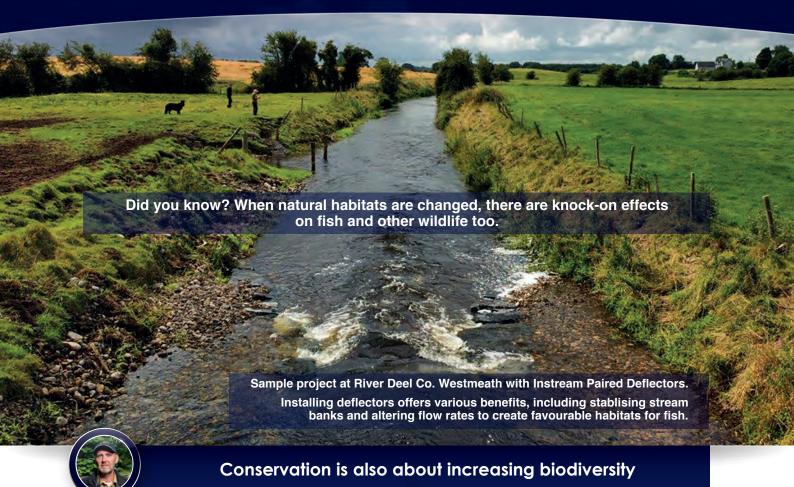




Conserving habitats and fish populations



"Conservation for us is not only about enhancing fish populations and improving water quality: it's about increasing

water quality: it's about increasing biodiversity," says Declan Cooke, Habitats Manager at Inland Fisheries Ireland, (pictured shove)

(pictured above).

"It's true that we have anglers in mind, and we want to ensure that there are enough fish for them, but we are also absolutely focused on the bigger picture. With climate change and the global biodiversity crisis upon us, we are in the privileged position of being able to use our expertise to actively increase biodiversity and build climate resilience in river catchments."

Inland Fisheries Ireland is alert to a variety of threats, which include pollution that may come in the shape of run-off from agricultural land, physical barriers in watercourses, or the alteration of river depth and flow (hydromorphology). When natural habitats are changed, there are knock-on effects on fish — and other wildlife.

Inland Fisheries Ireland's conservation projects for the large part focus on salmon and trout, two of Ireland's main native fish. Eels and lamprey are other native fish that are also an important focus for their work.



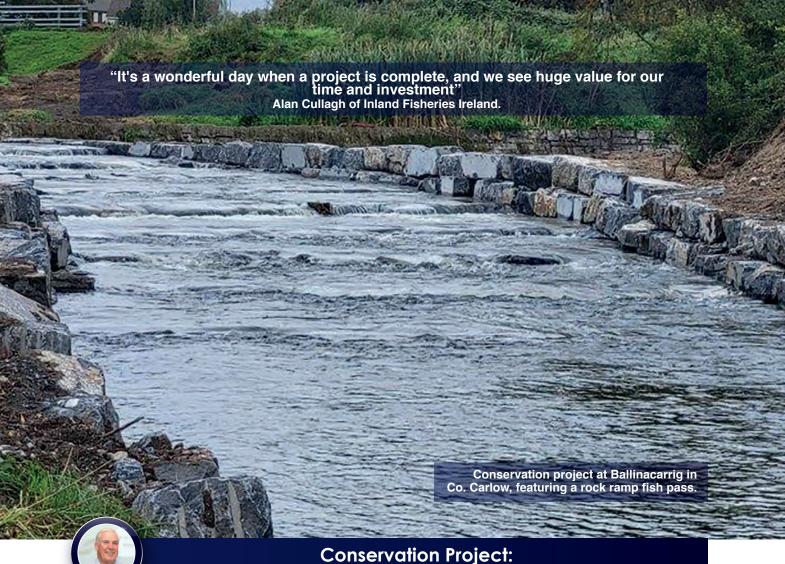












Conservation Project: Improving Fish Passage at Ballincarrig, Co. Carlow

"Weirs can be significant barriers for fish, especially for salmon and trout that need to swim freely upstream to spawn," says Alan Cullagh, Fisheries Inspector at Inland Fisheries Ireland, (pictured above). Alan and his team's project on the Ballinacarrig Weir, on the River Burren, Co. Carlow, is just one example of works that are undertaken to improve fish passage.

"We take great care that all our projects are managed professionally. Surveys are carried out – sometimes more than ten – on aspects of the project such as hydrology and topography, and together with consultant engineers we arrive at an options report." From these, a preferred option is chosen using a decision matrix, and this preferred option is then fully designed. "Following this, we then go for planning permission, during which we have to satisfy planners' queries and take stakeholders' concerns into consideration." This entire phase can take up to two years and sometimes longer.

When phase one is complete, contractors are appointed, however the work is very often time sensitive, meaning that it can only be carried out at certain periods of the year to account for water levels and the breeding and migration cycles of fish. All wildlife and nearby physical structures such as bridges and roads have to be factored in. Health and safety is vital, especially when working on large rivers, as is access to and security on sites.

"It's a wonderful day when a project is complete, and we see huge value for our time and investment. On the Ballinacarrig Weir, for example, we completed the works in September 2022, in time for the annual upstream migration of Atlantic salmon. They can now freely access 40km of spawning and nursery habitat in the River Burren and a further 80km of spawning and nursery habitat in the tributaries connected to this river."













Conservation Projects: Restoring and Enhancing Habitats

Other examples of conservation projects that Inland Fisheries Ireland has supported.

Adapting river structures

Over the years, land drainage works have altered many rivers, making them wider, deeper and straighter. This can mean that the features needed for spawning and nursery habitat for salmon and trout have been lost. To thrive, fish need varied depths and both fast- and slow-flowing water. To reintroduce these to rivers, Inland Fisheries Ireland uses approaches such as excavating pools, replenishing gravels and installing deflectors that vary flow conditions. Some examples of works like this can be seen on the Kells Blackwater River in Co. Meath where 1km of river habitat has been restored, and on the Garracloon Stream in Co. Mayo.

Replenishing gravel

Salmon and trout need gravel to spawn. Where rivers have been subject to arterial drainage, the natural processes that provide fresh gravel to the river-bed are often interrupted. One example of work to address this is a five-year project that is underway to replenish the gravel at 42 locations in the Moy Catchment, Co. Mayo.

Improving riverbanks

Restoration of riverbanks can greatly aid conservation too. "Trees along riverbanks provide great shade and keep the water cool in the summer months. They help keep the water below the ideal maximum for our native fish of 23°C. Trees and other vegetation also provide what we call an 'aquatic buffer zone' that can help prevent slurry and other agricultural run-off entering the water," explains Declan. Citing an example of restoration work, he notes, "The Lough Ennell Trout Preservation Association was awarded a grant by Inland Fisheries Ireland to carry out works along 250m of the Kilpatrick Stream in Co. Westmeath. In addition to structural work, they arranged for fences to be erected. This helped improve the water quality as it reduced the pollution caused by livestock drinking from the stream."













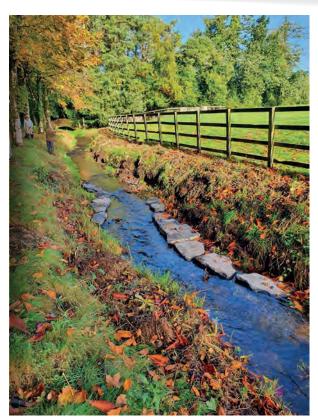
Funding call

The grant given to the Lough Ennell Trout Preservation Association is just one example of the €6 million that Inland Fisheries Ireland has awarded since 2016, across 280 different projects in various schemes.

There are two key funds: up to €1 million is available annually in the Salmon and Sea Trout Rehabilitation, Conservation and Protection Fund (SSTRCP) and up to €50,000 is available annually in the Midlands Fisheries Fund (MFF). The level of funding available through these schemes is always subject to the sales of salmon and sea trout licences (in the case of SSTRCP) and the sale of permits (in the case of MFF).

"Monies raised by the sale of angling licences and permits contribute to our funds," says Suzanne Campion, Head of Business Development with Inland Fisheries Ireland. "Since 2016, we are proud to have delivered some 29km of in-stream maintenance, 37km of habitat restoration, and made 83km of spawning and nursery habitats more accessible to migratory fish by completing five fish passage projects."

A long-term view of the future



Sample project at Kilpatrick with alternating deflectors.

Inland Fisheries Ireland takes a long-term view of what success looks like, carefully considering the potential impact of each project — both environmental and financial — before it goes ahead. Engagement with stakeholders is a high priority, and the organisation regularly works alongside the OPW (Office of Public Works) and other groups. "People are so much more aware of the biodiversity crisis than they were," observes Declan, "and so we have a lot of buy-in for the work we do."

"We can see the evidence that the time, effort and money we put in are worth it."

"When we go back and review completed projects, we can see the evidence that the time, effort and money we put in are worth it," says Declan. As stewards of the environment, Inland Fisheries Ireland seeks to continue making a positive impact on the preservation of our fish and habitats.

For more on the work of Inland Fisheries Ireland, please visit www.FisheriesIreland.ie.











