Lincs Scrutiny Nov 2020 Recovery Update

Pete Reilly Environment Agency



Boston Haven





Boston Haven



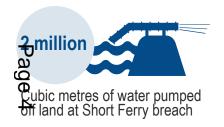




Lincs/Northants Winter 2019/20 Recovery



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.





Assets (i.e. flood walls, embankments) inspected



Flood storage reservoirs inspected after emptying stored flood waters



Miles of assets walked by inspectors



Communities have received local updates on repairs



Drone footage reviewed

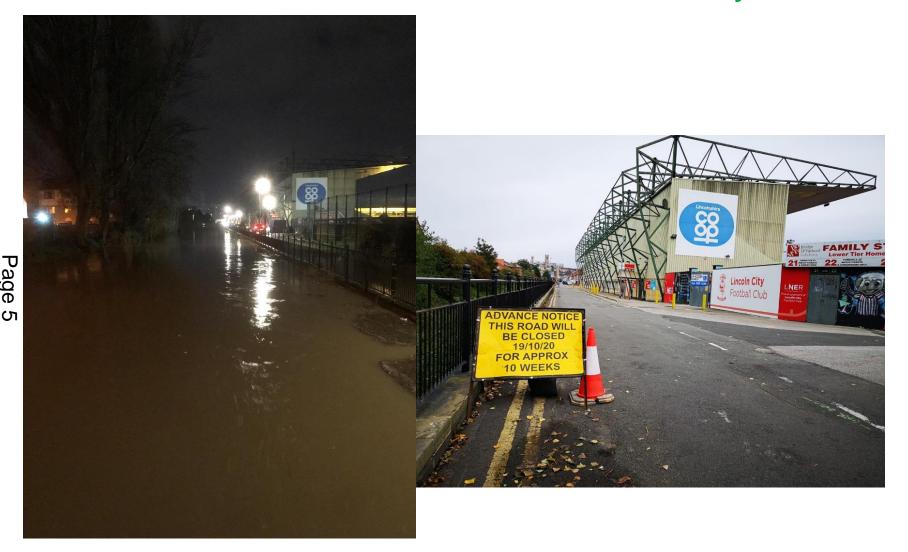


Approx number of properties protected by flood defences in Lincolnshire



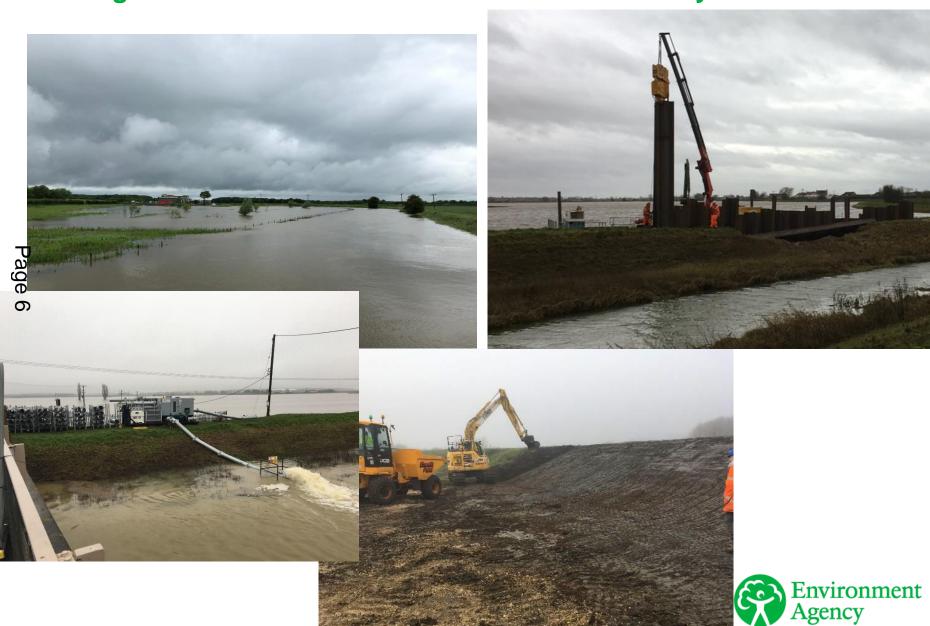
Millimetres of rain in October, November & December 2019

Lincoln Football Ground 2019 incident and 2020 recovery





Barlings Eau breach 2019 incident and 2020 recovery



Wainfleet Flood Relief 2019 incident and 2020 recovery





Timberland 2019 incident and 2020 recovery





Timberland Delph 2020 recovery





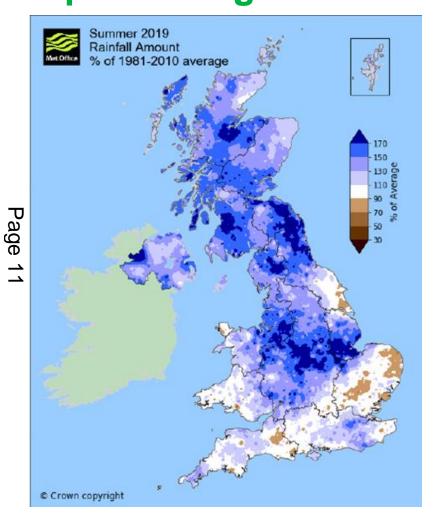
Ancholme at Bishopsbridge. Impacts on rural property and agricultural land

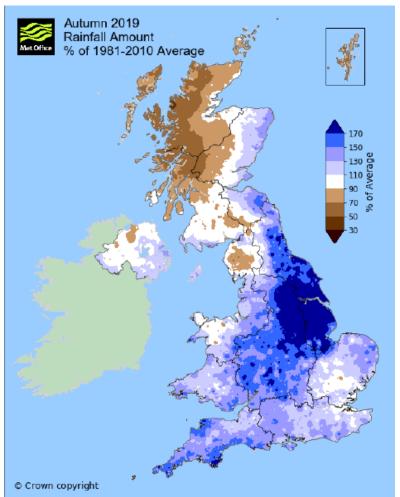




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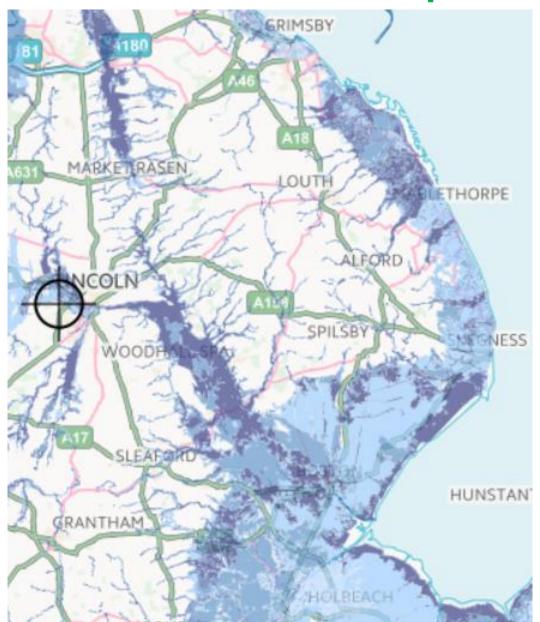
2019 summer and autumn rain representing 170% of 1981-2010 annual average







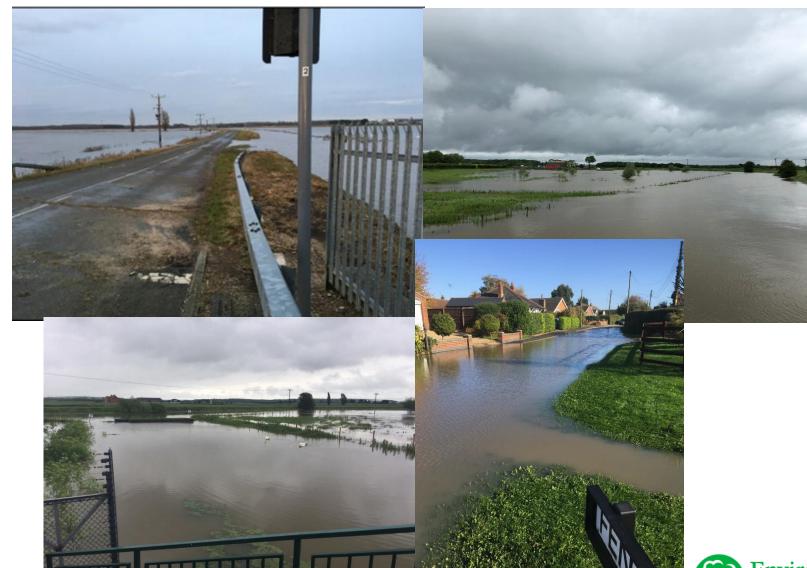
Extent of Lincolnshire flood plain is vast





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Water, water everywhere



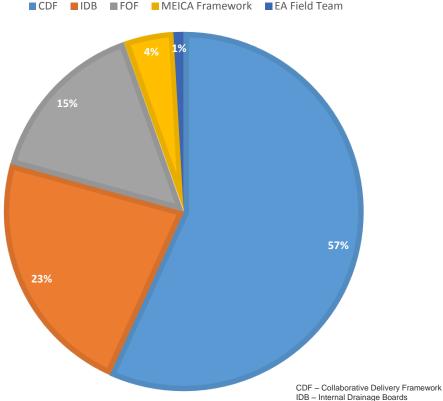


Scale of Recovery

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 Slea 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





FOF - FCRM Operational Framework

Types of Recovery work - Breaches



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Includes accessing remote sites







Remote sites





Remote sites





Remote sites





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Recovery - Burton Catchwater Drain SP2-04R





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





Recovery - St Clements, Fiskerton 2020 recovery SP1-28C





Recovery - St Clements, Fiskerton 2020 recovery SP1-28C



Environment Agency

































progression





















Recovery means building up low spots











Environment Agency











Environment Agency













Recovery means tree removal and brushing work





And vegetation clearance





Recovery means dealing with badgers, moles, rabbits and rats





And making sure they can't return













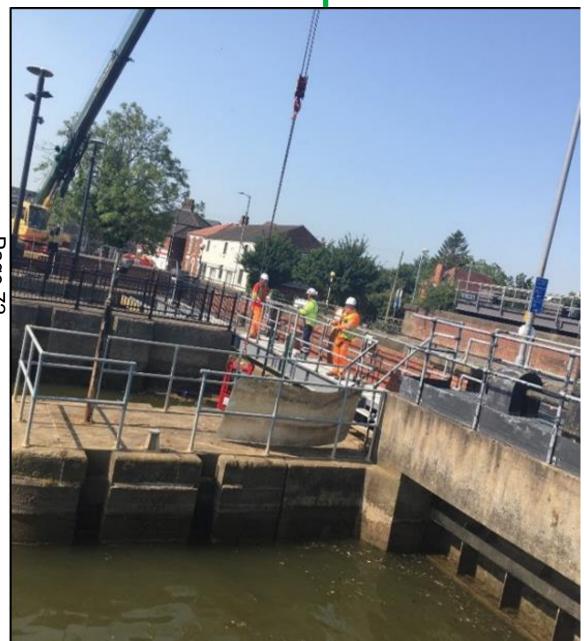








Recovery means large engineering works - Black Sluice Complex





Lincoln Defences







Lincoln Football Ground 2019 incident and 2020 recovery





Wainfleet Flood Relief 2019 incident and 2020 recovery







Impacts on rural property and agricultural land

J. Anyan



