News story: Environment Agency chair visits Grogley and Coverack

Emma Howard Boyd met residents of Coverack to see the progress of recovery work 3 weeks after flash flooding hit the Cornish village.

The chair of the Environment Agency spent 2 days in Cornwall, where she also visited a project to boost fish numbers.

On Wednesday 9 August Emma travelled by bike using the Camel trail to Grogley, where she was shown the Water for Growth project — a £2.2 million project to restore freshwater fish habitats to the Camel and Fowey rivers.

The project is a partnership with the Environment Agency, Westcountry Rivers Trust, Natural England and South West Water to remove obstructions to fish migration, making it easier for salmon and trout to spawn in Cornwall. The river restoration project will create an improved environment for people and wildlife while adding value for local businesses that depend on sustainable fisheries. The Camel trail itself is a very popular tourist destination all year round providing an important contribution to the local economy.

During the trip Emma met a staff member inspired to learn to cycle by her visit. Gitty Ankers is an Environment Agency catchment co-ordinator who has worked on the project since its inception in 2015 and was very pleased the chair would be visiting.



Emma Howard Boyd's visit inspired Gitty Ankers to learn to cycle

But when Gitty learned Emma was a keen cyclist and would be making the trip by bicycle, a cultural barrier from Gitty's childhood threatened to spoil the visit.

Gitty said:

My parents wanted me out of Iran during the revolution in 1979, so I came over to the UK to do my master's degree. But in my native country they don't teach girls two things: swimming and cycling. And those two things have been on my wish list ever since.

When area director Richard Stockdale said Emma Howard Boyd wanted to come and look at Grogley, I was so pleased as I had really worked hard on this project. But when he said it would be part of a cycling trip my heart sank. I thought it would be too difficult to keep up with everyone. So I gave myself a week to learn to cycle.

Borrowing a colleague's bicycle, bought for his daughter 5 years ago for £5, Gitty began to learn, which is not without its own unique difficulty in hilly Cornwall.

Gitty said:

Learning to cycle is the scariest thing I have ever done. The worst is the speed coming downhill. And finding somewhere flat in Cornwall is challenging. But I found a quiet residential street and every morning I would go up and down that road. Since then I have cycled from Bodmin to Grogley and from Grogley to Wadebridge and back. That's 7 miles each way.

If I don't learn to cycle now, then there will be no other opportunities. You always need someone to inspire you to do something, no matter how old you are.

Gitty's next goal is to learn to swim. Emma and Gitty have committed to swimming together next year so watch this space.

On Thursday 10 August Emma Howard Boyd visited Coverack to see how the village has recovered since flash flooding.



Area director Richard Stockdale shows Emma Howard Boyd around Coverack

Cornwall Council declared a major incident at 5.40pm on 18 July when flash flooding affected about 50 properties in Coverack. More than 105mm of rainfall fell within 3 hours. The recovery effort saw Environment Agency staff:

- transport 100 tons of silt from a river bed and take it 50m upstream
- remove 50 tons of debris from the beach
- dispose of 40 tons of green waste blocking watercourses
- remove 30 tons of silt, fallen trees and other blockages
- clear blockages from culverts

One of these culverts threatened to flood the home next door. Environment Agency staff cleared the watercourse that flowed within yards of the kitchen window and dug family possessions out of the silt by hand.

Notice: DN40 3JP, C.Gen Killingholme Limited: environmental permit issued

The Environment Agency publish permits that they issue under the Industrial Emissions Directive (IED).

This decision includes the permit and decision document for:

• Operator name: C.Gen Killingholme Limited

• Installation name: C.Gen Killingholme Limited

• Permit number: EPR/FP3838EB/A001

Notice: Andrew Wood: decision on licence application

The Environment Agency notifies the public of the decision made on certain applications for the abstraction or impoundment of water.

This decision statement explains:

- who has made the application
- what decision has been made
- how the decision has been made

News story: New customs proposals laid out by Government in new paper on future relationship with the EU

A new paper setting out proposals for a future customs relationship with the EU has been unveiled today by the Government in the first of a series of papers on the UK's future partnership with the EU.

The document highlights the UK's strong starting position and how we can build on the strong foundation through two broad approaches:

- A highly streamlined customs arrangement between the UK and the EU, with customs requirements that are as frictionless as possible. This would aim to continue some existing arrangements we have with the EU, reduce or remove barriers to trade through new arrangements, and adopt technology-based solutions to make it easier for businesses to comply with customs procedures.
- A new customs partnership with the EU by aligning our approach to the customs border in a way that removes the need for a UK-EU customs

border. One potential approach would involve the UK mirroring the EU's requirements for imports from the rest of the world where the final destination is the EU.

The paper also sets out new details on an interim period with the EU. The proposed model, which would mean close association with the EU Customs union for a time-limited period, would ensure that UK businesses only have to adjust once to a new customs relationship. This would minimise disruption and offering business a smooth and orderly transition.

Secretary of State for Exiting the EU David Davis said:

The approaches we are setting out today will benefit both the EU and UK and avoid a cliff-edge for businesses and individuals on both sides.

The way we approach the movement of goods across our border will be a critical building block for our independent trade policy. An interim period would mean businesses only need to adjust once to the new regime and would allow for a smooth and orderly transition.

The UK is the EU's biggest trading partner so it is in the interest of both sides that we reach an agreement on our future relationship. The UK starts from a strong position and we are confident we can deliver a result that is good for business here in the UK and across the EU.

Chancellor of the Exchequer, Philip Hammond said:

Our proposals are ambitious, and rightly so. They set out arrangements that would allow UK businesses to continue to trade with their European partners in the future, while expanding their markets beyond the EU.

And in the near term they will reassure people and companies that, the day after we leave the EU, they will still be able to go about their business without disruption as we make a smooth transition to our bright future outside the EU and deliver a Brexit that works for Britain.

The leading document crucially sets out that the UK will be guided by what delivers the greatest economic advantage to the UK, and by three key objectives: to ensure trade with the EU is frictionless as possible, to avoid any form of hard-border between Ireland and Northern Ireland and to establish an independent international trade policy.

International Trade Secretary, Dr Liam Fox said:

Leaving the Customs Union will allow us to operate a fully independent trade policy in Britain's national interest which will benefit UK businesses and consumers.

We will seek a new customs arrangement that ensures that trade between the UK and the EU remains as frictionless as possible and allows us to forge new trade relationships with our partners in Europe and around the world.

As we leave the EU and establish an independent trade policy, the Government will prioritise ensuring that the UK and EU businesses and consumers can continue to trade freely with one another as part of a new free trade agreement. In 2016, UK imports and exports from the EU totalled £553 billion alone.

The paper can be found here.

News story: Making safer polio vaccines with plants

The research, <u>published in the journal Nature Communications</u>, confirms that these plant-made particles are structurally similar to poliovirus and can protect mice from infection as effectively as existing vaccines.

As large amounts of live poliovirus are needed to make current vaccines, VLP-based vaccines could provide a safer alternative for vaccine production after polio eradication.

What are VLPs?

VLPs are empty protein shells that 'mimic' the virus but lack the genetic material needed for replication. Scientists have suggested poliovirus VLPs as potential vaccine candidates because they can provoke an immune response but

aren't infectious. However, their instability has long been a barrier for their use as vaccines.

In January, <u>NIBSC researchers published a new genetic approach to make stable poliovirus VLPs</u>, which forms the basis of this new study.

Using plants to make medicines

Over the last 20 years, plants have begun to compete with bacteria, yeast, insect and mammalian cells as producers of medicines and they've recently been used to make candidate VLP-based vaccines against infectious diseases such as influenza.

For this study, researchers expressed stabilised poliovirus VLPs in plants and compared them to normal, or 'wild-type', poliovirus.

They found that plant-produced stabilised VLPs had a similar structure to wild-type poliovirus and could promote similar levels of protective proteins, known as antibodies, as an existing vaccine.

<u>This paper</u> suggests plants could be used to make large quantities of stable and effective poliovirus VLPs for new vaccines.

The research is a collaboration between scientists at the John Innes Centre, NIBSC, University of Oxford, Diamond Light Source and University of Leeds and funded by the World Health Organisation (WHO).

NIBSC researcher, and study author, Dr Andrew Macadam said:

Current vaccines for polio are produced from large amounts of live virus which carries a threat of accidental escape and reintroduction. As VLPs aren't infectious, making vaccines using these particles is safer and could be particularly important posteradication.

This research shows that plants can be used to successfully make stable VLPs for vaccines. It takes us a step closer to replacing current polio vaccines, providing us with a cheap and viable option for making VLP-based vaccines.

But the possibilities of this approach could extend further than polio and we're also looking at applying these methods to develop stable VLPs for new vaccines against other viruses.