

Environmental Monitoring



Department for
Digital, Culture,
Media & Sport



Environmental Monitoring

The socio economic cost of the change in our climate is vast. The environmental impact of flooding can effect an individual's life but, also, on transport links which has further economic consequences. Mobile access has the potential to offer advanced warning signs which can aid community life and the infrastructures which support it.

Why Flooding?

Flooding is a key concern within North Yorkshire. In July 2019 some parts of the County had over 100mm of rainfall within less than 12 hours. The impact was felt widely, with bridges destroyed and roads closed leaving communities cut off and isolated.

Homes can be ruined due to water damage, whilst livelihoods are impacted as, for example, businesses have to close, farmer fields are water logged and visitor numbers decrease due to road closures and diversions.

Use Case detail

The MANY project will aim to develop a 5G network which allows real time or near to real time streaming of vital data meaning advanced monitoring can offer early warnings to communities and to the Environment Agency. Whilst, vital data can be given to Highways teams meaning minor changes in vibrations in a bridge's integrity can be found enabling repairs to take place before a collapse.

Technology

This use case will examine the use of:

- Internet of Things sensor technology
- Enhanced video and monitoring
- Live streaming of areas during incidents

Outcome

The Environmental Monitoring use case will help establish a technology and business case for roll out using 5G to support the rural areas in monitoring of the environment to support rural communities in the devastating effects that flooding can have.

About Us

The project is a Department for Digital, Culture, Media and Sport 5G testbed and trials project. We are exploring the extent that mobile access can connect people and improve lives. The project is set to last until March 2022 and whilst it is working the County Council will be working to assess if and how connectivity can continue past the end date.

Our consortium is made up of several organisations: Quickline Communications Ltd – the lead partner; North Yorkshire County Council (who lead the Environmental Monitoring use case); the Universities of York and Lancaster; Cybermoor; Safenetics; Flo-culture; and Wireless Coverage.

For more information and to become involved with the project, visit www.mobileaccessnorthyorkshire.co.uk

Or follow us via

   @mobileaccessNY

 @mobileaccessnorthyorkshire