

# **Environment Agency**

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# Environment Agency

## Roles and Responsibilities

The Environment Agency is responsible for taking a **strategic overview** of the management **of all sources of flooding** and coastal erosion and are responsible for managing the risk of flooding from main rivers, reservoirs estuaries and the sea

**Strategically:** this involves **working with partners** to assess and determine flood risk and to identify and deliver solutions to mitigate that risk.

We provide **information on areas at risk** of river, surface water and coastal flooding through flood risk maps.

Operationally: We issue **flood warnings** for main river flooding, our operations team **maintain assets** and clear blockages.

We conduct post-flood investigations to understand what occurred..

Our Resilience team **work with the community** to help the community respond to the event.

# Environment Agency



**Over 15,200 properties at flood risk from rivers and sea. 593 in Cheshire East**



**Over 300 incident response staff**



**13 Flood Alert Areas  
4 in Cheshire East**



**180 Flood Warning Areas- 15 in Cheshire East**



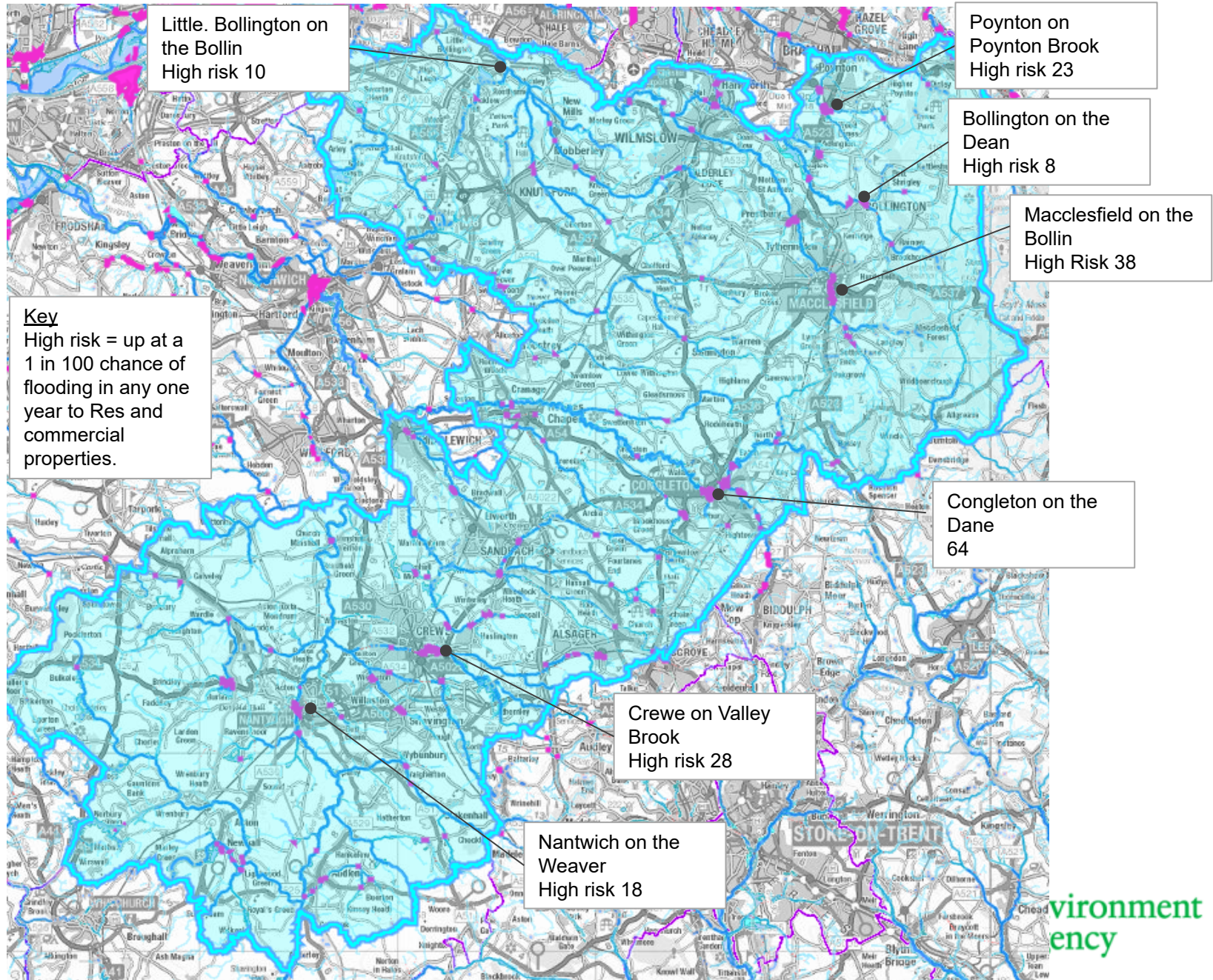
**Working with 50 Communities at risk**



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# Environment Agency Main River risk map





# Environment Agency

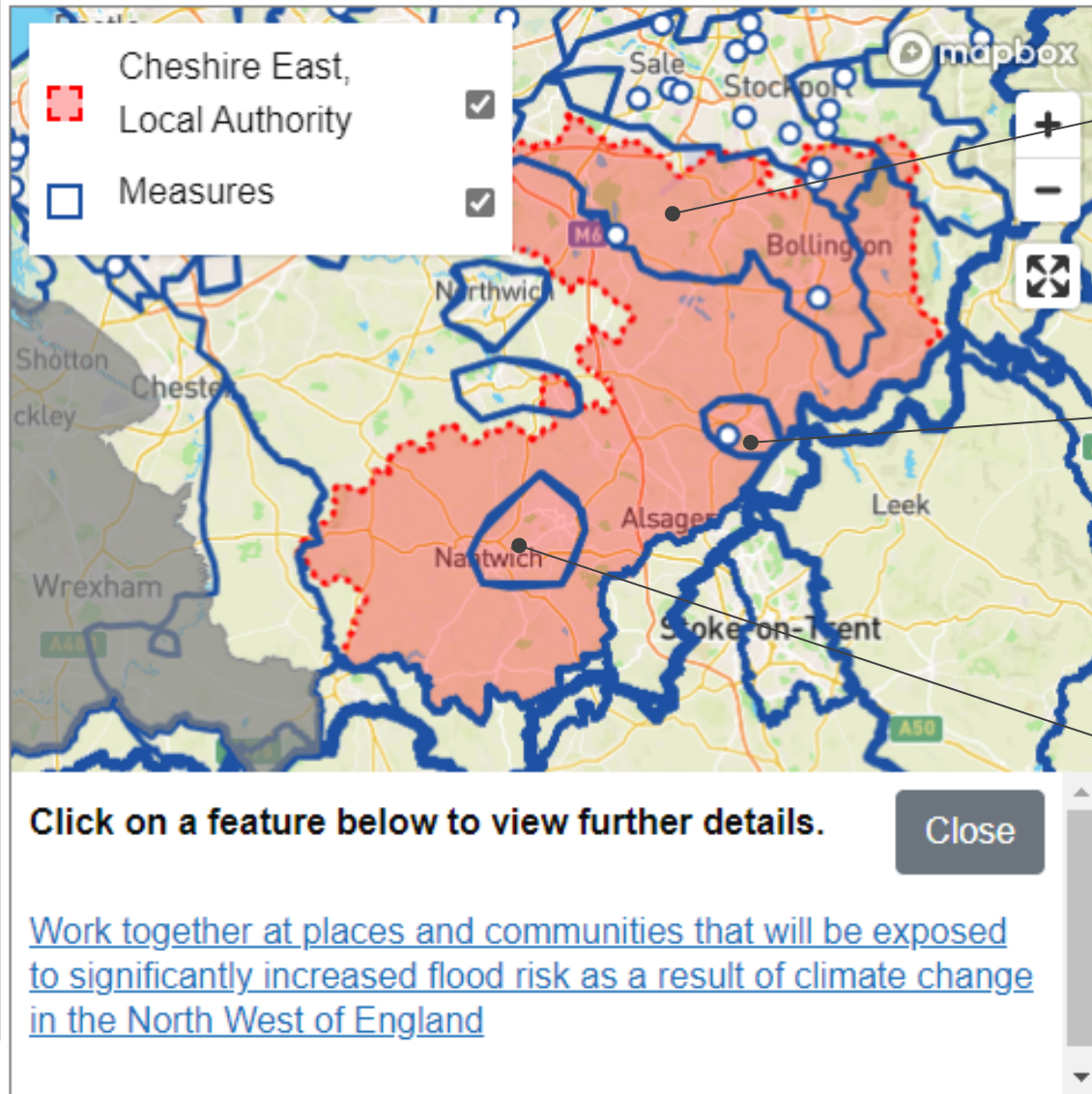
## Flood Risk Management Plan 2

National EA strategy

EA: area based strategy, with measures in FRMP2 (second cycle)

Available on Gov.uk

- Key messages: climate change mitigation
- work together
- reduce Carbon
- invest in flood risk assets
- provide planning advice
- monitor weather
- forecast flooding



Work together on Climate Change Mitigation

Take further action where the case is most compelling in identified areas in the North West of England

Work together on Climate Change Mitigation

# Environment Agency

Investigate main river flood risk solutions. Strategically, EA administer Defra Flood Defence Grant in Aid (FDGiA) Schemes, and Local Levy funding for the Regional Flood and Coastal Committee. This means advising on schemes, and providing QA on business cases to turn indicative allocations into signed off business cases and deliverable schemes.

## Cheshire East Local Flood Authority

### Lindow Community Primary School Flood Alleviation



Figure 1 Scheme location, existing flood risk and benefit area

### Recommendation

It is recommended that the approval for expenditure of **£89.5k** (including £72.5k GiA and £17k Local Levy) is given to implement Natural Flood Management and Sustainable Drainage features to reduce flood risk to Lindow Community Primary School and surrounding residential properties in Wilmslow. This project provides around £970k of benefits over a 50 year appraisal period and provides a 50 year

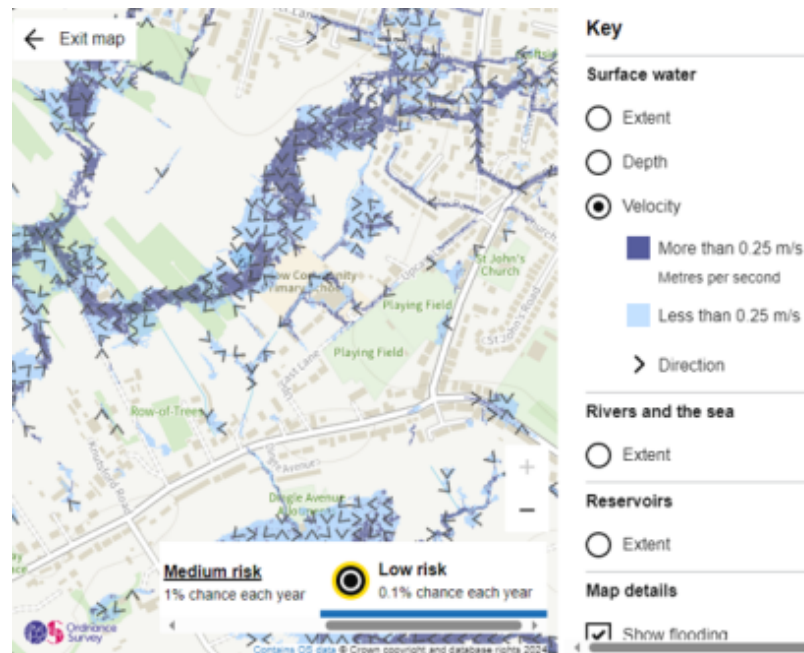
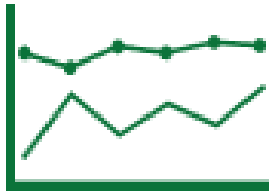


Figure 2 Overland flow route direction and speed (EA Long Term Flood Risk Map)

# New Years Flooding Event - GMMC

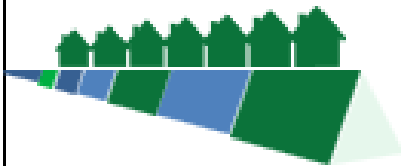
## Flood Event Impacts



### Record river levels on River Mersey

- Brinksway – 5.01m
- Didsbury – 7.67m
- Northenden – 3.76m

All 7 flood storage reservoirs were operated



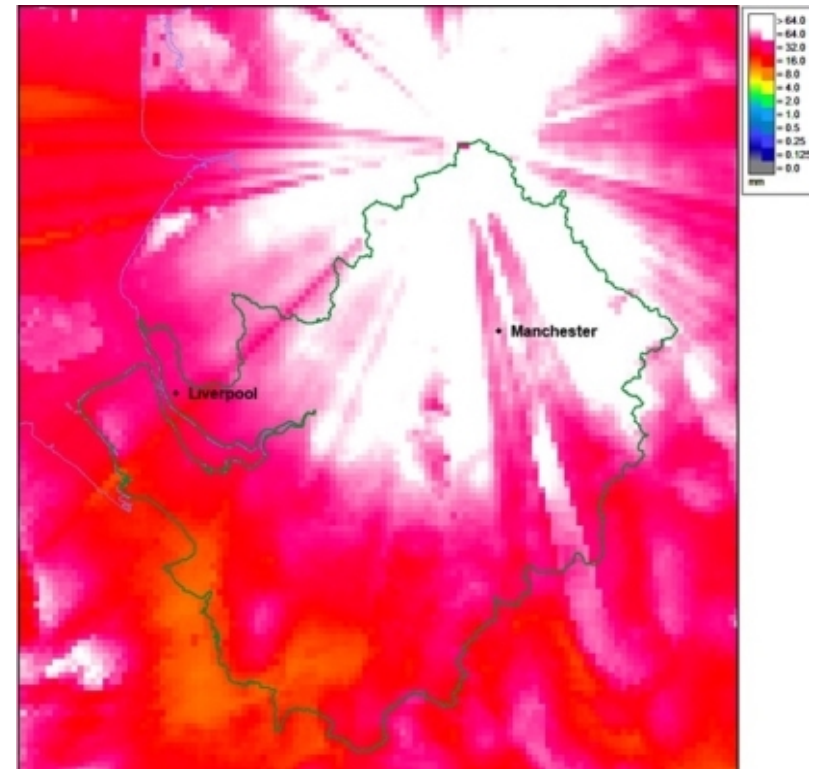
10,454 properties across GMMC were protected

360 properties flooded across GMMC,



350+ incident reports received from the public

## Rainfall



*A map representing the total rate of rainfall over the 24hr period from 17:00 31/12 to 01/01*

# Incident Response

During a Flood Event, we:

- Receive Weather Warnings from the Met Office.
- Run Forecast weather through Hydrological flood models to determine Best Estimate and Reasonable Worse case forecast scenarios
- Hold Flood Advisory Service (FAS) Telecoms with Resilience forum to disseminate intelligence
- Attend command structures and give technical advice on Flood Warnings and operational response and potential impacts
- Issue Flood Alerts & Warnings using Flood Warning System - telephone system, text and internet, partners, media etc
- Operate flood control structures and pumping stations
- Clear debris from channels, screens and culverts on main rivers and monitor/repair stressed defences

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Met Office

National Severe Weather Warning Service

Yellow warning  
Wind

Between  
05:00 Fri 17 Feb 2023 and  
14:00 Fri 17 Feb 2023

**Very strong winds developing through Friday morning associated with Storm Otto may bring disruption to travel.**

**What to expect**

- Road, rail, air and ferry services may be affected, with longer journey times and cancellations possible. High-sided vehicles may be particularly prone in this set-up.
- Some roads and bridges may close
- Power cuts may occur, with the potential to affect other services, such as mobile phone coverage
- Some damage to buildings, such as tiles blown from roofs, could happen
- Injuries and danger to life from flying debris are possible

**Further details**

A spell of very strong winds is expected during Friday morning, easing from the west during the afternoon.

Winds will be strongest over, and immediately to the east of high ground, with gusts of 55-65 mph. Gusts as high as 75 mph are possible, particularly for some of the more exposed trans-Pennine routes.

High-sided vehicles may be particularly impacted.

Low likelihood of medium impacts

**Environment Agency Flood Alerts/Warnings**  
**Floodline 0345 9881188**

 <b>FLOOD ALERT</b>	<p><b>What it means:</b> flooding could occur to low-lying land and roads. Flooding is not expected to affect homes and businesses at this stage.</p> <p>Don't panic but keep an eye on the situation—stay alert and check weather forecasts.</p> <p>Flood alerts can occur quite often and do not necessarily lead to flooding of homes and businesses so please do not be alarmed.</p>
 <b>FLOOD WARNING</b>	<p><b>What it means:</b> Flooding is expected. Immediate action required. We mainly target Flood Warnings at specific communities that are at risk from flooding. Some Flood Warnings may apply to stretches of coast and river.</p> <p>It will indicate that flooding is expected and that people should take more direct impact actions e.g. move belongings upstairs.</p>
 <b>SEVERE FLOOD WARNING</b>	<p><b>What it means:</b> Severe Flooding. Danger to life. All customers who receive a Flood Warning will receive a Severe Flood Warning if conditions are met.</p> <p>It will be used in extreme circumstances to tell people that flooding is posing significant risk to life or significant disruption to communities which could also cause risk to life. Depending on the circumstances it would indicate that people should evacuate the area or take shelter within safe buildings.</p>
<b>Warning No Longer In Force</b>	<p>We issue a message to tell people that the flood threat has passed and includes useful advice on what to do next.</p>



# Post Flood

Post-Flood, we:

- Undertake post-flood data collections. Community Support Officers advise communities on how to proceed, closely liaising with Local Authorities.

Support Multi Agency Flood Drop-ins following flooding

- We have supported communities across Poynton, Little Bollington, Bollington, Wilmslow, Church Minshull and Nantwich
- Advice ranges from insurance requests, possibly grants from Government, future flood risk, potential short-term mitigation.
- Input to LLFA's section 19 Reports
- Working collaboratively with partners on potential solutions



The channel downstream has trees growing in it. This is further impacting the conveyance of the brook and these need removing. The section requiring maintenance is the section marked in yellow above.



# Capital Programme Update

Since Last year :

LACPA post co-ordinating and assisting Business case approval and admin. Assist CE on Capital Projects delivery (add pics)

Cheshire East Project Delivery 24 to 25					
Scheme name	Funding amount/source	Business Case	Properties Better protected	Constn. date	Comments
Ryles Pool (Hobson St), Macclesfield Phase 1	£143k FDGiA, £120k LL, £10k CE	FBC	11 props	Nov-24	Phase 1 completed but culvert failure lead to withdrawal of phase 2 funding application
Lindow Primary School	£30k LL, £15k CE, FDGiA £60k	OBC Oct 2024	1 school, 3 props	Aug-25	Refresh bid for £60k FDGiA.Unsuccesful.
Wilmslow & Weston Skate Park, Macclesfield.					Unlikely to progress at the moment due to resources.
Calveley QW	£20k LL	Oct-24	Business, railway line, A road, 1 prop	Mar-25	High level carrier to reduce flooding on A51, Local business's and railway

# Future Capital Programme

- Current six-year capital investment programme will end a year early
- government deciding on the 2026/27 programme and beyond as part of the next spending review
- Partnership funding rules to be reviewed
- Overall funding bid from the EA and other RMA's far exceeded the available budget for 2025/26
- Cheshire East Projects 25/26:



	GiA Funding	Local Levy
Lindow Primary School FAS	£0	£30k (FY24/25)



# Partnership Working

Since Last year:

Monthly Operational meetings with UU and CE, where detailed operational works are progressed. (E.g. Calveley, Fulshaw Park, Wynbunbury). Review, check actions, agree investigations, raise new issues, for operational response.

A	B	C	D	E	F	G	H
Site Issue / Name	Postcode	UU Engineer		Comments	Date of Action	Action	
				and change to culvert direction was done in 1991). CE lost an attenuation pond (got filled in) 2 Bechwood Drive, Congleton (CW12 2NQ) has experienced Foul flooding and is still living in the pub - needs to be checked.			
			05.01.2024	Survey was completed, few props have built over the culvert. Residents are wanting CE to upsize the culvert but there is a property built above and CE do not have the funding at present. Lots of SW going into the UU network as it is foul only. No solution at present, no contacts to either UU or CE for a while. There is also a pond slightly further up that has had levels raised it cant hold any water any more and pools down the road.			
Yew Tree - Highway Drains		Mike Mounsey	19.07.2023	Raised with CE to remove the gully connections. Site visit hopefully next Thursday	19.07.2023	Colin	Colin to send over the location of the gullies to be removed and to arrange a site visit.
					19.07.2023	Guy	Raise for the gullies to be removed
			05.01.2024	CE have done a project and removed 2x Highway Gullies from foul system but havent connected them into the culvert. Resident has called in since and said that there is a big puddle due to the gullies not being connected. Rebecca said that when they were on site they said there was another outfall so they have tapped into that - this could be blocked	05.01.2023	Guy	Catch up with team to understand the connection
			05/07/2024	Gulleys disconnected from sewer have not been connected back into anything.	05/07/2024	Cheshire East Jake / Mike	CE - To investigate potential misconnections JH/MM - To update with investigations
Valley Road, Wistaston		Amy Tonner	19.07.2023	Number 14 has 4 gullies outside to try and handle overland flow but the gullies cannot control the flooding, number 14 has repeat internal flooding, next door is also slightly higher so the flows from next door also flow into number 14. They are 3rd generation of flooders. CE want to do a quick win bid for property level resilience and want to install flood doors. System here is combined. DNM monitor in MH 8402. Could be a highway drain that the gullies have been connected too. There is a pub opposite that hasnt seen any internal flooding so indicates that it may not be an issue with the combined sewer but more likely to be with the gullies/highway drains.	19.07.2023	Amy	Amy to check the DNM monitor in MH 8402 (Woodside Lane) for potential spikes
			05.01.2024	CE - Quick win bid approved for the property level resilience - £10k			
			10/05/2024	Mitigation funding has been sanctioned but the money has gone to Cheshire East pot and they are trying to retrieve the money from the CE pot. Legal conversations about the indemnity insurance so need to iron a few things out before they are installing. Being manufactured and installed by Whitehouse. Guaranteed for 12 months.			
			05/07/2024	Whitehouse are booked up programme until Nov 25. CE considering other options to try and get the work completed at an earlier date. CE to liaise with local residents on potential options	05/07/2024	Cheshire East	To liaise with legal department on potential options and update to be given at next meeting

# Natural Flood Risk Management

Since Last year:

Climate resilience. Increase flood awareness work. Continue to work on NFM locations. Working with landowners, on encouraging NFM (via CaBA)



## Rivers Nature North

### Cows to Coast NFM

Cows to Coast aims to work with landowners in rural Cheshire to restore natural processes which will reduce flood risk and help increase climate resilience.

The project seeks to deliver NFM interventions on the ground. These can include leaky woody barriers, tree-planting, hedge rows planting, areas for temporarily storing flood peaks, soil aeration, and ponds.

As well as flood risk and climate resilience benefits, NFM schemes can also deliver BNG, habitat creation, community well-being benefits, and improve water resources.

This project seeks to develop a programme of work alongside partners to use private finance to uplift existing funding streams and provide capital funding to deliver more NFM schemes across Cheshire.

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#### Bunds empty



#### Bunds full

**Project Location:** Cheshire

**Lead Organisation:** Mersey Forest

**Main Partners:** Environment Agency, Community Forest Trust, CaBA (Weaver Catchment Partnership)

**Estimated Cost**  
£2 M

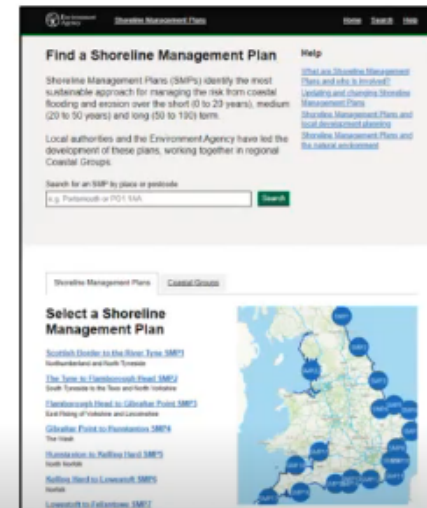
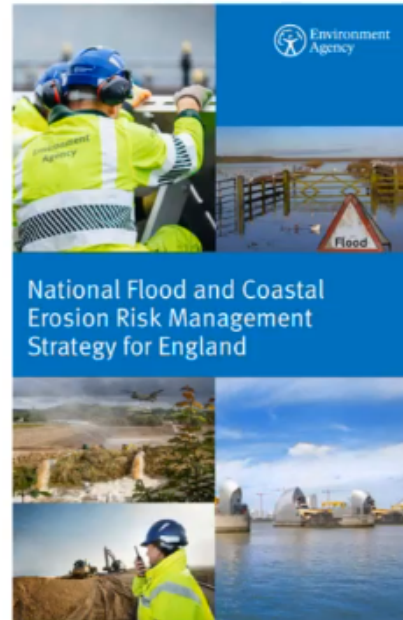
**Estimated Funding Gap**  
£1.5 M

**Estimated Time Scale**  
5 - 10 years

[Purpose](#) [Map](#) [Nature North](#) [Context](#) [Benefits](#) [Drivers](#) [Finance](#) [Pipeline](#) [Contact](#)

# National Assessment of Flood Risk

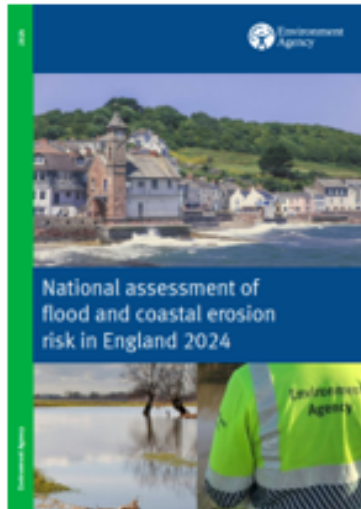
- Updating our current and future understanding of flood and erosion risk are requirements of our 'Strategic Overview' duties and key commitments in the statutory FCERM Strategy
- Publishing 2 significant improvements in mapping and communicating our flood and coastal erosion risk information:
  - New National Flood Risk Assessment (NaFRA2)**
  - Updated National Coastal Erosion Risk Map (NCERM)**





# National Assessment of Flood Risk

## How are we making the new information available



We published a report explaining how flood and coastal erosion risk is changing across England and why

17 December 2024

We will publish the data on GOV.UK and update our digital services - 'Check Your Long-Term Flood Risk'

28 January 2025

We will publish updated Flood Zones and add new data to 'Flood Map for Planning'

Spring 2025