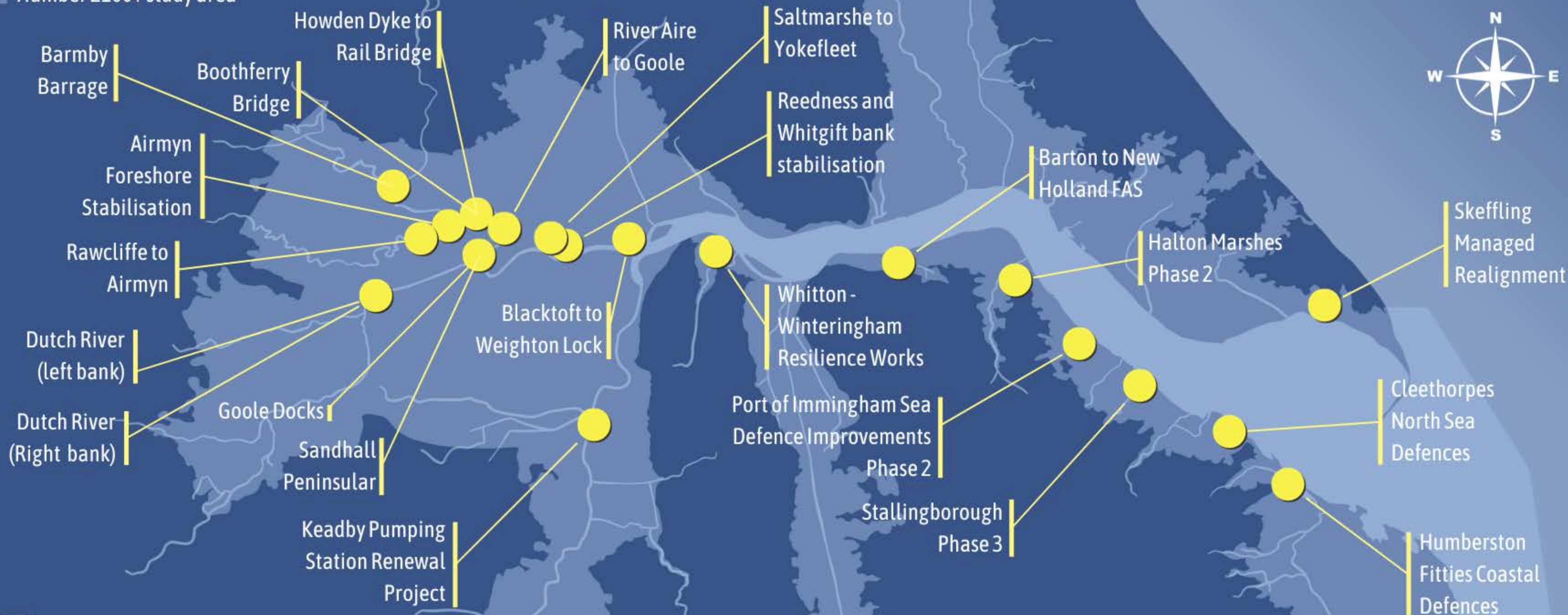


# Humber Long- Term Tidal Flood Risk Management

# Flood Risk Management Investment around the Humber

## What's happening now and in the near-future?

■ Humber 2100+ study area





# Investment in tidal flood risk management around the Humber

Over £200m flood defence spending 2008 - present day

● Examples of completed projects since 2008

● Examples of projects in progress





# Investment in tidal flood risk management around the Humber

## What has been delivered since 2013?

● Examples of completed work since 2013

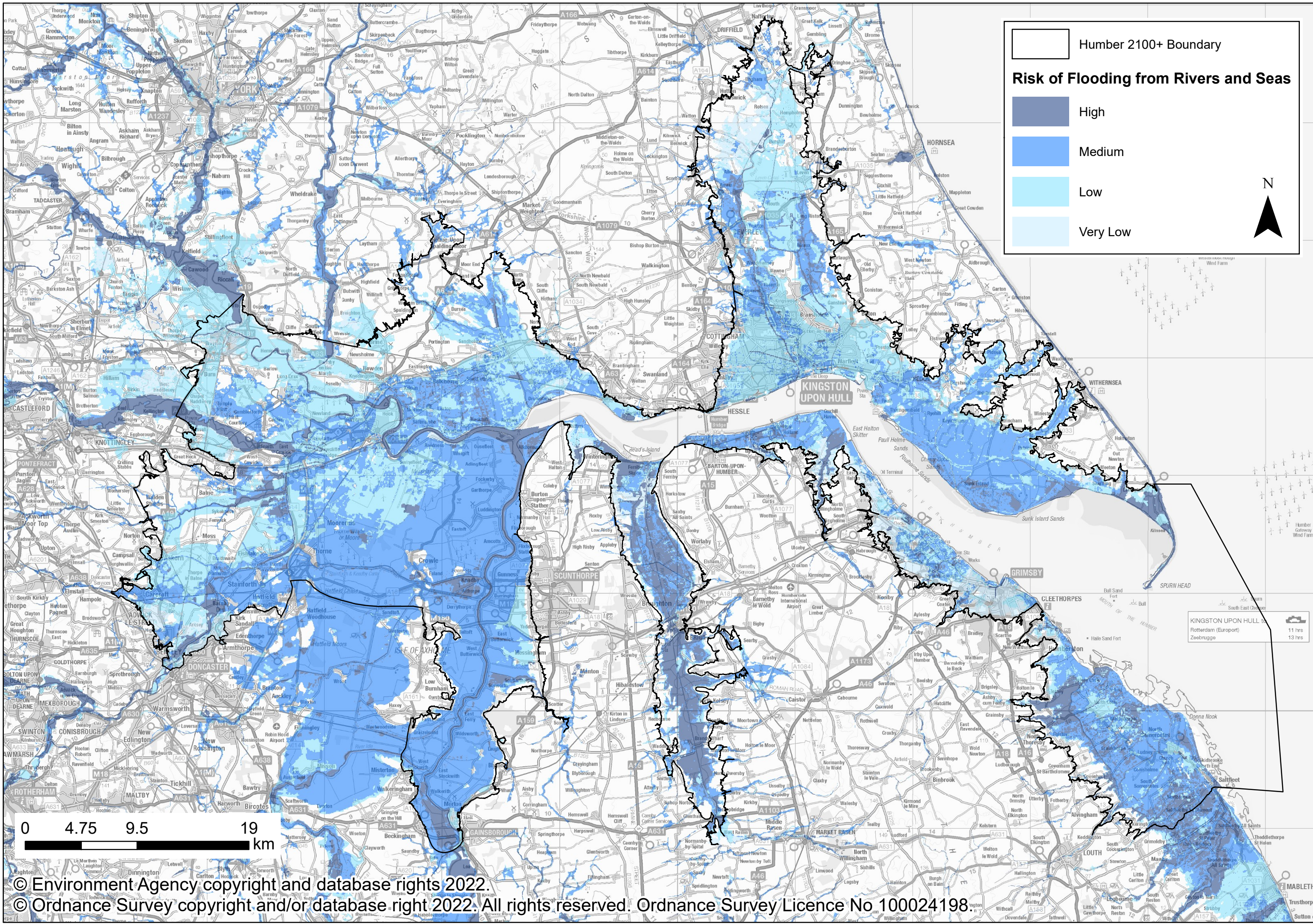
■ Humber 2100+ study area











Humber 2100+ Boundary

### Risk of Flooding from Rivers and Seas

- High
- Medium
- Low
- Very Low

N

0 4.75 9.5 19 km



# Tidal flood risk on the Humber

## Preparing for the future



### Tidal flood risk is already a reality

In 2013 over a thousand properties were **flooded**. In Hull, the tidal surge barrier came within 40cms of overtopping



### Sea levels are rising

Sea levels are expected to rise over a metre in the next 100 years due to **climate change**, and we will continue to have more extreme weather



### What is being done about it?

Over £200m has been invested in recent years to reduce risk to over 73,000 properties and to help communities become **resilient**



### We all have a part to play

We all need to understand the risk we face. Being **prepared** can save lives and livelihoods, and help communities recover quicker

Like all estuaries, the Humber is a complex system, so we need to work together. Inland areas also need to consider the impacts of climate change and sea level rise on drainage and river flows



The map above shows the area that could be at significant risk of tidal flooding in the future. This is why many organisations are working together to tackle the problem and help communities become more resilient to floods when they happen. **Everyone has a role!**



### What needs to **change**?

- We cannot continue to manage tidal flood risk in the same way
- The scale of the challenge means we need to learn to live with flood risk
- We need to be bold and think differently

### What does this **mean**?

- There are great opportunities here, alongside some difficult choices. A new approach will allow us to build resilience for local people, enable growth and development, improve the natural environment, and address the climate emergency

### What are **we** doing?

- There is a huge amount of activity going on to manage tidal risk already, from major investment to community preparedness
- We are looking ahead as a partnership to the steps we'll need to take to manage future risk
- Being adaptive to change, now and in the future, is key to ensuring ongoing prosperity for the region

### What can **you** do?

- Due to the flat and low nature of the Humber region, you don't have to be near the water for it to affect you
- It is important to consider the risk to your home or business as sea levels are rising and the climate is changing, causing weather to be more extreme and unpredictable
- **Check your flood risk** visit [gov.uk/flood](http://gov.uk/flood)
- **Make a plan** visit [gov.uk/prepare-for-flooding/future-flooding](http://gov.uk/prepare-for-flooding/future-flooding)
- **Sign up for flood warnings** - you can receive texts, emails, or phone calls to let you know if flooding is expected. Visit [gov.uk/sign-up-for-flood-warnings](http://gov.uk/sign-up-for-flood-warnings)







# Humber Tidal Flooding: A History

## 1921

17th Dec

Tidal flooding with a recorded depth of 2.44m causes severe disruption to transport and other infrastructure in Hull.



## 1953

31st Jan

A tidal surge hits the East Coast of England flooding over 100,000 hectares of land, and 24,000 homes between Yorkshire and the Thames, 307 people lost their lives and damages reached the equivalent of £1.2 billion in today's money.



## 1954

11th Nov

Thousands of people were trapped in their homes and around 1000 properties were flooded in Hull due to a combination of high tides and swollen rivers.



## 1969

29th Sept

A tidal surge affecting most of the east coast caused flooding around the Humber. The City of Hull was 3ft under water in some areas and became isolated as many routes and bridges were impassable.



## 1978

11th - 12th Jan

A tidal surge along the east coast flooded over 1000 homes and 500 hectares of land, resulting in the equivalent of almost £9m in today's money. Widespread disruption affected key infrastructure such as Grimsby railway and Docks.



## 1983

1st Feb

Tidal flooding at Spurn and other locations along the east coast.

## 1993

21st Feb

Tidal flooding at Spurn Head, and the evacuation of 600 people from their homes in Walcott, Hemsby and Morston.

## 2013

5th - 6th Dec

A tidal surge hit the east coast, with the highest ever recorded water levels around the Humber, including Hull where the Hull Tidal Surge Barrier came within 0.4m of being overwhelmed.

Around 1100 properties and over 7000 hectares of land were flooded, alongside significant impacts on industry and infrastructure affecting trade, transport and production such as the Port of Immingham that had to close for several days.



## 2017

13th Jan

A tidal surge was predicted along the east coast and thousands of properties were evacuated. Thankfully, conditions changed at the last minute which significantly reduced the impacts. If the wind direction had not changed course, the coast would have experienced a surge much greater than that seen in 2013 and 1953.



## Looking to the future...

Sea level rise of at least a metre is predicted over the next century. Future surges will be more severe and also more likely due to increased extreme weather

**Be prepared**  
Visit [gov.uk/flood](http://gov.uk/flood)