

Press release: Planting the seeds for a flood resilient future

A Sunderland school is more prepared for flooding after a rain garden planter was installed and the school's pupils created a flood plan as part of the Environment Agency's 'Flood Weeks'.

Community Engagement Officer Taryn Al-Mashgari helped the youngsters at Springwell Village Primary School develop a flood plan and 'grab bag' so they are prepared in the event of a flood.

And partners at Northumbrian Water installed a rain planter – which captures and stores rainfall from the school's roof – as part of its Rainwise initiative.

Youngsters at the school helped put flowers into the planter in an event on Friday 23 February and then 'tagged' the school with a flood warden logo designed by a pupil from Hetton Lyons Primary School.

This was done using Rainworks – an invisible spray which will only show the logo when it rains. It will remind pupils during key times to be aware of their flood resilience learning.

Initiative helps schools be prepared for flooding

A workshop held by the Environment Agency, Northumbrian Water and Northern Powergrid then also took place for parents and local councillors to see what the children have been learning and to see them demonstrate their newly-created flood plan.

It's part of an Environment Agency initiative to help schools across the North East be better prepared for flooding. Taryn works with children in all year groups to help them understand different types of flooding and how it happens.

They learn what to do before and during a flood, and what the flood warning symbols used by the Environment Agency mean. Taryn said:

It's important that younger people understand what flooding is, how it happens and what the different organisations that deal with flooding do.

We also teach them how to prepare for and what to do during a flood in a series of interactive sessions where they design their own flood protection and describe how they would keep their favourite possessions safe.

It's absolutely devastating to be flooded and that's why we are working with schools and our partners to educate our future

generations about what they can do to keep themselves and their valuables safe.



Spreading the word about managing rainfall

Northumbrian Water's Rainwise initiative aims to spread the word about how managing rainfall better can help increase capacity in the sewer network and encourages residents to make small changes around their homes and gardens.

Rain garden planters help reduce the risk of flooding by reducing the amount of water directly entering the sewer network, as well as slowing the amount of water that does.

Northumbrian Water's Project Manager, Chris Bond, said:

The Environment Agency's flood week gave us a real opportunity to work with the school to raise awareness of our Rainwise initiative and how it's important for families to manage rainfall better around their home to help reduce flood risk.

The planter captures rainwater from the roof of the school, which is then absorbed by the soil and plants and helps to take some of the pressure off our sewer network. It's been great working with the children to put in these plants, which builds their knowledge of flooding and creating new natural habitats.

For more information on Rainwise, visit [Northumbrian Water's website](#)

The Environment Agency is urging people to 'Prepare, Act, Survive' by visiting the [Floods Destroy website](#) and do three things to prepare for flooding.

- check your postcode and find out if you are at risk of flooding
- sign-up for free flood warnings if you are at risk
- view and save the 3-point flood plan so you know how to 'Prepare, Act, Survive' in a flood

Press release: Water quality returns to 'safe' following Heanor chemical spill

Tests carried out by the Environment Agency on the water quality of numerous ponds in Shipley Country Park have revealed the water has now returned to a safe drinking water quality and signs to stay out of the 2 affected ponds have now been removed.

Drinking water quality does not mean it is recommended to drink the pond water; it means the concentrations of cyanide currently monitored are below these standards.

Environment Agency officers have continued to investigate and monitor the impact on the local environment of an accidental spillage of around 400 litres of liquid cyanide from a lorry delivering to an industrial unit in Heanor on Tuesday 6 February, some of which leaked into the nearby Adam's Pond.

Since the incident occurred, the Environment Agency has been regularly collecting samples from numerous ponds on the site and sharing the results with Derbyshire County Council, which owns the park, and Public Health England. The results have determined what actions were required to minimise the impact of the contaminants in the watercourse and ponds.

Greg Oakes, Area Duty Manager at the Environment Agency, said:

Samples have regularly been taken to monitor the cyanide levels in the water and the results of the latest samples show the water is now at a drinking water quality, which is an excellent result. However, we would stress, drinking water standards does not mean we would recommend drinking the pond water, it is just that the concentrations of cyanide currently monitored are below these

standards.

Our officers have been working to minimise the effects of the spillage on the environment and wildlife in the area. The contamination was largely contained to Adam's Pond, which unfortunately resulted in a number of dead fish being found in the pond but, due to the level of contamination, our staff were unable to enter the water to carry out a netting activity to capture them. Whilst our monitoring showed there was some discharge to the nearby Osbourne's pond, this did not result in any dead fish being found there.

We placed bags of activated carbon downstream of Osbourne's pond to help filter cyanide out of the water and prevent it from leaking down the watercourse into the further ponds but the best course of action, minimising risk to people and the environment, was to wait for it to break down naturally.

In light of the latest results, rather than continuing with monitoring on site, we will now put a recovery plan in place. Adam's Pond is still closed to fishing to allow the water life to recover and the Environment Agency will meet with the county council and the local fishing club next month to discuss a management plan for the pond.

We will also be investigating the source of the pollution and take appropriate action against those found to be responsible.

A report by the Environment Agency's National Centre for Environmental Toxicology confirmed there was no significant risk to other wildlife which may have eaten dead fish from Adam's Pond.

Shipley Country Park has remained open and safe to use following the chemical spillage incident but visitors to the park were advised by Derbyshire County Council not to enter the water or let their dogs enter the water in Adam's Pond and Osbourne's Pond.

Councillor Simon Spencer, Derbyshire County Council's Cabinet Member for Highways, Transport and Infrastructure, said:

Shipley is a much-loved park and the damage caused to Adam's Pond is extremely distressing. But we're relieved that there appears to have been no damage to Osbourne's Pond and pleased that the water in both ponds has now returned to safe drinking water quality.

This must not be allowed to happen again and we're pleased there will be an investigation and action taken against those responsible to send a clear message to businesses that they need to take their environmental responsibilities seriously.

The Environment Agency plans to visit businesses on the industrial

estate next to the park to identify any potential pollution risks. We're grateful for any help and advice they can give about measures businesses can put in place to prevent further incidents like this happening at the park in the future.

Environment Agency staff work 24/7 to protect people and wildlife from pollution incidents. If you see pollution in your local river or watercourse, please call their incident hotline on 0800 80 70 60.

Press release: 'Flood and Coast' conference to tackle the big questions facing flood and coastal erosion management

Now in its third year, the annual event brings together experts from across the globe to share ideas and opportunities to work together to tackle the risk of flooding and coastal erosion.

Flood & Coast takes place at the Telford International Centre from 20-22 March and registration is live on the event's website: www.floodandcoast.com

Other topics including infrastructure resilience, partnership working, community collaboration and incident response will also be debated at the 3 day event.

Speakers this year include the Chief Executive of the Environment Agency, Sir James Bevan, the Chief Executive of the Met Office, Rob Varley, and Baroness Brown of Cambridge, Chair of the Adaptation Sub-Committee of the Committee on Climate Change.

Other speakers include Jeff Lindner, a Director and meteorologist with the Harris County Flood Control District in Houston, Texas, who will share his experiences from Hurricane Harvey last August.

Clare Dinnis, Deputy Director of the Environment Agency, said:

Climate change is one of the biggest global threats we face. Intense storms are becoming more frequent and climate change will also raise sea levels. So this year we're focussing on how partnerships between attendees can help us be better prepared to respond to future challenges like climate change.

Experts from the UK and across the globe will discuss their

experiences so we can learn from each other and improve how we manage flood risk and coastal erosion in the UK.

Paul Cobbing, Chief Executive of the National Flood Forum charity, said:

The Flood & Coast Conference is a great chance to network – bringing together a rich concentration of flooding and coastal erosion experts with a diverse mix of backgrounds – commercial companies, product manufacturers, public organisations, community representatives and academics.

Bringing these people together in a shared space provides a fantastic opportunity to explore how we can work together to reduce flood risk and manage coastal erosion more effectively in the UK.

More than 200 speakers will talk at the event, and 80 exhibitors will showcase the latest in flood risk management technology and innovation.

The full conference programme is now available on the website:

www.floodandcoast.com

Notes to editors

- Delegates include representatives from the Environment Agency, local authorities, risk management authorities, water companies, research academics, businesses, manufacturers and communities at risk of flooding.
- The winners of this year's Environment Agency Project Excellence Awards will be announced during the conference. The awards celebrate best practice in project areas such as programme and project delivery, partnership working, asset management, innovation, value for money, sustainability and community leadership.
- Flood & Coast's association partners include the Institution of Civil Engineers (ICE), the National Flood Forum, the Chartered Institution of Water and Environmental Management (CIWEM) and the Association of Drainage Authorities (ADA).
- Flood & Coast is kindly sponsored by Van Oord, Black & Veatch, Jacobs, Flood Modeller, AECOM and VolkerStevin, Boskalis Westminster and Atkins (VBA).

News story: Peatlands to be restored in the North West

Work is underway to restore peatlands to their natural state across Greater

Manchester, Merseyside and Cheshire after £160,000 of funding was secured through the Department Environment, Food and Rural Affairs.

The Environment Agency will be working with a number of partners including Cheshire Wildlife Trust, Warrington Borough Council and United Utilities at six sites.

Restoring peatland to their natural state

The funding will be used to restore upland and lowland peatlands to their natural state by increasing their capacity to prevent carbon entering the atmosphere, reduce flood risk by slowing the flow of rain water and creating habitats for vulnerable wildlife.

Natural England has been advising the partners about the best design for the schemes, and approving methods used on the Sites of Special Scientific Interest.

By blocking drainage ditches, building peat bunds and working with the local topography, the work will help keep water on the sites, encouraging the typical bog plant species and discouraging the dry-loving grasses and birch.

They provide 70% of our drinking water

Peatlands cover 11% of England's landscape and they provide a great habitat for a wide range of wildlife and birds including merlin, dunlin and golden plover. They also provide 70% of our drinking water and reduce greenhouse gases by locking away at least 3.2 billion tonnes of CO₂.

There are six projects across the Greater Manchester, Merseyside and Cheshire that have secured this funding, part of a Defra peatlands restoration pot of £500,000, with further projects around the country.

Environment Minister Thérèse Coffey said:

Well-maintained peatlands are an iconic aspect of the English landscape and are a vital part of the natural ecosystem. They provide key habitats for wildlife, supply us with clean water and reduce carbon emissions.

This scheme will help fulfil our ambition to be the first generation to leave the natural environment in a better state while returning thousands of hectares of peatland to their natural state.

Lisa Whelan, Environment Programme Manager at the Environment Agency, said:

Peatlands are a fantastic resource and these restoration projects

have multiple benefits to the environment.

Work at the sites will include creating fire breaks and peat bunds, introduce new plant species, block ditches along with further initiatives to restore the peatlands.

Some projects will also serve as study sites for trials of innovative new restoration techniques. As well as having > a huge environmental benefit such as reducing greenhouse gases it will enhance habitats for wildlife.

Work is underway at six sites across Greater Manchester, Merseyside and Cheshire

Risley Moss, Cheshire – working with Warrington Borough Council (funding of £20,000)

Danes Moss, Cheshire – working with Cheshire Wildlife Trust (funding of £15,000)

Holcroft Moss, Cheshire – working with Cheshire Wildlife Trust (funding of £46,000)

Goyt's Moss Bridge, Peak District – working with United Utilities (funding of £16,000)

Peak Naze and Sykes Moor, Peak District – working with United Utilities (funding of £36,300)

Crompton Moor, Greater Manchester – working with City of Trees (funding of £30,000)

Total funding is £163,300

Speech: What you should really be worrying about: climate change

What you should really be worrying about: climate change

Speech by Sir James Bevan, Chief Executive of the Environment Agency

Carbon Trust Low Carbon Cities Conference, London, 22 February 2018

Why you should worry about climate change

What keeps you awake at night? Fear of terrorism? Nuclear war? Economic collapse? If so, you're worrying about the wrong thing.

The Global Risk Report 2018, compiled by business leaders for last month's Davos meeting, put something else at the top of the list. The biggest risk now facing the world, they concluded, is none of the above – it's climate change. So if you have been worrying about the wrong thing, at least you are now at the right conference.

What it means for the UK

What does climate change mean for the UK? In 2009 the first UK Climate Projections brought together contributions from over 30 scientific organisations to model the likely changes to our climate out to the end of this century.

Those projections and more recent evidence suggest that average UK summer temperatures could rise by up to 4°C by 2080; that sea level will rise by up to 1 metre by the end of the century (more in some locations); and that we will see more extreme weather, including heavier, more intense rainfall.

Likely consequence: more frequent and more extreme flooding, greater coastal erosion and heightened risk of droughts. You don't need to be a genius to work out what that could mean for vulnerable communities up and down the country, rural as well as urban.

Why this matters for UK cities

We care about all communities in this country. But we're focusing today on cities. That makes sense. Over 83 per cent of the UK population now live in urban areas: that is expected to rise to over 90% by 2030. Our cities drive much of our economy and are engines for innovation. And they offer some of the biggest opportunities: if we get their future design right, they will play a crucial role in the transition to a low carbon and resilient future.

But our cities are also exposed to some of the greatest risks. It is an inconvenient truth that most of our cities, and therefore most of our population, are located by coasts or rivers or in other low lying locations; and that wherever our cities are, every single one of them depends on water.

The Committee on Climate Change has identified six major climate-related risks for the UK. The biggest of all is increased flooding – from rivers, the sea and surface water. This will impact particularly on our cities. It will threaten our city homes and businesses; the power, water, communications and transport infrastructure on which our cities rely; and the broader supply chains on which our city economies depend.

Greater flood risk is not the only threat that climate change is bringing to our cities. The Committee identified others too: there will be heightened risks to health, wellbeing and productivity from high temperatures; risks of shortages in water supply (a risk that has already materialised in Cape Town right now); threats to our natural capital; to food production; and from pests and diseases.

The good news

That's the bad news. The good news is that we can successfully tackle these threats if we work together; and indeed that if we do this right, we can create even better cities that are life-enhancing places to live and work, an even stronger economy and an even better country.

What the EA is doing

The EA itself is directly engaged in trying to turn all this risk into opportunity. We're doing that in three main ways.

First, we're helping to reduce the causes of climate change.

We administer a number of the government's carbon reduction and energy efficiency schemes. We oversee the regulation of over half the UK's carbon emissions, and we're having some success – since 2000 greenhouse gas emissions from the industries we regulate have decreased by 39%. We're an energetic and positive regulator of the renewable technologies we need for the future, including hydropower and anaerobic digestion and, perhaps one day, tidal lagoons.

Gandhi said: "be the change you want to see in the world". So we also try and live low carbon in the Environment Agency's own daily operations. Over the last decade we have cut our emissions by over 40%. We have a travel hierarchy that encourages us away from carbon. We've invested in low emission technology and renewables across our estate and in our vehicle fleet.

We also ensure that our own Pension Fund makes sustainable and responsible investments, and it's been globally recognised for that. That includes investing in the Carbon Trust's Low Carbon Workplace partnership, in which businesses come together to acquire and refurbish office buildings to make them into modern city workplaces that minimise energy costs and carbon emissions.

Second, we're helping building long term resilience to climate change for our cities.

Example: water. The biggest single influence on long term water availability is – you guessed – climate change. Water supplies are under further stress as our population rises. We are also seeing greater stress on the natural environment. Unless we take action now, demand for water in this country will eventually exceed supply.

Part of the answer is reforming the current system for taking water out of rivers and the ground. The Environment Agency regulates this through our abstraction licensing system. If you want to take more than 20 cubic metres a day, you will normally require an EA abstraction licence, many of which limit how much water can be taken. We actively manage thousands of those licences, working with the water companies, farmers and businesses who are their primary users to balance water availability and demand.

But this system of abstraction licensing was designed more than 50 years ago

for a world with less demand for water, fewer people, almost no environmental protections and little awareness of climate change. That's why we are now working actively with water users and the government to reform it, so we can give abstractors what they need while protecting water supplies and the wider environment for the long term.

Second example of future proofing ourselves through resilience: flood defence. The Environment Agency's £2.6bn flood defence investment programme will better protect 300,000 homes – the majority in cities – by 2021. We have built climate change projections into all those schemes, to ensure they will continue to offer a high standard of protection over decades into the future as the climate changes. Those climate change projections are built into the present Thames Barrier not far from here, which we own and operate. And they are built into our thinking about what London will need to replace the present Barrier some time after 2070.

Third example of future proofing: urban planning. The Environment Agency is a statutory consultee on most development. We work actively with city planners and developers to ensure that new housing, new infrastructure and other developments are sustainable, and will remain resilient to flooding and to the other, less obvious effects of climate change.

One of those effects is the risk of extreme temperatures in our cities due to urban heat island effects. The way we design and build our urban spaces can avoid those urban hotspots, and we are active in helping cities shape the right design.

The third contribution the Environment Agency is making to a successful low carbon future is helping to shape future policy,

We contribute data, analysis and advice to the government's Climate Change Risk Assessment and its National Adaptation Programme, an updated version of which is due this summer. We contribute to the UK Climate Projections, which will also be updated this year. We helped write the 25 Year Environment Plan launched last month by the Prime Minister, which commits the government to "all possible action to mitigate climate change, while adapting to reduce its impact". That Plan has our full support and we will have a major role in delivering it.

Finally, we are supporting the government's Clean Growth strategy. Our Chair, Emma Howard Boyd, is actively involved in initiatives to shape a bright urban future, including the Future Cities Catapult and the Green Finance Task Force.

Conclusion: think big, act early, be visible

Let me conclude with these thoughts. The Environment Agency is not, as we are sometimes portrayed, anti-growth. On the contrary. Our primary purpose, spelt out in the 1995 Environment Act that established the Agency, is not actually protecting the environment: it is promoting sustainable development. Our job is to do both of those things: to protect and enhance the environment on the one hand, and ensure sustainable growth and development on the other. And

there is no greater prize in sustainability than successfully tackling climate change.

The Environment Agency has a slogan for handling flood incidents: think big, act early, be visible. That's not a bad strapline for tackling climate change. We have another slogan too for how we try to work: One Team. We try to be One Team both inside the Environment Agency and with our partners.

All of us are here because we care. We're all pretty good at what we do. But none of us is as good as all of us. So let's not worry about climate change, let's do something about it. Let's tackle it together, and build a better future for our cities and our country. The Environment Agency will be your partner in that great endeavour.