

Response to winter flooding 2023/2024

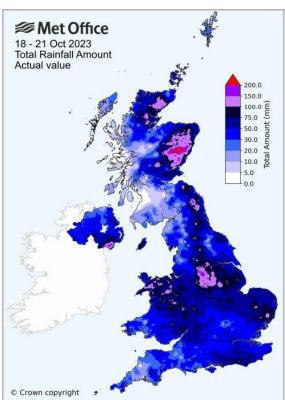
June 2024

What happened?

Between October 2023 and February 2024, the UK was beset by continuous storm events bringing heavy rainfall and flooding impacts to communities. Storm Babet and Storm Henk caused significant impacts across Lincolnshire and Northamptonshire, with above average levels of rainfall throughout the winter period.

- The area has recorded the wettest ever winter on record see the Met Office maps below.
- Storm Babet in October resulted in a month's rain in just 24 hours.
- Storm Henk followed, along with snow and rain into the new year, adding more pressure to already overwhelmed systems.
- We issued multiple Flood Warnings and Flood Alerts over the winter period.

This has resulted in very challenging conditions for repairing damage, including breaches to embankments. While we have had some drier weather this spring, we continue to closely monitor systems and the impact of high tides. The United Kingdom faces an increasing risk of storm surges, with sea levels rising 3mm each year. Since the start of the 20th century, sea levels in the UK have risen 16cm.



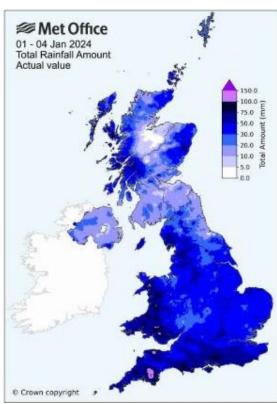


Figure 1. Maps showing total rainfall for Storm Babet (left) and Storm Henk (right) across the UK.



Properties affected by flooding across Lincolnshire and Northamptonshire

Currently, our data shows that there are approximately 2300 flooded properties across Lincolnshire and Northamptonshire due to river and surface flooding.

	Internal	External	TBC	Total
Main River	557	125	195	897
Other	158	226	20	404
твс	525	394	95	1014
Total	1260	745	310	2315

2023/24 Storms: combined property flooding totals. *All figures correct as of 23/04/2024.

What have we done?

- 9,344 flood risk management assets (these are structures that manage water in times of heavy rain) have been inspected since 20 October 2023.
- Approximately 50,000 hours of staff time have been spent on incident and/or recovery activities since Storm Babet. This has helped to better protect at least 11,000 properties in Lincolnshire and Northamptonshire.
- Emergency repairs to right bank of the Maxey Cut near Tallington have been completed.
- Emergency repairs to the left and right banks of the Barlings Eau near Short Ferry in Lincolnshire have been completed.
- The breach on the Bourne Eau near Bourne has been repaired.
- We have engaged directly with communities throughout the winter, with support from Mary Long Dhonau who has, over many years, been supporting those who have flooded.
- We have held public drop in events in the Floodmobile at Horncastle, Ruskington and Wainfleet. The Floodmobile is a 'house on wheels' containing more than 50 property flood resilience measures like flood doors and pumps.
- Our Fens 2100+ team is leading a pilot on sustainable recovery with partners, communities, and farmers in the Fiskerton and Barlings Eau area, as part of the Fens 2100+ demonstrations project. They are seeking to understand if a different approach to flood recovery could make them more resilient to flooding and the impacts of climate change in the future. They are seeking to understand if a different approach to flood recovery could make river systems more resilient to flooding and the impacts of climate change in the future.
- The investigation at Horncastle reservoir discovered an issue with the sluice gate control system that prevented automatic operation in certain circumstances. This issue has now been resolved so it cannot happen again. We have been working with the local community to explain what caused the flooding and what happened at the reservoir.





Prioritising our work

There are over 2000km of main river in Lincolnshire and Northamptonshire, where raised embankments better protect thousands of properties from tidal and river flooding. Ensuring these embankments remain resilient is important. However, our funding is limited and we must sometimes prioritise this work, including repairs to damaged structures, to where it helps reduce risk of flooding for the greatest number of people and homes first.

The Environment Agency has not received additional funding for recovery repairs, but we have been looking at ways to fund recovery works across the country. The damage to flood risk management assets in Lincolnshire and Northamptonshire is in the region of £45m on top of our existing programme of work. By readjusting our programme, we have managed to allocate a percentage of our 2024/25 budget to repair some flood risk management assets that present the highest risk, but this will not cover all repairs. We will work with partners to monitor the situation in relation to risk and funding, and should this change, we may be able to repair more of the damaged assets.

Our funding for maintenance activities is also under pressure for 2024/25. There has been a 20% increase in the money needed for our maintenance programme compared to 2023/24. Inflation and rising operating costs are the key factors behind this. These increases mean that our funding will not be able to deliver the same level of maintenance in 2024/25, with inflation leading to a real-terms reduction. We will prioritise our maintenance funding using factors such as properties at risk, asset type and benefit cost ratio.

What about flooding to farmland?

Approximately 12% (1.4 million hectares) of agricultural land in England is at flood risk from rivers or the sea; or from both. Although our Flood and Coastal Risk Management funding is allocated based on number of properties better protected, we will continue to invest in flood resilience schemes alongside wider resilience measures like nature-based solutions. Farmers and land managers therefore have a key role to play in creating climate resilient places and helping communities to plan for and adapt to future flooding and coastal change.

We continue to liaise closely with the National Farmers Union (NFU) and internal drainage boards to offer support and advice to farmers affected by flooding. We have contributed to guidance for farmers on flood recovery and this is hosted on the NFU website: https://www.nfuonline.com/cross-sector/environment/water/flooding/wet-weather-advice-for-members/

Further flooding advice for farmers and land managers on extreme weather can be found online https://www.gov.uk/guidance/extreme-weather-guidance-for-farmers-and-land-managers

https://www.gov.uk/guidance/basic-payment-scheme





How can communities be more flood resilient?

All riparian landowners have the right to protect their property from flooding and erosion. However, you must obtain permissions to build anything in or around the watercourse; and you must not build anything which could divert water and increase flood risk to other people's property. Please use the following link for further information: https://www.gov.uk/guidance/owning-a-watercourse

You can support communities to be more resilient by helping them if their area is at risk of flooding and signing up for free flood warnings here www.gov.uk/flood or by calling our Floodline service on 0345 988 1188.

All the current alerts and warnings that have been issued can be seen here https://check-for-flooding.service.gov.uk/. An explanation about what flood warnings are and what to do is available here www.gov.uk/. An explanation about what flood warnings are and what to do is available here www.gov.uk/ guidance/flood-alerts-and-warnings-what-they-are-and-what-to-do. If you think you are about to be flooded (i.e. flood warning or severe flood warning issued) then please:

- Turn off your gas, electricity and water supplies, if it is safe to do so do not touch an electrical switch if you're standing in water
- Move your family, vehicles, pets and important items to safety e.g. upstairs or higher ground
- Use flood products if you have them e.g. flood barriers or air brick covers
- Follow advice from the emergency services or local council you may be asked to evacuate

You could prepare an Emergency Bag of essential items. This might include spare glasses, waterproof coat, medication and a copy of any recent prescription, water, food, insurance documents and pet food.

If you have any queries please contact lnenquiries@environment-agency.gov.uk

