

Áth an Choite  
Bionscáil Phásáise Eisc

Annacotty  
Fish Passage Project

# ANNACOTTY FISH PASSAGE PROJECT

## PROJECT CONTEXT



- Constructed to power a mill but now a severe barrier for species like lamprey, salmon and trout.
- Annacotty Weir is a critical point at the downstream end of the Mulkear Catchment and is altering natural sediment flow, habitat formation, disrupting river connectivity and fragmenting aquatic habitat.



Annacotty Weir has been identified as a significant barrier to the free movement of fish. The Annacotty Fish Passage Project aims to address this by restoring the Mulkear River to a natural free flowing form

An Interagency Group has been established for this project including representatives from:

Inland Fisheries Ireland (IFI)	Department of Environment, Climate & Communications
Office of Public Works (OPW)	Department of Housing, Local Government and Heritage
Limerick City & County Council	National Parks and Wildlife Service (NPWS)
Electricity Supply Board (ESB)	Local Authority Waters Programme (LAWPRO)



### Legislative Context

There is a globally biodiversity crisis with species extinction rates accelerating.<sup>1</sup> The latest Living Planet Index (LPI) report released by WWF and Zoological Society of London states freshwater species populations have plummeted by 85% over the past half-century. In May 2019, Ireland became only the second country in the world to declare a climate and biodiversity emergency. The Imperative is to now act to prevent the loss of Ireland's biodiversity by changes such as the Annacotty Fish Passage Project.

Source: UN Report: Nature's Dangerous Decline 'Unprecedented'; Species Extinction Rates 'Accelerating'

- The **EU Biodiversity Strategy 2030** aims to make 25,000 km of rivers free-flowing by 2030. In line with this strategy Ireland's 4<sup>th</sup> National Biodiversity Action Plan 2023– 2030 has a target that requires the restoration of 300 km of rivers to a free-flowing state.
- The **EU Nature Restoration Law** is a new regulation by the European Commission to restore at least 20% of the EU's land and sea areas by 2030 and repair all ecosystems in need of restoration by 2050.
- The **EU Water Framework Directive (2000/60/EC)** objective is to protect water quality to achieve good ecological status. Ireland's 3rd River Basin Management Plan is called the Water Action Plan 2024. It specifically mentions Annacotty Weir as a pilot project in the programme for mitigation.
- The **EU Habitats Directive (92/43/EEC)**: This project directly supports the conservation objectives for the Lower River Shannon SAC, aiming to increase river accessibility for migratory species such as Atlantic salmon and lamprey.
- The **EU Eel Regulation (1100/2007)** requires EU countries to implement recovery measures for European eel populations. The Annacotty fish passage project will help to achieve this goal.





## OPTIONS

### Option A – Partial Removal of the Weir

Remove the eastern part of the weir, including the existing fish ladder. Restore the river channel with a gradient of 1:200. Abutment works to end of retained weir. Retain the Mill Sluice structure, with a new upstream wall to extend Mill Race. Previous Example: Ballyclough Weir, River Mulkear

### Option B – Complete Removal of the Weir

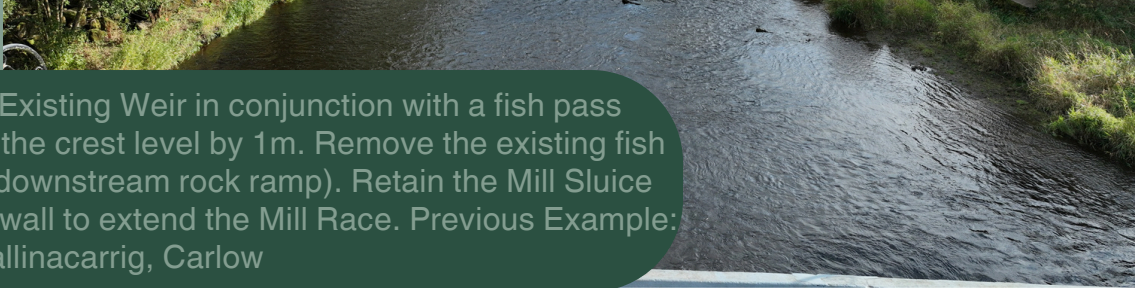
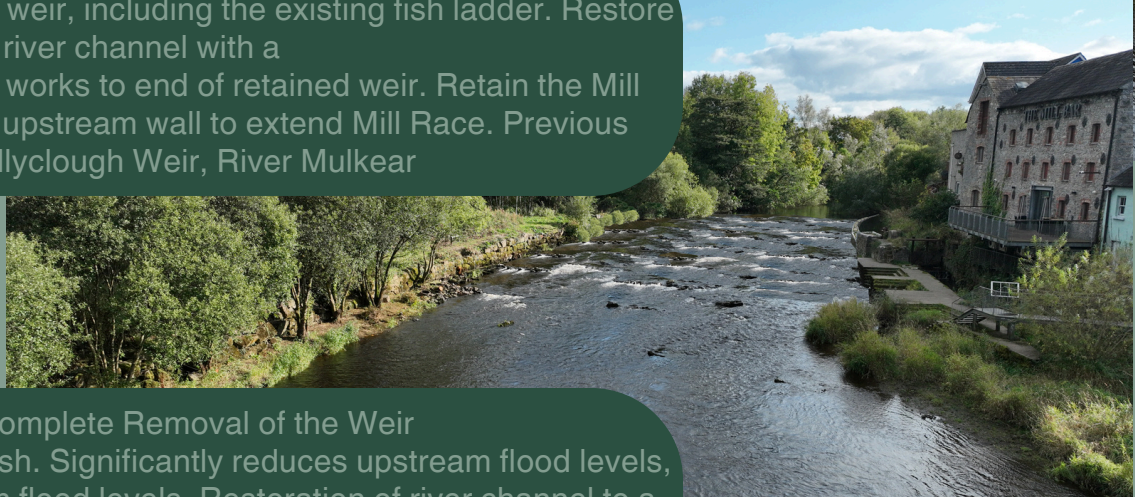
Full removal of obstruction of fish. Significantly reduces upstream flood levels, with no impact on downstream flood levels. Restoration of river channel to a more natural state which improves hydro-morphology and ecological diversity. Leave and include a new upstream wall to extend the Mill Race, original historic features in place adjacent to the protected mill.

### Option C – Refurbishment of Existing Fish Ladder

Retain the entire weir, including the existing fish ladder. Retain the Mill Sluice structure. Refurbished fish ladder, moderately improving gradient and placement of baffles. The extent of refurbishment is constrained by existing geometry.

### Option D – Lowering of the Existing Weir in conjunction with a fish pass

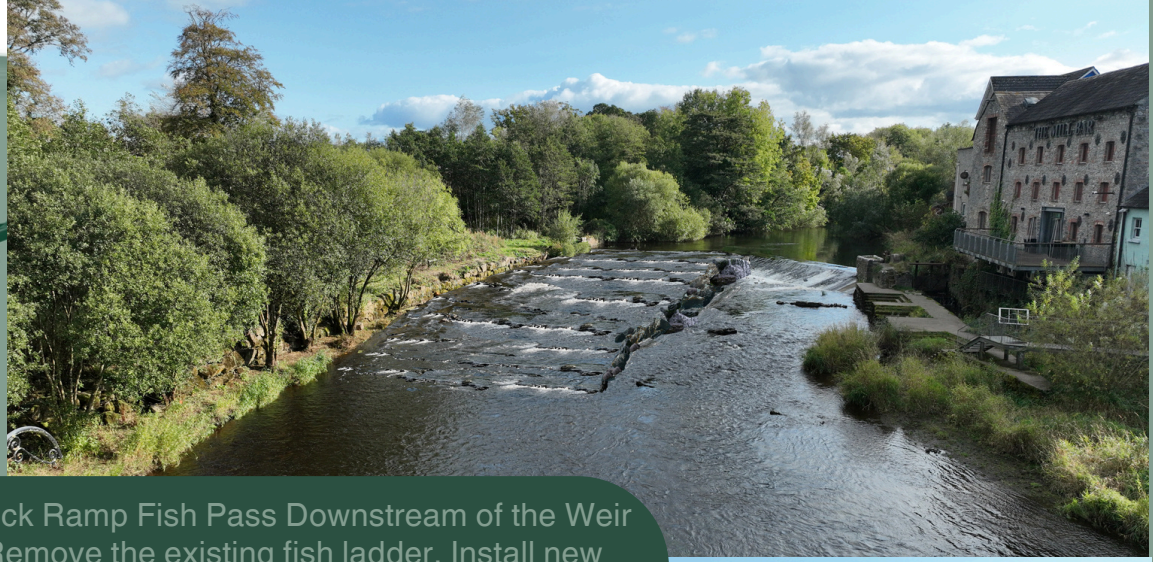
Retain the existing weir, lower the crest level by 1m. Remove the existing fish ladder. Install new fish pass (downstream rock ramp). Retain the Mill Sluice structure, with a new upstream wall to extend the Mill Race. Previous Example: Ballinacarrig, Carlow







## OPTIONS



Option E – Installation of Rock Ramp Fish Pass Downstream of the Weir  
Retain the existing weir. Remove the existing fish ladder. Install new downstream rock ramp. Retain the Mill Sluice structure. Previous Example: Castletown Weir, Castletown, Co. Laois



Option F – Installation of Rock Ramp Fish Pass Upstream of the Weir  
Retain the existing weir. Remove the existing fish ladder. Install new upstream rock ramp. Retain the Mill Sluice structure. Previous Example: Wuppertal, Germany



Option G – Bypass Channel  
Retain the existing weir. Remove the existing fish ladder. Install new by-pass channel on the east side river bank. Retain the Mill Sluice structure. Previous Example: Bevere Fish Pass, Worcester, England.

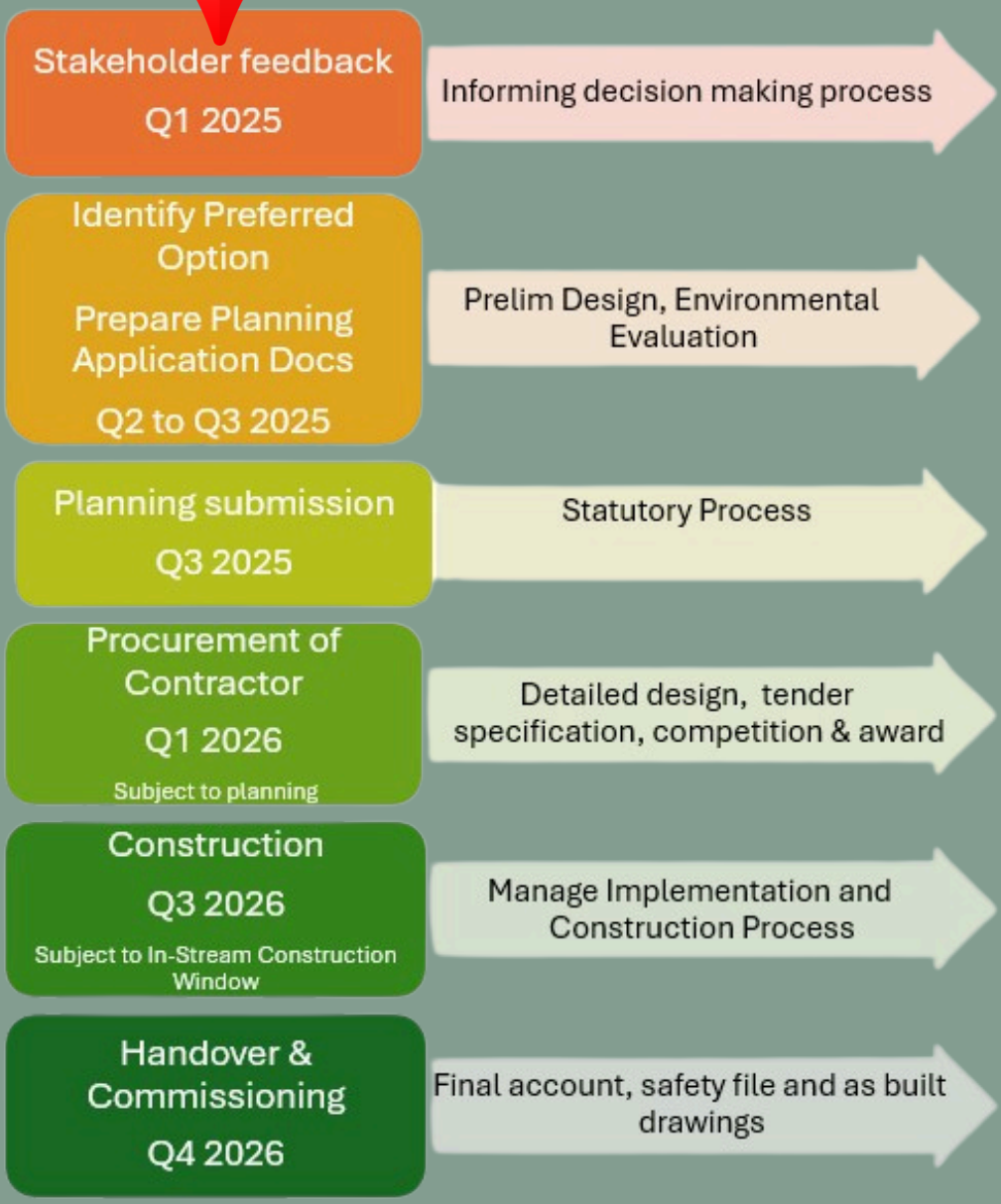


Option H – Retain Existing  
Retain the existing weir with the existing fish ladder and the Mill Sluice structure but will not allow all fish species traverse the weir.





# PROJECT TIMELINES AND NEXT STEPS



## Contact Details

The project team values opinions on the project and welcomes comment from the public and interested parties.

For further information on the project please log on to [www.fisheriesireland.ie/annacotty](http://www.fisheriesireland.ie/annacotty) or you can contact the project team via the contact details below.

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