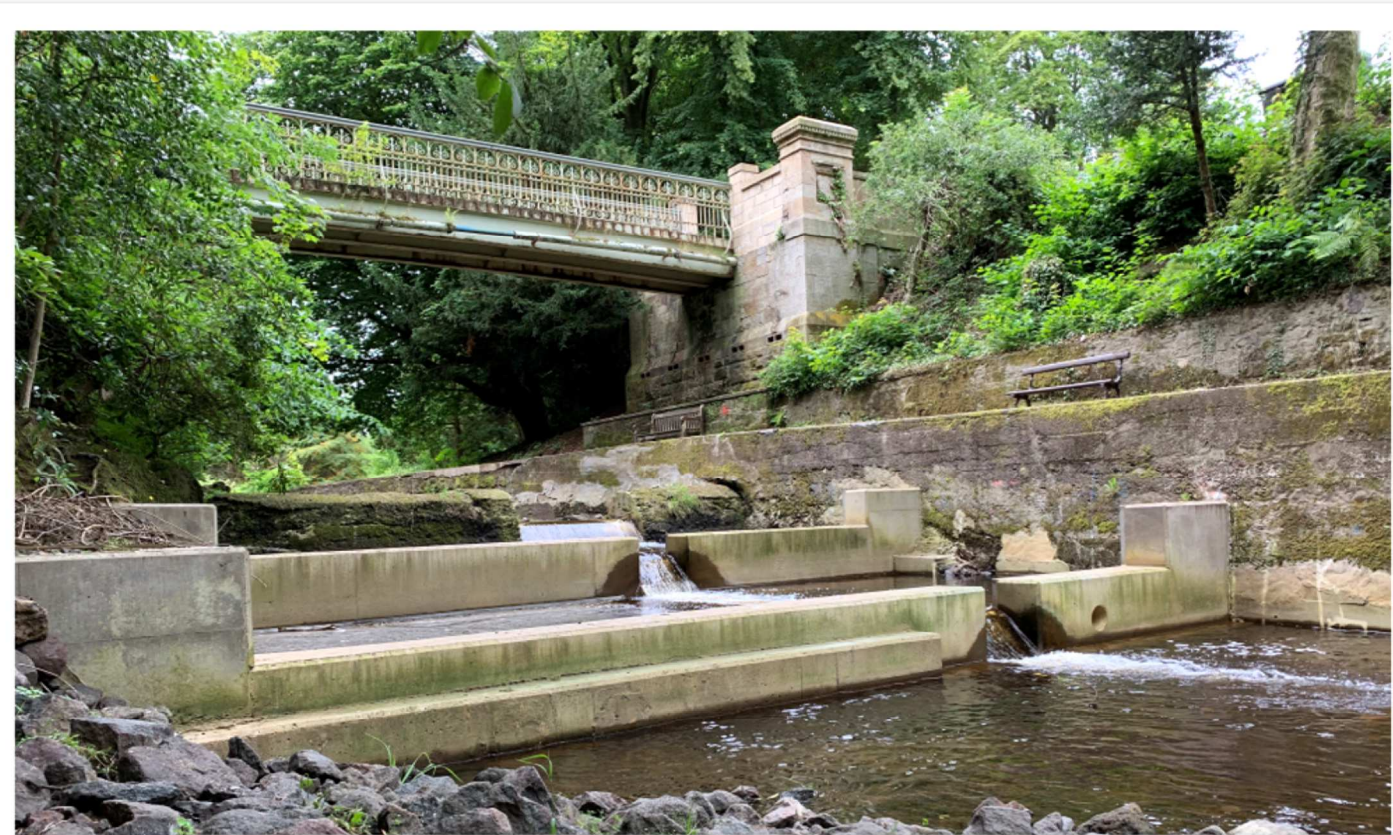


Improving Fish Passage at Gotter Water Weir

Mark Donoghue (Senior Engineer, Royal HaskoningDHV), Carina Agnew (Principal Environmental Consultant, Royal HaskoningDHV),

Rob Mitchell (Restoration Specialist, SEPA)



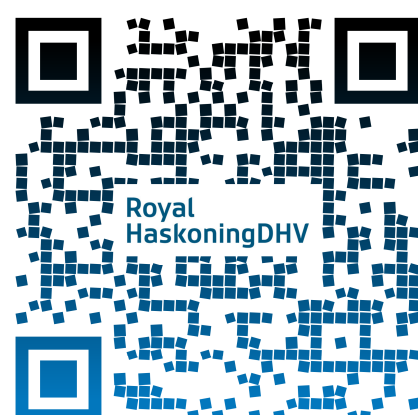
The Gotter Water Weir, situated in Quarriers Village was prioritised by SEPA under the second River Basin Management Plan for Scotland as it formed a complete barrier to the upstream migration of fish reaching the site via the River Clyde and River Gryfe.

The scheme, comprising of the notching the existing 2m high weir crest and the construction of two reinforced concrete pre-barrage structures across the full width of the channel, opens up access to up to nine kilometres of high-quality upstream habitat for the first time in over 120 years. Construction was completed in December 2019 by George Leslie Ltd and salmon were observed using the pass within hours of completion. Electro-fishing by Clyde River Foundation in July 2020 identified salmon fry upstream of the weir and in three feeder streams of the Gotter Water indicating approximately 2km of habitat colonised in the six months since completion. Funding for the project has been provided through the Scottish Government's Water Environment Fund. The project was directly commissioned by SEPA, and Royal HaskoningDHV has been involved from the outset, leading feasibility and design phases and the supervision of construction works.

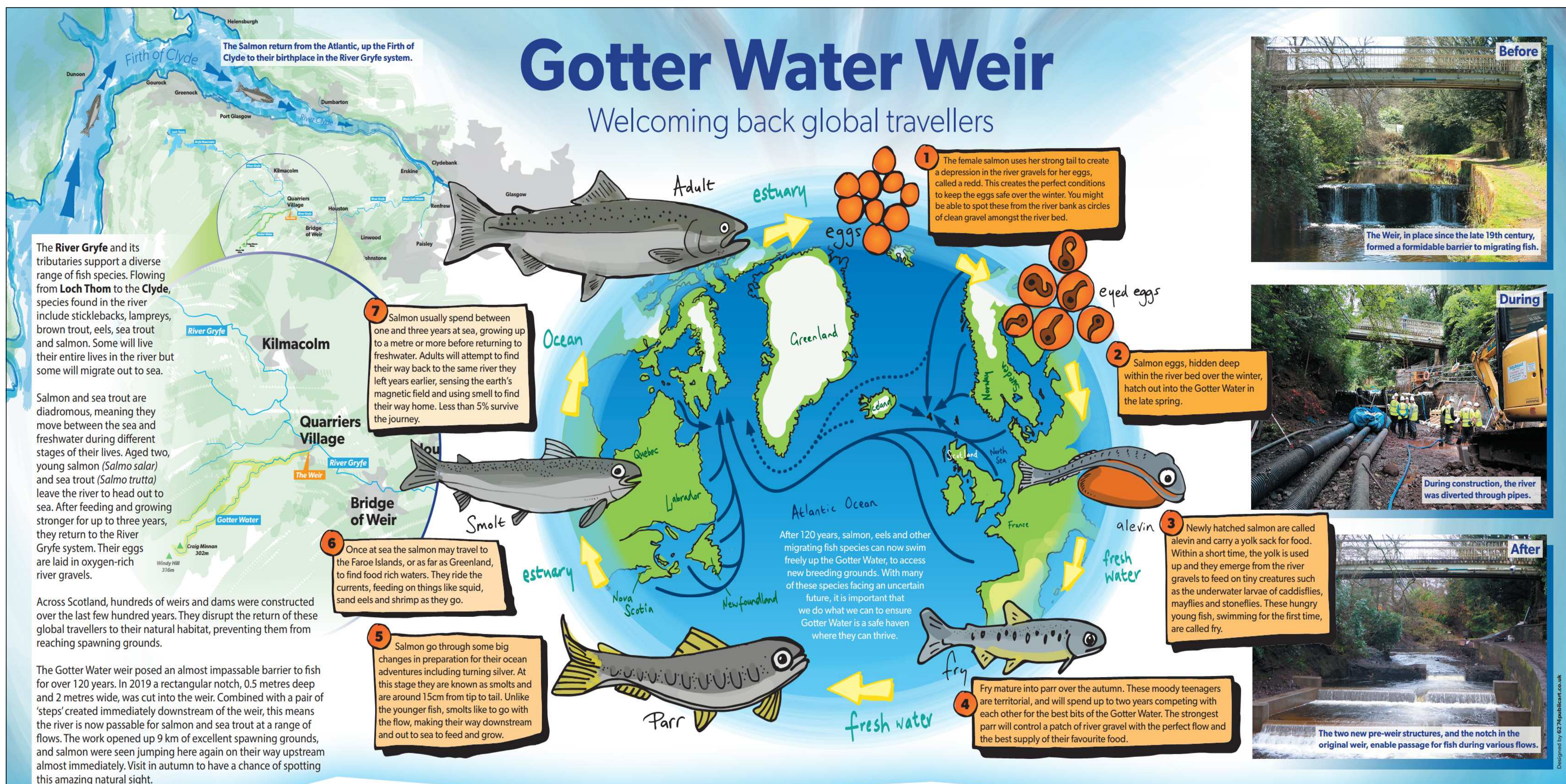
Key Challenges and Solutions

- The initial preferred option of a rock ramp and weir lowering was not cost effective and a Scottish Water sewer pipe buried adjacent to the river limited the options available. Our solution provided a sustainable balance between these constraints and the benefits for fish populations.
- Stakeholder engagement with the structure owner (Quarriers), residents, fishing club, and Clyde River Foundation has been a fundamental part of the project success.
- Disruption due to noise and access restrictions during construction were considered key risks within the historic village setting. These issues were managed well by George Leslie Ltd, for example by using a siphon in place of pumps during the temporary works.
- Design changes were required during construction due to the presence of bedrock outcrops in the river bed and banks at different levels than those anticipated. We proactively worked with the contractor to identify an optimal solution and secure the successful delivery of the project.

Use the QR codes below to access additional project information;



- [Construction condensed into 60 second time-lapse](#)
- [SEPA video including interviews with project team and stakeholders.](#)



Project partners

SEPA would like to take this opportunity to thank all project partners for their support.