

Colwick (Holme Sluices) Fish Pass Project – Frequently Asked Questions

Last updated: December 2022

The information in this document is presented in the form of frequently asked questions (FAQs). The purpose of these FAQs is to provide a response to commonly asked questions regarding the Colwick (Holme Sluices) Fish Pass on the River Trent, Nottingham.

We update these FAQs when we receive additional questions.

Background

Holme Sluices near Colwick Country Park in Nottinghamshire, owned by the Environment Agency, form the largest single barrier to fish migration in the Midlands. The sluice gates that span the River Trent maintain different upstream and downstream water levels, leaving fish unable to pass through.

Studies have been undertaken since 2013 to assess options for fish passage. The original 2013 feasibility studies investigated all possible fish pass options and concluded that the only viable solution is a bypass channel on the left (north) bank. It is well known that salmon need to swim upstream, however all fish species need to move up the river to feed and to spawn. This project will enable all fish to complete their life cycle.

Why not remove the sluices instead of building a fish pass?

Holme Sluices is a major flood risk management structure that spans the full width of the River Trent - the third longest river in the country - to the south of Nottingham and helps to protect Nottingham from flooding. It was built in the 1950s as part of a large scale flood defence scheme.

Why is a fish pass needed now?

Holme Sluices is the largest single barrier to fish migration on the River Trent. Our priority is to open up the River Trent for all fish species through the ambitions of the Trent Gateway Partnership. As we address and work to resolve the fish migration issues on our barrier, we would also like to encourage other weir owners to do the same.

Can't the fish just use the canoe slalom course instead?

Some fish are able to get around Holme Sluices via the canoe slalom course at the National Water Sports Centre. However, the design of the canoe slalom course means the flows and velocities are very difficult for fish to swim through. Only a few salmon can get through the slalom course some of the time. We are improving the river for all fish species as well as the salmon that are regularly seen trying and failing to get past the sluices.

What are you doing about the other weirs on the Trent that don't have a fish pass?

The Trent Gateway project aims to open the whole lower River Trent for fish. There are seven large weirs that still need addressing. Working alongside Trent Rivers Trust and the Lower Trent & Erewash Catchment Partnership we will work with weir owners to seek opportunities for installation of fish passes on each. This is a long-term ambition. Five of the weirs are owned by the Canal & River Trust (CRT), who are currently considering enabling fish passage alongside renewable energy initiatives. The remaining two weirs (Averham and Thrumpton) will require further scoping and design work as well as funding to build a fish pass. We are in the early stages of developing projects at these weirs and continue to work with partners and key stakeholders to realise the ambitions of Trent Gateway.

Why are you starting in the middle and not at the first barrier?

The only barrier that the Environment Agency owns is Holme Sluices at Colwick. They are a key asset for managing flood risk in Nottingham and maintaining water levels in the River Trent. By starting at our sluices at Colwick, we will be in a strong position to influence other weir owners to address their own barriers to fish migration.

What are the benefits of the fish pass?

The cost of construction of the Colwick (Holme Sluices) Fish Pass is £8.5m. The direct environmental benefits of the fish pass will be £18.6m. This includes 60km of river improvement from poor to good status for fish, as well as 60km of new spawning habitat immediately upstream of the barrier. It will also aid interconnectivity with numerous other fish passage schemes previously constructed upstream by the Environment Agency.

The fish pass will serve as a catalyst of other Trent Gateway projects which will in turn enhance the river and boost the local economy. Future plans could include a visitor centre telling the story of the Trent, its history, ecology and how it has shaped communities along its length for centuries.

Can a bridge be installed across the sluices and fish pass to link Colwick Country Park and Holme Pierrepont?

Holme Sluices is a major Environment Agency operational structure that helps to protect Nottingham from flooding and controls river levels. It is in operation every day of the year and therefore due to access and health and safety reasons, we are unable to allow public access near to the structure. The sluices only have a narrow walkway across them, they do not have a bridge designed to gain access to land on the opposite side of the river. However, we are actively engaged in looking at other ways of improving and extending the cycle and pedestrian routes around Nottingham and through the Trent Gateway Partnership we support the new bridge crossing being planned further upstream from our sluices at Colwick.

How does the fish pass work?

The deep vertical slot fish pass is a deep corridor constructed around the Environment Agency compound. It is broken up into a series of 21 ascending chambers into which the water flows through narrow slots. All fish species can swim through these slots and rest in the next chamber above before continuing their journey up the pass and into the river above.

Will I be able to see fish using the pass?

The design includes a viewing platform where you will be able to see up and down the fish pass. It is unlikely that you will be able to see the fish, but we are planning to work with Nottingham City Council to have a live feed of cameras and fish tracking technology linked to the proposed new visitor centre at Colwick Country Park. In the meantime, we will be installing some interpretation panels and information about how the fish pass works and the story of the fish that will be using it.

When will the fish pass be built?

Construction has started and we aim to have it completed in 2023.

Will you be removing any trees as part of the works?

Yes, to make room for the new road alignment we have removed around 200 trees. We have carried out all the necessary tree surveys to ensure that we will not be removing any high value trees. For each tree removed we will be planting five new trees and we are working with Nottingham City Council to identify locations within Colwick Country Park and the wider Nottingham area where we are able to plant 1,000 trees. All tree removal works took place outside of the bird nesting season.

Will you build a new bridge at the entrance of the park?

We are installing a temporary bridge at the Mile End Road entrance of Colwick Park to enable large vehicles to access the fish pass construction site. It is not suitable as a permanent replacement for the existing bridge. The Environment Agency and Nottingham City Council are discussing the future of the existing bridge and exploring options for a long-term solution.

What is piling?

Piling is a construction process involving inserting large amounts of wood, steel or concreting into the ground. In this case the construction of the fish pass channel needs about 620 steel sheet piles which will be installed using a crane and piling rig to provide strong retaining walls. This will allow the safe excavation of the channel and will also then form the structure to withstand the ground pressures. The works have started and are expected to continue over the next four months. Works are not expected to exceed industry standard noise limits; however, the sound is expected to travel due to the flat terrain and open waters around the site. All efforts will be made to minimise this noise wherever practicable, including predrilling to loosen the ground and using vibration as much as possible. This should reduce the need for impact driving, and we apologise for any inconvenience caused. The piling work will be undertaken between 8am and 17:30, Monday to Friday.

Where can I find out more about the project?

We will be providing updates throughout the construction via our Citizen Space page <https://consult.environment-agency.gov.uk/east-midlands/holme-sllices-fish-pass> and our Midlands Twitter account - @EnvAgencyMids

What is the intended use of the site compound (office block and car park) post project?

We are working with NCC and the Park Manager to develop a landscape plan for the surrounding area around the fish pass, including both areas affected by the project and areas not affected, to replace the biodiversity lost during the project. We envisage that the area used as the welfare facility and site car park will be grass seeded with planting including either hedgerows and/or trees. The whole area will be returned to a green space for park users with a small parking area for visitors.