



**Iascach Intíre Éireann  
Inland Fisheries Ireland**

Planning Section  
Kildare County Council  
Aras Chill Dara  
Devoy Park  
Naas  
Co. Kildare

16 May 2022

**Draft Kildare County Development Plan 2023-2029**

Dear Madam or Sir,

Thank you for the opportunity to contribute to the public consultation on the draft Kildare County Development Plan 2023-2029.

IFI is charged with the protection, conservation and promotion of fisheries within our functional area. Board policy is aimed at maintaining a sustainable fisheries resource through preserving the productive capacity of fish habitat by avoiding habitat loss or mitigating harmful alteration to habitat.

Of the three rivers draining County Kildare, the Barrow, Boyne and Liffey, within the County the lands draining to the Barrow catchment are the largest in area. The Barrow River is an important Spring Salmon and trout fishery and supports several species listed in Annex II of the Directive including Salmon, River Lamprey, Brook Lamprey, Sea Lamprey, Twaite Shad, Freshwater Pearl Mussel and Otter. The national/international importance of the Barrow River is recognised by the fact that almost the entire main channel of the Barrow River and many tributaries have been designated as Special Areas for Conservation (SAC) under the European Habitats Directive. The SAC designation of the Barrow River relates in large part to the importance of this system for populations of Atlantic Salmon. The Barrow is the second longest river in Ireland and the importance of the salmon populations of the Barrow is significantly increased by the fact it is one of a handful of Irish rivers where that majority of the salmon population are large MSW (Multi Sea Winter) fish, (often referred to as Spring Salmon).

Within County Kildare the entire Barrow main channel, much of the Lerr river and the lower reaches of the Finney river are SAC designated. Pollardstown Fen from which the Pluckerstown stream originates, a tributary of the Slate and Barrow is also SAC designated. Significant salmon spawning occurs on Barrow river tributaries that are not SAC designated. The Greese/Botkoge river, a large Barrow tributary rising in County Wicklow and flowing for a considerable distance through County Kildare is the most important salmon spawning/nursery tributary on the Barrow even though it is not SAC designated. Important salmon spawning also occurs on the Pluckerstown stream/Slate river, the upper reaches of the Finney river and many of its tributaries, the Tully river, the Figile river, the Cushina river and the Cushaling river. Adult salmon that spawn in the above non-SAC tributaries have migrated through the Barrow SAC to reach their spawning grounds and the progeny of these fish then drop down into deeper water as they grow eventually migrating downstream through the Barrow/SAC on their journey to sea. The salmon populations of these non-designated rivers are an integral component of the Barrow river SAC salmon populations.



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Our comments relating to the Draft Plan include:

**Section 6**, which deals with infrastructure and Environmental Services and states the availability of high-quality water, drainage infrastructure and environmental services are necessary to facilitate the sustainable development of the County and to protect the environment.

Poor land and surface water management in the past to make more land available for agriculture, reduced the natural storage within catchments and contributed to the severity of flooding events. The effect has been to increase the volume and speed at which the floodwaters arrive at vulnerable receptors downstream. Much of the main channel and tributaries in the upper Barrow have been subject to significant modifications including, realignment, deepening and widening. These modifications have significantly curtailed salmon recruitment throughout approximately 40% of the Barrow catchment and IFI believe that the habitat restoration within these impacted sections is integral to the restoration of populations of salmon and other native fish species throughout the Barrow system. Much of this drainage was undertaken by the Barrow Drainage Board, whose functions have now transferred to Kildare and Offaly County Councils and these areas are referred to historical drainage districts in the Kildare Plan.

IFI recognise the necessity of flood management, but we believe there is an obvious need to move to an integrated, catchment-based approach for the management of flooding which includes the restoration of fisheries habitat for native species such as salmon. IFI believe that river habitat restoration measures can be easily accommodated throughout these historical drainage districts, with no loss of instream flood conveyance capacity and that in addition to restoring and augmenting populations of native fish and other species, restoration measures can increase flood storage/retention, will introduce additional climate resilience, reduce the threat of invasive species, reduce the carbon footprint of future maintenance works and result in significant financial savings.

IFI hope to establish pilot projects in the upper Barrow on a catchment/sub-catchment basis to investigate restoration projects with co-benefits to address other significant pressures. Such projects could provide a template for a national restoration programme. IFI request that this plan includes a policy to support IFI pilot projects to investigate the incorporation of habitat restoration measures into flood management schemes on the upper Barrow and its tributaries.

In addition to clean water fish need a healthy habitat that provides spawning areas, shelter, and freedom of movement. The bed and soil of any surface water and the associated aquatic and riparian vegetation combine to provide the critical elements on which fish depend. A natural river channel is characterised by morphological features which are vital for the life cycle of fish: gravel shoals for spawning, pools and riffles where fish rest and feed, and turbulent reaches which enhance oxygenation.

Section 6 of this plan deals comprehensively with water quality, but there is little/no reference to the quality of river/riparian habitat. As stated above many watercourses throughout Kildare have been subject to hydro-morphological damage, significantly curtailing recruitment of native fish species in these waters.



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In addition to the objective to protect recognised salmonid watercourses in conjunction with Inland Fisheries Ireland, we request that section 6 of this plan include an objective to support river habitat restoration projects on the Barrow system in conjunction with IFI, where such projects include co-benefits to address other significant pressures.

IFI welcome proposals for the promotion of Sustainable Urban Drainage Systems (SUDS) in this plan. We are aware of numerous sites where attenuation ponds, water bodies linked to sand pits and quarries and ornamental ponds were illegally stocked with non-native fish species and other invasive aquatic plant species. Where SUDS are proposed and include ponds the potential/likelihood that non-native/invasive fish species could be introduced should be considered. IFI request that where proposed, ponds should be designed to reduce the potential for the introduction of non-native fish and managed so that they are dominated by emergent aquatic vegetation/plants with large areas which are intermittently wet.

#### **Section 7. deals with energy and communications.**

IFI recognise the commitment to promotion of renewable energy sources to achieve EU commitments to reduce carbon emissions. It is important however to highlight the distinction between the provision of renewable energy solutions and environmentally sustainable energy solutions. Hydro Electric Power (HEP) generation is a significant risk affecting fish migration in several Irish rivers. Many HEP facilities are located on the lower reaches of the main channels of larger rivers. This means that the impact from one site can have a catastrophic impact, as all runs of migratory fish on that system are affected.

IFI have serious concerns with the Policies and Objectives outlined in the Draft CDP, which *“Support proposals for hydro energy installations, including small-scale hydroelectric projects on the rivers, watercourses, freshwater dams and weirs across the County, where projects do not negatively impact on freshwater species, biodiversity and natural or built heritage features”*.

It is IFI’s experience that all hydro projects, both large and small, have significant potential for negative impacts on freshwater species and biodiversity. IFI are currently trying to resolve legacy issues on several hydroelectric schemes, both small and large scale within County Kildare, where several poorly designed, poorly maintained, and redundant hydro schemes are causing a hindrance to the free passage of fish, resulting in fish mortalities and a degradation to the overall aquatic environment.

Ireland has a legal obligation in accordance with The [EU Water Framework Directive \(2000/60/EC\)](#) which requires all Member States to protect and improve water quality in all waters so that we achieve good ecological status by 2015 or, at the latest, by 2027. It was given legal effect in Ireland by the [European Communities \(Water Policy\) Regulations 2003 \(S.I. No. 722 of 2003\)](#). IFI believe that the promotion of future hydro schemes in combination with existing schemes has the potential to lead to a further deterioration in fish life and biodiversity in the rivers of County Kildare, which is contrary to our legally binding requirements as set out in European Laws, which have subsequently been transposed into national legislation. This outcome would also be contrary to other policies and objectives contained within the draft County Development Plan. It is suggested that the proposed policy be reworded to consider the need to address



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existing legacy issues at hydro schemes in County Kildare to ensure consistency of policy throughout the document.

The plan supports the development of projects that convert biomass to gas or electricity subject to national and regional policy and biomass is defined as the biodegradable proportion of products, waste and residues from agriculture, forestry and related industries. Large areas of cut-over peatlands in the Bog of Allen area were planted with commercial afforestation in the recent past. This is of concern as, The National Peatlands Strategy 2016 highlights the lack of success in use of cut-over peatlands for afforestation, while the Dept. of Agriculture document, “Land Types for Afforestation” Working Document 2016, prohibits establishment of commercial forestry on cut-over peatlands. The main reason that the Dept. prohibits the commercial afforestation of cut-over peatlands is that it is not environmentally or economically sustainable with a recurring cycle of reductions in the biological quality of downstream waters, linked to establishment, thinning and primarily clear-felling operations on such sites. The very poor quality of timber growing on such peatland sites is of low value with limited uses. Of concern to IFI is that the construction of biomass facilities which utilise timber from such sites may consolidate the unsustainable afforestation of large areas of cut-over peatlands in the Bog of Allen area and be used to “Greenwash” this unsustainable practice.

IFI request that the plan state that the development of facilities involving the combustion of biomass will be promoted where the operator can demonstrate that the wood chip/wood pellets utilised are derived from environmentally sustainable sources.

### **Section 12 deals with biodiversity and green infrastructure.**

IFI welcome the commitment to enhancement of biodiversity in policy BI P1 of this plan and the focus given to protected habitats and species outside designated areas. This section addresses the issue of invasive species, and IFI welcome that the plan will support measures for the prevention and/or eradication of invasive species.

The invasive fish species Dace is particularly problematic on sections of the Barrow main channel and tributaries that were subject to deepening and widening by the Barrow Drainage Board. The degraded habitat in many of these channels confers an advantage upon the invasive Dace. Under the Water Framework Directive, Good Status on rivers is not solely determined by physico-chemical parameters. Biological status is another determining factor and the ability of rivers to support various age classes of different native fish such as trout and salmon, will be an important factor on whether Good Status is achieved. Sites dominated by invasive species such as dace can never achieve high status.

The restoration of river habitat on hydro-morphologically degraded systems can be an effective mitigation against the proliferation/expansion of invasive species such as dace. Habitat restoration confers a relative advantage to native species. Such measures provide other co-benefits including additional flood storage/protection and climate change resilience.

IFI hope to establish pilot projects in the upper Barrow on a catchment/sub-catchment basis to investigate restoration projects with co-benefits to address other significant pressures. IFI request that this plan includes a policy to support IFI river habitat restoration pilot projects throughout the upper Barrow as a measure to address invasive fish species. The pilot projects would confer an advantage upon native fish species such as



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salmon and trout over invasives such as dace, but with multiple co-benefits including climate change resilience and additional flood storage.

Chapter 12 includes the Green Infrastructure strategy for County Kildare, which it breaks down into 1. Core areas, 2. Stepping-stones and 3. Corridors. The plan defines core areas as large geographical areas of influence and importance for reasons of ecology, landscape designation, heritage, environmental management and environmental services.

The River Barrow SAC is very large and is the most extensive SAC within County Kildare, while other SACs such as Pollardstown fen are an important water source to salmon spawning tributaries of the Barrow system. The Barrow is the 2<sup>nd</sup> longest river in Ireland, and this SAC extends over 192km from the Slieve Bloom Mountains SPA/NHA through 5 counties to the Waterford Estuary SAC. It has significant migrations of a number of fish species between the marine and freshwater habitats and 23 separate habitats/species listed as qualifying interests. It is the only SAC within County Kildare that is specifically designated for salmon, lamprey species and otter.

IFI believe that we are justified in requesting that the Barrow River SAC be a core element of biodiversity and green infrastructure plans for County Kildare. IFI believe that the Barrow SAC fulfils criteria for Core Area designation and we the request that the Barrow River be included as one of the core areas as laid out in section 12.14.6 of the plan.

Of concern to IFI is the fact that many important salmon spawning rivers/streams linked to the Barrow have not been included as green corridors on the maps highlighting important biodiversity features. These include the Pluckerstown stream which flows from Pollardstown Fen to the Slate river, the important salmon spawning waters of the Botkoge, the large and extensive network of salmon spawning/nursery waters that makes up the headwaters of the Finney river, connecting the villages of Calverstown, Narraghmore, Suncoft and Kilmead. The Cushina river and Figile river, both important salmon waters were not included, these rivers extend for some considerable distance through Counties Laois and Offaly highlighting opportunities to link green corridors in County Kildare to those being proposed in County Development plans for other Counties. The Athy stream which represents excellent habitat with the potential for the development of a linear park/wildlife corridor through Athy was also not included. IFI believe that the absence of these important watercourses from the Green Infrastructure maps of County Kildare is a deficiency, and we request that the plan be revised to include all the above waters.

Relating to the Bog of Allen area the plan states that there will be a need to develop a separate masterplan to identify its own core areas. In the Barrow catchment the Bog of Allen is largely drained by the four tributaries, the Figile, Slate, Daingean and Cushina, which combined make up the Black river which, with a catchment area of 621km<sup>2</sup> represents 21% of the entire Barrow catchment. Salmon spawning occurs on the Figile, Slate and Cushina, while there is salmon spawning on the Esker (Daingean tributary), the Cushaling (Figile headwaters) and on the Pluckerstown stream (Slate tributary). The extent of salmon spawning on these systems however is limited by hydro-morphological/habitat damage, largely undertaken to facilitate commercial peat harvesting. Until relatively recently however salmon spawning/recruitment in these systems occurred over a far wider range. IFI believe many of these rivers such as the Slate and Cushaling have potential to be among the more important salmon spawning/nursery tributaries of the entire Barrow system.



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IFI hope to establish pilot projects in the upper Barrow on a catchment/sub-catchment basis to investigate restoration projects with co-benefits to address other significant pressures. Such projects could provide a template for a national restoration programme. IFI request that this section of the plan includes a policy to support IFI pilot projects to investigate the incorporation of habitat restoration measures on waters draining the Bog of Allen into flood management schemes.

IFI notes several references to a future Midlands Peatlands National Park throughout this plan. IFI support the setting up of a National Peatlands Park. The Bog of Allen is a huge area and the importance of the river throughout this area have been largely overlooked and forgotten. IFI believe that the story of these rivers and their importance as spawning/nursery areas for native fish species such as salmon should be at the centre of any plan for a National Peatlands Park.

IFI request a commitment in this plan that any proposals for a National Peatlands Park will consider the important rivers and populations of native fish and other species, draining the Bog of Allen area.

Should you require further clarification on any of the above or require a consultation meeting please contact Inland Fisheries Ireland.

Yours faithfully,

Donnachadh Byrne  
Senior Fisheries Environmental Officer

**Please note that any further correspondence regarding this matter should be addressed to Mr. Donnachadh Byrne, Senior Fisheries Environmental Officer, Inland Fisheries Ireland, 3044 Lake Drive, Citywest Business Campus, Dublin 24**