

### **Thames Valley Flood Scheme**

August 2024 project update

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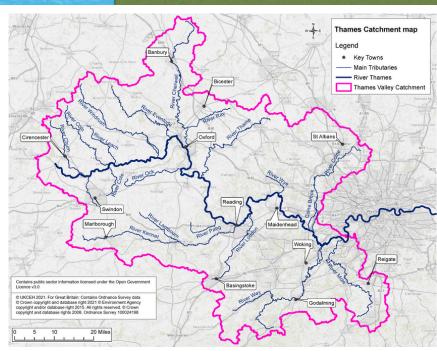
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Partner update



The Thames Valley Flood Scheme is investigating ways to manage flood risk on a large scale across the Thames Valley area. It aims to reduce flood risk and build climate resilience for communities, businesses and infrastructure along the River Thames. We work with partners to explore opportunities across the catchment to deliver a wide range of environmental and other benefits. Some of these would be in areas where flood storage is taken forward, supporting people and wildlife in the Thames Valley to thrive.



Catchment map of the Thames Valley Flood Scheme area

**Protecting and enhancing the Thames Valley** 



#### Welcome

### A catchment based approach

# Welcome to the Thames Valley Flood Scheme newsletter



I am pleased to introduce myself as the new Project Director and to welcome you to this edition of our newsletter. It is a privilege to join such a dedicated team and to work with partner organisations that are so engaged and enthusiastic.

The project team has been busy since our last newsletter. You may remember we shared updates from our recent work to identify potential flood storage areas for further investigation. These areas are on rivers that flow into the River Thames, known as tributaries.

What do I mean when I say further investigation? So far, we have used national data and flood modelling to identify 17 locations that could work to reduce flood risk on the River Thames. We have excluded locations where existing infrastructure would make water storage difficult. Our further investigation would include gathering more specific information about each location, such as more details on existing and planned land use, and the potential for improvements. We will also work closely with the local community to determine the precise details of any flood storage areas, including the placement and height of embankments and how the work would fit into the existing landscape.

I am mindful that those who own land or live near areas we have identified for potential flood storage may have concerns, especially since the benefits of flood risk reduction will be felt further down the River Thames. It is important to me that our team works closely with those who might be impacted to fully understand any local constraints and explore potential opportunities for local improvements. Local knowledge is crucial to the success of our project, and we are committed to ensuring that communities can help shape any work that might happen in their area.

We have been using high-level modelling to narrow down the locations, and now we are evaluating the costs and benefits of large-scale flood storage areas. Once this information is gathered, we will focus on a shorter list of areas and collaborate with the local communities in more detail. You can read more about the costs and benefits review on page 3 and 4.

We continue to meet regularly with a group of partners from wide range of organisations to gain their advice and input. We have invited new members to join as the project progresses and we review membership regularly to ensure we have the right representatives for each project stage. As part of that collaboration, we hope to connect the natural flood management work happening across the catchment. You can read more about this on page 7.

I want to stress that the project is still in an investigation stage and we are exploring different paths to find the best way forward. We also need to gain partner support, funding, and further down the line, planning approvals before we get close to starting any work on the ground.

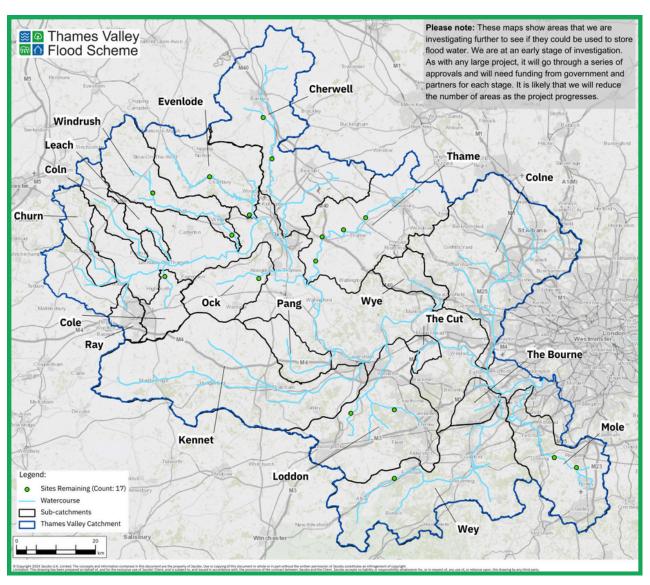
Thank you once again for your support of the Thames Valley Flood Scheme. I look forward to keeping you updated.

Robbie Williams Project Director



### Flood storage progress

As mentioned in our <u>spring newsletter</u>, the project team have been identifying areas that could be used to store floodwater to reduce flood risk across the Thames Valley. We have looked at the whole catchment of the non-tidal section of the River Thames, which includes everything from the source of the Thames in Gloucestershire to the tidal limit in West London. This area is shown on the map below. We initially assessed over 700 locations for flood storage and have now narrowed these down to 17 areas for further investigation. These are locations where a flood storage area could be most effective in reducing flood risk, while minimising impact on the local area. We are gaining a better understanding of which of these 17 areas will continue to be of interest. We will then work with local communities to understand the impacts and opportunities of a potential flood storage area near them. The 17 locations are shown as green dots on the map.



Areas that would benefit from reduced flood risk will be seen mainly in downstream communities along the River Thames. We are aware this means the main benefits from the flood storage areas may not be felt by those most impacted by the flood storage areas. There will be opportunities for local benefits such as wildlife habitat creation and recreational spaces. We will work with local communities to identify where this could be done and funding opportunities to support this.

#### Review of costs and benefits

We are now reviewing the costs and flood risk benefits of using individual or small groups of flood storage sites to reduce flood risk. These groups are made up of potential flood storage areas on different tributaries of the River Thames. This cost review is a normal step for any large project. In this work, we are comparing the cost of building flood storage areas against the potential to reduce financial and societal damage from flooding downstream. This will help us determine whether or not a scheme is good value for money. For a scheme to go ahead, the benefits must significantly outweigh the costs.

#### What are benefits?

Reduced flood risk, which would lead to reduced costs from:

- · fixing a house after flood damage
- evacuations and temporary rehoming
- impacts of flooding on mental wellbeing
- loss of income for businesses
- impacts on infrastructure, such as roads, railway and utilities

#### What are costs?

There are a number of different costs we are considering in our analysis. The main ones are:

- construction
- design
- materials
- maintenance
- · planning and approvals
- · inflation of the above costs

#### What else do we consider?

As well as the economic benefits, we also consider how people and the environment would be affected by the scheme. We aim to avoid impacts on existing green spaces wherever possible, and are looking for opportunities to improve:

- Wildlife habitats
- · Access to green space
- Water quality and availability
- · Community wellbeing



Our initial findings from the review show that overall the benefits of the 17 sites only slightly exceed the costs. Because the difference is small, it is possible that we will not get approval to continue looking at large scale flood storage across the Thames Valley catchment. This means it is likely that we will be looking at a small number of more localised flood storage areas. We are also keen to continue to work with our partners to support natural flood management work that is already happening in the catchment. It's still early, and we are exploring the next steps. You can see some likely scenarios on the next page.

#### The 3 scenarios

The next steps for the project are uncertain. Today, we bring you a quick look at some of the options for what might happen next. Each of these options would need to gain partner support, funding and, further down the line, planning approvals.



With this option, we would continue investigating all 17 locations. We would engage with landowners and communities to understand local conditions better. We could identify several locations that can work together to reduce flood risk across the Thames catchment.

Because the benefits are only slightly higher than the costs based on current information, this option seems unlikely.



As we continue our investigations we may find that only a small number of the flood storage areas are possible. They would still need to be cost beneficial to gain approvals. At this stage, our studies have been based on desk assessments alone, so we would collaborate with local communities, landowners and farmers to gather more information about the area. Scenarios 2 and 3 are equally likely to go forward at this stage.



Our work has shown that flood storage is important to reducing the flood risk of the Thames catchment at the scale needed in the face of climate change. However, we may find that the delivery of multiple flood storage areas under one scheme will not work.

We will use the work we have done though the scheme to inform other future flood risk mitigation projects and partnership working in the area. Scenarios 2 and 3 are equally likely to go forward at this stage.

#### 2024 to 2025 engagement plan

Planning for engagement when we are not exactly sure which direction the project will take is not easy. The plans and dates shown here may change as we start to know more.



### SUMMER

MPs, Councillors, partner organisations and everyone signed up to receive updates from our project have received this newsletter. Landowners and those who live in the vicinity of the 17 potential flood storage areas will receive printed copies. We will be reviewing our stakeholder list to make sure we are reaching everyone who may have an interest in the scheme.

## AUTUMN

Once we have a decision on the direction of the project, we will update our partners, MPs and councils through meetings and phone calls. We will send another newsletter to our subscribers and the landowners in late autumn. Depending on the direction of the project we will prepare for our next phase of engagement.

## WINTER

For any options that we continue to investigate, we will offer meetings with local communities and stakeholders. This will be the start of ongoing engagement to gather local feedback and collaborate on more detailed designs that take local views and knowledge into consideration.

## SPRING

We will review all feedback we have received and share the results and our plans for the next stage of engagement. We will continue to share newsletter updates and meet with interested parties throughout spring 2025.

## What is natural flood management?



Field Corner Bund (Credit: Wild Oxfordshire)

Natural flood management techniques work with nature to restore or mimic the natural functions of rivers, floodplains and the wider river catchment. In the right circumstances, they can be a sustainable and effective way of reducing flood risk.

As explained earlier in this newsletter we are looking at the different directions that Thames Valley Flood Scheme could take. All the options we are considering include working to connect the flood management work already happening across the catchment. This could include:

- Collecting and sharing data to build on existing understanding of how much natural flood management can reduce the risk of flooding to areas downstream.
- Helping to make funding options for landowners clearer.
- Bringing everyone together to share lessons and best practices.

The Environment Agency and partner organisations have delivered many natural flood management projects across the Thames Valley area, with others still in progress. We would like to share an example from one of these great projects with you today. We at the Thames Valley Flood Scheme hope to learn from this project and replicate its success.



#### The Littlestock Brook, Bruern

A natural flood management project was carried out from 2016 to 2021 on Littlestock Brook in the Evenlode catchment area to reduce flooding in Milton-under-Wychwood and improve the river environment. The Environment Agency worked with Wild Oxfordshire, the Evenlode Catchment Partnership, the Bruern Estate and the local community to make changes to the land and introduce natural flood management measures. These included 15 small dams to temporarily hold floodwater, 27 leaky woody dams and the restoration of 100 metres of watercourse.

The project also aimed to reduce pollution from phosphates and sediment in the brook and improve wildlife habitats. To achieve this, they built 14 ponds to capture nutrients, set up sediment traps along 1.1 kilometres of field edges, planted over 14 hectares of riverside woodland and created a new footpath. The local community helped by planting trees and reinforcing riverbanks. Information boards were put up to educate visitors and encourage them to take photos to document the changes over time.

This project won an award in 2021 for its contribution to creating climate-resilient areas. As one of the first natural flood management projects in the Thames Valley area, it provided valuable insights into using natural processes to manage flood risks in agricultural areas. Monitoring data showed that the measures reduced flood risk for 12 properties during various flood events. The project's success was due to the collaboration between different groups and the local community.

To learn more about the project check out their YouTube video (https://youtu.be/vt9pzi\_vqAQ) or website (https://www.wildoxfordshire.org.uk/ evenlode/natural-flood-management).

### **Contact the Team**

There are many ways you can stay up to date with the Thames Valley Flood Scheme or contact the team to ask questions or provide comments



<u>https://engageenvironmentagency.uk.engagementhq.com/hub-page/thames-valley</u>



TVFS@environment-agency.gov.uk



@TVFloodScheme



<u>ThamesValleyFloodScheme</u>



