

Restoring Toddbrook Reservoir



Update on plans for the permanent repair of Toddbrook Reservoir

A message from the Canal & River Trust North West Director, Daniel Greenhalgh

We hope you and your families have continued to remain safe and well during these challenging times. Although you may not have seen much activity at Toddbrook Reservoir over the last few months, our engineering teams and colleagues from the specialist design consultants, Arup, have been working hard behind the scenes, carrying out important ground investigation surveys and progressing design work for the permanent repair of the reservoir.

Thank you very much to everyone who engaged with the public consultation last September. Your comments matter very much to us and we appreciate your taking time to share your views with the Trust.

Overall, respondents had a stronger preference for 'Option A' – a new weir and spillway channel on the left hand (north) side of the dam by the Sailing Club. Residents raised concerns about protecting the Memorial Park and the nearby woodland, preserving facilities for the Sailing Club and the popular slipway beach area, protecting the Football Club, access routes for construction vehicles, and coping with excess traffic and noise during construction.

Repairing the reservoir is a huge engineering challenge and sadly there is no easy, win-win solution. Our specialist engineers and project team have carried out extensive technical investigations and

design, listened to all feedback and tried to accommodate the best engineering solution within the landscape. As a result, taking on board many of the concerns raised, we have concluded that a developed 'Option A' is the best solution for restoring Toddbrook Reservoir.

More details about the findings from the public consultation and reservoir repair plans are on the inside of this newsletter and posted on our website. We are planning to host a second public consultation on the detailed plans later in the spring. For more details, check out: canalrivertrust.org.uk/restoring-toddbrook-reservoir

Thank you for your support

March 2021



Toddbrook public consultation – your views

Thank you very much to everyone who took part in our public consultation last September.

Thirteen possible options were initially considered by our engineers, including repairing the existing spillways and de-commissioning the reservoir. Toddbrook Reservoir provides about 30 per cent of the water supply necessary to operate the Peak Forest and Macclesfield canals, so it's essential to restore this vital water supply, as quickly as possible. Restoring the existing spillway was also discounted on important public safety grounds, consistent with current engineering best practice.

In the end, working with our experts from Arup, we narrowed down the options to two viable proposals which were presented at the public consultation as 'Option A' and 'Option B'. Over 1,150 people engaged with the consultation

by either visiting the virtual consultation room or drop-in events and **325 gave feedback**:

- **60% of respondents** told us they **preferred Option A**; (A new 'bathtub' weir and spillway channel on the left hand end of the dam, on the sailing club side).
- **30% preferred Option B**; (A new 'tumble bay' weir and spillway channel on the right hand end of the dam, on the woodland side).
- **10% had no preference.**

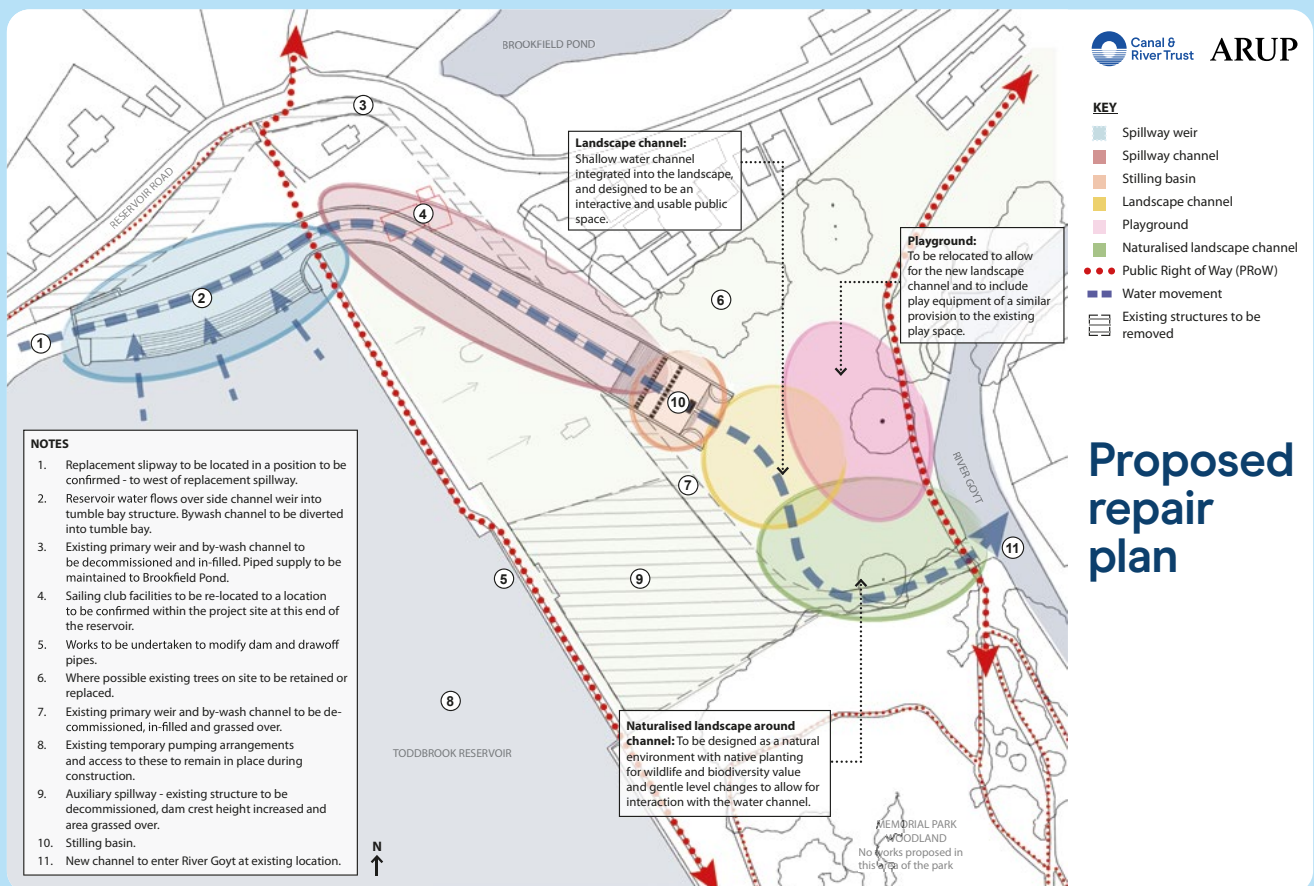
The feedback we received also included further comments relating to both options. Our team has worked to consider all of these comments, which includes understanding how best to address the concerns and explore the potential opportunities that you identified.

Please see our website for more information about the consultation, a detailed report explaining the process of reducing 13 options to two and a non-technical summary explaining how this feedback has informed our latest spillway design.

canalrivertrust.org.uk/restoring-toddbrook-reservoir

Green energy proposals?

We were keen to explore the possibility of using the new spillway construction as an opportunity for installing a 'green' hydro-electricity scheme and received many requests for this to be looked at. We can confirm we did carry out a comprehensive assessment but sadly, in this case, the expected small turbine size would not lend itself to a viable scheme.



Creation of a new side channel weir and spillway

Our plan for repairing Toddbrook Reservoir is a developed version of the public consultation 'Option A', featuring the construction of a new spillway at the left hand (north) end of the dam.

A side channel weir will discharge water into a 'tumble bay', down the spillway channel into a stilling basin, then connect with the River Goyt via a channel through the park.

The use of a side channel weir allows us to connect the existing reservoir bywash into the top of the tumble bay, which will mean water flows down the spillway at all times. We were guided in this design modification by public feedback indicating that a continuous flow of water down the spillway was preferable to having a predominantly dry channel.

Connection of the existing reservoir bywash also allows the existing primary and auxiliary spillways to be decommissioned and primarily grassed, removing the concrete panels on the dam above Memorial Park.

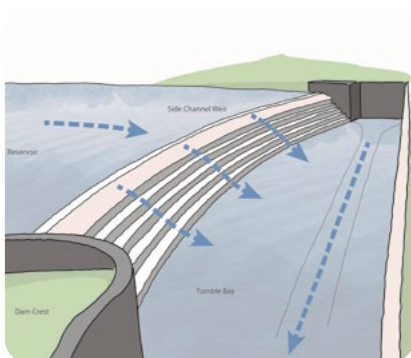
The new spillway will unfortunately require the relocation of Toddbrook Sailing Club's clubhouse and slipway. We appreciate this will have a substantial impact on the club but we are committed to working with the club to ensure

we provide suitable replacement buildings, boat storage and slipway to safeguard their continued use of the reservoir once the project is complete.

Our work will require changes to the northern area of the park. The play area will ultimately have to be moved slightly, and we will carry out landscaping works to ensure that when finished, the park remains an enjoyable and open public space. We are working to develop our proposals to ensure this happens as sensitively as possible.

During the construction phase, part of the park will unfortunately be closed, but we hope to be able to move some of the play equipment to an alternative location.

Site access is clearly a challenge. Options are very limited and all routes present difficulties. We anticipate construction traffic accessing the site primarily from Reservoir Road. This would also have been the case for large parts of the scheme had we proceeded with Option B.



Artist impression of the new side channel weir and 'tumble bay' leading into the new spillway channel.



Artist impression from the Memorial Park.



Artist impression looking across the dam towards the new side channel weir.

What happens next

Now that we have detailed designs in place, we are very keen to hear what local residents, businesses and organisations think of the plans and will be holding a second public consultation in late spring, probably online given that there are still likely to be coronavirus restrictions in place.

Before this, we will be talking to specific groups who may be affected by the plans, like the Sailing Club, immediate neighbours and Memorial Park organisers.

We will then refine the detail of the reservoir repair plan with the aim of submitting the scheme for formal planning permission in the summer. The hope is to be able to start work on site towards the end of this year.

The construction project on the dam will be followed by works to the inlet cascade, at the far end of the reservoir, to increase its resilience to high flows from the Todd Brook stream.

The whole project is likely to take about two years to complete, with the aim of having the reservoir open again by early 2024.



The current auxiliary spillway, which will be de-commissioned and grassed over.

Charity no. 1146792

For more information about Restoring Toddbrook Reservoir

canalrivertrust.org.uk/restoring-toddbrook-reservoir

You can also contact the Project Team with any comments or questions:

On **0808 196 8809**

By email toddbrook@canalrivertrust.org.uk

Or by post: **Freepost CRT Toddbrook**