

This briefing is to provide you with a summary of progress of the Kent Catchment Flood Risk Management Scheme as we deliver a combination of measures to better protect the most vulnerable communities across the Kent Catchment as well improving the local environment and community amenities. Construction started in Kendal over a year ago, and is progressing well with a number of locations now completed.

This briefing will inform you of what this project has achieved to date and what we intend to deliver across the catchment. It will provide you with information on how you can find out more, and how you can engage with us as work continues.

## Background to the scheme

Planning permission for the Kendal Flood Risk Management Scheme was granted in Summer 2019 as part of a wider three phase scheme designed to take a catchment based approach and protect the most vulnerable communities from flooding and climate change in the Kent Catchment.

Kendal is the first phase being delivered with construction starting in February 2021. We are developing our scheme design using a combination of measures in the Upper Kent to provide increased flood protection for the communities of Burneside, Staveley and Ings. This will include linear flood defences, flood storage, conveyance improvements and Natural Flood Risk Management. Below is a snapshot of some of the benefits of the scheme;



**6km** of defences through the town of Kendal, using a combination of walls finished mainly in local stone, grass embankments, and sections of glass panels. With **more than half** of the defences **set back** from the riverside, **access to existing open space** and **riverside views** will be **retained** and **improved**.



At least **4000** trees will be planted within Kendal with a pledge of **15,000** to be planted within the catchment of a **variety of species**. **Larger, semi-mature** trees will be planted in places that are accessed the most. This is following a maximum of 500 trees in the town requiring removal, but we are working hard to reduce this number through ongoing detailed design.



**55 hectares** of improved habitat for wildlife and recreational space will be created for the community in **two** areas in Kendal and in the **Upper Kent** catchment.



**Minimal** in river works will be undertaken during construction as the majority of our defences are **set back** from the rivers edge. This means our works will **have little to no impact** on the existing river environment.



Establishing **up to 3km** of new and improved **riverside footpaths** and exploring the opportunity for a further **6km** of newly connected **walking and cycling trails** in the town.



The scheme is the stepping stone for a wider programme of **enhancements** to the town. Working in partnership we will support other potential improvements to the area for the **benefit of the local community** and **visitors** to the town.

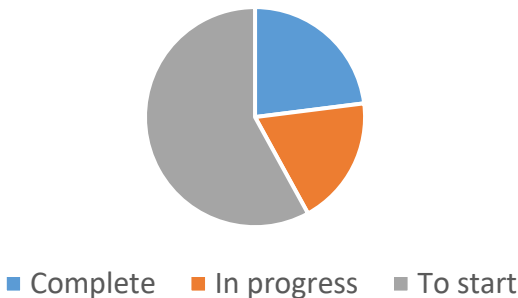
# What have we delivered to date

Since construction began in Kendal in February 2021 we have completed works in five locations with works progressing in a number of others areas.

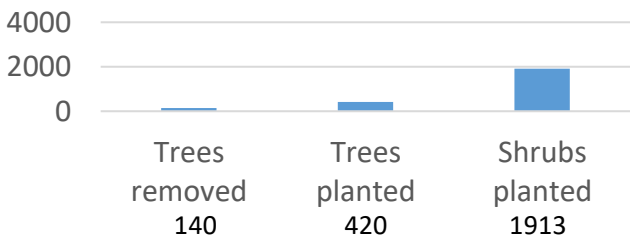
The following table provides a summary of completed or in-progress locations;

Location	Construction type	Community improvements	Status
Dockray Hall	Improved foundations and strengthened existing flood wall	Footpath resurfacing with tree and shrub planting to provide improved riverside habitat	Complete
Romney Gardens	Raised flood walls	Footpath resurfacing and shrub planting providing improved riverside habitat	Complete
Natland Road/Ford Park	Raised kerbing and flood wall	Footpath resurfacing, new seating and extensive riverside planting of ornamental shrubs, seed mixes and trees	Complete
Clarks	Raised flood wall	Restored a previously hard surface to grassland and planted a mixture of trees and shrubs to the riverside	Complete
Helsington & Watercrock	Raised flood embankments, flood walls and road raising	Resurfaced an existing car park and undertaking extensive planting of shrubs and trees. A further 1000 trees will be planted in the next planting season by Kendal Conservation Volunteers.	Complete
Parish Church	Raised flood walls		In progress
Waterside Flats	Raised flood walls		In progress
Busher Walk & Benson Green	Flood embankment and raised flood walls		In progress
Beezon Fields	Landscaping a new environmental and public amenity area		In progress
Aynam Road	Underground service/utility diversions to prepare for construction		In progress
Sand Aire House	Raised flood wall		Starting in June 2022

Kendal construction status to date

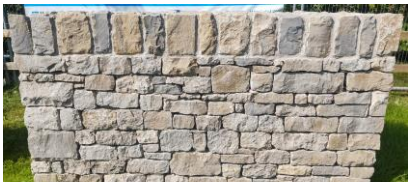


Kendal tree removal and shrub planting status to date



There have been a number of opportunities to review and adapt the original design of the Kendal scheme following engagement with our statutory consultees, the community, and a number of local interest groups. These opportunities have enabled us to maximise our design to retain riverside views in key locations within the town; preserve Kendal's heritage by incorporating a 'Webster' railing design, as well as accommodating the historic Washing Steps at Waterside and Jennings Yard Fountain.

The flood scheme in central Kendal will be finished in natural stone, sourced from a local quarry at Orton. We have two other imprinted concrete wall finishes, which will be used in outer areas of the town. Glass panels will feature in three key locations at Waterside, Aynam Road and Gooseholme.



Natural stone



Imprinted stone



Imprinted brick



Glass panel



# Kendal Flood Risk Management Scheme

## Retaining views of the River Kent

Proposed tree planting after 5yrs growth



# Kendal Flood Risk Management Scheme

## Preserving and celebrating Kendal's heritage



The aim of the Kendal Flood Risk Management Scheme is to not only protect people and properties from flooding, but to create a lasting benefit for the community and the local environment. We plan to enhance the river corridor throughout the extent of the scheme through extensive landscaping, planting, and integrating a number of public realm improvements and art features.

Once complete in Summer 2023, our flagship site at Beezon Fields will improve the amenity value of the site by landscaping and planting a diverse range of trees, wildflowers, grasses and shrubs, as well as integrating a number of art and educational play features.



Kendal Flood Risk Management Scheme

Delivering environmental enhancement and improved community amenities



Native trees will be planted in more rural locations on the edges of Kendal, e.g. Mintsfeet, Beezon Fields and Helsington Mills. These species will complement the natural setting of these spaces and provide an excellent resource for wildlife, providing food and shelter.

Both ornamental and native trees will be planted in town centre locations, including streets, parks and open spaces, e.g. Abbott Hall, Gooseholme Park and Aynam Road. Species will be selected that are appropriate in size and will provide seasonal interest.



We are committed to leaving a lasting legacy for the community and visitors to Kendal. We are supporting a number of art and education initiatives to get the community involved with the development of the scheme. Here is a snapshot of some of the community involvement;

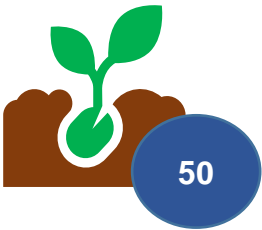


Engaging three local Schools, seven local charity organisations and over 20 community volunteers we took and potted over 2000 tree cuttings



## Inspired Art

Working with three schools, one mental health charity, older residents of Kendal and four local artists, we are delivering inspired art which will feature in two key locations of the scheme



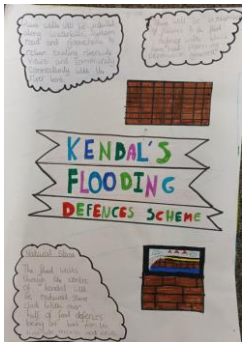
Families joined us and planted over 50 seeds in decorative pots with the help of Love art Workshops and Kendal Conservation Volunteers as a 'seed to tree' planting day



Over 200 students from local schools have attended site visits and talks

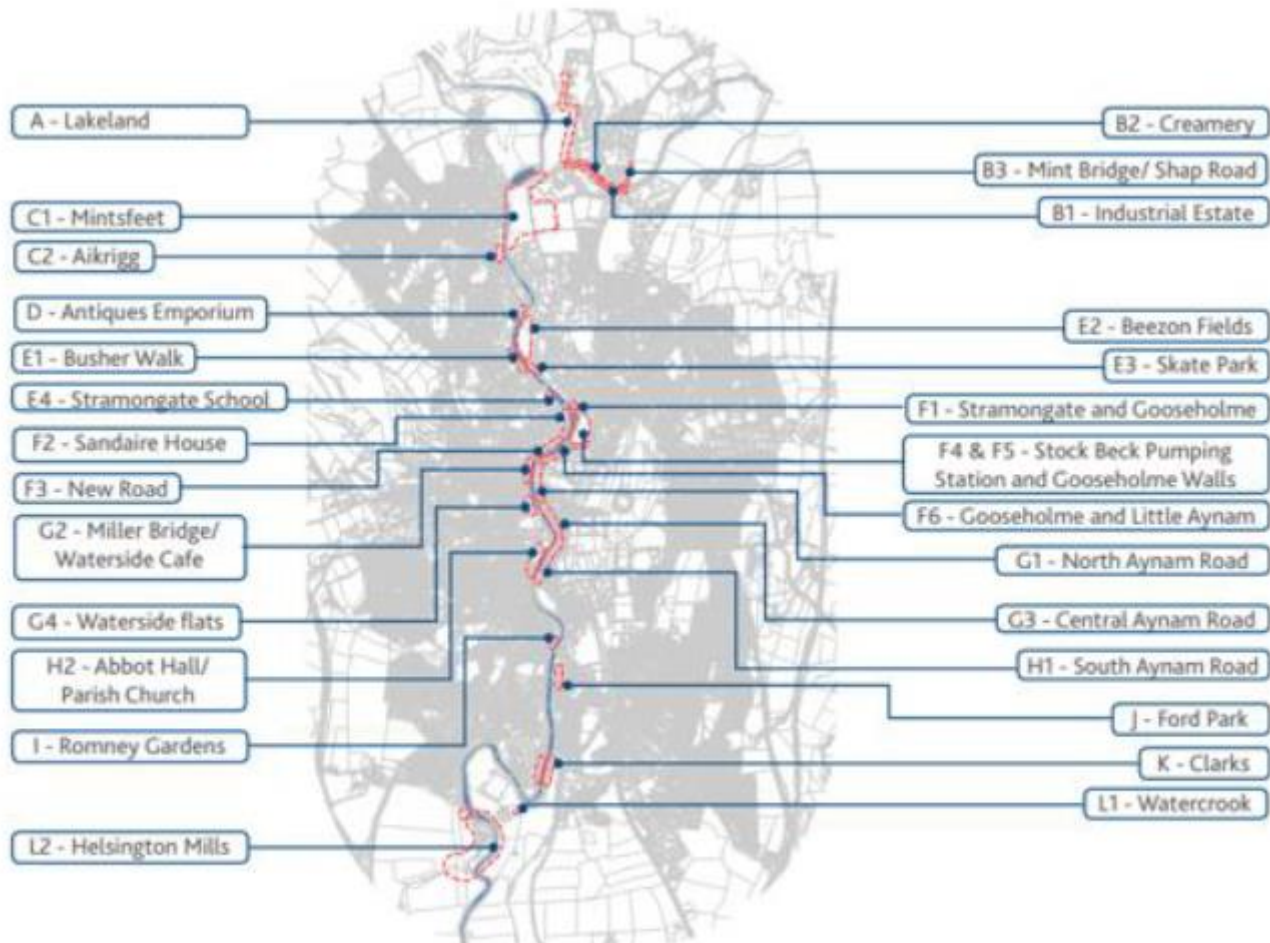


Over 60 children have creatively translated the scheme key facts into posters





The Flood Risk Management Scheme runs from Helsington Mills in the South to Minsfeet in the North of the town. The complex nature of delivering a scheme of this size has led us to break down the scheme into a number of small sections we term as 'reaches'. The order of the works is influenced by minimising traffic and pedestrian movement within the town whilst ensuring we manage flood risk.



SCHEME CONSTRUCTION– Programme of active and proposed construction for 2022

The complex nature of delivering a scheme through a busy town centre means that works on the scheme need to be broken down into a number of small sections we term as 'reaches'.

The order of work is influenced by minimising disruption within the town and ensuring flood risk is managed.

Work will take place in a number of reaches at the same time and the ordering of these has been carefully considered.

Location	Construction Reach	Kendal FRMS Phase 1 - 2022 Programme of Construction Work				
		2021	Winter/Spring 2022	Spring 2022	Summer 2022	Autumn/Winter 2022
Helsington Mills	Reach L2					
Watercrock/Scrogs	Reach L1		COMPLETE			
Clarks/Natland Road	Reach K		COMPLETE			
Ford Park	Reach J		COMPLETE			
Romney Gardens	Reach I		COMPLETE			
Parish Church	Reach H2					
Waterside Flats	Reach G4					
Waterside	Reach G2					
Aynam Road - Nether Bridge	Reach H1					
Aynam Road - Jennings Bridge	Reach G3					
Aynam Road - Miller Bridge	Reach G1					
Little Aynam	Reach F6					
Gooseholme walls	Reach F5					
Gooseholme & pumping station	Reach F4					
New Road	Reach F3					
Sandaire House	Reach F2					
Stramongate	Reach F1					
Benson Green	Reach E5					
Beezon Fields	Reach E2					
Busher Walk	Reach E1					
Dockray Hall	Reach D		COMPLETE			
Aikrigg	Reach C2					
Jubilee Fields	Reach C1					
Mint Bridge - Creamery	Reach B2					
Mint Bridge - Industrial Est.	Reach B1					
Lakeland	Reach A					

This programme is accurate as of Spring 2022 and may be subject to change.

We are currently in the early design stages of the scheme for the communities within the upper Kent. We are continuing with our surveys and investigations and will be shortly reviewing the modelling outputs which will inform the outline design of the schemes for Burneside, Staveley, Ings and the upstream storage measures.



To find out more about our road map to delivery visit [www.thefloodhub.co.uk/upperkent](http://www.thefloodhub.co.uk/upperkent)

## The role of Natural Flood Management (NFM)

NFM forms part of our proposals to reduce flood risk and is complementary to traditional engineered flood defence measures. Studies on NFM in the Kent catchment have shown that the amount of excess water required to be managed in the event of a 1 in 100yr flood (1% chance of occurring in any one year) will not provide the level of protection needed if NFM is integrated as a stand alone solution. Our approach to reducing flood risk is to primarily use more traditional engineered solutions and use NFM as a complimentary measure where we can.

There are currently four projects underway to improve the local environment, reduce and slow the flow in the Kent catchment area. We are working with Lancaster University who are undertaking a number of pilot projects, one of which is located in the Kent catchment to evaluate the effectiveness of nature based flood mitigation. Information on these studies can be found at [www.thefloodhub.co.uk/upperkent](http://www.thefloodhub.co.uk/upperkent)



Kerplunk attenuation feature



Leaky dam



Peatland restoration

# Keeping up to date and how to contact us

We have produced a **Design and Benefits guide** which provides a full summary of our scheme. Please contact us if you would like a copy, alternatively information can be found on our flood hub website [www.thefloodhub.co.uk/kendal](http://www.thefloodhub.co.uk/kendal)

You can also keep up to date by downloading our **Volkerstevin Engage Scheme App**. We provide daily updates on scheme progress.

Come and see us. We will be opening our **Information Hub at Little Aynam on 24<sup>th</sup> May**, which will be our main public information centre. We warmly welcome you to pop in, meet the team and have a look at our scheme information on a **Tuesday and Thursday from 10am to 4.30pm**.



## Useful links



Follow us on Twitter [@EnvAgencyNW](https://twitter.com/EnvAgencyNW)

Download our **scheme App VolkerstevinEngage** from the App store or scan the QR code to keep up date or to get in touch



Ring us on **03708 506 506**

Email us at [Kendalfrms@environment-agency.gov.uk](mailto:Kendalfrms@environment-agency.gov.uk)

Visit our online information at [www.thefloodhub.co.uk/kendal](http://www.thefloodhub.co.uk/kendal) and [www.thefloodhub.co.uk/upperkent](http://www.thefloodhub.co.uk/upperkent)

