Transport and Environment Committee

10.00am, Thursday, 27 January 2022

Progress Report on the 'Vision for Water Management' and Operational Management of Roads Drainage Infrastructure

Executive/routine	**Executive**
Wards All	**All**
Council Commitments	1, 2, 15

1. Recommendations

1.1 It is recommended that Committee:

1.1.1 Notes progress on the implementation of the Vision for Water Management;

1.1.2 Notes the progress on the Green Blue Network project to date;

1.1.3 Notes that a dedicated multi-disciplinary in-house team will be required to progress the recommendations which fall to the Council and that officers are working on the development of plans for this team;

1.1.4 Notes the proposal to commence operational roads drainage meetings with Scottish Water in 2022, as well as an updated process for recording and monitoring blocked gullies; and

1.1.5 Approves the discharge of Motions on drainage and flooding from the Council meeting in August 2021.

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Report

Progress Report on the 'Vision for Water Management' and Operational Management of Roads Drainage Infrastructure

2. Executive Summary

2.1 This report provides an update on the implementation of the Vision for Water Management and on operational management of the city's roads drainage infrastructure, and responds to two motions which were approved by the Council in August 2021.

3. Background

3.1 Achieving net zero emissions and adapting the city to the impacts of climate change represents the greatest challenge of a generation. The City of Edinburgh Council has set an ambitious target for Edinburgh to become a net zero and climate-resilient city by 2030, as set out in the draft 2030 Climate strategy.

3.2 The Vision for Water Management in the City of Edinburgh (Water Vision) is being actively driven forward by the newly formed Blue Green City Partnership. This is a partnership between Scottish Water, Scottish Environment Protection Agency (SEPA) and the Council. The group reports to the Edinburgh and Lothians Strategic Drainage Partnership.

3.3 The Blue Green Network project was initiated to determine a strategic Green Blue Network across Edinburgh, highlighting missing links in the network for future projects. The project brought together all the information available across the Council and externally from SEPA and Scottish Water on green blue infrastructure. This included flooding from all sources, in particular Scottish Water sewer flooding and Sustainable Drainage Systems (SuDS) opportunity mapping, along with the existing planning green network, and active travel data sets. The project worked with the Edinburgh Nature Network project to integrate all habitat data sets and agreed buffer zones and connectivity across the city.

3.4 Whilst many of the outcomes from the above projects will be progressed by others (through externally-funded developments), there is currently insufficient staff and financial resources available to progress either the strategic planning work, or any

recommendations which may arise from this which will fall to the Council to implement. Consequently, a dedicated multi-disciplinary in-house team will be required, at a cost of approximately £300,000 per year. Also, significant additional funding will be required to construct and maintain any resulting new blue-green infrastructure.

3.5 There is no longer any doubt that transformational change at scale is needed to manage Scotland's water environment if we are to respond effectively to climate change, biodiversity decline and population growth. The climate is changing, and climate trends predict that we will experience milder and wetter winters. Summers are expected to become hotter and drier, and occurrences of extreme rainfall events are expected to increase both in frequency and intensity. Despite the overall trend, there will still be cold, dry winters, and cool, dry summers, as there is variability in the summers and winters we see today.

3.6 This has been widely recognised internationally and the United Nations set Sustainable Development Goals; thirteen out of seventeen of which link to water issues. The UK Committee on Climate Change also highlights flooding issues as one of the top risks to the country.

3.7 The Scottish Government recognised the need to take a regional approach to flooding, drainage, water quality and wider consideration of the water environment and the Edinburgh and Lothians Strategic Drainage Partnership (ELSDP) was established in October 2018. The Partnership seeks to develop a co-ordinated and transformative approach across Edinburgh and the Lothians to drainage, water management and flooding issues. There will be a strong focus on water management using above-ground drainage infrastructure (or SuDS), increasing biodiversity, creating great places and supporting a climate-resilient city region.

3.8 SuDS is one aspect of Blue-Green infrastructure (BGI) and includes rain gardens, grass swales, ponds and various other structures aligned to provide staged treatment in terms of water quality and reduced flow rates/storage, thereby reducing flooding. As described in the ESRG, best practice in blue-green infrastructure design and implementation can also achieve much wider place-led benefits. Such benefits include supporting biodiversity, providing attractive open/play space and complementing mobility and active travel. As such, BGI can provide significant added value socially, economically and environmentally, and it supports the Council's current strategic direction. The ELSDP's work within Edinburgh is being taken forward by the partnership working group, Blue Green City Partnership (BGCP), led by Scottish Water.

3.9 The role of the ELSDP is to make decisions in relation to the implementation of the different work streams, whilst maintaining an overview of all the existing and proposed work within Edinburgh and the Lothians that relates to water issues and related interests. This overarching role will ensure different work streams are co-ordinated, providing opportunities for collegiate working with shared efficiencies, learning and added value maximised both internally and externally.

3.10 In June 2021, The Council launched the draft 2030 Climate Strategy; Delivering a Net Zero Climate Ready City for consultation. This also embeds the work of the Water Vision and ELSDP. The aims of the ELSDP, the Water Vision and Climate Strategy also align with the Edinburgh Climate Change Commission which states that the city should become resilient to climate change, embed a collaborative approach to problem solving and be open to all best practice. This also accords with the Council's Edinburgh 2050 Vision of a sustainable, green, and safe city. The draft National Planning Framework 4 published 25 November 2021 proposes that 'adaptation by blue and green infrastructure to surface water and drainage infrastructure' is one of Edinburgh's two national projects. The work of the BGCP team and the GBN project will help to deliver this sustainable approach to adaptation.

3.11 On 26 August 2021, the Council approved two motions in respect of drainage and flooding. These actions are addressed in the main report below.

4. Main Report

Progress on the implementation of the Water Vision

4.1 The BGCP is targeting areas for transformational change, including implementation of the Water Vision through City Plan 2030 policies and supporting guidance.

4.2 To date, it has been examining potential opportunities in existing projects to influence and alter their planning and design to manage surface water flows on the surface, using blue-green infrastructure. It has successfully identified an active travel and traffic calming project that potentially could be improved, providing multiple benefits to the project and the community. This approach supports Scottish Water's Policy with respect to surface water which can be summed up as 'no more in, and what's in, out', and focuses on the separation of surface water from combined drainage systems, contributing to an increase in overall drainage capacity within the city and additional biodiversity and place-making benefits.

4.3 The partnership has also made meaningful progress towards a collaborative planning exercise within the Craigleith catchment, also including Inverleith and the Orchards areas. Whilst the necessary workstreams have been identified, there is currently no available Council staff resource available to support the next stages of this work and a centrally-resourced team is required. Funding is also required for any construction costs for identified interventions, which are not undertaken as part of third party developments or funded elsewhere.

4.4 The BGCP Group are also looking at opportunities to influence all new developments and capital projects that are being put forward in the city, including roads, public realm, housing and active travel projects. Specific projects that the group have contributed to in relation to strategic planning include:

4.4.1 Strategic Flood Risk Assessment for the City Plan 2030: the group has supported this aspect of the City Plan 2030 in understanding risk of housing

sites to river, coastal and surface water flooding issues. This is now complete and has informed the City Plan location of housing sites and the briefs for these sites;

4.4.2 Scottish Water's Integrated Catchment Study: the group continues to provide feedback on this evolving drainage model for the city; to understand how the city is drained through the sewer network, culverted watercourses and the open watercourses in the city, and importantly how they interact with each other. Three opportunities areas have been identified and brought into the Green Blue Network Project as Partnership projects; and

4.4.3 The 'Green Blue Network' project: this brings together active travel, footpath networks, biodiversity and 'water' networks alongside green open space and planning information. This provides us with an understanding of the city's Green Blue Network and opportunities for new multifunctional green-blue infrastructure derived from various sources, to expand and link the network. These include prime opportunities for disconnection of existing surface water systems from combined sewers. The project has completed a Strategic Green Blue network that was embedded in the City Plan 2030. It also brought together all the key information into shared GIS platform to enable SW/SEPA and Council officers to share that information more easily for project work. The draft summary document can be viewed by clicking here, and additional information can be gained from two videos prepared for COP26 by clicking here (Video 1) and here (Video 2).

4.5 A communication strategy across all three organisations is also being created. This will support integrated planning across departments and agencies, as well as recognising the importance of engaging local communities in the design of blue-green infrastructure in their area.

4.6 The group is also developing the necessary governance arrangements to allow fully collaborative working between the Council and Scottish Water.

4.7 BGCP is aware of Glasgow's Smart Canal project and its use as a conduit for surface water from new development. Unlike Glasgow however, through the populated areas of Edinburgh, the Union Canal is mostly on raised embankments which limits opportunities for surface water management without significant pumping, which is expensive to install and maintain. There are no current plans to form an analogous partnership with Scottish Canals or to further explore the option of using the canal to alleviate flooding.

4.8 In addition, the Council is progressing Surface Water Management plans for the city and continues to progress its other actions under the Local Flood Risk Management Plan for the Forth Estuary. Consultation on the draft plan for 2021-2028 has now closed, and this will be published by SEPA later in 2022.

Operational Management of Roads Drainage Infrastructure

4.9 The inspection and management of the public sewerage system are the responsibility of Scottish Water. As the body responsible for this network, they have systems and processes in place for the management of their assets in this respect.

4.10 Road drains or "gullies" and the associated piped network, which connects gullies to the main sewerage system where it becomes the responsibility of Scottish Water or to a final outfall which is the responsibility of the City of Edinburgh Council. The management of these by the Council is undertaken by the Roads Operations team.

4.11 There are currently 56,562 road gullies on the Council's asset management system (at 04/12/2021). This inventory changes regularly as new roads are adopted, complete with new drainage, or new gullies are added or removed as required. Due to the number of assets, it is not possible to survey them all at one time; similarly, as soon as a survey is undertaken it is out of date as the network condition very quickly moves on.

4.12 To resolve this issue, sections of the network are surveyed every single day and provide a rolling snapshot of the network. The Council's asset management system has been configured to capture asset information daily from our drainage teams on the ground as they encounter blockages whilst undertaking our two yearly cyclic maintenance. This is further strengthened by adding customer reports. The journey of a gully report or blockage repair can be a complex one and to help Elected Members and customers understand this better, a "Road Drainage Explained" summary sheet has been provided in Appendix 1.

4.13 Our records show that there were 539 gullies at Gully Investigation required (at 04/12/2021). These are gullies that have been identified with faults that require a dig up repair. This value represents <1% of the network. Repairs are prioritised as best possible on a risk-based approach prioritising issues that are affecting property or creating a road safety issue. Drainage squads are engaged in gully repairs all year round to keep this number as low as possible.

4.14 It should be noted that the cleaning of gullies on a cyclic, routine basis is far more efficient than attending reactive reports (estimated to be about three times more efficient). The service priority is therefore weighted to maintenance of this cyclic programme. The available resources undertaking reactive cleaning, are balanced on a risk basis; prioritising issues that are affecting property or creating a road safety issue.

4.15 At an operational level, the Council drainage team has been exploring how to implement an ongoing operational partnership with Scottish Water to tackle current problem areas as a collective. The two organisations have already made this link at a senior level and are in the process of developing a mechanism to implement this going forward. The partnership has already come together to collaboratively investigate several problem areas and formulate joint responses which have brought about improvement and demonstrate the ongoing benefits that could be achieved with more structured partnering.

Attenuation of flood water within road design

4.16 Flooding from surcharging existing surface water and combined surface water/foul water sewers that were not designed to accommodate the intense rainfall events we have been experiencing over the last few years are very complex and expensive issues to resolve. Recent surface water flooding events have demonstrated that surface water flooding generally does not originate from blocked gullies. Whilst there are occasions when blocked gullies do contribute, these occasions are rare. The majority of surface water flooding occurs when the capacity of the entire drainage system is overwhelmed; the sewers and manholes are full, rainwater cannot enter the system, and surface water flows overland. In the most intense rainfall events, sewer surcharging does occur.

4.17 It is now mandatory for all Council projects to implement the Water Vision, and this requires the incorporation of SuDS where appropriate, including in Roads projects. However, roads are not *de facto* flood prevention measures, and any changes to road camber, gully placement and the use of adjacent surfaces must be carefully considered. In addition to the road safety and other legal considerations, this is to ensure that any well-intentioned mitigation measures do not adversely affect other properties, either directly from overland flows, or indirectly by placing the existing drainage system under additional pressure.

4.18 Roads form only one part of the overall catchment areas that the existing sewer system is required to accommodate. In addition to road drainage, roof drainage and direct overland run-off also contribute to the volume of water entering the system.

4.19 Roads already provide a level of flood storage during extreme rainfall events by virtue of the volume of run-off that can be accommodated in the gutters at the kerb/channel interface. Road drainage systems are typically designed for a 1:1 to 1:5 year rainfall event as per current standards, but recent storms have been well in excess of 1:200 year return periods, therefore surface water flooding is expected.

4.20 Whilst roads may be considered as conveyance measures for large-scale planning initiatives, such as those originating from the Craigleith or Blue Green Network projects, they generally cannot be retrofitted to fully accommodate the intense rainfall we are now experiencing.

4.21 A holistic approach must be taken to road design to assist in coping with widespread surface water flooding, due to the drainage system being overwhelmed. It is not practical for the Council to retrofit any roads to deal with localised surface water flooding issues. The onus must remain on property owners to implement suitable measures to protect themselves from flooding. The provision of mitigation measures for individual properties is not a viable approach and it could impact on other properties or parts of the existing drainage system.

4.22 All new road developments require separation of the foul and surface water systems and will include SuDS measures to both treat and attenuate run-off into the surface water drainage system or watercourses. The widespread separation of foul from road drainage systems is currently prohibitive due to the associated costs, the

disruption these works would cause and, in many cases, insufficient space as a result of the presence of underground utilities.

4.23 In conclusion, officers are working closely with Scottish Water to minimise the impact of extreme rainfall events on the existing drainage system and acknowledge that a holistic approach needs to be taken to address this complex issue through the greater use of soft landscaping, SuDS storage and separate road drainage systems for new developments.

5. Next Steps

BGCP Group

5.1 The BGCP Group will continue to progress the following workstreams, as resourcing allows, in order to achieve its vision to 'create the collaborative approach to planning and delivering blue-green infrastructure to manage surface water and create a climate resilient city for the future':

- Working with key developers and project teams to support the development and delivery of blue-green infrastructure, influencing project scopes, processes, mindsets and behaviours;
- Delivery of a proof-of-concept BGI Strategy for priority areas;
- Delivery of on-the-ground blue-green interventions;
- Development of a communication and engagement campaign;
- Proactively sharing data between partner organisations, underpinned by geographic information systems;
- Ensure integration with city-wide policy and initiatives;
- Establishment of regular operational partnership group; and
- Seeking funding and additional staff resource to fully support the above measures.

Green Blue Network Project

5.2 The next stage of the project is to look more closely at a local level. This will use surface water management catchment areas and test the strategic network and identify opportunity areas. Missing links will be identified. Consultation will be carried out both internally and externally and then tested on the ground, working collaboratively with Edinburgh Nature Network.

Operational Management of Roads Drainage Infrastructure

5.3 To help customers navigate some of the common reporting issues the "Roads Drainage Explained" summary will be further developed and implemented within the 'Report a Blocked Gully' web page to prevent erroneous reports from being created

in the first instance and to help reduce the customer journey as well as better inform customers.

5.4 The first operational meeting with Scottish Water is scheduled for early 2022. Routine meetings will be established, and work streams developed to drive improved communication and co-ordination.

5.5 Officers are developing plans to create the new multi-disciplinary team required to implement the recommendations which fall within the responsibility of the Council.

6. Financial impact

6.1 In the near future there is likely to be a financial impact, both Capital and Revenue, resulting from the changing climate, and a need to address this by changing the Council's current approach to roads and drainage design. Additional funding requires to be identified to:

6.1.1 Construct intervention measures identified through the BGCP, which are not undertaken as part of third party developments or funded elsewhere, and which fall within the Council's responsibility; and

6.1.2 Maintain these additional intervention measures.

6.2 It is likely that private green finance initiatives will be required to support the large-scale portfolio of works necessary for city-wide adaption.

7. Stakeholder/Community Impact

7.1 Any new or existing projects altered by the work of the BGCP will be subject to the normal consultation process for all new design projects within the Council. Also, as noted in 5.1, a Communications and Engagement campaign is being proposed.

7.2 In terms of the guidance, SEPA, Nature Scot and Scottish Water and adjacent Local Authorities and officers in the Council have had a significant role in the preparation through consultation and workshops.

8. Background reading/external references

8.1 Climate Change Strategy

8.2 Edinburgh Adapts Climate Change Adaptation Action Plan and Progress reports

8.3 Edinburgh Climate Change Commission

8.4 SUDsnet – understanding Sustainable urban drainage

8.5 Climate change

8.6 Climate Change Summary for Scotland

8.7 Local Flood Risk Management Plan

8.8 Reducing emissions in Scotland - 2020 Progress Report to Parliament

8.9 Scottish Water Surface Water Policy

8.10 Scottish Flood Forum

9. Appendices

9.1 Appendix 1 – Road Drainage Explained

10. Glossary

Blue Green City Partnership - Blue green infrastructure or BGI is defined by the European Commission as a 'strategically planned network of natural and semi-natural areas with other environmental features designed and managed to deliver a wide range of ecosystem service'. The partnership is the working group that is looking to plan BGI in order to manage rainwater sustainably in the city.

Road Drainage Explained

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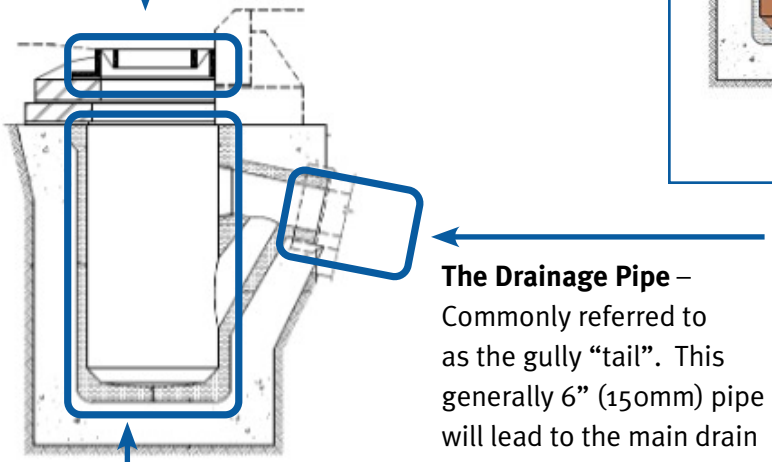
The purpose of this document is to explain the process of how customer reports of a non-functioning gully are handled from point of report to completion. The process is varied and can range from the simple removal of silt in the gully pot, through to digging up the road to repair a damaged drainage pipe; potentially a large distance from the drain in question. To assist customers who are unfamiliar with drainage systems and infrastructure a brief description of the drainage features is given below.

1. Drainage Systems Explained:

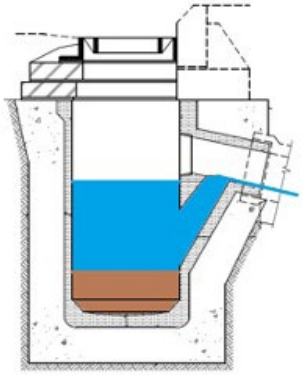
The typical features of a road drain:

The gully grating – The metal grill that sits, in a frame, over the Gully pot. Usually sitting on top of brick or concrete sections.



The Drainage Pipe – Commonly referred to as the gully "tail". This generally 6" (150mm) pipe will lead to the main drain or sewer.

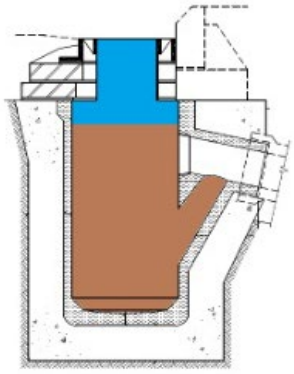
The gully pot – The pot is designed to collect silt before it goes down the outlet pipe or "tail".



Properly Functioning Gully:

Some silt at the bottom

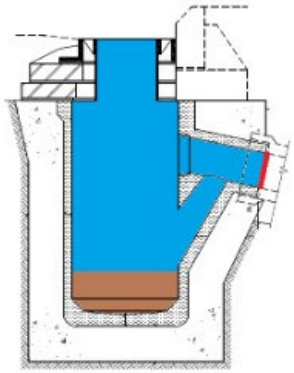
Water sitting in the gully up to the outlet level. During dry periods this will evaporate away but following wet weather it is normal to have an amount of water sitting in the gully pot.



Blocked Gully:

Here the level of silt has risen significantly and has blocked the outlet pipe (bottom hole) and the rodding eye outlet (the top hole).

The rainwater cannot reach the drainage pipe and so in wet weather fills up the pot causing the gully to flood.



Damaged or Blocked Gully Tail:

Here the level of silt is not significant enough to block the gully pot but there is a collapse in the drainage pipe leading to the sewer and so in wet weather the rainfall cannot reach the sewer and so the pot fills with water causing the gully to flood.

Where the tail is partially blocked this may result in the water taking longer to clear – often referred to as a "Slow Runner".

2. Accurate Reporting:

The Gully team regularly get enquiries that are not managed by the team or in some instances even the responsibility of the City of Edinburgh Council. To help direct enquiries to the right place the following advice should be considered before reporting through the "Report a Blocked Gully" webpage:

Leaves in the Channel:

If the gully grating is covered in leaves or detritus, then the issue is not one with the gully but the cleansing of the adjacent "channel".

This is managed by the City of Edinburgh Council's cleansing department who can be contacted at *waste@edinburgh.gov.uk*

Sewer Backflowing:

Another common issue is where there is a problem with the main sewer being blocked or restricted and can lead to foul sewage and toilet paper backflowing out of the gully. If this is the case it is most likely a problem with the sewage system.

If the problem lies within the property boundary it is likely a private issue;

If the problem is out with the property boundary it is likely an issue for Scottish Water. Scottish Water can be contacted on **0800 077 8778** or see *www.scottishwater.co.uk*

Housing Downpipes:

Similarly, we receive a significant number of enquiries about housing downpipes which drain building roof water.

These drains are not maintained by the Roads Drainage team. In most instances this will be a private matter for the property owner or owners.

If the house is a council property you may be able to get further assistance by contacting housing:

0131 200 2345

www.edinburgh.gov.uk/council-house-repairs

If you are living in a building which has a shared maintenance responsibility, then the City of Edinburgh Council's Shared Repair team may be able to assist:

0131 529 6778

www.edinburgh.gov.uk/shared-repairs/shared-repairs-maintenance

Basements & Cellars:

Basements and Cellars require to be suitably waterproofed by the owner(s), even where the structure is under a public footpath or road. Footpaths are not designed to be impenetrable to water and there is the possibility of water ingress through the road or footpath structure. Roads gullies adjacent to these structures are generally connected into the nearest sewer and are not connected directly to the building sewerage. If water or sewage is coming into a basement or cellar from a toilet, sink, shower trap or internal drain then this will likely be coming from the property's drainage system and depending on the cause of the blockage or backflow then would be the responsibility of either the property owner(s) or Scottish Water. Scottish Water can be contacted on **0800 077 8778** or see *www.scottishwater.co.uk/*

Roads Gully Problems:

If the issue is not one of the above and look more like one of the below:

Gully clear but flooding during 'normal' rainfall

Gully blocked with vegetation

Gully full of silt

Then it is a likely a roads drainage issue and should be reported through the councils website at: *www.edinburgh.gov.uk/gully*

When doing so, please provide as much detail as you can, the more information provided helps to accurately understand the problem and can help to speed up the overall process.

3. Blocked Gully Lifecycle:

Step 1 – Empty and flush

The first step in the resolution process is to attend the gully with one of our Gully motors to attempt to empty and flush the gully pot. One of our 18t gully motors will attend and attempt to empty all the silt from the gully pot and flush the gully tail to ensure it is working.

If it can be emptied and flushed the Job and Enquiry will be completed.

However, it is not always possible to do so due to:

- Restricted Access – Can't attend due to parked cars / Roadworks / Building works / some other restriction
    - The team will attempt to reschedule the works as best possible considering the restriction presented.
- The Gully was accessed and cleaned but could not be flushed
    - This indicates an issue with gully tail that requires further investigation – this is passed to the jetting team.

Step 2 – High Pressure Jet & CCTV team

The jetting team pick up the job and attend site with the High-Pressure Jet and CCTV camera and attempt to unblock the drain line or establish the location and cause of the block or collapse.

If they can unblock the drain, then they will complete the Job and Enquiry. If they cannot then they will locate as best possible the location and type of block or collapse and record this information to pass to the next team.

There are several different possibilities that can cause a damaged gully tail, these include:

- **Mortar / Cement / Plaster / Paint** - poured down the drain system by contractors which then solidifies and blocks or restricts the drain.
- **Third party damage** – Other contractors dig up the road to install or maintain their apparatus and damage the drainage assets in doing so.
- **Tree roots** – Can in instances penetrate the drain line and create blockages.
- **Historic collapse** – Some of the drainage infrastructure is of a historic nature and through time can simply collapse or perish causing a block to the main sewer.

Step 3 – Gully Investigation Required

The final step in the process, if all else has been unsuccessful, is to dig up the area of the blockage or damage and repair it with a new section of drainage pipe. This requires co-ordination and planning to ensure safe and timely access of the network can be achieved, the position of other underground services is required, and a safe traffic management set up is required.

It is at this stage that 3rd party damage can be uncovered. When it is identified we seek to get the responsible party to make good the damage or seek agreement for the council to do so on their behalf and recover the associated costs.

The "dig up" process can be timely and requires a lot of dedicated co-ordination but will generally see a resolution to the issue. Once the drainage pipe is repaired and the roads is reinstated the Job and Enquiry are closed.

4. Climate Change and Flooding:

Exceptional Rainfall & Flood conditions:

During periods of exceptional rainfall intensity, it is possible for drainage systems to be become overwhelmed. This is not from an inadequate design or maintenance, but simply that they were never intended to cope with the intense rainfall events we are now experiencing on an increasingly frequent basis.

Road drainage systems are typically designed for a 1:1 to 1:5 year rainfall event as per current standards (sewers are 1:30), but recent storms have been well in excess of 1:200 year return periods, therefore surface water flooding is expected.

The immediate reaction is to blame the number of gullies or number of functioning gullies. However, gullies being the cause of surface water flooding is rare, and usually as a result of the finite capacity of the main sewer into which the roads gully discharges. The result of this is that even adding more gullies into the network would not resolve the problem as there is nowhere for the water to go to. In severe cases the water in the sewer can become pressurised and seek to escape out through the gully or manhole cover.

During periods such as this the localised flooding can often dissipate quickly after the rainfall event and is evidence that the gully is fully functioning, as it has drained the water, but has suffered some form of capacity restriction.

Example: Surcharging Sewer System at Capacity

Other Sources of Help:

It is primarily for property owners to protect themselves from flooding although the following support is available:

- Information is available on the Council website at *www.edinburgh.gov.uk/flooding.*
- The Council provide a limited number of sandbags at fire stations throughout Edinburgh for public use.
- Property level protection is available to homeowners, further advice can be found at *scottishfloodforum.org*.
- Residents can sign up for alerts and monitor flood warning information issued by SEPA at *www.sepa.org.uk/environment/water/flooding/floodline*
- The public can report blocked gullies (considering the guidance above) by phone or online via the Council's website at: *www.edinburgh.gov.uk/gully*

How can I help?

There are several key things that residents can do or look out for to help prevent blocked gullies from arising:

- Where possible locally clear channels of leaves and detritus that if left unchecked can speed up the silting up of gully pots or temporarily block the gully grating.
- Remain vigilant when builders are working in your street – avoid pouring paints / cements / plaster down the drainage system.
- Observe the "No Parking" restrictions that are erected to help us gain access to the gullies in areas of heavy parking. Help to spread the message that it is only a short-term disruption that will help prevent blockages and flooding.