

PROJECT update

Winter 2025



A quarterly insight into what's been happening on NI Water's £34m Castor Bay to Ballydougan Service Reservoir Project.



PROJECT UPDATE

As we head towards our Christmas break, we look back on a few busy months.

Key construction highlights include the setup of the contractor's compound; the completion of essential piling works and commencement of dewatering well installation for the new water pumping station. As you will read, our project team has also been busy in the community - working to spread the engineering message and making environmental and safety improvements in the area.

On behalf of the project team, I wish you a very happy Christmas and best wishes for 2026. As always, we look forward to keeping you informed as the project progresses.

Nigel Nevin
Senior Project Manager
NI Water



PROJECT LAUNCH

NI Water, along with our project team from Farrans-Glanua JV and WSP, were pleased to officially launch the start of the multi-million-pound Castor Bay to Ballydougan Service Reservoir Project this quarter.

The £34 million project will replace the existing 1970's pumping station with a modern, more efficient facility, and provide a new high-voltage power supply to improve reliability during outages. The upgraded system will increase the amount of drinking water that can be delivered each day across Counties Armagh and Down and will strengthen the network so that water can be rerouted more easily during maintenance or emergencies.

Work will be carried out in phases to ensure the water supply to customers is not affected. This multi-million-pound investment will help meet future demand and support long-term water quality and resilience.



Improving road safety

As part of the work to set up the contractor's compound, the project team assessed road safety around the site entrance and along Castor Bay Road. While unfortunately we were not able to get the speed limit on Castor Bay Road reduced, the team took a number of proactive measures to improve road safety.

These included additional road markings at junctions to encourage drivers to stop; increased signage to heighten awareness of construction traffic in the area and 'toolbox' talks with site staff and supply chain to emphasise the need to drive slowly into and out of the site and along Castor Bay Road.



Caring for the environment

While setting up the compound, the team also introduced a few eco-friendly measures to enhance biodiversity and improve the aesthetics of the site entrance. Huge planters, made from recycled site materials, have been adorned with flowers and a 'bug & bee hotel' – also made from recycled timber – has opened its doors to new guests!

We are delighted to make the site a more welcoming and visually pleasing place for all our neighbours!



School visits

To mark the start of construction work at Castor Bay, Farrans visited St. Teresa's Primary School in Lurgan to deliver their interactive water construction challenges activity.

The students learned about the improvements being made at Castor Bay, how Farrans install water mains and the challenges that construction workers have to overcome on sites. The P7 pupils also got an insight into the many careers available in construction and through the conversation they learned about the diverse skills that make up our industry.

With St. Teresa's taking part in the Engineers Ireland programme, a follow-up visit was arranged to the school in early December. The students presented their projects to Farrans' engineers, highlighting how they devised their ideas and the challenges they faced. Each group of pupils got the opportunity to ask questions about the day-to-day life as an engineer. Hopefully the visits have helped to inspire the next generation into a career in construction.

CONSTRUCTION UPDATE AND LOOKAHEAD

Works to date have progressed well across all areas, with compound set up, site preparation works, service diversions and trench proving all completed ahead of the cofferdam being installed to allow main construction of the new pumping station to commence.

Looking ahead to Q1 2026, the focus will shift to installing and commissioning pumping wells and dewatering systems, undertaking bulk excavation and reinforced concrete works, completing critical connections and associated services, progressing external pipework and commencing full construction of the new high voltage (HV) building and pumping station.

Sustainability is high on our agenda and throughout the construction programme we will be recycling materials wherever possible. To date 150m³ of sand/

soil from excavations has been reused with a further 300m³ retained to use as pipe bedding.

In the same sustainability vein, we are also pleased to have prioritised the use of local suppliers within 30 minutes of Castor Bay Water Treatment Works. This approach is not only helping to support the local economy but is reducing carbon emissions by cutting haulage distances. We look forward to building many more business relationships locally as we move forward with the project.



Pumpkin carving at Castor Bay

At Halloween, the project team held a pumpkin carving workshop, where local children used construction-themed cutters to create and design their very own pumpkin. The pumpkins were then illuminated with tea lights, bringing the children's creative designs to life in the dark. At the end of the session, every child received a bag of pumpkin pulp to take home, along with a poster filled with ideas for reusing their pumpkin after Halloween, including recipes like pumpkin soup or curry, or even using it as a bird feeder. Great fun was had by all and it was lovely to have some of the local families over to the Castor Bay site.



MEET THE TEAM

LUKE EMERY

In the first in our 'Meet the Team' series we speak to Luke Emery, Higher Level Apprentice Construction Engineer with NI Water and Assistant Project Manager on the Castor Bay project.

What is your role on the Castor Bay project and what does it involve?

My role on the Castor Bay project is Assistant Project Manager for NI Water. It involves supporting several core areas, including financial and risk management; preparing progress reports; supervising contractor activities from a client perspective and coordinating communication between NI Water, consultants and contractors.

How does your previous experience support your current role?

Prior to joining NI Water, I spent eight years working as a joiner with Lowry Building & Civil Engineering. That hands-on construction experience is providing a strong practical understanding of site activities, which is particularly useful when reviewing drawings, assessing buildability and supervising works on site.

What do you enjoy most about working on this project?

The most rewarding aspect is seeing how structured project management brings together planning, risk control, financial oversight and on-site delivery. Being part of a collaborative team that values clear communication and continuous improvement makes the work especially fulfilling.

How does the Castor Bay project support your professional development?

The project offers a wide range of real-life scenarios that directly complement my ongoing studies in Engineering and Project Management. The Castor Bay project provides an ideal platform to apply academic theory to practical delivery while contributing to a major infrastructure project.

What is an interesting fact that people don't know about you?

I once flew a plane as part of an experience day in the USA!



Did you know that Castor Bay WTW currently delivers up to **95 million** litres of drinking water every day. That's enough clean water to fill **38** Olympic-sized swimming pools! This upgrade will allow an additional **20 million** litres of water to be pumped from Castor Bay on a daily basis, safeguarding the delivery of high-quality drinking water for over **250,000** customers.

Delivery Team



FARRANS
A SISK COMPANY

Glanua

Christmas holidays

Farrans-Glanua JV will finish work for the Christmas holidays on Friday 19th December 2025 and will resume work again on Monday 5th January 2026. NI Water operations staff will still visit the Castor Bay site during the holiday period.

We take this opportunity to wish residents and other stakeholders a very happy Christmas.

