



BLUE GREEN PLAN FOR HULL AND HALTEMPRICE

Delivering resilience through long-term planning



THE CHALLENGE

The risk of flooding and the damages flooding causes are widespread to both people and the environment. We must adjust to provide resilience to our communities.

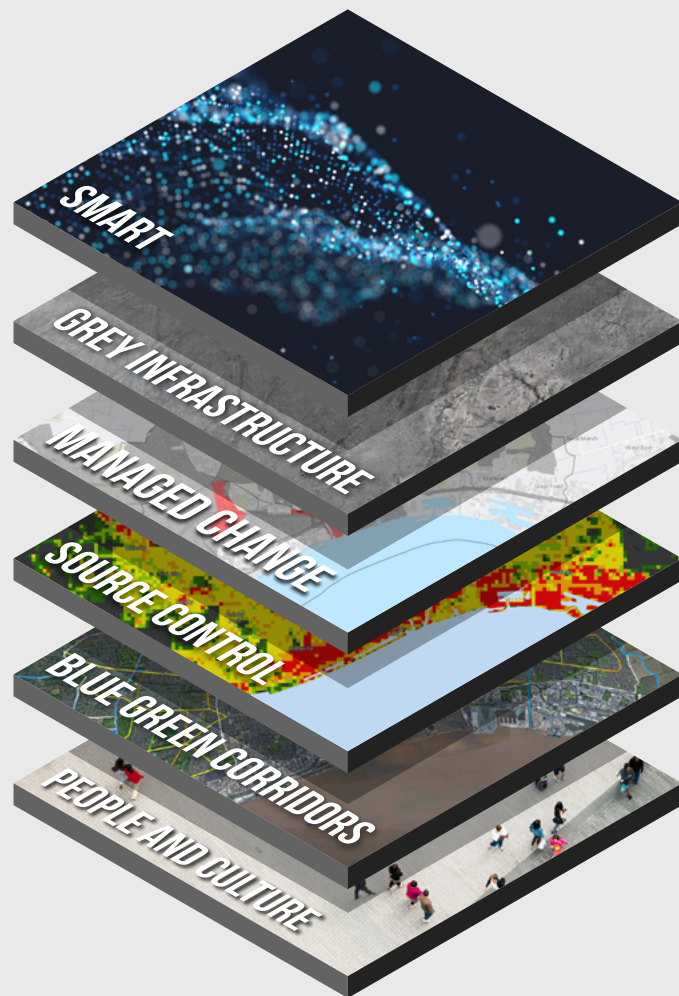
There are different ways an area can flood which include river, tidal, surface water, sewer and groundwater and Hull and Haltemprice are at risk of all of them.

Located on the Humber estuary, Hull and Haltemprice are built on the natural floodplain of the River Hull. The surrounding land is elevated, which forms a bowl. Rainwater flows to the estuary through the built-up urban area using a series of drains and sewers which are reliant on pumping. When these are full, water pools in low spots causing flooding to property, roads or infrastructure.

Since the floods in 2007, significant investment has been made in the region to reduce flood risk. However, to prepare for and adapt to climate change including rising tide levels and more intense and frequent rainfall, a collaborative and long-term vision for the area is required. This is where the Hull and Haltemprice Blue Green Plan comes in.



WHAT IS THE BLUE GREEN PLAN?



A Blue Green Plan is a strategy over 25 years to manage surface water and sewer flooding to ensure resilience within our communities and involves using blue (water) and green (vegetation) infrastructure to do this. Our vision is to live with and embrace water in a green and climate adaptive place.

SMART

A smart approach will optimise the use of above and below ground spaces to provide flood alleviation and maintenance in the right place at the right time. Real time information can allow communities to be more involved locally or provide data.

GREY INFRASTRUCTURE

Although grey infrastructure will be minimised, we need assets such as pumping stations, buried culverts and pipes to help connect many of the blue-green corridors and sustainable solutions and enable robust and resilient operation.

MANAGED CHANGE

Repurposing and regeneration of certain parts of the city with a focus on blue green infrastructure will increase flood resilience.

SOURCE CONTROL

To reduce the amount of water entering our drainage networks, sustainable drainage systems (SuDS) such as highway raingardens, rainwater planters and smart water butts will be used to slow the flow.

BLUE-GREEN CORRIDORS

A network of blue-green channels will collect and move surface water across the area which will reduce the risk of homes and properties flooding. In some locations, the blue-green channels will connect to aqua greens - a green space which slows the flow of water by holding water during large storm events.

PEOPLE AND CULTURE

Sustainable blue-green infrastructure will be designed in partnership with residents to understand what's important to them. The Plan will bring long term benefits to local communities including school education programmes, creation of jobs and businesses and strengthens Hull and Haltemprice as an international leader in flood resilience. Working together across communities, groups, businesses and institutions will be critical to the success of the plan and ensuring opportunities to co-create, co-fund and co-deliver.

BLUE GREEN PLAN ACROSS THE REGION



**SOURCE CONTROL:
WATER BUTTS, RAIN
GARDENS, RAINWATER
PLANTERS**



**PEOPLE AND CULTURE:
COMMUNITY AND
BUSINESS INVOLVEMENT**



**BLUE GREEN
CORRIDORS & GREY
INFRASTRUCTURE
TO MOVE WATER
THROUGH THE CITY**



**MANAGED CHANGE:
ADAPTING WHEN
OPPORTUNITIES ARISE**



**SMART: INNOVATION
AND TECHNOLOGY**

WHAT DOES THIS MEAN FOR YOU ?



14,000
fewer properties
flood in 2080



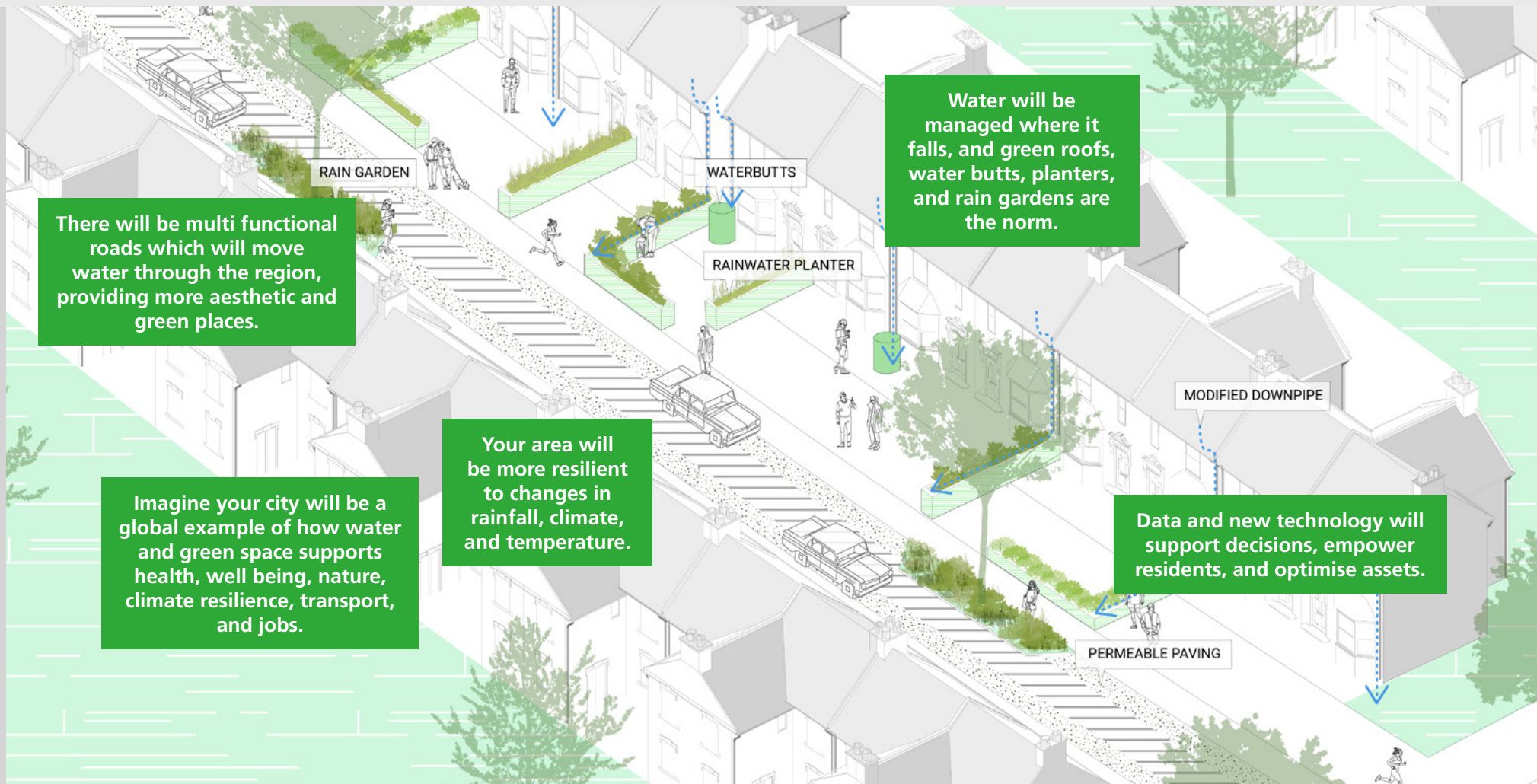
£2.6BN
potential
benefits



£1.3BN
potential
investment



**NATURE BASED
SOLUTIONS**



THE BLUE GREEN PLAN



Provides a blue print for the future to connect and inform broader plans for change and development, and suggests a structure to help us work together better to minimise disruption and expenses.



Changes the way our communities look and feel by using and making more green spaces. In turn, this is good for people's health and well-being when they are in or near nature.



Increases the amount of plant and animal life (biodiversity) and creates a livelier environment as additional green spaces are added and existing ones are improved.



Provides protection from flooding while working towards a carbon neutral future.



Gets residents, landlords, businesses, community groups, and developers involved to make change possible.



Promotes flood-resilient infrastructure and makes it possible for development to take place.



Gives children and communities chances to learn about and get more comfortable with water management.



Helps the economy grow and creates opportunities, such as jobs.

WHO IS INVOLVED?

The Blue Green Plan has been created collaboratively by Living With Water (LWW) which is made up of the various partner organisations: Hull City Council, East Riding of Yorkshire Council, Yorkshire Water, the Environment Agency, and the University of Hull with assistance from Stantec. Each partner brings vital experience which shaped this plan and we look to our communities to understand what the plan truly needs to do.

For more information, please contact Living With Water: <https://livingwithwater.co.uk/contact>





BLUE GREEN PLAN FOR HULL AND HALTEMPRICE

Delivering resilience through long-term planning

The Blue Green Plan shows that it is possible to radically increase flood resilience while enhancing and improving spaces and places for our communities.

The plan can help transform our urban areas to better utilise green spaces, store surface water locally, move surface water, and reuse surface water.