

Press release: Exercise Ash will test water pumps on Somerset Levels

Environment Agency engineers from across England will descend on two Somerset pumping stations next week (14 to 18 August) for Exercise Ash.

Huish Episcopi Pumping Station and Westover Pumping Station, near Langport, will see pump specialists and incident operatives sharpen their major incident skills in preparation for any serious flood.

High volume pumps – which can fill two average sized bathtubs every second – will be deployed at the stations, increasing water pumping capacity.

Westover Pumping Station removes water through three permanent, electric, submersible pumps at a combined rate of 1,800 litres per second. Huish Episcopi Pumping Station also has three permanent pumps and removes water at combined rate of 5,610 litres per second.

Organiser John Rowlands said:

Somerset has experienced a number of flooding incidents in recent years, most notably in 2013/14 when communities were impacted by flood water. That winter was the wettest for 250 years in parts of the country with only one completely dry day in nearly two months in Somerset.

This unprecedented event led the Environment Agency to consider what else we could do to reduce the impact of a similar flood in the future.

In the summer of 2014, we developed a series of trigger points. When certain criteria is met – more than 100mm of rainfall forecast in 5 days, water levels on the moors rise more than 50mm per hour and a geographical feature (normally a road) is inundated – additional pumping capacity will be deployed at certain locations.

These trigger points were rolled out at a series of community meetings over the autumn and winter of 2014 and Exercise Ash will test this commitment next week.

Severe flooding can also have a detrimental impact on the ecology and agriculture and depending on the time of the flood can take

years for the landscape to recover.

As part of the Somerset Levels and Moors 20 Year Flood Action Plan, regular testing of our resilience via training exercises on an annual basis will provide reassurance for communities at flood risk.

The pumps will be loaded onto a lorry at an Environment Agency depot in Bawdrip village a few miles north of the pumping stations on Monday, 14 August. They will reach the pumping stations the same day. It will then take a whole day to unload and deploy them before they are switched on. Different exercise teams will practice attaching the pipes over the course of a week.

John Rowlands said:

Deploying and attaching these pumps takes a significant amount of planning and because these pumps can be used anywhere in the country. We've invited engineers from across the Environment Agency to come and put their incident skills into practice.

This, alongside the work of our partners, will make a huge difference in reducing the frequency, duration and severity of flooding in the future.

Partner organisations have been invited to attend Exercise Ash as observers, including Avon and Somerset Local Resilience Forum, Somerset County Council, Internal Drainage Board and the Devon and Somerset Fire and Rescue Service.

It is important that everybody is aware of their own flood risk. People can find out how to get ready and check their flood risk at <https://www.gov.uk/prepare-for-flooding> or by calling Floodline on 0345 988 1188.

Notes for Editors:

There are 21 permanent pumping sites in Somerset. Pumping stations are set to operate automatically according to water levels in the rhynes draining the moor or flood alleviation schemes. These pumps cannot operate if the receiving river is full, when spillways are operating or river banks are overflowing. This is why trigger points are in place, which alert the Environment Agency to start deploying mobile pumps. Triggers include specific roads starting to flood, the forecast of heavy rain, and moor water levels rising above 50mm/hour.

Huish Episcopi Pumping Station and Westover Pumping Station were built in the 1960 as part of a suite of works around Langport. Another two pumping stations were built at the same time – Long Load Pumping Station and Midelney

Pumping Station. They are all located next to rivers – Huish Episcopi and Long Load on the River Yeo, Midelnay on the River Isle and Westover on the River Parrett. They pump water from the adjacent moors (38 million cubic metres of water when the moors are full) which form part of the entire 160,000 acre Somerset Levels and Moors.

The 20 Year Flood Action Plan was jointly created by a broad range of local and national organisations and communities, and is overseen by the Somerset Rivers Authority.

Press release: South West Water to pay £142,524 for Devon and Cornwall breaches

South West Water Ltd has been ordered to pay more than £142,000 in fines and costs for discharging poor quality effluent from two of its sewage treatment plants. The prosecutions were brought by the Environment Agency.

The offences were committed in Denbury, Devon and Praze an Beeble near Camborne, Cornwall where the company breached permit conditions by allowing inadequately treated effluent to enter nearby watercourses.

Strict limits are set on effluent discharged from sewage treatment works to ensure they don't adversely affect receiving watercourses. It is the responsibility of the site operator to ensure a treatment works operates in accordance with its permit. They must carry out regular maintenance and repairs.

At Denbury, treated effluent is discharged into the Halwell Stream. Between September 2015 and June 2016, four samples tested for ammonia, suspended solids and Biochemical Oxygen Demand (BOD) exceeded the quality standards laid down in the site's permit. The treatment works is only permitted two exceedances in any 12 months so the additional discharges made in March and June 2016 were offences.

The court was told the filter bed rotating arms at the site failed to operate effectively over a number of months. This coincided with a time when the site was not visited every day and alarms were not working reliably.

The sewage treatment works at Praze an Beeble requires a lot of maintenance and is permitted to discharge only a very limited amount of ammonia. Every month South West Water must take a sample of the discharge and notify the Environment Agency of the result.

In May and August 2016 the amount of ammonia discharged exceeded the amount

allowed by the permit.

When further inquiries were made by the Environment Agency, it transpired that the site's online ammonia monitor had recorded that too much ammonia had been discharged from the treatment works for some 15 days in April 2016 as well.

In May, part of the site was not being cleaned often enough and equipment needed repairing. In August, part of the site had been blocked by moss, blanket weed and sludge. South West Water said the monitoring equipment had not always worked accurately in April.

Mark Pilcher of the Environment Agency said:

Water companies must ensure effluent is treated to a sufficiently high standard to protect the environment. Regular maintenance of sewage treatment works helps with the early detection of faults and allows repairs to be made in good time before treatment deteriorates to the point where a site breaches its permit.

Appearing before a district judge at Bodmin Magistrates' Court, South West Water Ltd was ordered to pay a total of £142,524. The company had earlier pleaded guilty to three charges (two for Denbury and one for Praze an Beeble) of breaching Regulation 38(2) of the Environmental Permitting (England and Wales) Regulations 2010.

The fine for Denbury was £80,000 with £4,993 costs plus a £120 victim surcharge. The fine for Praze an Beeble was £53,334 with £3,957 costs plus a £120 victim surcharge. The case was heard on 3 August, 2017.

News story: Environmental impact assessment June 2017: River Thames Scheme

Introduction

The River Thames between Datchet and Teddington has the largest area of undefended, developed floodplain in England. Over 15,000 homes and businesses within the area are at risk from flooding.

The River Thames Scheme will reduce the risk of flooding to homes, businesses and critical infrastructure (roads, sewerage network and power supplies).

We need a range of solutions to manage the risk of flooding in the River Thames Scheme area and so the scheme consists of:

- construction of 17 kilometres of new flood channel built in 3 sections
- capacity improvements to the weirs at Sunbury, Molesey and Teddington
- community resilience measures
- major incident planning
- habitat creation.

Environmental impact assessment

The Environmental Impact Assessment (EIA) establishes how things are now (the environmental baseline) and assesses the impacts that the scheme is likely to have on this.

It will consider all the likely significant impacts that could result from the scheme and will look at ways to avoid or minimise these impacts, as well as ways to improve the local environment.

The EIA will be documented in an Environmental Statement, which will be submitted with the planning application to inform the planning decision.

We will capture all the ways to avoid or minimise impacts in an Environmental Action Plan, which will be implemented throughout the construction phase of the project.

Environmental Statement

The first stage of producing an Environmental Statement is to develop an Environmental Scoping Report which will be presented to external consultees for comment in the summer.

The Scoping Report provides a summary of the existing environment, considers how the environment could be effected by the Scheme and whether these effects are likely to be significant. Such considerations include landscape, cultural heritage, ecology, noise, water environment and human beings.

Scoping opinion

The scoping report is submitted to the Local Authorities as part of the planning process, who will be asked to provide a scoping opinion under the Town and County Planning (Environmental Impact Assessment) Regulations. They will consider if we have included all the likely significant impacts that could result from the scheme, which will set the scope of the Environmental Impact Assessment.

They are likely to consult with other organisations and government departments in order to form this opinion. This is not a formal public consultation at this stage and comments are not requested from members of the public. Comments from the public will be captured during the planning application process in 2018.

Environmental and Ecological Surveys

As part of our work to manage our environmental impact we are carrying out further ecological and environmental surveys this year. A range of species will be targeted in these surveys, including bats (and their roosts), water voles, breeding birds, otter, great crested newts and species of reptiles.

Archaeological surveys are planned to commence in summer 2017, and will involve metal detecting, radar surveys and borehole sampling. The results of these surveys will help us identify targeted locations for trial trenches, in late 2017, to evaluate archaeology.

If you would like more information about the surveys we are conducting please visit our [website](#)

Environment Agency
June 2017

[News story: Community resilience measures June 2017: River Thames Scheme](#)

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Community Resilience Measures (CRM)

We are progressing initial assessments for Community Resilience Measures across the scheme area. This involves analysing data from flood modelling and

surveys to look for areas that could benefit from more localised permanent, temporary or property level solutions.

Types of CRM may include permanent flood defences in the form of flood walls or embankments, temporary flood defences that can be deployed in advance of a flood or property level flood intervention consisting of flood doors and barriers.

Initial assessments

The first stage is to group properties together based on the modelling and survey data into areas that could benefit from CRM. The next stage is to identify what type of measure could be used. This is done by engineers based on the location of the properties, the physical and environmental constraints in the area, the flood modelling, past experience and by looking at the costs and benefits for each option.

Appraisal

Once we have completed initial assessments we will identify areas that can be taken forward for more detailed appraisal and consultation with communities to select a preferred solution.

CRM will not be suitable for all communities and properties. Our assessments will identify those measures that can be taken forward based on how much they cost and the benefit they provide along with engineering decisions.

Those CRMs taken forward for implementation will qualify for partial central government funding. The remaining funding is expected to be provided from partnership contributions as part of the wider River Thames Scheme.

Property level programme

You may also be aware of our Property Level Programme (PLP) which has installed flood protection measures to hundreds of properties within the Lower Thames Area. The PLP programme is now closed with works to the last few remaining properties soon to be completed.

Next Steps

Most of the data we need is collected from an office however you may see RTS representatives visiting areas to understand the location better. We will also be using local knowledge of previous flooding to better understand how we can help.

We understand you will want to know how you will be affected and we would like to talk to communities later in the year once we have reviewed the data from our initial assessments.

In the meantime we will keep you updated on the progress of our assessments and let you know how and when you can get involved via our [River Thames Scheme newsletter](#)

News story: Archaeology surveys June 2017: River Thames Scheme

Archaeological surveys will start in June 2017 and are expected to finish at the end of the year. They will take place in areas of Chertsey Abbey Meads, Kingsmead Quarry, Thorpe Hay Meadow, Desborough, Datchet, and Shepperton.

We use different survey techniques in different areas to give us a wide range of data. This gives us a better understanding of what is likely to be in the ground. We use this information to plan the construction of the River Thames scheme.

The results of these surveys will help us identify targeted locations for trial trenches, in late 2017, to evaluate the archaeology.

Geophysical Surveys

Different materials below the ground can cause local disturbances in the Earth's magnetic field that are detectable with sensitive equipment. Archaeologists use hand held devices or small hand pulled carts to establish the presence of buried archaeological remains and the potential of the study area.

Earthworks Surveys

Help identify the presence of archaeologically significant earthworks or landscape features. Archaeologists look at the areas and compare what they see with historical maps and aerial photographs.

Borehole Surveys

Archaeologists dig boreholes and hand auger pits to record the composition of the ground. This information enables archaeologists to draw conclusions about how and when the area may have been used. The boreholes are excavated using specialist construction equipment.

Electrical Resistivity

Tomography Surveys Archaeologists insert magnetic probes into the ground to gather more data about the composition of the ground to support the information recorded by the borehole surveys.

Metal Detecting Surveys

Archaeologists use high performance metal detectors to detect different types of metals in the ground. This information is used to identify areas that could contain archaeological remains.

Field Walking Surveys

Archaeologists walk along marked out areas looking at the land for features to identify areas that could contain archaeological remains.

All works are carried out under the supervision of either our consultant engineers or a member of Environment Agency staff, in accordance with an agreed method statement.

If you would like more information about the River Thames Scheme please visit our [website](#)

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