

# **Lincs Scrutiny**

## **Nov 2020**

### **Recovery Update**

Pete Reilly  
Environment Agency

# Boston Haven

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Jackson



Environment  
Agency

**Boston Haven Banks**

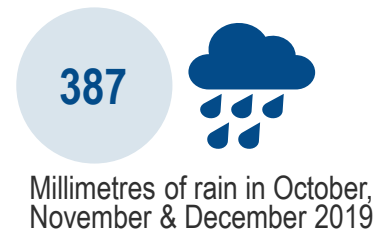
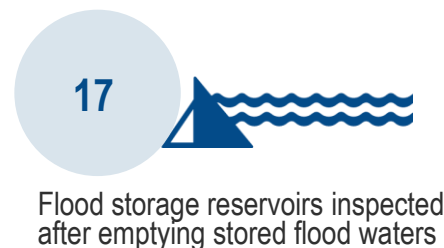
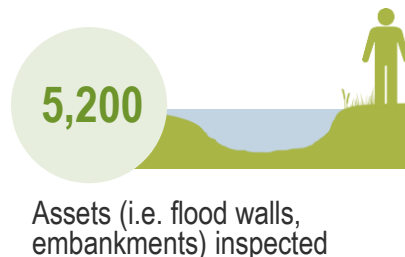
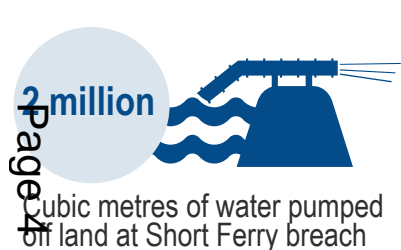
# Boston Haven

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# Lincs/Northants Winter 2019/20 Recovery

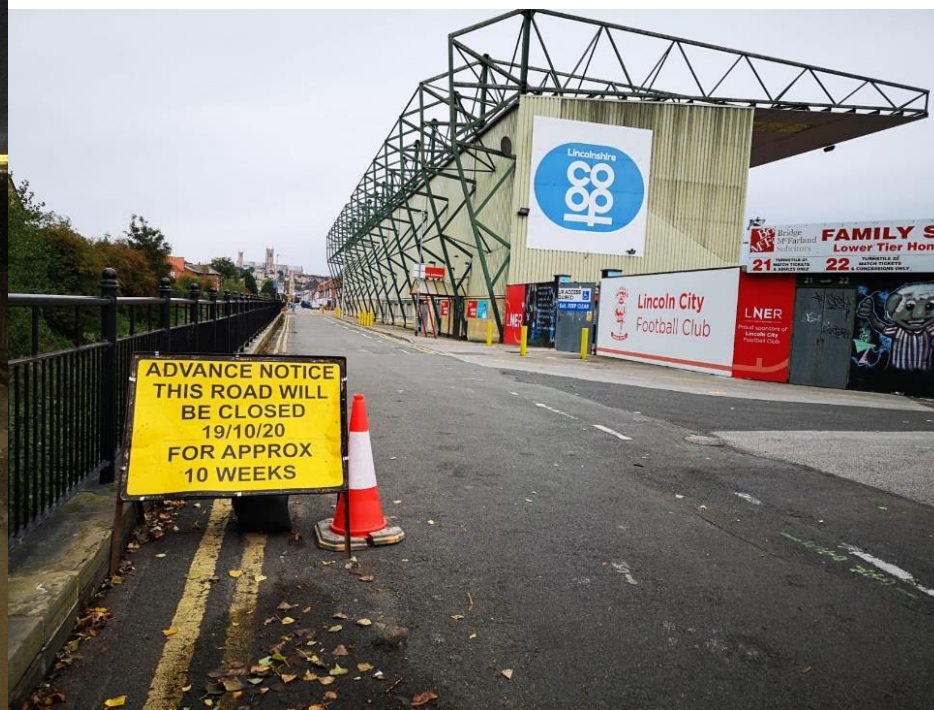
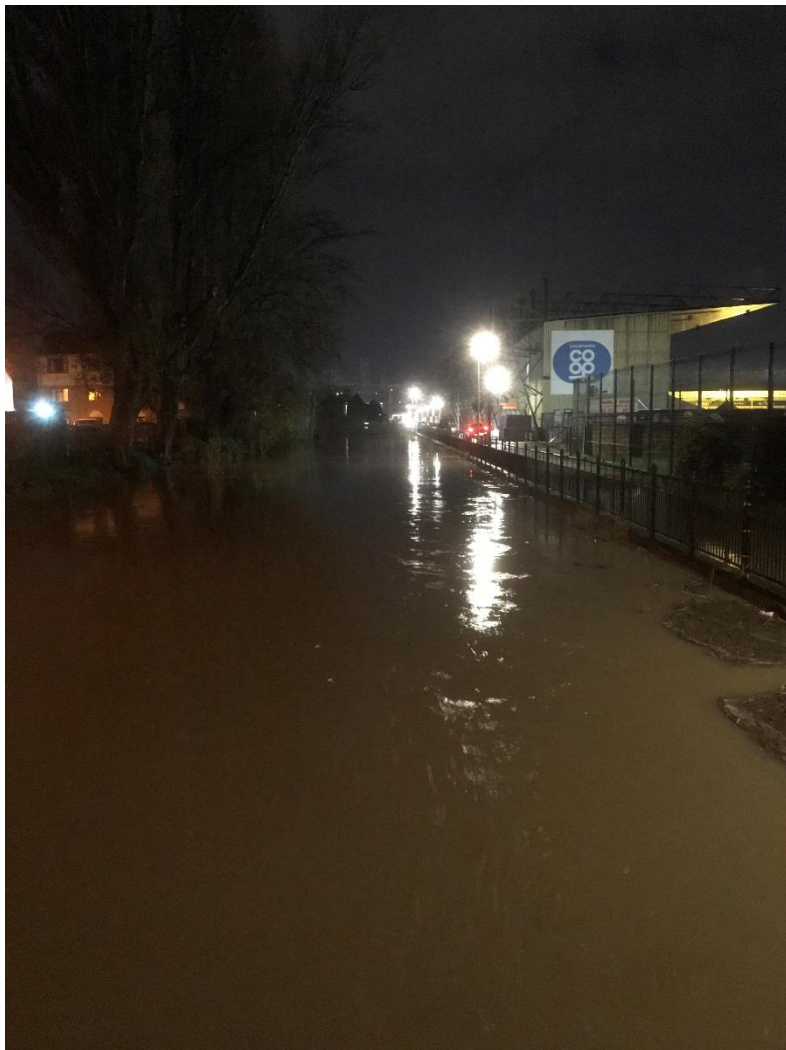
September, October and November 2019 we saw significant rainfall across Lincolnshire and Northamptonshire, resulting in high river levels, damage to defences and flooding to land and properties. This infographic shows some statistics on the work we have been doing since.





# Lincoln Football Ground 2019 incident and 2020 recovery

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# Barlings Eau breach 2019 incident and 2020 recovery

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# Wainfleet Flood Relief 2019 incident and 2020 recovery

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## Timberland 2019 incident and 2020 recovery

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## Timberland Delph 2020 recovery



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## Ancholme at Bishopsbridge. Impacts on rural property and agricultural land

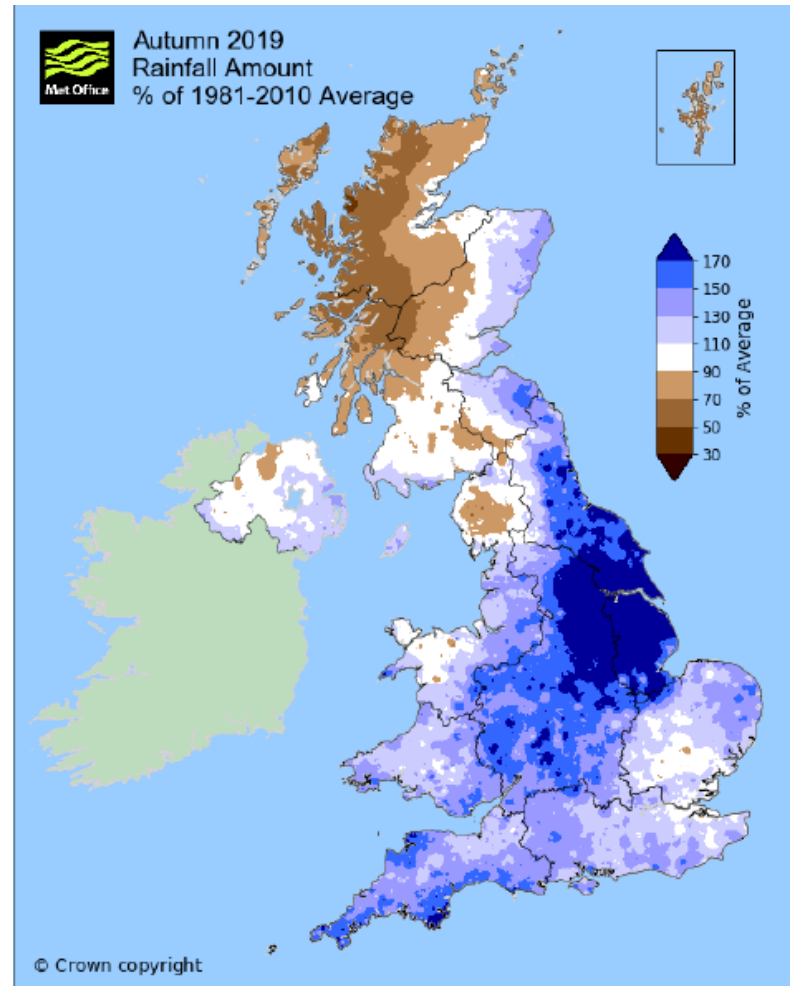
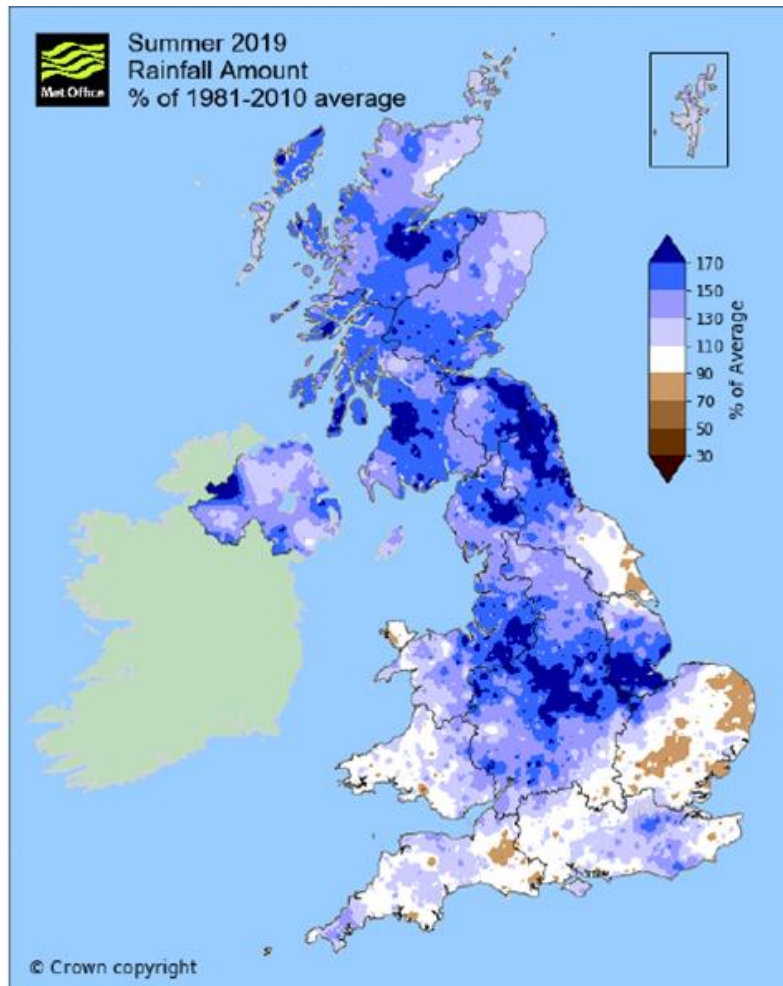
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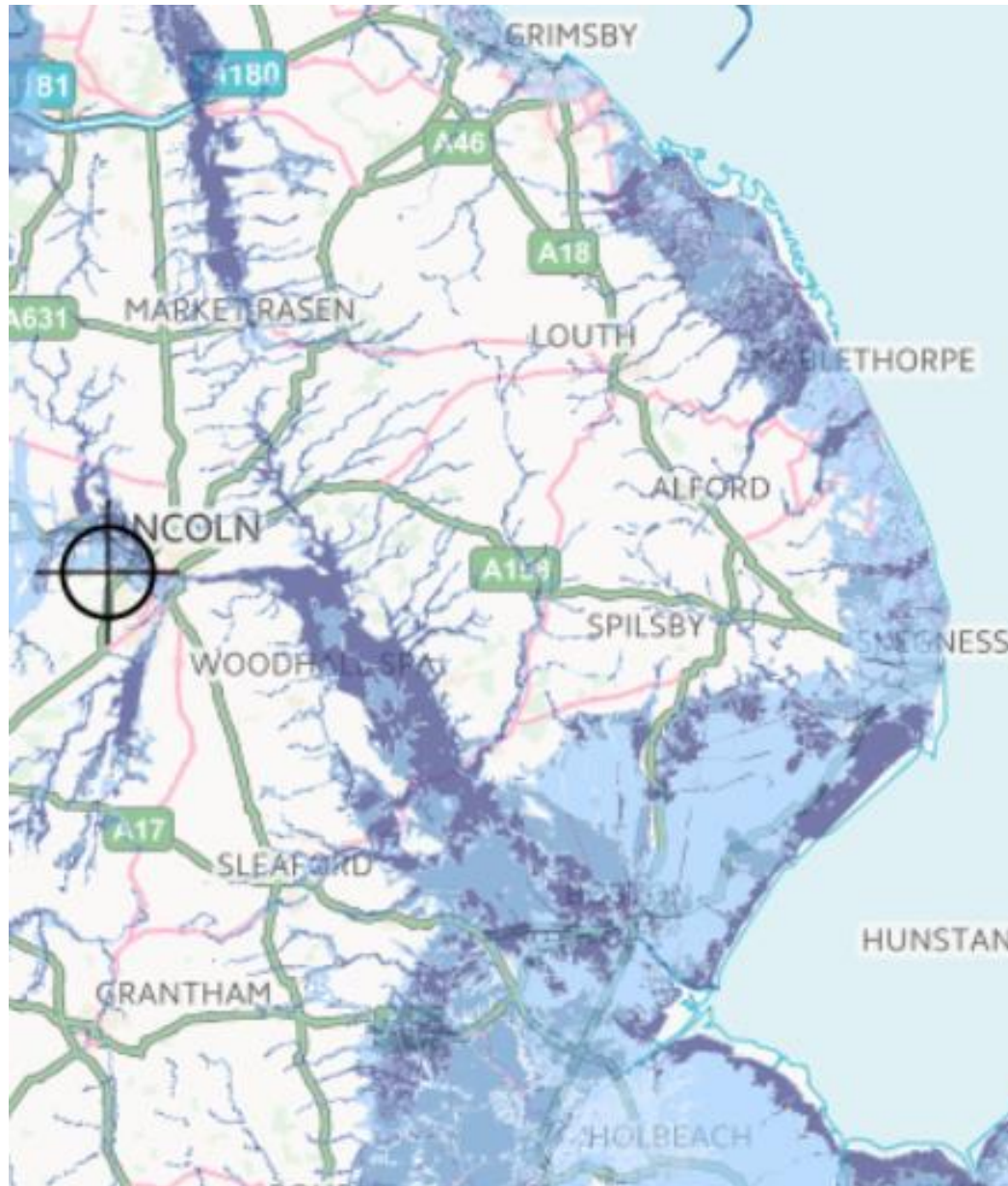


# 2019 summer and autumn rain representing 170% of 1981-2010 annual average

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# Extent of Lincolnshire flood plain is vast





# Water, water everywhere

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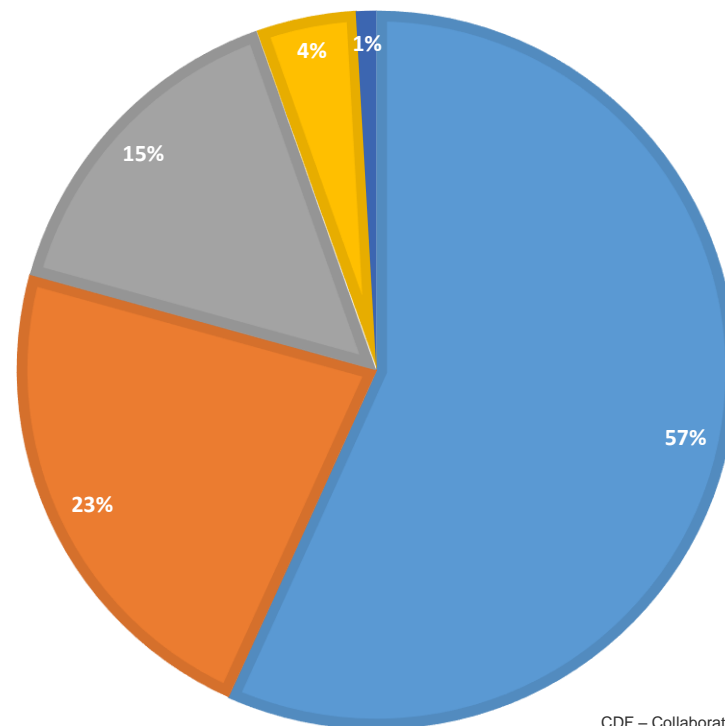
# Scale of Recovery

138 individual projects – 34 sub-projects within Project 1 alone  
Recovery achieved through multiple delivery routes

Kettleby Beck, Brigg
Old River Ancholme, Site 2
North Kelsey Beck
Bishop Bridge Seepage
Barlings Eau LHB site 1, Short Ferry
West Drain (South Ferriby) Slip
Barlings Eau LHB site 2, Short Ferry
Northampton Washlands Secondary Control Gate Repair
Barlings Eau RHB seepage / slip
Park Beck
New Cut Flood Storage Reservoir, River Freshney
Timberland Delph (RHB), Martin Dales
Timberland Delph (RHB), Martin Dales - Piping Site No.2
Timberland Delph LHB
Kyme Eau, Chapel Hill
Old River Ancholme, Site 1
Cobblers Lock, River Sleas Bypass (Anwick)
Billinghay Skirth, Phase 2 (RHB)
Sandhill Beck, Washingborough
West Drain Pointing Doors, South Ferriby
Hibaldstow Highland Drain
River Till Near Broxholme & Bransby Cw pumped outfall
Steeping River at Wainfleet flood wall damage
Timberland Delph NE of Timberland
Hibaldstow Catchwater NE of Hibaldstow
Kyme Eau West of South Kyme
Wainfleet Relief Channel
Carr Dyke Billinghay
River Ancholme Toe Protection Repairs - NE Wressle
Northampton Washlands Secondary Control Gate Repair
North Kelsey Beck
River Witham LHB at Fiskerton
River Ancholme East of Hibaldstow
Steeping River at Wainfleet toe erosion and embankment slips (11 Assets there)

## RECOVERY DELIVERY ROUTES

■ CDF ■ IDB ■ FOF ■ MEICA Framework ■ EA Field Team



CDF – Collaborative Delivery Framework  
IDB – Internal Drainage Boards  
FOF – FCRM Operational Framework

# Types of Recovery work - Breaches





# Breach - Timberland





# Breach - Timberland

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# Breach - Timberland

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# Breach - Timberland

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# Breach - Timberland



# Breach – Barlings Eau





# Breach – Barlings Eau





# Breach – Barlings Eau

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# Breach – Barlings Eau



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# Breach - Barlings Eau



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# Breach – Barlings Eau

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# Breach – Barlings Eau



# Breach – Barlins Eau





# Breach – Barlings Eau

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# Breach – Barlings Eau

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# Includes accessing remote sites

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# Remote sites

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# Remote sites



# Remote sites





# Recovery - Burton Catchwater Drain SP2-04R

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# Recovery - Burton Catchwater Drain SP2-04R





# Recovery - Burton Catchwater Drain SP2-04R



# Recovery - Burton Catchwater Drain SP2-04R

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# Recovery - Burton Catchwater Drain SP2-04R



# Recovery - St Clements, Fiskerton 2020

## recovery SP1-28C

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# Recovery - St Clements, Fiskerton 2020

## recovery SP1-28C

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# Recovery - St Clements, Fiskerton SP1-28C

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# Recovery - St Clements, Fiskerton SP1-28C

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# Recovery - St Clements, Fiskerton SP1-28C

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# Recovery - St Clements, Fiskerton SP1-28C

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# Recovery - St Clements, Fiskerton SP1-28C progression

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# Recovery - St Clements, Fiskerton SP1-28C progression

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# Recovery - St Clements, Fiskerton SP1-28C progression

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# Recovery - St Clements, Fiskerton SP1-28C progression





# Recovery - St Clements, Fiskerton SP1-28C progression



# Recovery - St Clements, Fiskerton SP1-28C progression

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# Recovery - St Clements, Fiskerton SP1-28C progression





# Recovery - St Clements, Fiskerton SP1-28C progression



# Recovery - St Clements, Fiskerton SP1-28C progression



# Recovery means building up low spots





# Low spots

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# Low spots

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# Low spots

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# Low spots

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# Low spots

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# Low spots





# Low spots



# Low spots





# Recovery means tree removal and brushing work





# And vegetation clearance

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# Recovery means dealing with badgers, moles, rabbits and rats

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# And making sure they can't return

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# And rehoming protected species

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# And rehoming protected species



# And rehoming protected species

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## And rehoming protected species



# Recovery means large engineering works - Black Sluice Complex

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# Lincoln Defences

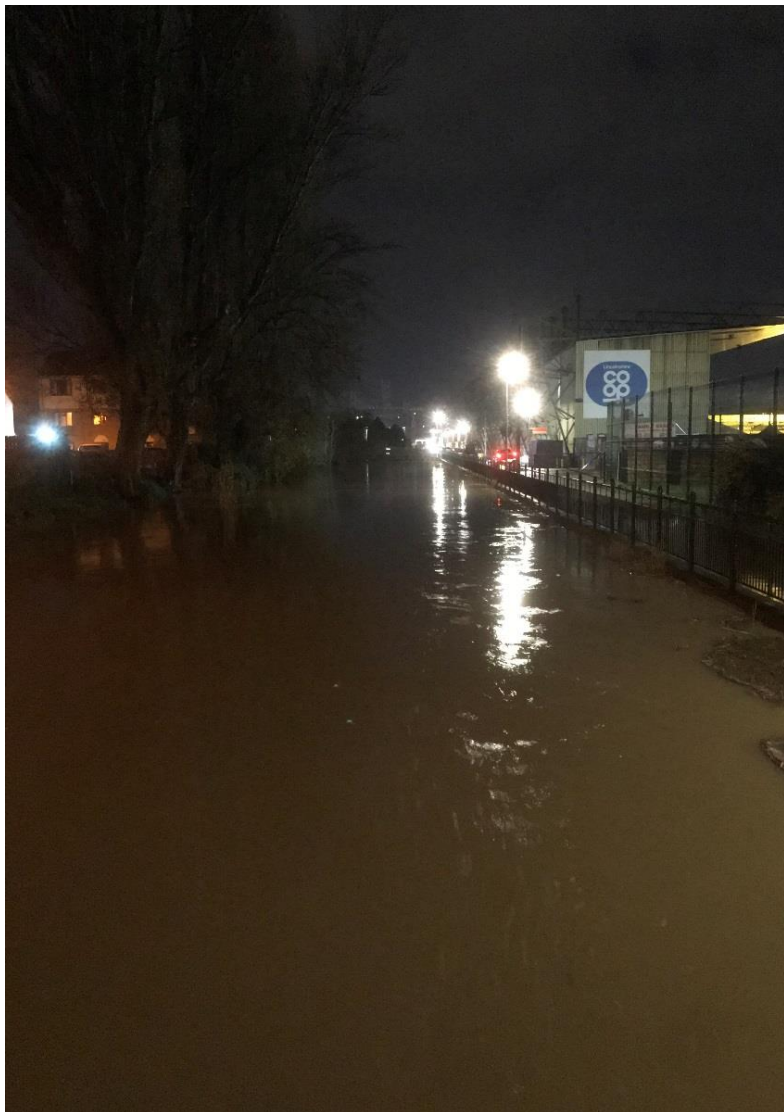
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# Lincoln Football Ground 2019 incident and 2020 recovery

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## Wainfleet Flood Relief 2019 incident and 2020 recovery





## Impacts on rural property and agricultural land





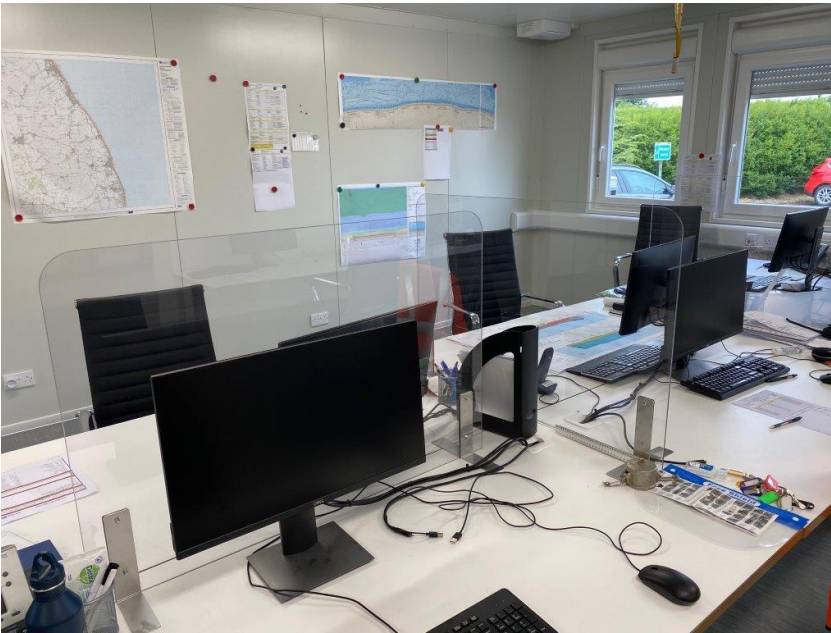
# **Lincolnshire Flood and Drainage Scrutiny**

## **Nov 2020**

### **East Coast Update**

Deborah Campbell  
Environment Agency

# Covid-19 Measures



- Short delay
- Exemption for overseas staff
- Keeping staff safe
- Segregating public and plant



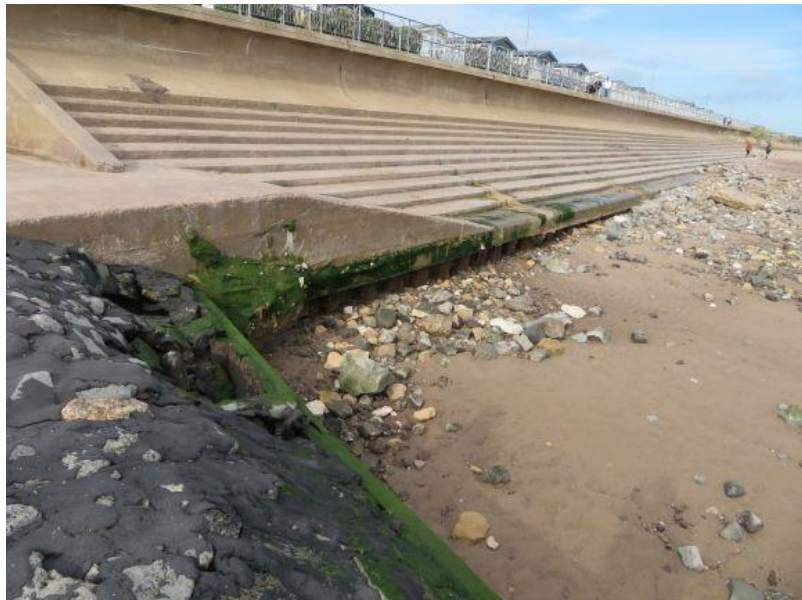
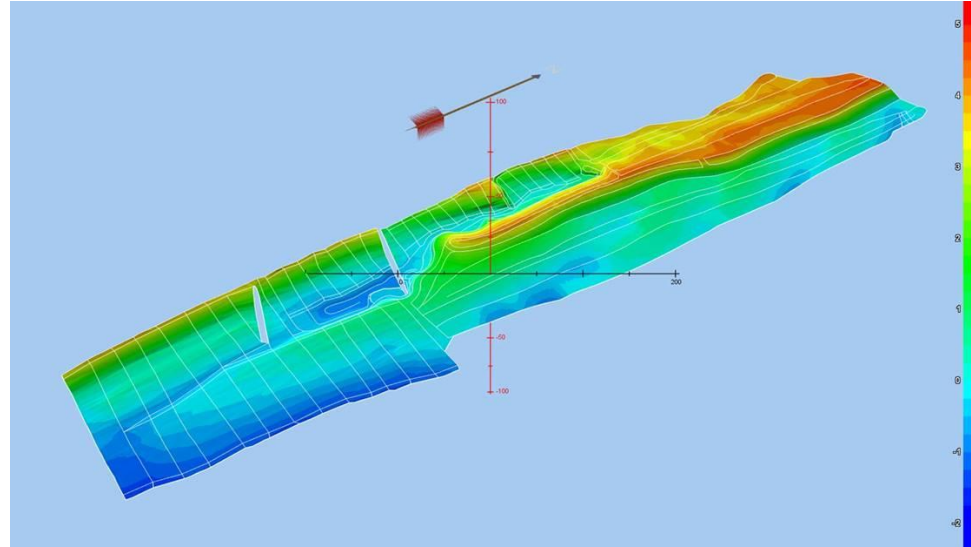
# Interim Beach Management





# Beach Recycling at Winthorpe

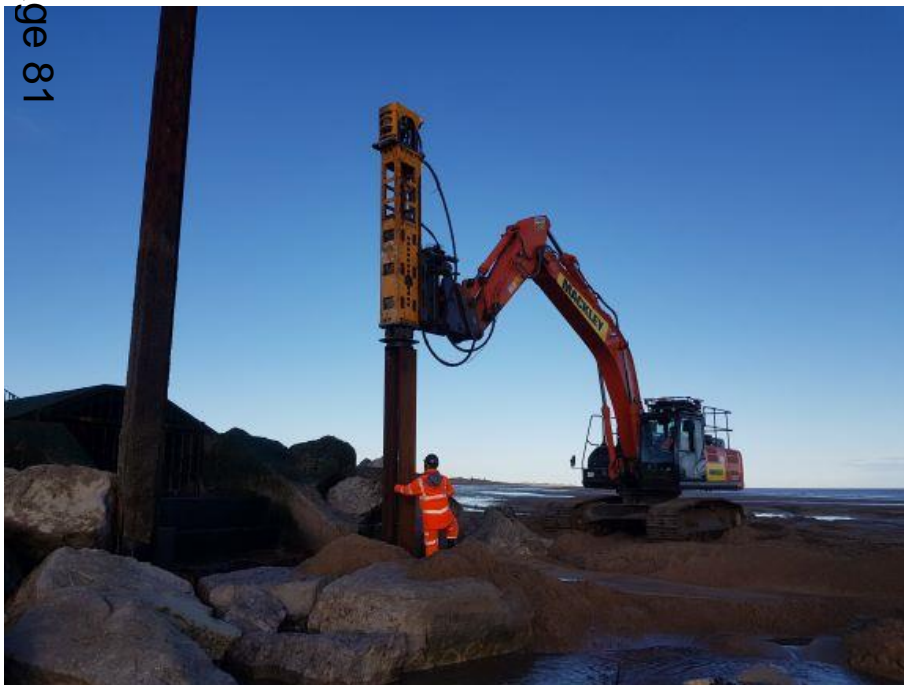
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- Beach below design profile
- Nearshore too shallow for dredger
- Accumulation on sand bar
- Rapid response
- 63,000m<sup>3</sup> moved in 2 weeks

# Additional Works

- Outfall repairs
- Replacement of navigation markers





# Inspecting the tidal defences

- Many of the defences constructed after 1953
- Refurbished in the 1980's
- Buried under sand in 1990's
- Will inform future works
- Next steps March 2021



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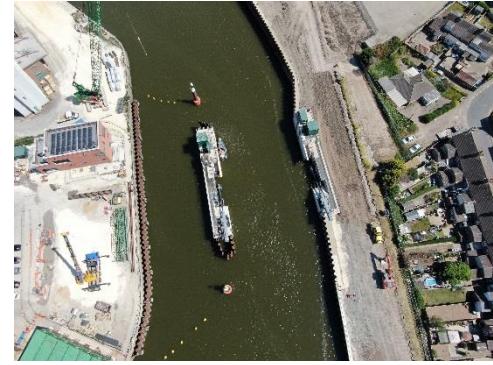
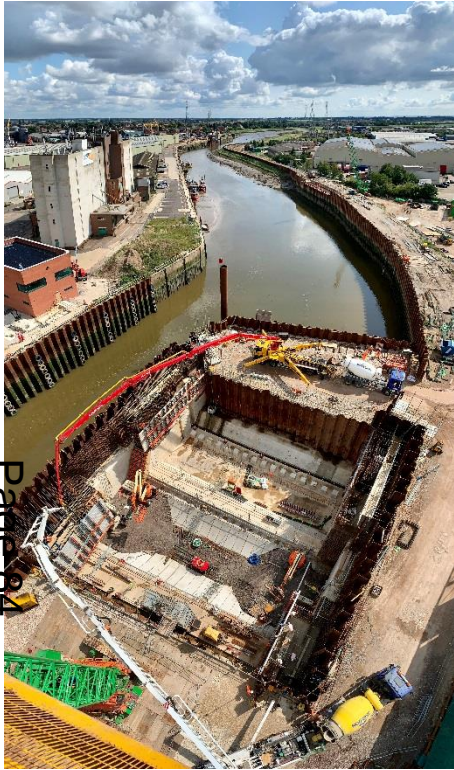
# Lincs Scrutiny Nov 2020

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## Projects and Steeping Catchment Update

Morgan Wray  
Environment Agency

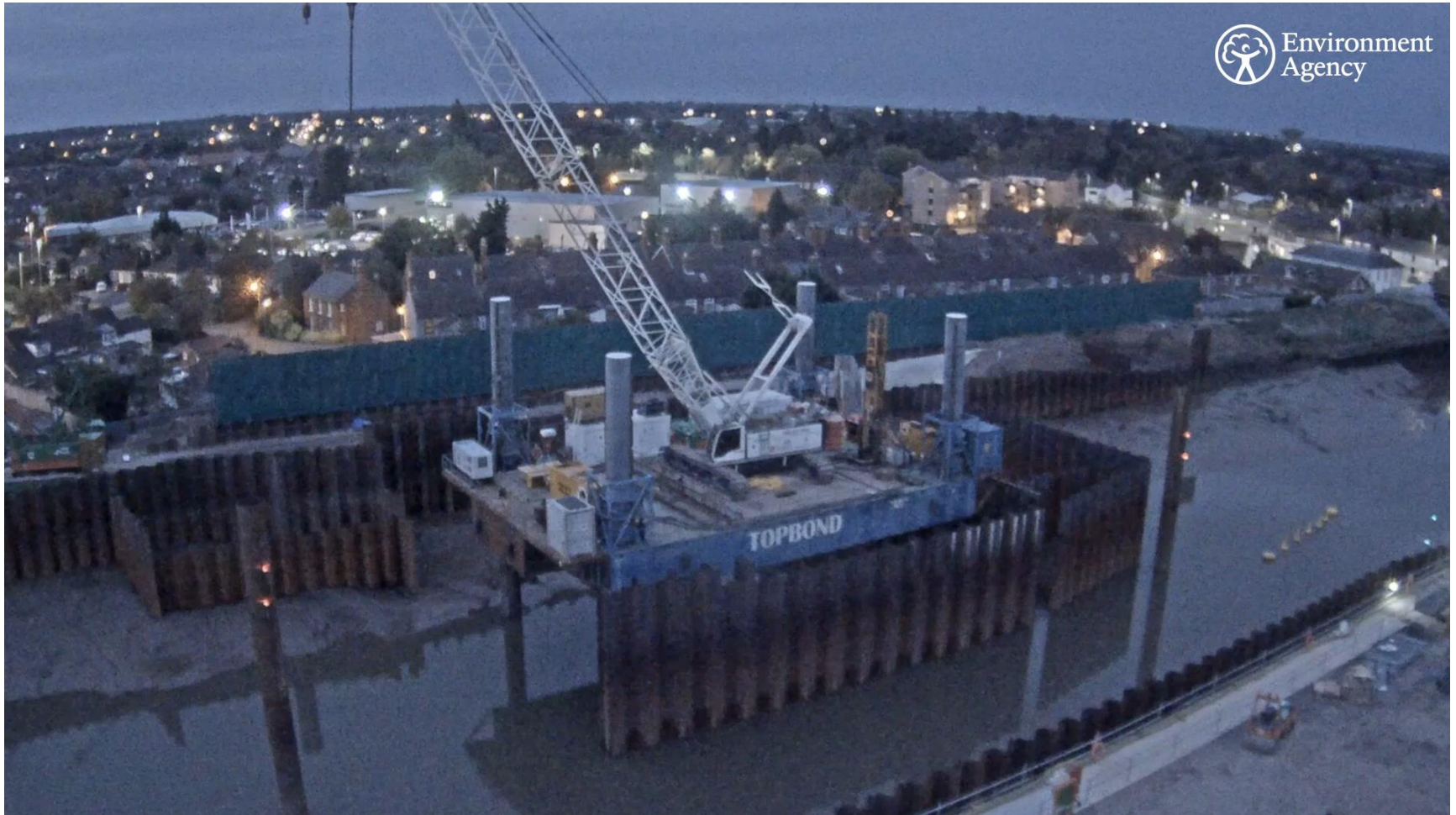
# Boston Barrier





Two minute time-lapse video from the beginning of the project  
to when the channel was opened

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# Maintenance in Lincs County





# Lincoln Defences



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# Wainfleet



Weed cutting was completed mid September to get the roots out of the middle of the river ready for dredging.



Steeping Steering Group Chair Robert Caudwell, centre, is with local councillors from the partnership, Joe Taylor and Wendy Bowkett, near Bycroft's Bridge at the start of the dredging.



This is a lagoon similar to those that have been constructed so the dredged material can settle – the water will run into nearby drains and silt eventually be mixed into the land.



Additional flood risk activity within the Catchment Action Plan includes reducing bank erosion through 'toe protection work' e.g. using coir rolls shown here.



Royal Smals dredger arriving on site



# Walsley Marsh Drainage Board

**Board Meeting via MS Teams  
25th November 2020**



# River Steeping Dredging Project

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