

# Agenda Item 8.

<b>TITLE</b>	Flood Risk Management Update
<b>FOR CONSIDERATION BY</b>	Community and Corporate Overview and Scrutiny Committee on 22 May 2023 at 7pm
<b>WARD</b>	None specific
<b>STRATEGIC DIRECTOR</b>	Giorgio Framallicco
<b>LEAD MEMBER</b>	Ian Shenton, Executive Member for Environment

## **OUTCOME**

To inform Members of the progress made with the Lead Local Flood Authority's (LLFA) duties under the Flood and Water Management Act (FWMA) 2010 during 2022/2023.

## **RECOMMENDATION**

That the Committee review the report and note the ongoing work in relation to flood risk reduction in the Borough and offer comment.

## **SUMMARY OF REPORT**

Flood risk management is a key responsibility for Wokingham Borough Council (WBC), in its role as the Lead Local Flood Authority (LLFA), following the introduction of the Flood and Water Management Act (FWMA) in 2010. The LLFA has been progressing with the implementation of its responsibilities, to manage the coordination of surface water and groundwater flood risk, to protect residents from flooding, whilst continuing to deliver existing reactive drainage maintenance services. This report provides an update to Members on the progress made during 2022/23. The next 12 months will also see further progress which will be reported back to the committee in 2024.

## **Background**

Drainage within the Borough is complex in the sense that some of our gulleys discharge into a Thameswater sewer network. This calls for continuous partnership working with the utilities provider, to ensure that both systems are harmoniously functioning optimally, to reduce flood risk in the Borough. This symbiotic relationship can only be effective if both parties work in synergy.

2022/23 has been an interesting year in the sense that we had a relatively dry summer, followed by some heavy burst of rainfall during December, as well as some freezing temperatures in January.

During the 2022/23 financial year, the Flooding and Drainage team made further progress in fulfilling Wokingham Borough Council's (WBC) statutory obligations as Lead Local Flood Authority (LLFA) under the Flood and Water Management Act

(FWMA) 2010. The primary responsibility as an LLFA is to manage the coordination of surface water and groundwater flood risk, to protect residents from flooding.

As the highways authority, WBC is also responsible for ensuring that the highway drainage system is working effectively, to prevent highway and property flooding following heavy rainfall.

To deliver these responsibilities, several actions have been taken over the past 12 months, including:

1. CCTV condition surveys and repair works to the highway drainage system.
2. The delivery of capital drainage schemes across the borough.
3. Ongoing revenue drainage maintenance works.
4. Comments on planning applications in relation to flooding and drainage.
5. Smart drainage trials.
6. Manhole Inventory.
7. Thames RFCC funding to reduce surface water flood risk.
8. Designation of additional flood defense structures
9. Section 21 Asset Register

### **1. CCTV drainage surveys and repair works.**

The drainage network in the Borough has been there for decades and because it is beneath the surface, we do not really notice when failures start occurring, until the damage is severe and starts manifesting above ground. When this happens, the pipe needs to be surveyed with a camera, to assess the damage done and depending on the level of damage done, repairs or a complete replacement of the pipe can be commissioned.

Pipe repair or replacement works usually require travel disruptions, via traffic lights or road closures. The inconvenience for residents implies that as a Borough, we start looking at replacing the drainage pipes within the Borough, so that they can last another 30 years before they are done again. This is a costly investment, but worthwhile, for long-term savings.

Between April 2022 and February 2023, despite tight budgetary constraints, the drainage team commissioned CCTV surveys and pipe replacement works at the following locations:

Shinfield Road  
Headley Road East

## Barkham Road phase 2

The repair works resulting from the CCTV works have led to a significant drop in reports of surface water flooding in these locations and consequently has allowed the emergency flood response team to focus elsewhere.

### **2. Delivery of capital drainage schemes**

In addition to the program of CCTV surveys and pipe replacement works carried out in the 2022/23 financial year, officers have worked with our capital projects team to complete construction of the Barkham Ride capital drainage scheme.

Even though this scheme had been designed and waiting to be delivered, construction was delayed because a road space license could not be acquired, from street works, due to other works in the area.

The drainage team obtained the street works permit to construct during 2022/23 and construction was completed in August 2022.

Officers are also working hard with our consultants (WSP) to wrap up the detail design for the Church Lane Flood Alleviation Scheme, which has experienced ecological setbacks, as well as the discovery of a power cable line, running straight through the area of the proposed attenuation basin.

Working in collaboration with SSEN, we have agreed a way forward and detailed design can continue, to finalize construction details and drawings. Once the construction drawings have been submitted by WSP, we will open tenders for construction, and hopefully deliver the project in 2023/24.

### **3. Ongoing drainage revenue works.**

WBC's contractor emptied over 40,000 gullies between January 2022 and March 2023, as part of the annual gully cleansing program. As normal, the contractor records the silt levels within the gulleys, allowing officers to continue to develop a risk based approach to gully cleansing. WBC now has over 5 years of silt level monitoring, allowing officers to identify areas where silt builds up rapidly. This information is reviewed annually, to update the annual gully cleansing program, ensuring that a risk-based approach is used and that areas prone to silt build up are targeted more regularly.

In addition, drainage issues reported by residents, on an ad-hoc basis, were responded to. These include issues on the highways network, localized flooding, gully emptying, delivery of sandbags, replacement of small sections of pipe, installation of new drainage, manhole and gully lid replacements.

It is worth mentioning that the freezing temperatures experienced led to several pipe bursts, which had to be responded to, by the team, to mitigate property flooding.

#### **4. Commenting on planning applications in relation to flooding and drainage**

Compared to the 673 planning consultations responded to during 2021/22, the Flooding and Drainage team have responded to over 700 planning applications during 2022/23.

Even though the team is one man short, over 500 of the 700 consultations were responded to within the statutory consultation period.

Our responses to planning consultations help to ensure that the most appropriate drainage strategies are being implemented by developers and this contributes towards reducing surface water flood risk across the borough, taking climate change into consideration.

#### **5. Smart drainage trials**

Between February and December 2021, the drainage team, in collaboration with the capital program team piloted a scheme that uses gulley sensors to identify when a gulley needs emptying, allowing for proactive maintenance of the gulley, thus reducing the number of reactive responses to flood incidents. 3 roads benefitted from the smart drainage sensor trial and these roads included Gipsy Lane and Wilderness Road, in Earley and Reading Road, Arborfield.

The results of this Map16 based trial have not generated meaningful data, however, other suppliers are being explored, to determine if the smart drainage sensors will provide the cost savings that we are hoping for.

If the smart drainage sensor trial proves successful in these locations, the drainage team will look at rolling the scheme out on a much wider basis across the borough.

This will ultimately replace the annual gulley cleansing program and achieve cost savings as well as proactive gully maintenance, rather than reactive, as it is at the moment.

#### **6. Manhole Inventory**

During the 2022/23 financial year the drainage team commissioned the clearance of 25% of the council's 5000 manholes, in accordance with the requirement of the Highways Maintenance Management Plan, which states that all WBC highways drainage manholes must be inspected at least once every 5 years to record their condition and identify any required maintenance.

We are now completing year 4 of clearing 25% of the manholes in the Borough. At the end of year 4, we would revert to clearing 20% of our manhole infrastructure each year to ensure that all manholes are cleared at least once every 5 years.

Manhole maintenance ensures that the drainage team can proactively carry out manhole upgrades and repairs before it leads to flooding.

Data from all the maintenance visits are captured in our drainage database for future reference.

## **7. Thames RFCC funding to reduce surface water flood risk.**

The drainage team continues to look for opportunities for extra funding, working in partnership with different stakeholders, to acquire funding for projects within the Borough, that will reduce flood risk.

Despite being unsuccessful in our bid for the Thameswater funding last year, we were not discouraged and working in collaboration with Swallowfield Parish Council and Swallowfield Flood Resilience Group, we applied for the Thames RFCC 2022/23 funding for Natural Flood Management projects.

Our application was successful and we were awarded £47K, towards funding the Swallowfield/Riseley Natural Flood Management Scheme.

The paperwork is being finalised for the funds to be transferred.

Once the funds have been received, we will open tenders for the scheme to be delivered, to help alleviate some of the surface water flood issues in Riseley and Swallowfield.

## **8. Designation of additional flood defence structures**

The Council remains committed to designating structures within the borough, that could have an impact on flood risk if significant changes are made to them. This means that the owner of the structure is unable to do anything to it without the prior consent of the LLFA. Furthermore, the structure will be shown as a designated structure on the local land charges register so that any successive owner is aware of the significance of it in terms of flood risk.

## **9. Section 21 Asset Register**

Under Section 21 of the FWMA the LLFA has a duty to maintain a register of features or structures within the borough that, in the opinion of the Authority, could affect flood risk. The LLFA must also maintain a record, aligned to the register, of information regarding the ownership and state of repair of each feature or structure.

The register helps the Council to develop more informed maintenance regimes, which can take account of the assets important for managing flood risk. It also helps to establish where the borough's drainage and watercourse systems are, allowing for quicker identification of the responsible authority in incidences of flooding.

The information is currently being stored in ArcGIS, allowing staff to view the assets via a mapping system. Part of the information has been made publicly available so that residents are able to report faults with individual assets across the borough.

<b>List of Background Papers</b>
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The Flood and Water Management Act 2010
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<a href="http://www.wokingham.gov.uk/community-and-safety/emergencies/drainage-and-flooding/">http://www.wokingham.gov.uk/community-and-safety/emergencies/drainage-and-flooding/</a>
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