

Oxford Flood Alleviation Scheme

May 2015

Summary

We are working with our partners, who include Oxfordshire County Council, Oxford City Council, Vale of White Horse District Council, Thames Water and the Oxford Flood Alliance, to develop a scheme to reduce flood risk in Oxford. This will involve improving the capacity in Oxford's western floodplain, between the Botley Road and Sandford-on-Thames, with a flood relief channel.

We are continuing to gather the evidence needed to gain Defra, HM Treasury and Cabinet Office approval for the scheme. We are in the final approval stages for the Strategic Outline Case, which sets out the overall approach and aims for the project. This is the first of three major government approvals that the scheme will need, in addition to planning permission, before construction can begin.

We have also started to work on the Outline Business Case for the project which includes evaluating different options for the size and route of a flood relief channel. This will enable us to identify which is the best option for reducing flood risk and to deliver wider local benefits. As part of this process we will consult with local stakeholders, including our partners, residents, businesses, landowners, community groups and environmental groups.

We still need to carry out a significant amount of investigation and at present a scheme has not been approved or designed. The earliest that full business case approval will be given and construction will begin is spring 2018. Construction is expected to take between two to three years.

What is at risk and how many properties does the scheme benefit?

There are 4500 properties at a 1% or greater annual risk of flooding in Oxford. This figure could rise to nearly 6000 by 2080 with the predicted effects of climate change. In addition major roads, railway lines, schools and businesses are also at risk. Our existing flood risk management operations across Oxford, which includes operating weirs and channel maintenance, reduces the number of properties at a 1% or greater annual risk to 1800.

Our initial modelling of the flood relief channel indicates that it could reduce the flood risk to the vast majority of these 1800 properties. Of the 1800 properties whose risk could be reduced by the scheme, approximately 1200 of these would see their flood risk reduced to less than a 1% chance each year.

How a flood relief channel may work

If approved a channel would flow through the western floodplain of Oxford in two sections between the Botley Road and Redbridge and between Kennington and Sandford-on-Thames.

The new channel would provide additional capacity and would work with the natural processes of the local watercourses and the flood plain to help manage the movement of water through Oxford. During a flood this would reduce the risk of water entering homes, businesses and disrupting transport links.

Although a channel would reduce flood risk it cannot remove it entirely. In extreme weather the western flood plain would still be utilised as a channel would fill up and be overtopped, with flood water spilling into the surrounding flood plain.

Partnership funding

This is a partnership funded scheme which, in addition to a contribution from government, has secured funds from Oxfordshire Local Enterprise Partnership, Thames Regional Flood and Coastal Committee, and local councils to enable development of the scheme.

We are working together to identify other potential sources of funding to enable the scheme to progress. Partners and businesses can also contribute towards the scheme through activities such as helping with maintenance and providing services.

Working in partnership for Oxford

Working in partnership is important to the success of the scheme. This is an opportunity for Oxfordshire communities to create an inspiring new natural resource. Our aim is to ensure that any scheme would be as natural, wildlife-rich and attractive as possible. We are continuing to work closely with local environmental groups to protect and enhance the landscape character, cultural heritage and wildlife habitats of the area. We will seek to ensure that any scheme will work with natural processes to bring multiple benefits and enhancements to the local environment.

We, along with representatives of our partners, have been meeting with landowners, community groups, local flood groups, local councillors and attending parish council meetings. We have also attended regular meetings with partners and stakeholders, including members of the scheme's sponsoring group, to gather further information to help progress the scheme.

We are also working closely with Thames Water and Network Rail to explore any potential opportunities to work together to reduce flood risk in Oxford.

Appraisal, design and construction

We are now in the appraisal stage of the project. This means we are looking into what route a channel may take and how it could be designed. We have appointed Halcrow Group Ltd to undertake the site investigations and, at a later date, to present detailed options for the route and design of a channel.

During May, engineers from Halcrow will be carrying out a walkover throughout Oxford's western floodplain. This will provide more information about physical aspects of the land that may either benefit, or cause issues for, the development of the new channel. We will work with partners and landowners to identify opportunities for the scheme and discuss issues that may influence route options.

At this early stage of development, it is important that we collect a wide range of information and ideas.

We are planning to hold a series of public events during the summer. These events are an opportunity for people to learn about our ideas and to share local knowledge that we can use in developing the scheme. The scheme could provide opportunities for improved recreational activities, environmental enhancements and social spaces. We will soon be announcing the dates and locations of the events. We are looking forward to engaging with residents on this issue, which we know means so much to so many people.

We are expecting to share more detail on the route and design of a channel at the end of this year. There will be an official public consultation on the route and design at this point.

Downstream considerations

We work to reduce flood risk overall, not to transfer it from one community to another. As part of our design of the scheme we will use our latest river modelling to assess any changes in flow that a channel may bring. We will share this information with communities in Oxford and in downstream areas before the final scheme is approved.

We will include a detailed flood risk assessment with any planning application we submit for the scheme. This assessment will contain information on any potential changes to downstream flood risk. It will also include details of any mitigation measures we will take, if required, to protect properties in the unlikely event that their flood risk is changed.

Together with our partners we take the management of flood risk very seriously.

Maintaining local watercourses

Our flood risk management activities across Oxford include regularly carrying out our maintenance on main rivers, clearing debris screens, deploying temporary defences and managing flood incidents with our partners and the emergency services. We also support Oxfordshire County Council, Oxford City Council, the Vale of White Horse District Council and Thames Water with the development of their own flood risk management projects.

Defra allocate funding to us to carry out watercourse maintenance and also to construct new flood risk management schemes. The amount granted to us is determined by the number of properties within a flood risk area. This funding allows us to keep main river channels in high risk areas clear. A person who owns land adjacent to a watercourse is responsible for maintaining the banks and unless the bed of the watercourse is registered to a different owner, they are also responsible, under common law, for maintaining the bed to the centre of the watercourse, which is known as riparian ownership.

Watercourse maintenance is vital to keep main rivers clear at critical urban locations prior to any flood. We continue to prioritise this work around Oxford and encourage others to perform their legal responsibilities as riparian land owners. This work reduces flood risk to people and property from smaller scale, more regular, flooding; however more significant flooding cannot be reduced by watercourse maintenance alone.

Additional information

If you would like to know more about this scheme, please contact us:

Email: oxfordscheme@environment-agency.gov.uk

Website: <https://www.gov.uk/government/publications/oxford-flood-risk-management-scheme>