



Iascach Intíre Éireann
Inland Fisheries Ireland

**To: Joint Committee on Housing, Local Government and Heritage, Leinster House, Dublin 2.
D02 XR20**

Our Ref. NatEnv_Abs_002
Your Ref. HLGH-i-35

Re: Invitation to make a submission in relation to Pre-Legislative Scrutiny of the General Scheme of the Water Environment (Abstractions) Bill

Introduction

Inland Fisheries Ireland (IFI) is a Statutory Body established on the 1st July, 2010. Under section 7(1) of the Inland Fisheries Act 2010 (No. 10 of 2010) the principal function of IFI is the protection, management and conservation of the inland fisheries resource. Ireland has over 70,000 kilometres of rivers and streams and 144,000 hectares of lakes all of which fall under the jurisdiction of IFI. The agency is also responsible for sea angling in Ireland.

IFI is mandated to ensure that the fisheries of the State are protected. To protect means to keep safe, defend, to shield from danger, injury or change. "Fisheries" includes all inland fisheries recreational and commercial, sea angling and mollusc fisheries stipulated under the Fisheries Acts, the physical habitat upon which the fishery relies, the facilities and access, the quantity and quality of the water and the plant and animal life on which fish depend for shelter and food and the spawning areas where in fish deposit their eggs. The protective role of IFI relates to all aspects of the aquatic environment and all factors that influence the biotic communities within waters, which in any way relate to the propagation of fish stocks / populations.

Under section 7(3) of the IFI Act it is stated that: *without prejudice to subsection (1), IFI shall in the performance of its functions have regard to –*

(g) the requirements of the European Communities (Natural Habitats) Regulations 1997 (S.I. No. 94 of 1997) and the need for the sustainable development of the inland fisheries resource (including the conservation of fish and other species of



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*fauna and flora habitats and the biodiversity of inland water ecosystems),
(h) as far as possible, ensure that its activities are carried out so as to protect the national heritage (within the meaning of the Heritage Act 1995).*

The EU Water Framework Directive (2000/60/EC) entered into force in December 2000 and requires the protection of the ecological status of surface and ground waters – this encompasses (among other elements) water quality, quantity and requires the conservation of habitats for ecological communities. One of the primary objectives of the Directive is to establish a framework which prevents further deterioration and protects and enhances the status of aquatic ecosystems. Article 5 of the 2009 Surface Water Regulations requires that a public authority, in performance of its functions, shall not undertake those functions in a manner that knowingly causes or allows deterioration in the chemical or ecological status of a body of surface water. Article 28(2) of the said regulations states that a surface water body whose status is determined to be less than good shall be restored to at least good status not later than the end of 2015.

'Hydromorphology' considers the physical character and water content of water bodies. Good hydromorphological conditions support aquatic ecosystems (i.e. hydromorphological elements such as water flow and substrata - which provide physical habitat for biota such as fish, invertebrates and aquatic macrophytes) (EPA 2020). The Bill recognises that protection of the aquatic environment / habitat not only requires the protection of water quality but also necessitates the protection and maintenance of physical habitat and hydrological processes and regimes (with a particular emphasis on abstraction impacts and pressures). In this context and bearing in mind obligations to ensure sustainable development, the Bill addresses the overarching requirement to prevent deterioration in the chemical or ecological status of waters.

Sustainability, Abstractions and Protection of the Environment

Protection of the aquatic environment must imply a greater commitment than merely to prevent fish mortality or protect water quality or quantity. Sustainable management of hydrological regimes is necessary to safeguard the fisheries resource and avoid potential negative impacts on habitat and biological functions. Maintenance / improvement of aquatic habitat is a particularly important fisheries objective and forms part of the broader remit of other environmental authorities (WFD objectives).

Climate Disruption

Climate disruption is expected to have diverse and wide ranging impacts on Ireland's environment, society and economic development, including managed and natural ecosystems, water resources, agriculture and food security, human health and coastal zones. The most immediate risks to Ireland which can be influenced by climate change are predominantly those associated with changes in extremes, such as droughts / floods.



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These factors should be integrated in every decision made when planning for surface / groundwater management. High temperatures / low flows cause changes in species distribution and phenology, including native, non-native and invasive species. Ireland's native fish populations such as Salmon, Brown trout, Pollan and Arctic char are cold water species and are more vulnerable to climate change and warming of our waterbodies than those fish species that have been introduced over the last 100 years.

Water Abstraction (surface and groundwaters) can have detrimental effects on fish species that spawn on the lake shore or in riverine areas where gravels become 'dried out' at certain times of the year - in particular Arctic char, Brown trout and Atlantic salmon. A sample of possible issues that can arise through abstraction of water are:

- Loss of habitat (including riparian zone) impacts - a smaller stream will support fewer fish, particularly territorial species.
- Blockage of migration pathways.
- Loss of spawning or nursery areas due to reduced flow or 'dried out' areas in a waterbody.
- Changes to habitat quality from heating, reduced oxygenation and reduced dilution of effluents and pollution.
- Drying out of riffles (the major food production areas of stream systems).
- Entrainment of juvenile and larval fishes in pump intakes, particularly on the upstream migration.

Extreme Flows, Abstractions and Fish

During very dry, drought and / or heatwave conditions, abstractions (including unauthorised and ad hoc abstractions) and associated works (e.g. temporary erection of dams and barriers) have represented a significant risk to water quality, quantity, the inland fisheries resource and broader biological diversity. This risk progressively becomes more acute as the period of drought persists. IFI advocates a precautionary approach at all times. Proposals for abstraction must thoroughly consider relevant requirements of Fisheries, Water Framework Directive, Habitats Directive and other relevant legislation. From a fisheries legislative perspective, the issues of fish entrainment and alterations to free fish passage / migration and habitat are critical issues to consider. Notwithstanding this, any abstraction activity (at any volume) must be in compliance with Fisheries and all other relevant legislation at all times.

Decision-makers must take account of climate disruption when considering any proposal. IFI will seek to support these measures while ensuring that any input via formal or informal planning measures (national or regional) is grounded in and focused on IFI's legislative remit.



Comments on specific provisions in the General Scheme of the Water Environment (Abstractions) Bill

Head 2 - Interpretation

The definition of 'abstraction point' appears restrictive and risks excluding sites of significant abstraction activity currently in operation. IFI has recommended revisiting this definition to include 'diversionary channels or canals' or other similar abstraction points not specifically listed.

Head 5 - General binding rules

IFI advocates a mandatory requirement to accurately measure and record abstraction data at the abstraction point of each regulated location. The provision of flow measurement infrastructure should not impact on natural habitat and the fisheries resource.

As provided for under the Water Framework Directive, IFI understands that it is proposed to exempt from registration or licensing, abstractions which have no 'significant impact' on water status. The proposal mirrors the approach taken in Scotland and Wales where a system of lower thresholds is in operation. IFI note that a threshold of 25m³ per day was chosen in the Bill for consistency with Section 9 of the Local Government (Water Pollution) Act 1977. IFI remain concerned that this threshold may not afford adequate protection to the fisheries resource at all sites and continues to advocate a precautionary approach. In a very small stream which may be fish bearing, an alternative approach using threshold(s) based on a percentage of '95 percentile' or 'low flow' levels may be more appropriate. The threshold of 10 m³ per day (as in operation in Welsh and Scottish jurisdictions) is recommended as the lower threshold for registration generally.

IFI suggests that the system in operation in Scotland (a biogeographical region similar to Ireland) would be more precautionary from a resource management perspective and may be more appropriate in an Irish context. The system is understood to operate as follows:

- 10 to < 50 m³ – register
- 50 to <2000 m³ – licence
- >1999 m³ – complex licence



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IFI highlights the fact that notwithstanding any general approach developed on the basis of such thresholds and the concept of 'significant impacts', further assessment or regulation may be necessary in sub-threshold site specific cases where the fisheries resource may be at risk. It must be assumed that all watercourses, no matter how small, are fish bearing or have potential to bear fish or the food of fish – (until proven otherwise).

A number of activities may require specific consideration for inclusion under general binding rules. These activities include but are not limited to areas such as extractive industry, aquaculture, horticulture, sub-threshold (IPPC) activity, forestry nursery operations, hydroelectric installations, put and take fisheries / ornamental lakes and ponds, industrial cooling water abstraction and *ad hoc* water abstraction (e.g. to water crops, parks, public areas) etc.

Head 6 - Temporary Abstractions

A precautionary approach to definition of 'temporary abstraction' for the purposes of the Bill is strongly advocated. In effect, the definition should specifically limit the proposed exemption to a small and environmentally benign range of activities. It is IFI's practical experience that those engaging in recurring abstraction activities using mobile plant and machinery can, in good faith, consider their activities 'temporary' and 'unplanned' in nature (regularly associated with periods of low flow and drought) while the environmental impact of these activities can be significant. Regulation of abstraction activities should not exempt those engaged in these practices where significant impacts can arise but rather should require a proactive, sustainable approach grounded in formal forward planning.

Head 7 - Register of Abstractions

IFI welcomes the inclusion of Subhead (13) making provision for data exchange between Public Authorities to enable the discharge of statutory functions. IFI is seeking the earliest possible opportunity to contribute to site specific regulation in order to assist in protection of the inland fisheries resource at all times.

Head 8 - Impact of abstractions on the status of surface water and groundwater

IFI welcomes the enhanced characterisation (via the WFD and Habitats Regulations processes) of abstraction pressures proposed. IFI agrees that there should be no deterioration in the status of relevant sites as a result of abstraction activities. IFI would welcome detail in respect of how assessments of 'impact significance' will be delivered.



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Any regulation of abstraction should thoroughly consider relevant requirements of fisheries and other relevant legislation (WFD, Habitats Regulations etc.) with a particular focus on fish entrainment and fish passage / migration.

Head 21 – Emergency abstraction for public drinking water supply

IFI has worked proactively and in collaboration with Irish Water and all relevant statutory authorities to protect continuity of drinking water supply during recent episodes of drought.

IFI must stress the fact that notwithstanding any general approach developed on the basis of emergency need, further assessment or regulation may be necessary in site specific cases and prior liaison / agreement with environmental authorities is possible (and in our view crucial) in delivering a sustainable solution. It must be assumed that all watercourses, no matter how small, are fish bearing or have potential to bear fish or the food of fish – (until proven otherwise). Any abstraction activity (at any volume) must be in compliance with Fisheries and all other relevant legislation at all times.

IFI is grateful for the opportunity to have these views considered as a component of the current Pre-Legislative Scrutiny of the Water Environment (Abstractions) Bill. Should you require clarification on any of the above please contact the signatory on the accompanying letter.

Inland Fisheries Ireland
03rd December 2020