

Transport, Environment & Climate Change Select Committee Agenda Supplement

Date: Thursday 7 November 2024

Time: 10.00 am

The Oculus, Buckinghamshire Council, Gatehouse Road, Aylesbury Venue:

HP19 8FF

Agenda Item		Time	Page No
7	Flooding Response in Buckinghamshire Working Group	11:45	3 - 26

At its June 2024 meeting, the Select Committee agreed the scoping document for a rapid review into flooding response in Buckinghamshire.

The Review Group held a number of evidence gathering meetings in September. The report with the key findings and areas of recommendation is to be discussed and agreed by Members.

Contributors:

Councillor Robert Carington, Chairman of the Review

Group

Councillor Bill Chapple OBE

Councillor Peter Cooper

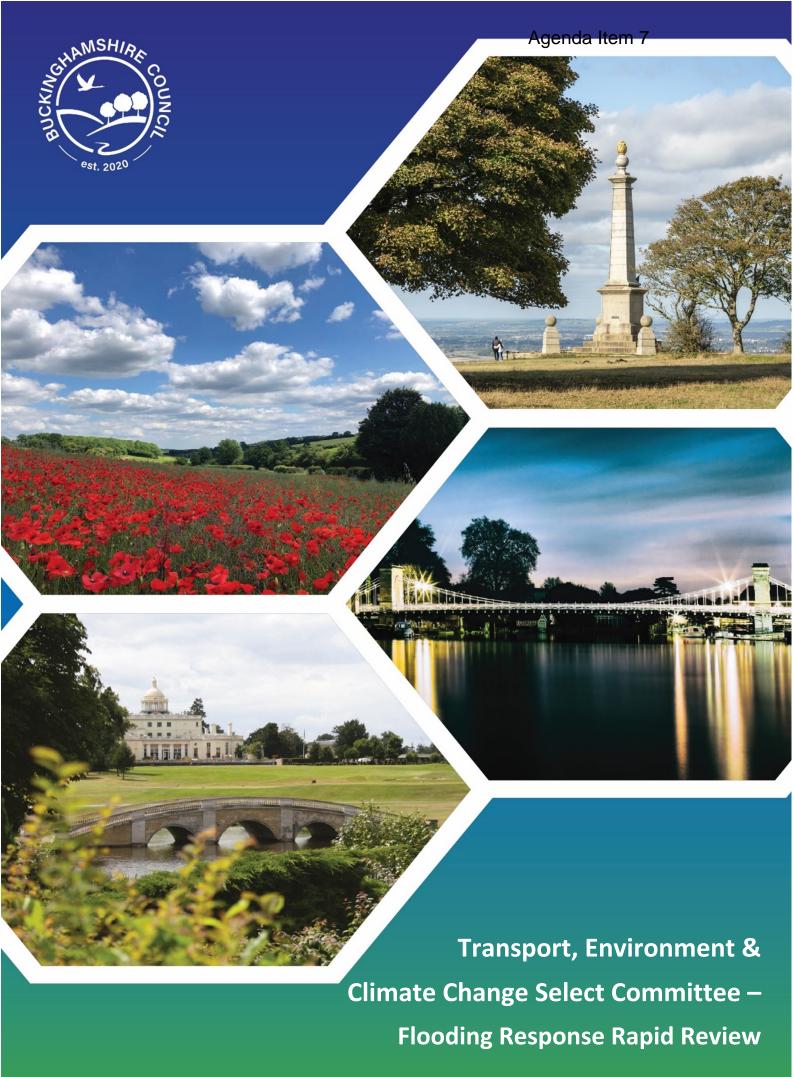
Councillor Caroline Cornell

Councillor Stuart Wilson

If you would like to attend a meeting, but need extra help to do so, for example because of a disability, please contact us as early as possible, so that we can try to put the right support in place.

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Introduction

I would like to start this report by introducing myself. I am Robert Carington, Buckinghamshire Councillor for Ridgeway West and Vice-Chairman of the Transport, Environment and Climate Change Select Committee (TEEC). Following its meeting on the 6 June 2024, the Select Committee invited me to lead a rapid review group to investigate flooding in Buckinghamshire and the response to flooding from key actors in particular Buckinghamshire Council. I was joined in this by five other colleagues: the Chair of TECC, Cllr Bill Chapple OBE, and Cllrs Caroline Cornell, Stuart Wilson and Peter Cooper. We held an extensive series of evidence gathering sessions over Teams and in person over a three-month period where we heard evidence from council officers, Members representing affected areas, the National Farmers Union, local organisations, Parish and Town Councils, water companies, the EA and the River Thame Conservation Trust. We also received written evidence from other organisations such as the Buckingham and River Ouzel Internal Drainage Board. We very much hope that the recommendations made in this report will be able to achieve real change in addressing and delivering achievable solutions to the very real problem of flooding in Buckinghamshire which unfortunately is becoming more of a common occurrence and putting more pressure on local communities and the council's resources.

I would like to extend my thanks to my colleagues on the review group, our scrutiny officer, Chris Ward, and other officers from Highways, Strategic Flood Management Team (including Sustainable Drainage Systems), Property & Assets, and Climate Change. Also, I would like to extend thanks to Cllr Jilly Jordan (Deputy Cabinet Member for Climate Change and Environment Portfolio) who represented the Executive during our evidence gathering.

Cllr Robert Carington, October 2024



Cllr Robert Carington Ridgeway West



Cllr Bill Chapple OBE Aston Clinton & Bierton



Cllr Peter Cooper Wing



Cllr Caroline Cornell Buckingham West



Cllr Stuart Wilson
The Wooburns, Bourne End & Hedsor

Aim of the Rapid Review

Our climate is changing which is impacting flood risk from rivers, surface water, groundwater and sewers. Buckinghamshire has suffered the increasing consequences of flooding in recent years which has involved significant joint-working between the Council and its partners. The Transport, Environment and Climate Change Select Committee understand how traumatic flooding is for impacted residents and businesses, and that it can take communities years to recover.

Although there have been no formal Section 19 Flood Investigations since 2021 in the county, the Select Committee was deeply concerned to hear of a number of pockets of localised urban and rural flooding. With this in mind, Members of the working group expressed an interest in seeking assurance that the Council and its partners are prepared and able to respond effectively to flood events and explore possibilities for improvement.

Methodology

The review group gathered evidence as follows:

11 July 2024 – Opening discussion with Members to hear experience in their wards and examples of casework.

9 September 2024 – Discussion with Council officers from: Highways, Strategic Flood Management Team (including Sustainable Drainage Systems), Property & Assets, and Climate Change.

16 September 2024 AM – Meeting with local organisations:

- Chalfonts Flood Working Group
- The River Thame Conservation Trust
- National Farmers' Union
- Buckingham and River Ouzel Internal Drainage Board (written statement)
- Hughenden Valley Residents Association Drainage Improvement Group (written statement)

16 September 2024 PM – Meeting with Thames Water, Anglian Water and the Environment Agency.

23 September 2024 – Meeting with Town Councils which was also attended by the Head of Resilience Services:

- Aylesbury Town Council
- Chesham Town Council (including the River Chess Association)
- Marlow Town Council
- Buckingham Town Council (written statement)

26 September 2024 – Review Group meeting to discuss and consider all evidence gathered to date and to identify areas of recommendation.

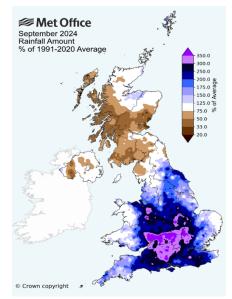


Flooding from Cowerde Brook, Thornborough, December 2020 (photo credit: Thornborough residents)

Context

Britain has experienced one of its wettest winters in 130 years, in part due to a number of named storms: Elin, Fergus, Gerrit, Henk, Isha and Jocelyn. A storm is named in the UK when it has the potential to cause disruption or damage which could result in an amber or red warning.¹ Storm Kathleen also hit saturated ground in April 2024. The flooding that followed caused widespread damage to properties (residential and commercial), vehicles, farmers' crops and road surfaces. February 2024 was the fourth wettest month on record since 1871 for England and all catchments received above average rainfall during February, with three quarters of catchments receiving more than twice the expected rainfall.² The National Infrastructure Commission have warned that extreme weather events such as floods and drought are increasingly more likely in villages, towns and cities due to climate change.³⁴ Evidence gathering for the review took place in September 2024 which was when southern and central England experienced significant rainfall — Buckinghamshire recorded over three

times its average September rainfall.5



There is no single organisation responsible for all flood matters in local areas, however the Flood and Water Management Act 2010 sets out that there must be a Lead Local Flood Authority (LLFA). The LLFA is responsible for the coordination of 'local' flood risk management and is required to work with Risk Management Authorities (RMAs) to enable effective, joined-up responses to local flooding. The LLFA can investigate significant flood incidents, as defined in the Local Flood Risk Management Strategy, and produce Section 19 reports where there is uncertainty around the cause or responsibility for the flooding event. These reports may draw conclusions and produce recommendations based on the flooding event. It is worth noting that LLFAs are not first responders to a flood event but do lead on the management of risk from surface water, groundwater and ordinary watercourses. No single organisation has overall responsibility for operational flood response.

Buckinghamshire Council is the LLFA in the county and coordinates with a number of RMAs including the Environment Agency, Thames Water, Anglian Water, Buckingham and River Ouzel Internal Drainage Board, Highways and Resilience services, and riparian landowners. The Strategic Flood Management Team has completed numerous Section 19 reports regarding flood incidents since 2014⁷, including a small number of addendums to existing Section 19 reports, and the Team are working on a number of flood management projects including Project Groundwater, which aims to raise awareness and understanding of groundwater flooding in communities. There are three pilot communities within Buckinghamshire: Marlow, Chesham and Chalfont St Peter. The Local Flood Risk Management Strategy was updated in September 2024 to ensure it was aligned with national and local strategies, and in August 2024 capital funding was released to deliver flood alleviation projects. Alongside this, the Resilience service has been engaging with Town & Parish Councils to develop community emergency plans including flood action groups. Over the course of the 2024-25 Medium Term Financial Plan, £10.5m has been allocated to the Council's Flood Capital Programme over 2025-27 which intends to reduce the risk of surface water, ordinary water and groundwater flooding to over 200 residential properties in the county.

¹ https://www.metoffice.gov.uk/weather/warnings-and-advice/uk-storm-centre/index

https://www.gov.uk/government/publications/water-situation-national-monthly-reports-for-england-2024/water-situation-january-2024-summary

https://nic.org.uk/themes/water-floods/#:~:text=issues%20Headline%20recommendations-,Summary,a%20severe%20drought%20before%202050

⁴ https://nic.org.uk/studies-reports/reducing-the-risks-of-surface-water-flooding/surface-water-flooding-final-report/

⁵ https://www.metoffice.gov.uk/about-us/news-and-media/media-centre/weather-and-climate-news/2024/record-breaking-rainfall-for-some-this-september

⁶ https://thefloodhub.co.uk/flood-investigation-reports-section-19-of-the-flood-and-water-management-act-2010/

⁷ https://www.buckinghamshire.gov.uk/environment/flooding-and-flood-risk-management/flood-investigations/

Summary of Recommendations

The Transport, Environment and Climate Change Select Committee Rapid Review group recommend that:

Communication

- 1) a) Strategic Flood Management Team and the Resilience Team pursue a joint Medium Term Financial Plan bid to fund a communications post from the National Flooding Forum that can work closely with the Council and at-risk communities.
 - b) Anglian Water and Thames Water contribute towards the funding of this post.
 - c) The post facilitates the establishment of hyper-localised, multi-agency Flood Action Groups to build community-level flood resilience.
- 2) A short, accessible communications campaign be created and widely shared with the public and Parishes that clearly outlines roles, responsibilities and contact details of all risk management authorities for flood incidents, as well as reminders of personal responsibility.
- 3) Ward Members should:
 - a) be briefed when Section 19 reports or addendums have been completed.
 - b) have flood resilience and drainage improvements included in Member annual asset reviews.

Resourcing

4) In addition to Recommendation 1a, further resource should be allocated to the SFMT to enable recruitment and increase capacity. This is to ensure that communications remain open and clear between the Council services (Highways, Resilience and SFMT), water companies, the EA and Parishes before, during and after flooding events at all levels of responsibility.

Resilience

- 5) Parishes be supported to:
 - a) Create a Community Flood Action Group that crosses Parish borders (if appropriate) to pool mutual aid, encourage local resilience and increase responsiveness to external funding opportunities from the EA and water companies.
 - b) Ensure all relevant training for deployment is up to date.
 - c) Share information with each other if they suffer from the same type of flooding e.g. fluvial or groundwater.

Riparian Ownership

6) The Council must better understand its own assets and responsibilities which it inherited from the legacy councils, particularly where it is a riparian owner, and allocate budget accordingly to lead by example in carrying out routine maintenance that alleviates flood risk.

Planning

7) The emerging Local Plan actively incorporates identified policies and measures to mitigate flooding, such as use of permeable paving, particularly in areas prone to flooding.

8) The Planning service must give appropriate weighting to comments made by the water companies in at-risk areas regarding sewage capacity during the planning consultation phase, including any comments on the capacity of downflow sewage treatment plants.

Environment Agency

9) The EA should provide a dedicated contact to Community Flood Action Groups to enable Community Flood Coordinators to link effectively with the EA during flooding events. The EA contact must be kept up-to-date particularly when there are staffing changes within the EA.

Water Companies

10) Water Companies should monitor case/incident reports in known flood risk areas in a more strategic manner. This would enable live, widespread flooding incidents to be identified sooner and avoid the risk of individuals cases being dealt with in isolation.

Please read on to understand more fully the reasoning and evidence behind the recommendations.



Flooding in Chalfont St Peter during 2024 (photo credit: BBC: https://www.bbc.co.uk/news/articles/c62de7djy4yo)

Key Findings & Recommendations

After carefully considering the evidence we collected across a number of meetings, seven key themes emerged, and the review group wish to report on our observations and key findings as follows:

Theme One: Communication

- It is fundamentally important that communication is clear during a flooding event due to the multiple Risk Management Authorities (RMAs) and organisations that may be involved. For instance, a localised flood may involve liaison between Buckinghamshire Council, including council officers in the Highways, Resilience and Strategic Flood Management Teams, the emergency services, Thames Water or Anglian Water, the Environment Agency and Parish Councils. These organisations range vastly in size and resource, stretching from national Government body to local parish level.
- This is a fragmented approach that focuses on cooperation and partnership working. Despite this being
 the national blueprint, there is a significant challenge for residents or those unfamiliar with the set-up to
 appreciate or understand the roles and responsibilities of each RMA and the LLFA. This can be frustrating
 particularly when flood water, response and recovery can last many weeks or months.
- During a flood, the council's flood incident response is coordinated by the Resilience Team. Highways
 deliver an emergency frontline operational response to protect the Highways asset and may assist with
 potential property flooding and other issues subject to resource and direction from the Emergency
 Operations Centre or Duty Officers.
- Sandbags are deployed by Highways to protect the asset by restricting or directing water flow and can be requested by residents at risk of imminent flooding, however this is subject to resources and does not include either operational deployment or collection for disposal. The Council advises residents and businesses to purchase their own sandbags to protect their own property, as well as considering other flood resistance measures such as flood boards, flood doors and air brick covers. It is worth noting that there are drawbacks to sandbags, such as retention of sewage water and oil, and are made from biodegradable materials which will disintegrate if saturated for long periods of time.⁸⁹
- Throughout the evidence gathering exercise, the working group heard a mix of views on the performance and effectiveness of communication from the Buckinghamshire Council, Highways, water companies and the EA during a flood event. For instance:

Buckinghamshire Council: Highways

Marlow TC – Reported delays in sandbag stock availability and delivery despite being listed in the Community Flood Plan (e.g. Mill Road: 5 days after request, Garnet Court: some never arrived).

Chalfonts – Slow road closures, lack of signage and no sandbags offered when requested before and during January 2024 event.

Buckingham TC – In December 2020, there were slow road closures which led to vehicles creating bow waves that caused sewage to enter homes. There was also confusion regarding the responsibilities of Transport for Buckinghamshire. It is worth noting that this was under the previous Highways contract.

Hughenden Valley Residents Association – Historically positive engagement with remedial works on Valley Road in 2020 however recent concerns and calls for investigation around The Harrow Pub and Warrendene Road area have been dismissed, despite the Drainage Improvement Group carrying out their own investigation and detailing assessment of work required.

⁸ https://www.buckinghamshire.gov.uk/environment/flooding-and-flood-risk-management/flooding-to-a-property-or-business/.

⁹ https://www.buckinghamshire.gov.uk/environment/flooding-and-flood-risk-management/flooding-to-a-property-or-business/how-to-prepare-for-a-flood/

Chesham TC – Flood warning signs and sandbags added to Moor Road months into the flooding.

National Farmers' Union – Positive feedback from farmers on gully cleaning programme but mixed feedback on other engagement, most notably enforcement of farmers cleaning their own ditches that differed to EA advice.

Thames Water – Commended the quick engagement with Highways but noted Highways were not as involved in Chalfont St Peter.

Anglian Water – Found it more difficult to find the right contact in Highways on the ground compared to other Authorities (e.g. Milton Keynes) to arrange site meetings particularly during out of hours.

Buckinghamshire Council: Resilience and Strategic Flood Management Teams

Chalfonts – Felt the initial response was slow and dissatisfied with responses outlining their non-operational role particularly when Thames Water and the EA deferred to the LLFA; "we thought you would be more hands on."

Marlow TC – The overall communication chain worked well during the Marlow Community Flood Action Plan's deployment, for example Resilience assisted by chasing the EA regarding non-return valve repair at Gossmore.

Buckingham TC – The Resilience service is in regular contact with the Town Clerk whenever actionable alerts are issued.

Internal Drainage Board – Notes the significant merit in having named contacts.

Aylesbury TC – Inconsistent with being 'kept in the loop' on potential Willows defence deployment.

National Farmers' Union – A single point of contact with 'authority' would be helpful in holding water companies and EA to account.

Thames Water and Anglian Water

Marlow TC – Thames Water took one week to attend following reports of sewage in groundwater flooding. Communication has been 'non-existent.'

National Farmers' Union – Anglian Water is reasonable to work with, but Thames Water is more challenging compared to others operating in the south, for instance it is difficult to organise a site visit.

River Thame Conservation Trust – There are good examples of partnership working across the country however Thames Water could improve their knowledge at meetings in-person as information 'to follow afterwards' can take weeks and often feels like a stock answer.

Chalfonts – Overall lack of communication, response and follow-up to affected residents by Thames Water. Also, no sandbags offered.

Internal Drainage Board – Both can be challenging organisations to liaise with due to their large size and would like to improve the relationship. From a regulatory perspective it is positive due to

established face-to-face contact with key individuals.

Environment Agency

Marlow TC – Persistent follow-ups required to resolve malfunctioning non-return valve at Gossmore which is a concern and required Resilience service intervention however the overall communication chain worked well during the Marlow Community Flood Action Plan's deployment.

Internal Drainage Board – Due to the size of the organisation, it is difficult to pass messages to the right people. We have success due to two of us previously working at the EA and even signpost the public to the right contacts.

National Farmers' Union – Challenging to have the concerns of their members heard with one example of a field being flooded and unusable since September 2023. Farmers feel their concerns are not treated as urgent so ask the NFU to refer them to the correct contact for escalation.

Aylesbury & Chesham TCs – Feel that the EA's presence to monitor and carry out work has reduced which may be a reflection on EA's available resources.

- Of particular note was the lack of awareness of what the role and responsibility is of the LLFA and the
 misconception that it involves operational, hands-on response to flooding including protection of private
 property. This was highlighted particularly during the Chalfonts flooding.
- As the LLFA, the Council has enforcement powers under Sections 24 and 25 of the Land Drainage Act
 (LDA) 1991 as amended by the Flood and Water Management Act 2010. However, these powers are
 very limited and can only be used to 'ensure free passage of water along ordinary watercourses in the
 county by prohibiting the erection or alteration of an obstruction which impedes the flow of an ordinary
 watercourse, this includes overgrown vegetation due to lack of maintenance.'10

Members note that the regulations do not provide the LLFA with the 'teeth' of true enforcement powers that the public may reasonably expect the LLFA to have.

- When questioned, the water companies and the EA highlighted the increasing national issue of high groundwater that penetrates the sewer system, overloading it and thereby manifesting as flooding from sewers. The pressure exerted by groundwater is extreme and will always infiltrate the weakest points in the sealed networks. Work from the Strategic Flood Management Team (SFMT) on Project Groundwater is helping educate on this point and was spoken of highly by Thames Water, although the Chalfonts Flood Group felt that the project was 'muddying' the water.
- Members explored the possibility of how communication could be improved between all organisations
 that are involved in flood response and heard repeatedly that improvement would be mutually beneficial
 across the board.
- Additionally, the working group accept that residents will often approach local Parish and Town Councils
 and local Members as a first port of call for help and updates. It was therefore vital that they should be
 kept informed due to being an important connection to the community. It is also recognised that
 members of the public have valuable local knowledge and insight that should be listened to.
- The working group heard of a joint proposal being considered between the SFMT and Resilience service
 to bring in resource from the National Flood Forum (NFF) to support communication between specific atrisk communities, the Council and RMAs. The NFF is an independent community-led organisation that
 has a successful track record of facilitating positive and constructive dialogue between communities and
 organisations through the establishment of Flood Action Groups. Being independent would be important

¹⁰ https://www.buckinghamshire.gov.uk/environment/flooding-and-flood-risk-management/apply-for-land-drainage-consent/buckinghamshire-council-land-drainage-enforcement-policy/

in creating trust that Councils can find challenging to achieve. The NFF has significant experience in other counties, such as Cambridgeshire, Essex and Northamptonshire, with good results and currently works with over 300 local Flood Action Groups nationally. The cost for a full-time individual would be £80,000 (ex VAT) and brings additional benefits such as the NFF's expertise, organisation framework, and experience from lessons learnt elsewhere. It is also a development opportunity for council officers to upskill by learning best practice on community engagement from the NFF.¹¹

- Both water companies acknowledged the 'fantastic work' of the NFF and saw merit in the possibility of
 them contributing funding towards the cost of the NFF proposal due to it benefiting multiple parties.
 Anglian Water said they would be happy to discuss this outside the meeting and Thames Water were
 open to proposals that would improve communication. Members would suggest that a contribution from
 Thames Water would be relatively modest when compared to the considerable sums being spent on
 tankers pumping foul water 24/7 in Chalfont St Peter.
- The working group also sees the additional benefit of the role being a designated single point of contact
 that coordinates external communication of the council services to the community during a flood event.
 The NFU and River Thame Conservation Trust also commented on how a single point of contact would be
 useful for liaising with multiple agencies.
- Members note that whilst engagement with flooded communities is not a statutory function of the LLFA, the Council suffers reputational harm by not doing so as residents, businesses, Parishes and Members turn to the Council for help. As noted later in the report (see Recommendation 4), the SFMT does not have the resource to undertake this work.

<u>Recommendation 1a</u> – The Strategic Flood Management Team and the Resilience Team pursue a joint Medium Term Financial Plan bid to fund a communications post from the National Flooding Forum that can work closely with the Council and at-risk communities.

Recommendation 1b - Anglian Water and Thames Water contribute towards the funding of this post.

- The working group heard examples of flood action groups from the water companies and EA that had been set-up outside Buckinghamshire which had been beneficial to local communities that had been impacted by flooding by building resilience. The importance of Parish involvement was acknowledged, as was the need to keep the information accessible for everyone.
- Flood Action Groups with NFF involvement have a number of benefits including:
 - Regular updates on work progress
 - Quarterly steering group reports
 - A live tracker sheet of updated information on what is happening in each Flood Action Group
 - NFF advising and supporting the SFMT within internal and external meetings on Flood Action Groups
 - NFF support on wider flood risk initiatives¹²
- Additionally, the Internal Drainage Board note the useful work of Flood Action Groups across a range of areas:
 - Gathering information of watercourse condition thereby enabling early intervention works e.g. maintenance
 - Managing public expectations in terms of what is possible which can reduce confusion and complaints during a flood event
 - RMA collaboration to resolve cross-jurisdictional responsibilities
 - Encourage residents to be proactive e.g. property preparation and riparian ownership responsibilities
 - Developing good ideas from members of the public who usually have vast local knowledge
- In Buckinghamshire there are two communities with Flood Plans: Buckingham and Marlow. The

¹¹ https://nationalfloodforum.org.uk/working-together/working-with-professional-partners/what-we-offer/

¹² https://nationalfloodforum.org.uk/working-together/communities/benefits-of-flood-action-groups/

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- Resilience service works with both these Town Councils by liaising with them when flood warnings are issued and also with plan exercises.
- The Council has a Service Level Agreement with Aylesbury Town Council for the storage and deployment of flood defence equipment for The Willows estate, Aylesbury, which has previously flooded. Its deployment was almost required during the latest heavy rainfall in September 2024.

Members value the importance of Flood Action Groups forming partnerships during 'peacetime' so that plans can be formalised and then enacted during flood events.

- It is critical that Flood Action Groups have readily available access to key contact information for group members. This includes specific contacts at the EA and water companies that are relevant to the Flood Action Group's location so that issues can be investigated and action taken (See Recommendation 9).
- The group would suggest that the NFF postholder be the single point of contact for all partners in the group that maintains this contact information and facilitates the ongoing management of these hyperlocalised meetings as necessary.

<u>Recommendation 1c</u> – The post facilitates the establishment of hyper-localised, multi-agency Flood Action Groups to build community-level flood resilience.

- Members agree with the observation that a clearer understanding of the roles and responsibilities of each RMA would be highly beneficial during a flood and after a flood due to:
 - o Misunderstandings about what the LLFA does and does not do
 - o A lack of clear information creating a 'vacuum' which leads to unhelpful speculation
- A summary of 'who does what' is as follows:

During a Flood

Risk Management Authority	Role		
Buckinghamshire Council: Resilience Service	 Plans for response to emergencies and control or reduce impact of emergency – category one responder Co-ordinate as per the Flood Plan as part of a multi-agency response Follow Incident Management Process and set up Incident Management Team as appropriate in a flood event May set up rest centres for people evacuated due to flooding 		
Buckinghamshire Council: LLFA	 Community networking to support emergency plans Information and data gathering 		
Buckinghamshire Council: Highways	 Fixing drainage and flooding issues on highways and roads across Buckinghamshire Road closures May provide sandbags if appropriate 		
Environment Agency	 Operational responsibility for managing the risk of flooding from main rivers, reservoirs, estuaries and the sea Issuing flood warnings 		
Water Companies	 Managing the flooding and flood risk from public sewers and water mains 		
Emergency Services	 Police – co-ordination of emergency services during a major flood Fire service – saving lives, may also pump out flood water 		

Town and Parish Councils	 Implement own risk management process from community flood plan No duties but can encourage set-up of volunteer flood groups/wardens in at-risk areas Liaise with other agencies to be a point of contact with community
Property Owners	Take appropriate action to protect their own property from flooding

Before/After a Flood

Risk Management Authority	Role		
Buckinghamshire Council: LLFA	 Manage local flood risk from surface water, ordinary watercourse and groundwater Determine post-flooding if a Section 19 Flood Investigation is required Statutory consultee in the planning process for major developments in relation to surface water drainage Have a decision-making responsibility for whether third party works on ordinary watercourses may affect water flow can take place (land drainage consenting) Discretionary enforcement powers on riparian owners of private watercourses to undertake maintenance to reduce flood risk 		
Buckinghamshire Council: Highways	Responsible for managing & maintaining highway infrastructure such as gullies, culverts and other assets to ensure effective drainage of the highway		
Environment Agency	 Responsibility for taking a strategic overview of the management of all sources of flooding and coastal erosion Has operational responsibility for managing the risk of flooding from main rivers, reservoirs, estuaries and the sea (as well as being a coastal erosion risk management authority) Statutory consultee in the planning process for sites in Flood Zone 2 or 3 or within 20 metres of a Main River 		
Water Companies	Responsible for managing the flooding and flood risk from public sewers and water mains		
Bedford Group of Internal Drainage Board	 Managing water levels in the watercourses within their area Permit works on an ordinary watercourse in an Internal Drainage Board (IDB) IDBs are non-statutory consultees in the planning process, but local planning authorities will consult with IDBs in relation to drainage matters. 		
Town and Parish Councils	 Being prepared by reviewing own risk management processes & create community flood plan Liaise with other agencies to be a point of contact within community and reporting flooding 		
Property Owners	Take appropriate action to protect their own property from flooding		

Riparian Owners	•	Maintaining the watercourse or ditch running through or
		adjacent to their land (applied to bother main rivers and
		ordinary watercourses)

• It would therefore be appropriate for the Council to promote understanding of 'who does what' and 'who to contact' in preparation for flood events particularly in at-risk areas. There may also be merit in circulating the messaging via the Community Boards and tailoring it locally.

<u>Recommendation 2</u> – A short, accessible communications campaign be created and widely shared with the public and Parishes that clearly outlines roles, responsibilities and contact details of all risk management authorities for flood incidents as well as reminders of personal responsibility.

- Section 19 of the Flood and Water Management Act 2010 places a statutory duty on LLFAs to investigate
 flooding to the extent that it considers it necessary or appropriate. In Buckinghamshire, the LLFA
 investigate and publish reports into 'significant' flood events that meeting certain criteria as defined by
 the Local Risk Management Strategy.¹³ The most common trigger for Section 19 (S19) investigations are
 internal flooding of five or more residential or commercial properties (not including gardens or garages)
 in a single event from the same source of flooding. These reports may take many months to complete.
- These reports aim to provide:
 - An overview of the flooding incident
 - o Details of the flooding incident's impact on the drainage infrastructure in the wider catchment
 - o An overview of the known history of flooding
 - Rainfall analysis
 - Understanding of the causes and mechanisms of the flood
 - The roles and responsibilities of all RMAs involved
- High-level recommendations may also be suggested for stakeholders to consider and investigate further.
 However, as the group heard from the EA, enforcement of these would require legislative change. It is also important to note the report will not resolve the flooding issues or provide designed solutions.¹⁴
- Where the causes of, mechanisms and responsibilities for addressing flooding issues are already well understood (for example, where a previous S19 investigation has been undertaken), as per the Local Flood Risk Management Strategy it is unlikely that a new formal investigation will be undertaken.
- The working group heard that addendums to historic S19 reports could be drafted when:
 - o areas were re-impacted by flooding and the criteria for triggering an investigation would have been reached had there not been a previous investigation
 - it was deemed there was not to have been substantial changes to the causes found in the existing report.
- Addendums may be produced more quickly than a formal S19 investigation, can review previous
 recommendations and make additional ones. Whilst the working group appreciate that S19 addendums
 may offer a quicker reporting response, there is the risk that flooded communities may feel that more
 recent incidents may not be taken as seriously, so a balance needs to be struck.
- Local Members are engaged by the SFMT during S19 investigation process. Once a draft report is
 available, Members and the relevant Parish Council are invited to fact check the report and provide any
 other comments. Ward members, as well as the relevant Parish Council, are briefed through a written
 feedback process when formal S19s are completed. However, the working group heard that local
 Members were not briefed when S19 reports or S19 addendums were finalised. This was explored and
 the group was advised that the organiser of a briefing would depend on the flooding source e.g. EA.
- Given that Members can be a focal point during a flooding event and can have a community liaison role in flooding response and resilience, the group would have expected that the local Members be updated

¹³ https://www.buckinghamshire.gov.uk/environment/flooding-and-flood-risk-management/flood-risk-strategies-plans-and-assessments/local-flood-risk-management-strategy/better-understanding-of-flood-risk-now-and-in-the-future/

¹⁴ https://www.buckinghamshire.gov.uk/environment/flooding-and-flood-risk-management/flood-investigations/

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- on finalised addendums by the Council, even if the flooding responsibility lies with another RMA.
- In addition to this, Members receive annual reviews on the assets in their wards and the Medium-Term Financial Plan (MTFP) that focuses on carriageway and footway schemes. Members have the opportunity to raise concerns about drainage improvements with their Local Area Technician during their monthly surgeries. However, the working group believe that this should be included in the annual local ward asset review as capital investment into drainage and gully improvements may be a greater priority to the local community. Members have the local knowledge to engage with residents and suggest improvements to Highways in flood-prone areas that take into account the local geography; for instance, a wider highway verge may lend itself to a new soakaway that removes excess surface water from the highway.

Recommendation 3 - Ward Members should:

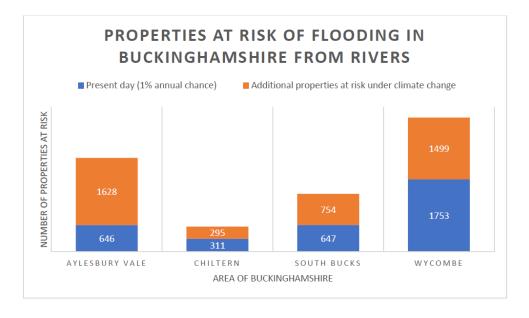
- a) be briefed when Section 19 reports or addendums have been completed.
- b) have flood resilience and drainage improvements included in Member annual asset reviews.



Flooding from the River Great Ouse at Tingewick Road in Buckingham, 23 December 2020 (photo credit: Tyne Marshall)

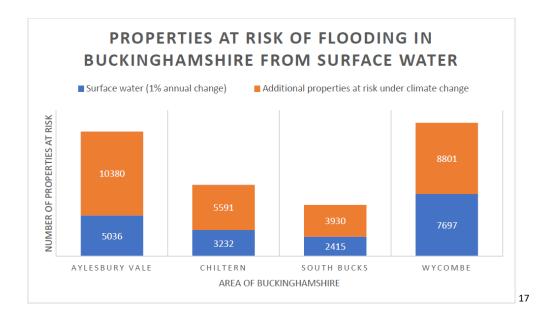
Theme Two: Resourcing

- The Council's Strategic Flood Management Team (SFMT) works across four key areas, that are all managed by the SFMT Manager:
 - Flood Management (1 Team Manager & 3 FTE)
 - Coordinate management of flood risk from surface water, groundwater and ordinary water courses
 - Local Flood Risk Management Strategy
 - Asset Register
 - Ordinary watercourse land drainage consent
 - Enforcement
 - Section 19 Flood investigations and addendums
 - Projects (1 Programme Manager & 1 FTE)
 - Feasibility studies
 - Manage pipeline projects
 - Deliver flood schemes, notably property flood resilience and natural flood management
 - Sustainable Drainage Schemes (SuDS) (1 Team Leader & 4 FTE)
 - Major & minor planning consultations
 - Pre-application advice and planning performance agreements
 - Respond to national infrastructure projects e.g. HS2 and EWR
 - o Project Groundwater (1 Programme Manager & 2.5 FTE)
 - Defra funded innovation project as part of the £150 million Flood and Coastal Resilience Innovation Programme which is managed by the Environment Agency¹⁵
- During the course of the review, the SFMT Manager left the organisation. During evidence gathering
 meetings, it was clear that the outgoing SFMT Manager had been respected by those she had worked
 with and would be a loss to the Council. Members recognise that there was also a risk of losing
 'corporate memory' with the outgoing SFMT Manager. Members heard that the role would not be
 recruited to and that the Climate Change Programme & Partnership Manager would oversee the four key
 SFMT areas on an interim basis, in addition to his existing teams.
- The SFMT is currently resourced to manage the typical workload of several years ago when there was
 less demand on the team, which is in stark contrast to the current picture. One example is the impact of
 climate change that is significantly increasing the number of properties at risk of flooding across the
 county:



¹⁵ https://www.buckinghamshire.gov.uk/environment/flooding-and-flood-risk-management/flood-management-projects/project-groundwater/

¹⁶ https://www.projectgroundwater.co.uk/



- Moreover, there has been more severe and extensive flooding in the county in recent years, particularly in north Buckinghamshire in 2020, and last winter was the wettest in 30 years.
- The working group heard that more flooding events has led to increased expectations of the SFMT from residents and Members on flood response, coordination, engagement and recovery that are not within the statutory remit of the service. For instance, a significant amount of time was allocated by the outgoing SFMT Leader towards the Chalfont St Peter flood incident in 2024.

The group fully acknowledge and appreciate the work of the SFMT, however increased demand and expectation for officers to cover additional, non-statutory functions and staff covering responsibilities for vacant posts can lead to increased pressures, reduced team morale and burnout.

- In particular, the team does not have the resource or skillset to fully engage with flooded and at-risk communities (aside from Section 19 reports) and must be assisted in this regard (See Recommendation 1a, b and c).
- If Members demand more engagement, then the SFMT must be supported to deliver this.
- Additionally, there is no revenue budget set aside for Section 19 reports, so if these do increase in frequency then the working group note there is a risk of budgetary implications as this is a statutory LLFA function.
- Following extensive flooding, the SFMT collate reports of flooding from a range of sources and partner
 organisations, including Highways, Buckinghamshire Fire and Rescue, the EA and affected Town and
 Parish Councils. This process takes a few weeks and may require more detailed, costly investigation such
 as mail drops of flooded areas. This manual, piecemeal investigation is required as there is currently no
 central system for Members and communities to report flooded households or businesses during or after
 an incident. SFMT has ambition to explore improvement options to more effectively record, capture and
 share flood incident records, such as an online reporting tool.
- An online questionnaire was utilised to gather information on the Chalfont St Peter flooding and understand its impact on the local community which has had 102 responses. However more resource is required to develop reporting further.

¹⁷ Buckinghamshire Council Local Flood Risk Management Strategy 2024



 Given the likelihood of flood collation activity increasing in future due to climate change, the team must be resourced to deal with the challenge.¹⁸

<u>Recommendation 4</u> – In addition to Recommendation 1a, b and c, further resource should be allocated to the SFMT to enable recruitment and increase capacity. This is to ensure that communications remain open and clear between the Council services (Highways, Resilience and SFMT), water companies, the EA and Parishes before, during and after flooding events at all levels of responsibility.



Highways surface water flooding, September 2024 (photo credit: Councillor Stuart Wilson)

¹⁸ https://www.bucks.radio/news/local-news/flooding-to-become-more-common-in-buckinghamshire-warning-after-heavy-rain/18 |

Theme Three: Resilience

- The Resilience service provides a 24/7 365 days out of hours on call emergency response to flooding and collaborates with the SFMT and Highways. The Flood Response Plan and Sandbag Protocol can also be invoked. There is no provision or training for the service to be operationally deployed to manage a flood incident.
- The group heard that the service engages with local communities when flood alerts are issued by the EA, but this can be hit and miss depending on their community's receptiveness e.g. voicemails being left
- The service has been working to promote and develop Community Emergency Plans and can provide support, guidance and plan templates to assist in their formulation. Resilience also has carried out exercises with Buckingham Town Council and Marlow Town Council, as they have dedicated Flood Plans.
- However, it was reported there has been very little uptake at local community levels to develop either of these plans mainly due to either:
 - o The Council being seen to push work on to the local community or
 - An informal procedure already being in place amongst local residents and therefore does not require formal documentation
- This is a national picture that is being experienced by other Local Authorities.
- The service is also working with Bucks Business First on a new business resilience programme to prepare and protect themselves against major challenges such as flood incidents. This CODE RED – Business Resilience Scheme aims to back businesses to plan, prepare, be ready and adapt, so that any risk and impact is minimised. The service will highlight a range of useful resources and practical steps businesses can take in supporting their respective continuity plans.¹⁹
- The working group was advised that a community emergency plan enables parishes to have community assets listed that can support a flood response e.g. tractor and 4x4 owners, list of volunteers and storage of sandbags, cones and flood signage. It is notable that the local parish is best placed to provide a local response due to knowing the location of vulnerable residents and community assets. Additionally, the group understands that the water companies and the EA look favourably upon those communities with plans in place when it comes to funding for basic equipment (cones, hi-vis jackets etc).

The working group recognise that local Members have a role to play in promoting Community Emergency Plans to parishes in their wards.

- The group note that road closures and associated closure signage deployment remain a Highways responsibility during a flood event. Any devolution of this would need to be carefully discussed on a caseby-case basis.
- In response to discussion about the resources required for each Parish and Town Council to draft a plan, the group was advised that Parishes can put together a joint-plan that covers multiple Parish areas that pools resource and brings together mutual-aid support. Such joint plans would still be applicable for external funding from the EA and water companies.
- During the meeting with the Chalfonts Flood Group, it was suggested that the parish reach out to other parishes who may be experiencing similar flooding issues to share best practice and lessons learnt. Following the meeting, the working group was pleased to hear that the Parish Clerks in Chalfont St Peter and Chalfont St Giles had reached out to the Parish Clerk network. There may be merit in the Resilience service encouraging at-risk parishes to share relevant information with each other depending on the flood risk (e.g. fluvial or groundwater) through existing channels such as Buckinghamshire and Milton Keynes Association of Local Councils (BMKALC).

<u>Recommendation 5</u> – Parishes be supported to:

¹⁹ https://bbf.uk.com/news/new-business-resilience-programme-is-a-boost-to-buckinghamshire-organisations

- a) create a Community Flood Action Group that crosses Parish borders (if appropriate) to pool mutual aid, encourage local resilience and increase responsiveness to external funding opportunities from the EA and water companies.
- b) ensure all relevant training for flood defence deployment is up to date.
- c) share information with each other if they suffer from the same type of flooding e.g. fluvial or groundwater.

Theme Four: Riparian Ownership

- Land or property owners next to a river, stream or ditch are known as riparian owners and have certain
 responsibilities. A key responsibility is maintaining the bed and banks of the watercourse and keeping it
 free from obstruction (e.g. loose vegetation or litter) as failing to do so can increase flood risk by
 reducing flow volume.²⁰ In fact, one of the few enforcement powers the Council has as the LLFA relates
 to ensuring free passage of water along ordinary water courses.
- The working group explored the council's current arrangements on how it manages its own riparian ownership responsibilities and was surprised to hear that there is no allocated budget for this. It was understood that prior to unitary, low-level riparian maintenance was carried out informally through various different District Council service budgets but this has not been picked up post-April 2020. The group was also concerned that the council's asset register does not contain riparian land. More detailed discussions are required to establish where the maintenance budget would lie as it may be across services, but it is fundamental that this is addressed. We did hear examples of multiple budgets being combined to resolve flooding issues such as capital expenditure on the Pednormead End project, Chesham, so services should be able to work together to deliver riparian maintenance.
- The group heard of an example of the lack of council riparian maintenance that contributed to prolonged flooding at Moor Road, Chesham, in Summer 2024. The river channel had significant vegetation growth that had built-up through a lack of maintenance thereby restricting the free flow of water. We heard that the Council had been reliant on an annual winter maintenance cut carried out by the EA (subject to their budget). Members understand that there has been a lot of dialogue between the Council, Chesham Town Council, the EA and the River Chess Association which has caused significant frustration to local residents due to a lack of action. The working group heard that local residents removed excess weed from the channel which greatly assisted with the problem²¹ but did also hear that the 'vigilante' action of a member of the public opening a sluice in the Lords Mill Pond almost led to the flooding of the Gym and Swim facility. This was averted through the efforts of gym staff, Chesham Environmental Group and Chesham Town Council.
- The group was sorry to hear that the impact of the flooding has increased insurance costs for the Gym and Swim facility and been a contributing factor towards the loss of a £1m data centre project, which aimed to improve sustainability by enabling waste heat to be harnessed to heat the pool water.
- Whilst the group understands that short-term plans have been put in place, long-term maintenance
 management must materialise particularly given the increased projection of intense rainfall due to
 climate change and the risk of the area flooding again. In this example, consistent deferral of action has
 led to a larger issue arising that negatively impacts the wider community and the council's reputation.

Members believe that the Council should be leading by example by ensuring it complies with its riparian ownership responsibilities.

<u>Recommendation 6</u> – The Council must better understand its own assets and responsibilities which it inherited from the legacy councils, particularly where it is a riparian owner, and allocate budget accordingly to lead by example in carrying out routine maintenance that alleviates flood risk.

²⁰ https://www.buckinghamshire.gov.uk/environment/flooding-and-flood-risk-management/maintaining-a-river-or-stream-you-own/

²¹ https://www.bucks.radio/news/local-news/stream-off-river-chess-cleared-of-rubbish-and-debris-after-flooding/

Theme Five: Planning

- Buckinghamshire has experienced significant housing development and depending on the outcome of the NPPF consultation, may have to increase this number by an additional 42% (from 2,912 to 4,122 homes per year).²²
- The county has the existing Local Plans of the former District Councils and has to produce a Buckinghamshire Local Plan by April 2025. This work is in development.
- The Buckinghamshire Local Plan aims to deliver sustainable development through:
 - o meeting the social, economic, and **environmental** needs of Buckinghamshire
 - better quality places
 - o more comprehensive and predictable delivery of all kinds of infrastructure
- It is crucial that the emerging Local Plan is resilient to future flood risks given that more intense rainfall is predicted to increase in frequency due to climate change. This is particularly important for areas already at-risk of flooding. We heard from the NFU that neighbouring planning authorities in Oxfordshire are 'behind the curve' in this regard and that Buckinghamshire Council has an opportunity to address the flooding challenge with its Local Plan.
- There are measures that can be incorporated into the Local Plan through Sustainable Drainage Systems (SuDS). SuDS aim to reduce the impact of development by replicating the natural processes through which rainwater is captured, stored and transported within a development. Examples include permeable paving, attenuation ponds, green roofs and rain gardens; all of which are in place in Kingsbrook, Aylesbury (see below).





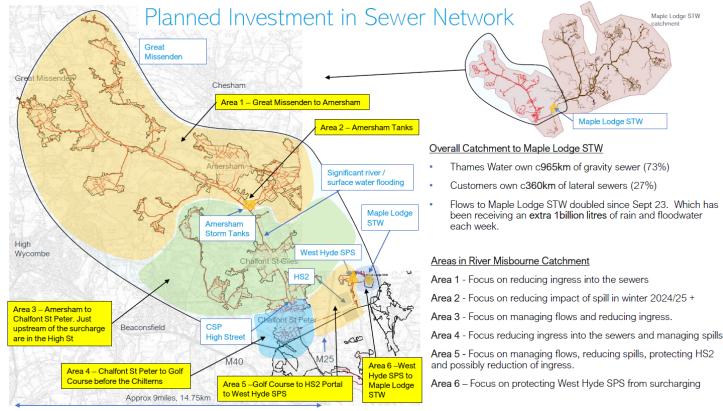
Other examples include bioretention areas, soakaways and attenuation basins. These can be connected

²² https://buckinghamshire.moderngov.co.uk/mglssueHistoryHome.aspx?IId=44950&Opt=0

- to domestic surface water runoff (e.g. roofs) thereby reducing surface water that reaches the sewer network, the highway and gullies. This is particularly important during intense rainfall events as the water volume can overwhelm drainage systems.
- There is an understandable perception that new development increases flood risk due to 'concreting over' the landscape and increasing the impermeable area, however this can be mitigated against if managed correctly. In fact, the Internal Drainage Board reported that they worked with the Stony Stratford Flood Action Group to demonstrate that a local brownfield development in Milton Keynes would end up being beneficial in terms of flood risk. This was due to the measures put in place such as:
 - permeable paving
 - o changing the land profile for drainage away from the high street and instead towards fields and the watercourse
 - underground surface water storage tanks that have a steady outflow
- The maintenance of any measures in the Local Plan is also an important factor to consider.
- The working group notes that the Growth, Infrastructure and Housing Select Committee has had an item on its 2024-25 work programme on the Local Plan and its relationship with utility companies and would encourage this being considered further whilst the Local Plan emerges particularly in relation to the water companies.
- Linked to this is the liaison between the Local Planning Authority (LPA) and the water companies during the planning application process which the working group heard was an area of concern in the Chalfonts and Chesham.
- Water companies are not a statutory consultee during the planning process however the LPA does
 engage with them regarding applications as developers have a legislative right to connect to the existing
 sewage infrastructure. Water companies must ensure that their business plans keep their infrastructure
 up to date to meet demand of new developments. The water companies have submitted their business
 plans to Ofwat for the period 2025-30.²³
- In response to comments from the water companies on existing network capacity, the LPA can put in place conditions on Section 106 and occupancy levels to ensure that the infrastructure is ready to meet demand
- The working group appreciate that there are competing priorities here as the water companies would want to ensure that their investment into the sewer asset is being fully utilised however the group feel that at-risk areas should take priority for sewage investment during development.
- Furthermore, the group heard concerns from the Chalfonts Flood Working Group about the performance of Thames Water's Maple Lodge Treatment Works that was impacting Chalfont St Peter due to being downstream. The Chalfonts cited that Three Rivers District Council had 'documented issues' with the works. The River Thame Conservation Trust also commented that increased flow downstream to treatment works was not taken into account with planned developments. When questioned on Maple Lodge, Thames Water responded that discharge events had taken place due to groundwater ingress, flows to the works had doubled since September 2023 and that there was no issue at the station. Thames Water also advised that Maple Lodge is being upgraded to ensure a higher quality of treated effluent goes to the river and that its storm tank capacity was being increased. This was planned to be completed in 2030 and would reduce the need for untreated sewage discharges during storm conditions.²⁴

²³ https://www.ofwat.gov.uk/regulated-companies/price-review/2024-price-review/business-plans/

²⁴ https://www.thameswater.co.uk/about-us/performance/river-health/frequently-asked-questions/information-about-specific-sites#m



- The working group believes that there is a valid concern in the capacity of treatment works that must be
 taken into account alongside sewage infrastructure when the LPA considers development applications.
 The example above highlights that there may also be merit in seeking cross-border comments from
 neighbouring LPAs on the performance of treatment works when the asset is located outside the county,
 as further demands will undoubtedly impact it and therefore affect Buckinghamshire residents.
- We note with interest that the Environment Agency have objected to a housing development site in Oxfordshire 'due to a failing sewage system' at Cassington, Oxford. The treatment works has been illegally discharging sewage since 2017 and requires investment to be compliant which was planned for completion in 2025 but has been delayed by several years. Despite this, Thames Water had said to South Oxfordshire DC during the planning application process that there were no issues with capacity at the treatment works.²⁵

<u>Recommendation 7</u> – The emerging Local Plan actively incorporates identified policies and measures to mitigate flooding, such as use of permeable paving, particularly in areas prone to flooding.

<u>Recommendation 8</u> – The Planning service must give appropriate weighting to comments made by the water companies in at-risk areas regarding sewage capacity during the planning consultation phase including any comments on the capacity of downflow sewage treatment plants.

²⁵ https://www.theguardian.com/environment/2024/feb/27/oxfordshire-housing-development-should-be-blocked-due-to-failing-sewage-system

Theme Six: Environment Agency

- The group heard consistently throughout the inquiry that there is a feeling of reduced EA presence at ground level, which may be a national trend given that farmers and landowners have raised concerns about the country's waterways and drainage systems being 'clogged and in disrepair.' ²⁶
- An additional theme raised was that it is challenging to find the correct contact at the EA. The Internal
 Drainage Board report that they have assisted the public to signpost to the right departments which they
 are able to do due to having staff that have previously worked at the EA. Whilst appreciating that the EA
 is a large organisation split across different regional areas, the working group feel the EA must be more
 accessible to the public and that it should not take operational knowledge of the EA's inner workings to
 quickly reach the right contacts.
- Of particular concern was the experience of Marlow Town Council during a flood event: a flood warden
 reported a malfunctioning non-return valve at Gossmore leading to immediate contact with the EA. The
 warden had only been provided the standard EA telephone number to then ask to be put through to the
 Duty Flood Officer. Each subsequent contact required a re-explanation of the whole situation to the EA
 call-handler, leading to frustration. The group understand intervention was also required by the
 Resilience service to assist in the EA follow-ups and subsequent repairs.
- Given that the Council is promoting Community Flood Action Groups, it is imperative that the right contacts at the EA can be contacted by the Flood Warden to avoid frustrations particularly as flood events can be time sensitive.

<u>Recommendation 9</u> – The EA should provide a dedicated contact to Community Flood Action Groups to enable Community Flood Coordinators to link effectively with the EA during flooding events. The EA contact must be kept up-to-date particularly when there are staffing changes within the EA.

Theme Seven: Water Companies

- The Chalfonts reported that multiple properties at Corden's Close, Hiljon Crescent, Lower Road, Hither Meadow and Woodside Close experienced varying degrees of sewage flooding in and around their properties and/or were unable to use toilets, washing machines, sinks etc. These issues were reported to Thames Water with engineers attending to pump out based on an allocated job number.
- However, it is understood that each case and job number was dealt with in isolation, and it was reported
 that engineers were unable to assist neighbouring properties due to a job number not being raised
 despite the issue being the same or very similar and having the same root cause. It is also understood
 by the Chalfonts Flood Group that Thames Water's emergency callout centre was not linking the cases or
 job numbers together which ultimately resulted in frustration for struggling residents and wasted
 engineer time in travelling back and forth.
- The working group also understand that Thames Water had promised follow-up contact with affected homeowners but that this has not been forthcoming.

The working group ask that Thames Water maintain their integrity by completing the follow-up actions with individual properties if they have promised to do so.

In response to questions raised by the working group, Thames Water did acknowledge that there are
areas of improvement to be made in their reporting system. An assurance was given that Thames Water
was releasing emergency funding to help Chalfont St Peter and that works would continue irrespective of
its future funding models.

<u>Recommendation 10</u> – Water Companies should monitor case/incident reports in known flood risk areas in a more strategic manner. This would enable live, widespread flooding incidents to be identified sooner and avoid the risk of individuals cases being dealt with in isolation.

https://www.fwi.co.uk/news/environment/flood-hit-farmers-call-for-national-rivers-authority-to-be-reinstated