Natland Beck Flood Resilience Scheme Update | April 2025



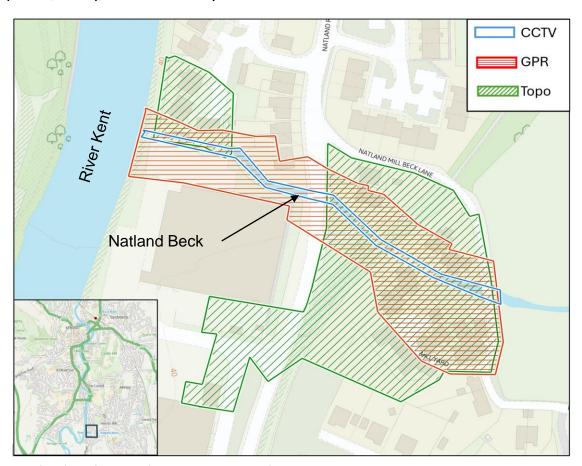
The Environment Agency is delivering a Flood Risk Management Scheme (FRMS) to better protect homes and businesses from flooding in the Kent Catchment, enhance the local environment and improve community amenities.

As an extension to the existing works in Kendal, we will be carrying out surveys in the area around Natland Beck which will help inform our approach to flood resilience in this area. This newsletter will provide an overview of the activities which are scheduled to take place. If access to gardens or privately owned land is required to conduct the surveys a Notice of Entry will supplement this newsletter.

#### **Previous works**

The Environment Agency were originally granted planning consent to complete flood risk management measures on the Clarks Factory site in Summer 2019, consisting of 114m in total of linear defences and improve resilience of the area.

However, flood risks associated with Natland Beck, a tributary of the River Kent were not included in these works. The Environment Agency are now in a position to conduct survey works to understand the area and identify what measures might be appropriate, if any, to address any flood risk around Natland Beck.



Natland Beck ground investigations and surveys











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### Our surveys explained

Over the coming months topographic, Ground Penetrating Radar (GPR) and Closed Circuit Television (CCTV) surveys (land and water based), will be undertaken to understand the Natland Beck area in more detail, and the development of potential flood risk management measures.

## **Topographic surveys**

Non-intrusive topographic surveys will be undertaken to ascertain ground levels and how water flows through the area.

'Atlantic Geomatics' will use a GPS laser and level equipment to record level data points along Natland Beck.

In some locations we will require access to gardens and land – where this is required, as with all our



GPS laser and level equipment

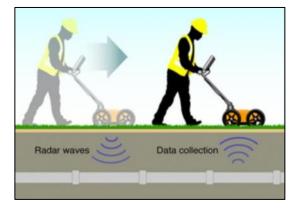
work, the Notice of Entry letter will be issued to the property owner.

Atlantic Geomatics are the Environment Agency's contractor and will also hold a letter of authorisation.

## **Ground Penetrating Radar (GPR) surveys**

Ground Penetrating (GPR) Surveys are also nonintrusive and use equipment (like that shown) to gather underground information.

GPR is a geophysical locating technique that makes use of radio waves to take images of objects below ground level, without digging up the soil. The objects that need their images to be captured should not be too far into the ground (no more than tens of metres below surface level).



**GPR** survey equipment

GPR Surveys are used to find the exact location of natural or man-made objects underground, natural materials, and will detect changes in the position of those objects. For example, surveyors can use them to detect changes in the soil profile, pockets of air, the layout of underground pipelines, rocks, groundwater tables and other geological features.











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### GPR surveys continued ...

GPR systems have two key pieces of equipment; the transmitter and the antenna. The transmitter (which is placed close to the ground) sends radar signals into the ground. The signals are reflected and detected by the antenna. The signals received are processed and shown on a graphic recorder.

As the transmitter and antenna are moved across the surface being surveyed, the graphic recorder generates a radar or cross-sectional image of the earth.

## **CCTV Surveys**

Working on behalf of the Environment Agency, 'ILine' will carry out CCTV surveys on the culverts using a range of specialist vehicles and equipment.

CCTV (camera) surveys are used to identify and log the structural condition and conveyance capacity of the culverts. Where blockages are identified within the culverts they will be removed by jetting, vacuuming or using cutting equipment. Typical blockages consist of tree roots and silt build up.

#### What will we see?

Specialist vehicles will be seen in a number of locations where we are carrying out the survey work, together with topographic and GPR survey equipment. Personnel will also be visible as they track along public footpaths and the road.



Water jetting tanker



**CCTV** operator



Remote camera vehicle

# **Traffic management**

If required, traffic Management measures will be in place to ensure our contractors, and the public are safe whilst we carry out the works.











Natland Beck Flood Resilience Scheme | Frequently Asked Questions | April 2025



## What time of day will the works be undertaken?

Works are typically carried out between 8.00am and 6.00pm (daylight dependent), Monday to Friday. In the event weekend work is required residents will be notified.

## How long will you take to complete this work?

We envisage that the surveys will be complete in the coming months, within the 'inriver working window' (typically April/May to September/October).

## Will you need to access individuals land, gardens?

We will inform any affected residents where we need to gain temporary access to gardens or driveways via a 'Notice of Entry' - this is standard correspondence sent out in preparation of such activities.

## What vehicle and pedestrian impacts will there be?

If any traffic or pedestrian management is required, it will be put in place for the safety of all.

#### Where will we find the latest information?

We will continue to keep you up to date with newsletter updates, with all information available on our flood scheme website.

To keep up to date visit www.thefloodhub.co.uk/kendal and navigate to the 'What's Happening' page. Alternatively, you can visit us at our Flood Scheme Information Hub based on Beezon Road Kendal (adjacent to Lidl supermarket). We are open every Tuesday and Thursday from 10am to 4.30pm.

#### Contact us

Customer service 03708 506 506 KendalFRMS@environment-agency.gov.uk

## VolkerStevin Engage

Our new project app allows you to keep up to date on the Kendal Flood Risk Management Scheme, view construction progress, images and provide feedback.

## Keep up to date

Visit www.thefloodhub.co.uk/kendal www.thefloodhub.co.uk/upperkent

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