

Taking action in a changing climate

Liz Fowler
Flood Resilience Team Leader
Environment Agency



Floodline 0345 988 1188

Incident Hotline 0800 80 70 60

Our role in the EA



Within England we're responsible for:

regulating major industry and waste

treatment of contaminated land

water quality and resources

fisheries

inland river, estuary and harbour navigations

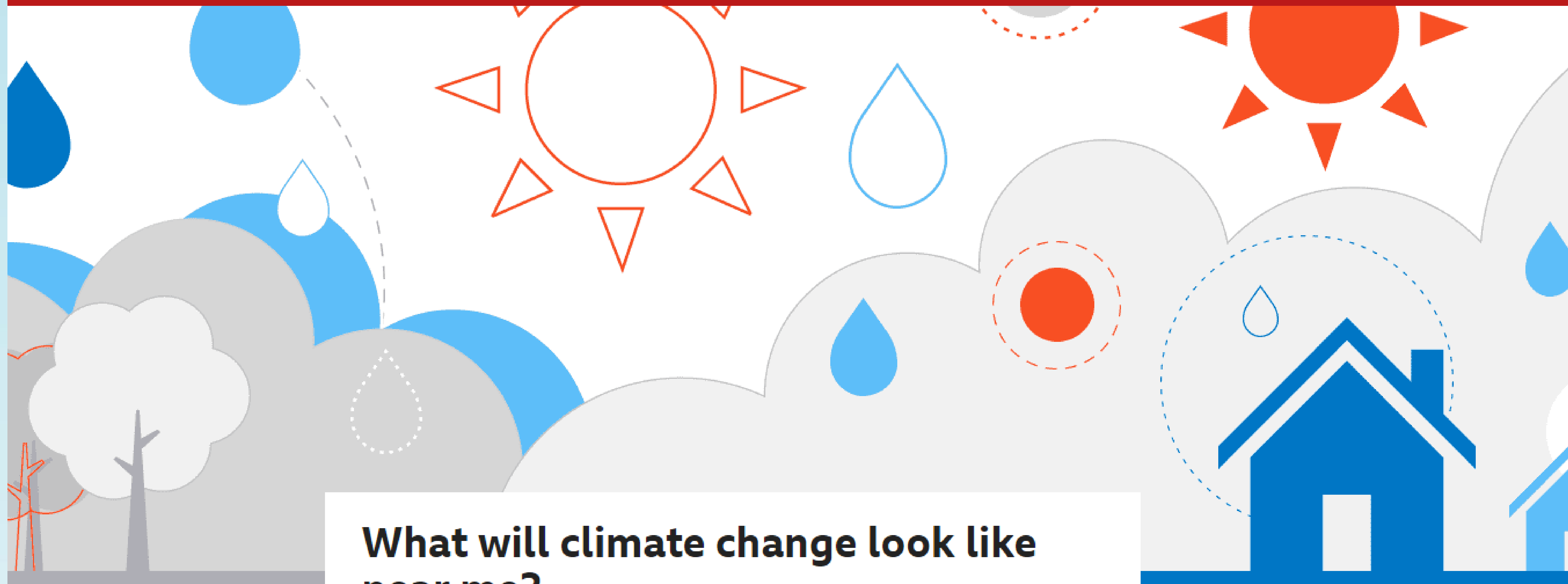
conservation and ecology

We are responsible for managing the risk of flooding from main rivers, reservoirs, estuaries and the sea.



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What will climate change look like near me?

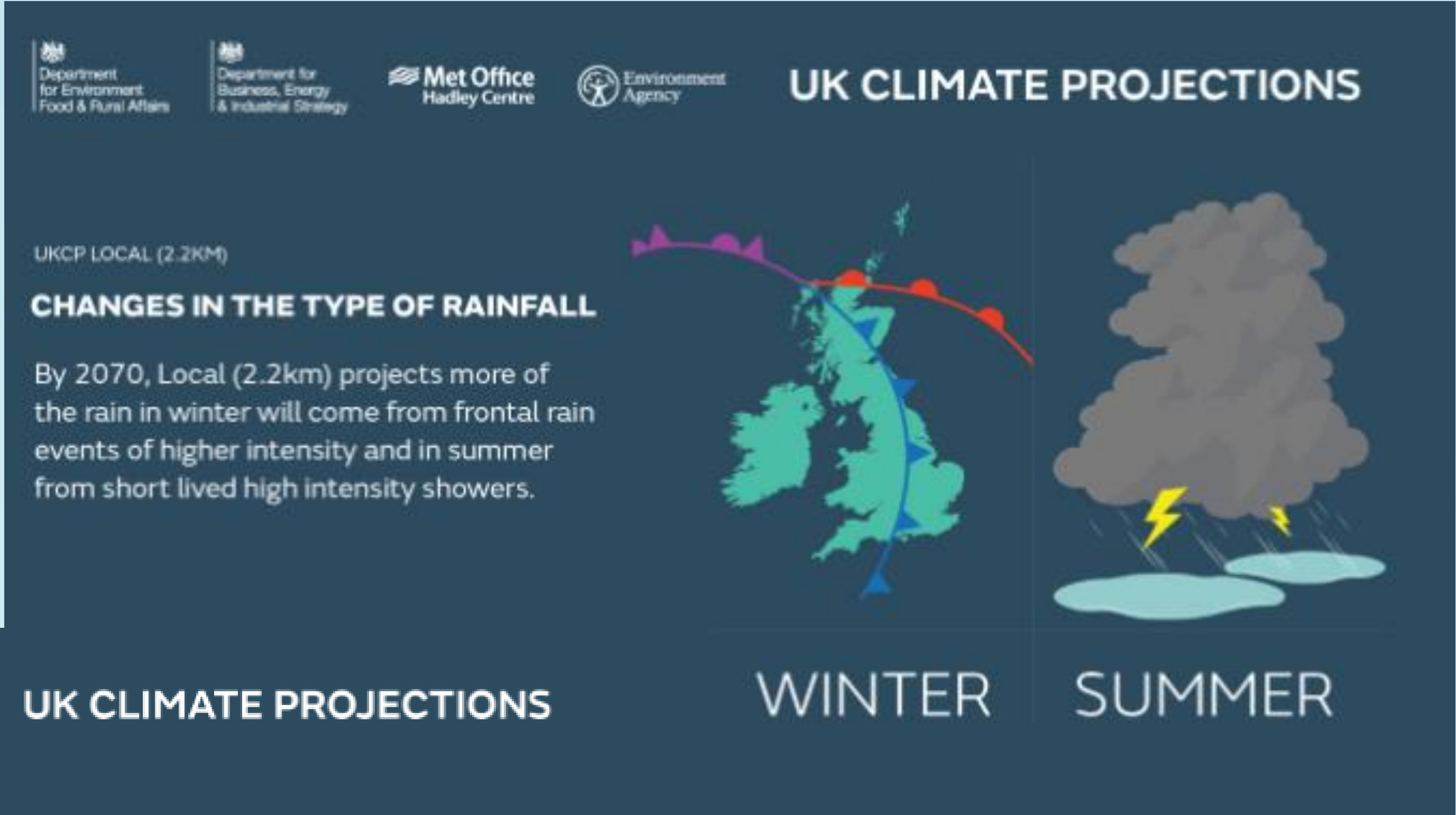
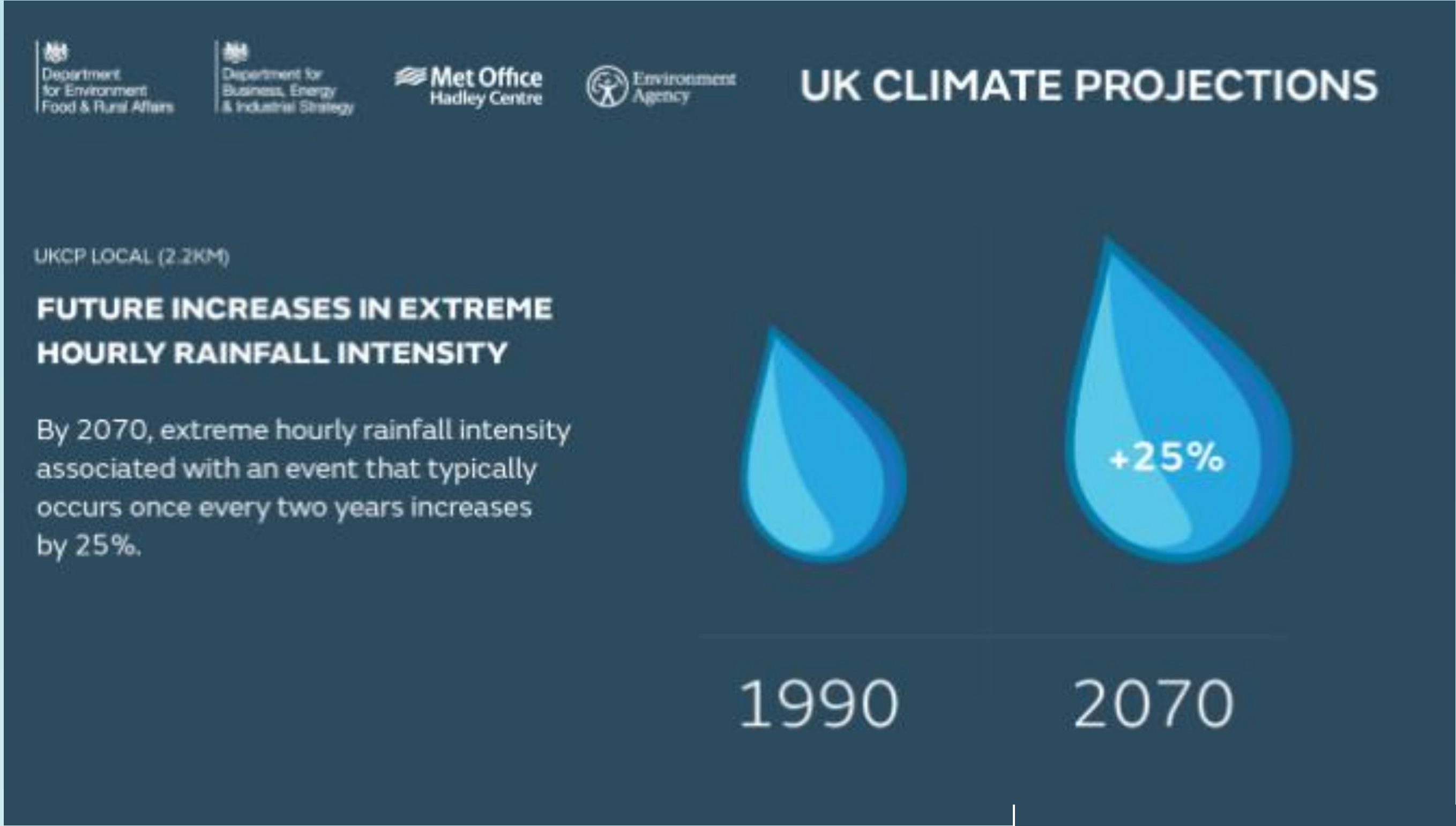
By Becky Dale and Nassos Stylianou | 29 July 2021 | Science & Environment

☒ Animations on

How much rain might fall in your area and how high might temperatures climb? The BBC and the Met Office have looked at the UK's changing climate in detail to find out.

The UK is already experiencing increased rainfall and higher temperatures, and these extreme weather events are likely to become even more frequent.

Our weather and climate



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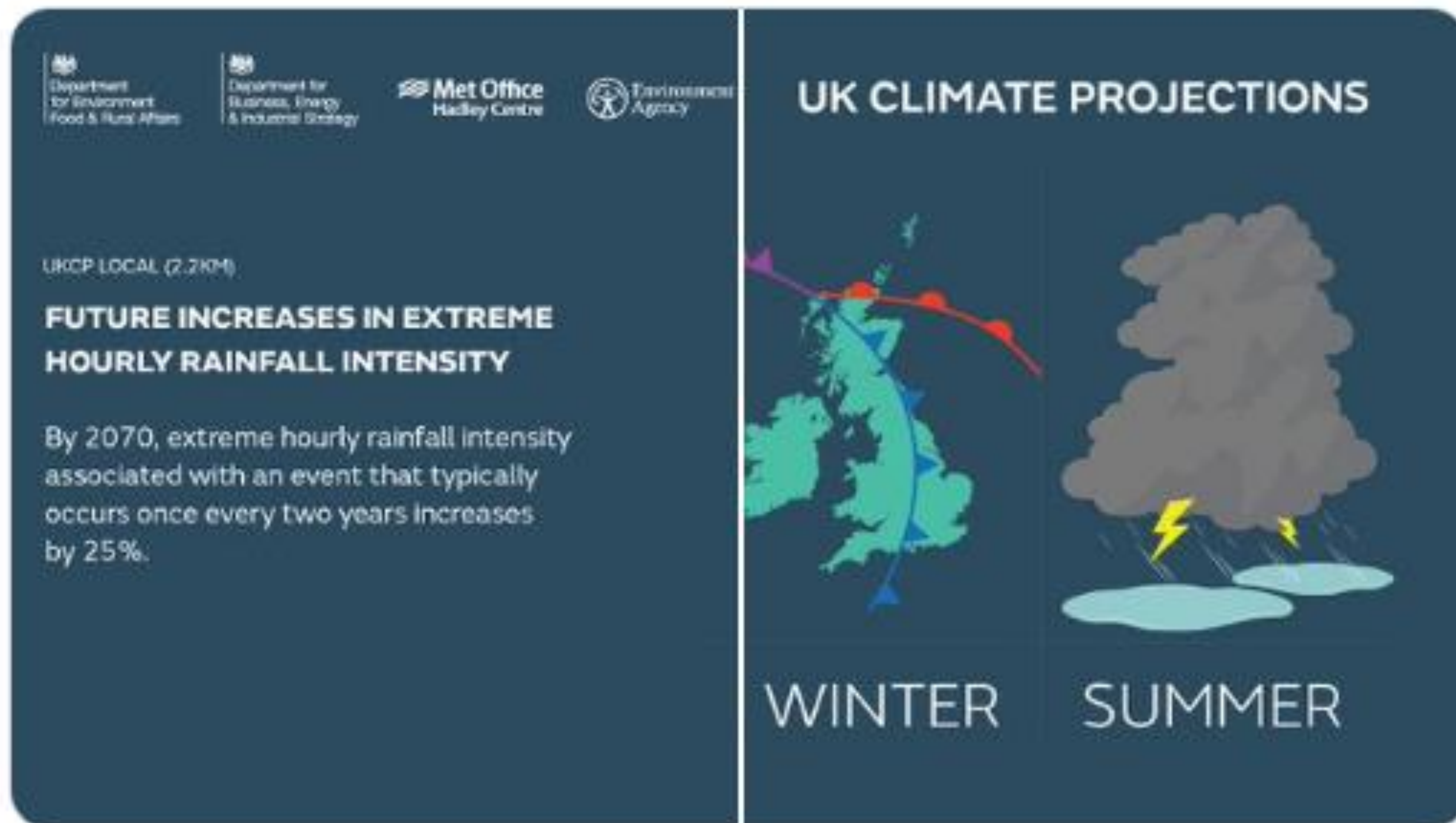
Our weather, climate and flooding

🔄 You Retweeted



John Curtin @johncurtinEA · Sep 16


Today we launch, with the Met Office, our enhanced climate predictions for the U.K. Think this summer's events and consider 'In summer storms, the most intense hourly rainfall in England may increase by up to 45% by the 2080s' - now is the time to prepare [metoffice.gov.uk/about-us/press...](https://www.metoffice.gov.uk/about-us/press-releases)



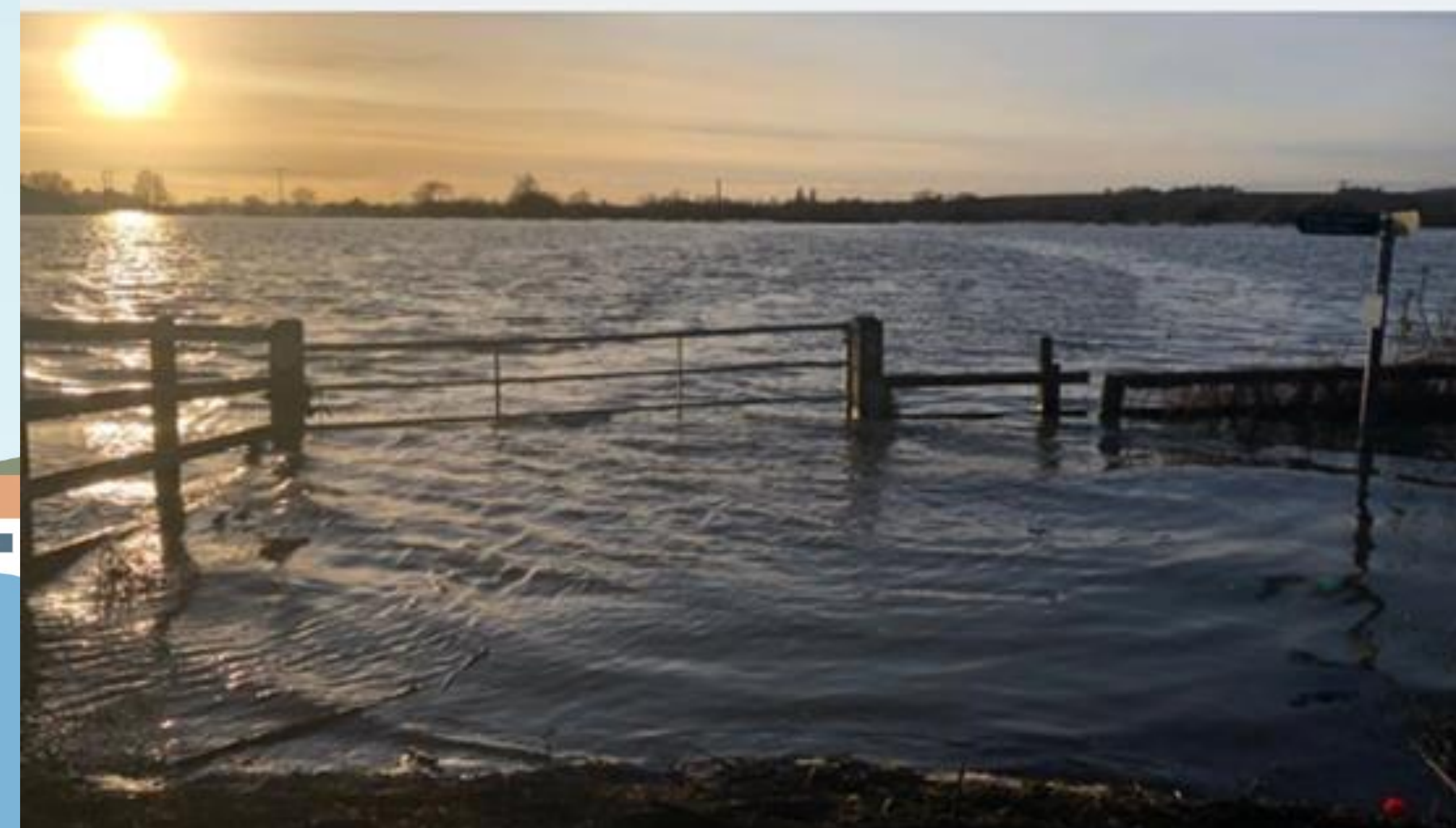
00 80 70 60

Our weather, climate and flooding



 **Chris Bainger** @ChrisBaingerEA · Nov 16, 2019
A lot of water around #Tewkesbury with a prolonged peak into Sunday. @EnvAgencyMids warnings being acted upon where the local community are prepared. #TeamEA morning shift now handing over as we continue to monitor 24/7 from our incident rooms. #FloodAware #PrepareActSurvive

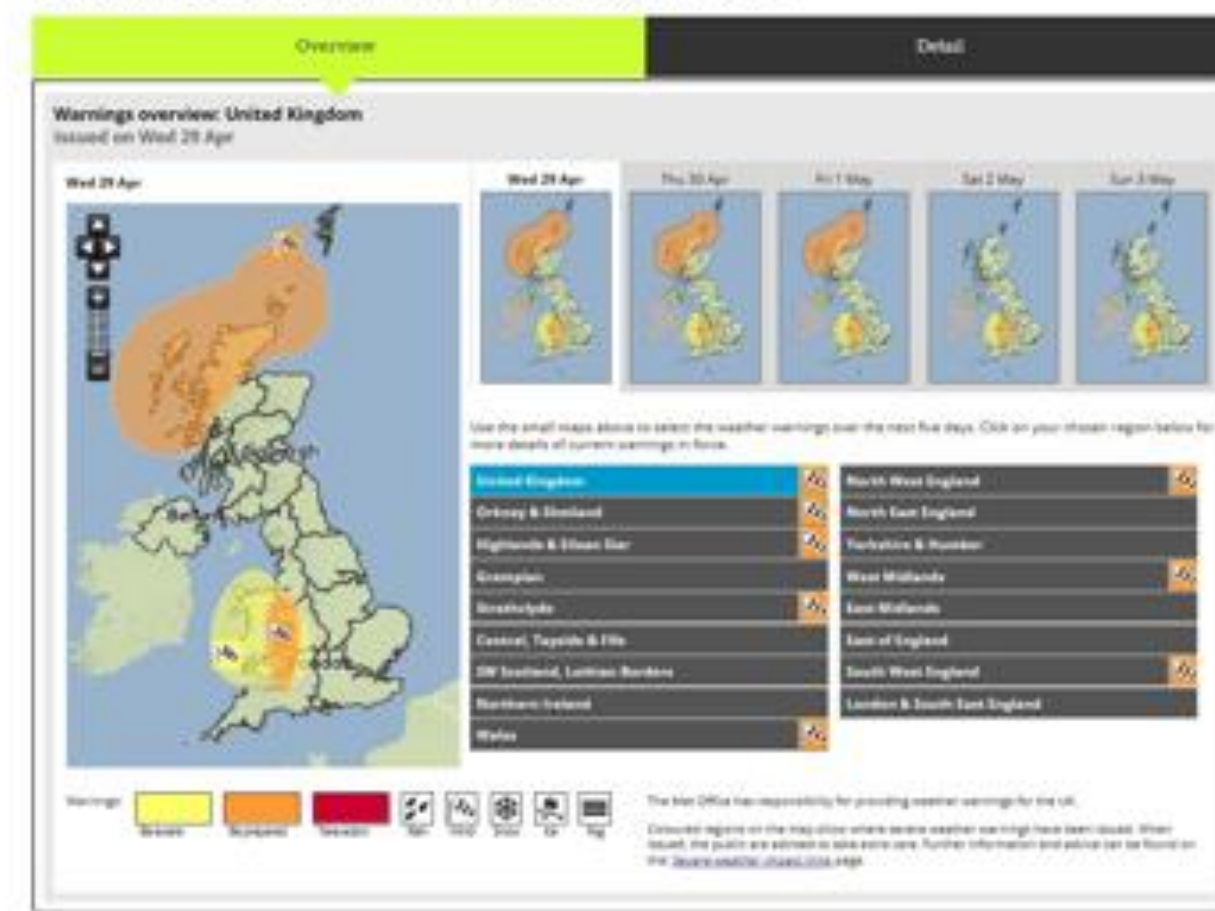
 **Dave Throup** @DaveThroupEA · Dec 23, 2019
Huge amounts of water have built up around #Tewkesbury
Town is still fully open but levels expected to remain very high from Tewkesbury to #Gloucester right through Christmas
#floodaware



Weather warnings

- On the [Met Office web page](#), and via e mail alerts and the smart phone app it is possible to sign up to be warned of severe weather in your chosen area by weather warnings.

National Severe Weather Warnings - United Kingdom



Yellow Be aware
Amber Be prepared
Red Take action

HIGH				
MED				
LOW				
VERY LOW				
	VERY LOW	LOW	MEDIUM	HIGH
	IMPACT			

Flood alerts and warnings



FLOOD ALERT



FLOOD WARNING



SEVERE FLOOD WARNING

- Flood alert - flooding is possible. Be prepared.
- Flood warning - flooding is expected. Immediate action required.
- Severe flood warning - Severe flooding. Danger to life.

- [Sign up to flood warnings if there is one available for your area](#)
- You can also call Floodline 0345 988 1188.
- For more information see the [Floods Destroy](#) page.

DO YOU KNOW WHAT TO DO?



Extra support from utilities

- Sign up to the [Priority Service Register](#) with Western Power Distribution on 0800 096 3080 or wpdpriorityservmids@westernpower.co.uk if there are older, pregnant, or infant family members or anyone with mobility, sensory or illness related issues.
- Water companies have similar schemes
- Call 105 to report a power cut or get an update.
- These services are for all outages not just caused by flooding.

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The future – adaptive pathways



Strategy for the Severn



Natural Flood Management

- £15 million investment in Natural Flood Management
- Increase infiltration and slow the flow
- Range of options – tree planting, woody dams, wetland creation, Beavers!



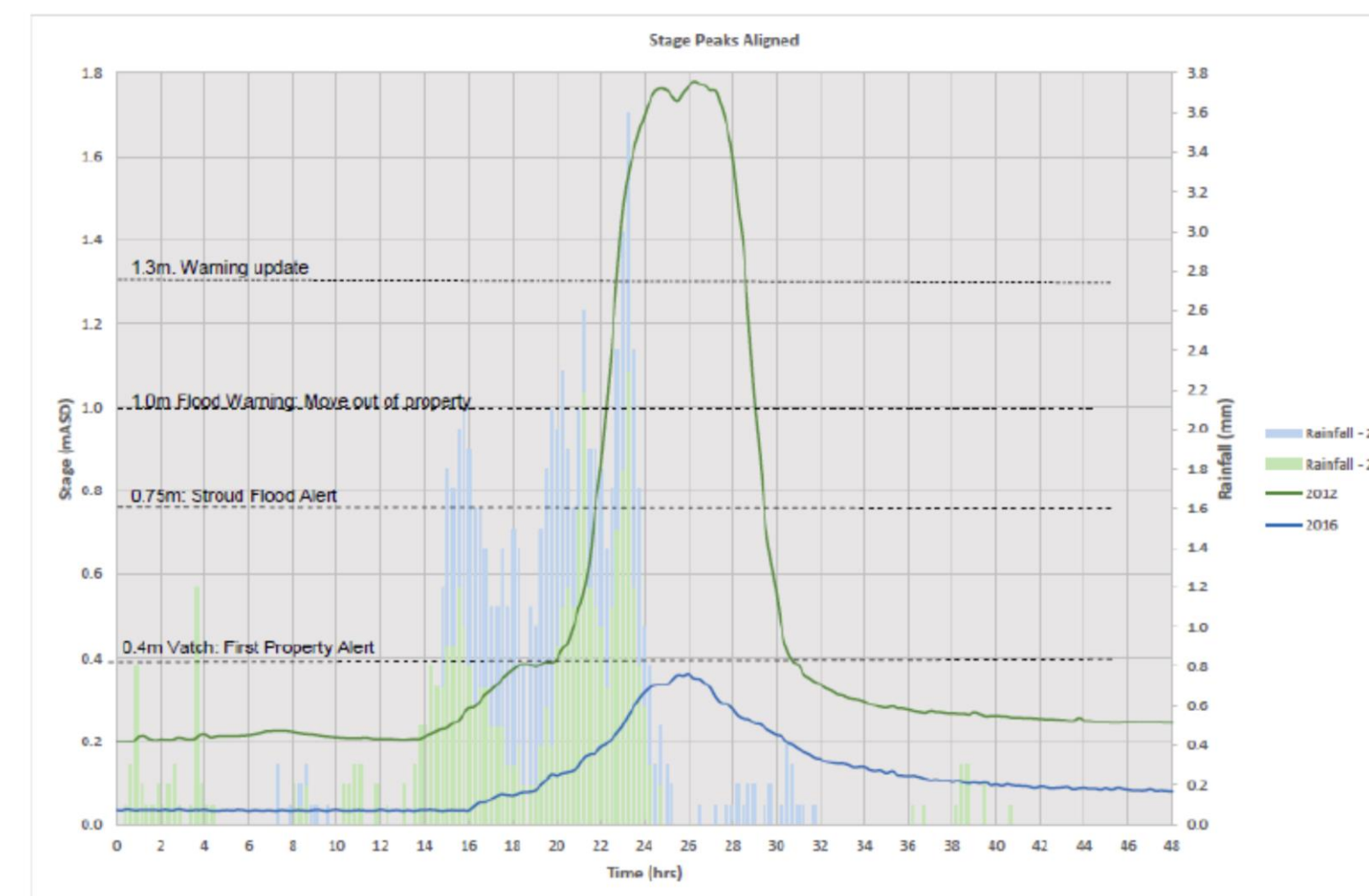
Stroud July 2007

 **STROUD DISTRICT COUNCIL**
www.stroud.gov.uk

 Environment Agency



Liz Fowler @LizleyFowler · May 30
Chris showing off natural flood management @StaffsShow #TeamEA



 **STROUD DISTRICT COUNCIL**
www.stroud.gov.uk

 **Beacon Authority**
Climate Resilience in Rural Areas
2002-2022
2008-2020
Emergency for Older People
2017-2020
Emergency Planning



Mark Bowers
@MarkBowersEA

Follow

We've been working with Worcester University's Physical Geography students today. Discussing all things inc. rapid response catchments, resilience, NFM & Beavers. Here's Jason (on the left) explaining how natural flood management can help to slow the flow. #FutureTeamEA



6:08 AM - 10 May 2019

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Big engineering and innovation

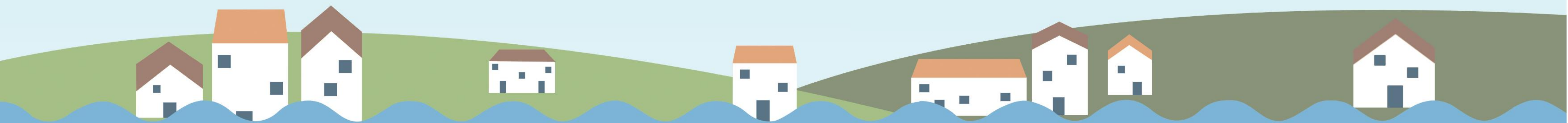
The Result



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What else can we do?



Floodline 0345 988
1188

Incident Hotline 0800 80 70
60

Watercourse management



The GOV.UK logo, featuring a crown icon and the text "GOV.UK".

Search on GOV.UK

→ [Coronavirus \(COVID-19\)](#) | Guidance and support

[Home](#) > [Environment and countryside](#) > [Boats and waterways](#)

Check if you need permission to do work on a river, flood defence or sea defence

You may need permission to do work on or near a river, flood defence or sea defence.

These rules apply to England only. There are different rules for [Wales](#), [Scotland](#) and [Northern Ireland](#).

There are different ways of getting permission, depending on whether you're working on:

- a sea defence or main river (including its flood plains and flood defences) - [check which are main rivers](#)
- other watercourses

A black circle with a white exclamation mark.

You can be prosecuted and may be fined or go to prison if you do not get permission when you need it.

The GOV.UK logo, featuring a crown icon and the text "GOV.UK".

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[Consultations](#) [Statistics](#) [News and communications](#)

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[Home](#) > [Flooding and coastal change](#)

Guidance

Owning a watercourse

Your responsibilities and rules to follow for watercourses on or near your property, and permissions you need to do work around them.

From: [Environment Agency](#)

Published 15 February 2018

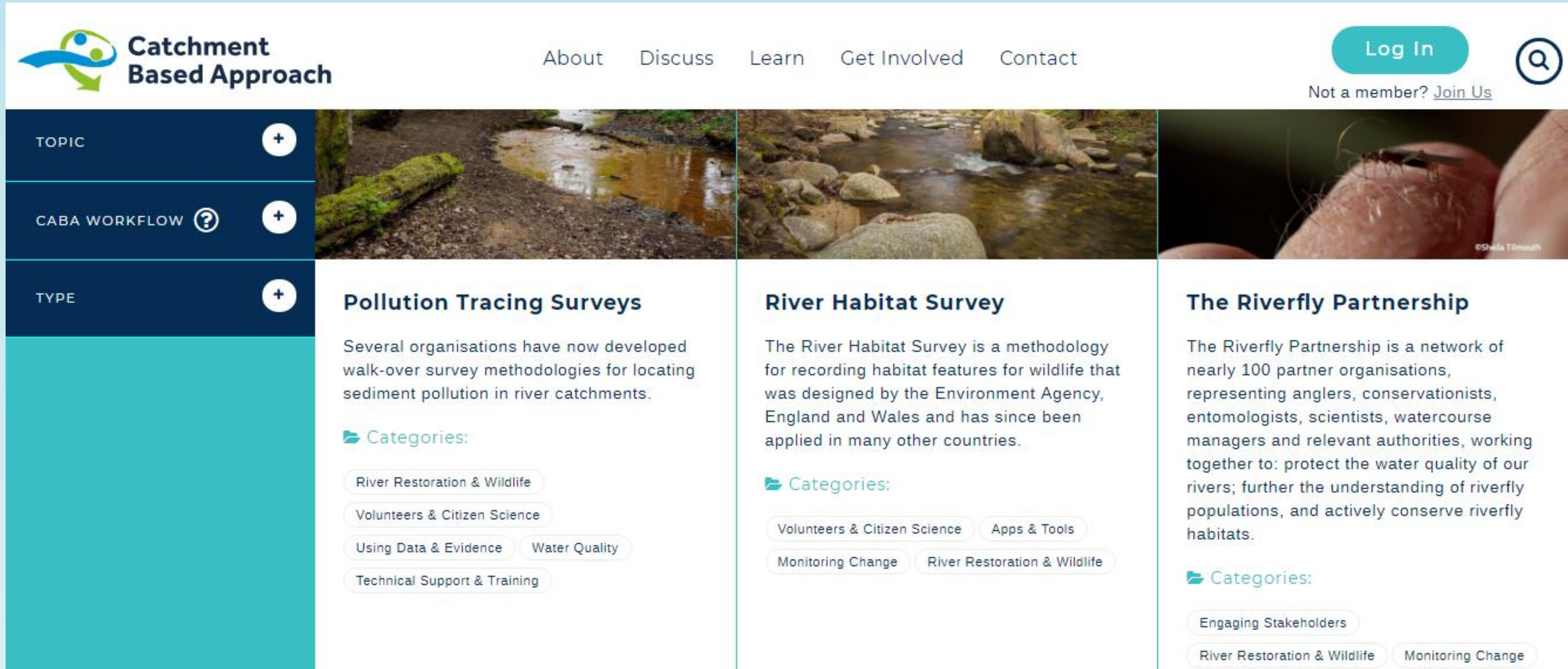
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Plant trees and keep our estates green



Landowners and volunteers



The screenshot shows the 'Catchment Based Approach' website. The header includes the logo, navigation links (About, Discuss, Learn, Get Involved, Contact), a 'Log In' button, and a 'Join Us' link for non-members. The main content area is divided into three columns, each featuring a topic image and a description. The first column, 'Pollution Tracing Surveys', includes a list of categories: River Restoration & Wildlife, Volunteers & Citizen Science, Using Data & Evidence, Water Quality, and Technical Support & Training. The second column, 'River Habitat Survey', includes categories: Volunteers & Citizen Science, Apps & Tools, Monitoring Change, and River Restoration & Wildlife. The third column, 'The Riverfly Partnership', includes categories: Engaging Stakeholders, River Restoration & Wildlife, and Monitoring Change.

Catchment Based Approach

About Discuss Learn Get Involved Contact

Log In

Not a member? [Join Us](#)

TOPIC +

CABA WORKFLOW ? +

TYPE +

Pollution Tracing Surveys

Several organisations have now developed walk-over survey methodologies for locating sediment pollution in river catchments.

Categories:

- River Restoration & Wildlife
- Volunteers & Citizen Science
- Using Data & Evidence
- Water Quality
- Technical Support & Training

River Habitat Survey

The River Habitat Survey is a methodology for recording habitat features for wildlife that was designed by the Environment Agency, England and Wales and has since been applied in many other countries.

Categories:

- Volunteers & Citizen Science
- Apps & Tools
- Monitoring Change
- River Restoration & Wildlife

The Riverfly Partnership

The Riverfly Partnership is a network of nearly 100 partner organisations, representing anglers, conservationists, entomologists, scientists, watercourse managers and relevant authorities, working together to: protect the water quality of our rivers; further the understanding of riverfly populations, and actively conserve riverfly habitats.

Categories:

- Engaging Stakeholders
- River Restoration & Wildlife
- Monitoring Change

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Education



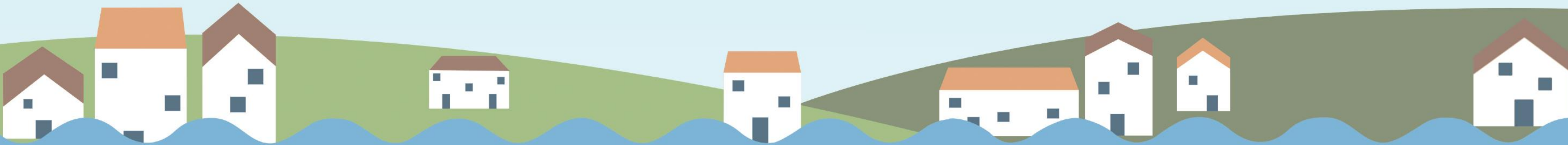


Env Agency Midlands

@EnvAgencyMids

Following

Our FCRM officers were at Rawletts School today raising awareness of flood risk with young people. #floodaware #teamEA #beprepared #FCRM



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Homework

- What one thing ...

General Environment Agency Contacts

- General enquiries
- **03708 506 506**
- Minicom 03702 422 549
- enquiries@environment-agency.gov.uk

- Incident reporting (24 hour flood risk or pollution)
- **0800 80 70 60**
- Floodline
- **0345 988 1188**
- Type talk 0345 602 6340

DO YOU KNOW WHAT TO DO?



Liz Fowler

Liz.fowler@environment-agency.gov.uk

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