



Humber Newsletter

May 2023

This newsletter is given to interested parties within the Humber area. It provides an update on the development of a new strategy for managing tidal flood risk around the Humber. If you wish to receive this newsletter or would like further information please contact us at HStrategy@environment-agency.gov.uk

Humber 2100+ Strategy

Climate change is the biggest threat we face on the Humber. If unmanaged, sea level rise and extreme weather could have catastrophic consequences for local communities, the environment, the economy and key infrastructure. The Environment Agency is working in partnership with 11 local authorities, supported by Internal Drainage Boards (IDBs) and Natural England to develop **Humber 2100+** - a new strategy for managing tidal flood risk (including tidal rivers), setting the way forward for the next 100 years. For more information, please visit our [StoryMap](#) on the Humber 2100+ strategy <https://arcg.is/u1rPi>



Strategy Update

Recap

In the last issue we had just received the initial results of the **Present-Day modelling outputs** and gave feedback on the **Winter Comms Campaign**.

The initial stage of our work to understand risk, involves carrying out modelling to establish **Present-Day Risk** around the Humber ([essentially a statement of risk as it is now](#)). The initial **Present-Day modelling** run results were reviewed by all partners at the start of the year and following this review process we have been working to update the model. The second model run is due to commence shortly, with final outputs being considered by partners through the summer, and formally 'endorsed' in early autumn.

In parallel with this work to define the Present-Day risk, we are also progressing the scope for our future baselines model runs (to show how risk will change over time) and are beginning to explore as a partnership what Step 2 of the project (Agree Approaches) will need to encompass to ensure that it meets the needs of all partners.

Alongside our work to understand risk and agree approaches, we are exploring how a framework for implementation of the Humber 2100+ Adaptation Pathway could work. This is progressing thanks to funding from the Defra innovative resilience programme and will include understanding how we'll use the information we gather (such as climate evidence; growth and development; investment and funding opportunities; and other changes to the local environment) to help make decisions, and how we work together.

As part of this adaptation pathways work, we also have funding to run a Community Panel, which will allow us to seek views from a cross-section of people living in the strategy area, to inform our thinking. This is due to run in early 2024, and the partnership are working to develop the local objectives of the panel.

customer service line
03708 506 506

incident hotline
0800 80 70 60

floodline
0345 988 1188
0845 988 1188

www.gov.uk/environment-agency

Outstrays to Skeffling Managed Realignment

The compound between Weeton and Skeffling has now reopened following the winter, and construction of the embankment is ongoing with excavations to help create the creek network between the old and new embankments. Work has recommenced on the wet grassland area at the western end of the site. This will involve creating a series of small, connected ponds and lagoons and sowing grassland seed. Other activities later this year will include commencing work on the new car park and capping the historic landfill area behind the existing bank to allow completion of the embankment towards Winestead Drain.



Picture of hibernacula

During the winter months our contractors carried out regular bird surveys. The results from these will provide baseline data for monitoring the site once the scheme is completed. The surveys have shown positive results for many species of wildfowl and wading birds, with other species also spotted.

Material has also been reutilised to create 'hibernaculas' across the site. These are small scale structures that contain spaces and crevices, allowing small animals such as reptiles and insects to shelter and hibernate in. The brick mounds, like the one shown in the photograph, will be covered with soil and seeded, to allow them to blend into the landscape.

The site is expected to breach spring / summer 2024. For more information visit: [Outstrays to Skeffling Managed Realignment Scheme - Environment Agency - Citizen Space \(environment-agency.gov.uk\)](#) or get in touch with the team: Welwick.Skeffling@environment-agency.gov.uk.

Strategic Review of the Middle Humber Defences

The Initial Assessments for Phase 1, which includes asset condition, remedial works, packaging, prioritisation, and a Strategic Overview Report is now complete. Phase 2 is well underway with funding approvals and scoping work complete. Initial breach modelling, a general assessment on flood damages, and initial economic assessment are all complete, with further detailed work ongoing. The scope for the main work is still being developed, and we are discussing this, and surrounding work for phase 2, with other Risk Management Authorities, as well as the potential to link with their investment plans for the area.

South Humber -Developing Projects

Stallingborough 3 sea defence improvements – The project team are continuing to engage with the communities, stakeholders, and Northeast Lindsey IDB. A Full Business Case was submitted to Large Project Review Group early this year. The team have secured the planning licence and are currently awaiting the marine licence, expected imminently. This year the works will focus on the southern revetment repairs and the smaller rock revetment, with potentially some outfall improvements in the Autumn. The large rock revetment works are expected to be carried out during summer 2024.

Barton-New Holland tidal flood alleviation scheme – The short-listed options are being appraised. Increasing inflation means we will need to proceed to ensure we develop a scheme that is affordable and deliverable. Ecological, heritage/landscape surveys continue, and an initial phase of ground investigation has been completed. Engagement and information sharing happens via the project’s community newsletter and webpage [Barton to New Holland Flood Alleviation Scheme](#), also with the local stakeholder representatives through regular meetings of the project Resilience Advisory Group and Steering Group. The preferred option is expected to be identified by early 2024.

Working in Partnership



Spotlight on the Humber

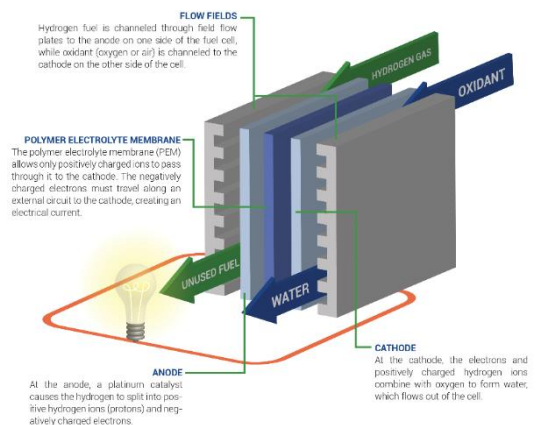
Hydrogen Fuel Cells

The Barton to New Holland Tidal Flood Alleviation Scheme aims to develop sustainable tidal flood defences, to protect the communities of Barton, Barrow Haven, and New Holland from future tidal flood events.



A Hydrogen Fuel Cell used to power the site

HOW DO HYDROGEN FUEL CELLS WORK?



©Setra Systems, Inc.

www.setra.com

In January, the first phase of on-site ground investigation surveys took place to help us understand the makeup of sections of the existing flood embankments and underlying ground. Better understanding the ground conditions will allow the team to develop the most effective flood alleviation option.

The project team have been trialling the use of hydrogen fuel cells to power the ground investigations. By combining hydrogen and air in the presence of a catalyst, a fuel cell generates electricity to drive an electric motor with water vapour as the only by-product. Hydrogen fuel cells are emerging as a clean and flexible energy source to support routes to Net Zero and are a zero-carbon alternative to traditional diesel generators.

Environment Agency PM Laura Dawson said “At the Barton-upon-Humber site, the fuel cell was coupled with solar panels to make the system as efficient as possible. This set-up is ideal for a small compound with several welfare cabins, which are adapted with air source heat pumps because they are more energy efficient.” She added; “Using hydrogen for ground investigation work is an exciting development. Often the ground investigation teams are the first to arrive in a community ahead of a scheme – if they can do this with a minimum of noise and pollution, it has to benefit everyone”.

The diagram (above) shows how Hydrogen Fuel cells generate energy.

customer service line
03708 506 506

incident hotline
0800 80 70 60

floodline
0345 988 1188
0845 988 1188

www.gov.uk/environment-agency

How resilient are you?

Are you prepared for future floods?

Although defences reduce the likelihood of flooding, the risk can never be removed entirely. To begin to be more resilient take some simple practical steps to help reduce the impact of flooding to your home or business.

To find out if you are at risk, how to prepare, stay safe and sign up (free) for flood warnings visit www.gov.uk/flood or call Floodline on **0345 988 1188**.



Contact us



<https://consult.environment-agency.gov.uk/humber/strategyreview>



HStrategy@environment-agency.gov.uk



@Humber_Strategy



@HumberStrategy

customer service line
03708 506 506

incident hotline
0800 80 70 60

floodline
0345 988 1188
0845 988 1188

www.gov.uk/environment-agency