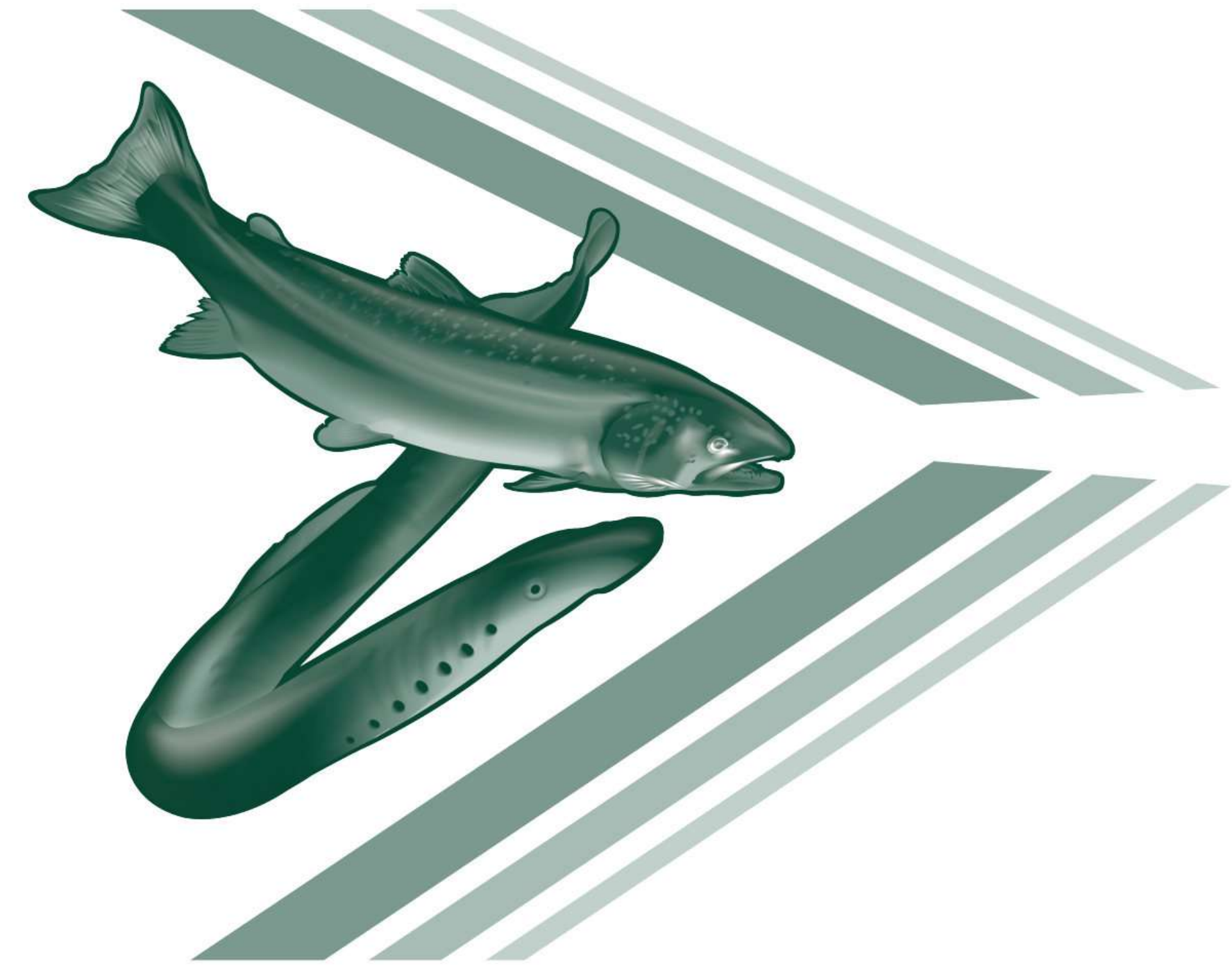


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Annacotty

Fish Passage Project



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 that 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)

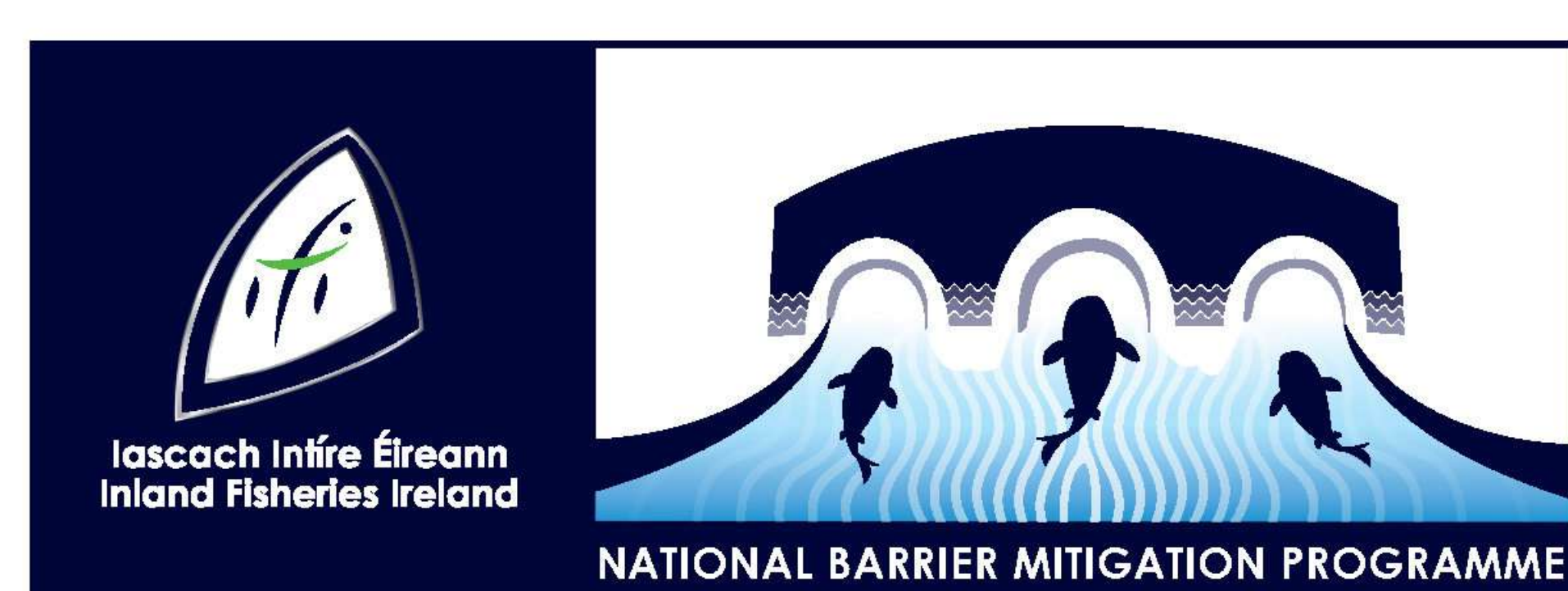
Project Context

There is a globally **biodiversity crisis** with species extinction rates accelerating.¹ 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 act now to prevent the loss of Ireland's biodiversity by changes such as the Annacotty Fish Passage Project.

¹Source: UN Report: Nature's Dangerous Decline 'Unprecedented'; Species Extinction Rates 'Accelerating'

Legislative Context

- The **EU Biodiversity Strategy 2030** aims to make 25,000 km of rivers **free-flowing by 2030**. In line with this strategy Ireland's 4th **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 re- store 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 (G2/43/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.



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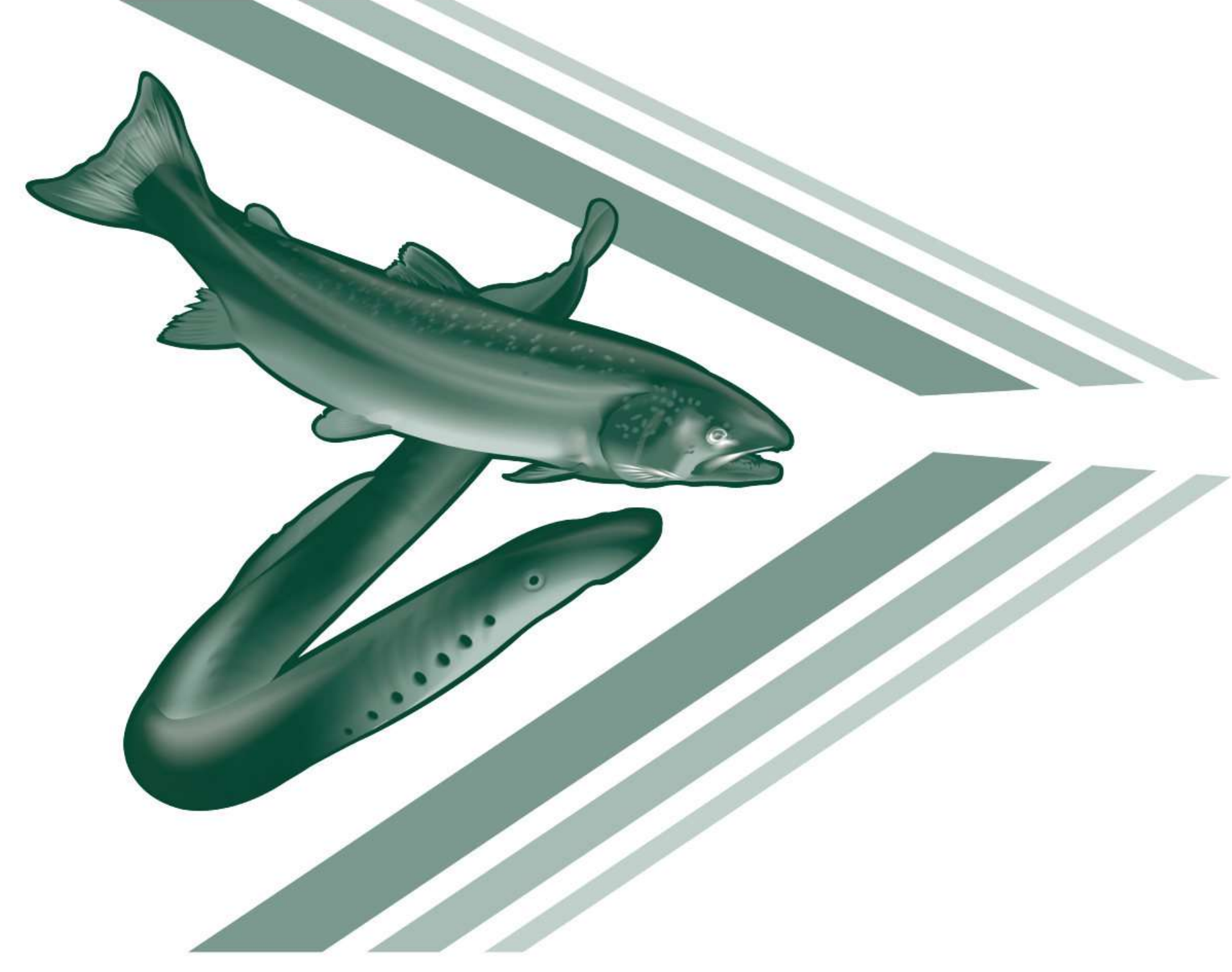
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What is a Fish Barrier?

A barrier is anything that might prevent a fish from passing or migrating or may slow it down on the way up or down a river. Physical barriers can be natural or man-made features and can include weirs, bridges, waterfalls, culverts, fords, dams, sluices and ramps. Inland Fisheries Ireland has been building a national inventory of barriers under the National Barriers Programme since 2017. An online dashboard has identified over 6,500 barrier locations across Ireland of which Annacotty Weir is just one. A QR link is shown to find out more on this.

When does a structure become a barrier?





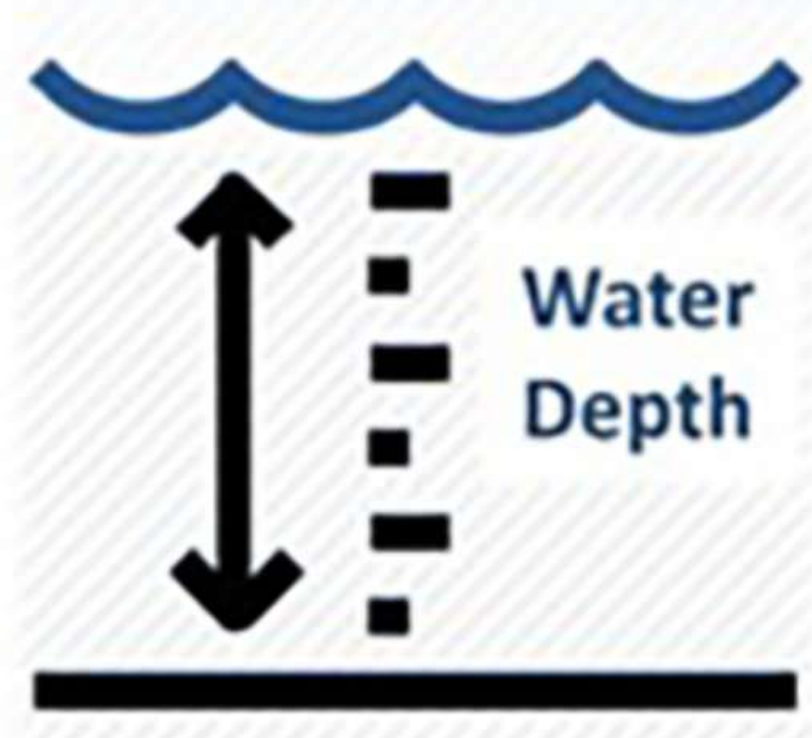



Hydraulic Head

Barrier at: **Greater than 0.1m**


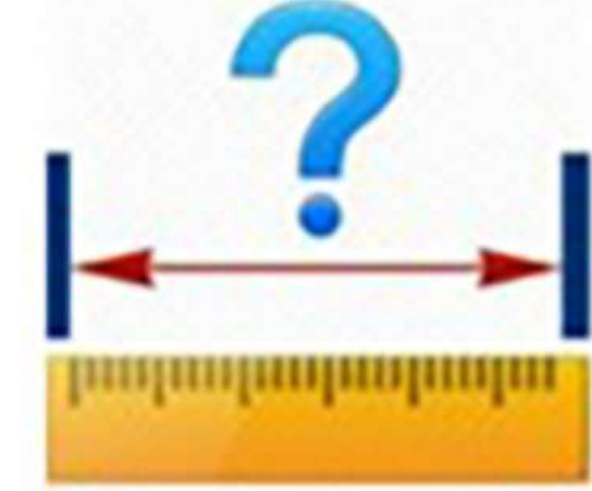
Rule of:




Water Depth

Barrier at: **Less than 0.1m**

Effective Length

Barrier at: **Greater than 10m**



Riverine Fish Barrier Assessment Tool: Coarse Resolution – EG: SNIFFER: Survey

What is a Weir?

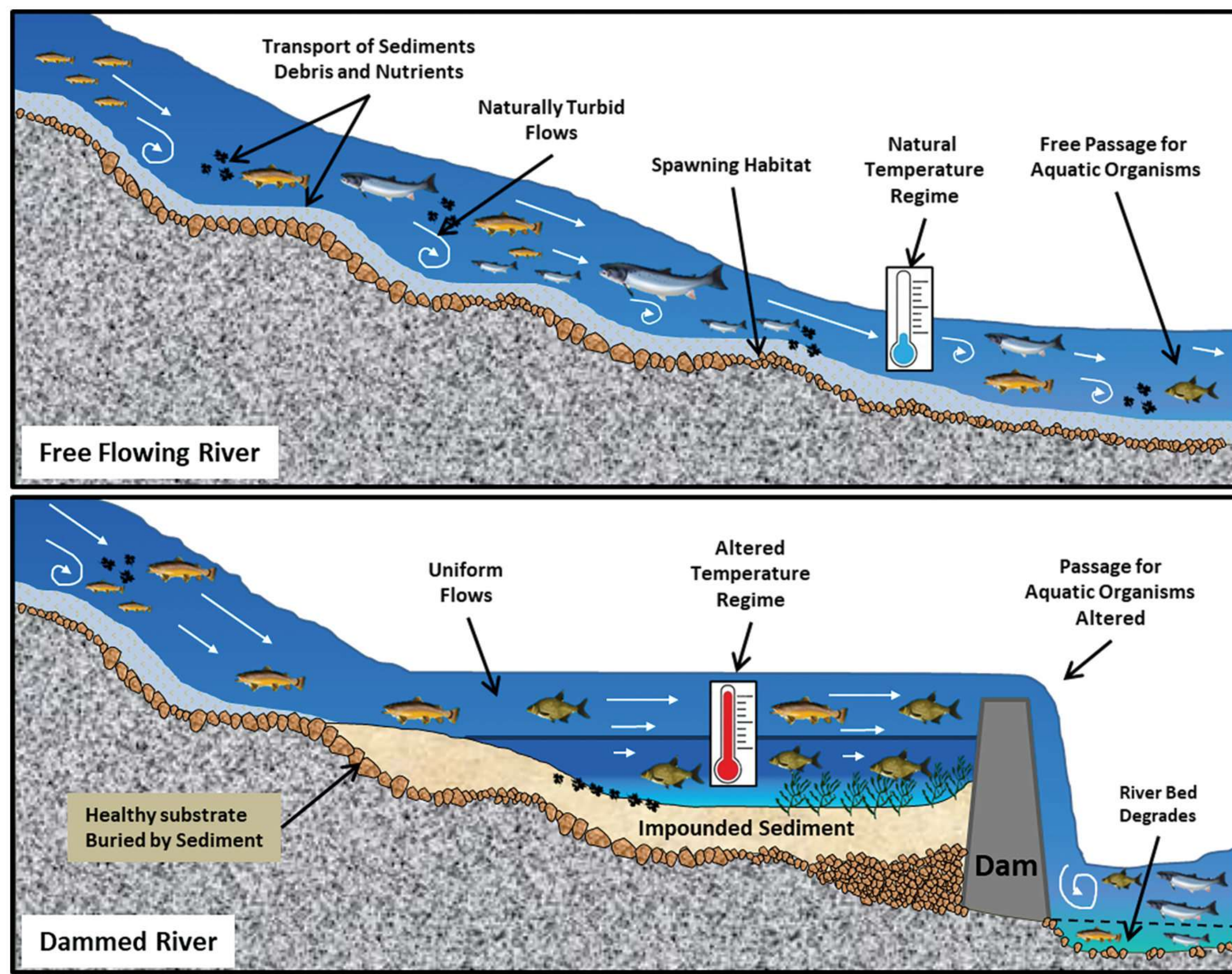
A weir is a barrier aimed at regulating flow conditions and water levels and/or intercepting sediment or reducing the channel slope; for stabilizing the channel bed of a river or stream. Water often flows freely over the top of a weir except in low flow conditions. Weirs come in many shapes and sizes but often have a height of less than 5 meters.

Annacotty Weir was used as a source of power generation in the past as a Mill. The weir is currently a serious barrier to lamprey, salmon and trout.

How can weirs impact rivers?

Weirs present fragmentation and disrupt the connectivity of the natural river processes. They can prevent natural sediment movement, water flow and habitat formation for a wide range of flora and fauna such as lamprey, fresh water pearl mussel and macro invertebrates.

To the right is a graphic highlighting the various problems fish species have with a structure like Annacotty weir.



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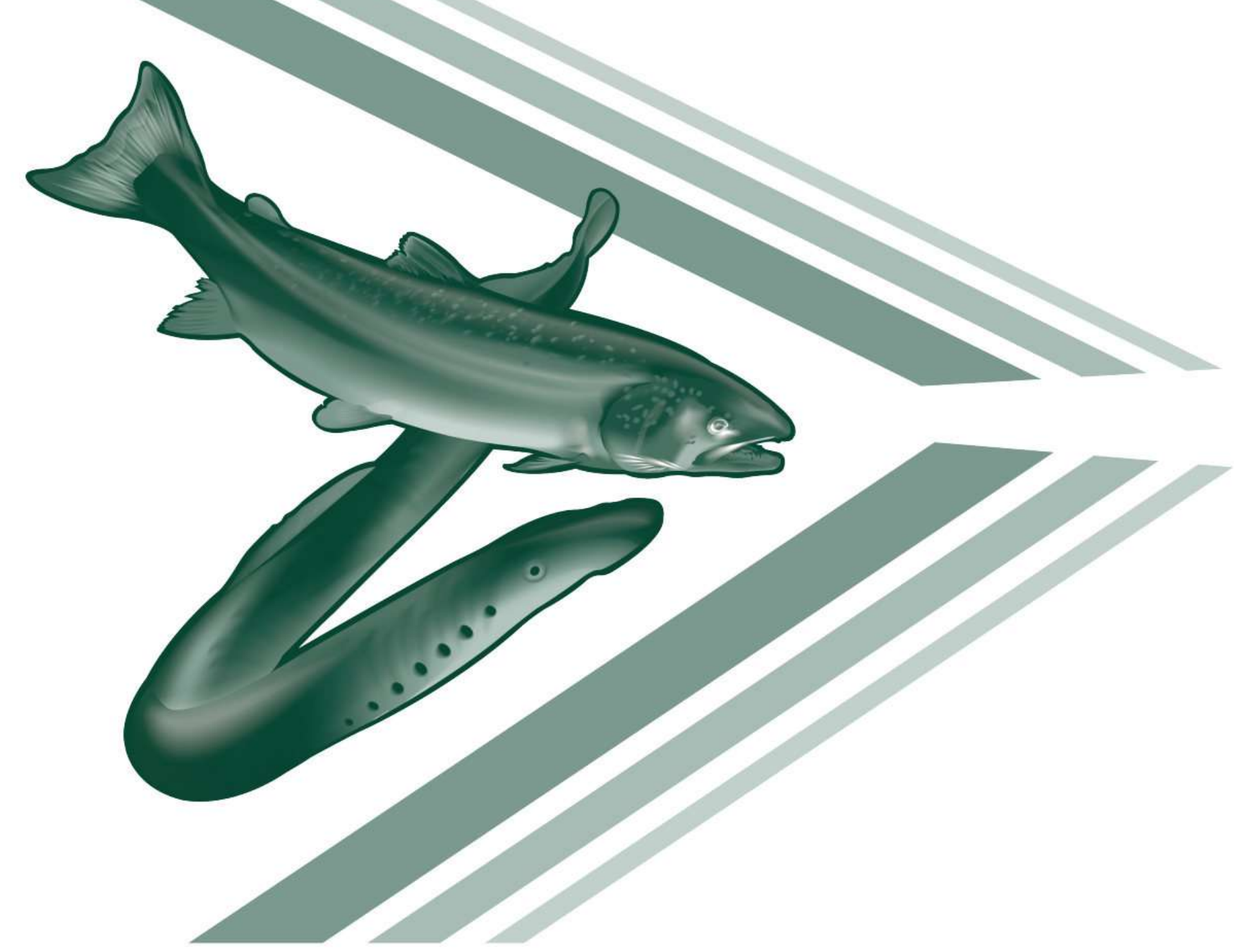
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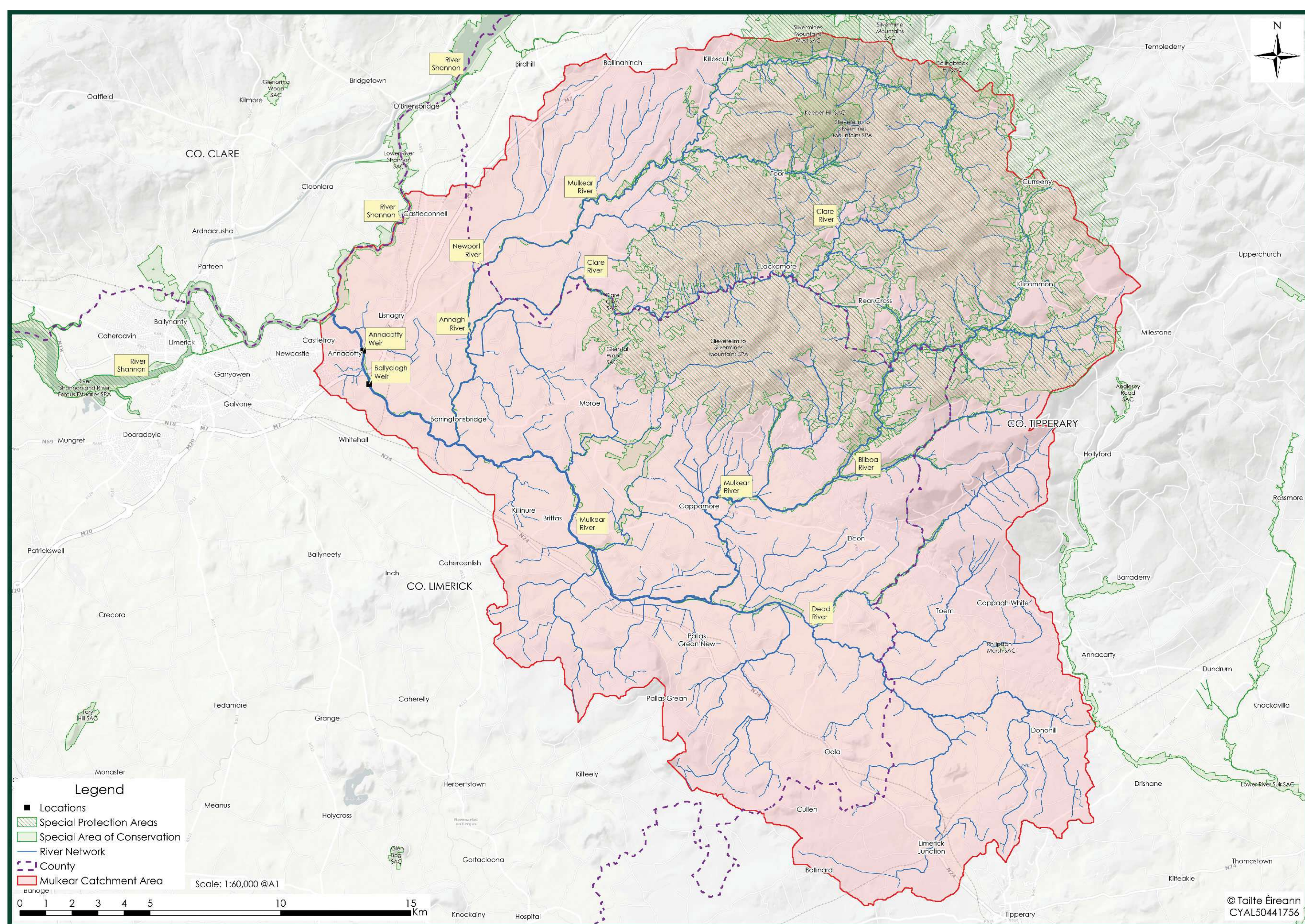
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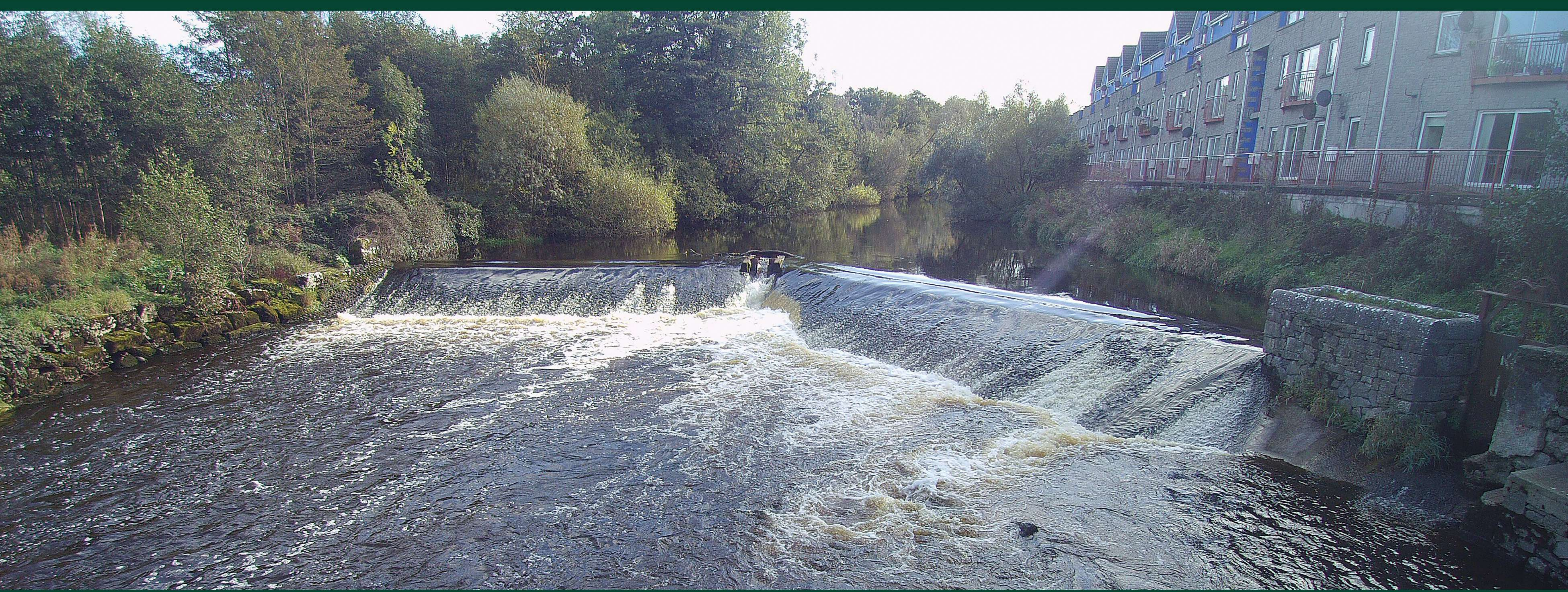
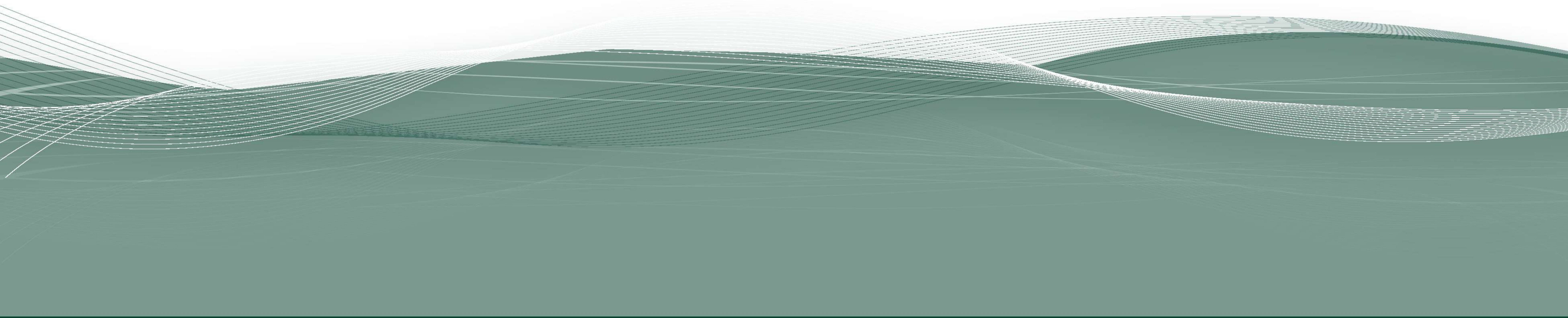


The Environment



The Catchment map shown above details the towns, rivers, special area of conservation and special protection areas for the Mulkear River. Annacotty Weir due to its location at the downstream end of the Mulkear Catchment is a high priority for mitigating due to the impacts on fish migration.

The fish species of the Mulkear River are Atlantic Salmon, Sea Lamprey, Brook Lamprey, River Lamprey, Trout and Eels.



The area around Annacotty Weir consists primarily of a mix of eroding river, mixed broadleaved woodland, buildings and artificial surfaces, amenity grassland/meadows and grassy verges/ scrub mosaic.

Invasive plant species at the site include giant hogweed and Himalayan Balsam with invasive aquatic species being Dace and the Jenkins Spire Snail.



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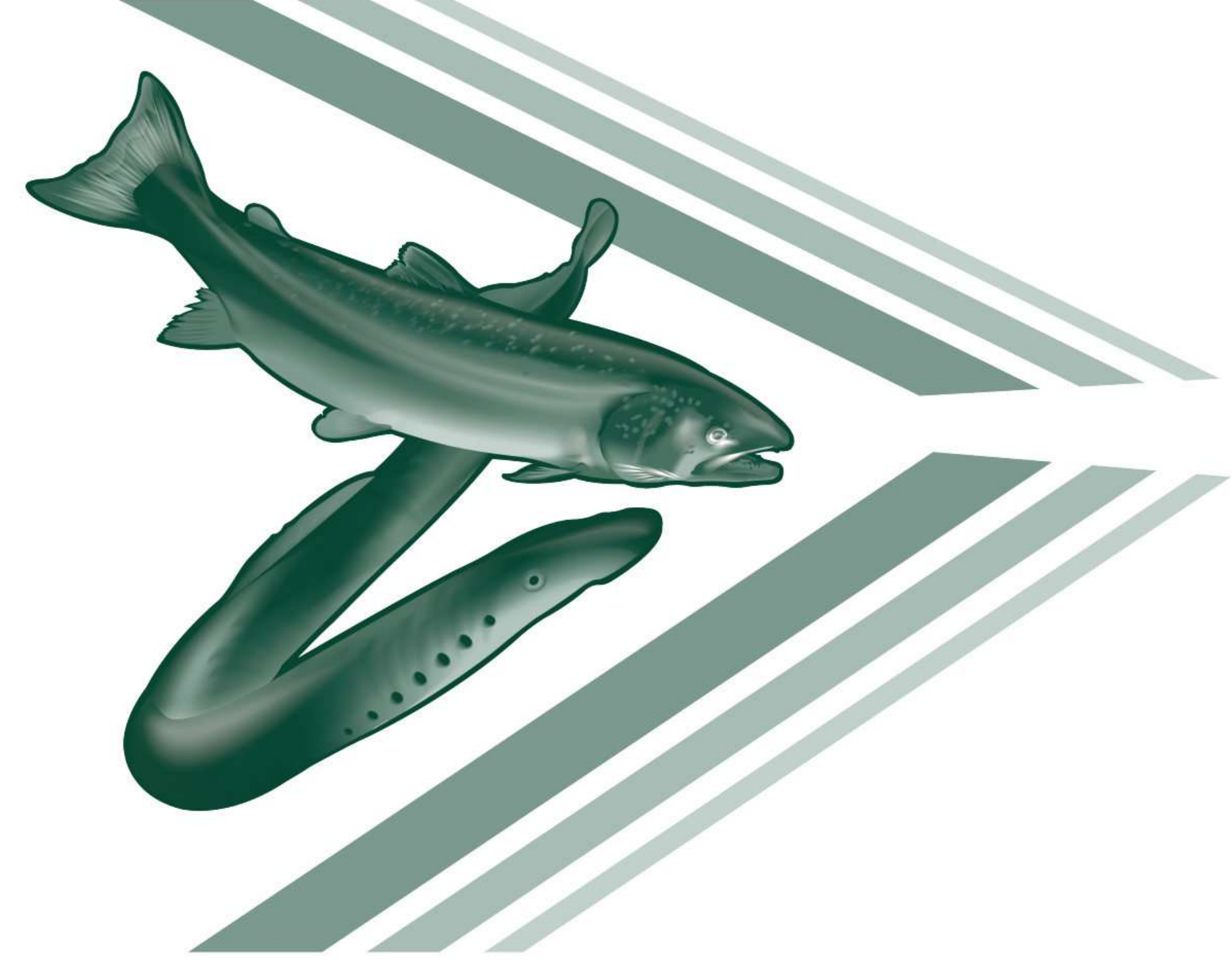
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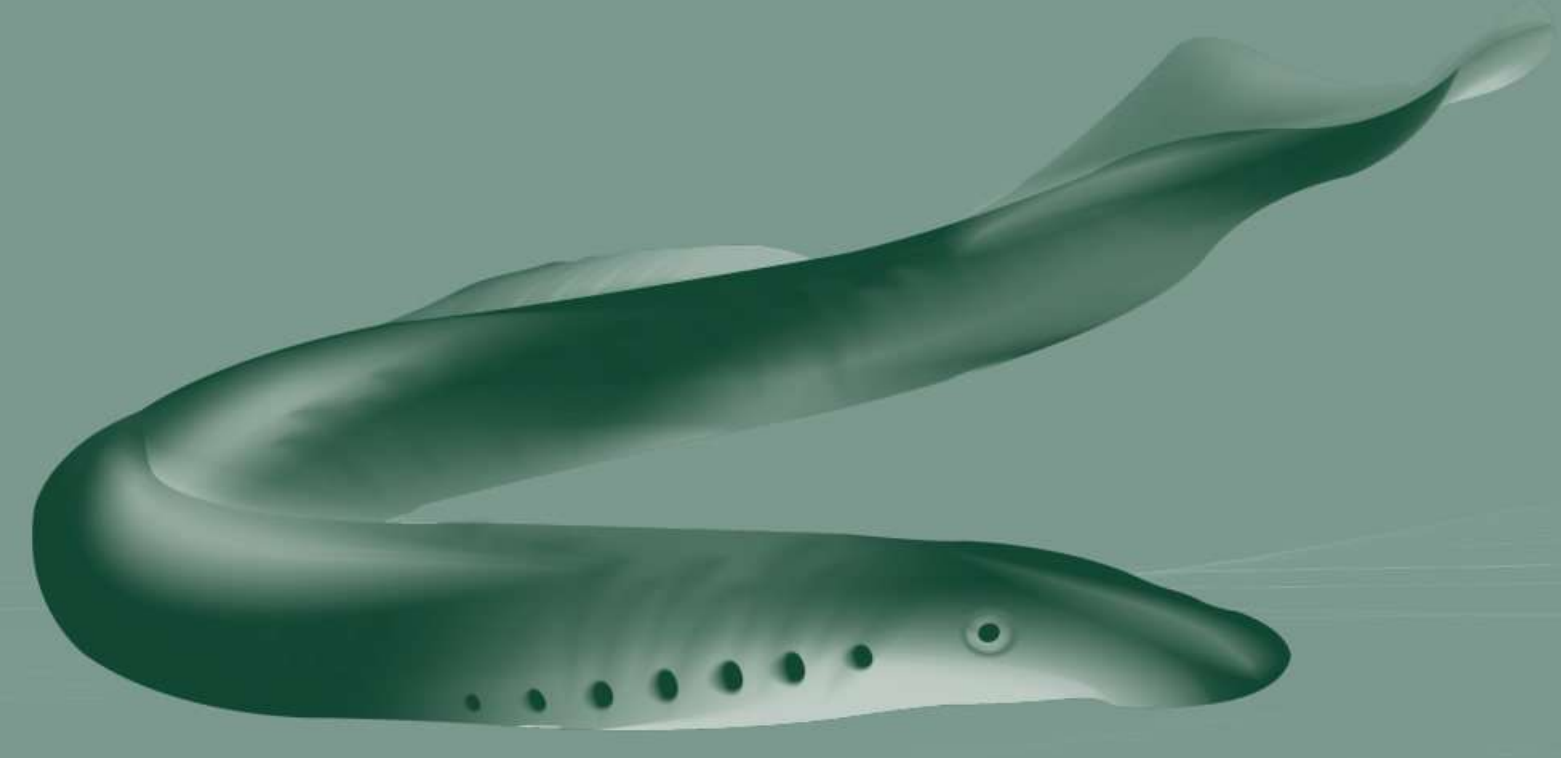
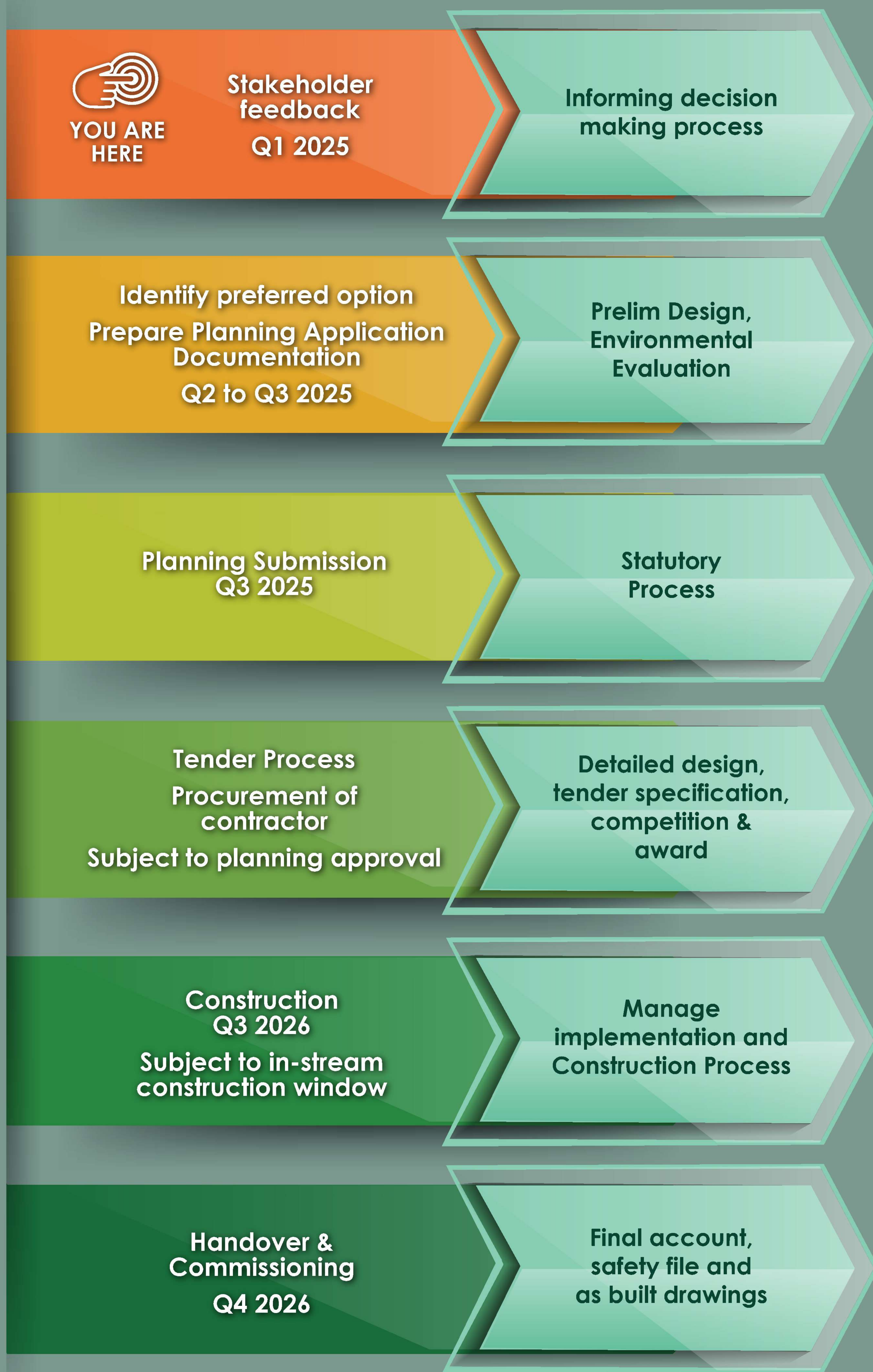
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Timelines & project next steps



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