

Update: Jubilee River, Black Potts weir repairs

November 2020

Black Potts Weir

Black Potts Weir is one of five control structures along the length of the Jubilee River and is the final structure separating the tail end of the Jubilee River from the River Thames. It is a fixed crest weir, meaning that there are no mechanical components. Water naturally flows over the weir as upstream flows increase. There is a fish pass at the centre, enabling fish to move upstream. The weir forms the foundation of a railway viaduct overhead for the Windsor & Eton Riverside branch line.



Black Potts weir, left bank

Urgency

In August 2020 a routine dive survey found scour holes, i.e. erosion caused by fast moving water, to the downstream area of the weir.

As a result we are not able to operate the Jubilee to divert flood flows away from the main River Thames channel

We cannot wait any longer to carry out the work. If we experience high flows in the coming months the damage to the weir could significantly increase, reducing the control of water velocity downstream and compromising the structure of the Jubilee River and the railway viaduct in the long term.



Aerial view of Black Potts weir

We are working with our supply chain to carry out essential repairs to the weir to return the Jubilee River to full service.

The work

Our priorities are:

- Restore the weir and ensure the Jubilee River continues to provide flood protection.
- Use the Jubilee River in a reduced capacity as soon as possible. This will be carefully planned depending on the stage of repair works and the river conditions.
- Full operation of the Jubilee River will be in early 2021.

The repair work will involve installing piles, grouting and placing graded rockfill armour to reinstate the scour protection on the downstream side of the weir. We are carrying out this work with our framework contractors and collaborating with stakeholders including Network Rail.

A site compound has been set up in Home Park, Windsor, with access to the weir from the river (downstream side). Access to the site compound is via King Edward VII Avenue in Windsor.

Timescales

We are doing all that we can to accelerate the programme for the repair works. The work started in November and will continue into early 2021. Note that timescales may be subject to changing weather and river conditions.

- Phase 1 - November to December: We are removing and replacing grout and installing piling. To ensure safe conditions for workers carrying out repairs, we have reduced the flow rate down the Jubilee River. This may also cause a minor reduction in water levels in the channel.
- Once phase 1 is complete we will partially operate the Jubilee River by 1/2 to 2/3 of its capacity (a maximum flow of 100 to 120 cubic meters per second)
- Phase 2 - January to March 2021 (approximately): We will complete the work with more permanent fittings that include the placing of rock armour. This will stop any future scour. Demobilisation of site at Home Park will then take place from March 2021.



Phase 1. Staff at the floating pontoon in place at Black Potts weir with material and equipment, 18 November

Continued protection from flooding

1. Long term forecast and River Thames levels

Our teams have been keeping a close eye on the long term forecast, which currently looks encouraging with no high flows in range for November. The River Thames needs long and continuous days of rain to flood, providing us with ample time to prepare for any flooding. We have implemented temporary changes to how we operate the Thames upstream and downstream of the Jubilee River to ensure the Thames stays at a constant level.

2. River Modelling

Based on the analysis of our river modelling, we have been visiting known locations at risk of flooding in Eton, Maidenhead and Windsor. This has helped us assess and determine the most feasible and appropriate local flood measures should flooding be forecast.

3. Community protection

Due to our continuous and close monitoring of the levels in the Thames we will have ample time to support the community by deploying measures such as sandbags where necessary.

We have a dedicated point of contact for flood warning and alert system at the touch of a button should flooding be expected.

4. Maidenhead, Windsor & Eton Flood Alleviation Scheme

We will continue to operate the other elements of the Maidenhead, Windsor & Eton Flood Alleviation Scheme (MWEFAS), such as the existing flood gates and supporting pump plan that reduces flood risk to Cookham and north Maidenhead.

What do I need to do?

- Find out if you're at risk of flooding by entering your postcode at www.gov.uk/check-flood-risk
- Stay aware of the risk of flooding in your area by [signing up for flood alerts and warnings](#). You'll be alerted by phone, email or text when flooding is expected.
- Monitor [local river levels in England](#) and [weather conditions](#).

Further information

Follow us on Twitter [@EnvAgencySE](#) or email enquiries_THM@environment-agency.gov.uk

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