

Gooseum Rhyne Reservoir Improvement Scheme

September 2023

Background to the Gooseum Rhyne Reservoir

Introduction

The Congresbury Yeo River was named after Congresbury, the village through which the river flows.

The Yeo has its source on the western slopes of the Mendip Hills near Compton Martin and flows in a north westerly direction for approximately 17 km, before reaching the Bristol Channel. The catchment area for the Congresbury Yeo is approximately 66 km². It has approximately 6,600 properties within the area including villages of Yatton, Burrington, Blagdon, Redhill, Huish, Puxton, Kingston Seymour and of course Congresbury.

The river flows through the centre of Congresbury, with residential and commercial properties on both river banks.

The Gooseum Rhyne is a flood storage area (FSA) on the Congresbury Yeo River.

Maintenance and management

The Gooseum Rhyne FSA was classified as a reservoir in 2006 under the Reservoirs Act 1975 because of the volume of water it can hold above the adjacent natural ground.

As a designated reservoir structure, it is maintained by the Environment Agency.

The Environment Agency maintains the channel and banks of the Congresbury Yeo from Mendip Weir to the tidal limit at Tutshill Sluice.

We play a major role in managing flood risk, which includes ensuring continued safe operation of reservoirs and their proper maintenance.

Flooding history

The low lying nature of the area means that there is a long history of flooding over the past millennia, which has continued until recent times. The North Somerset area is ranked second nationally for having the highest number of properties at significant risk of flooding.

The most extreme flood event was caused by a severe storm in 1968 that led to flooding of 125 properties to a maximum depth of 2 metres. The same storm caused devastation to towns and villages across the country. In 2000, the Millennium Green at Congresbury village was flooded although no properties were flooded.



Gooseum Rhyne Reservoir flooded

In 2007, properties along a tributary to the Congresbury Yeo were flooded caused by a combination of surface water flooding and a blocked trash screen. In 2008, Wrington (upstream of Congresbury village) experienced flooding which caused damage to some properties and gardens.

The latest flooding in the area was in 2012, which caused severe impacts to the local motorway and railway.

The Environment Agency recognises and understands the severity of flood risk in the area and the impact it has had on the local community since the 1950s. We want to assure you that we're working very hard to reduce flood risk to this area. We aim to improve flood risk management in the area by working together with and for the local community.



Congresbury Yeo flooded

Gooseum Rhyne Reservoir

The Gooseum Rhyne reservoir as a flood defence

Flood defences are either natural or man-made structures that retain, store or channel water. This makes them an important method of reducing flood risk to an area.

They can be designed to offer different levels of protection as needed. Different types of flood defences are used to protect different communities.

The Congresbury Yeo has multiple flood defences and the Gooseum Rhyne reservoir is one of them. It is located in

Millennium Green, Congresbury, providing flood protection to the properties in the village.

The flood defence is formed by the raised riverbanks of the Congresbury Yeo and embankments along its northern and eastern edges. Currently, when the water levels in the Yeo rise enough to spill into the fields, the reservoir will begin to fill up. When the water levels in the river drop, water will gradually flow back into the river through the culvert near the basketball court. The embankment around

the edge of Millennium green protects properties on the northern side of the Yeo from flooding.



Northern embankment

Why is the improvement scheme needed

So far, many schemes have been completed on the Congresbury Yeo to help reduce the risk of flooding to the village.

This includes a flood prevention scheme that was constructed in November 1972 that strengthened both banks.

Given the history of flooding in the area and the key role played by the Gooseum Rhyne reservoir in flood risk reduction, it is important to regularly inspect and maintain it.

The reservoir was inspected by a reservoir engineer specialist, and they identified certain aspects of the reservoir that need improvement. Under the Reservoirs Act 1975, we have a legal responsibility to ensure the continued safety of the existing embankments and water structures.

Flooding History

1954 (January) Congresbury, flooding of the Old Bristol Road, two properties affected

1954 (November) Congresbury, flooding from the river, impact on the village is unknown

1954 (December) Congresbury, flooding from the river, impact on the village is unknown

1960 (October) Congresbury, estimated 100+ properties were severely flooded

1968 (July) Congresbury, serious flooding in the village, the extent of properties affected is unknown

1979 (March) Wrington, flooding along Notes Lane, Beam Bridge, Silver Street and downstream, properties affected unknown

1979 (March) Congresbury, two garages, a blacksmiths and one house flooded

1985 (December) Congresbury, corner of Wrington Road and Rhodyate Hill, properties affected unknown

1985 (December) Wrington, ponding in road at Cox Green

1986 (April) Congresbury, Smallway public highway and house, number of properties affected unknown

1986 (April) Wrington, Silver Street and downstream, a number of properties affected.

1996 (March) Congresbury, Brinsea Road flooded, number of properties affected unknown

1996 (June) Congresbury, serious flooding of the village, number of properties affected unknown

2000 Gooseum Rhyne Flood Storage Area fills up

2008 (January) Wrington, flooding of lower garden, utility room and road at Beam Bridge

What we've been doing

Ground Investigation works

We have now completed the ground investigation works that began at the end of May. They were completed in the first week of June. The works were along the crest of the Northern embankment and within the Millennium Green. We have also reinstated the land where the works happened.

We will be producing a report based on the investigations which will help us in developing the design of the main improvement works.



Vegetation cleared for topographical surveys

Topographical surveys

We completed the additional topographical surveys in the first week of August. We carried out vegetation clearance on the bank opposite the access track off Well Park entering Millennium Green to enable access for the surveys. We would like to assure you this was carried out under the supervision of a trained and experienced ecologist who ensured that there are no nesting birds, or other protected or rare species in the work area.



Preparing for ground investigation works

Where we are at now and what's next

We are currently in the process of updating our design based on the feedback received during the public consultation in February and during the recent tree days. We are also preparing for a public consultation on our outline design that is currently planned for autumn 2023 ahead of submitting our planning application in early 2024.



Memorial Tree Days

We hosted two tree days on 19 and 20 July for the local community in Congresbury, which were well attended with about 16 to 18 people joining us over the two days. This helped us to understand the feelings of our local neighbours towards the trees in the Millennium Green.

We heard about people's concerns regarding the impact our work will have on the memorial trees that they've planted for loved ones, and ways we could mitigate any loss. We also spoke to people about memorial benches and stones within the Green, and

talked about finding a safe space for them whilst the work is carried out.

We also had the opportunity to talk to members of the Congresbury Youth Club about our work, and what was important to them, and discussed potential opportunities to host events or workshops for them to learn more about engineering and flood risk management.

The tree days were very helpful for us to further understand perspectives of the local community, and we'd like to thank all those who attended. If you weren't able to join us but would

like to provide us with information on trees that hold special meaning to you, we'd love to hear from you.



Our project team at the memorial tree days

Other Environment Agency Projects

We would like to inform you that there are several other Environment Agency projects happening in the near future in Congresbury. They include:

- Repairs to erosion downstream of Mendip Weir
- Repairs to flood banks affected by badger habitat upstream of the bridge on the left bank

- 2023 Annual maintenance of the Congresbury Flood Defence Scheme

So you can rest assured that if you see any work happening in the area in the coming weeks, they are not related to the Gooseum Rhyne Reservoir Improvement Scheme.

Contact Us

If you have any questions or comments, please contact us:

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