



# Build a fish pass in a bath

Links to the Key Stage 2 and 3 Design and Technology National Curriculum

Along our river you find many weirs. These are manmade barriers that were used to power the mills that made our Yorkshire cities rich during the Industrial Revolution. Now they are not needed but they still block the way for fish moving through the river to feed, breed and shelter.

The best thing to do is remove weirs but this is not always possible. Here, engineers can help. The flow of water over a weir is too fast, too shallow and too long for fish to swim or leap over. Engineers work to change this.

Watch the Environment Agency's video "Our Rivers: Recovery and Renewal" on YouTube to find out more about our project <https://tinyurl.com/OurRiverAire>

## What you need

Loads of Lego / Duplo, some baseboards and a bath! Some waste polystyrene if you have it. Did you know Lego and Duplo can link together?

## Your challenge

First run water over the Lego baseboard. Notice how it flows fast it flows. Floating bits of waste polystyrene down it might help you see this.

Add Lego blocks to see if you can create more roughness to the surface. Engineers add these in the form of baffles (like in the picture on the right) to slow the flow of water by **friction**. This is called a **Larinier fish pass** after the Frenchman who invented it. Did you slow the flow? Congratulations. **Engineering is reconnecting river habitats.**

Experiment with different designs. Maybe you could build a **pool and weir fish ladder**? Find out more at [https://en.wikipedia.org/wiki/Fish\\_ladder](https://en.wikipedia.org/wiki/Fish_ladder)

## Find out more

Find out more about how we are working to return Salmon to Skipton at [www.airriverstrust.org.uk](http://www.airriverstrust.org.uk)

The Wild Trout Trust has a good page about fish passes <https://tinyurl.com/WildTroutTrust>



To book a free Key Stage 2 River Defenders school session email [contact@airriverstrust.org.uk](mailto:contact@airriverstrust.org.uk)

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