

TITLE	Flood Risk Management Update
FOR CONSIDERATION BY	Community Partnerships Overview and Scrutiny Panel
WARD	None Specific
STRATEGIC DIRECTOR	Steve Moore, Director Place and Growth
LEAD MEMBER	Wayne Smith, Executive Member for Planning and Enforcement

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 2021/2022.

RECOMMENDATION

Members are asked to review the report and note the ongoing work in relation to flood risk reduction in the Borough.

SUMMARY OF REPORT

Flood risk management is a key responsibility of Wokingham Borough Council 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 gradually 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 2021/22. The next 12 months will also see further progress which will be reported back to the committee next year.

Background

During the financial year 2021/22, 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 in order 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 rain. To continue delivering these responsibilities, a number of actions have been taken over the past 12 months including:

1. CCTV condition surveys and repair works to the highways drainage system
2. The delivery of capital drainage schemes

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 Water partnership to reduce surface water flood risk and improve water quality
8. Designation of additional flood defence structures
9. Section 21 Asset Register

1. CCTV drainage surveys and repair works

In certain areas of the borough, the drainage network has been in place for several decades and as a result is prone to pipe collapses, blockages and leaks. This can lead to an increase in surface water flood risk following heavy rain. In order to understand the condition of the network and identify the cause of flooding in these locations, CCTV surveys can be carried out to assess the damage and identify the appropriate repairs required.

Between April 2021 and February 2022, the drainage team has commissioned CCTV surveys and pipe replacement works at the following locations:

Shinfield Road
Basingstoke Road
Davis Street
Barkham Ride
Old Forest Road
Bearwood Road

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 flood response team to focus efforts elsewhere during heavy rain. Officers are currently reviewing opportunities for borough wide CCTV surveys followed by large-scale pipe replacement and are in the process of developing a capital programme of works to take place over the next 10 years.

2. Delivery of capital drainage schemes

In addition to the programme of CCTV surveys and pipe replacement works carried out this financial year, officers have worked with our contractors to finalise the design for the Barkham Ride capital drainage scheme, which is scheduled for construction from May 2022. This will involve the installation of a new pipe system to reduce surface water flooding on the carriageway.

Officers have also been working with contractors to finalise the design for the Church Lane, Shinfield flood alleviation scheme, funded through Defra Grant in Aid funding. It is anticipated that this scheme will be delivered later in 2022.

3. Ongoing drainage revenue works

WBCs contractor emptied over 40,000 gullies between January 2021 and January 2022 as part of the annual gully cleansing programme. During the cleansing process the contractor records the silt levels within the gullies, which officers have been using to develop a risk-based approach to gully cleansing. WBC now has almost 5 years of silt level monitoring, allowing officers to identify areas prone to silt build up. This information is reviewed annually and used to update the annual gully cleansing programme, ensuring that areas prone to silt build up are targeted more regularly.

In addition, over 1000 drainage issues reported by residents were triaged and actioned in the current financial year. Reports have included issues on the highways network, localised flooding, gully emptying, delivery of sandbags, replacement of small sections of pipe, installation of new drainage, manhole and gully lid replacements.

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

From April 2021 to date, the Flooding and Drainage team provided consultation responses to 673 planning applications. This has helped to ensure that the most appropriate sustainable drainage strategies are being implemented by developers, in turn contributing towards a reduction in surface water flood risk across the borough.

5. Smart drainage trials

Between February and December 2021, the drainage team ran a pilot scheme that uses gully sensors to identify when a gully requires emptying. This allows for a more proactive, risk-based approach to gully maintenance, consequently reducing the number of reactive responses to flooding incidents. Three roads were included in the smart drainage sensor pilot scheme including Gipsy Lane and Wilderness Road, in Earley and Reading Road, Arborfield.

The results of the trial are currently being reviewed and if found successful in these locations, officers will investigate the feasibility of rolling this scheme out more widely across the borough.

6. Manhole Inventory

During the 2021/22 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 in order to record condition and identify any required maintenance.

This routine manhole inspection and maintenance ensures that the drainage team can proactively carry out manhole upgrades and repairs, before defects lead to flooding.

7. Thames Water partnership to reduce surface water flood risk

The drainage team continues to work in partnership with Thames Water, to identify areas within the Borough where surface water interacts with the Thames Water surface water sewer, leading to pipe inundation and subsequent flooding. Officers are currently identifying areas of grass verges, roundabouts and other public open space where surface water can be stored to reduce inundation of the Thames Water system.

8. Designation of additional flood defence structures

Over the last 12 months officers have formally designated several features/structures within the borough, including drainage channels, filter strips, culverts and basins, that could have an impact on flood risk if significant changes are made to them. This means that the owner of the feature/structure is unable to make any changes to the feature/structure without the prior consent of the LLFA. Furthermore, the feature/structure will be shown as a designated structure on the local land charges register so that any successive owner is aware of its significance in terms of flood risk reduction.

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 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, prioritising those assets that play a significant role in 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 GIS mapping system. Part of this information has been made publicly available so that residents are able to report faults with individual assets across the borough.

List of Background Papers	
The Flood and Water Management Act 2010 http://www.wokingham.gov.uk/community-and-safety/emergencies/drainage-and-flooding/	
Contact Boniface Ngu	Service Green and Blue Infrastructure Place & Growth Directorate
Telephone No	Email Boniface.Ngu@wokingham.gov.uk
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