

The Environment Agency has proposed a three phase Flood Risk Management Scheme to better protect residential and business properties from flooding in the Kent catchment. We are starting our detailed design phase for Burneside, Staveley, Ings and the upstream storage locations. Below is a snapshot of some of these benefits being delivered as part of the three phase scheme;



**Dec 2019**

**£76m**

Funding approved to deliver all three phases

**Summer 2020**



Data gathering and detailed design started

**Summer 2021**



Consultation opportunity

**Winter 2021**



Phase Two & Three Planning

**Winter 2022**



Construction starts

We are getting ready to start construction of the Flood Risk Management Scheme in Kendal. This is the first phase of a proposed three phased catchment scheme. The three phased scheme will deliver a combination of linear defences, improved conveyance, upstream storage and complimentary Natural Flood Management measures to provide increased flood protection for the communities of Kendal, Burneside, Staveley, and Ings.

We are continuing to develop our scheme designs for Burneside, Staveley, and Ings (Phase Two) and for the upstream storage locations (Phase Three) ahead of our planning permission submission in Winter 2021. To inform our detailed design of the schemes we have been undertaking a number of data gathering activities, these activities are important as it informs our understanding of the area and ultimately the final scheme design.

## Data gathering

We have completed the majority of the Environmental and Topographical, also known as over-ground surveys which were the first stage of data gathering. We now have a good understanding of the wildlife and habitat that is present within the river corridor as well as mapped land features and physical boundaries.

Our next step is to undertake Ground Penetrating Radar surveys which will map services and underground features which will shortly be followed by digging a number of Trial Pits. These trial pits are important as they physically check the location of underground services and utilities as well as the foundations of existing structures and ground conditions. All our works will be delivered in line with Covid-19 Government guidelines.

## Future consultation

The data we will be collecting will inform our detailed design of the scheme. We will have gathered sufficient information by Summer 2021 where we will be able to present our initial design drawings. We will publicise the date of these consultation events in Spring.

In addition to the Flood Risk Management Scheme, we have made a commitment to work with natural processes as far as possible to make catchments resilient to climate changes. We are working with other organisations to support the delivery of a number of other projects within the catchment which will provide a wide variety of environmental and flood risk benefits.

## Peatland Project in the Upper Kent catchment

Working with Cumbria Wildlife Trust we are delivering 50 hectares of peatland restoration in the uplands of the Kent catchment. Peatlands provide a number of important functions and deliver a number of benefits including:-

- Storing carbon
- Providing habitat for specialist species
- Providing clean drinking water
- Protection against flooding by slowing the flow.



The amount of water that can be stored relative to it's dry weight



Of carbon dioxide equivalent to the restored peat could store each year



Of blanket bog habitat restored through the scheme

## Natural Flood Management at Staveley

Working with South Cumbria Rivers Trust we are delivering a two phased project that aims to reduce flood risk from both river and surface water flooding. This project will:-

- Re-connect existing floodplains
- Provide flow routing to divert excess flood water
- Attenuation features to allow water to be temporarily stored
- Community volunteers will help monitor the site to assess the impacts of the work.



Example "Kerplunk" attenuation feature

## Weir removal and improvement projects

We are working with South Cumbria Rivers Trust as part of the Cumbria River Restoration Programme to look at ways we can restore rivers back to a natural state for the benefit of people and wildlife. For the Kent Catchment, this has currently identified Bowston weir, which has secured funding for full removal. With permissions in place, the design and process for removal will now be progressed.

For more information visit <https://s crt.co.uk/whatwe-do/current-projects/bowston/>

It is the ambition of the Cumbria River Restoration Strategy to look at other weir removal options on the River Kent to make further improvements in the future.

## Working with our partners

We are also working closely with United Utilities as we develop our flood scheme design alongside their sewer improvement programmes and Cumbria County Council on their surface water improvement programmes.

### Contact us

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