# A Free-Spirited River Rerouting Itself, do we want to have a say?

The River Kennet is rerouting itself. Centuries of human intervention have significantly altered the natural course, but this old infrastructure is now collapsing and the river is reclaiming its own flood plain. Here we look at what changes nature is making on its own, how that might affect Newbury and if we may wish to intervene in natures own design.


A series of aqueducts go under the river to drain the land above. NEWT's wetland nature reserve is fed and drained by these aqueducts, so by design it is disconnected from the river. Due to breaches in the river banks above, the river is now rerouting through the wetlands. Based on the progress of similar breaches, there will be a new river course within 10 years. With significantly more water flowing into the areas of Newbury already subject to flooding.

## New channels into the wetlands

The breaches in the river bank get larger with every flood event. Seeing how the older larger breaches, develop over a number of years gives us some insight into how the new small breaches will grow.

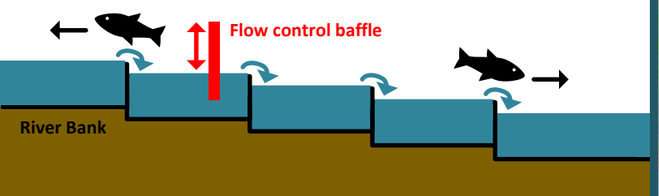
Placeholder for large breach photo on suttons

5 year old breach

10 year old breach

Where each breach occurs, there is an opportunity to proactively manage that change, through simple low cost means. Here we have a breach that crosses less than 5m of bank and the water height difference is less than 0.5m. There are several similar new breaches that present us with an opportunity now or a problem later.

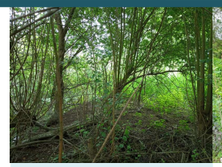

This presents a very cost effective opportunity to manage this change. A series of stepped ponds would allow fish to travel freely between the wetlands and the main river. Also allowing better management of peak flow. In flood conditions the upper bank is topped anyway, so this would not adversely affect current river flow behaviour in extreme conditions.



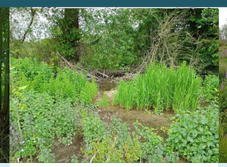

## New river across the park

Floods of 2024 have removed previous natural barriers. The thick **turquoise wiggly line on the map** is where the river is making a new channel across the park.

A **bund along the south of the wetlands in pink**, could manage peak flow rates. With fish friendly stepped pools to allow nature to move between wetland & river.

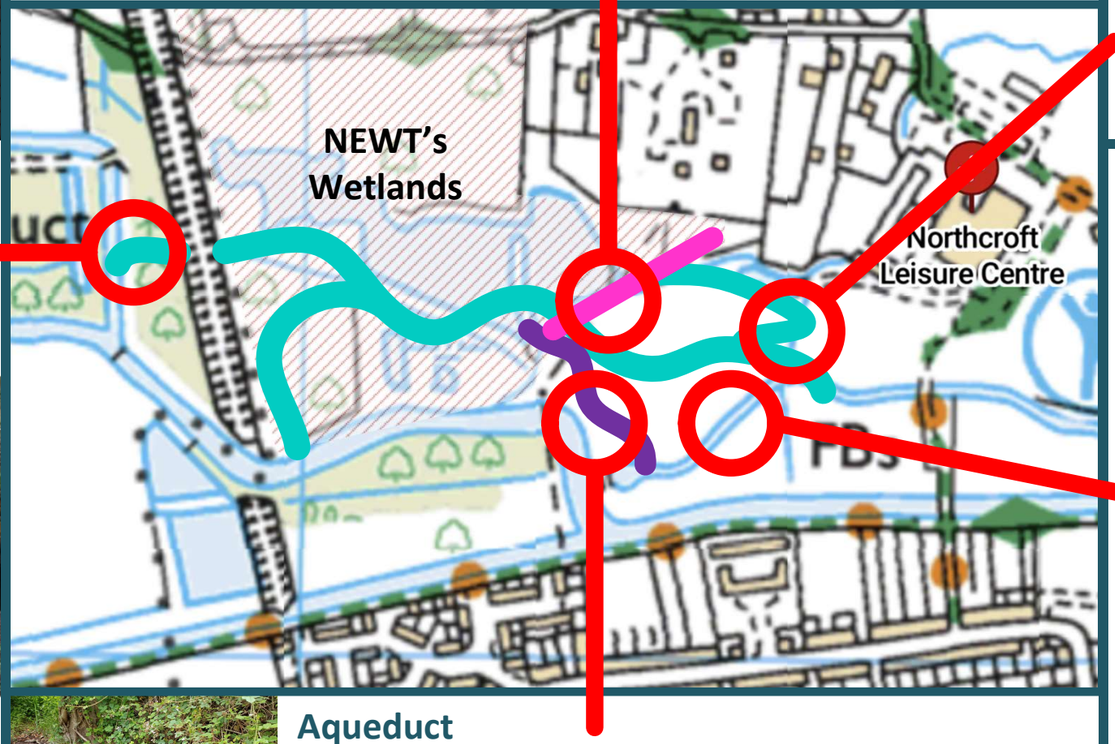


A small low bund of 30cm in height and 3m width holds the water from the park.



Breaches form with flowing water enlarging the channels and eroding the banks even further.

The ground water level has increased creating ponds on a previously dry parkland field.




## Aqueduct

There is an aqueduct going under the park that drains the wetlands into the original path of the river Kennet at the bottom of the valley. This aqueduct is far too small for the contemporary flow rates we now get. Replacing this aqueduct with a deep wiggly channel with gently sloping sides and obstacles, would retain more water upstream and slow the flow before it reaches Newbury.

The **purple line on the map** shows where an open air river channel could replace the aqueduct, creating greater capacity to hold water back from town, whilst also creating a fantastic habitat and public amenity too.

## Not a ditch

The channel marked as Northcroft ditch on maps, really isn't a ditch anymore. Ten years ago I used to be able to step over it, 5 years ago I could jump over it, it is now wider than 2m. It used to dry up every summer, it now is a deep fast flowing river all year round. Fish such as brown trout are regularly seen in the old 'ditch' now river.

Newbury is becoming more vulnerable to flooding from this direction, as demonstrated in 2024. Some intervention to be able to manage flow here would provide capacity during peak flow events. Again with access for nature incorporated into the design, to reconnect the wetlands with the river.

## Original Kennet

The original channel of the river kennet here is in poor condition. It will benefit massively from these new river tributaries. The increased flow will help restore the gravel and plant life through natural processes. This in turn supports all the other life that calls the river home.

Using similar techniques that have been very successfully employed up and down the country. This could provide an easy and cost effective way to increase flood resilience for Newbury, through simple, tried and tested river restoration and habitat improvement.

This would benefit from increasing natural wiggles, with obstacles like rocks and embedded trees, create features that divert the flow, creating more diverse habitats for nature. But this also creates additional capacity to hold flood water, slowing its pace down as it flows through the more complex environment. Which goes hand in hand with better habitat creation to support bio-diversity.

These projects have proven their success in many different environments. Such as the Turkey Brook project in London: https://www.youtube.com/watch?v=N0Q-0NYm27o