DECEMBER 22, 2025

NEWSLETTER

BRIDGWATER TIDAL BARRIER

Creating a community resilient to flooding and coastal change

The Bridgwater Tidal Barrier scheme has been developed by the Environment Agency and Somerset Council due to the increasing tidal flood risk to Bridgwater town centre and the surrounding area. The scheme will deliver a tidal barrier and improvements to downstream defences on the River Parrett near Chilton Trinity, and will reduce tidal flood risk to 11,300 homes and 1,500 businesses.

The whole scheme comprises:

- Constructing a tidal barrier on the River Parrett, next to Express Park, Bridgwater
- Improving existing downstream riverside banks and constructing new secondary flood banks
- Improving fish and eel passage at up to 12 upstream sites on the rivers Parrett and Tone

The Bridgwater Tidal Barrier (BTB) Scheme team has achieved remarkable progress in recent months. The bypass channel is now open and flowing, preparing the river for in-channel construction, and the jack-up barge has been relocated to support the central cofferdam, where the three barrier towers will be built.

Looking back over the last year, the progress made by the project team on site has been exceptional. We are now starting to shape the new look and feel of the landscape, which will offer reduced flood risk for Bridgwater and surrounding communities for generations to come.

The tidal barrier is just one part of the programme of works to reduce tidal flood risk to Bridgwater and the downstream communities. To work effectively, the barrier relies on a network of strengthened and improved downstream defences, ensuring long-term protection for communities and infrastructure. Read more on this below.

Behind the scenes, value engineering and detailed design reviews using 3D modelling and AI are optimising the Scheme, identifying cost and carbon savings while ensuring an effective, sustainable solution.

I also want to thank our local communities for their patience and understanding as the Scheme progresses. We remain committed to keeping you informed at every step through our newsletter, website, social media, public drop-in sessions, parish council updates, school visits, and on-site tours for both the public and education groups. See our community updates below for more.

We are also excited to share an update from the Wildfowl and Wetlands Trust on the environmental enhancements linked to the BTB Scheme.

As 2025 draws to a close, I would like to wish you all a happy festive season with family and friends, and a positive start to 2026. The first three months of the new year will continue to see significant progress on the BTB Scheme, and I look forward to sharing these developments with you.

Ross Barton
Project Director, Environment Agency

DECEMBER 22, 2025

What's been happening?

Progress of the tidal barrier

The past 3 months has brought a number of construction milestones for the tidal barrier construction. The construction team completed their first concrete pour for the temporary tension slab in the West Cofferdam. This entailed 55t of rebar and 205m3 of concrete poured with a 65m distance-reach pump, which is the largest pump in the UK. The temporary tension slab is a concrete slab that stabilises the west cofferdam in its temporary state, until the permanent concrete slab has been poured at a later date.

The jack-up barge has now moved into a central position in the River Parrett, to undertake tubular pile installations as part of the central cofferdam construction.

First concrete pour for the temporary tension slab in the west cofferdam

Aerial view of the temporary bypass channel at high tide

The bypass channel is officially flowing!

The excavation works with the use of an 80t excavator, made good progress with water now flowing through the bypass channel. Kier is now continuing to excavate the final elements of the bypass channel material, utilising the tidal range, to install scour protection in readiness for the permanent construction of the tidal barrier.

Piling of the east cofferdam is now completed and ready for the temporary tension slab concrete pour in 2026.

Wintering birds at Combwich and Pawlett

Winter is a crucial time for some birds, and to prevent potentially disturbing protected species, such as Redshank and Shelduck, winter-working conditions were agreed with Natural England.
This required Kier to pause works and re-assess if there was significant disturbance to the qualifying birds. To help with planning for this, surveys were conducted, and then an ecologist was on site every working day to monitor bird numbers and behaviour.
Thanks to this monitoring, works continued safely through October and November maintaining project momentum, and importantly, no disturbances to qualifying species were observed.

While carrying out the wintering birds survey, one of the ecologists spotted a porpoise in the River Parrett and notified the construction teams working further upstream, so they could monitor the river and stop works if required.

On site ecologists undertaking over-wintering bird surveys

One of the many species of over-wintering birds

What's been happening? (continued)

Downstream Defence Progress

Alongside the ongoing piling works at the site for the tidal barrier, progress continues on downstream defences. Some of the highlights include:

Chilton Trinity

Coming into winter and wetter weather, the team have installed trenches to help with water management and will start firming them up along the eastern section of the secondary embankment of the scheme.

The 3000m haul road construction has been completed in Chilton Trinity to bring plant and materials down to the final 600m of the secondary defences.

The environmental team successfully translocated four water voles into the new receptor ditch, which assisted in the completion of the haul road and installation of temporary culverts.

Archaeological works are nearing completion, with the area now starting to be backfilled in readiness for the next stage of construction.

Excavation of the largest borrow pit in Chilton Trinity has continued with 60,000m3 of material being excavated to form the embankments being constructed across the project.

New water vole receptor ditch

The largest borrow pit excavation on site

Preparation for the roof removal

Pawlett

Work continued on the Pawlett haul road installation, which included a number of temporary culverts, as well as the construction of a compound area off the A38.

After a potential bat roosting spot was located in the roof of one of the three cottages at the end of River Road, a roof tile strip has been completed, with no roosting bats found.
The demolition of the cottages is now continuing.

Archaeological works have started in the area, with a number of footings from the old brickworks factory being unveiled and recorded.

Combwich

Good progress was made in Combwich, of the construction of the secondary embankment and stockpiling clay material for the main works to commence in 2026, on the primary embankment.

Temporary culverts were installed to complete the construction of the haul road for the area.

Kier has now demobilised from the area, due to the over-wintering bird constraints, as a Site of Special Scientific Interest (SSSI). All plant has been removed from site and the team are checking the area on a weekly basis.

Combwich secondary embankment

What's happening over the next 3 months?

Christmas Shutdown

There will be no construction activities from Friday 19th December 2025 and the whole site will be closed and secured from 24th December 2025 until Monday 5th January 2026.

We will have members of the team checking site on a regular basis over this period, but if you do need to raise any concerns, please contact us on 07714 683609.

Chilton Trinity

- Installation of 600m piling mats, in readiness for seepage cut off wall sheet piling in Spring 2026
- Installation of four permanent culverts
- Continued construction of secondary embankment

Pawlett

- Archaeological excavation and investigations will be ongoing and completed in the first quarter of 2026
- The demolition of the three cottages at the end of River Road will be completed in early 2026
- Installation of the haul road will continue

Combwich

- Weekly surveys will be undertaken to ensure the area remains safe and to monitor works already constructed
- Work will recommence back in the area, in Spring 2026

Tidal Barrier

- A temporary tension slab concrete pour will be undertaken in the east cofferdam
- Marine excavations will continue with scour protection installed
- The final elements of piling for the in-channel central cofferdam will be installed, making the temporary bypass channel fully operational
- Propping will be installed to support the beginning of central excavation works within the central cofferdam
- A footbridge will be installed to access the west cofferdam, in readiness for the permanent concrete slab

Your questions answered

As the Bridgwater Tidal Barrier Scheme progresses, we know the community has important questions about how the Scheme will work, why it's needed, and what benefits it will bring. Below, we've highlighted three of the most frequently asked questions along with clear explanations of how the Scheme protects people, places and infrastructure now and for the future.

Will closing the barrier cause flooding elsewhere?

No. The barrier is specifically designed to work in harmony with the river system and the downstream defences. When a tidal surge is forecast, the barrier is closed at low tide, when river levels are at their lowest. This creates temporary storage space upstream for river water that would normally flow into the estuary. After the tide passes, the barrier is reopened in controlled stages, allowing water to discharge safely without creating downstream surges. Together, the barrier and the downstream defences form a coordinated flood management system that protects thousands of homes, businesses, and essential infrastructure across the wider area, for decades to come.

Floods and Droughts: How can both happen in the same place?

Drought and flooding can occur side-by-side, and climate change is making these extremes more frequent. Hard, compacted soil during dry spells can't absorb heavy rain, increasing the risk of flash flooding.

Bridgwater has seen how quickly conditions can shift. Since the major floods of 2013/2014, the need for long-term protection has been clear. The Bridgwater Tidal Barrier Scheme safeguards people, homes, businesses, and infrastructure from tidal surges and climate extremes.

Flooding disrupts daily life, damages property, affects health, and has economic impacts. Nationally, every £1 invested in flood protection saves around £7.50 in future damages, making the BTB Scheme a smart long-term investment for Bridgwater.

For more information, please check out our website:
https://www.somerset.gov.uk/beaches-ports-and-flooding/bridgwater-tidal-barrier-scheme/bridgwater-tidal-barrier-communications-and-engagement/

What are the downstream flood defences on the BTB Scheme?

Downstream flood defences are a critical part of the Bridgwater Tidal Barrier Scheme, working alongside the barrier to protect communities, infrastructure, and farmland from tidal surges. These embankments provide long-term flood resilience for Combwich, Chilton Trinity, Pawlett, and key transport routes including the A38 and railway line.

To build the new and improved embankments, which are progressing well, the project team is using material excavated from local borrow pits in Chilton Trinity, Pawlett and Combwich. This reduces the need for importing material, cuts down on HGV movements, and supports a more sustainable approach to construction. We are also reusing materials from temporary works wherever possible. Once no longer required, the borrow pits will be restored as wetland habitats, creating long-term ecological enhancements alongside the engineering benefits.

To minimise local disruption, dedicated haul roads and gated access routes are being/have been created to limit construction vehicles using village roads. These arrangements are supported by detailed Construction Traffic, Noise and Vibration Management Plans, approved by the Local Planning Authority for each phase of work. We continue to work closely with residents and Parish Councils, providing regular updates, particularly as some activities pause over winter and resume in spring.

Wildfowl and Wetlands Trust (WWT) Update

Blue Heritage Project: Restoring wetlands, supporting communities, and strengthening climate resilience

The Blue Heritage Project, led by the Wildfowl and Wetlands Trust (WWT), is helping to regenerate Bridgwater's blue (water) infrastructure so the town becomes more climate-resilient, richer in wetland wildlife, and better connected.

The work combines wetland habitat restoration, sustainable drainage systems (SuDS), and community engagement, drawing on Bridgwater's maritime, industrial, and natural heritage. It also links closely with major flood infrastructure projects, including the Bridgwater Tidal Barrier Scheme.

Key Achievements to Date

Meads Floodplain Restoration
On the outskirts of Bridgwater, the Meads has been re-wetted and restored into a functioning urban floodplain grazing marsh. This work boosts natural flood storage, enhances the landscape, and creates valuable wetland habitat. A new conservation grazing regime is now in place, supported by additional Countryside Stewardship funding, with visible improvements in habitat quality and flood-storage capacity.

SuDS for Schools Pilot
The Sustainable Drainage Systems (SuDS) pilot launched at Eastover Primary School, with future phases planned at St John & St Francis, Chilton Trinity, and Bridgwater Academy. These features manage surface-water flood risk while giving students hands-on learning about climate, water, and biodiversity.

DECEMBER 22, 2025

Floating Ecosystems in Bridgwater Docks
A new archipelago of floating islands and planted rafts has been installed, creating fresh habitat for wildlife, improving water quality, and providing an engaging point of interest for the local community. Planting was supported by volunteers.

Community and Volunteer Engagement
Strong community involvement underpins the project, with activities including pond-dipping, Wetlands Day, Meads volunteer days, and habitat creation with groups such as The Prince's Trust, local colleges, Friends of the Meads, and Seed of Hope.

Brewery Field Swale
This co-created feature captures runoff from the car park with over 8,000 wetland plants, boosting biodiversity, filtering silt, and absorbing hydrocarbons. The area also includes play equipment and seating, creating a green oasis within the urban environment.

Partnerships and Policy Integration
The Blue Heritage Project aligns closely with the Bridgwater Tidal Barrier Scheme and local planning policy, supporting a connected approach to ecosystem restoration, heritage conservation, and long-term flood management.

Evidence of success:
- Reduced Flood Risk – Natural flood management, restored wetlands, and SuDS increase the town's capacity to manage water safely.
- Biodiversity Gains – Enhanced wetland habitats support more species and improve ecological connectivity.
- Community Health and Wellbeing – Greater access to green and blue spaces promotes outdoor learning and everyday use.
- Heritage and Education – Schools, events, and interpretation reconnect Bridgwater with its historic water and wetland heritage.

Community and Environment Update

As construction progresses on the Bridgwater Tidal Barrier, our teams continue to work in step with the natural environment and the communities around us. From planning work around tides and weather to engaging with schools, colleges, and partner organisations, we're committed to delivering the Scheme responsibly and collaboratively.

Here's a snapshot of what we've been involved in this season.

Working in Tandem with Nature
Our teams balance construction with seasonal wildlife needs. Ecologists are monitoring bats, overwintering birds, and wetland habitats to ensure work follows environmental best practice. Tidal and in-channel activities like bypass channel works and cofferdam construction are carefully timed to protect river health. With winter approaching, we are managing access and vehicle movements to minimise ground impact. Environmental monitoring guides every stage to protect the River Parrett's biodiversity.

Creative Thinking with Year 5 Engineers!
We visited Callicroft Primary Academy, where Year 5 pupils learned about flooding, the BTB Scheme, and the Bristol Avon Flood Strategy. They then created their own flood defence ideas using drawings and 3D modelling showcasing impressive creativity and enthusiasm.

Somerset Prepared Community Resilience Day
The BTB team attended Somerset Prepared's annual event, presenting why the Scheme is needed, progress so far, and its long-term benefits for resilience and wellbeing. Engagement was strong, with many thoughtful questions from attendees.

Sharing Knowledge at the Southwest Coastal Monitoring Meeting
We also contributed to the regional coastal monitoring meeting, sharing lessons from building in a tidal, dynamic environment as foundation works progress in the River Parrett.

Welcoming Countryside Ranger Apprentices
Countryside Ranger apprentices from University College Somerset visited site to learn about designing with ecological constraints, planned environmental enhancements, and our SuDS work with WWT. The group engaged well and hope to return next year.

Regular Engagement with Local Parish Councils
We continue to attend monthly parish council meetings in Pawlett, Otterhampton and Chilton Trinity, keeping communities informed and enabling residents to raise questions directly. These sessions help us stay aligned with local priorities and respond quickly to emerging concerns.

Site Visits
Our very popular public site visits will start again from March 2026. Early in the New Year, we will share our 2026 Public Site Visit Programme, including how to reserve your space for the months ahead.

School Advice for local students
Haygrove School invited Kier project team members to a careers event for Year 9 students, to gain valuable insight into the opportunities available to them and to receive advice tailored to their aspirations.

Each student was offered a dedicated 15-minute conversation with employers, allowing them to discuss which 'pathway' they are currently on, explore the range of options available, and understand how particular subjects can support their future career paths. These one-on-one sessions enabled students to ask questions, gain practical advice, and build confidence in making informed decisions about their education.

Work Experience
A work experience student from Chilton Trinity School came to the Bridgwater Tidal Barrier project for a week to gain knowledge, insight and experience into civil engineering. We would like to thank our student for joining us and wish them the best for his future career!

End of year video: A look back at 2025

We're excited to share our End of Year Video, featuring new footage and quarterly highlights, it shows how far the Bridgwater Tidal Barrier Scheme has advanced in 2025.

This year has seen major on-site activity, design refinements, community events, site visits, and important ecological, environmental, and archaeological work. None of this would be possible without the dedication of our project team.

It's been a year of teamwork, innovation, and problem-solving. Thank you to everyone involved in delivering a scheme that protects people, places, and the future.

Looking ahead to 2026, we will be continuing this momentum and partnership as we deliver the next stages of this vital flood risk reduction scheme.

https://youtu.be/KikXoSzGbLQ

Working Hours

Our core working hours on site are 7am to 7pm.
There are certain activities that have been granted extended working hours and this will be communicated to affected stakeholders when required.