Friends of the Gumstool Brook

Flooding and water in Cirencester:
A perspective for discussion from the Friends of the Gumstool Brook

Introduction

This document was prepared for the Flooding Summit, hosted by Riz Savage MP at the Cirencester Growth Hub on 8th March 2025. It presents a perspective from the Friends of the Gumstool Brook (FoGB) for discussion, covering:

- the importance of understanding the types of flooding that impact Cirencester, and where they occur;
- an action framework, including the need for an integrated catchment consideration of the range of water issues that affect the town.

Flood type

Although all driven by rain, there are several types of flooding that impact Cirencester:

- fluvial (river) flooding
- pluvial (surface water) flooding
- groundwater flooding.

The location of flood impacts and the duration of each type is different. For example, groundwater flooding occurs where aquifers fill up in response to longer periods of above average rainfall, with groundwater emerging at the surface causing impacts that tend to be of longer duration. In contrast, surface water flooding results from intense rainfall, which can be exacerbated by drains being overwhelmed (e.g. Watermoor Way); foul sewers can also be overwhelmed, especially if there are misconnections of storm water into foul sewers.

These types of flooding can interact with each other to produce complex cumulative impacts. As an example, inundation of basements in places such as Thomas Street is a result of groundwater flooding in the Gravel aquifer. This can be caused by the longer periods of rainfall mentioned above but also in combination with higher river water levels and fluvial flooding, with river water moving into the Gravel aquifer resulting in higher groundwater levels. As we know, some homeowners have sealed (or tanked) their basements to prevent groundwater flooding, which could increase the risk of flooding in unsealed basements. When any of these flood types occur, there can often be infrastructure impacts, e.g. flood water ingress into foul sewers causing effluent discharge via manholes; such issues occur at Hereward Road and Corinium Gate.

The degree of interaction of these types of flooding will vary depending on the timing, extent, duration and intensity of rainfall during different events. As a result, the characteristics and impact on people and property from each flood event will be different, but establishing the key drivers of previous flooding events is important to enable appropriate and sustainable solutions to be delivered.

Locations of flooding

FoGB put together an informal list of locations flooded in Cirencester as a result of Storm Bert in November 2024. The list below in Table 1 is unlikely to be complete, but it does highlight the potential types of flooding where that information exists. Understanding the type and location of flooding is important in guiding potential solutions.

Table 1 – Locations in Cirencester flooded due to Storm Bert

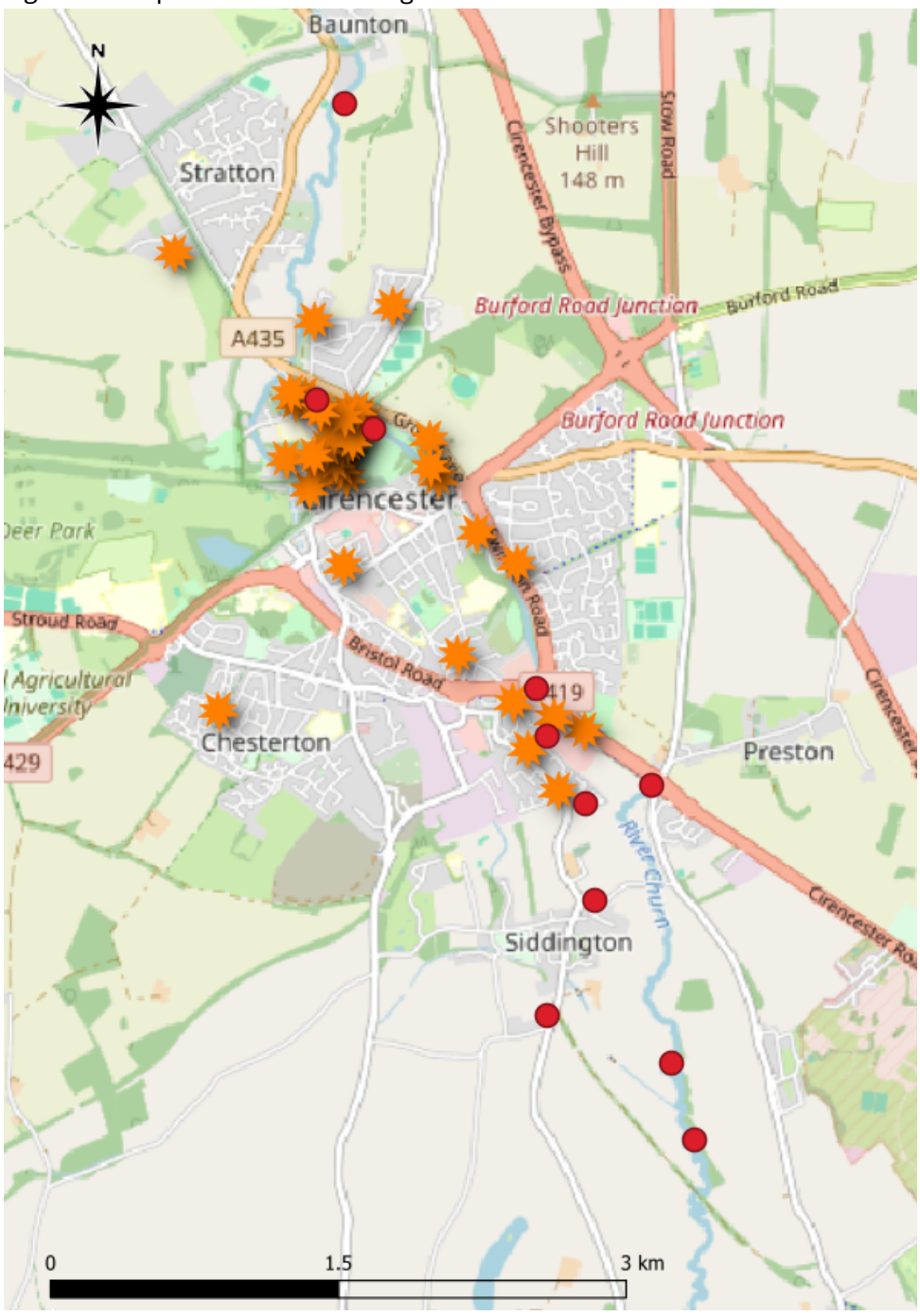
Location	**Type of Flooding**
20-22 Beeches Road	*Unconfirmed*
Ashcroft Road - cellars flooded	Groundwater
Cirencester Opportunity Group	*Unconfirmed*
City Bank Recreation Field	*Unconfirmed*
Corinium Gate	Foul Sewer
Gloucester St - pavement by filling station	Surface water
14 & 16 Hereward Rd	Foul Sewer + Surface water
Jack Gardeners Field	Foul Sewer + Fluvial
Melmore Gardens - road & pavement flooded	Surface water + Storm Sewer
Powell's School field	Groundwater
The Steadings - SuDS ponds overflowing	Surface water
Sheep Street, near Rave	Surface water
City Bank Park	Foul Sewer
Rose Way, roads and pavement flooded, thigh deep	Surface water
Somerford Rd flowing from Chesterton Lane	Surface water
Countess Lilias Rd, St Lawrence - drain blocked with leaves	Surface water
Cherry Tree Drive	*Unconfirmed*
St James Place - ground floor/basement	Surface water + Groundwater
St Peter's Road cellars	Groundwater
Watermoor Corner - road flooded	Surface water
Watermoor Road - the low cottage	*Unconfirmed*
Picnic ground opposite Aldi and Tesco	Fluvial
Old Cricklade Road	Surface water + Fluvial

We are not aware of how many of these locations would have been reported as flooding incidents at the time, but to maintain effective records they should have been. If they were recorded it may have been done via the FORT (Flood Online Reporting Tool) website via this link https://fort-gloucestershire.dorsetcouncil.gov.uk/. FORT is run by Dorset County Council but it also acts as a route for reporting flooding incidents to Gloucestershire County Council (GCC), and does apparently pass on the information to other agencies/organisations with flood responsibilities. Whatever information is reported via FORT, there does not seem to be the ability to view reported incidents, either as a list or a map.

There is information on historical flood events in the Strategic Flood Risk Assessment (SFRA) carried out for Cotswold District Council in 2023. It records information for 2012 and 2020 with information on flood type included. This information is likely to be incomplete as, for example, FoGB is aware that Market Place and Thomas Street are susceptible to groundwater flooding in addition to Coxwell Street and Dollar Street which the SRFA does include. There is also reference to historical flood events and location in the flood modelling report produced for GCC in 2016, but available information is very limited.

In the absence of readily available mapped flood events from these and other sources, the Figure 1 below has been prepared by FoGB to help visualise the 2012 and 2020 flood location data extracted from the SFRA, together with data collected at the Cirencester Waterways Symposium in June 2024.

Figure 1 - Map of selected flooding events in and around Cirencester



Flooding records 2012 & 2020, collated for Cotswold District Council

Flooding issues highlighted at Cirencester Waterways Symposium

Actions

A series of actions are suggested below, which form a framework within which flooding and other water issues in Cirencester and the surrounding catchment should be addressed.

Accessible central repository of flooding incidents - Reporting and recording flooding incidents, their extent, duration and type is required to maintain an accessible record. Currently, there does not appear to be an obvious route to an accessible central repository of historical flooding incidents. Having such a repository, and being able to generate a range of flood event maps, is valuable as a common source of information that can be shared among stakeholders. Furthermore, it can also be used as a decision support tool, for example, in the prioritisation and definition of solutions, as well as enabling the tracking of benefits delivered following implementation of flood mitigation measures.

Integrated catchment management - Although the focus of the March 2025 Summit was flood impact and mitigation, there needs to be recognition that there are flood, low flow and drought as well as water quality issues within the water environment. There are multiple stakeholders who should be engaged in addressing these issues. This includes different teams within the environmental regulator as well as different teams within water companies, but there is rarely an integrated approach across catchments. This brings with it, for example, the risk that solutions to mitigate low river flow risks result in unintended consequences for environmental and infrastructure flooding.

There is a clear driver for improved and integrated catchment management. Taking such an approach would enable an integrated programme of planned actions to be developed, highlight the interactions and promote synergies, and facilitate tracking the progress of delivery as well as the benefits delivered.

Nature Based Solutions - Working with landowners, the delivery of nature based solutions (NBS) to flood, low flow, drought and water quality issues should be a priority and be promoted as such.

Working in partnership with GCC and FWAG (Farming & Wildlife Advisory Group), FoGB has been successful in securing funding from the Thames RFCC (Regional Flood & Coastal Committee) to deliver and monitor Natural Flood Management (NFM) projects in the upper Churn catchment. The business plan for this "Re-naturalising the Churn" project is currently being developed with a total of £240k of funding, from RFCC with contributions from Cirencester Town Council (CTC) and The Kate Winstone Trust. It is pertinent to note that the NFM works planned are within the North Cotswolds constituency while aiming to deliver flood mitigation that benefits Cirencester and communities further downstream in the South Cotswolds constituency. Although this project will deliver flood mitigation measures by spring 2027, it is improbable that it will mitigate all flood risks without further interventions including, for example, further NFM, SuDS, rainwater harvesting etc.

Flood management infrastructure - Although implementation of NFM projects for flood mitigation should be a priority, there is a continuing need for the effective operation and maintenance of flood management infrastructure. This includes the Gloucester Street sluices in Cirencester, managed and operated by CTC. FoGB continues to work with CTC, the EA and local sluice owners in the town to ensure that the existing Memorandum of Understanding that

guides sluice operation remains up to date and continues to be appropriate for flood mitigation.

To ensure that flood management infrastructure continues to be fit for purpose, and can support improvements to low flow and water quality challenges, FoGB is promoting the need for a review of the operation and benefits from the various sluices within Cirencester.

Community engagement - Promoting and supporting community engagement with the water environment is a key building block to delivering improvements, not least through valuing and appreciating the environment to cultivate a community of custodians. As a group that has carried out citizen science monitoring of Cirencester's waterways since 2017, FoGB recognises the need to further engage communities to raise awareness of the water environment. The "Re-naturalising the Churn" project will provide a significant opportunity to do this. A further key component of this project is to promote citizen science monitoring of the NFM works, to assess the flood mitigation, river habitat and biodiversity benefits delivered, and enabling identification of further NBS works required.

In parallel with the "Re-naturalising the Churn" project, FoGB is also in the early stages of planning a Water Festival in Cirencester in summer 2026. This will provide a further opportunity to sustain active engagement with communities in Cirencester and the surrounding Churn catchment. The scope of the Cirencester Water Festival is currently being developed in partnership by FoGB, CTC and the Cirencester Community Development Trust (CCDT).

Partnerships - Building on the successful Cirencester Waterways Symposium held at the RAU in June 2024, organised jointly by CTC, FoGB, CCDT and Cirencester Wildlife Group (CWG), a key recommendation to develop a partnership is being implemented. The Cirencester & Churn Waterways & Environment Partnership aims to bring together stakeholders including local councils, environmental groups, landowners, regulators and water companies. The aims of this partnership include the development of a programme to deliver nature based solutions to mitigate flood, low flow, drought and water quality issues in the upper Churn catchment. This will link with the "Re-naturalising the Churn" project, which will form one element of the programme, as well as more widely with the Upper Thames Catchment Partnership.

Promoting and supporting working in partnership is another key building block to delivering improvements to the water environment and the surrounding communities.

Appendix

As an illustration of the need to work in partnership for clarity of planning and delivering improvements, examples of Thames Water's work in the Cirencester area are useful to consider. The following are links to some of the information that is available online, covering wastewater and water environment works, demonstrating the extent of work and how challenging it can be to work out what is being done by all stakeholder organisations:

- Drainage plans up to 2025 are accessible here, https://www.thameswater.co.uk/about-us/regulation/drainage-plans, with specific information for Cirencester here, https://www.thameswater.co.uk/media-library/home/about-us/regulation/drainage-reports/groundwater-infiltration-management-plans/cirencester-groundwater-infiltration-management-plan.pdf. This indicates that no sewer lining was planned or carried out in 2023/24. We know that Cirencester STW is currently being upgraded to improve capacity and the quality of discharges from the works into the Churn.
- Future general information on wastewater work that is planned for 2025 and beyond is in the Drainage and Wastewater Management Plan (DWMP), here https://www.thameswater.co.uk/media-library/home/about-us/regulation/drainage-and-wastewater/oxfordshire-swindon-wiltshire-gloucestershire-warwickshire-catchment-strategic-plan.pdf
- The Water Industry National Environment Programme (WINEP) was published by DEFRA at the end January 2025, https://environment.data.gov.uk/dataset/39b11ea0-3cfa-4cbb-b3a1-b5950019f169. This covers water and wastewater projects for environmental improvements for all water companies in England. Some water driven examples for Thames Water in the Cirencester area include, "Undertake detailed feasibility and design of river restoration scheme on the River Churn upstream of Cirencester and at South Cerney by 2030 prior to AMP9 (2030-35) implementation", and "Further investigation during 2025-30 of groundwater abstraction at Latton and Meysey Hampton on the River Churn."