Submissions received (redacted) to Draft Western Lakes Plan

Part 3

IFI/2023/1-4648

Iascach Intíre Éireann
Inland Fisheries Ireland

PUBLIC CONSULTATION SUBMISSION TO INLAND FISHERIES IRELAND DRAFT LONGTERM PLAN ON THE PROPOSED DESIGNATED SALMOND WATERS OF THE GREAT WESTERN LAKES AS PUBLISHED IN JUNE 2022 - IFI/2022-4618

Submitted from Rossinver Fishery Rossinver Co Leitrim.

Rossinver Fishery owns the fishing on a third of Lough Melvin. Rossinver Fishery is member owned with around 100 members and permit holders.

Rossinver Fishery is very disturbed that Lough Melvin was not included in the Western Lakes Plan and would like to see this omission rectified.

Lough Melvin urgently needs to be actively managed as a Salmonid Fishery as in fact it is already a designated SAC.

It is critical to the protection of our unique and endangered species of trout Sonaghan and Gillaroo and indeed Salmon.

Rossinver Fishery sstrongly supports the submission of FISSTA of which we are a member and reproduces part of the FISSTA submission below.

FISSTA welcomes the Government's genuine intention by the Minister, through IFI this time and not his Department, to introduce greater protection in designating Salmonid waters in the proposed Draft Plan as published on August 10th 2022, which includes 49 pages of the Draft Plan, 26 pages of the SEA Scoping Report and 83 pages of the Invas Appropriate Assessment Report, Press releases, Briefing meetings details and questionnaire which amounts to over 170 pages that took almost a year to prepare and for to expect a professional and constructive response from our federations by September 20th is unreasonable to the point of discouragement.

However, while we have read and debated the above documentation, we see it as a deflection to confuse and therefore will not engage or comment in detail in this submission until the obvious omission is rectified and the key sentence is inserted.

While we acknowledge the depth of work developed over a year that now has been submitted as a proposed roadmap to achieve our objectives of last year, we must state clearly this plan will not provide this intended protection and management responsibility that is required to safeguard these unique and important habitats while a mixed stock coarse fishery is being accepted. The EU Habitats Directive has long protected the integrity of our SAC's and our salmonid species, but this draft plan will now undermine it without a shadow of a doubt.

Last August, you may remember, in our submission to the Dept byelaw public consultation, we asked Minister Ryan to do two things to rectify the proposed bye law,

we proposed the following because we had trust in Inland Fisheries Ireland:

1. **This proposed draft Bye Law will not achieve the objective of protecting our unique salmonid habitat as it proposes to transfer the management responsibility from Inland Fisheries Ireland to the Minister unless the entire Section 7 is deleted.**

2. **We would also require that the Minster removes the word "primarily" from Section 4 which reads:** "The designated waters shall be managed primarily for the benefit of wild salmonid species. **to read as follows: "The designated waters shall be managed for the benefit of wild salmonid species."**

Rossinver Fishery strongly believes that coarse fish levels in Lough Melvin must be controlled Specifically Perch and Roach/Rudd hybrids are at record levels and are a detriment to the native Sonaghan and Gillaroo population.

The fishing clubs are willing to trap the coarse fish and relocate them to designated coarse fisheries.

Thankfully, the general angling public and our members agreed with these requests and further plans for the proposed Bye Law from the Department was dropped in a press release of September 2nd 2022 and was to be replaced by the IFI Draft Designated Salmonid Lakes Plan with *"its proposal to develop an evidence-based management plan for the seven lakes and to submit timelines for the plan to the Department by the end of September"* - within 28 days on September 30th 2022, which led us to believe that we should have at least had a draft before November or Christmas.

We can only speculate on what has delayed this Draft Plan which was already the product of a public consultation, and surely would not have merited another public consultation as time for urgent salmonid protection and conservation implementation is of the essence.

Whatever the delay, we hoped and trusted the eventual outcome would reflect the spirit of the 152 submissions out of the 180 that had the one theme that supported the call for legislation to designate our Western Lakes as salmonid lakes as laid down in the programme for Government.

Inland Fisheries Ireland's (IFI) very own submission summarised it very well, when it stated on page 3 under a heading of CONFLICTING BYELAWS that:

"it is evident, that unless the lakes in the Schedule to the draft bye law are excepted from the provisions of the two Byelaws – namely Byelaw 806 and Byelaw 809 of 2006, the byelaw it stands, does not achieve its stated aim of protecting the wild brown trout status of the lakes. In fact these byelaws have resulted in fish species which have become 'naturalised' in these lakes are now afforded equal protection to the native species which have bee there since the retreat of the last ice age. This is contrary to the aims of the Habitat Directive and fisheries legislation in general."

Indeed, the entire five pages have some excellent management plan points for a Designated Salmonid Lakes Plan that we enclose it in its entirety below, for your consideration.

Also, the Coarse Fish Conservation Bye-Law (No. 806) and the Pike Conservation Bye-Law (No. 809) continue to conflict with Ireland's legal obligations under the EU Habitats Directive and Water Framework Directives. Under the EU Water Framework Directive, IFI have been surveying lakes and rivers since the late 2000's using the FIL2 model, which classifies pike and most coarse fish as "non-native influencing ecology" for Ecoregion 17 (Ireland). Water bodies with non-native invasive fish species will not meet high status for EU Water Framework Directive (WFD) purposes due to the presence of these species. Future introductions of non-native species will also lead to a downgrading of the ecological status of a water body.

We are also aware through our membership who submitted multiple FOI and AIE requests to both IFI and their parent government department that no appropriate assessment screenings were conducted on the two bye-laws (806/809) when they were formulated in 2006. These bye-laws constitute a plan as laid down by articles 6.3 and 6.4 within the EU Habitats Directive. The screening requirement for bye-laws was confirmed in the Dáil by Minister Eamon Ryan on July 27th 2021 when responding to a PQ. With no screenings these two incumbent bye-laws are legally inadmissible and are completely at odds with the 'precautionary principle' laid down by the EU Habitats Directive. Without the insertion of this wording, IFI and the government will continue to stand over two bye-laws that encourage and

reward through conservation the spreading of invasive pike/coarse fish throughout the country including the deliberate targeting our salmonid SACs?

Therefore, we appeal to you as the state body responsible for the protection, conservation and management of the inland fisheries resource

to include in the draft plan for the long-term management for the seven lakes, the above principled wording shaded in yellow along with spirit of the enclosed five pages from your submission to the Minister of last August.

The lakes have long-been designated, as a matter of policy, to be managed primarily as wild brown trout waters. Therefore, the proposed management programmes for these lakes, as set out in the draft plan, will protect, conserve and, where possible, enhance the lakes' natural attributes and native biodiversity if this key principle is inserted to comply with the EU Habitats Directive.

We look forward to continuing to work with the Minister and his staff, and IFI to improve and enhance our wild salmonid habitat.

Yours sincerely

[redacted]

Rossinver Fishery

[redacted]

[redacted]

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APPENDIX 1 - COPY OF IFI SUBMISSION TO PUBLIC CONSUTLTATION AUGUST 2021

Iascach Intíre Éireann
Inland Fisheries Ireland

Designated Salmonid Waters Byelaw
Submission to Public Consultation

August 2021

Author(s):	Inland Fisheries Ireland
Description of Content:	Submission to Department of the Environment, Climate and Communications

Byelaw Proposal

On page 66 of the programme for Government it states that the government intends to "Legislate to designate our western lakes as salmonid lakes".

IFI welcomes the Government's commitment to recognise these exceptional limestone lakes which are unique in Europe as salmonid – in particular wild brown trout - lakes. The intention of the designation of these lakes as 'salmonid' lakes from IFI's perspective needs to be fully explained. This requires some background.

Background:

Since the 1950's, and probably before, the main large limestone lakes of Ireland were selectively managed as wild brown trout fisheries. Few countries have such a unique resource whereby there is adequate spawning in clean rivers for wild trout to breed and this is complimented by limestone lakes with extensive stoneworth (*Charaphyte sp*) beds in which an abundance of invertebrate life exists on which the wild trout, which migrate down from the nursery streams, feed and grow quickly.

In the earlier years the fish fauna of these lakes was less diverse – over time more species appeared in these lakes as a result of anthropogenic activity and as a consequence most of these lakes have additional non-native species competing with the trout for food.

Under the management of the Inland Fisheries Trust all the large limestone lakes – some of which were originally known as the 'Crown Lakes' were managed selectively for wild brown trout angling. This entailed removing predator and competitor species as part of a management programme. It is IFI's policy and intention that the lakes in the Schedule to this draft bye-law will continue to be managed into the future with the reduction, through both angling and direct management, of both competitor and predator species into the future.

Proposed Designation:

The designation of these lakes is welcomed by IFI but should be simple. They are already designated in terms of the established management policy of Inland Fisheries Ireland and the agencies that preceded it such as the Central and Regional Fisheries Boards and the Inland Fisheries Trust and also marketing of these lakes as wild brown trout fisheries. However, there was never formal recognition of this. In the view of IFI, it is unclear that this byelaw, as currently drafted, actually achieves the intent of IFI to protect these lakes and enshrine their management in such a manner that they are primarily wild brown trout fisheries and competing or predator species shall be removed to improve the opportunity for trout to survive and grow.

On another detail, in view of the fact that some of the lakes in question are remote from the sea and have no migratory salmon component to their population – the byelaw would be best worded to specify wild brown trout as opposed to salmonid.

Conflicting Byelaws:

One of the over-riding concerns of Inland Fisheries Ireland in the past 15 years was the fact that two bye-laws introduced in 2006, (specifically to prohibit the widescale harvest of pike and coarse fish from certain waters in Ireland), was directly in conflict with the management policy of the then Central and Regional Fisheries Boards. This was intended as a 'stop-gap' measure to address a particular threat – but the anomaly caused by these byelaws in respect of the management and marketing of the Great Western Lakes as wild brown trout fisheries has continued for an inordinate period of time. The proposal to designate these lakes as salmonid (or wild brown trout) lakes must address this inconsistency once and for all.

It is evident that unless the lakes in the Schedule to the draft byelaw are excepted from the provisions of the two Byelaws – namely Byelaw 806 and Byelaw 809 of 2006 the byelaw as it stands does not achieve its stated aim of protecting the wild brown trout status of the lakes. In fact these byelaws have resulted in fish species which have become 'naturalised' in these lakes are now afforded equal protection to the native species which have been there since the retreat of the last ice age. This is contrary to the aims of the Habitats Directive and fisheries legislation in general.

Stock Assessments, Carrying Capacity and Angling Returns:

The draft byelaw as currently stated also appears to bind IFI into a massive undertaking in terms of regular stock assessments of all the lakes in the schedule (7) including most of the largest lakes in the country and such an assessment will also require surveys of all feeder rivers and streams. This will require very significant additional resources for IFI to be able to deliver on this component annually. Coupled with the assessment of the stocks IFI will be required to identify the carrying capacity of the lakes, the current stock and the 'harvestable surplus' available to anglers. IFI have never done such a detailed stock assessment for any of these lakes previously and the cost of such a commitment into the future for seven lakes will be very substantial.

The logical extension from this would be that the complimentary element to this will be an assessment of the fishing effort and catch of trout on the lakes in question. Previously voluntary "Creel Census" returns were introduced for some of these lakes but with limited success. Creating a system for all anglers to make required returns will be another significant administrative burden and may be seen by some as the precursor to the introduction of a 'fee or licence for trout angling' on these lakes which, it is clear, will never be an acceptable funding mechanism.

Without the substantial additional resources annually to carry out all these requirements IFI will not be in a position to fulfil the terms of the byelaw. This may lead to IFI being in breach of the byelaw which would be an unacceptable scenario. Furthermore, the byelaw as currently worded empowers the Minister – a politically elected public representative to amend the plans of IFI – prepared by fishery management professionals and scientists 'as he sees fit'. This leaves the future

management of these vitally important lakes open to potential pressure for change from lobby groups and takes it away from professional fisheries managers where such expertise exists and should remain.

Summary & Recommendations:

In the light of the foregoing IFI propose that a more manageable approach be adopted. One that addresses the fundamental anomalies of the 2006 byelaws and also encourages anglers to play their part in the future management of the lakes.

IFI believes this matter would benefit from further discussion and debate prior to finalising the wording of the proposed byelaw. This should involve detailed discussion with the relevant stakeholders in particular the local resident, local anglers, key tourist interests including guides, angling centres as well as local angling clubs. The buy-in from these sectors is fundamental to the success of the future management of these lakes. However, should that approach not be possible at this stage IFI proposes that the byelaw be amended to include the following:

(1) Calling the byelaw the Designated Wild Brown Trout Waters Bye-Law .....

(2) Defining "designated waters" as means the waters designated as wild brown trout waters under Article 3: which shall be managed by Inland Fisheries Ireland specifically for wild brown trout (Salmo trutta) in all its forms and subspecies.

(3) Defining "wild brown trout" as meaning fish of the species (Salmo trutta) including Ferox, Sonaghan and Gillaroo trout.

(4) Specifying that the designated waters shall be managed specifically as premier wild brown trout fisheries. Management shall include the unrestricted removal of predator and competitor species either by direct management or angling.

(5) Exempting the waters in the schedule from the provisions of Byelaw 806 of 2006 – for example:- The waters in Schedule 1 Column 2 of this byelaw shall be excluded from the bag limit and size provisions of byelaw 806 of 2006 namely a person may take (by angling) and kill more than 4 coarse fish and including fish less than or greater than 25 cms measured in a straight line from the tip of the snout to the fork of the tail.

6. Exempting the waters in the schedule from the provisions of Byelaw 809 of 2006 – for example:- The waters in Schedule 1 Column 2 of this byelaw shall be excluded from the bag limit and size provisions of byelaw 809 of 2006 namely a person may take (by angling) or kill more than one

pike including pike less than or greater than greater than 50 cms measured in a straight line from the tip of the snout to the fork of the tail.

7. Include a general provision for the proper management of the fishery – i.e. - IFI shall do whatever it deems necessary for the proper management of the lakes in Schedule 1 as wild brown trout fisheries.

8. Leave the transfer provision in the proposed regulation:- (a) A person shall not put or transfer into the designated waters fish of any species without the prior written consent of IFI. (b) An application for the prior written consent of IFI referred to in paragraph (a) shall be made in writing to IFI.

APPENDIX 2 - FISSTA SUBMISSION IS BASED ON THIS REFERENCE DOCUMENT AS IT LINKS LEGAL, ENVIRONMENTAL AND POLICY IN RELATION TO EU HABITATS DIRECTIVE SITES

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Viewpoint

A legal and ecological perspective of 'site integrity' to inform policy development and management of Special Areas of Conservation in Europe

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ABSTRACT

The European Union Habitats Directive (92/43/EEC) provides for the designation and management of Special Areas of Conservation (SACs) and requires that impacting activities are subject to 'an appropriate assessment' of their implications for the 'integrity' of the site. We define the term 'site integrity' from a legal and an ecological perspective. We demonstrate that 'site integrity' is the maintenance of ecological processes and functions that support the wider delivery of ecosystem services. 'Site integrity' can be influenced by SAC management. Management that seeks to support 'site integrity' may include the use of buffer zones or connecting areas that extend beyond the SAC site's designated features. We conclude that 'site integrity' and 'favourable conservation status' are powerful legal terms that if fully transposed into the law and policy of Member States can enable the achievement of broader European and International goals for marine conservation.

1. Introduction and legal perspective

Widespread and intensive human activity in the world's oceans and the subsequent loss of marine populations and species are believed to be impairing the ability of marine ecosystems to provide the essential ecosystem services that contribute to human well-being (CBD, 2010; Chapin III et al., 2000; Halpern et al., 2008; Hooper et al., 2005; Worm et al., 2006). Bearing in mind that MPA management remain adaptive to developments in scientific understanding of the spatial element of ecosystem service delivery (Smith et al., 2009; Smith and Wilen, 2003), networks of Marine Protected Areas (MPAs), designated though a system of marine spatial planning, are recognised as being the mechanism though which marine ecosystem services may be conserved, as 'they are the only approach to marine resource management specifically designed to protect the integrity of marine ecosystems and preserve intact portions and examples of them' (Sobel and Dahlgren, 2004).

In terms of public policy and law, the European Union (EU) (92/43/EEC) (the Habitats Directive) currently exerts great influence over MPA planning at a European scale. The Habitats Directive requires EU Member States to set up 'Natura 2000', a 'coherent European ecological network of Special Areas of Conservation' (SAC), comprising sites hosting the habitat types and species listed in its Annexes I and II (The Council of the European Communities, 1992). Within the network of SACs, Article 6.1 of the Habitats Directive requires the establishment of necessary 'conservation measures' corresponding to the ecological requirements of the Annex I habitats and the Annex II species present at the sites (The Council of the European Communities, 1992). Article 6.2 requires Member States to '… take appropriate steps to avoid, in the Special Areas of Conservation, the deterioration of natural habitats and the habitats of species as well as disturbance of the species for which the areas have been designated, in so far as such disturbance could be significant in relation to the objectives of [the] Directive' (The Council of the European Communities, 1992). In regard to proposals for the management of activities within an SAC, Article 6.3 of the Habitats Directive requires an 'appropriate assessment' of the implications of 'plans or projects' for the site, in view of its conservation objectives. In light of the conclusions of that assessment, the plan or project may only be granted permission to proceed if it can be 'ascertained that it will not adversely affect the integrity of the site concerned' (The Council of the European Communities, 1992).

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The Habitats Directive is considered to be Europe's strongest legal tool for nature conservation (Hochkirch et al., 2013). However, despite such legal provisions the conservation status of 70% of European coastal habitats and 50% of European marine ecosystems is considered to be in an unfavourable condition (Conde et al., 2010). In the United Kingdom (UK), this unfavourable status is linked to SAC site management. Most SACs remain multiple use sites that are managed individually with a narrow remit of fixed habitat or species specific conservation objectives. There is no focus on the ecological function of the site and therefore no consideration of the contribution towards the ecological integrity of the site (Gaston et al., 2006). Notwithstanding the requirements of Article 6.2 of the Habitats Directive, the UK regulatory authorities have taken the view that on-going activities that pre-date SAC designation (including licenced fishing) need not be subject to an 'appropriate assessment'. Continued degradation of SAC site features is revealed as a result of the onus placed on Member States by Article 11 of the Habitats Directive to 'undertake surveillance of the conservation status' of habitats and species within SACs (The Council of the European Communities, 1992). Despite a growing body of evidence that demonstrates that some methods of fishing can impact upon sensitive SAC marine features (Fossa et al., 2002; Hall-Spencer, 1998; Hall-Spencer and Moore, 2000; Hinz et al., 2011; Riesen and Reise, 1982; Thrush et al., 1998) there has been limited commitment from the UK and devolved governments to act upon evidence. The few evidence based campaigns that have been successful in proving the damaging effects of fishing to sensitive marine features have proved to be costly, drawn-out and highly contentious (Rees et al., 2010a).

Recent rulings of the European Court of Justice (EC), CJUE) clearly demonstrate that the protection offered to SACs by Articles 6.2. and 6.3 of the Habitats Directive is equal ('the Waddenzee case' Case C-127/02, 2004; Commission v French Republic Case C-241/08, 2010; Commission v Ireland Case C-418/04, 2007). It is thus increasingly clear that the precautionary principle, which is clearly embedded in Article 6.3 in relation to proposed 'plans or projects' must also be applied when looking at existing activities and the status quo within SACs. In light of this, UK Non-Governmental Organisations (NGOs) are currently placing pressure on UK Government to review its implementation of the Habitats Directive, arguing that the UK Government is in breach of Article 6.2 for failing to deal with damaging fishing activity within SACs that leads to 'deterioration of natural habitats' and Article 6.3 for failing to subject fishing license grants and renewals to 'appropriate assessments' (Client Earth and Marine Conservation Society, 2011).

The equal stringency of the Habitats Directive's approach to both future and existing activities in SACs ought to have implications for the management of SACs across the EU, and should bring to the fore the issue of 'site integrity'. To support development of forthcoming guidance in the EU to integrate 'site integrity' into SAC management and therefore achieve the overarching goals of the Habitats Directive, this paper aims to:

- Clarify 'site integrity' from a legal perspective.
- Clarify 'site integrity' from an ecological perspective.
- Consider the importance of the 'typical' species of designated habitats in assessing conservation status.

Using a case study example we will:

- Demonstrate how 'site integrity' is linked to marine features.
- Demonstrate how 'site integrity' can be influenced by management.

2. A legal definition of 'site integrity'

The term 'integrity' is only used once in the Habitats Directive, in Article 6.3, in connection with the requirement only to give consent to plans or projects following an 'appropriate assessment' that allows it to be ascertained that they will not 'adversely affect the integrity of the site concerned' (The Council of the European Communities, 1992). It is notable that it is 'site integrity', rather than the integrity of specific habitats or species, that must not be adversely affected. 'Site' is defined as 'a geographically defined area whose extent is clearly delineated' (Article 1(j) of the Habitats Directive). The Habitats Directive does not define 'integrity'. However, the EC's guidance 'Managing Natura 2000 Sites: The provisions of Article 6 of the 'Habitats' Directive 92/43/EEC, European Commission (2000)' (the EC Guidance) states at 4.6.3 that 'It is clear from the context and from the purpose of the directive that the 'integrity of the site' relates to the site's conservation objectives'. The EC Guidance notes that integrity also relates spatially to the site and that activities are 'not allowed to destroy a site or part of it on the basis that the conservation status of the habitat types and species it hosts will anyway remain favourable within the European territory of the Member State' (European Commission, 2000). Importantly, the EC Guidance states that integrity can be considered as a quality or condition of being whole or complete. In a dynamic ecological context, it can also be considered as having the sense of resilience and ability to evolve in ways that are favourable to conservation (European Commission, 2000).

The EC Guidance (2000) states that the 'integrity of the site' may be defined as 'the coherence of the site's ecological structure and function, across its whole area, or the habitats, complex of habitats and/or populations of species for which the site is or will be classified'. A site can be described as having a high degree of integrity where the inherent potential for meeting site conservation objectives is realised, the capacity for self-repair and self-renewal under dynamic conditions is maintained, and a minimum of external management support is required' (European Commission, 2000; Her Majesty's Government, 1994).

The recent Opinion of the Advocate General to the CJEU in the case of Sweetman and others – v – An Bord Pleanala (Case C-258/11, 2012) stresses a temporal element and includes the following: 'in order to establish whether a plan or project . . . has an adverse effect on the integrity of the site, it is necessary to determine whether that plan or project will have a negative effect on the constitutive elements of the site concerned, having regard to the reasons for which the site was designated and their associated conservation objectives. An effect which is permanent or long-lasting must be regarded as an adverse one. In reaching such a determination, the precautionary principle will apply.'

The link between 'site integrity' and the 'conservation objectives' for the site is made in Article 6.3 of the Habitats Directive and, necessarily, in the EC Guidance and in case law. The overarching requirement of the Habitats Directive is to achieve 'favourable conservation status' of Annex I habitats and Annex II species (Articles 3.1 and 4.4). Therefore, the primary conservation objective for those habitats and species within SACs designated for their protection must be the achievement of 'favourable conservation status' for those habitats and species within that site. The Habitats Directive specifically defines 'conservation status of a natural habitat' and 'conservation status of a species' (Article 1(e) and (i)) and goes onto set out the circumstances in which those statuses may be considered 'favourable' (The Council of the European Communities, 1992). Of considerable significance is the precondition in Article 1(e) that the conservation status of a designated habitat will only be taken to be favourable when the conservation status of its

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typical species is itself favourable. It is notable that there is no requirement for the typical species of a designated habitat to be species for which the SAC has been designated.

3. An ecological definition of 'site integrity'

The simplest ecological definition identifies ecological integrity as the ability of a system to support and maintain a biological community which displays species compositions, diversity and functional organisation analogous to a system which is undisturbed (Karr and Dudley, 1981). Truly pristine conditions are both difficult to identify or aspire to in Marine Protected Area management, and many would argue that humans are a natural part of the ecosystem, the social-ecological system (Armsworth et al., 2007; Curtin and Prellezo, 2010; Pollnac et al., 2010). A practical definition of ecological integrity therefore encompasses this natural state with the ability to cope with disturbance. Parrish et al. (2003) define ecological integrity as being met when the dominant ecological characteristics (composition, structure, function and ecological processes) of the system, '...occur within their natural range of variation and can withstand and recover from most perturbations imposed by natural environmental dynamics or human disruptions'. Ulanowicz (2002) expands this definition into three main concepts. The first, system health, relates to the continued successful functioning of the community, which in an anthropocentric view may be defined as the delivery of ecosystem services. The second looks at the ecosystems' ability to withstand stress (resilience). Finally, the concept of adaptation is considered, which Ulanowicz (2002) defines as the optimum capacity of a system to develop in different ways without human interference.

Whilst ecological integrity is not often defined specifically in conservation management policy, there have been efforts recently to focus on addressing the wider integrity of the ecosystem. For example, 'sea-floor integrity' is one of eleven descriptors used to assess 'Good Environmental Status' in Annex 1 of the EC Marine Strategy Framework (Directive 2008/56/EC) (Rice et al., 2012). 'Good Environmental Status' under this descriptor is found when 'sea-floor integrity is at a level that ensures that the structure and functions of the ecosystems are safeguarded and benthic ecosystems, in particular, are not adversely affected' (European Parliament and Council, 2008). It is proposed that the measurement of sea-floor integrity consists of identifying structures and functions of particular importance, identifying the pressures, and identifying appropriate indicators which reflect the sensitivity and resilience of the ecosystem.

4. Integrating 'site integrity' into SAC management

To integrate the legal principles of 'site integrity' and therefore 'favourable conservation status' into practical SAC management it is necessary to demonstrate how ecological functions and processes are linked to the conservation status of a habitat and influenced by changes in SAC management regimes. To demonstrate this, we use a case study area of Lyme Bay, UK where a consortium of scientists led by Plymouth University Marine Institute were commissioned by the UK Government to undertake a 3 year study to assess the ecological and socio-economic effects of changes to management of the marine area (Attrill et al., 2011).

4.1. Lyme Bay case study site

Lyme Bay is located in the southwest of England, UK (Fig. 1). Comprised of a mosaic of substrates from sand, mud and gravel to rock and mixed ground, the entire bay was defined as an area of 'high species richness that includes rare and threatened species' (Hiscock and Breckels, 2007). 'Reefs' are contained in Annex I of the Habitats Directive and are defined as 'habitats where animal and plant communities develop on rock or stable boulders and cobbles' (Jackson and Mcleod, 2000). In Lyme Bay, these include outcropping bedrock (with igneous, chalk, mudstone and limestone examples) and pebbles, cobbles and boulders, support a diverse range of reef species assemblages characterised by species such as the sea squirt (*Phallusia mammillata*), sponge (*Cliona celata*), anemone (*Aiptasia mutabilis*), bryozoan (*Pentapora fascialis*) and corals (*Alcyonium digitatum* and *Eunicella verrucosa*). Such species may be considered to be the 'typical species' of this reef habitat.

Fig. 1. Map showing location of Lyme Bay, cSAC and the order boundaries plus sites surveyed – 2012 sites. Substrate map data provided by Devon Biodiversity Records Centre.

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In July 2008, following advice from its statutory nature conservation advisors Natural England, the UK Government closed a 206 km^2 area of the Bay by way of 'The Lyme Bay Designated Area (Fishing Restrictions) Order' (2008) to bottom towed fishing gear. The objective of the Order was to promote marine biodiversity by ensuring that the structure of the reef system was maintained, and to aid the recovery of the benthos following damage caused by bottom towed fishing gear (Attrill et al., 2011; DEFRA, 2008). The Order was specific to bottom towed fishing gear and the area remains open to fishers using static gears such as pots and nets, and to recreational users.

In August 2010, a larger section of the Bay was put forward as a candidate SAC (cSAC) due to the presence of extended Annex 1 reef habitat that lie outside the boundary of the Order (Fig. 1). Selection criteria behind this decision concluded that the site has excellent representivity of a broad range of habitats and reef species, has good prospects for recovery of structure and function as a result of fisheries restrictions, and has excellent conservation (Natural England, 2010)

4.2. 'Site integrity' in the Lyme Bay cSAC

Using the definitions for ecological functions and ecological processes defined by (Balmford et al., 2008), The Lyme Bay and Torbay cSAC Annex I reef features, their associated (typical) species of conservation importance, ecological function, and ecological processes are shown in Table 1.

In addition to those species designated as being of conservation importance, the reefs in Lyme Bay provide habitat for a further range of species (some may be considered as 'typical' in a local context). Mobile organisms such as whelk, crab (Howard, 1982), lobsters and fish use them as a refuge and source of food and sessile species such as soft corals, hydroids and sponges use the reef structure for settlement. Some sessile species also provide platforms for the recruitment of others, for example hydroids, which provide a three dimensional structure above the sea bed, allowing scallop spat to settle off the seabed thereby reducing the risk of being smothered by sediments (Brand et al., 1980; Dare and Bannister, 1987; Eggleston, 1962). This can provide substantial increases in spat abundance, with Bradshaw et al. (2003) reporting 8.4 times more spat associated with hydroids than without. Structurally complex habitats are also known to be important as nursery habitats, they provide refugia for juvenile fish species, for which they are known to increase survivorship (Bradshaw et al., 2003; Connell and Jones, 1991).

The ecological composition and structure of the marine environment supports ecosystem functions and processes in Lyme Bay that, in turn, provide for a range of ecosystem services (the social–ecological system). Traditionally within Lyme Bay, fishermen towing demersal fishing gear (otter trawls, beam trawls, scallop dredges) avoid the hard rock reef areas and fish on the mixed sediment areas (sands, gravels, cobbles) and static gear fishermen place pots in the rocky areas, targeting crabs and lobster (Rees et al., 2010a). Recreational SCUBA diving, sea angling and wildlife watching trips are key components of the leisure and recreation activities undertaken in Lyme Bay, making use of the natural marine resources that stem from biological diversity (Rees et al., 2010b).

The implementation of the Order and the subsequent proposal for an SAC in Lyme Bay recognises 'site integrity' in that the reefs underpin the ecological processes and functions in the area and that these interact with non-SAC features and the wider marine environment to provide ecosystem services (Fig. 2). This interaction can be influenced by the 'conservation status' of the habitat.

4.3. Management and 'site integrity'

The EC Guidance states that 'site integrity' 'can be considered as a quality or condition of being whole or complete. In a dynamic ecological context, it can also be considered as having the sense of resilience and ability to evolve in ways that are favourable to conservation' (European Commission, 2000). Changes in management have enabled both recovery and expansion of the distribution of reef associated organisms.

Table 1
Habitats and typical species within the Lyme Bay portion of the Lyme Bay & Torbay cSAC listed for conservation and their associated ecological functions and ecological processes (developed from Fletcher et al., 2012).

	Ecological functions	Ecological processes
Habitats		
Annex I reef habitat[a]	Production	Primary production; secondary production; larval/gamete supply; formation of species habitat; species diversification; formation of physical barriers
Species		
Alcyonium digitatum[b]	Production; geological processes; ecological interactions	Formation of species habitat; species diversification; food web dynamics
Dead man's fingers		
Axinella dissimilis[b]	Production; geological processes; ecological interactions	Formation of species habitat; species diversification; food web dynamics
Erect branching sponge		
Eunicella verrucosa[c,d,e]	Production; geological processes; ecological interactions	Formation of species habitat; species diversification; food web dynamics
Pink sea fan		
Leptopsammia pruvoti[c,d,e,f]	Production; ecological interactions	Formation of species habitat
Sunset cup coral		
Pentapora fascialis[b]	Production; geological processes; ecological interactions	Formation of species habitat; species diversification; food web dynamics
Ross coral		

[a] Habitats Directive (HD).
[b] Nationally important marine features.
[c] Wildlife & Countryside Act 1981.
[d] The UK Biodiversity Action Plan 1995 (UK BAP).
[e] The International Union for Conservation of Nature (IUCN) Red Data List.
[f] Convention on International Trade in Endangered Species of Wild Flora and Fauna (CITES).

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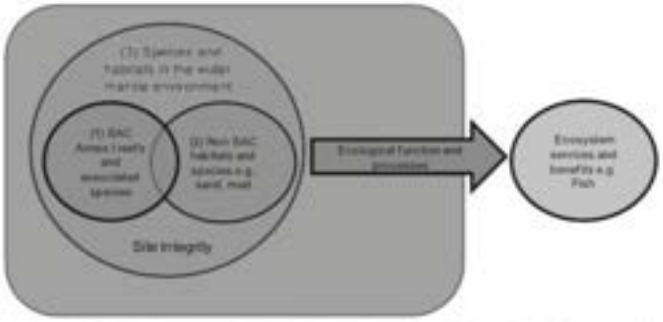

Fig. 2. A model depicting 'site integrity'. 'Site integrity' comprises the interaction between 1 and 2 to underpin ecological functions and processes to deliver ecosystem services.

In terms of recovery, results of the 3 year survey in Lyme Bay show that there has been some recovery of the reef community and that recovery has also been observed for certain individual species (such as the ross coral (*Pentapora fascialis*), sea squirt (*Phallusia mammillata*) and king scallop (*Pecten maximus*)) in areas where bottom towed fishing gear is no longer permitted (Fig. 3) (Attrill et al., 2011). Species which are long lived and slow growing such as the pink sea fan (*Eunicella verrucosa*) (Jackson et al., 2008), have, however, yet to exhibit consistent signs of recovery (Attrill et al., 2011).

The recovery of the reef habitats has also resulted in positive socioeconomic changes, with research demonstrating that the implementation of the Order in Lyme Bay has benefitted the local recreation industry by preventing further deterioration of natural resources (Rees et al., 2010b) and the static gear sector of the fishing industry, primarily by providing a safe haven in which they can set their pots and nets (Mangi et al., 2011). These changes are also linked to potential benefits for the delivery of ecosystem services via conservation of species that support ecological function (Rees et al., 2012). Therefore improvements in the 'conservation status' of the reef habitat via recovery has influenced 'site integrity' with positive implications for the delivery of ecosystem services.

In terms of the expansion of the distribution of reef organisms, research from Lyme Bay has determined that recovery of the reef habitat has not been restricted to those areas that are strictly defined as reef habitat for the purposes of Annex I of the Habitats Directive (Sheehan et al., 2012). The results demonstrate that sessile taxa associated with reef habitats are also now present on pebbly sand habitats in Lyme Bay that have been protected from bottom towed fishing gear for 3 years. These sessile species are found in greater abundances on pebbly-sand habitat in areas closed to fishing compared to those where bottom towed fishing continues (Sheehan et al., 2012). According to the Interpretation Manual of European Union Habitats (2007) 'hard substrata that are covered by a thin and mobile veneer of sediment are classed as reefs if the associated biota are dependent on the hard substratum rather than the overlying sediment', suggesting that these areas are an extension of the realised cSAC designated reef habitat and should be treated as such. This has only become evident following the cessation of bottom towed fishing in the area of cSAC covered by the Order.

The importance of areas between the rocky reefs is further evident when considering the life history of benthic species, some of which may be considered as 'typical' to the reef habitat. This often comprises several life stages, each of which may depend upon different components of the reef, highlighting the importance of comprehensive conservation of the various habitats of these species throughout their life cycle. Juvenile common lobsters (*Homarus gammarus*) for example, are known to bury in the sediment near to reef habitats (Howard and Bennett, 1979) and occupy crevices in the reef once matured (Holthuis, 1991). The edible crab (*Cancer pagurus*) also uses the reef for protection (Howard, 1982) or bury into mixed sediments when carrying eggs (Edwards, 1979). Thus, protecting the areas between the reefs could promote adult crustacean abundance, which should be of benefit not only for meeting the conservation objectives by reference to the conservation status of typical species of the site, but also for bringing wider economic benefits through fisheries enhancement.

It is therefore apparent that within Lyme Bay, reef habitat consists of rocky reef colonised by sessile fauna, areas between rocky reef outcrops where a veneer of sediment overlies hard substrata which, if left unfished will begin to be colonised by sessile reef species, and the linking patches of sediment that are also crucial for reef associated mobile fauna such as lobster providing ontogenetic stepping stones for reef species (Boström et al., 2011).

Fig. 3. Recovery of the reef community in an area previously fished. Image courtesy of the Marine Institute, Plymouth University.

5. Discussion

The application of legal principles ('site integrity' and 'favourable conservation status') to ecological functions and processes in a marine area poses some points for discussion that are pertinent to the development of Habitats Directive policy and the management of SAC sites in Europe.

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5.1. Improvements to the conservation status supports the ecological processes and function of a reef habitat

Through their contribution to production, Annex I reef habitats (as found in Lyme Bay) contribute to a range of ecological processes. Via management, the dominant ecological characteristics that typify the reef habitat have been enhanced, and recovery of these areas not only increases habitat complexity and benthic biodiversity, but also increases the three dimensional structure of the habitat, providing additional structure to enhance the settlement of species such as scallops, and for species such as cuttlefish, whelk and shark to lay their eggs (Bradshaw et al., 2003).

The recovery of the reefs will also increase their resilience. A key aspect of 'site integrity' is that the site must have capacity for 'self-repair and self-renewal'. A site which has integrity will be able to withstand episodes of storm disturbance, heavy predation and disease, and will have sufficient capacity to recolonise damaged areas as a result of the interconnectivity between the reefs and surrounding habitats.

In addition to protection of the rocky reef habitat, protection of areas between the reef outcrops in the Bay is important. Annual benthic surveys have demonstrated that the protection afforded by the Order has allowed gradual colonisation of reef species (some which may be considered as 'typical') in areas that would not be categorised as reef, based on apparent habitat type (Sheehan et al., 2012). Similar enrichment of sand gravel and mud biological communities after the cessation of scallop dredging has also been observed in closed area experiments on the Isle of Man, UK (Bradshaw et al., 2001). True assessment of the extent of the reef feature cannot therefore be quantified in an area that is trawled or dredged as the use of towed fishing gear will prevent growth of reef species. Annual monitoring in Lyme Bay has shown the importance of these areas, which, in the early years of site management, could not have been identified as reef associated due to the impact of fishing activity. Any 'appropriate assessment' of activities within an SAC must conclude by asking whether it can be ascertained that those activities, individually or collectively 'will not adversely affect the integrity of the site'. As 'site integrity' is closely linked with the 'capacity [of the habitat] for self-repair and self-renewal' (European Commission, 2000) it follows that the condition and management of features that have positive impacts on repair and renewal, such as areas between rocky reefs, is integral to an assessment of site integrity. Therefore, management of an SAC ought to take into consideration 'reference' or 'control' 'areas' against which to measure change and the inclusion of buffer zones around designated habitats, or connecting areas between designated habitats to allow typical species associated with those habitats to colonise and grow. All management must remain 'adaptive' to potential change.

5.2. Application of the legal principle of 'site integrity'

As has been noted, the principal goal of the Habitats Directive is the achievement, by maintenance or restoration, of 'favourable conservation status' for Annex I habitats and Annex II species. The existence of 'site integrity' is an implicit precondition to the achievement of 'favourable conservation status' and it is this quality that is specifically protected by the Habitats Directive's requirement for potentially harmful activities to be subject to an 'appropriate assessment and prevented from taking place if it cannot be ascertained that they will not affect 'site integrity'. On a true interpretation of the Habitats Directive and relevant case law (op. cit.) such an assessment should be applied to both proposed and existing activities. In terms of SAC management and compliance with the Habitats Directive 'site integrity' must therefore be informed by the status of the designated Annex I and II habitats and species and applied in the sense that these habitats and species support and interact with broader ecological processes and functions within a marine area.

It must also be recalled that 'favourable conservation status' requires that any 'typical species' of a designated habitat also be in favourable condition, whether or not they are themselves Article II species. The Interpretation Manual of European Habitats contains examples of species that may be regarded as typical for their habitats (European Commission, 2007). Many are not Annex II species, but if they are harmed by activities that do not directly impinge on the Annex I habitat there is a legal argument that such activities prevent the achievement of 'favourable conservation status' for that habitat.

5.3. An assessment of 'site integrity' within an SAC

The legal definition of 'site integrity' is informed by definitions of ecological integrity. Underlying the concepts of ecological integrity are various ecological components and processes which would require consideration at a site and network level to address integrity. Assessing 'site integrity' would therefore require the complex task of understanding the ecosystem organisation at a location in terms of the ecosystem structure, functions, processes and connectivity, especially in relation to the features of interest and its resilience to, and ability to recover from, disturbance. It can be argued that in some areas of science-policy research, the scientific knowledge can lag behind the ideology embedded in policy (Rees et al., 2013). This indeed remains the case in relation to a detailed understanding of ecological interactions in relation to measuring the contribution of individual habitats or species to ecological processes and functions (Chapin III et al., 2000; Ieno et al., 2006; Petchey and Gaston, 2006; Somerfield et al., 2008). This poses difficulty for conservation planning that relates directly to a measurement of ecological function, e.g. specifically as an indicator of 'site integrity' (Rees et al., 2012). However, as demonstrated in the case study for Lyme Bay, an understanding of the link between ecological function (e.g. primary production) to the delivery of ecosystem services (e.g. fish and raw materials) can potentially provide a framework by which 'site integrity' could be assessed.

6. Conclusions

The definition of 'site integrity' as a legal term and its translation to 'on the ground' practical management of an SAC from an ecological perspective demonstrates that interpretation of the Habitats Directive in conservation policy and SAC management needs to evolve to meet the current challenges of marine resource use management. In the example for Lyme Bay, UK, we have demonstrated that 'site integrity' is intimately associated with the maintenance of those ecological processes and functions that support the wider delivery of ecosystem services and may extend beyond just the designated features. The achievement of 'favourable conservation status' and 'site integrity' within the Lyme Bay cSAC is dependent upon securing ecological integrity of the reef and its typical species and interactions between both reef and non-reef elements of the ecosystem. It is, therefore, prudent for both ecological and legal purposes to treat the 'site' as a whole and not to focus management merely on the limited locations of reef areas within the site. A change in management that required the cessation of fishing using bottom towed gear within the area has demonstrated that the reefs have the capacity for self-repair and self-renewal, particularly in areas that were not previously considered as reef habitat. This, in turn, has provided for ecological processes and functions within the site and beyond the delineated boundaries of the SAC to interact and increase the potential for realisation of ecosystem services for a broad range of stakeholders.

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The Habitats Directive is not, however, a standalone instrument. The designation of Annex I and II species and habitats are part of the building blocks for broader marine environmental protection in European waters that stem from international drivers for MPAs and targets to halt further loss of biodiversity (Convention on Biological Diversity, 2011; OSPAR Convention, 2002; Secretariat of the Convention on Biological Diversity, 2004). The Marine Strategy Framework Directive 2008/56/EC aims to achieve 'Good Environmental Status' in all EU marine waters by 2020 while protecting the resource base for economic and social activities (European Parliament and Council, 2008). This Directive will play a key part in achieving targets for biodiversity, food webs and sea floor integrity (HM Government, 2012). 'Site integrity' under the Habitats Directive will need to contribute to the objective for sea-floor integrity that 'ensures that the structure and function of ecosystems are safeguarded' (European Parliament and Council, 2008). The Habitats Directive is considered to be a strong and comprehensive piece of legislation (Hochkirch et al., 2013). However, the conservation law and policy developed by Member States is generally narrow in focus and limited to Annex I habitats and Annex II species without necessarily having regard to the conservation status of typical species of Annex I habitats that are not themselves Annex II species or the position of Annex I habitats within their wider areas. In order to maintain pace with European and International conservation objectives the development of conservation policy must include the role of individual SAC sites in underpinning ecological function in a wider marine area. Otherwise there is a danger that these sites (SACs) will stay trapped by past conservation motivations and serve little purpose in a network of MPAs (Gaston et al., 2006). As such, the effectiveness and legitimacy of our broader, shared European and international goals for conservation will be undermined (Paavola, 2004).

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Federation of Irish Salmon & Sea Trout Anglers

Conaidhm na Slat Iascairi Bradáin agus Breac Geal

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Chairman: [redacted]
Secretary:

PUBLIC CONSULTATION SUBMISSION TO INLAND FISHERIES IRELAND DRAFT LONGTERM PLAN ON THE PROPOSED DESIGNATED SALMOND WATERS OF THE GREAT WESTERN LAKES AS PUBLISHED IN JUNE 2022 - IFI/2022-4618

Submitted from the FISSTA Secretariat in Donegal 19th September 2022 to:
westernlakesplan@fisheriesireland.ie

FISSTA, the Federation of Irish Salmon and Sea Trout Anglers are Ireland's all island salmon and seatrout angling body representing the majority of the 20,000 club anglers and the sport on the many salmon and seatrout rivers that pay millions in rod license revenue to finance the state fisheries authorities on both north and south of the border. We are founding and an accredited NGO member of NASCO, which we attend along with 40 other NGO's from nineteen other salmonid countries annually, of whom many are envious of our salmonid resource and are monitoring this public consultation of this Designated Salmonid Lakes Plan and management process internationally at present. The Department and IFI attend and advise the EU party on behalf of Ireland at this venue which took place last June for four days in Edinburgh.

FISSTA welcomes the Government's genuine intention by the Minister, through IFI this time and not his Department, to introduce greater protection in designating Salmonid waters in the proposed Draft Plan as published on August 10th 2022, which includes 49 pages of the Draft Plan, 26 pages of the SEA Scoping Report and 83 pages of the Invas Screening Stage 1 Appropriate Assessment Report, Press releases, Briefing meetings details and questionnaire which amounts to over 170 pages that took almost a year to prepare and for IFI to expect a professional and constructive response from our federations by September 20th is unreasonable to the point of discouragement while our wild salmonid waters everywhere in Ireland, are left unprotected while non-native species are afforded the protection under Byelaws 806 & 809 which must be removed immediately. IFI can never defend this environmental and economic threat to our wild brown trout and salmonid habitat any longer.

F.I.S.S.T.A.

FISSTA have read and debated the above documentation, and we see it as a deflection to confuse and therefore will not engage or comment in detail in this submission until the obvious omission is rectified and the key sentence is inserted.

While we acknowledge the depth of work developed over a year that now has been submitted as a proposed roadmap to achieve our objectives of last year, we must state clearly this plan will not provide this intended protection and management responsibility that is required to safeguard these unique and important habitats while a mixed stock coarse fishery is being accepted. The EU Habitats Directive has long protected the integrity of our SAC's and our salmonid species, but this draft plan will now undermine it without a shadow of a doubt.

Last August, you may remember, in our submission to the Dept byelaw public consultation, we asked Minister Ryan to do two things to rectify the proposed bye law,

we proposed the following because we had trust in Inland Fisheries Ireland:

1. **This proposed draft Bye Law will not achieve the objective of protecting our unique salmonid habitat as it proposes to transfer the management responsibility from Inland Fisheries Ireland to the Minister unless the entire Section 7 is deleted.**

2. **We would also require that the Minster removes the word "primarily" from Section 4 which reads:** "The designated waters shall be managed primarily for the benefit of wild salmonid species. **to read as follows: "The designated waters shall be managed for the benefit of wild salmonid species."**

Thankfully, the general angling public and our members agreed with these requests and further plans for the proposed Bye Law from the Department was dropped in a press release of September 2nd 2022 and was to be replaced by the IFI Draft Designated Salmonid Lakes Plan with *"its proposal to develop an evidence-based management plan for the seven lakes and to submit timelines for the plan to the Department by the end of September"* - within 28 days on September 30th 2022, which led us to believe that we should have at least had a draft before November or Christmas.

We can only speculate on what has delayed this Draft Plan which was already the product of a public consultation, and surely would not have merited another public consultation without an Appropriate Assessment being done and included to comply with the IFI legal responsibilities. The Invas report on screening dated July 2022 is designed to confuse, as it seems to make an attempt to argue that an Appropriate Assessment is not required but it does not appear to follow the correct methods and guidelines.

Whatever the delay, we had hoped and trusted the eventual outcome would reflect the spirit of the 152 submissions out of the 180 that had the one theme that supported the call for legislation to designate our Western Lakes as salmonid lakes as laid down in the programme for Government.

Inland Fisheries Ireland's (IFI) very own submission summarised it very well, when it stated on page 3 under a heading of CONFLICTING BYELAWS that:

"it is evident, that unless the lakes in the Schedule to the draft bye law are excepted from the provisions of the two Byelaws – namely Byelaw 806 and Byelaw 809 of 2006, the byelaw it stands, does not achieve its stated aim of protecting the wild brown trout status of the lakes. In fact these byelaws have resulted in fish species which have become 'naturalised' in these lakes are now afforded equal protection to the native species which have bee there since the retreat of the last ice age. This is contrary to the aims of the Habitat Directive and fisheries legislation in general."

Indeed, the entire five pages have some excellent management plan points for a Designated Salmonid Lakes Plan that we enclose it in its entirety below, for your consideration.

Also, the Coarse Fish Conservation Bye-Law (No. 806) and the Pike Conservation Bye-Law (No. 809) continue to conflict with Ireland's legal obligations under the EU Habitats Directive and Water Framework Directives. Under the EU Water Framework Directive, IFI have been surveying lakes and rivers since the late 2000's using the FIL2 model, which classifies pike and most coarse fish as "non-native influencing ecology" for Ecoregion 17 (Ireland). Water bodies with non-native invasive fish species will not meet high status for EU Water Framework Directive (WFD) purposes due to the presence of these species. Future introductions of non-native species will also lead to a downgrading of the ecological status of a water body.

We are also aware through our membership who submitted multiple FOI and AIE requests to both IFI and their parent government department that no appropriate assessment screenings were conducted on the two bye-laws (806/809) when they were formulated in 2006. These bye-laws constitute a plan as laid down by articles 6.3 and 6.4 within the EU Habitats Directive. The screening requirement for bye-laws was confirmed in the Dáil by Minister Eamon Ryan on July 27th 2021 when responding to a PQ. With no screenings these two incumbent bye-laws are legally inadmissible and are completely at odds with the 'precautionary principle' laid down by the EU Habitats Directive.

Without the insertion of this wording, IFI and the government will continue to stand over two bye-laws that encourage and reward through conservation the spreading of invasive pike/coarse fish throughout the country including the deliberate targeting our salmonid SACs?

F.I.S.S.T.A.

Therefore, we appeal to you as the state body responsible for the protection, conservation and management of the inland fisheries resource to include in the draft plan for the long-term management for the seven lakes, the above principled wording shaded in yellow along with spirit of the enclosed five pages from your submission to the Minister of last August.

The lakes have long-been designated, as a matter of policy, to be managed primarily as wild brown trout waters. Therefore, the proposed management programmes for these lakes, as set out in the draft plan, will protect, conserve and, where possible, enhance the lakes' natural attributes and native biodiversity if this key principle is inserted to comply with the EU Habitats Directive.

We look forward to continuing to work with the Minister and his staff, and IFI to improve and enhance our wild salmonid habitat.

Yours sincerely

[redacted]

FISSTA

Federation of Irish Salmon & Sea Trout Anglers

Conaidhm na Slat Iascairí Bradáin agus Breac Geal

F.I.S.S.T.A.

F.I.S.S.T.A.

APPENDIX 1 of 3. - FISSTA BRIEFING NOTE:

At the IFI webinar tonight last Wednesday 14th September 2022, [redacted] Secretary of FISSTA tabled the following question to [redacted] in the course of his presentation. However, it was the CEO [redacted] who asked to respond who quoted the following extracts from the plan for clarification.

Question to IFI [redacted] during Webinair:

"Would IFI agree that unless the 7 lakes in the plan are excepted from the provisions of the two Byelaws – namely Byelaw 806 and Byelaw 809 of 2006, the byelaw as it stands, does not achieve its stated aim of protecting the wild brown trout status of the lakes. In fact these byelaws have resulted in fish species which have become 'naturalised' in these lakes are now afforded equal protection to the native species which have been there since the retreat of the last ice age. This is contrary to the aims of the EU Habitats Directive and Water Framework Directive and fisheries legislation in general."

IFI CEO [redacted] agreed quoting the following from the draft plan.

Page 22

This plan recommends the removal of any legislative protection conferred on pike (e.g. Bye-law 809) in waters where they are newly introduced. It also recommends that teams of IFI officers are deployed to manage and remove pike rapidly, if they are discovered in previously uncolonized waters. This legislation should also be reviewed in waters that are specifically designated for salmonids.

Page 38

Although it is unlikely that any changes in angling exploitation of roach in the western lakes will have a significant impact on their numbers, it is recommended that the protection conferred upon them under bye-law 806 (Conservation of and Prohibition on Sale of Coarse Fish, Bye-Law 806 2006) is removed in these catchments as an additional measure to help somewhat reduce numbers if the evidence base indicates that this will be beneficial to wild brown trout.

Page 40

The management of pike stocks has been ongoing for over 5 decades, on the western lakes. This has always been regarded as an important management tool for the conservation of salmonids. Research by IFI (Kennedy et al 2018 - https://doi.org/10.1111/jfb.13676) indicated that lake entry is believed to be a pike predation bottleneck for salmonids in natural systems, further suggesting that targeted stock management may be more beneficial. It is intended that these management programmes will be continued but may be subject to modification as our understanding of species interaction is improved by sampling and population modelling. Through this process, a series of management "levers" will be developed, and these will be applied to various degrees on the different lakes, to bring about more effective stock 39 management processes. Consideration may also be given to a review of the current Conservation of Pike Bye-law No. 809, 2006 which confers special legal protection on pike with regard to their exploitation by angling. This may be inappropriate on lakes which are being managed specifically for salmonids or where pike have been recently introduced.

The long delay in getting this draft plan to publication.

Parliamentary Question Tuesday, 26 April 2022

Questions (317)

[redacted] [redacted]

Question:

317. Deputy [redacted] asked the Minister for the Environment, Climate and Communications when he received the draft management plan from Inland Fisheries Ireland in relation to a number of lakes including Lough Corrib; when he intends taking action, including legislation if necessary in the context of implementing this plan; and if he will make a statement on the matter. [20856/22]

View answer

Written answers (Question to Environment)

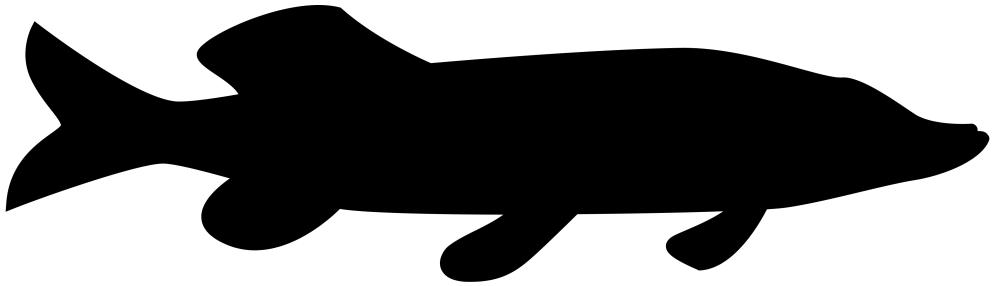
[redacted]

Minister for the Environment, Climate and Communications

Inland Fisheries Ireland (IFI) has, at my request, set out a draft Management Plan specifically for the 7 Western Lakes, including Lough Corrib, in the context of the Programme for Government. The first preliminary draft of a comprehensive, evidence-based management plan for the Lakes was submitted by IFI to my Department in mid-October 2021. Following detailed consideration of the preliminary draft plan and wide-ranging discussions with IFI, the draft plan was further developed. The revised draft was received from IFI in late February.

My Officials are continuing to work closely with IFI in this matter and I expect that the finalised draft plan will be put out for public consultation shortly by IFI.

FISSTA have a question to the Minister seeking detailed further information on who delayed the process and for what reasons did the Minister did not receive this Draft Plan until July 2022.



Lough Corrib Pike Research & Control Group

[redacted]

Submission to
Inland Fisheries Ireland

Public Consultation
on
The 2022 Draft Great Western Lakes Management Plan

September 20th 2022

1.0 INTRODUCTION

The Lough Corrib Pike Research & Control Group is a voluntary team of local anglers and riparian stakeholders based around the shores of Lough Corrib in Co. Galway, who monitor the presence of non-native[1]/invasive pike (*Esox lucius*) in the lake and who control pike numbers with rod and line angling within current fisheries legislation (Section 59, Inland Fisheries Act 2010) for the benefit of our native wild salmonid species. The harvesting/culling of invasive pike with rod and line is an adjunct to the mechanical controls/stock management (gill netting & electrofishing) employed by Inland Fisheries Ireland (IFI) annually to maintain the integrity of Lough Corrib Special Area of Conservation (SAC) as laid down by the EU Habitats Directive **(FIGURE 1)**. The coordinated culling of invasive pike stocks has been in train since 1898 on Lough Corrib commenced initially by the Corrib Fisheries Association (CFA).

Figure 1. Lough Corrib invasive pike management by rod and line angling

[1] AA Screening - Lough Corrib Stock Management Plan 2019 - Inland Fisheries Ireland.

1.1 LOUGH CORRIB AT PRESENT

While this public consultation process is solely concerned with the Draft Great Western Lakes Management Plan, we are taking this opportunity to highlight the gross contradictions and dysfunctionality within inland fisheries policy/legislation as it pertains to Lough Corrib Special Area SAC and its salmonid population. This dysfunctionality is driven by a covert agenda within the Inland Fisheries Division of the Department of the Environment, Climate and Communications (DECC) and elements of Inland Fisheries Ireland (IFI) to impose a mixed fishery model on every freshwater body in the country, in complete contravention of the EU Habitats and EU Water Framework Directives. This mixed fishery model can be simply defined as the validation and legitimisation through secondary legislation of all anthropogenic introductions of invasive coarse fish including pike to every watercourse in the country including SAC lakes and rivers. At present if known invasive coarse fish such as dace (Leuciscus leucisus) or chub (Squalius cephalus) were found to be present in Lough Corrib SAC, they would receive immediate legislative protection under the Coarse Fish Conservation Bye-Law No. 806, 2006. Unfortunately, there is a multitude of perverse individuals who are perfectly happy to defend this position.

On July 2nd 2020, the European Commission[2] issued a press statement regarding their decision to refer Ireland to the Court of Justice of the EU over its failure to designate Special Areas of Conservation (SACs), more than five years after the deadline expired. Under the Habitats Directive (Directive 92/43/EEC), EU member states must designate SACs, with specific conservation objectives and corresponding conservation measures to maintain or restore a favourable conservation status of the species and habitats present.

These steps need to be carried out within six years from the inclusion of these sites in the EU list as Sites of Community Importance (SCI). In the case of Ireland as of 2020, 154 SCIs (out of 423) had not yet been designated as SACs in the Atlantic biogeographical region, although the relevant deadline expired in December 2014. Site-specific conservation objectives had not been established for 87 sites, and the necessary conservation measures have not been established at any of the 423 sites.

[2] https://ec.europa.eu/commission/presscorner/detail/en/IP_20_1235

On July 27th this year, after many years of procrastination, the necessary legislative measures have been listed for Lough Corrib SAC by the Department of Housing, Local Government and Heritage via S.I. (Statutory Instrument) No. 384 of 2022[3], which completed the formal designation of the site as a Special Area of Conservation in accordance with Article 4 of the Habitats Directive.

Lough Corrib was designated a **Salmonid Water** under S.I. No 293/1988 European Communities (Quality of Salmonid Waters Regulations 1988) and as previously stated is a designated SAC (Special Area of Conservation) under the EU Habitats Directive due to the presence of Atlantic salmon a qualifying interest species under Annex II/V of the Directive.

Under current Inland Fisheries Ireland (IFI) policy[4], Lough Corrib is a designated wild brown trout fishery where pike management occurs. This brown trout policy originally implemented in 2014 was supposed to be reviewed in 2017 (3 yearly intervals) but to date IFI have made no attempt to do so. Considering this failure by IFI to follow its own procedures and policy development processes, how will the IFI CEO influence any future salmonid policy on Lough Corrib considering that DECC are hamstringing the incumbent CEO at every opportunity with their mixed fishery agenda? Will he preside over another shambles just like his predecessor did with respect to the 'Pike Management Review (2016-2018)' or the 'Sea Trout Policy' development that was mysteriously shelved in 2017?

2.0 LOUGH CORRIB SAC

The Lough Corrib Special Area of Conservation (Site Code 000297) is situated to the north of Galway city and is the second largest lake in Ireland, with an area of approximately 18,240ha (the entire site is 20,556ha).

Special Areas of Conservation (SACs) are prime wildlife conservation areas in the country, considered to be important on a European as well as Irish level. Most SACs are in the countryside, although a few sites reach into town or city landscapes, such as Dublin Bay and Cork Harbour. The legal basis on which SACs are selected and designated is the EU

[3] European Union Habitats (Lough Corrib Special Area of Conservation 000297) Regulations 2022.

[4] Inland Fisheries Ireland, Brown Trout Policy, August 2014, IFI/2014/1-4233.

Habitats Directive (Council Directive 92/43/EEC of May 21st 1992 on the conservation of natural habitats and of wild fauna and flora), which is transposed into Irish law by the European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. No. 477 of 2011). The Habitats Directive was initially transposed into Irish law in 1997 by the European Communities (Natural Habitats) Regulations, 1997 (S.I. No. 94 of 1997), with later amendment regulations (S.I. No. 233 of 1998; S.I. No. 378 of 2005).

The aim of the European Habitats Directive (Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora) is to create a network of protected wildlife sites in Europe, which are maintained at a good conservation status. The Habitats Directive formed a basis for the designation of Special Areas of Conservation (SACs). Similarly, Special Protection Areas (SPAs) are legislated for under the Birds Directive (Council Directive 79/409/EEC as amended by Council Directive 2009/147/EC) on the Conservation of Wild Birds). Collectively, SACs and SPAs are referred to as European sites or Natura 2000 sites in Irish legislation. In general terms they are considered to be of exceptional importance for protecting rare, endangered or vulnerable habitats and species within the European Union.

The Directive lists certain habitats and species that must be protected within SACs. Irish habitats include raised bogs, blanket bogs, turloughs, sand dunes, machair (flat sandy plains on the north and west coasts), heaths, lakes, rivers, woodlands, estuaries and sea inlets. The twenty five Irish species which must be afforded protection include salmon, otter, freshwater pearl mussel, bottlenose dolphin and Killarney fern.

Lough Corrib can be divided into two parts: a relatively shallow basin, underlain by Carboniferous limestone, in the south, and a larger, deeper basin, underlain by more acidic granite, schists, shales and sandstones to the north. The surrounding lands to the south and east are mostly pastoral farmland, while bog and heath predominate to the west and north. A number of rivers are included within the SAC as they are important for Atlantic salmon. These rivers include the Clare, Grange, Abbert, Sinking, Dalgan and Black to the east, as well as the Cong, Bealanabrack, Failmore, Cornamona, Drimneen and Owenriff to the west. In addition to the rivers and lake basin, adjoining areas of conservation interest, including raised bog, woodland, grassland and limestone pavement, have been incorporated into the site.

Atlantic salmon (*Salmo salar*) use the lake and rivers as spawning grounds. Although this species is still fished commercially in Ireland, it is considered to be endangered or locally threatened elsewhere in Europe and is listed on Annex II/V of the EU Habitats Directive. The lake is a renowned salmonid fishery and is a designated **Salmonid Water** under S.I. No 293/1988 European Communities (Quality of Salmonid Waters Regulations 1988), this S.I. has been superseded by the EU Water Framework Directive. The lake has a population of sea lamprey (*Petromyzon marinus*), a scarce, though probably under-recorded species listed on Annex II of the EU Habitats Directive. Brook lamprey (*Lampetra planeri*), also listed on Annex II, are also known from a number of areas within the site. A population of freshwater pearl mussel (*Margaritifera margaritifera*), a species listed on Annex II of the EU Habitats Directive, occurs within the site. White-clawed crayfish (*Austropotamobius pallipes*), also listed on Annex II, is well distributed throughout Lough Corrib and its in-flowing rivers over limestone. The freshwater pearl mussel (*Margaritifera margaritifera*) is a freshwater bivalve listed under Annex II as mentioned and V of the EU Habitats Directive. It is legally protected in Ireland under Schedule 1 of the Wildlife Act (1976 (Protection of Wild Animals) (Statutory Instrument No. 112, 1990) and the now amended European Communities (Natural Habitats) Regulations (Statutory Instrument No. 94, 1997). Owing to its complicated life history and environmental sensitivities, it is a key biological indicator species for the habitat quality of river ecosystems.

2.1 OWENRIFF RIVER - PART OF THE LOUGH CORRIB SAC

The Owenriff is home to one of the most important populations of the freshwater pearl mussel in the world. It is certainly amongst the top four most important populations in Ireland. Unfortunately it has been in unfavourable condition since 2004, owing to degradation of its habitat. Ireland has reported twice, under Article 17 of the Habitats Directive, on the conservation status of the freshwater pearl mussel. On both occasions, the species was found to be in unfavourable bad and declining status.

The Owenriff River is part of Lough Corrib (SAC 000297) and salmon is a designated Annex II/V species. The conservation objectives for all species designated in this SAC are generic. In Europe, the freshwater pearl mussel (*M. margaritifera)* has been shown to use native brown trout (*S. trutta L.*) and Atlantic salmon (*Salmo salar*) (Young & Williams, 1984a; Moorkens, 1996, 1999). Ziuganov & Nezlin (1988) have proposed that the relationship of pearl mussels and salmon is symbiotic. The fish provides the essential step

in the mussels' life cycle, and mussels improve water quality by filtering water. If salmon numbers decline to the level where there are not enough fish to support the new generation of mussels, this would have a direct negative effect on the mussel population and the conservation objectives for the SAC. Although brown trout are not a protected species in the context of Council Directive 92/43/EEC, they are listed as a "species of conservation interest" at the site.

3.0 THE DELIBERATE SPREAD OF INVASIVE COARSE FISH

Ireland is an island nation at the western edge of mainland Europe. The country was effectively separated from mainland Europe during the early stages of the retreat of the last ice age (2004; 2004). This separation provided a physical barrier that prevented stenohaline species colonising from the East. As a result, Ireland has a relatively reduced fauna and flora (2004). Ireland's freshwater fish community is far less diverse than that of Britain or mainland Europe. In respect of fish, Ireland has 28 freshwater species (2004), compared with 236 in Europe and 2000; 2004). Consequently, all of Ireland's indigenous freshwater species are euryhaline, having some degree of tolerance to salt water (and 1996; and 2004). They include salmon (*Salmo salar* Linnaeus), trout (*Salmo trutta* Linnaeus), pollan (*Coregonus autumnalis* (Pallas)), char (*Salvelinus alpinus* (Linnaeus)), river lamprey (*Lampetra fluviatilis* (Linnaeus)), sea lamprey (*Petromyzon marinus* Linnaeus), brook lamprey (*Lampetra planeri* (Bloch)) and eel (*Anguilla anguilla* (Linnaeus)).

Invasions by non-native species are a major threat to global biodiversity. Terrestrial and aquatic habitats can be negatively affected, resulting in grave damage to conservation and economic interests, such as agriculture, forestry and civil infrastructure. In some cases public, animal and plant health may also be threatened. Both Northern Ireland and Ireland have international obligations to address invasive species issues, principally the Convention on Biological Diversity, International Plant Protection Convention, Bern Convention, EU Water Framework Directive and the EU Habitats Directive.

"In the recent past, the majority of species introductions to Ireland have originated from Great Britain, also an island. Thus a filtering effect has been in operation, Ireland being the last land mass in a fragmented chain. As a result of its geographical location the number of introductions of alien species into Ireland has

been smaller in comparison to much of continental Europe. However increasing global trade and migration over the last century have led to a marked increase in the rates of species introductions to Ireland, resulting in more frequent and noticeable impacts upon native biota."[5]

It is very evident from various IFI fish surveys that the deliberate anthropogenic spread of invasive coarse fish is a major problem in Ireland. This spread is the result of 'Bucket Biologists'[6] illegally moving fish from one catchment to another for their own egocentric gains. This activity in Ireland has been confirmed by [redacted], IFI Head of Research and Development, in a submission made on December 10th 2015 to the Department of Environment, Community and Local Government regarding **Significant Water Management Issues in Ireland (SWMI)**. [redacted] made the following statement.

"The native Irish freshwater fish fauna has been augmented by a large number of non-native species (e.g. perch, pike, dace, bream, tench, roach and rainbow trout). These have been introduced either deliberately or accidentally, e.g. angling activities, aquaculture and the aquarium trade. A non-native species is one that has been either intentionally or accidentally released in to an environment outside of its natural geographical habitat range. Many non-native fish species have become established in the wild throughout Irish lakes and rivers, e.g. perch, roach, rudd and bream. Roach is a species which has been shown to affect salmonid production and cause a decline in brown trout angling catches. Within a few years of being introduced into a water body they can become the dominant species due to their high fecundity and they usually displace brown trout. Water bodies with non-native invasive fish species such as roach will not meet high status for EU Water Framework Directive (WFD) purposes due to the presence of these species. Future introductions of non-native species will also lead to a downgrading of the ecological status of a water body."

[5] Stokes, K., O'Neill, K. & McDonald, R.A. (2004) Invasive species in Ireland. Unpublished report to Environment & Heritage Service and National Parks & Wildlife Service. Quercus, Queens University Belfast, Belfast.

[6] 'Bucket Biologists' is a phrase coined by US wildlife authorities to describe individuals who want to illegally alter fishing grounds by stocking them with their preferred catch, usually invasive species.

3.1 THE EU WFD & INVASIVE COARSE FISH

The Water Framework Directive (WFD) was introduced in December 2000 with the broad aims of providing a standardised approach to water resource management throughout Europe and promoting the protection and enhancement of healthy aquatic ecosystems. The Directive, transposed into Irish Law in December 2003, requires EU member states to protect those water bodies that are already of good or high ecological status and to restore all water bodies that are degraded, in order that they achieve at least good ecological status by 2015.

Inland Fisheries Ireland (IFI) has been assigned the responsibility by the Environmental Protection Agency (EPA) for delivering the fish monitoring element of the WFD in Ireland. Surveillance monitoring sites are set out in the WFD Monitoring Programme published by the EPA in 2006 (EPA, 2006) and the fish monitoring requirements are extensive, with over 300 water bodies, encompassing rivers, lakes and transitional waters, being surveyed in a three year rolling programme. The main unit of management of the WFD across Europe is the River Basin District (RBD). A river basin or catchment is an area of land from which all surface run-off flows through a series of streams, rivers and possibly lakes into the sea at a single river mouth or estuary. An RBD comprises one or more neighbouring river basins together with their associated wetlands, groundwaters and coastal waters. The distribution of flora and fauna in surface waters will vary both within RBDs due to the physical differences in habitats and also regionally across Europe due to geoclimatic variations.

The WFD addresses this issue by dividing the EU into a series of ‘ecoregions’. For rivers and lakes Ireland shares an ecoregion with Northern Ireland (Ecoregion 17), and for estuaries and coastal waters Ireland shares an ecoregion with the UK (Ecoregion 1). For IFI’s fish monitoring element in Ireland, three fish groups have been identified and agreed for Ecoregion 17 by a panel of fishery experts **(FIGURE 3)**. In the absence of major human disturbance a lake fish community is considered to be in reference state (in relation to fish) if the population is dominated by salmonids (or euryhaline species with an arctic marine past) (i.e. group 1 fish species (natives) are the only species present in the lake).[7]

[7] North South Shared Aquatic Resource (NS Share) Task 6.9: Classification Tool for Fish in Lakes: Plan for Development/Conceptual Model (T1 A6.9 - 1.1).

List of the three fish groups identified for Ecoregion 17

1. Natives	2. Non-natives influencing ecology	3. Non-natives benign (generally not influencing ecology)
Brown trout	Roach	Tench
Sea trout	Perch	Rudd
Salmon	Pike	Stoneloach
Char	Bream	Gudgeon
Pollan	Dace	
Eel	Carp	
Shad	Rainbow trout	
3-spine stickleback	Chub	
9-spine stickleback	Minnow	
Brook lamprey		
River lamprey		
Sea lamprey		
Flounder		

Figure 3. EU Water Framework Directive - Irish fish classification

Classification and assigning lakes with an ecological status is a critical part of the WFD monitoring programme. It allows River Basin District managers to identify and prioritise lakes that currently fall short of the minimum "Good Ecological Status" that is required if Ireland is not to incur penalties. A multi-metric fish ecological classification tool (Fish in Lakes –'FIL') was developed for the island of Ireland (Ecoregion 17) using IFI and Agri-Food and Biosciences Institute Northern Ireland (AFBINI) data generated during the NSSHARE Fish in Lakes project (Kelly *et al.*, 2008). This tool was further developed during 2010 (FIL2) in order to make it fully WFD compliant, including producing Ecological Quality Ratio (EQR) values for each lake and associated confidence in classification (Kelly *et al.*, 2012).

3.2 CASE STUDIES OF INVASIVE FISH IN ECOREGION 17

CASE STUDY 1: Lough Fern, Co. Donegal.

Lough Fern located in Co. Donegal, was one of the great spring salmon lakes until its stocks were hit by UDN (Ulcerative Dermal Necrosis) in the 1970s. However, the salmon stocks were making a slow recovery since then until perch appeared in recent years. Lough Fern is also located within the Leannan River Special Area of Conservation. In 2005, Lough Fern was surveyed as part of the North South Shared Aquatic Resource (NS Share) 'Fish in Lakes' project. No perch were found. In 2008, Lough Fern was surveyed as part of the Water Framework Directive (WFD) Monitoring Programme. No perch were found. In 2011, Lough Fern was surveyed as part of the Water Framework Directive (WFD) Monitoring Programme. No perch were found. In 2014, Lough Fern was surveyed again as part of the Water Framework Directive (WFD) Monitoring Programme. Perch (aged 1+) were found.[8] Therefore, an illegal introduction took place somewhere between 2012 and 2013. Since 2014, IFI haven't made any effort to remove perch nor have they made any attempt to pursue a rehabilitation plan for the lake. Under current legislation, these invasive perch are protected in a natural salmonid fishery within a SAC.

CASE STUDY 2: Lough Shindilla (Screebe System), Co. Galway.

Lough Shindilla is the uppermost lake on the Screebe system in Co. Galway, located approximately 0.75km west of Maam Cross. The lake is also located in the Maamturk Mountains Special Area of Conservation (SAC). The lake used to hold a good stock of brown trout and got the occasional run of sea trout and salmon (O'Reilly 2007). Lough Shindilla was surveyed in 2007 under the WFD surveillance monitoring programme (Kelly and Connor 2007). During this survey arctic char and brown trout were found to be the dominant species present in the lake. Adult salmon, minnow and eels were also captured. The lake was surveyed again in 2010, with arctic char being the dominant species in terms of abundance (CPUE)[9] and perch were the dominant species in terms of biomass (BPUE).[10] This was the first time that perch were recorded in Shindilla and IFI surmised

[8] Inland Fisheries Ireland - Sampling Fish for Water Framework Directive - Lakes 2014 - Lough Fern.

[9] CPUE (Catch Per Unit Effort).

[10] BPUE (Biomass Per Unit Effort).

that the lake was colonised by perch from Ardderry Lough during the floods of 2008 and 2009.[11] No explanation was given in the 2010 WFD report as to why perch were in Ardderry Lough considering its location and morphology. In the same report, IFI acknowledged that ***"the introduction of this non-native species has the potential to negatively impact the native brown trout and arctic char populations".*** The lake was surveyed again in 2013 under the WFD programme. Brown trout was the dominant species in terms of abundance (CPUE) and perch was the dominant species in terms of biomass (BPUE). IFI noted that the mean arctic char CPUE and BPUE was substantially lower in 2013 compared to 2010 and 2007, yet they stated that this decrease was not statistically significant.[12] The latest WFD survey of Shindilla was conducted in 2016. The 2016 report noted that perch was now the dominant species in terms of both abundance (CPUE) and biomass (BPUE). The same report also highlighted that the mean arctic char CPUE and BPUE were significantly lower in 2016 compared to 2013, 2010 and 2007.[13] Nevertheless, the 2016 report made no mention on the obvious impact that perch are having on the native arctic char population and one could infer that IFI has no interest in removing the invasive perch or rectifying the sharp decline in char numbers in a SAC.

CASE STUDY 3: River Inny, Co. Westmeath.

The River Inny, an order 5 river (Strahler 1952), is one of the major tributaries to the River Shannon. The river is 88.5km long and occupies a catchment area of 782.46km^2 (2002). The river rises in Co. Westmeath and flows through Loughs Sheelin, Kinale, Derravaragh and Iron before discharging into Lough Ree. Chub (*Leuciscus cephalus (Linnaeus,* 1758)) is a highly prized angling species in Britain and Europe. The absence of chub from the rivers of Ireland, many of which provided an ideal habitat for the species and excellent conditions for the angler, provoked considerable controversy among the visiting angling community. However, it is the stated policy of the Fisheries Boards (IFI) in Ireland to preserve our indigenous and naturalised fishes and to prohibit the introduction of non-native and potentially invasive species (National Policy for the Management, Development and Conservation of Coarse Fish Species in Ireland, Central Fisheries

[11] Inland Fisheries Ireland - Sampling Fish for Water Framework Directive - Lakes 2010 - Lough Shindilla.

[12] Inland Fisheries Ireland - Sampling Fish for Water Framework Directive - Lakes 2013 - Lough Shindilla - IFI/2014/1-4186.

[13] Inland Fisheries Ireland - National Research Survey Programme - Lakes 2016 - Lough Shindilla - IFI/2017/1-4354.

Board, in preparation).[14] In 2001 and 2004 there were unconfirmed reports from anglers that chub had been caught in the River Inny, a major tributary of the River Shannon. No specimens, however, were retained for identification and authentication. In 2005, three live chub were caught in the River Inny and officially identified by fisheries scientists from the Central Fisheries Board (CFB). These fish had probably been illegally introduced to the river by British carp or pike anglers with a view to establishing a population of this species in Ireland.[15]

"It is probable, however, that, as the chub become more abundant and widespread, they will impact on our native or naturalised fishes. The impact could be direct, through predation, or indirect, by competing for available habitat or for common food items. A further risk associated with the introduction of non-native, invasive species relates to the viral, bacterial or parasitic fauna that these fish harbour

Between 2006 and 2008 the CFB conducted a chub removal operation that was deemed a success by the then CFB CEO ***"I am delighted that the effective response mounted by the Fisheries Boards to eradicate this invasive species has paid off. Chub posed a major environmental threat to the country. I would like to take this opportunity to remind anglers that it is illegal to introduce non-native species into Irish waters. As custodians of our precious fisheries resource the Fisheries Boards will take whatever action is necessary to remove any introduced invasive fish species and to prosecute any person that is deemed to be responsible for such introductions".***[17]

As of September 2022, chub still exist in the Inny River with IFI issuing a press release on August 25th 2020 declaring that chub had made a 're-appearance'.[18]

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[14] Caffrey, Joe & Acevedo, Silvana & Gallagher, Kevin & Britton, Rob. (2008). Chub (Leuciscus cephalus): A new potentially invasive fish species in Ireland. Aquatic Invasions. 3. 201-209. 10.3391/ai.2008.3.2.11.

[15] Caffrey, Joe & Acevedo, Silvana & Gallagher, Kevin & Britton, Rob. (2008). Chub (Leuciscus cephalus): A new potentially invasive fish species in Ireland. Aquatic Invasions. 3. 201-209. 10.3391/ai.2008.3.2.11.

[16] Caffrey, Joe & Acevedo, Silvana & Gallagher, Kevin & Britton, Rob. (2008). Chub (Leuciscus cephalus): A new potentially invasive fish species in Ireland. Aquatic Invasions. 3. 201-209. 10.3391/ai.2008.3.2.11.

[17] Westmeath Examiner, Tuesday June 30th 2009, Inny's Chub Stubbed Out - Tom Kelly.

[18] https://www.thejournal.ie/chub-river-inny-longford-inland-fisheries-ireland-investigation-5185772-Aug2020/

Salmon and brown trout are considered to be at risk from direct competition with *Leuciscus cephalus* (Caffrey *et al.* 2008; Invasive Species Ireland 2010; Caffrey 2013). Brown trout and juvenile salmon occupy habitats utilised by *Leuciscus cephalus* and their dietary range overlaps (Caffrey *et al.* 2008; Invasive Species Ireland 2010; Caffrey 2013). Other important native fish such as rare strains of brown trout (e.g. in Lough Melvin), Pollan and Arctic Char may also be threatened by the introduction of *Leuciscus cephalus* (Caffrey *et al.* 2008; Invasive Species Ireland 2010; Caffrey 2013).

If chub are found in Lough Corrib SAC, what will the response of DECC officials and IFI be?

CASE STUDY 4: Owenriff Catchment, Co. Galway.

The Lough Corrib catchment is the largest and most important wild salmonid catchment in Ireland and Lough Corrib is considered the premier wild brown trout fishery in Ireland ([redacted] *al.*, 2002). Oughterard village is situated on the Owenriff River, which drains a region of approximately 68km^2 and enters Upper Lough Corrib downstream of Oughterard, Co. Galway. The Owenriff catchment is located within two different Special Areas of Conservation (SACs) both of which support two Annex II species of the E.U. Habitats Directive (92/43/EEC), namely Atlantic salmon (*Salmo salar*) and the freshwater pearl mussel (*Margaratifera margaratifera*) (NPWS, 2005).

"Prior to 2009 there were no official records of pike (Esox lucius) being present in the Owenriff catchment upstream of the natural waterfall at Canrawer, Oughterard. There were anecdotal records suggesting that there were pike present in some lakes in the catchment in the 1990s but this was never confirmed by IFI staff and no pike were recorded in the electrofishing surveys of 1997 and 2007 (IFI unpublished data; WRBD, 2008). Gradients in excess of 6.6% (Spens et al., 2007) and 7% (Hein et al., 2011) have been shown to act as barriers to the natural dispersal of pike. The natural waterfall at Canrawer, Oughterard on the main channel of the Owenriff exceeds the published gradient threshold preventing natural colonisation of pike from the established population in Lough Corrib, as do the natural falls on the Clooshgereen and the Glashanasmearny both of which now have pike present in the lakes above these natural barriers (IFI, 2018a). In 2009, pike were captured for

the first time by Inland Fisheries Ireland (IFI) staff in two lakes in the catchment (Loughs Bofin and Agraffard) following reports from anglers of pike in the system."[19]

"During the 2017 survey pike were recorded at three river sites including the most upstream sub-catchment and in the two lakes surveyed, indicating a range expansion over the past 20 years. Results from the 2017 survey suggest that pike are present all over the Owenriff catchment, in areas where they can freely gain access and in some areas where they cannot naturally gain access (gradients > 7%)."[20]

"As there are little or no major anthropogenic pressures in the catchment to cause the decline in fish stocks, it is reasonable to infer that the introduction of pike and their subsequent range expansion in the Owenriff catchment (with impacts of competition for food and space and predation on resident and migratory fish) is the main factor causing the decline of brown trout and salmon in the Owenriff catchment. Research from Europe and North America supports this finding."[21]

On November 22nd 2019, IFI published a further fish stock survey report on the Owenriff catchment.[22] The report stated the following.

"Pike was the most common fish species recorded in all lakes, followed by eel. Pike and eel were also captured in the fyke nets in both lakes where the two species were recorded. No brown trout were recorded in any of the lakes indicating a possible failure in recruitment or survival in at least the previous few years. In contrast the brown trout captured in Lettercraffroe Lough (also located in the Owenriff catchment, but no pike are present in the lake) during the 2016 survey ranged in age from 0+ to 4+ indicating recruitment success in the previous five years (Kelly et al., 2017). Brown trout in Lough Bofin and Lough Agraffard from the

[19] Inland Fisheries Ireland - Owenriff Fish Population Rehabilitation Plan - 2018 - IFI/2018/1-4399.

[20] Inland Fisheries Ireland - Fish Stock Survey of Selected Lakes and River Sites in the Owenriff Catchment - 2017 - IFI/2017/1-4396.

[21] Inland Fisheries Ireland - Fish Stock Survey of Selected Lakes and River Sites in the Owenriff Catchment - 2017 - IFI/2017/1-4396.

[22] IFI (2019) Fish Stock Survey of Selected Lakes and River Sites in the Owenriff Catchment, 2018. National Research Survey Programme, Inland Fisheries Ireland, 3044 Lake Drive, Citywest Business Campus, Dublin 24.

2017 survey were aged at 2+ (IFI, 2018a). Definitive conclusions are difficult to determine for all four lakes surveyed due to the limited number of fish recorded. However, brown trout were not recorded in each lake, but they are still present in Lettercraffroe (a lake within the Owenriff with no pike present) and in neighbouring catchments (Loughs Doo, Glencullin, Kylemore and Lettercraffroe) where pike are also not present."

With respect to the Water Framework Directive (WFD) and the impact of invasive coarse fish on the Owenriff's ecological status, IFI had the following comments to make in the same 2019 report.

"Using the FIL2 classification tool, Loughaphreaghaun, Lough Adrehid, Lough Ateeann and Lough Shannaghree were assigned a fish ecological status of Bad for 2018 based on the fish populations present. Reasons for the failures were mainly due to the absence, lower than expected abundance or missing age classes of type specific indicator species (i.e. brown trout). In contrast lakes in neighbouring catchments where there are no pike present, such as Glencullin Lough, Doo Lough, Kylemore Lough and Lough Shindilla, were assigned a fish status of High and Ardderry Lough was assigned a fish status of Good (see www.wfdfish.ie). The EPA has also assigned high status to Lough Bofin; however this status assignment does not incorporate fish status (EPA, 2017)."

CASE STUDY 5: Ross Lake, Co. Galway.

Ross Lake is situated in the Corrib catchment, located approximately 1km south-east of Rosscahill and 3km north-west of Moycullen, Co. Galway in a chain of lakes entering Lough Corrib at Moycullen Bay. Ross Lake and the surrounding woodlands have been designated as a Special Area of Conservation (SAC) for containing a hard water lake, a habitat listed on Annex I of the EU Habitats Directive (Council Directive 92/43/EEC) (NPWS, 1999). The lake supports communities of *Chara pedunculata* and *Chara curta*, both of which are characteristic of marl lakes such as Lough Carra in Co. Mayo. Ross Lake was surveyed in September 2016 as part of the WFD (Water Framework Directive) surveillance monitoring programme and roach were found to be the dominant species in terms of abundance (CPUE) and roach/bream hybrids were the dominant fish species in

terms of biomass (BPUE).[23] No brown trout were found in 2016 or during the previous WFD surveys conducted in 2007, 2010 and 2013.

Ross Lake was once a famed trout fishery that had its own self sustaining wild population.[24] Since the introduction of various invasive coarse fish including pike and roach, the native trout population have ceased to exist. Ross Lake is now a de-facto coarse fishery with a mayfly hatch but no salmonids present in a SAC lake.

CASE STUDY 6: Lough Corrib, Co. Galway.

Lough Corrib the second largest lake in Ireland (after Lough Neagh), is situated in Co. Galway in the River Corrib catchment. The lake stretches from outside Galway city to within three kilometres of Maam Cross, a distance of over 50 kilometres. The main rivers draining into Lough Corrib include the Black, Clare, Dooghta, Cregg, Owenriff rivers and the Cong canal which joins Lough Corrib to Lough Mask. The lake can be divided into two parts; Lower Lough Corrib - a relatively shallow basin underlain by carboniferous limestone in the south and Upper Lough Corrib - a larger, deeper basin underlain by more acidic granite, schists, shales and sandstones to the north (NPWS, 2004). Since 2008, the lake has been surveyed under the WFD (Water Framework Directive) surveillance monitoring programme. During the summer of 2011, IFI conducted the second WFD fish survey. One tench (*Tinca tinca*) was captured in a fyke net on Upper Lough Corrib.[25] This discovery should have set off alarm bells but IFI at the time decided to bury the fact in an obscure WFD report. No tench were discovered in a subsequent WFD survey (2014). On March 4th this year during stock management operations on Lough Corrib another tench was caught in gill nets in the Ballycurrin/Salthouse area.[26]

As of September 2022, riparian anglers can conclude that a self sustaining population of tench exist in Lough Corrib. Have IFI formulated any contingency plans to remove these invasive fish? Why did IFI attempt to protect this species in 2018 under proposed legislative amendments considering that the potential presence of tench is the result of an

[23] Inland Fisheries Ireland - National Research Survey Programme Lakes 2016 - Ross Lake - IFI/2017/1-4366.

[24] Went, Arthur E. J. "The Pike in Ireland." *The Irish Naturalists' Journal*, vol. 12, no. 7, 1957, pp. 177–182. *JSTOR*, JSTOR, www.jstor.org/stable/25534470.

[25] Inland Fisheries Ireland - Sampling Fish for the Water Framework Directive Lakes 2011 - Lough Corrib - IFI/2012/1-4069.

[26] FOI Request 493-22-CW released by Inland Fisheries Ireland.

obvious illegal introduction (no tench were captured in the major fish stock surveys of 1986 and 1996) and the presence of tench in Lough Corrib SAC is in contravention of the EU Habitats Directive conservation objective's?

CASE STUDY 7: Lettercraffroe Lough, Co. Galway.

Lettercraffroe Lough is located 6km south-west of Oughterard, Co. Galway on a tributary of the Owenriff River which flows through the town and into Lough Corrib. Lettercraffroe Lough is also situated within the Connemara Bog Complex, a large Special Area of Conservation (SAC) site that encompasses a wide range of habitats, including extensive tracts of blanket bog, heath, woodland, lakes, rivers and streams.[27] The lake was the subject of a WFD survey in 2007, 2010, 2013 and 2016. The surveys showed that roach are now the dominant species in terms of biomass and CPUE (Catch Per Unit Effort). Yet in 2008, the Western Regional Fisheries Board (WRFB) produced a fish stock survey report of the entire Owenriff System that stated the following:

"The presence and dominance of roach in Lettercraffroe lake is unacceptable and illustrates the need for improved bio-security planning in order to prevent unauthorised fish introductions, alien species infestations and fish disease transfers. Options should now be considered with regard to methods for the removal of the roach population from Lettercraffroe Lake."[28]

As it stands over the last fourteen years, the WRFB, CFB or IFI have made no effort in removing invasive roach from this once famed trout fishery as described by T.C. Kingsmill Moore in his celebrated book 'A Man May Fish'. Furthermore, should any angler remove five roach or any roach above 25cm in length from Lettercraffroe Lough then that angler would be breaking the law (Coarse Fish Conservation Bye-Law No. 806 of 2006) and potentially liable to a fine plus confiscation of their fishing gear used. Is this obscene and contradictory policy fully supported by IFI staff, the IFI Board, its CEO, DECC and the Principal Officer within the Inland Fisheries Division?

[27] Inland Fisheries Ireland - National Research Survey Programme Lakes 2016 - Lettercraffroe Lough - IFI/2017/1-4360.

[28] The Western Regional Fisheries Board, Catchment Wide Fish Survey For The Owenriff River, January 2008.

CASE STUDY 8: Lough Inagh, Co. Galway.

Lough Inagh is situated in the Ballynahinch system approximately 7.5km north of Recess, Co. Galway. The lake is located in the Inagh valley with the Twelve Pins Mountains rising to the west and the Maumturk mountain range to the east. Lough Inagh is fed primarily from the Tooreenacoona River, which then flows out of the lake into Derryclare Lough.

Lough Inagh is situated within the Twelve Bens/Garraun Complex Special Area of Conservation (SAC). This is an extensive SAC located in the north-west of Connemara and is dominated by mountainous terrain. Geologically, the SAC can be divided into two distinct sections; the Twelve Bens which are composed of quartzite and schists in the valleys and the mountains to the north of Kylemore which are composed of gneiss, sandstones and mudstones (NPWS, 2005). The main soil type within the site is peat. Eight of the habitat types listed in the SAC are found in Annex I of the EU Habitats Directive.

The SAC also contains many species listed on Annex II of the Habitats Directive: freshwater pearl mussel, Atlantic salmon, otter and the plant, slender naiad (NPWS, 2005). Lough Inagh is part of the Lough Inagh and Derryclare Fishery. The lake holds a stock of brown trout and has a spring and grilse salmon fishery and a run of sea trout (O' Reilly, 2007). The lake was previously surveyed in 2002 and 1997 (Gargan and Rogers, 2002). At that time the lake held a stock of Arctic char, brown trout, sea trout, minnow and eel (Gargan and Rogers, 2002). Perch were discovered in the lake in 2016, since then stock management efforts (using perch traps) by IFI have been on-going to remove them from the lake.

In a 2019 Water Framework Directive (WFD) survey conducted by Inland Fisheries Ireland, a total of four fish species (sea trout are included as a separate 'variety' of trout) were recorded in Lough Inagh. Perch was the dominant species in terms of both abundance (CPUE) and biomass (BPUE) captured in the survey gill nets during the 2019 survey. This contrasts with the previous survey in 2002 when brown trout and Arctic char were the dominant fish species in the lake (Gargan and Rogers, 2002).

Arctic char were not captured during the 2019 survey. The Arctic char population may now be so small that it is difficult to capture using conventional sampling methods and could be on the verge of extinction. Introductions of perch and other non-indigenous

species cause declines in Arctic char populations and can also lead to extinctions in some lakes (Kelly *et al.*, 2014, Kelly *et al.*, 2017, Connor *et al*., 2019 and Morrissey-McCaffrey *et al*., 2018).

CASE STUDY 9: Aughrusbeg Lake SAC, Co. Galway.

Aughrusbeg Lake SAC is one of the most westerly lakes in the Connemara area of Co. Galway, located approximately 5km west of Cleggan. It has a surface area of 50ha, a mean depth of less than 4m and a maximum depth of 14m. The lake falls into typology class 7 (as designated by the EPA for the Water Framework Directive), i.e. deep (>4m), less than 50ha and moderate alkalinity (20-100mg/l $CaCO_3$).

Aughrusbeg Lough forms part of the Aughrusbeg Machair and Lake Special Area of Conservation (SAC). The site has been selected as a SAC for containing a lowland oligotrophic lake, a habitat listed on Annex I of the E.U. Habitats Directive. The underlying geology of the region is made up of Omey granite (NPWS, 2003). Species recorded from the shoreline of the lake include six-stamened waterwort (*Elatine exandra*), quillwort (*Isoetes lacustris*) and shoreweed (*Littorella uniflora*) (NPWS, 2003). The majority of Aughrusbeg Lough has gently sloping granite shores, with a well developed sand shelf present on the western shore. At the edge of this sand shelf the lake bed falls off steeply to a depth of 6m (NPWS, 2003).

According to archival Inland Fisheries Trust data and [redacted] (2003), eels and brown trout were the only species present in the lake. However, a recent survey in 2007 as part of the WFD surveillance monitoring programme (Kelly and Connor, 2007) found rudd and eels to be the dominant species present, with three-spined stickleback also recorded.

On Wednesday, August 11th last year, Inland Fisheries Ireland issued a press statement confirming that invasive pike had been found in Aughrusbeg Lake SAC for the first time. The confirmation was made during a fish stock survey by Inland Fisheries Ireland research staff.

The introduction of invasive pike to small low-complexity lakes, such as Aughrusbeg Lough, could be devastating to resident fish populations. New introductions are also potentially a carrier of fish disease and parasites, the state agency stated.

[redacted] CEO of Inland Fisheries Ireland said: ***"Ireland's inland waterbodies are ecologically important ecosystems, which support significant recreational fisheries for native and established fish species. 'Introductions' of new species threaten these ecosystems that they support, potentially in unforeseen ways, and are a major cause for concern for Inland Fisheries Ireland."***

He added: ***"Unfortunately, a similar introduction of pike into the upper sections of the Owenriff catchment in County Galway over ten years ago caused the virtual collapse of what had been a very important salmonid fishery in the West of Ireland."***

Under current fisheries legislation (see Section 4.0), which the Inland Fisheries Division of DECC are steadfastly standing over, these invasive pike are now protected in a SAC. Only this could happen in Ireland with such negligent civil servants operating within DECC.

4.0 CURRENT COARSE FISH & PIKE BYE-LAWS

Conservation of Pike Bye-Law No. 809 of 2006.

On August 3rd 2006, the then Minister of State at the Department of Communications, Marine and Natural Resources, Mr. [redacted] TD, signed a new national bye-law on the conservation and protection of (invasive) pike in all watercourses. This bye-law contained three wording changes from bye-law no. 805, which was revoked. The new bye-law clarified several issues that were raised by interested parties. The new bye-law superseded the Pike Conservation Bye-Law no. 667, which was in force since 1990. That bye-law allowed for the killing of one specimen sized pike i.e. 20lbs in a river and 30lbs in a lake in any one day. The current bye-law no longer allows this practice and only one pike up to 50cm may now be killed in a day on any watercourse including SACs. All pike taken by fair angling, longer than 50cm must be returned alive to the water in all cases. Another change in the current bye-law is that 0.75kg of pike flesh may only be retained by an angler instead of 1.5kg.

Conservation of and Prohibition on Sale of Coarse Fish Bye-Law No. 806 of 2006.

Two weeks prior to the new pike bye-law being signed in to legislation, Mr. [redacted] TD signed a bye-law protecting (invasive) coarse fish[29] in every Irish water course on July 20th 2006. The new bye-law allowed only four coarse fish per angler per day to be retained and no coarse fish above 25cm in length could be retained either. The bye-law also prohibited the sale of any coarse fish in Ireland excluding fishing tackle dealers and fish bait suppliers who have been granted an exemption from their respective regional fisheries board (IFI).

4.1 GENESIS OF CURRENT COARSE FISH & PIKE BYE-LAWS

The following extracts (*all in italics*) are from a research essay titled “National Identity, Moral Panic and East European Folk Devils” by Kevin Howard, which appeared in a 2011 academic textbook titled “Globalization, Migration and Social transformation - Ireland in Europe and the World” edited by Bryan Fanning of University College Dublin and Ronaldo Munck of Dublin City University. The research by Kevin Howard gives an in-depth and chronological history of how invasive coarse fish and invasive pike got such comprehensive legal protection by Irish politicians and deficient government officials.

[29] “Coarse fish” means any fresh water fish other than pike, salmon, trout , eels or minnow.

In the early 1970s with EEC membership approaching, attention broadened to the potential value of visiting continental anglers. in the context of the debate around the 1970 Fisheries Bill, the Labour Party TD told how a visiting group of French anglers he observed would take:

"Great delight in doing things which we would not bother to do. Some of them would be more elated from catching a perch weighing half a pound than would a man who had caught a 25lb. salmon … Coarse fish are a menace. We all know the damage both pike and perch do. [However, they could be] a great tourist attraction. There should be a promotional drive in that respect throughout European countries (Coughlan, Dáil Éireann, 2 December 1970)."

Ireland joined the EEC in 1973 and throughout the decade, the economic potential of continental anglers pursuing Irish pike was a recurrent theme. German coarse anglers of which there were an estimated 250,000 were perceived to have far more disposable income than English visitors. In the context of the 1979 fisheries bill, Fine Gael's echoing the assumptions of 20 years earlier about continentals' taste for pike suggested that Germans in particular, should be encouraged to come here. They would be able to catch and 'make a delicious meal of a fish that we would be likely to throw away' (Dáil Éireann, 18 October 1979). Five years later, in the context of a further fisheries debate, the point was again made that while few in Ireland were bothered with coarse fish, pike in particular, continentals were avid pike anglers. The Fine Gael spokesperson on tourism, argued:

"Coarse fishing is frowned on by inland fishermen in this country. It is a lowly thing in the eyes of some anglers to fish for pike. People in Germany and on the Continent generally, they are very much into pike fishing. We have lakes full of pike. Promote it, particularly in areas like Germany and continental countries (Dáil Éireann, 22 June 1984)."

From the 1920s to the 1980s then, the themes are quite clear: across the political spectrum, coarse fish particularly pike should not be, and are not wanted, in Irish waters; on the other hand, the English, Germans and other continentals pursue these species and should be facilitated in coming here to fish for them.

Piscine Ethnocentrism

At the same time as parliamentarians were pushing for the promotion of pike angling tourism amongst Germans and other continental anglers, other parliamentarians were lobbying for legislation to protect pike stocks from the apparent threat these continentals posed to these stocks. The claims made in relation to the predations of visiting German and French fishermen were extraordinary, most particularly from parliamentarians who represented areas with a tradition of coarse angling. In late 1986, the Fianna Fáil TD for Cavan-Monaghan, [redacted] asked the 'Minister for Tourism, Fisheries and Forestry the steps he is taking to ensure that the pike stocks in County Cavan will not be completely depleted by continental anglers' (emphasis added, [redacted], Dáil Éireann, 25 November 1986).

The mainstream media expressed similar disquiet. The Irish Independent ran a story claiming that 'several border lakes had been "totally cleaned" out of coarse fish recently'. The chairman of the Dublin Pike Anglers club claimed:

"Continentals are now arriving here in droves, equipped with nets, a multitude of rods and freezer boxes. The fish are then sold on the Continent, so it all adds up to a cheap holiday here with little benefit to the tourist sector ([redacted], Irish Independent, 12 January 1987)."

Yet in the three years 1985–1987 inclusive, the fisheries boards removed nearly 60,000 pike at a cost to the state of £IR184,000 (offset to some extent in that dead pike were sold on to fish dealers for £IR1 per kilo). During the economically depressed mid 1980s, the state was spending considerable sums to remove pike wholesale while introducing legislation to limit the alleged retail-scale activities of continental anglers, who were being encouraged to come to Ireland in the first place, to fish for a species which many Irish anglers, politicians, academics and popular opinion had traditionally regarded as an invasive nuisance. Yet as Table 12.2 shows, legislation has emerged to protect coarse fish, pike in particular. Crucially, in each case, this legislation was a direct response to the claims made about the threats which foreigners posed to the stocks of coarse fish.

Table 12.2 Legislative protection of pike, coarse fish

Measure	Date	Legislation	Proscription
1	1986	Conservation of Pike By-law No. 654	No more than three fish taken in one day, no more than 10 allowed in possession at any one time
2	1990	Conservation of Pike By-law No. 654	Only one pike, no more than 6.6lb (3kg), per angler, per day, allowance made for 'specimen' fish
3	2006	Conservation of Pike By-law No. 809, 2006	Only one pike can be killed per angler, per day, and this must no longer than 50cm in length
4	2006	Conservation of and Prohibition on Sale of Coarse Fish Bye-law No. 806, 2006	No more than four coarse fish, none of which can be longer than 25cms (4ins)

Source: Drawn from data at *Dáil Eireann*.

One of the reasons for these contradictory dynamics was the beginnings of an indigenous pike angling lobby, which was adopting the English practice of 'catch and release' in the context of a fisheries management tradition and a game angling culture that was extremely hostile to pike. The Dublin Pike anglers referred to above had been founded as early as 1970. The bulk of Ireland's pike angling clubs however were formed in the 1980s and 1990s. In January 1988, 15 of them came together to form the Irish Federation of Pike Angling Clubs (IFPAC). From that beginning membership has risen to 94 clubs (IFPAC 2009). One of the IFPAC's key aims is to have the pike 'assigned the status of indigenous species', an ongoing and ideologically loaded debate. Nevertheless, the lobbying of IFPAC, stressing in particular the predations of foreigners, contributed to the introduction in 1991 of further legislation to protect pike stocks (Measure 2, Table 12.2).

By the mid 1990s 'catch and release' had become the hegemonic normative framework for club-based, organised pike angling and for coarse anglers more generally. The establishment of 'catch and release' reached a watershed with the launch in 1999 of the Sligo-based Irish Angler's Digest. The magazine set out to 'provide a forum for an exchange of views about various topics of interest'. For the first few years of the periodical's life, the perceived threats to coarse fish were the usual suspects: algae bloom, water extraction, effluent from farming activity; littering by Irish anglers and of course 'the Continentals'. Nonetheless, in the main, the tone of the magazine was positive and upbeat. All forms of angling, and the commercial activities that surrounded them, seemed to be doing well. However, the wider context was changing rapidly. In 1996, Ireland experienced net migration for the first time since the late 1970s. The net migration of the

1970s comprised Irish emigrants returning home. For the last few years of the 1990s that pattern was very similar, ethnic Irish returning. By the early 2000s the composition of the migrant stream was much more diverse. From the perspective of Ireland's coarse anglers, these newcomers were quite different to Germans on vacation. There were far more of them; they weren't in Ireland on holiday and they seemed to want to catch and eat any and all species of freshwater fish. In short, they were not anglers, they were fishermen. Thus, while the fisheries boards continued to cull pike, water quality continued to deteriorated, extraction for building increased, the sole variable for the perceived decline in coarse fish stocks, and the attendant threat to tourism became the undifferentiated category 'East European' immigrants.

The highpoint of the panic was 2005, the year after accession. In the January 2005 edition of Irish Anglers Digest, the IFPAC warned readers that 'into the cauldron of abuse of Irish pike, has come a barrage of illegal and immoral practices designed to indiscriminately remove any fish that swims. The simple facts speak for themselves.' The authors did not refer specifically to East Europeans, that was left implicit. April 2005 was the first time the term 'non-nationals' appeared; used in relation to what the IFPAC saw as the government's reluctance to 'consider the wholesale taking and killing of coarse fish by non-nationals as a major problem'. IFPAC went on 'it does not do our tourist industry any good when visiting [English] anglers [a more morally advanced type of non-national] go back with tales of specimen bream, tench, etc, being bar-b-queued on the lakeshore' (Irish Anglers Digest, 2005, vol. 6, no. 12:21). By July of that year, the IFPAC's chairperson was more explicit:

"We now have a large population of Eastern Europeans who traditionally eat coarse fish …. To prohibit members of this significant community from catching and eating coarse fish could be viewed as wrong and discriminatory. Fish removal should be controlled. The total ban on the taking of coarse fish would be unworkable and possibly discriminatory. Bag limits for coarse fish should be introduced (Chambers, IAD, July 2005, 47)."

The IFPAC didn't want a total ban on the taking of coarse fish because their members used small fish as pike bait. Nevertheless, they were still anglers, pursuing fish for sport, not harvesting them for food:

"What really annoys anglers at present is the illegal methods used by many non-nationals to catch fish. A week rarely goes by without reports of non-nationals being seen setting nets or longlines. In many cases they use dinghies, arrive on lakes at dusk and again at dawn. It does not take them long to lay the long lines or remove the fish (ibid., p. 48)."

In May 2006 the magazine reported on a meeting the previous month of a coalition of angling interest groups brought together to suggest a campaign of political lobbying. The meeting was told that 'fresh, frozen and smoked roach, bream, pike etc, can be purchased in many shops including some in Moore Street' (Irish Angling Digest, May 2006: 35). While no evidence of this was given the same edition showed photographs of dead coarse fish, caught up in nets, and allegedly dumped on the bankside by East Europeans. Dead fish, on a fishmonger's slab or in a supermarket's fish section, is one of the few remaining authentic presentations of animals as foodstuffs. In the main, animal products are presented for human consumption packaged, in other words, 'disembodied'. Thus, in and of themselves, pictures of dead fish might be regarded as quite neutral. The difference of course is that in the pages of Irish Anglers Digest coarse fish are not food; they are sporting quarry that should be returned to their habitat alive, to fight another day. Such photographic imagery therefore is highly emotive and those responsible are quite easily identifiable.

The Legislators' Campaign

Throughout 2005 and 2006 the push for legislation gathered pace, most particularly though not surprisingly by opposition TDs. In April 2005, the Green Party had gotten on board the campaign for raising the legal status of coarse fish. The Party's leader [redacted] tabled a question in the Dáil to the Minister for Communications, Marine and Natural Resources, as to 'when legal protection of coarse fish, in addition to the protection afforded to the pike species, in order to protect stocks from destruction [would be introduced] ([redacted], Dáil Éireann, 27 April 2005). The Fine Gael TD [redacted] tabled a number of written questions (March and June 2005, January 2006) calling on the government to introduce legislation compelling 'catch and release'. In March 2006 the independent TD from the Cavan-Monaghan constituency [redacted] sought an adjournment debate, 'to discuss the following matter of urgent public and national concern, namely … the threat to inland coarse fishery resources … from illegal fishing

activity and stock depletion ([redacted] Dáil Éireann, 23 March 2006). Not to be outdone, Sinn Féin's TD for the same Cavan-Monaghan constituency, [redacted] tabled a question to encourage a 'catch and release' ethos as a way of protecting 'coarse fish stocks which are under threat from illegal fishing' ([redacted], Dáil Éireann, 28 March 2006). [redacted] followed up a month later will a similar question. In May 2006 Green Party TD [redacted] pressed the government to introduce 'a "catch and release" system for pike angling in the interests of preserving stocks here' ([redacted], Dáil Éireann, 3 May 2006). In July, Ireland's semi state electricity provider, the Electric Supply Board (ESB) announced that 'catch and release' was to be practised in the waters it controlled.

Legislative Catharsis

While the government had deflected requests for legislation with the response that fish protection was a matter for the fisheries boards, in July 2006 it relented. Two bye-laws were introduced, Measure 3 and Measure 4 in Table 12.2 above. Measure 3 further strengthened the protection of pike, Measure 4 offered the first ever protection for all forms of coarse fish. Thus by 2006, all coarse fish had come under the Dáil's protection. As we have seen, <u>each legislative step was taken to protect fish against foreign predation.</u>

The Irish Anglers Digest was jubilant, 'Protection – at last' ran the headline in the edition which followed the introduction of the legislation (Vol. 8, no. 6, October 2006). The introduction of the legislation appears to have had a cathartic effect for the authors of the magazine. Its November 2007 edition featured pike fishing in Poland which raved about the abundant and rich waters; the state run restocking programmes; the efficient administration and policing of fishing licences, ending with a paen to the wonderful Poles. Since then, there's been no negative mention of the 'East European' threat. Indeed, the February 2007 edition contained a piece on how the pike fishing scene in Ireland had changed over the last two decades. How it had become populated by diverse types of anglers, the most common of which was the xenophobic-piker, 'a character who first raised his head in the mid-1990s'.

"The recent past has provided xenophobic-piker with a new wave of targets from the accession states. Basically, a latent racist, if he fails to catch a pike, then it's not the fault of the weather, water, the bait, or even his angling prowess – 'the

Bosnians' [anyone from east of Calais] are always to blame (Farrell, IAD, Vol. 8, no. 10, 2007, p. 5)."

Yet despite the protective legislation, the fisheries boards continue to cull pike. An anomaly not lost on the Mayo TD [redacted] *who queried the policy with the Minister for Communications, Marine and Natural Resources. On foot of the 2007 general election in Ireland this was now the Green Party's* [redacted]*. In 2008, his party colleague* [redacted]*, suggested to the Minister that coarse fish stocks were in imminent danger of collapse' adversely affecting 'a valuable source of tourism for rural areas' (*[redacted]*, Dáil Éireann, Vol. 650, 13 March 2008).* [redacted] *responded to the effect that the threat was overstated. There had been a few localised examples of fish stocks being exploited as a food item. 'However, this relatively new practice has not had a significant impact on coarse fish stocks nationally … the main problem appears to be perception. In Ireland, we are not used to seeing our coarse fish killed and eaten … domestic anglers are commonly angered when they witness this practice' (*[redacted]*, Dáil Éireann, Vol. 650, 13 March 2008).*

In addition to Minister [redacted] *downplaying of the apparent danger to actual fish stocks, research by Fáilte Ireland (Irish Tourist Board) suggests that the apparent threat to tourism may also have been exaggerated. For the seven years 2002–2008 inclusive, neither coarse angler numbers nor visitors satisfaction rates with the quality of angling in Ireland showed any significant declines. During that period, the number of visitors engaging in coarse angling averaged around 29,000 (Fáilte Ireland 2007, 2009), much the same as in the late 1960s. The same source recorded that slightly less than 12 per cent of those surveyed indicated they were not satisfied with the quality of the angling. Indeed, the majority, 57 per cent, indicated they were very satisfied.*

It is true that there has been some turning away from Ireland as a coarse fishing venue, not least by pike anglers. However, this cannot be blamed on recently arrived East European immigrants. In 2002, the Pike Anglers' Club of Great Britain made a submission to the Central Fisheries Board which stated that:

"For many years a great number of our members, plus numerous other British pike anglers have visited the various loughs and rivers of Ireland to sample the pike

[30] In March 2010 Mary White was appointed to the cabinet as a Junior Minister at the Department of Community, Equality with special responsibility for Integration, Equality and Human Rights.

fishing for which it was once famed. However, in recent years most of these anglers have refrained from visiting Ireland to fish, because of the … dwindling quality of the pike fishing … It is significant that the recent decline of quality pike fishing on Irish venues coincides with [the fisheries board's culling of] pike in large numbers, this in our view is short sighted and a recipe for fishery suicide! (PAC 2002)."

The ambivalence towards the pike, its 'native' status, and the consequent policy of culling it to protect the indigenous salmonids profoundly alienates the very constituency the Conservation of Pike Bye-Law no. 809, 2006 was introduced to protect.

Conclusion

There is a long history of illegal fishing in Ireland, not least in the border counties. As long as there have been riparian rights of exclusion, people have poached and, if caught, punished. Eighty years before Alfonsas Zilius was convicted of illegal fishing, [redacted] appeared in court in Cavan charged with fishing illegally. He was netting bream (a coarse fish) for food in a river to which he had no access rights. [redacted] pleaded guilty on the basis that he didn't think he was doing anything wrong. The judge decided to treat him leniently (Anglo-Celt, 23 October 1926). In the 1980s it was the continentals 'cleaning out our rivers and lakes' (Anglo-Celt, 10/1987, 13), as well as 'faceless get rich quick merchants from Northern Ireland'.

Moral panics are the acute manifestations of a chronic moral indignation (Young, 2009, 7). As we have seen, since at least the 1980s, the activities of foreigners taking fish for food were the source of this indignation. In the context of the mass immigration of mid 00s this indignation became acute. The future is open and we cannot perceive how the large-scale immigration of the 00s will impact on Irish national identity. What we can see is the rapidity with which the core ethnic group can alter the legislative and administrative context to compel cultural compliance from foreigners. At the core of Irish national identity is a profound ethnocentrism. An obvious ethnocentrism informs the 2006 legislation. Yet all identities are constructs and the more flexible these constructs are, the more resilient they are likely to prove. In this specific example, the normative framework East Europeans transgressed is itself an example of transnational cultural syncretism; the English practice of 'catch and release' repackaged as traditionally Irish. The criminalisation of East

Europeans' fishing and dietary practices was justified on the basis of the perceived threat these posed to Ireland's coarse fishing stocks.

4.2 COARSE FISH/PIKE BYE-LAWS IN SACs SUBVERT EU LAW

As discussed in previous sections, the Conservation of Pike Bye-Law No. 809, 2006 and the Conservation of and Prohibition on Sale of Coarse Fish Bye-Law No. 806, 2006 are national bye-laws that cover all lakes, rivers, streams, ponds etc and including Special Areas of Conservation (SACs). The legal basis on which SACs are selected and designated is the EU Habitats Directive (92/43/EEC) was initially transposed into Irish law in 1997 and is now covered by the European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. No. 477 of 2011), as amended. The Habitats Directive contributes to ensuring biodiversity in the European Union by conserving natural habitats and wild fauna and flora species. It sets up the 'Natura 2000' network, the largest ecological network in the world. Natura 2000 comprises **Special Areas of Conservation** designated by EU countries under this directive and **Special Protection Areas** classified under the Birds Directive (Directive 2009/147/EC).

Any plan or project that is likely to have a significant effect on a Natura 2000 site must be subject to Appropriate Assessment Screening (AAS) under Article 6(3) of the Habitats Directive. Competent authorities may only agree to a plan or project after having ascertained that it will not have a significant impact on the integrity of a Natura 2000 site. Some projects that will cause significant negative impact may still be permitted, in the absence of other alternatives, for imperative reasons of overriding public interest (including those of a social or economic nature). Where this arises, EU countries must introduce compensatory measures to ensure the overall coherence of the Natura 2000 network. This procedure is regulated under Article 6(4) of the Habitats Directive. Article 6(3) of the EU Habitats Directive provides the following:

"any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subject to appropriate assessment of its implications for the site in view of the site's conservation objectives. In the light of the conclusions of the assessment of the implications for the site and subject to the provisions of paragraph 4, the competent national authorities shall agree to the plan or project only".

The Lough Corrib Pike Research & Control Group has availed of legal advice from a Senior Counsel, which concludes that there is no basis to limit the range of the term "**any**" in Article 6(3) in its preface to "plan or project". Thus, the two Bye-Laws No.s 806 and 809 of 2006 are a plan (or project) and therefore they trigger the Article 6(3) requirements, and should be subject to Appropriate Assessment Screening (AAS), as it arises in circumstances, which are not necessary for the management of Natura 2000 sites. It is logical to conclude that any such AAS may result in the requirement for a full Appropriate Assessment to be done on the Bye-Laws themselves.

Neither department officials nor the now defunct Central Fisheries Board conducted Appropriate Assessment Screenings[31] on these two Bye-Laws for any of the 439 Irish SACs[32] that may include freshwater catchments prior to implementation. Therefore, the Conservation of Pike Bye-Law No. 809, 2006 and the Conservation of and Prohibition on Sale of Coarse Fish Bye-Law No. 806, 2006 are fundamentally **illegal** as they contravene both the EU Habitats Directive and the current domestic European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. No. 477 of 2011).

Accordingly, the two Bye-Laws are also in breach of Article 6(2) as DECC are not taking appropriate steps to avoid, in SACs, the deterioration of natural habitats for which salmon etc are designated. Instead, DECC has adopted measures through secondary legislation that are causing such deterioration.

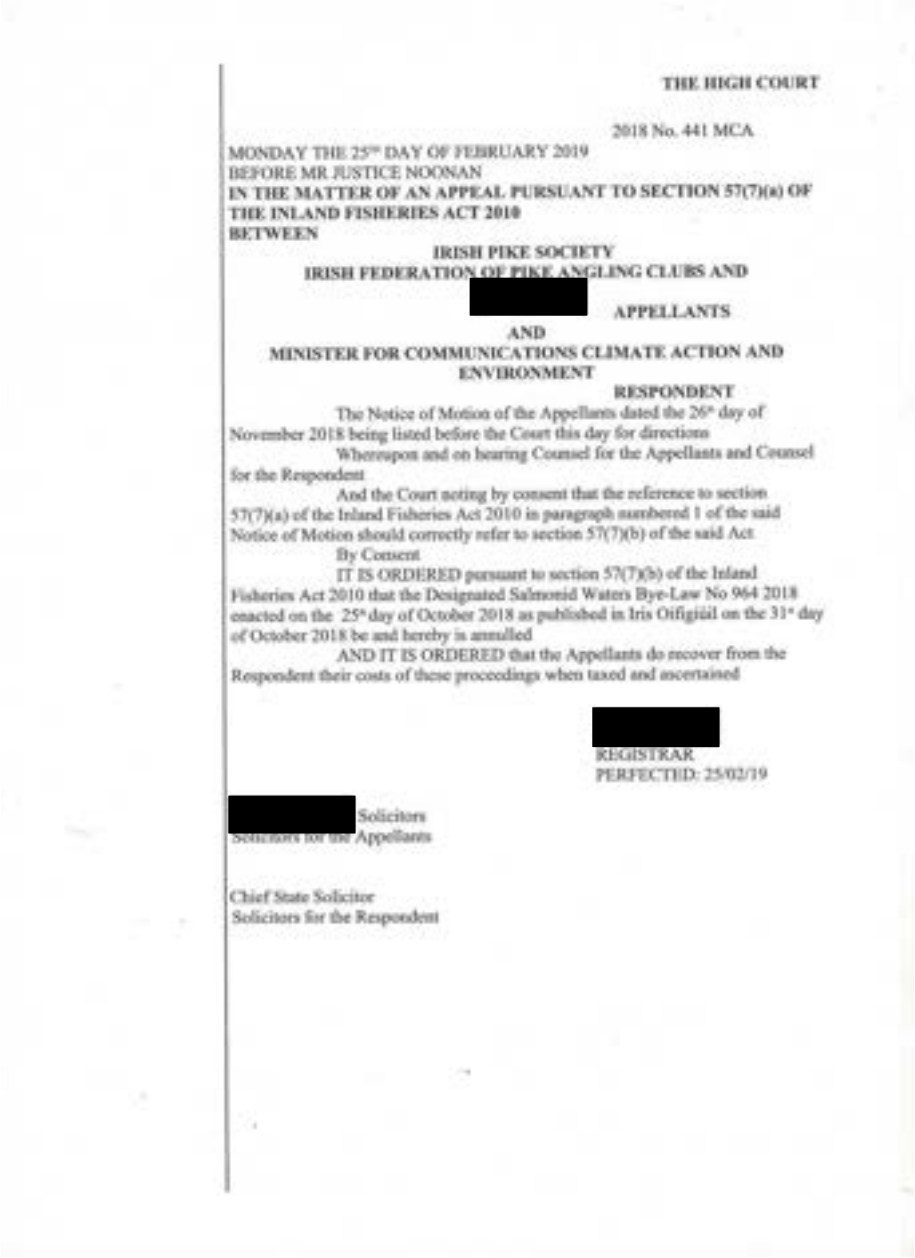
Furthermore, on July 27th last year in response to a Parliamentary Question (PQ) regarding the proposed draft 2021 Salmonid Bye-Law asked by [redacted] TD, Minister [redacted] stated the following:

"In parallel, the Department has tendered for an independent Appropriate Assessment (AA), in line with the requirements of the EU Habitats Directive to be undertaken to bring independent professional advice to bear on potential impacts of the bye-law on the conservation objectives of the waters concerned. The final draft bye-law will be subject to legal advice".

[31] Oughterard Anglers Association, pers. comm., November 2019 - FoI and AIE requests.

[32] https://www.oireachtas.ie/en/debates/question/2019-09-19/261/.

A 2018 fisheries Bye-Law was revoked on this very issue. On October 25th 2018, the Designated Salmonid Waters Bye-Law No. 964 of 2018 was signed in to law by [redacted] TD (Fine Gael). British and Irish pike angling lobbyists challenged the Bye-Law in the High Court, case no. 441 MCA (2018). The case never went to non-jury trial presided over by Mr. [redacted] as the state's legal team never defended the Bye-Law as the requisite Appropriate Assessment Screenings (AASs) were never completed. As a consequence, the Bye-Law was annulled under Section 57 of the Inland Fisheries Act 2010 on February 25th 2019 **(FIGURE 4)**.



THE HIGH COURT

2018 No. 441 MCA

MONDAY THE 25TH DAY OF FEBRUARY 2019
BEFORE MR JUSTICE NOONAN
IN THE MATTER OF AN APPEAL PURSUANT TO SECTION 57(7)(a) OF THE INLAND FISHERIES ACT 2010
BETWEEN
IRISH PIKE SOCIETY
IRISH FEDERATION OF PIKE ANGLING CLUBS AND
[redacted]
APPELLANTS
AND
MINISTER FOR COMMUNICATIONS CLIMATE ACTION AND ENVIRONMENT
RESPONDENT

The Notice of Motion of the Appellants dated the 26th day of November 2018 being listed before the Court this day for directions

Whereupon and on hearing Counsel for the Appellants and Counsel for the Respondent

And the Court noting by consent that the reference to section 57(7)(a) of the Inland Fisheries Act 2010 in paragraph numbered 1 of the said Notice of Motion should correctly refer to section 57(7)(b) of the said Act

By Consent

IT IS ORDERED pursuant to section 57(7)(b) of the Inland Fisheries Act 2010 that the Designated Salmonid Waters Bye-Law No 964 2018 enacted on the 25th day of October 2018 as published in Iris Oifigiúil on the 31st day of October 2018 be and hereby is annulled

AND IT IS ORDERED that the Appellants do recover from the Respondent their costs of these proceedings when taxed and ascertained

[redacted]
REGISTRAR
PERFECTED: 25/02/19

[redacted] Solicitors
Solicitors for the Appellants

Chief State Solicitor
Solicitors for the Respondent

Figure 4. 2019 High Court annulment of Salmonid Bye-Law No. 964 of 2018.

Last August, IFI as the statutory body made a submission to DECC regarding the public consultation on the 2021 Draft Designated Salmonid Waters Bye-Law. IFI made the following comments in relation to the Coarse Fish Conservation Bye-Law No. 806, 2006 and the Pike Conservation Bye-Law No. 809, 2006:

"In fact these Bye-Laws have resulted in fish species which have become "naturalised" in these lakes are now afforded equal protection to the native species which have been there since the retreat of the last ice age. This is contrary to the aims of the Habitat Directive and fisheries legislation in general".

Why are these two Bye-Laws still on the Irish Statute Book?

5.0 SALMON & TROUT STOCKS IN LOUGH CORRIB SAC

As stated previously, Atlantic salmon (*Salmo salar*) use the lake and rivers as spawning grounds. Although this species is still fished commercially in Ireland, it is considered to be endangered or locally threatened elsewhere in Europe and is listed on Annex II/V of the EU Habitats Directive.

The annual salmon run through the fish counter at the Galway salmon weir is estimated to be 50% of the total run as salmon ascend through the open gates at the weir. The count recorded by the fish counter is doubled annually to provide a total estimate of the salmon run.[33] For example, the total salmon run for 2015 was estimated at 18,952 salmon. The salmon conservation limit for the Corrib is 7,572 fish. The available surplus of salmon for the 2017 season was 5,470 salmon. The available salmon surplus over the five year period (2013 to 2017) on the Corrib system ranged from 4,235 to 6,250 salmon.

Year	2013	2014	2015	2016	2017
Salmon Surplus	4,235	6,250	4,966	5,227	5,470

Based on the above data, the Corrib salmon run is sub optimal but relatively stable in recent years in spite of the problems within the SAC and with marine survival values (ICES 2016).

The scientific advice and management policy in Ireland is to allow salmon stocks to return to individual rivers below conservation without commercial or angling harvest. The harvesting of salmon is only permitted in rivers with an identifiable surplus. This policy ensures the best chance of recovery of depleted salmon stocks and allows the continued propagation of genetically distinct populations within each stock.

The former Central Fisheries Board (CFB) operated a commercial salmon fishery at the cribs on the Corrib River since purchasing the fishery in 1978. In 1999, all commercial salmon fishing ceased on the Corrib and salmon entering the river had free access. Ireland ceased mixed stock drift net fishing at the end of 2006 season. This action coupled with the closure of the commercial traps on the river meant that there has been no interception of Corrib salmon returning since 2006. At sea, the commercial salmon

[33] [redacted] 2017, WRBD Director, Inland Fisheries Ireland, pers. comm., June 22nd

fishery at the Faeroes has not operated since the 1980s and the Greenland commercial salmon fishery is on a strict quota for subsistence use only. Therefore, there is little to no interception of Corrib salmon returning and a quota is in place on the river, which allows salmon to be taken on rod and line while protecting the number of salmon required to spawn annually. The official line from IFI and DECC is that the Corrib system has been substantially above conservation limit in recent years.

Taking all this evidence at face value, there are some some pertinent questions that remain unanswered.

Firstly, why are IFI and by extension DECC pushing a 'catch and release' agenda as a conservation tool for salmonids through various social media platforms? If we examine the Corrib salmon data for 2015, IFI were willing to allow anglers to harvest approximately 25% of incoming salmon stock and still have a sustainable population within the Corrib system. By allowing this high percentage of harvesting, IFI are implying that the angler is not having a negative impact on overall stocks. If this is the case, why is there such a spotlight on promoting 'catch and release' and the continual latent message that if an angler returned more fish alive then there would be no issues with salmon stocks or wild fish in general. Either the angler is having a negative impact or not. The contradictory policy of IFI shoving 'catch and release' angling down every anglers throat through the 'CPRsavesfish' campaign while simultaneously selling harvesting licences (blue gill tags) to the same anglers is laughable. IFI are only making a mockery of themselves and the expert scientific advice that underpins quotas.

This duplicitous position on 'catch and release' angling was further compounded by a statement made by Mr. [redacted] (former IFI Chairman) in the published Wild Salmon and Sea Trout Statistics Report 2019 (IFI/2020/1-4513). [redacted] stated the following, ***"given the status of the species(salmon) there is clearly scope for improving the level of catch and release angling"***. If the former IFI Chairman was so concerned about the impact of rod and line harvesting on wild salmon, why did he and the IFI board sign off on the sale of blue harvesting tags every year? Was he afraid that IFI would lose major revenue from the cash cows of the Corrib and Moy fisheries if Irish salmon angling went full 'catch and release'?

Let us examine another indigenous Corrib salmonid in brown trout. Corrib trout stocks are currently very healthy and stable with respect to the last major Corrib fish survey in 2012 and the various WFD surveys that have taken place in 2008, 2011, 2014, 2018 and 2021. The 2021 WFD survey for Lough Corrib has not been published by IFI to date.

The following statement was made by IFI in March 2012 regarding Lough Corrib:

"If excessive angling catches were responsible for reducing trout stocks in recent years then a significant reduction should be seen in the numbers of larger older fish in the 2012 survey – this is not the case. It is the smaller fish, not the larger individuals, which are poorly represented in the stock".[34]

If these categorical statements with respect to Corrib trout stocks are made in official reports, why is there a concerted effort currently being made within the Inland Fisheries Division of DECC and IFI to amend the Western Fisheries Region Conservation of Trout Bye-law No. 840 of 2008 by lowering the daily bag limit from four trout to two. It appears that DECC want to solve a problem that doesn't exist. If this push towards lowering brown trout bag limits and full 'catch and release' angling on Lough Corrib is being portrayed as a conservation effort, then no quantitative scientific evidence[35] exists to support it. Therefore, what is the hidden agenda? Currently, there is no bag limit for brown trout on Loughs Conn and Cullin in Co. Mayo, which form part of the 'Great Western Lakes' grouping with Corrib, Mask, Carra, Arrow and Sheelin. The lack of bag limits on these lakes show that there is no rationale or consistency to the legislative conservation strategies employed by DECC and by extension IFI in the West of Ireland.

Secondly, why have DECC or IFI failed to produce annual Appropriate Assessment Screenings for individual SAC lakes and rivers, which are covered by the Wild Salmon and Sea Trout Tagging Scheme Regulations. As comprehensively discussed in Section 4.2 of this submission, these annual regulations trigger the EU Habitats Directive Article 6(3) requirements and should be subject to Appropriate Assessment Screening.

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[34] Inland Fisheries Ireland - Preliminary Observations in Relation to an Adult Fish Stock Survey of L. Corrib completed in February/ March, 2012 - IFI/2012/1-4097.

[35] Oughterard Anglers Association, pers. comm., November 2019 to present - FoI and AIE requests.

In November 2020, DECC published for the first time ever a generic Appropriate Assessment Screening (AAS) produced by the private sector for the current Wild Salmon and Sea Trout Tagging Scheme (Amendment) Regulations. However with respect to Lough Corrib SAC, this AAS never examined the major impact that invasive pike are having on the Owenriff River, an important Atlantic salmon nursery. Also, the AAS never examined the role that other invasive coarse fish such as roach, perch, bream etc are having on juvenile salmon. If legally challenged in the High Court could this AAS stand up to scrutiny? Why was this AAS completed by a private sector company, INVAS Biosecurity Ltd. and not the appropriate statutory body being IFI?

If the necessary Screenings were conducted properly on the Wild Salmon and Sea Trout Tagging Scheme Regulations for the Lough Corrib SAC, provisions would be made for the serious decline in Atlantic salmon stocks entering and leaving the Owenriff system and the resultant negative consequences for the freshwater pearl mussel, another Annex II species (see Section 2.1). While IFI have produced an ‘Owenriff Fish Population Rehabilitation Plan’ in 2018, no meaningful work has taken place since to protect Atlantic salmon stocks in the system apart from a pike radio tracking survey. DECC and IFI seem to be maintaining the illusion that because relatively consistent numbers of salmon are returning to the Galway Weir each year then everything is rosy in the garden. This is far from the truth.

6.0 SEA TROUT & LOUGH CORRIB SAC

Sea trout is the common name usually applied to anadromous or sea-run forms of brown trout (*Salmo trutta)*, and is often referred to as *Salmo trutta* morpha *trutta.* The sea trout, also widely known as 'white trout' or 'breac geal' in Irish, can be found in rivers, loughs and estuaries throughout Ireland. Other names for anadromous brown trout are sewen/ sewin (Wales), peel or peal (SW England), mort (NW England), finnock (Scotland), and salmon trout (culinary).[36] In essence, sea trout are sea-going brown trout.

Most Irish sea trout are females, with their male partners often remaining behind in rivers as resident brown trout. Sea trout/brown trout breed in autumn when river temperatures reach about 6 degrees centigrade, usually in October/November. Most are coloured but late-running fish may still be silver-sided.

While the Lough Corrib SAC is not recognised as a sea trout fishery, its importance in producing a small number of sea trout should not be underestimated. From records currently available to hand, it is very difficult to ascertain the numbers of sea trout running the Corrib River over the last twenty to thirty years.

"Sea trout numbers were generally low during the season. Up to the end of May water levels fluctuated up and down with numbers difficult to assess, as angling was restricted at times due to high water conditions. From mid-June onwards levels stabilised at one gate up to the third week in July. Water levels fluctuated thereafter for the remainder of the season and it was difficult to observe numbers of fish present in the system. While staff observed some small numbers of decent size sea-trout on the camera in the Weir Pool, and anglers encountered some sea trout while fishing for salmon, numbers overall were generally poor"[37].

According to the available IFI Salmon and Sea Trout Statistics Reports, there were 13 sea trout landed in the Corrib catchment in 2010, only one in 2013 and none for the years 2014 and 2015. Furthermore, the annual IFI Fishcounter Reports noted that 6 sea trout passed through the Galway weir in 2015 and none in 2016.

[36] Everard, Mark. *Britain's Freshwater Fishes*. Princeton: PUP, 2013, p. 84.

[37] Inland Fisheries Ireland - Galway Fishery Newsletter 2015.

The Wild Salmon and Sea Trout Statistics Report 2019 (IFI/2020/1-4513) published on November 2nd 2020, shows that 3 sea trout were caught and released on the Corrib system for the year 2019.

The whole Galway coastline was once famous for the sea trout that it supported. Though badly affected by salmon farms and sea lice, the southern Galway Bay area though not as prolific as the north of the bay still holds stocks of sea trout particularly around Kinvara and Ballyvaughan Bays. In 2016, a sea trout weighing 6.5lbs was captured on August 16th in the inner Galway Bay area.[38]

All sea trout in the Galway Bay caught by rod and line must be released alive under legislation. Considering that there has been a consistent catch and release policy for sea trout over the last twenty odd years yet stocks have never recovered. One could reasonably argue that catch and release angling is a societal issue and nothing to do with the conservation or enhancement of wild fisheries.

[38] Annual Report of the Irish Specimen Fish Committee 2016.

7.0 LOUGH CORRIB SAC STOCK MANAGEMENT OPERATIONS

Stock Management is undertaken/required on certain systems for the conservation of salmonids in waters, which are managed by IFI as salmonid fisheries. Such waters are identified in IFI's pike and trout management policies. These stock management operations are informed by scientific research, are based on best international practice and carried out in accordance with IFI's pike and trout management policies under strict standard operating procedures. Stock management in relation to invasive pike on Lough Corrib has been carried out by IFI and its predecessors; the Western Regional Fisheries Board, the Inland Fisheries Trust and the Corrib Fisheries Association since 1898. The targeted predation of salmonids by pike has been observed and described by many professionals working in the inland fisheries sector both in Ireland (, 2008) and in other states and regions where pike are considered as non-native and invasive e.g. Alaska (Sepulveda *et al*, 2013) and Sweden (Byström *et al*, 2007). This is particularly so in the spring months when juvenile salmon and trout migrate from feeder streams to larger freshwater bodies. Pike are an invasive predatory fish that can reduce stocks of salmon and trout and their numbers are managed on certain wild trout fisheries that are recognised as internationally important.

Stock management is an intrinsic component in the conservation management of a Natura 2000 site, ie. Lough Corrib SAC. A report published by the National Parks and Wildlife Service (NPWS) in relation to protected habitats and species, highlight pike as a potential threat to the status of Atlantic salmon in some Irish water-bodies designated under the EU Habitats Directive (NPWS, 2007). This report specifically refers to the Corrib catchment. Pike are also regarded by Inland Fisheries Ireland as a non-native species within the context of the EU Water Framework Directive (IFI, 2018)

When considering the above and bearing in mind that Atlantic salmon are classified as an Annex II and Annex V species in the provisions of the EU Habitats Directive, coupled with Atlantic salmon being a qualifying interest of this SAC, management of pike stocks is necessary in the Corrib catchment as it designated as Lough Corrib SAC.[39]

[39] Inland Fisheries Ireland - Screening for Appropriate Assessment - Lough Corrib Stock Management Plan 2021 - Page 6

8.0 CONCLUSIONS & RECOMMENDATIONS

1. If IFI in conjunction with DECC are going to implement proper universal conservation measures for wild salmonids on the Great Western Lakes, they must firstly designate in law without ambiguous wording all of our salmonid fisheries in the state, not just the seven lakes listed in this current draft plan. The prospective legislation must be properly prepared with Appropriate Assessment Screenings (AASs) and/or Natura Impact Statements (NISs) by IFI where necessary unlike the incompetent preparation and bungling due diligence of the revoked 2018 Designated Salmonid Waters Bye-Law No. 964. Potential legislation must be robustly defended if legally challenged and in all likelihood it will be challenged by British pike/coarse angling lobby groups through their proxy Irish organisations. All salmonid lakes outside the the seven listed in the draft plan some of which are highlighted in Section 3.2 of this submission will be effectively thrown to the wolves by not being included in this draft management strategy. For example, is the IFI CEO happy to see Lough Inagh (SAC) become a world class invasive perch fishery or Aughrusbeg Lake (SAC) an invasive pike dominated wasteland?

2. Secondly, current fisheries legislation such as the 806 and 809 Bye-Laws of 2006 must not conflict with or contravene the conservation objectives of the EU Habitats and Water Framework Directives. The bizarre situation whereby invasive coarse fish such as pike, roach, perch, bream, tench, dace, chub, various hybrids etc being protected in salmonid fisheries must end. Is it morally acceptable that pike, which are classed as non-native[40] to Ireland under the WFD have more protection under current questionable legislation than our native Atlantic salmon? Please note that it is perfectly 'legal' for an angler to harvest a 30lb wild Atlantic salmon if in possession of a valid salmon licence but a 30lb invasive pike is untouchable under 'law'. The 806 and 809 Bye-Laws as currently worded also validate the presence of invasive coarse fish no matter where they are deliberately introduced in the future including SACs. The 806 and 809 Bye-Laws are illegal and must be revoked. The IFI CEO is perfectly aware of the situation. Not alone are the 806 and 809 Bye-Laws repugnant to current Irish and EU legislation but they were formulated in 2006 on the basis of perceived threats, false facts and latent racism by pike/coarse angling lobbyists. How could DECC in the most hypocritical manner attempt to designate the seven Great Western Lakes as 'primarily

[40] AA Screening - Lough Corrib Stock Management Plan 2019 - Inland Fisheries Ireland

salmonid' through secondary legislation in 2021 while simultaneously protecting invasive coarse fish in the very same lakes?

3. All future freshwater fisheries legislation must be compliant with the EU Habitats, Water Framework and Strategic Environmental Assessment Directives and all necessary Screenings must be completed rather than the mishmash of contradictory and illegal legislation that DECC/IFI presently presides over. The question must be asked, is any inland fisheries legislation currently on the Irish Statute Book fully compliant with EU Directives?

4. Water bodies with non-native invasive coarse fish species such as pike will not meet high status for Water Framework Directive purposes due to the presence of these species. Future introductions of non-native species will also lead to a downgrading of the ecological status of a water body. Stricter border controls especially in the post Brexit era and strengthening of existing legislation for moving these species internally in Ireland is required immediately. Legislation currently exists under Regulation 49 (Prohibition on introduction and dispersal of certain species) of the European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. 477). We are calling on DECC/IFI to add all invasive coarse fish (covered by the 806 & 809 Bye-Laws) including zander (*Sander lucioperca*), barbel (*Barbus barbus*), wels catfish (*Silurus glanis*) and topmouth gudgeon (*Pseudorasbora parva*) to the Third Schedule (Part 2A) of S.I. 477, which already lists chub, dace, roach and carp. No additional legislation is required. Heavier fines and custodial sentences are also required if individuals are found transporting these invasive species into Ireland and within the country. An interesting footnote to S.I. 477 of 2011 is the absence of pike from the Third Schedule (Part 2A). During a consultation held on the draft regulations in 2011 by the Department of Environment, Heritage and Local Government, IFI made a submission requesting that pike be added to the Third Schedule[41]. Why were pike deliberately left off this list (Third Schedule) but still are classed as 'non-native influencing ecology' under the EU Water Framework Directive (WFD)?

5. Proper staffing to be put in place by IFI and proper funding to be provided by the DECC to carry out the 'Owenriff Rehabilitation Plan'[42] to eradicate all invasive pike

[41] AIE request AIE-0105-2021. Department of Housing, Local Government and Heritage.

[42] IFI (2018) Owenriff Fish Population Rehabilitation Plan.National Research Survey Programme, Inland Fisheries Ireland, 3044 Lake Drive, Citywest Business Campus, Dublin 24.

from the Owenriff. Under the EU Water Framework Directive, the state is legally obliged to remove these pike, as they are invasive to the SAC. Due to the lobbying by Lough Corrib stakeholders over the last six years, the grave threat to the remarkable polymorphic Owenriff salmonid population has gone from latent to visible. DECC and IFI had a decade of forewarning on this issue, in addition the previous IFI CEO may go down as the individual who single handedly oversaw the demise of Owenriff salmonids after years of deliberate procrastination. We are also calling for DECC to release more funding to IFI to deal with the recent introduction of invasive pike to Aughrusbeg Lake, another SAC water deliberately seeded with invasive pike by malicious pike anglers.

6. IFI must immediately end its duplicitous position on the status of pike in Ireland. On October 15th 2013, [redacted] of IFI issued an online press statement[43] declaring that pike were native to Ireland. Over two years later, on December 10th 2015, [redacted], IFI Head of Research and Development, in a submission made to the Department of Environment, Community and Local Government regarding **Significant Water Management Issues in Ireland (SWMI)**, stated categorically that pike were non-native to Ireland. In 2019, IFI reconfirmed that pike were non-native in an AAS conducted for invasive pike removal operations on Lough Corrib (Special Area of Conservation-SAC 000297). How can a statutory fisheries authority make such contradictory public statements with no rational explanation forthcoming and expect to be a credible organisation in the eyes of game angling interests? As of this date, the angling information website (www.fishinginireland.info) run by IFI still claims that pike are native to Ireland.[44]

7. IFI must end its self defeating and hypocritical policy of releasing all pike 85cm or greater in length during annual stock management (pike control) operations on the designated trout fisheries. IFI or its legacy organisations have never produced any credible scientific evidence showing that releasing 'Big Old Fat Fecund Female Fish (BOFFFF)'[45] i.e. large hen pike would benefit a salmonid lake such as Lough Corrib. How can a statutory fisheries authority produce an AAS for Lough Corrib stock management operations, which states clearly that the presence of pike are a negative

[43] https://www.fisheriesireland.ie/Press-releases/new-study-reveals-pike-native-to-ireland.html (legacy)

[44] https://fishinginireland.info/2013/pike-reports/32589/

[45] Shephard, Samuel. (2019). Re: Which fisheries are managed with a maximum size limit or harvest slots (both max and min size)?. Retrieved from: https://www.researchgate.net/post Which_fisheries_are_managed_with_a_maximum_size_limit_or_harvest_slots_both_max_and_min_size/5d15e9f8f0fb6227d1741a77/citation/download.

in the Lough Corrib SAC and then have a contradictory policy of releasing alive all large fecund female pike caught in gill nets? The mind boggles.

8. All open cage salmon farming in Galway Bay and its environs must immediately cease. How long more can successive Irish governments and civil servants in the relevant state departments be seen to promote the conservation of wild salmon stocks while simultaneously championing the growth of sea based Irish salmon farming?

9. The seven 'High Level Objectives' contained within the Draft Great Western Lakes Management Plan are admirable targets but they will be exercises in futility, while the fundamental issue of non-native/invasive freshwater fish receiving legislative protection in Ireland is continually ignored by state actors. The perfect example of this are the current buzzwords of 'water quality', which are being bandied about. Any advancements in water quality will not offset the damage caused by the protection and proliferation of non-native/invasive freshwater fish in Ireland.

The Lough Corrib Pike Research & Control Group,

September 20th 2022.

[redacted]

"Northern pike are a problem, not an opportunity".

SUBMISSION

TO THE

INLAND FISHERIES IRELAND

PUBLIC CONSULTATION

ON THE

DRAFT GREAT WESTERN LAKES MANAGEMENT PLAN

Lough Corrib SAC Riparian Stakeholder

September 15th 2022

On January 31st 2005, dialogue was initiated between the Inland Fisheries Division of the Dept. of Communications, Marine and Natural Resources (DCMNR) and the Central Fisheries Board (CFB) to conserve all non-native/invasive coarse fish species in Ireland.

This dialogue eventually led to a national conservation plan for non-native/invasive fish species in the form of two special purpose vehicles, namely the Pike Conservation Bye-Law No. 809 of 2006 and the Coarse Fish Conservation Bye-Law No. 806 of 2006.

I have examined a multitude of documents sourced under FOI and AIE legislation and at no point during the drafting process for the 806 and 809 Bye-Laws was the ecological impact of conserving non-native/invasive fish species within Natura 2000 (SACs, SPAs) sites considered or assessed as legally mandated under the EU Habitats Directive (Council Directive 92/43 EEC). No Appropriate Assessment Screenings, no Natura Impact Statements or other ecological/environmental analysis was conducted as mandated by Article 6(3) and 6(4) of the EU Habitats Directive.

Proliferation of non-native/invasive fish species was the objective for the now defunct Central Fisheries Board and the legacy Dept of Marine. In other words, conservation to maximise reproductive success.

"The amendment to the existing pike legislation is being requested, in keeping with protection of fish and their spawning age/size…..This would ensure the added protection of spawning stocks"[1]

The implementation of the 806 and 809 Bye-Laws in 2006 lead to tacit approval by the Irish State for further illegal anthropogenical introductions of non-native/invasive fish and by extension this rewarded environmental vandalism and the subsequent destruction of native ecosystems, e.g., the Owenriff Catchment, Lough Inagh, Lough Shindilla, Aughrusbeg Lough, Lough Lettercraffroe, Lough Leane etc and the list goes on.

On September 9th 2010, Inland Fisheries Ireland (IFI) made a submission to the Department of Environment, Heritage and Local Government regarding the draft European Communities (Birds and Natural Habitats) Regulations 2010. These regulations were drafted to replace the European Communities (Natural Habitats) Regulations 1997 (S.I. No.94 of 1997). This revocation was necessary following an ECJ judgment against Ireland in relation to deficiencies in transcribing of the EU Habitats Directive into domestic legislation. In their submission, IFI stated that pike (Esox lucius) "need to be added to the list (Third Schedule - Non-native species subject to restrictions)". When the new regulations were signed off by Minister [redacted] on September 21st 2011, pike

[1] Internal Correspondence June7th 2006 - Inland Fisheries Division of DCMNR.

were absent but chub, dace, roach and carp were all listed. How can these four species, which are essentially classed as highly dangerous under S.I. No. 477/2011 - European Communities (Birds and Natural Habitats) Regulations 2011 be conserved under the Coarse Fish Bye-Law No. 806 of 2006? Why were pike absent from this list (Third Schedule) but still are classed as ‘non-native influencing ecology’ under the EU Water Framework Directive (WFD). Furthermore, why are all fish species classed as ‘non-native influencing ecology’ under the WFD protected under either the 806 or 809 Bye-Laws?

As it stands in September 2022, IFI and the present Dept. of the Environment, Climate and Communications (DECC) preside over an absolute duplicitous mess of policies and legislation, where invasive fish species have more legislative protection than our native salmonids in SACs? Has nobody within IFI or DECC ever considered the legislative necessity of ‘site integrity’?

In a 2013 UK research paper, titled, “A legal and ecological perspective of 'site integrity' to inform policy development and management of Special Areas of Conservation in Europe”, the authors made the following statements regarding SACs and the EU Habitats Directive (see APPENDICES):

“An effect which is permanent or long-lasting must be regarded as an adverse one. In reaching such a determination, the precautionary principle will apply”.

“Of considerable significance is the precondition in Article 1(e) that the conservation status of a designated habitat will only be taken to be favourable when the conservation status of its typical species is itself favourable. It is notable that there is no requirement for the typical species of a designated habitat to be species for which the SAC has been designated”.

“The simplest ecological definition identifies ecological integrity as the ability of a system to support and maintain a biological community which displays species compositions, diversity and functional organisation analogous to a system which is undisturbed (Karr and Dudley, 1981)”.

Considering these statements, there is no way the ‘site integrity’ of Lough Corrib SAC can be maintained whilst the 806 and 809 Bye-Laws remain on the Statute Book.

In a 2014 European Commission Water Framework Directive Intercalibration Technical Report on ‘Northern Lake Fish fauna ecological assessment methods’, the following statements were made (see APPENDICES):

"Ireland has a depauperate and distinctly young freshwater fish fauna compared with the rest of Europe. It is widely believed that Irish freshwaters were frozen to the point where there were no freshwater fish during the last glaciation, ending approximately 11,000 years ago. (Went 1949, 1950). This has resulted in a native fish fauna derived from salt tolerant, often migratory, ancestors that would have been able to colonise Irish freshwaters at the end of the last Ice Age. In addition to this native group there are non native species present, very probably introduced by man over the past 1000 years for food, bait, sport or accidentally. The result is a highly patchy and discontinuous fish species distribution in Irish freshwaters, which is further and strongly influenced by a "who put what where when?" effect. A consequence of this history is that not all water bodies have been exposed to colonisation by all fish species present on the island. Rather, fish communities in Irish freshwaters tend to separate into three main groups; the first group contains mainly native species, primarily salmonids and is characteristic of upland or more isolated lakes. The second group contains native species, along with cyprinids, perch and pike. The third group, typical of lowland lakes linked by river and canal systems, contains no (or a limited number of) native species and is dominated by cyprinids, perch and pike (Kelly et al., 2008a). Therefore it is quite difficult to describe the fish communities representing the borderline conditions between high and good and good and moderate status for Irish lakes".

"Intolerant fish species (such as brown trout and Arctic char) were the dominant fish species in High and Good status lakes (Figure C.6). Nutrient enriched lakes (moderate and poor/bad) were characterised by a higher biomass of tolerant fish species than intolerant fish species. Analysis also showed that in general intolerant fish species decreased and tolerant fish species increased in relation to in relation to decreasing ecological status".

"In high status Irish lakes all type specific intolerant or disturbance sensitive species fish species (e.g. trout and char) are present and dominant. The species composition and abundance of these species corresponds to undisturbed conditions".

In August 2021, IFI made a submission to its parent Department (DECC) vis-à-vis the public consultation on the Designated Salmonid Waters Bye-Law. IFI made the following comments in relation to the 806 and 809 Bye-Laws (see APPENDICES):

"In fact these bye-laws have resulted in fish species which have become "naturalised" in these lakes are now afforded equal protection to the native species which have been there since the retreat of the last ice age. This is contrary to the aims of the Habitat Directive and fisheries legislation in general".

In conclusion, the 806 and 809 Bye-Laws should never have been constituted in their present manner. They are the product of the 'Good Idea Fairy'[2]. The fairy visits every organisation at some point in time. They bring with them pixie dust of a new and improved idea to apply a solution to a problem that may or may not exist, which in turn has caused the greatest loss in native Irish fish ecosystems since the last glacial maximum.

This loss is self evident written in the post mortem pages of the annual EU Water Framework Directive Fish Surveys conducted by IFI and all eco-vandalism validated by the 806 and 809 Bye-Laws.

The draft Great Western Lakes Management Plan is and will continue to be an impotent instrument while the fly in the ointment (806 and 809 Bye-Laws) is continually ignored. Obfuscation, political interference from the Leinster region, departmental meddling and downright negligence now takes precedence over EU Law and the integrity of SACs in Ireland.

IFI has zero credit in the bank with Lough Corrib SAC stakeholders and goodwill towards the statutory body will never materialise considering all that has happened regarding freshwater fishery policies since 1997. However, if certain individuals in IFI found a backbone and made the legally correct decisions then a prosperous and symbiotic relationship could develop between all Connacht game angling stakeholders and IFI.

All 7 of the High Level Objectives (HLOs) listed in the draft Great Western Lakes Management Plan are exercises in vanity while the fundamental legislative issues are continually ignored. Let us see how many successful prosecutions IFI can make in 2023 under the 806 and 809 Bye-Laws on Lough Corrib SAC?

Finally, on July 27th this year, after many years of deliberate dithering, the necessary legislative measures have been listed for Lough Corrib SAC by the Department of Housing, Local Government and Heritage via S.I. (Statutory Instrument) No. 384 of 2022[3], which completed the formal designation of the site as a Special Area of Conservation in accordance with Article 4 of the EU Habitats Directive. Given the primacy of the EU Habitats Directive over domestic legislation the inclusion of 'Activities Requiring Consent 2 - stocking or restocking of fish' implies that fish as a species can have a negative impact on the integrity of a SAC. Will Inland Fisheries Ireland and the Inland Fisheries Division within the DECC finally acknowledge this simple concept?

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[2] Contemplations With The Good Idea Fairy By: Lt Col Gabriel "gaberock" Avilla., Military Leadership - Why we lead.

[3] European Union Habitats (Lough Corrib Special Area of Conservation 000297) Regulations 2022.

APPENDICES

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Viewpoint

A legal and ecological perspective of 'site integrity' to inform policy development and management of Special Areas of Conservation in Europe

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ABSTRACT

The European Union Habitats Directive (92/43/EEC) provides for the designation and management of Special Areas of Conservation (SACs) and requires that impacting activities are subject to 'an appropriate assessment' of their implications for the 'integrity' of the site. We define the term 'site integrity' from a legal and an ecological perspective. We demonstrate that 'site integrity' is the maintenance of ecological processes and functions that support the wider delivery of ecosystem services. 'Site integrity' can be influenced by SAC management. Management that seeks to support 'site integrity' may include the use of buffer zones or connecting areas that extend beyond the SAC site's designated features. We conclude that 'site integrity' and 'favourable conservation status' are powerful legal terms that if fully transposed into the law and policy of Member States can enable the achievement of broader European and International goals for marine conservation.

1. Introduction and legal perspective

Widespread and intensive human activity in the world's oceans and the subsequent loss of marine populations and species are believed to be impairing the ability of marine ecosystems to provide the essential ecosystem services that contribute to human well-being (CBD, 2010; Chapin III et al., 2000; Halpern et al., 2008; Hooper et al., 2005; Worm et al., 2006). Bearing in mind that MPA management remain adaptive to developments in scientific understanding of the spatial element of ecosystem service delivery (Smith et al., 2009; Smith and Wilen, 2003), networks of Marine Protected Areas (MPAs), designated though a system of marine spatial planning, are recognised as being the mechanism though which marine ecosystem services may be conserved, as 'they are the only approach to marine resource management specifically designed to protect the integrity of marine ecosystems and preserve intact portions and examples of them' (Sobel and Dahlgren, 2004).

In terms of public policy and law, the European Union (EU) (92/43/EEC) (the Habitats Directive) currently exerts great influence over MPA planning at a European scale. The Habitats Directive requires EU Member States to set up 'Natura 2000', a 'coherent European ecological network of Special Areas of Conservation' (SAC), comprising sites hosting the habitat types and species listed in its Annexes I and II (The Council of the European Communities, 1992). Within the network of SACs, Article 6.1 of the Habitats Directive requires the establishment of necessary 'conservation measures' corresponding to the ecological requirements of the Annex I habitats and the Annex II species present at the sites (The Council of the European Communities, 1992). Article 6.2 requires Member States to '... take appropriate steps to avoid, in the Special Areas of Conservation, the deterioration of natural habitats and the habitats of species as well as disturbance of the species for which the areas have been designated, in so far as such disturbance could be significant in relation to the objectives of [the] Directive' (The Council of the European Communities, 1992). In regard to proposals for the management of activities within an SAC, Article 6.3 of the Habitats Directive requires an 'appropriate assessment' of the implications of 'plans or projects' for the site, in view of its conservation objectives. In light of the conclusions of that assessment, the plan or project may only be granted permission to proceed if it can be 'ascertained that it will not adversely affect the integrity of the site concerned' (The Council of the European Communities, 1992).

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The Habitats Directive is considered to be Europe's strongest legal tool for nature conservation (Hochkirch et al., 2013). However, despite such legal provisions the conservation status of 70% of European coastal habitats and 50% of European marine ecosystems is considered to be in an unfavourable condition (Conde et al., 2010). In the United Kingdom (UK), this unfavourable status is linked to SAC site management. Most SACs remain multiple use sites that are managed individually with a narrow remit of fixed habitat or species specific conservation objectives. There is no focus on the ecological function of the site and therefore no consideration of the contribution towards the ecological integrity of the site (Gaston et al., 2006). Notwithstanding the requirements of Article 6.2 of the Habitats Directive, the UK regulatory authorities have taken the view that on-going activities that pre-date SAC designation (including licenced fishing) need not be subject to an 'appropriate assessment'. Continued degradation of SAC site features is revealed as a result of the onus placed on Member States by Article 11 of the Habitats Directive to 'undertake surveillance of the conservation status' of habitats and species within SACs (The Council of the European Communities, 1992). Despite a growing body of evidence that demonstrates that some methods of fishing can impact upon sensitive SAC marine features (Fossa et al., 2002; Hall-Spencer, 1998; Hall-Spencer and Moore, 2000; Hinz et al., 2011; Riesen and Reise, 1982; Thrush et al., 1998) there has been limited commitment from the UK and devolved governments to act upon evidence. The few evidence based campaigns that have been successful in proving the damaging effects of fishing to sensitive marine features have proved to be costly, drawn-out and highly contentious (Rees et al., 2010a).

Recent rulings of the European Court of Justice (ECJ, CJUE) clearly demonstrate that the protection offered to SACs by Articles 6.2. and 6.3 of the Habitats Directive is equal ('the Waddenzee case' Case C-127/02, 2004; Commission v French Republic Case C-241/08, 2010; Commission v Ireland Case C-418/04, 2007). It is thus increasingly clear that the precautionary principle, which is clearly embedded in Article 6.3 in relation to proposed 'plans or projects' must also be applied when looking at existing activities and the status quo within SACs. In light of this, UK Non-Governmental Organisations (NGOs) are currently placing pressure on UK Government to review its implementation of the Habitats Directive, arguing that the UK Government is in breach of Article 6.2 for failing to deal with damaging fishing activity within SACs that leads to 'deterioration of natural habitats' and Article 6.3 for failing to subject fishing license grants and renewals to 'appropriate assessments' (Client Earth and Marine Conservation Society, 2011).

The equal stringency of the Habitats Directive's approach to both future and existing activities in SACs ought to have implications for the management of SACs across the EU, and should bring to the fore the issue of 'site integrity'. To support development of forthcoming guidance in the EU to integrate 'site integrity' into SAC management and therefore achieve the overarching goals of the Habitats Directive, this paper aims to:

- Clarify 'site integrity' from a legal perspective.
- Clarify 'site integrity' from an ecological perspective.
- Consider the importance of the 'typical' species of designated habitats in assessing conservation status.

Using a case study example we will:

- Demonstrate how 'site integrity' is linked to marine features.
- Demonstrate how 'site integrity' can be influenced by management.

2. A legal definition of 'site integrity'

The term 'integrity' is only used once in the Habitats Directive, in Article 6.3, in connection with the requirement only to give consent to plans or projects following an 'appropriate assessment' that allows it to be ascertained that they will not 'adversely affect the integrity of the site concerned' (The Council of the European Communities, 1992). It is notable that it is 'site integrity', rather than the integrity of specific habitats or species, that must not be adversely affected. 'Site' is defined as 'a geographically defined area whose extent is clearly delineated' (Article 1(j) of the Habitats Directive). The Habitats Directive does not define 'integrity'. However, the EC's guidance 'Managing Natura 2000 Sites: The provisions of Article 6 of the 'Habitats' Directive 92/43/EEC, European Commission (2000)' (the EC Guidance) states at 4.6.3 that 'It is clear from the context and from the purpose of the directive that the 'integrity of the site' relates to the site's conservation objectives'. The EC Guidance notes that integrity also relates spatially to the site and that activities are 'not allowed to destroy a site or part of it on the basis that the conservation status of the habitat types and species it hosts will anyway remain favourable within the European territory of the Member State' (European Commission, 2000). Importantly, the EC Guidance states that integrity can be considered as a quality or condition of being whole or complete. In a dynamic ecological context, it can also be considered as having the sense of resilience and ability to evolve in ways that are favourable to conservation (European Commission, 2000).

The EC Guidance (2000) states that the 'integrity of the site' may be defined as 'the coherence of the site's ecological structure and function, across its whole area, or the habitats, complex of habitats and/or populations of species for which the site is or will be classified'. A site can be described as having a high degree of integrity where the inherent potential for meeting site conservation objectives is realised, the capacity for self-repair and self-renewal under dynamic conditions is maintained, and a minimum of external management support is required' (European Commission, 2000; Her Majesty's Government, 1994).

The recent Opinion of the Advocate General to the CJEU in the case of Sweetman and others – v – An Bord Pleanala (Case C-258/11, 2012) stresses a temporal element and includes the following: 'in order to establish whether a plan or project ... has an adverse effect on the integrity of the site, it is necessary to determine whether that plan or project will have a negative effect on the constitutive elements of the site concerned, having regard to the reasons for which the site was designated and their associated conservation objectives. An effect which is permanent or long-lasting must be regarded as an adverse one. In reaching such a determination, the precautionary principle will apply.'

The link between 'site integrity' and the 'conservation objectives' for the site is made in Article 6.3 of the Habitats Directive and, necessarily, in the EC Guidance and in case law. The overarching requirement of the Habitats Directive is to achieve 'favourable conservation status' of Annex I habitats and Annex II species (Articles 3.1 and 4.4). Therefore, the primary conservation objective for those habitats and species within SACs designated for their protection must be the achievement of 'favourable conservation status' for those habitats and species within that site. The Habitats Directive specifically defines 'conservation status of a natural habitat' and 'conservation status of a species' (Article 1(e) and (i)) and goes onto set out the circumstances in which those statuses may be considered 'favourable' (The Council of the European Communities, 1992). Of considerable significance is the precondition in Article 1(e) that the conservation status of a designated habitat will only be taken to be favourable when the conservation status of its

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typical species is itself favourable. It is notable that there is no requirement for the typical species of a designated habitat to be species for which the SAC has been designated.

3. An ecological definition of 'site integrity'

The simplest ecological definition identifies ecological integrity as the ability of a system to support and maintain a biological community which displays species compositions, diversity and functional organisation analogous to a system which is undisturbed (Karr and Dudley, 1981). Truly pristine conditions are both difficult to identify or aspire to in Marine Protected Area management, and many would argue that humans are a natural part of the ecosystem, the social-ecological system (Armsworth et al., 2007; Curtin and Prellezo, 2010; Pollnac et al., 2010). A practical definition of ecological integrity therefore encompasses this natural state with the ability to cope with disturbance. Parrish et al. (2003) define ecological integrity as being met when the dominant ecological characteristics (composition, structure, function and ecological processes) of the system, '...occur within their natural range of variation and can withstand and recover from most perturbations imposed by natural environmental dynamics or human disruptions'. Ulanowicz (2002) expands this definition into three main concepts. The first, system health, relates to the continued successful functioning of the community, which in an anthropocentric view may be defined as the delivery of ecosystem services. The second looks at the ecosystems' ability to withstand stress (resilience). Finally, the concept of adaptation is considered, which Ulanowicz (2002) defines as the optimum capacity of a system to develop in different ways without human interference.

Whilst ecological integrity is not often defined specifically in conservation management policy, there have been efforts recently to focus on addressing the wider integrity of the ecosystem. For example, 'sea-floor integrity' is one of eleven descriptors used to assess 'Good Environmental Status' in Annex 1 of the EC Marine Strategy Framework (Directive 2008/56/EC) (Rice et al., 2012). 'Good Environmental Status' under this descriptor is found when 'sea-floor integrity is at a level that ensures that the structure and functions of the ecosystems are safeguarded and benthic ecosystems, in particular, are not adversely affected' (European Parliament and Council, 2008). It is proposed that the measurement of sea-floor integrity consists of identifying structures and functions of particular importance, identifying the pressures, and identifying appropriate indicators which reflect the sensitivity and resilience of the ecosystem.

4. Integrating 'site integrity' into SAC management

To integrate the legal principles of 'site integrity' and therefore 'favourable conservation status' into practical SAC management it is necessary to demonstrate how ecological functions and processes are linked to the conservation status of a habitat and influenced by changes in SAC management regimes. To demonstrate this, we use a case study area of Lyme Bay, UK where a consortium of scientists led by Plymouth University Marine Institute were commissioned by the UK Government to undertake a 3 year study to assess the ecological and socio-economic effects of changes to management of the marine area (Attrill et al., 2011).

4.1. Lyme Bay case study site

Lyme Bay is located in the southwest of England, UK (Fig. 1). Comprised of a mosaic of substrates from sand, mud and gravel to rock and mixed ground, the entire bay was defined as an area of 'high species richness that includes rare and threatened species' (Hiscock and Breckels, 2007). 'Reefs' are contained in Annex I of the Habitats Directive and are defined as 'habitats where animal and plant communities develop on rock or stable boulders and cobbles' (Jackson and Mcleod, 2000). In Lyme Bay, these include outcropping bedrock (with igneous, chalk, mudstone and limestone examples) and pebbles, cobbles and boulders, support a diverse range of reef species assemblages characterised by species such as the sea squirt (*Phallusia mammillata*), sponge (*Cliona celata*), anemone (*Aiptasia mutabilis*), bryozoan (*Pentapora fascialis*) and corals (*Alcyonium digitatum* and *Eunicella verrucosa*). Such species may be considered to be the 'typical species' of this reef habitat.

Fig. 1. Map showing location of Lyme Bay, cSAC and the order boundaries plus sites surveyed – 2012 sites. Substrate map data provided by Devon Biodiversity Records Centre.

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In July 2008, following advice from its statutory nature conservation advisors Natural England, the UK Government closed a 206 km^2 area of the Bay by way of 'The Lyme Bay Designated Area (Fishing Restrictions) Order' (2008) to bottom towed fishing gear. The objective of the Order was to promote marine biodiversity by ensuring that the structure of the reef system was maintained, and to aid the recovery of the benthos following damage caused by bottom towed fishing gear (Attrill et al., 2011; DEFRA, 2008). The Order was specific to bottom towed fishing gear and the area remains open to fishers using static gears such as pots and nets, and to recreational users.

In August 2010, a larger section of the Bay was put forward as a candidate SAC (cSAC) due to the presence of extended Annex 1 reef habitat that lie outside the boundary of the Order (Fig. 1). Selection criteria behind this decision concluded that the site has excellent representivity of a broad range of habitats and reef species, has good prospects for recovery of structure and function as a result of fisheries restrictions, and has excellent conservation (Natural England, 2010)

4.2. 'Site integrity' in the Lyme Bay cSAC

Using the definitions for ecological functions and ecological processes defined by (Balmford et al., 2008), The Lyme Bay and Torbay cSAC Annex I reef features, their associated (typical) species of conservation importance, ecological function, and ecological processes are shown in Table 1.

In addition to those species designated as being of conservation importance, the reefs in Lyme Bay provide habitat for a further range of species (some may be considered as 'typical' in a local context). Mobile organisms such as whelk, crab (Howard, 1982), lobsters and fish use them as a refuge and source of food and sessile species such as soft corals, hydroids and sponges use the reef structure for settlement. Some sessile species also provide platforms for the recruitment of others, for example hydroids, which provide a three dimensional structure above the sea bed, allowing scallop spat to settle off the seabed thereby reducing the risk of being smothered by sediments (Brand et al., 1980; Dare and Bannister, 1987; Eggleston, 1962). This can provide substantial increases in spat abundance, with Bradshaw et al. (2003) reporting 8.4 times more spat associated with hydroids than without. Structurally complex habitats are also known to be important as nursery habitats, they provide refugia for juvenile fish species, for which they are known to increase survivorship (Bradshaw et al., 2003; Connell and Jones, 1991).

The ecological composition and structure of the marine environment supports ecosystem functions and processes in Lyme Bay that, in turn, provide for a range of ecosystem services (the social–ecological system). Traditionally within Lyme Bay, fishermen towing demersal fishing gear (otter trawls, beam trawls, scallop dredges) avoid the hard rock reef areas and fish on the mixed sediment areas (sands, gravels, cobbles) and static gear fishermen place pots in the rocky areas, targeting crabs and lobster (Rees et al., 2010a). Recreational SCUBA diving, sea angling and wildlife watching trips are key components of the leisure and recreation activities undertaken in Lyme Bay, making use of the natural marine resources that stem from biological diversity (Rees et al., 2010b).

The implementation of the Order and the subsequent proposal for an SAC in Lyme Bay recognises 'site integrity' in that the reefs underpin the ecological processes and functions in the area and that these interact with non-SAC features and the wider marine environment to provide ecosystem services (Fig. 2). This interaction can be influenced by the 'conservation status' of the habitat.

4.3. Management and 'site integrity'

The EC Guidance states that 'site integrity' 'can be considered as a quality or condition of being whole or complete. In a dynamic ecological context, it can also be considered as having the sense of resilience and ability to evolve in ways that are favourable to conservation' (European Commission, 2000). Changes in management have enabled both recovery and expansion of the distribution of reef associated organisms.

Table 1
Habitats and typical species within the Lyme Bay portion of the Lyme Bay & Torbay cSAC listed for conservation and their associated ecological functions and ecological processes (developed from Fletcher et al., 2012).

	Ecological functions	Ecological processes
Habitats		
Annex I reef habitat[a]	Production	Primary production; secondary production; larval/gamete supply; formation of species habitat; species diversification; formation of physical barriers
Species		
Alcyonium digitatum[b] Dead man's fingers	Production; geological processes; ecological interactions	Formation of species habitat; species diversification; food web dynamics
Axinella dissimilis[b] Erect branching sponge	Production; geological processes; ecological interactions	Formation of species habitat; species diversification; food web dynamics
Eunicella verrucosa[c,d,e] Pink sea fan	Production; geological processes; ecological interactions	Formation of species habitat; species diversification; food web dynamics
Leptopsammia pruvoti[c,d,e,f] Sunset cup coral	Production; ecological interactions	Formation of species habitat
Pentapora fascialis[b] Ross coral	Production; geological processes; ecological interactions	Formation of species habitat; species diversification; food web dynamics

[a] Habitats Directive (REF).
[b] Nationally important marine features.
[c] Wildlife & Countryside Act 1981.
[d] The UK Biodiversity Action Plan 1995 (UK BAP).
[e] The International Union for Conservation of Nature (IUCN) Red Data List.
[f] Convention on International Trade in Endangered Species of Wild Flora and Fauna (CITES).

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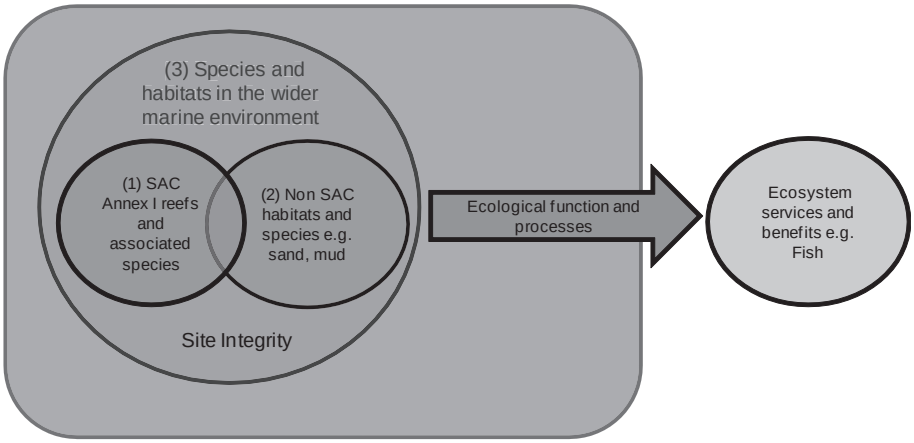

Fig. 2. A model depicting 'site integrity'. 'Site integrity' comprises the interaction between 1 and 2 to underpin ecological functions and processes to deliver ecosystem services.

In terms of recovery, results of the 3 year survey in Lyme Bay show that there has been some recovery of the reef community and that recovery has also been observed for certain individual species (such as the ross coral (*Pentapora fascialis*), sea squirt (*Phallusia mammillata*) and king scallop (*Pecten maximus*)) in areas where bottom towed fishing gear is no longer permitted (Fig. 3) (Attrill et al., 2011). Species which are long lived and slow growing such as the pink sea fan (*Eunicella verrucosa*) (Jackson et al., 2008), have, however, yet to exhibit consistent signs of recovery (Attrill et al., 2011).

The recovery of the reef habitats has also resulted in positive socioeconomic changes, with research demonstrating that the implementation of the Order in Lyme Bay has benefitted the local recreation industry by preventing further deterioration of natural resources (Rees et al., 2010b) and the static gear sector of the fishing industry, primarily by providing a safe haven in which they can set their pots and nets (Mangi et al., 2011). These changes are also linked to potential benefits for the delivery of ecosystem services via conservation of species that support ecological function (Rees et al., 2012). Therefore improvements in the 'conservation status' of the reef habitat via recovery has influenced 'site integrity' with positive implications for the delivery of ecosystem services.

In terms of the expansion of the distribution of reef organisms, research from Lyme Bay has determined that recovery of the reef habitat has not been restricted to those areas that are strictly defined as reef habitat for the purposes of Annex I of the Habitats Directive (Sheehan et al., 2012). The results demonstrate that sessile taxa associated with reef habitats are also now present on pebbly sand habitats in Lyme Bay that have been protected from bottom towed fishing gear for 3 years. These sessile species are found in greater abundances on pebbly-sand habitat in areas closed to fishing compared to those where bottom towed fishing continues (Sheehan et al., 2012). According to the Interpretation Manual of European Union Habitats (2007) 'hard substrata that are covered by a thin and mobile veneer of sediment are classed as reefs if the associated biota are dependent on the hard substratum rather than the overlying sediment', suggesting that these areas are an extension of the realised cSAC designated reef habitat and should be treated as such. This has only become evident following the cessation of bottom towed fishing in the area of cSAC covered by the Order.

The importance of areas between the rocky reefs is further evident when considering the life history of benthic species, some of which may be considered as 'typical' to the reef habitat. This often comprises several life stages, each of which may depend upon different components of the reef, highlighting the importance of comprehensive conservation of the various habitats of these species throughout their life cycle. Juvenile common lobsters (*Homarus gammarus*) for example, are known to bury in the sediment near to reef habitats (Howard and Bennett, 1979) and occupy crevices in the reef once matured (Holthuis, 1991). The edible crab (*Cancer pagurus*) also uses the reef for protection (Howard, 1982) or bury into mixed sediments when carrying eggs (Edwards, 1979). Thus, protecting the areas between the reefs could promote adult crustacean abundance, which should be of benefit not only for meeting the conservation objectives by reference to the conservation status of typical species of the site, but also for bringing wider economic benefits through fisheries enhancement.

It is therefore apparent that within Lyme Bay, reef habitat consists of rocky reef colonised by sessile fauna, areas between rocky reef outcrops where a veneer of sediment overlies hard substrata which, if left unfished will begin to be colonised by sessile reef species, and the linking patches of sediment that are also crucial for reef associated mobile fauna such as lobster providing ontogenetic stepping stones for reef species (Boström et al., 2011).

Fig. 3. Recovery of the reef community in an area previously fished. Image courtesy of the Marine Institute, Plymouth University.

5. Discussion

The application of legal principles ('site integrity' and 'favourable conservation status') to ecological functions and processes in a marine area poses some points for discussion that are pertinent to the development of Habitats Directive policy and the management of SAC sites in Europe.

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5.1. Improvements to the conservation status supports the ecological processes and function of a reef habitat

Through their contribution to production, Annex I reef habitats (as found in Lyme Bay) contribute to a range of ecological processes. Via management, the dominant ecological characteristics that typify the reef habitat have been enhanced, and recovery of these areas not only increases habitat complexity and benthic biodiversity, but also increases the three dimensional structure of the habitat, providing additional structure to enhance the settlement of species such as scallops, and for species such as cuttlefish, whelk and shark to lay their eggs (Bradshaw et al., 2003).

The recovery of the reefs will also increase their resilience. A key aspect of 'site integrity' is that the site must have capacity for 'self-repair and self-renewal'. A site which has integrity will be able to withstand episodes of storm disturbance, heavy predation and disease, and will have sufficient capacity to recolonise damaged areas as a result of the interconnectivity between the reefs and surrounding habitats.

In addition to protection of the rocky reef habitat, protection of areas between the reef outcrops in the Bay is important. Annual benthic surveys have demonstrated that the protection afforded by the Order has allowed gradual colonisation of reef species (some which may be considered as 'typical') in areas that would not be categorised as reef, based on apparent habitat type (Sheehan et al., 2012). Similar enrichment of sand gravel and mud biological communities after the cessation of scallop dredging has also been observed in closed area experiments on the Isle of Man, UK (Bradshaw et al., 2001). True assessment of the extent of the reef feature cannot therefore be quantified in an area that is trawled or dredged as the use of towed fishing gear will prevent growth of reef species. Annual monitoring in Lyme Bay has shown the importance of these areas, which, in the early years of site management, could not have been identified as reef associated due to the impact of fishing activity. Any 'appropriate assessment' of activities within an SAC must conclude by asking whether it can be ascertained that those activities, individually or collectively 'will not adversely affect the integrity of the site'. As 'site integrity' is closely linked with the 'capacity [of the habitat] for self-repair and self-renewal' (European Commission, 2000) it follows that the condition and management of features that have positive impacts on repair and renewal, such as areas between rocky reefs, is integral to an assessment of site integrity. Therefore, management of an SAC ought to take into consideration 'reference' or 'control' 'areas' against which to measure change and the inclusion of buffer zones around designated habitats, or connecting areas between designated habitats to allow typical species associated with those habitats to colonise and grow. All management must remain 'adaptive' to potential change.

5.2. Application of the legal principle of 'site integrity'

As has been noted, the principal goal of the Habitats Directive is the achievement, by maintenance or restoration, of 'favourable conservation status' for Annex I habitats and Annex II species. The existence of 'site integrity' is an implicit precondition to the achievement of 'favourable conservation status' and it is this quality that is specifically protected by the Habitats Directive's requirement for potentially harmful activities to be subject to an 'appropriate assessment and prevented from taking place if it cannot be ascertained that they will not affect 'site integrity'. On a true interpretation of the Habitats Directive and relevant case law (op. cit.) such an assessment should be applied to both proposed and existing activities. In terms of SAC management and compliance with the Habitats Directive 'site integrity' must therefore be informed by the status of the designated Annex I and II habitats and species and applied in the sense that these habitats and species support and interact with broader ecological processes and functions within a marine area.

It must also be recalled that 'favourable conservation status' requires that any 'typical species' of a designated habitat also be in favourable condition, whether or not they are themselves Article II species. The Interpretation Manual of European Habitats contains examples of species that may be regarded as typical for their habitats (European Commission, 2007). Many are not Annex II species, but if they are harmed by activities that do not directly impinge on the Annex I habitat there is a legal argument that such activities prevent the achievement of 'favourable conservation status' for that habitat.

5.3. An assessment of 'site integrity' within an SAC

The legal definition of 'site integrity' is informed by definitions of ecological integrity. Underlying the concepts of ecological integrity are various ecological components and processes which would require consideration at a site and network level to address integrity. Assessing 'site integrity' would therefore require the complex task of understanding the ecosystem organisation at a location in terms of the ecosystem structure, functions, processes and connectivity, especially in relation to the features of interest and its resilience to, and ability to recover from, disturbance. It can be argued that in some areas of science-policy research, the scientific knowledge can lag behind the ideology embedded in policy (Rees et al., 2013). This indeed remains the case in relation to a detailed understanding of ecological interactions in relation to measuring the contribution of individual habitats or species to ecological processes and functions (Chapin III et al., 2000; Ieno et al., 2006; Petchey and Gaston, 2006; Somerfield et al., 2008). This poses difficulty for conservation planning that relates directly to a measurement of ecological function, e.g. specifically as an indicator of 'site integrity' (Rees et al., 2012). However, as demonstrated in the case study for Lyme Bay, an understanding of the link between ecological function (e.g. primary production) to the delivery of ecosystem services (e.g. fish and raw materials) can potentially provide a framework by which 'site integrity' could be assessed.

6. Conclusions

The definition of 'site integrity' as a legal term and its translation to 'on the ground' practical management of an SAC from an ecological perspective demonstrates that interpretation of the Habitats Directive in conservation policy and SAC management needs to evolve to meet the current challenges of marine resource use management. In the example for Lyme Bay, UK, we have demonstrated that 'site integrity' is intimately associated with the maintenance of those ecological processes and functions that support the wider delivery of ecosystem services and may extend beyond just the designated features. The achievement of 'favourable conservation status' and 'site integrity' within the Lyme Bay cSAC is dependent upon securing ecological integrity of the reef and its typical species and interactions between both reef and non-reef elements of the ecosystem. It is, therefore, prudent for both ecological and legal purposes to treat the 'site' as a whole and not to focus management merely on the limited locations of reef areas within the site. A change in management that required the cessation of fishing using bottom towed gear within the area has demonstrated that the reefs have the capacity for self-repair and self-renewal, particularly in areas that were not previously considered as reef habitat. This, in turn, has provided for ecological processes and functions within the site and beyond the delineated boundaries of the SAC to interact and increase the potential for realisation of ecosystem services for a broad range of stakeholders.

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The Habitats Directive is not, however, a standalone instrument. The designation of Annex I and II species and habitats are part of the building blocks for broader marine environmental protection in European waters that stem from international drivers for MPAs and targets to halt further loss of biodiversity (Convention on Biological Diversity, 2011; OSPAR Convention, 2002; Secretariat of the Convention on Biological Diversity, 2004). The Marine Strategy Framework Directive 2008/56/EC aims to achieve 'Good Environmental Status' in all EU marine waters by 2020 while protecting the resource base for economic and social activities (European Parliament and Council, 2008). This Directive will play a key part in achieving targets for biodiversity, food webs and sea floor integrity (HM Government, 2012). 'Site integrity' under the Habitats Directive will need to contribute to the objective for sea-floor integrity that 'ensures that the structure and function of ecosystems are safeguarded' (European Parliament and Council, 2008). The Habitats Directive is considered to be a strong and comprehensive piece of legislation (Hochkirch et al., 2013). However, the conservation law and policy developed by Member States is generally narrow in focus and limited to Annex I habitats and Annex II species without necessarily having regard to the conservation status of typical species of Annex I habitats that are not themselves Annex II species or the position of Annex I habitats within their wider areas. In order to maintain pace with European and International conservation objectives the development of conservation policy must include the role of individual SAC sites in underpinning ecological function in a wider marine area. Otherwise there is a danger that these sites (SACs) will stay trapped by past conservation motivations and serve little purpose in a network of MPAs (Gaston et al., 2006). As such, the effectiveness and legitimacy of our broader, shared European and international goals for conservation will be undermined (Paavola, 2004).

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J R C T E C H N I C A L R E P O R T S

Water Framework Directive Intercalibration Technical Report

Northern Lake Fish fauna ecological assessment methods

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Introduction

The European Water Framework Directive (WFD) requires the national classifications of good ecological status to be harmonised through an intercalibration exercise. In this exercise, significant differences in status classification among Member States are harmonized by comparing and, if necessary, adjusting the good status boundaries of the national assessment methods.

Intercalibration is performed for rivers, lakes, coastal and transitional waters, focusing on selected types of water bodies (intercalibration types), anthropogenic pressures and Biological Quality Elements. Intercalibration exercises were carried out in Geographical Intercalibration Groups - larger geographical units including Member States with similar water body types - and followed the procedure described in the WFD Common Implementation Strategy Guidance document on the intercalibration process (European Commission, 2011).

In a first phase, the intercalibration exercise started in 2003 and extended until 2008. The results from this exercise were agreed on by Member States and then published in a Commission Decision, consequently becoming legally binding (EC, 2008). A second intercalibration phase extended from 2009 to 2012, and the results from this exercise were agreed on by Member States and laid down in a new Commission Decision (EC, 2013) repealing the previous decision. Member States should apply the results of the intercalibration exercise to their national classification systems in order to set the boundaries between high and good status and between good and moderate status for all their national types.

Annex 1 to this Decision sets out the results of the intercalibration exercise for which intercalibration is successfully achieved, within the limits of what is technically feasible at this point in time. The Technical report on the Water Framework Directive intercalibration describes in detail how the intercalibration exercise has been carried out for the water categories and biological quality elements included in that Annex.

The Technical report is organized in volumes according to the water category (rivers, lakes, coastal and transitional waters), Biological Quality Element and Geographical Intercalibration group. This volume addresses the intercalibration of the Lake Northern Fish fauna ecological assessment methods.

C. Irish fish assessment system (FIL2)

An ecological classification tool (FIL2) suitable for establishing ecological status of lakes in Ireland based on fish population parameters has been recently developed to comply with the requirements of the Water Framework Directive. Agencies from the Republic of Ireland and Northern Ireland have contributed data from netting surveys and supporting information which was used in model development. A suite of metrics from native and non-native fish species were combined to derive a classification, using nutrients (total phosphorus and chlorophyll a) as the predominant pressure as this is the primary pressure on lakes in Ireland (Tierney *et al*, 2010)

Sampling Method

Fish sampling was conducted using standard Nordic monofilament multi-mesh benthic and surface survey gill nets. The gill netting procedure was in accordance with a modified version of the European standard multi-mesh gillnetting method (CEN, 2005) which was adapted by Inland Fisheries Ireland for WFD fish monitoring in Irish lakes (Kelly *et al*., 2008b). Fyke nets and surface floating survey gill nets were used to supplement the gill netting effort in all lakes. In some lakes (particularly high alkalinity lakes) the netting effort was supplemented with single panel multifilament survey gillnets (27.5 x 2.0m) of larger mesh sizes (60-70mm knot to knot). Fish data from 137 lakes (151 surveys) in the Republic of Ireland and Northern Ireland were used. 43 reference sites were included in the database.

FIL2 model

A lake typology relevant to fish populations in lakes from Ecoregion 17 was produced as part of the ecological classification tool development. Four lake types were determined based on fish metrics and abiotic variables from 43 "reference" lakes using cluster analysis and stepwise discriminant analysis. The specific lake fish typology categorised lakes into low (≤ 67 $CaCO_3$ mg L^{-1}) or high (> 67 $CaCO_3$ mg L^{-1}) alkalinity, and shallow (≤ 17m) or deep (> 17m) maximum depth.

The fish in lakes classification tool (FIL2) follows a multimetric predictive approach and assigns ecological status to a lake using a novel approach of two independent methods. FIL2 qualitatively defines a lake's ecological status based on fish metrics using discriminant classification rules and, using a generalised linear model, quantitatively derives an Ecological Quality Ratio (EQR, 0<EQR<1), along with associated 95% confidence intervals. It is recommended that both methods are used to validate output and cross-check and highlight potential misclassification. The results of the qualitative classification rule and quantitative EQR model were cross-tabulated at various cut-points in order to quantify class boundaries. A High lake was defined to be [0.76, 1]; Good [0.53, 0.76); Moderate [0.32, 0.53); and, Poor/Bad [0, 0.32).

An investigation was also carried out to assess if FIL2 could be used to classify lakes in Scotland. Initial results are positive and the Scottish Environmental Protection Agency is provisionally adopting the tool for use in Scotland.

The relationship between FIL2 and pressure

The mean EQR of lakes classified as 'reference' (0.71) during the tool development was significantly higher than those classified as 'impacted' (0.43) (Independent t-test, $P<0.001$) (Figure C.1). FIL2 EQR values were negatively correlated with both mean total phosphorus (Pearsons correlation, $r=-0.598$, $P<0.01$) and maximum chlorophyll a (Pearsons correlation, $r=-0.536$, $P<0.01$) (Figure C.2 and Figure C.3). There was also a significant difference in the EQR between each pressure index class (Independent samples Mann Whitney U test, High vs Good, $P<0.05$; Good vs Moderate $P<0.05$, Moderate vs Poor/Bad $P<0.05$; High vs Moderate $P<0.05$; High vs Poor/bad $P<0.05$; Good vs Poor/Bad $P<0.05$) (Figure C.4).

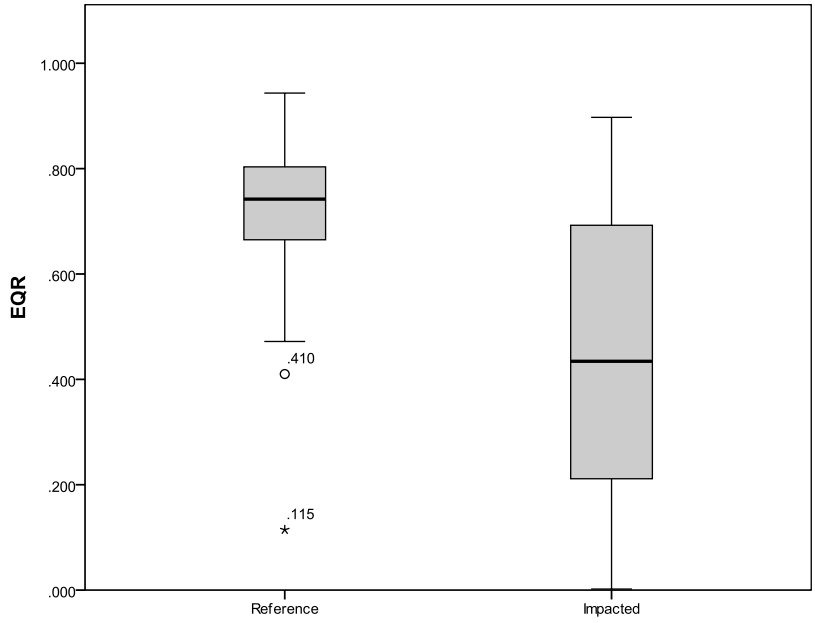

Figure C.1 Box and whisker plots of FIL2 ecological quality ratio (EQR) scores in reference and impacted lakes (minimum, 1st quartile, median, 3rd quartile and maximum).

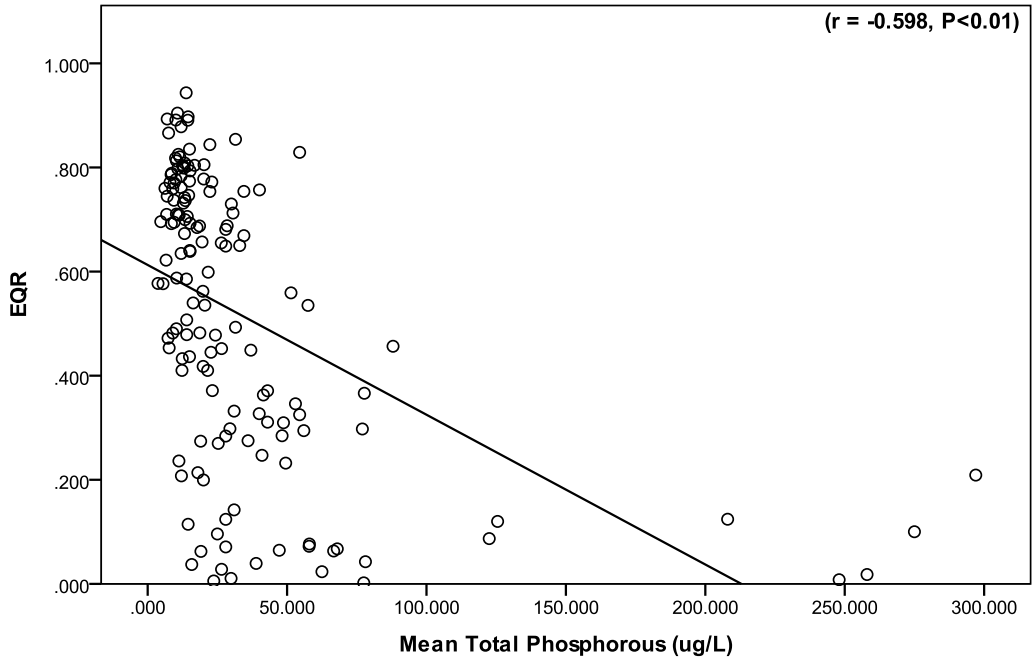

Figure C.2 FIL2 ecological quality ratio (EQR) scores versus total phosphorus (mean) in Irish lakes.

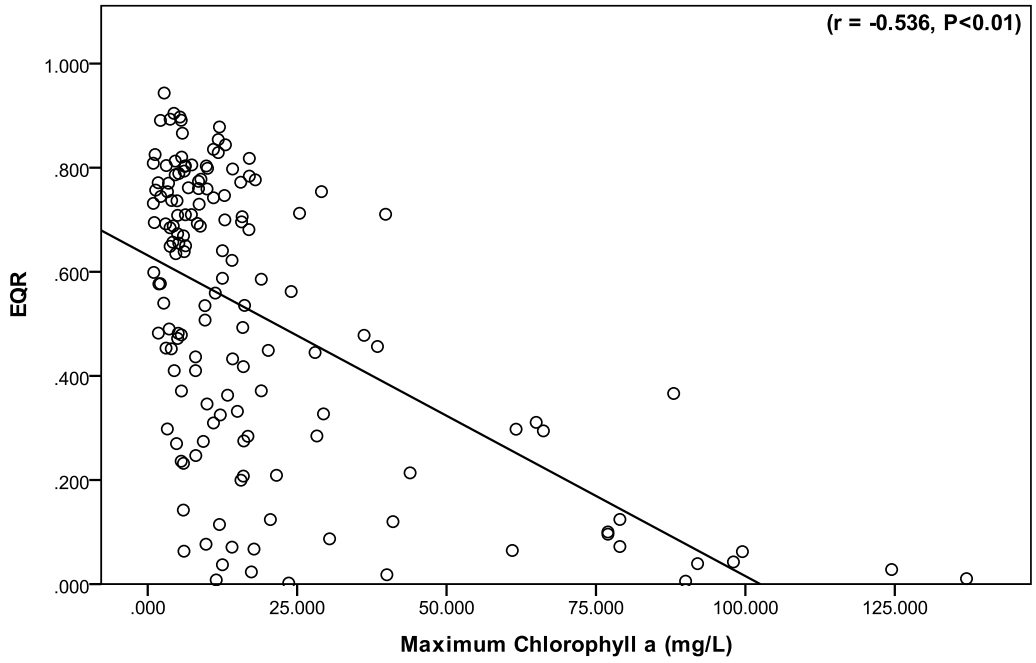

Figure C.3 FIL2 ecological quality ratio (EQR) scores versus chlorophyll a (maximum) in Irish lakes.

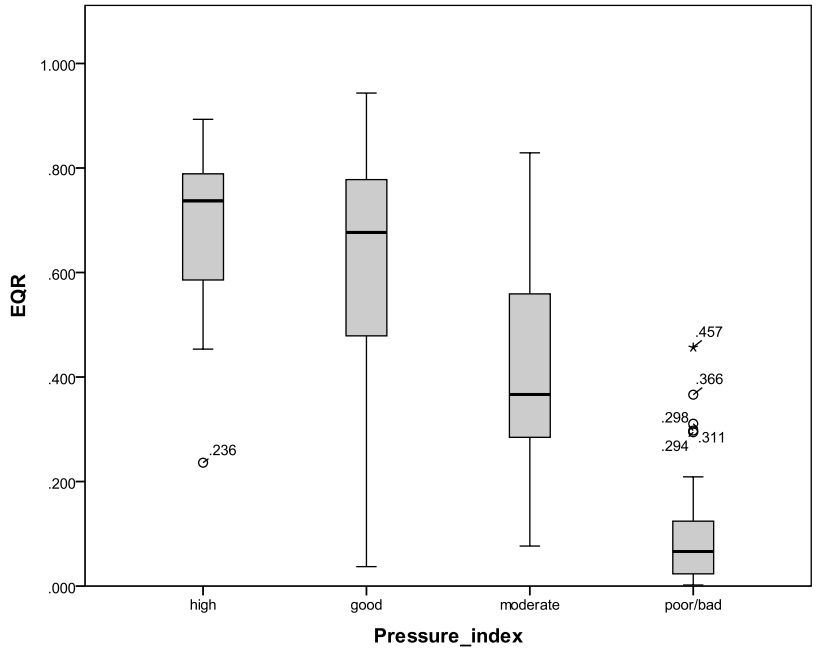

Figure C.4 Box and whisker plots of FIL2 ecological quality ratio (EQR) scores in relation to the pressure index in Irish lakes.

Boundary setting

The Irish assessment method FIL2 has a multimetric predictive approach and assigns ecological status to a lake using a novel approach of two independent methods. FIL2 qualitatively defines a lake's ecological status based on fish metrics using discriminant classification rules for each of the four typologies using a water quality gradient and, using a generalised linear model, quantitatively derives an Ecological Quality Ratio (EQR, $0<EQR<1$), along with associated 95% confidence intervals. Both methods are used to validate output and cross-check and highlight potential misclassification. A range of bounary values were investigated to determine the High/Good, Good/Moderate, Moderate/Poor and Poor/Bad boundaries. The results of the qualitative classification rule and quantitative EQR model were cross-tabulated at various cut-points (boundaries) in order to quantify the class boundaries. Each boundary was determined when the maximum correct classification from the cross tabulation of EQR ecological status class and discriminant analysis ecological status class was achieved for that ecological status class. This resulted in an overall correct classification between the EQR ecological status class and discriminant analysis ecological status class of 56.9%. Expert opinion was then used to verify if the boundaries and ecological status classes could be compared to the normative definitions according to WFD. In high status Irish lakes all type specific intolerant or disturbance sensitive species fish species (e.g. trout and char) are present and dominant. The species composition and abundance of these species corresponds to

undisturbed conditions. There was no observed failure in the reproduction or development of any particular species. In good status Irish lakes only a slight decrease in the type specific communities was observed and there was no observed failure in the reproduction or development of any species. In moderate status Irish lakes there was a moderate decrease in the type specific fish community and a moderate increase in the proportion of tolerant species (e.g. cyprinidae and percidae). Analysis showed that there appears to be an equal proportion of tolerant and sensitive species at the G/M boundary.

Description of the biological community representing the borderline conditions between good and moderate ecological status and between good and high ecological status

Method: Compare the fish community half a class over and half a class below the considered (H/G and G/M)

Ireland has a depauperate and distinctly young freshwater fish fauna compared with the rest of Europe. It is widely believed that Irish freshwaters were frozen to the point where there were no freshwater fish during the last glaciation, ending approximately 11,000 years ago. (Went 1949, 1950). This has resulted in a native fish fauna derived from salt tolerant, often migratory, ancestors that would have been able to colonise Irish freshwaters at the end of the last Ice Age. In addition to this native group there are non-native species present, very probably introduced by man over the past 1000 years for food, bait, sport or accidentally. The result is a highly patchy and discontinuous fish species distribution in Irish freshwaters, which is further and strongly influenced by a "who put what where when?" effect. A consequence of this history is that not all water bodies have been exposed to colonisation by all fish species present on the island. Rather, fish communities in Irish freshwaters tend to separate into three main groups; the first group contains mainly native species, primarily salmonids and is characteristic of upland or more isolated lakes. The second group contains native species, along with cyprinids, perch and pike. The third group, typical of lowland lakes linked by river and canal systems, contains no (or a limited number of) native species and is dominated by cyprinids, perch and pike (Kelly et al., 2008a). Therefore it is quite difficult to describe the fish communities representing the borderline conditions between high and good and food and moderate status for Iriah lakes.

Mean TOTAL_BPUE, mean TOL_%_BIO (% BPUE tolerant fish species) and mean INTOL_%_BIO (% BPUE of intolerant fish species) were calculated for each EQR half class for each lake (Figure C.5 and Figure C.6). Data analysis shows that there was a continuous increase in TOTAL_BPUE in relation to decreasing ecological status/decreasing water quality (Figure C.4). Statistical analysis revealed that TOTAL_BPUE was significantly different between the high-good boundary and the good-moderate boundary (Independent samples Mann Whitney U test; Hlwr vs Gupr $P<0.05$; Glwr vs Mupr $P<0.05$).

Intolerant fish species (such as brown trout and Arctic char) were the dominant fish species in High and Good status lakes (Figure C.6). Nutrient enriched lakes (moderate and poor/bad) were characterised by a higher biomass of tolerant fish species than intolerant fish species. Analysis also showed that in general intolerant fish species

decreased and tolerant fish species increased in relation to in relation to decreasing ecological status (Figure C.6). Although there was no significant difference between the high-good (hlwr/gupr) and good-moderate (glwr/mupr) boundaries for intolerant and tolerant fish species (% bpue), the mean tol_%_BIO at Hlwr was slightly lower than at Gupr and Glwr was also lower than Mupr Figure C.6). For mean intol_%_bio the hlwr was greater than the gupr and glwr was greater than mupr (Figure C.6).

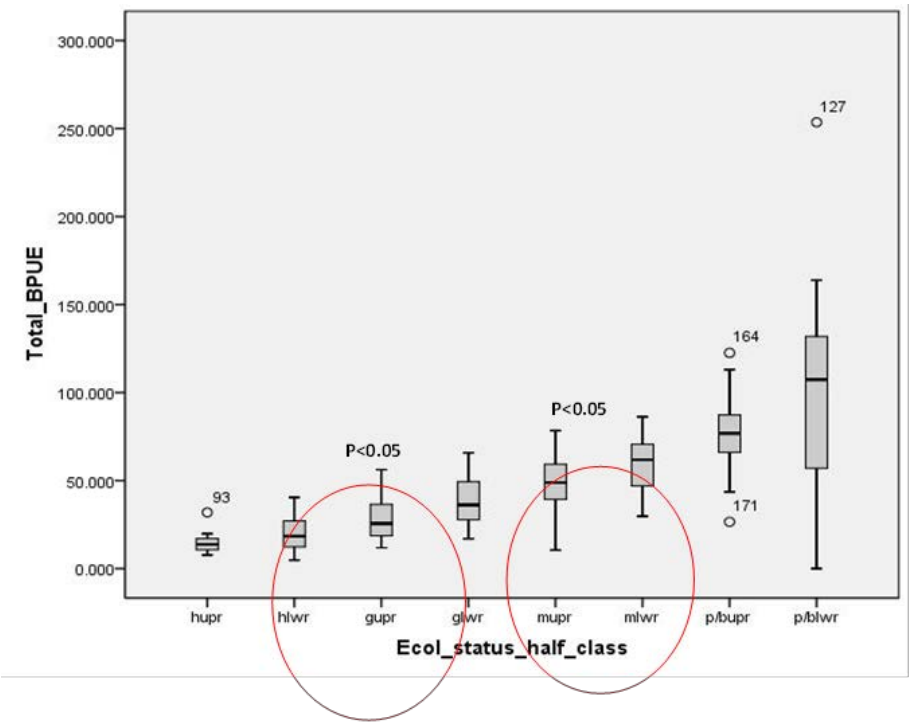

Figure C.5 TOTAL_BPUE (all fish species) vs ecological status (as indicated by half class boundaries) in Irish lakes. N=176).

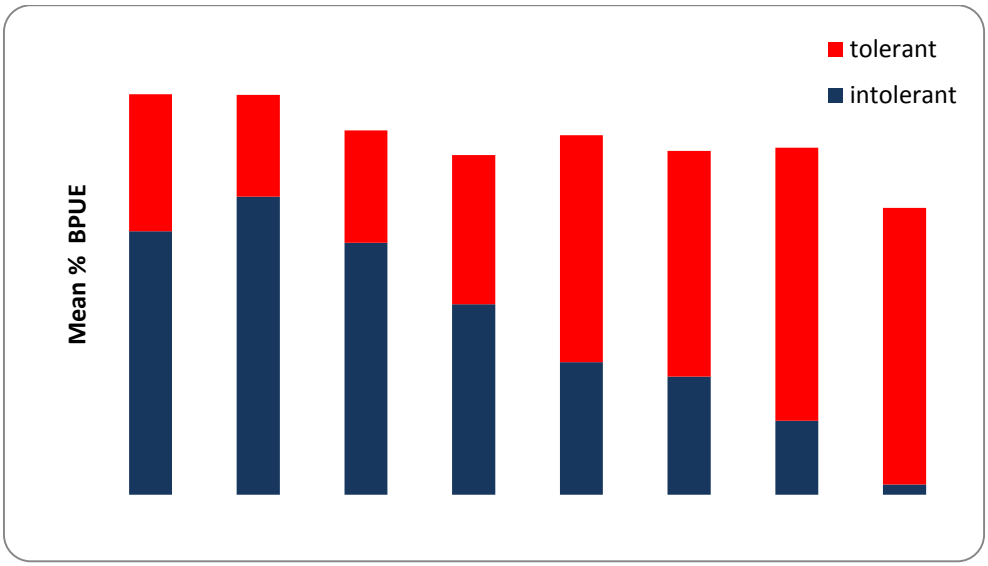

Figure C.6 Mean percentage BPUE of tolerant and intolerant fish species in Irish lakes in relation to ecological status (as indicated by half class boundaries) N=176.

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Iascach Intíre Éireann
Inland Fisheries Ireland

Designated Salmonid Waters Byelaw
Submission to Public Consultation

August 2021

Author(s):	Inland Fisheries Ireland
Description of Content:	Submission to Department of the Environment, Climate and Communications

Byelaw Proposal

On page 66 of the programme for Government it states that the government intends to "Legislate to designate our western lakes as salmonid lakes".

IFI welcomes the Government's commitment to recognise these exceptional limestone lakes which are unique in Europe as salmonid – in particular wild brown trout - lakes. The intention of the designation of these lakes as 'salmonid' lakes from IFI's perspective needs to be fully explained. This requires some background.

Background:

Since the 1950's, and probably before, the main large limestone lakes of Ireland were selectively managed as wild brown trout fisheries. Few countries have such a unique resource whereby there is adequate spawning in clean rivers for wild trout to breed and this is complimented by limestone lakes with extensive stoneworth (*Charaphyte sp*) beds in which an abundance of invertebrate life exists on which the wild trout, which migrate down from the nursery streams, feed and grow quickly.

In the earlier years the fish fauna of these lakes was less diverse – over time more species appeared in these lakes as a result of anthropogenic activity and as a consequence most of these lakes have additional non-native species competing with the trout for food.

Under the management of the Inland Fisheries Trust all the large limestone lakes – some of which were originally known as the 'Crown Lakes' were managed selectively for wild brown trout angling. This entailed removing predator and competitor species as part of a management programme. It is IFI's policy and intention that the lakes in the Schedule to this draft bye-law will continue to be managed into the future with the reduction, through both angling and direct management, of both competitor and predator species into the future.

Proposed Designation:

The designation of these lakes is welcomed by IFI but should be simple. They are already designated in terms of the established management policy of Inland Fisheries Ireland and the agencies that preceded it such as the Central and Regional Fisheries Boards and the Inland Fisheries Trust and also marketing of these lakes as wild brown trout fisheries. However, there was never formal recognition of this. In the view of IFI, it is unclear that this byelaw, as currently drafted, actually achieves the intent of IFI to protect these lakes and enshrine their management in such a manner that they are primarily wild brown trout fisheries and competing or predator species shall be removed to improve the opportunity for trout to survive and grow.

On another detail, in view of the fact that some of the lakes in question are remote from the sea and have no migratory salmon component to their population – the byelaw would be best worded to specify wild brown trout as opposed to salmonid.

Conflicting Byelaws:

One of the over-riding concerns of Inland Fisheries Ireland in the past 15 years was the fact that two bye-laws introduced in 2006, (specifically to prohibit the widescale harvest of pike and coarse fish from certain waters in Ireland), was directly in conflict with the management policy of the then Central and Regional Fisheries Boards. This was intended as a 'stop-gap' measure to address a particular threat – but the anomaly caused by these byelaws in respect of the management and marketing of the Great Western Lakes as wild brown trout fisheries has continued for an inordinate period of time. The proposal to designate these lakes as salmonid (or wild brown trout) lakes must address this inconsistency once and for all.

It is evident that unless the lakes in the Schedule to the draft byelaw are excepted from the provisions of the two Byelaws – namely Byelaw 806 and Byelaw 809 of 2006 the byelaw as it stands does not achieve its stated aim of protecting the wild brown trout status of the lakes. In fact these byelaws have resulted in fish species which have become 'naturalised' in these lakes are now afforded equal protection to the native species which have been there since the retreat of the last ice age. This is contrary to the aims of the Habitats Directive and fisheries legislation in general.

Stock Assessments, Carrying Capacity and Angling Returns:

The draft byelaw as currently stated also appears to bind IFI into a massive undertaking in terms of regular stock assessments of all the lakes in the schedule (7) including most of the largest lakes in the country and such an assessment will also require surveys of all feeder rivers and streams. This will require very significant additional resources for IFI to be able to deliver on this component annually. Coupled with the assessment of the stocks IFI will be required to identify the carrying capacity of the lakes, the current stock and the 'harvestable surplus' available to anglers. IFI have never done such a detailed stock assessment for any of these lakes previously and the cost of such a commitment into the future for seven lakes will be very substantial.

The logical extension from this would be that the complimentary element to this will be an assessment of the fishing effort and catch of trout on the lakes in question. Previously voluntary "Creel Census" returns were introduced for some of these lakes but with limited success. Creating a system for all anglers to make required returns will be another significant administrative burden and may be seen by some as the precursor to the introduction of a 'fee or licence for trout angling' on these lakes which, it is clear, will never be an acceptable funding mechanism.

Without the substantial additional resources annually to carry out all these requirements IFI will not be in a position to fulfil the terms of the byelaw. This may lead to IFI being in breach of the byelaw which would be an unacceptable scenario. Furthermore, the byelaw as currently worded empowers the Minister – a politically elected public representative to amend the plans of IFI – prepared by fishery management professionals and scientists 'as he sees fit'. This leaves the future

management of these vitally important lakes open to potential pressure for change from lobby groups and takes it away from professional fisheries managers where such expertise exists and should remain.

Summary & Recommendations:

In the light of the foregoing IFI propose that a more manageable approach be adopted. One that addresses the fundamental anomalies of the 2006 byelaws and also encourages anglers to play their part in the future management of the lakes.

IFI believes this matter would benefit from further discussion and debate prior to finalising the wording of the proposed byelaw. This should involve detailed discussion with the relevant stakeholders in particular the local resident, local anglers, key tourist interests including guides, angling centres as well as local angling clubs. The buy-in from these sectors is fundamental to the success of the future management of these lakes. However, should that approach not be possible at this stage IFI proposes that the byelaw be amended to include the following:

(1) Calling the byelaw the Designated Wild Brown Trout Waters Bye-Law .....

(2) Defining "designated waters" as means the waters designated as wild brown trout waters under Article 3; which shall be managed by Inland Fisheries Ireland specifically for wild brown trout (Salmo trutta) in all its forms and subspecies.

(3) Defining "wild brown trout" as meaning fish of the species (Salmo trutta) including Ferox, Sonaghan and Gillaroo trout.

(4) Specifying that the designated waters shall be managed specifically as premier wild brown trout fisheries. Management shall include the unrestricted removal of predator and competitor species either by direct management or angling.

(5) Exempting the waters in the schedule from the provisions of Byelaw 806 of 2006 – for example:- The waters in Schedule 1 Column 2 of this byelaw shall be excluded from the bag limit and size provisions of byelaw 806 of 2006 namely a person may take (by angling) and kill more than 4 coarse fish and including fish less than or greater than 25 cms measured in a straight line from the tip of the snout to the fork of the tail.

6. Exempting the waters in the schedule from the provisions of Byelaw 809 of 2006 – for example:- The waters in Schedule 1 Column 2 of this byelaw shall be excluded from the bag limit and size provisions of byelaw 809 of 2006 namely a person may take (by angling) or kill more than one

pike including pike less than or greater than greater than 50 cms measured in a straight line from the tip of the snout to the fork of the tail.

7. Include a general provision for the proper management of the fishery – i.e. - IFI shall do whatever it deems necessary for the proper management of the lakes in Schedule 1 as wild brown trout fisheries.

8. Leave the transfer provision in the proposed regulation:- (a) A person shall not put or transfer into the designated waters fish of any species without the prior written consent of IFI. (b) An application for the prior written consent of IFI referred to in paragraph (a) shall be made in writing to IFI.

STATUTORY INSTRUMENTS.

S.I. No. 384 of 2022

EUROPEAN UNION HABITATS (LOUGH CORRIB SPECIAL AREA OF CONSERVATION 000297) REGULATIONS 2022

S.I. No. 384 of 2022

EUROPEAN UNION HABITATS (LOUGH CORRIB SPECIAL AREA OF CONSERVATION 000297) REGULATIONS 2022

I, [redacted], Minister for Housing, Local Government and Heritage, in exercise of the powers conferred on me by section 3 of the European Communities Act 1972 (No. 27 of 1972) and for the purpose of giving further effect to Council Directive 92/43/EEC of 21 May 1992[1], hereby make the following regulations:

Citation

1. These Regulations may be cited as the European Union Habitats (Lough Corrib Special Area of Conservation 000297) Regulations 2022.

Interpretation

2. (1) In these Regulations -

"Directive" means Habitats Directive within the meaning of the Regulations of 2011;

"Minister" means Minister for Housing, Local Government and Heritage;

"Regulations of 2011" means European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. No. 477 of 2011);

"Special Area of Conservation" means the area designated under Regulation 3 as a Special Area of Conservation.

(2) In these Regulations a word or expression that is used in these Regulations and is also used -

(*a*) in the Regulations of 2011 shall, unless the contrary intention is expressed, have in these Regulations the meaning that it has in the Regulations of 2011, or

(*b*) in the Directive shall, unless the contrary intention is expressed, have in these Regulations the meaning that it has in the Directive.

Designation of Special Area of Conservation

3. (1) Having taken account of the matters referred to in Article 4 of the Directive and having been adopted by the European Commission in accordance with the procedure laid down in Article 4(2) of the Directive, the area identified by reference to the map contained in Schedule 1 and further referred to in Schedule 2 is designated as a Special Area of Conservation, in accordance with Article 4(4) of the Directive, in order to ensure the protection of natural

[1] OJ No. L206, 22.07.1992, P. 7

Notice of the making of this Statutory Instrument was published in "Iris Oifigiúil" of 2nd *August,* 2022.

habitats and species in Annex I and II to the Directive, including in particular the natural habitat type and animal and plant species specified in Schedule 3.

(2) The Minister shall, in accordance with the Regulations of 2011, establish and publish such particular conservation objectives as he or she, from time to time, considers necessary for the Special Area of Conservation with regard to the natural habitat type and animal and plant species specified in Schedule 3.

Matters relating to maps

4. (1)(*a*) The indicative map contained in Schedule 1 showing the boundary of the Special Area of Conservation shall be drawn to such convenient scale as the Minister thinks fit and sealed and shall be deposited in the offices of the Minister.

(*b*) The Minister may prepare more detailed maps, in such convenient number of separate sheets as the Minister thinks fit, showing the boundary of the Special Area of Conservation and shall seal each of the maps and shall deposit them in the offices of the Minister.

(*c*) Any dispute involving the boundaries of the Special Area of Conservation shall be determined by reference to maps prepared under this subsection in relation to the area.

(2) (*a*) A map referred to in paragraph (1) when so deposited in the offices of the Minister shall be retained in such offices and the map, or a true copy of it, shall be open for inspection free of charge in such offices by any person at any time at which the offices are open for the transaction of public business.

(*b*) The Minister may cause to be prepared and supplied to any person so requesting a true copy of a map deposited with the Minister under paragraph (1)(a) or (b) or any particular part or sheet of it and to charge for such copy such sum to cover administrative costs as the Minister decides.

Activities requiring consent

5. (1) Subject to paragraph (2), a person shall not carry out, cause or permit to be carried out or continue to carry out, or assist in carrying out, any activity specified in Schedule 4 within the Special Area of Conservation except with, and in accordance with, consent given by the Minister under Regulation 30 of the Regulations of 2011, upon application in writing to the Minister to carry out the activity.

(2) There is no requirement upon a person to obtain the consent of the Minister under paragraph (1) where a proposed activity or continued activity referred to in that paragraph -

(*a*) is one that requires consent or consents under one or more of the enactments set out in the Second Schedule to the Regulations of 2011 or under the Planning and Development Acts 2000 to 2015 and the activity is carried out with and in compliance with such consent or consents,

(*b*) is part of a project that has received consent under one or more of the enactments set out in the Second Schedule to the Regulations of 2011 or under the Planning and Development Acts 2000 to 2015 and the project or activity is carried out with and in compliance with a consent or consents given under the applicable statutes,

(*c*) is part of a project that has received consent under one or more regulations made under the European Communities Act 1972 or under one or more regulations made under any of the enactments set out in the Second Schedule to the Regulations of 2011 and the project or activity is carried out with and in compliance with such consent, or

(*d*) has been authorised as part of an agreed farm or land management plan.

(3) A person affected by a decision to refuse to give consent, to attach or vary conditions or revoke a consent under Regulation 30 of the Regulations of 2011, in respect of an activity referred to in paragraph (1), may appeal the decision under Regulation 37(3) of the Regulations of 2011.

Offence and proceedings

6. (1) A person who carries out, causes or permits to be carried out, or assists in the carrying out of an activity referred to in Regulation 5(1), without a consent or otherwise than in accordance with a consent given by the Minister under Regulation 30 of the Regulations of 2011, commits an offence and is liable -

(*a*) on summary conviction, to a class A fine or to imprisonment for a term not exceeding 6 months, or both, or

(*b*) on conviction on indictment, to a fine not exceeding €500,000 or to imprisonment for a term not exceeding 3 years, or both.

(2) In imposing a penalty under paragraph (1), the court shall, in particular, have regard to the risk or extent of injury to the environment arising from the act constituting the offence.

(3) Proceedings for an offence under paragraph (1) may be brought summarily by -

(*a*) the Minister,

(*b*) the public authority concerned, or

(*c*) a member of the Garda Síochána, in accordance with section 8 of the Garda Síochána Act 2005.

(4) Any fine in respect of an offence prosecuted summarily by a public authority shall be paid to that public authority.

Offence - body corporate

7. (1) Where an offence under Regulation 6 is committed by a body corporate and is proven to have been so committed with the consent, connivance or approval of or to have been attributable to the wilful neglect on the part of any person, being a director, manager, secretary or other officer of the body corporate or a person who was purporting to act in any such capacity, that person, as well as the body corporate, commits an offence and is liable to be proceeded against and punished as if he or she were guilty of the first-mentioned offence.

(2) Where the affairs of a body corporate are managed by its members, paragraph (1) applies in relation to the acts and defaults of a member in connection with his or her functions of management as if he or she were a director or manager of the body corporate.

Costs of prosecutions

8. Where a person is convicted of an offence under Regulation 6, the court shall, unless it is satisfied that there are special and substantial reasons for not so doing, order the person to pay to the prosecutor the costs and expenses, measured by the court, incurred by the prosecutor or other person in relation to the investigation, detection and prosecution of the offence, including costs and expenses incurred in the taking of samples and the carrying out of tests, examinations and analyses.

Authorised officers

9. A person appointed as an authorised officer under Regulation 4 of the Regulations of 2011 for the purposes of ensuring compliance with these Regulations may exercise the powers of an authorised officer under Part 2 of the Regulations of 2011.

Sceideal 1 / Schedule 1

LIMISTÉAR FAOI
CHAOMHNÚ SPEISIALTA
SPECIAL AREA OF CONSERVATION

Limistéar faoi Chaomhnú Speisialta
Special Area of Conservation

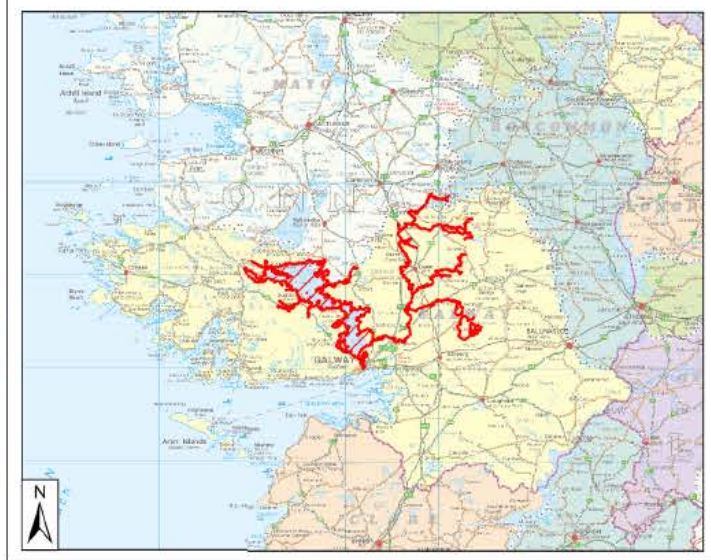
Rialachán 4(1)(b) Innéacs Mapa Mionsonraithe
Regulation 4(1)(b) Detail Map Index

LCS Loch Coirib
Lough Corrib SAC

000297

Achar / Area 24,956.62 ha

Co. na Gaillimhe, Co. Mhaigh Eo agus Co. Ros Comáin
Co. Galway, Co. Mayo and Co. Roscommon



Leagan / Version: 3.16

Arna chló an / Printed on: 09/03/2022

Scála / Scale 1:250,000

Schedule 2

Regulation 3

Description of area designated as a Special Area of Conservation

The area known as Lough Corrib Special Area of Conservation 000297 is situated in the counties of Galway, Mayo and Roscommon being the land and waters enclosed on the map (contained in Schedule 1) within the inner margin of the red line and hatched in red and is situated in whole or in part in the townlands of Abbert, Abbert Demesne, Abbey (E.D. Abbey West), Abbeyland North, Abbeyland South, Addergoole More, Ahgloragh, Airgloony, Áit Tí Seonac, An Baile Ard, An Charraig Láir, An Charraig Thiar, An Charraig Thoir, An Cheathrú Gharbh [T: Conga], An Cloigeann, An Currach Mór [T: Baile Chláir], An Ghráinseach [T: Eanach Dhúin], An Laighdeacán [T: An Carn Mór], An Móinín Mór, An Móinteach Theas, An Móinteach Thuaidh, An Pollach [T: Bearna], An Pollach [T: Maigh Cuilinn], An Saighleán [T: Ceathrú an Bhrúnaigh], An tArdán Thiar, An tArdán Thoir, An tÁth Buí [T: Bearna], An tÁth Buí [T: Maigh Cuilinn], An tEanach Thiar, An tEanach Thoir, An tSeanchill [T: Eanach Dhúin], Anbally, Annagh (E.D. Kilmoylan), Annaghbeg (E.D. Letterfore), Annaghkeelaun, Annaghkeen, Annaghwood, Ard, Ard na Gaoithe, Ardcloon, Ardfintan, Ardnasillagh, Ardskea Beg, Ardskea More, Aughnanure, Baile an Bhrúnaigh, Baile an Dúlaigh, Baile Chláir, Baile Dhúlocha, Baile Uí Chuirc Thiar, Baile Uí Chuirc Thoir, Baile Uí Laoigh [T: Eanach Dhúin], Ballaghalode, Ballinderry (E.D. Ballinderry), Ballinduff (E.D. Ballinduff), Ballinlass (E.D. Carrownagur), Ballybanagher, Ballybaun (E.D. Derryglassaun), Ballybrone, Ballyedmond, Ballygaddy, Ballygally, Ballyglass (E.D. Cappalusk), Ballyglooneen, Ballyhale, Ballykeaghra, Ballymary, Ballymoney North, Ballynaboorkagh, Ballynacreg South, Ballynacregga, Ballynahallia, Ballynakilla (E.D. Killererin), Ballywataire, Banagher, Barbersfort, Barnaboy (E.D. Headford), Barnagorteeny, Barr Eanaigh, Barratleva, Barrusheen, Baunoges North, Baunoges South, Bealnalappa, Bellaconeen, Boghilmore Island, Boyounagh Beg, Bracklagh (E.D. Raheen), Breanra, Brooklodge Demesne, Brownes Island, Bullaun (E.D. Kilmoylan), Burnthouse or Bleanoran, Bushypark, Cahergal (E.D. Killererin), Cahernahoon, Cahernashilleeny, Callownamuck, Canrawer East, Canrawer West, Cappagarriff, Cappanalaurabaun, Cappantruhaun, Cargin, Carrowferrikeen, Carrowkeelanahglass, Carrowmacowan, Carrowmanagh (E.D. Oughterard), Carrowmore (E.D. Abbey East), Carrowmore (E.D. Derryglassaun), Carrowmoreknock, Carrowntomush, Carrowntootagh, Cartron (E.D. Milltown), Cartronroe, Cashel (E.D. Boyounagh), Castle, Castlefarm, Castlemoyle, Castletown (E.D. Killeen), Cathair Ghabhann, Ceapach Chorcóige Thiar, Ceapach Chorcóige Thoir, Cill Torróg, Cinn Uisce, Claídeach [T: Maigh Cuilinn], Clare, Claremount, Claretuam, Clashaganny (E.D. Doonbally), Clashard, Claureen, Clerhaun, Clogh, Clonbern, Clonkeenkerrill, Cloonagawnagh, Cloonagh (E.D. Dunmore South), Cloonaghgarve, Cloonarkan, Cloonascragh (E.D. Cooloo), Cloonascragh (E.D. Tuam Rural), Cloonboo Beg, Cloonbrusk (E.D. Addergoole), Cloonconra (E.D. Hillsbrook), Clooncurreen, Cloondahamper (Blake), Cloondahamper (Brown), Cloondarone, Cloondergan, Clooneen (E.D. Dunmore South), Cloonfane, Cloonfush, Clooninagh, Cloonkeely, Cloonkeen (E.D. Abbey East),

Cloonkeen North, Cloonkeen South, Cloonlusk, Cloonmore (E.D. Carrownagur), Cloonmore (E.D. Claretuam), Cloonmore (E.D. Wormhole), Cloonmoyle, Cloonnacat, Cloononaghaun, Cluain Brón, Cluain Bú, Cluain Duibh, Cluain na Binne, Cluid, Clydagh (E.D. Killursa), Coill Uachtair, Colmanstown, Common (E.D. Claretuam), Common (E.D. Kilmoylan), Conagher, Cooladooaun, Coolanillaun, Coolaran, Coolfowerbeg, Coolrevagh, Coosaun, Corbally North, Corbally South, Cordarragh, Cormacuagh East, Cormacuagh West, Cornacartan, Cornaminaun, Corr na Móna, Corralea (E.D. Levally), Corrandrum, Corranellistrum, Corrofin, Corskeagh Beg, Corskeagh More, Creevaghbaun, Cregcarragh, Cregg (E.D. Oughterard), Cregmore (E.D. Lisheenavalla), Cromghlinn Thiar, Cromghlinn Thoir, Cuddoo East, Cuddoo West, Cúil Each [T: Mionlach], Culliagh North, Cummer, Curra, Curraghaun (E.D. Addergoole), Curraghaun (E.D. Killeen), Curraghcreen (E.D. Levally), Curraghduff East, Curraghduff Middle, Curraghduff West, Curraghmore (E.D. Killursa), Currarevagh (E.D. Letterfore), Curraun Beg, Curraun More, Curraveha or Birchhall, Currawatia, Daley's Island, Dalgin, Dangan Lower, Darrary South, Dawros, Dawros Lower, Derradda (E.D. Oughterard), Derreenmeel, Derreighter, Derroogh, Derroura, Derryherbert (E.D. Letterfore), Devinish Island, Drimnahoon, Drimneen (E.D. Oughterard), Droim na Gaoithe, Droim Snámha, Drum (E.D. Milltown), Drumminnakill, Dubhachta, Dunmore, Dúráithe, Dúros [T: Conga], Eadargúil [T: Eanach Dhúin], Eadargúil [T: Maigh Cuilinn], Eanach Dhúin, Eighterard, Farnocht, Farravaun (E.D. Letterfore), Fartamore, Fortbrown, Fough East, Fough West, Freeheen Island, Gallcharrick Island, Gardenfield, Garraun (E.D. Killererin), Garraunbaun (E.D. Clonbern), Gaterstreet, Gilkagh, Ginnaun, Gleann Loiscthe, Glengowla East, Glengowla West, Glennamucka, Gort an Chalaidh, Gort an Chalaidh, Gort an tSléibhe [T: An Carn Mór], Gortaganny (E.D. Boyounagh), Gortaghokera, Gortdrishagh (E.D. Oughterard), Gorteen (E.D. Cappalusk), Gorteen (E.D. Carrownagur), Gorteendrishagh, Gorterwulla, Gortgarrow, Gortmore (E.D. Wormhole), Gortnaglogh (E.D. Monivea), Gortnagoyne, Gortnaloura, Gortnashingaun, Gowlaun (E.D. Letterfore), Grange (E.D. Dunmore South), Grange (E.D. Killererin), Grange East, Grange West, Greenfield or Shanbally, Gurlaun Island, Hillswood East, Illaunaragh, Illaunavee, Illauncarbry, Illaunfadda, Illaunfadda Beg, Illaunfadda More, Illaunmahon, Illaunnafinnoge, Illaunnagower, Illaunnashinnagh, Illaunroe (E.D. Ballinderry), Inchagoill, Inchiquin, Inis Camáin, Inis Dúrois, Inis Mhic an Trír, Inish, Inishcunnia, Inishflynn, Inishgarraun Beg, Inishgarraun More, Islandmore (E.D. Lisheenavalla), Joyces Park, Keekill, Kentfield, Kid Island, Kilbeg (E.D. Killursa), Kilbeg (E.D. Monivea), Kilcloggaun, Kilcloghans, Kilcloony (E.D. Doonbally), Kilcreevanty, Kilgarriff, Kilgevrin, Killaclogher, Killaguile, Killaloonty, Killeelaun, Killeen (E.D. Barna), Killeighter, Killerneen, Killuney, Kilmore (E.D. Killererin), Kilmore (E.D. Tuam Rural), Kilphrasoga, Kiltrasna, Kinnakinelly, Knock North, Knockatee East, Knockatee West, Knockaunkeel, Knockbaun (E.D. Oughterard), Knockcorrandoo, Knockdoebeg East, Knockkillaree, Lack, Lackadunna Island, Lackagh Beg, Lackagh More, Lackavrea, Laghtgannon, Largan, Larragan, Laughil (E.D. Cloonkeen), Lee's Island, Lehid (E.D. Kilbennan), Lemonfield, Lenamore (E.D. Tiaquin), Lettercraff, Levally East, Levally West, Liagán [T: Tulaigh Mhic Aodháin], Lisheennageeha, Lisheennaheltia, Lisín an Óráin, Liskeevy, Lisnaminaun, Liss (E.D. Abbey East), Lissybroder, Lissyconor, Luimnagh East, Luimnagh West,

Maghera Beg, Mahanagh (E.D. Ballinderry), Mahanagh (E.D. Clonbern), Maigh Cuilinn, Meelick More, Meelick West, Meelickbeg, Menus, Milltown (E.D. Milltown), Mionlach, Monivea Demesne, Mountross, Moyvoon East, Muckcoort, Muckrush Island, Mucrois, Na Croisíni, Newcastle (E.D. Graigabbey), Newcastle (Rathún Ph), Newtown (E.D. Abbey East), Oileán an Aoil, Oileán Mhatha Bhreatnaigh [T: Eanach Dhúin], Oileán na gCoiníní [T: Eanach Dhúin], Oileán na mBráthar [T: Maigh Cuilinn], Omaun Beg, Omaun More, Ordnance Ground, Ower (E.D. Killursa), Ower (E.D. Wormhole), Páirc na bhFia [T: An Fhairche], Park (E.D. Wormhole), Parkacurry, Parkbaun (E.D. Raheen), Patch (E.D. Raheen), Pollacappul (E.D. Hillsbrook), Pollacorragune, Pollacrossaun, Pollaturick, Pollawarla, Pollbaun, Polldarragh, Polleighter, Pollnamal, Porridgetown East, Portacarron, Portdarragh, Potato Islands, Rabbit Island (E.D. Oughterard), Rabbit Island North, Raha, Rinn na hAirne, Rinnaknock, Rinnerroon, River Island, Ross (E.D. Headford), Rusheeny (E.D. Oughterard), Russelstown, Ryehill Demesne, Sceach Liag, Shanballymore (E.D. Cappalusk), Shanballymore (E.D. Oughterard), Shannawagh, Shantallow (E.D. Killererin), Shoodaun, Shrub Island, Shrulegrove, Skehanagh (E.D. Derryglassaun), Slieve, Slieveroe (E.D. Killursa), Srue, Stowelodge, Straw Island, Timadooaun, Tír an Fhia [T: Conga], Tír na Cille Theas, Tír Oileáin, Togher Beg, Tom na Sraithe, Tom Naíonán, Tonacurragh, Tonamace (E.D. Kilmoylan), Tonlegee (E.D. Belclare), Tonmoyle, Tulaigh Mhic Aodháin, Tullyvrick, Turloughcartron, Turloughmartin, Ummeracly East, Ummeracly West, Walsh's Island (E.D. Killeany), Whitemare's Island, Willyrogue Island, Woodfield (E.D. Carrownagur) and Woodquay in County Galway and Ballinvilla (E.D. Kilvine), Ballycurrin Demesne, Ballykilleen, Ballymacgibbon North, Ballymacgibbon South, Ballynalty, Brodullagh South, Carheens (E.D. Houndswood), Carrownlough, Castletown (E.D. Houndswood), Cloonbanaun, Cordroon, Corgarve, Creevard, Creeveeshel, Culnacleha, Derry (E.D. Houndswood), Derrynamuck (E.D. Culnacleha), Doonmacreena, Gortacurra, Gortatober, Gortbrack (E.D. Shrule), Kilvine, Kinlough, Lackafinna, Lislaughera, Moyne (E.D. Shrule), Ramolin, Shrule, Strandhill and Toorard (E.D. Shrule) in County Mayo and Cloonfad East, Cloonfad West, Cornabanny, Curragh, Fiddaun, Hundred Acres, Meeltraun (Daniel Kelly), Meeltraun (Denis Kelly), Meeltraun (Wills), Mountdelvin, Pollanalty East, Pollanalty West, Pollaphuca and Swinefield in County Roscommon.

Schedule 3

Regulation 3

Natural habitat type and animal and plant species lists

Natural Habitat Type

In this list the sign [*] *indicates a priority habitat type as defined in the Directive.*

Natura 2000 Code	**Description**
3110	Oligotrophic waters containing very few minerals of

	sandy plains (Littorelletalia uniflorae)
3130	Oligotrophic to mesotrophic standing waters with vegetation of the Littorelletea uniflorae and/or Isoeto-Nanojuncetea
3140	Hard oligo-mesotrophic waters with benthic vegetation of *Chara* spp.
3260	Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation
6210	Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco Brometalia) (* important orchid sites)*
6410	*Molinia* meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae)
7110	Active raised bogs*
7120	Degraded raised bogs still capable of natural regeneration
7150	Depressions on peat substrates of the Rhynchosporion
7210	Calcareous fens with *Cladium mariscus* and species of the Caricion davallianae*
7220	Petrifying springs with tufa formation (Cratoneurion)*
7230	Alkaline fens
8240	Limestone pavements*
91A0	Old sessile oak woods with *Ilex* and *Blechnum* in the British Isles
91D0	Bog woodland*

Animal and Plant Species

Natura 2000 Code	Common Name	Scientific Name
1029	Freshwater Pearl Mussel	*Margaritifera margaritifera*
1092	White-clawed Crayfish	*Austropotamobius pallipes*
1095	Sea Lamprey	*Petromyzon marinus*

1096	Brook Lamprey	*Lampetra planeri*
1106	Salmon	*Salmo salar*
1303	Lesser Horseshoe Bat	*Rhinolophus hipposideros*
1355	Otter	*Lutra lutra*
1833	Slender Naiad	*Najas flexilis*
6216	Slender Green Feather-moss	*Hamatocaulis vernicosus*

Schedule 4

Regulation 5

Activities requiring consent of Minister

ARC Code	Description
ARC 01	Reclamation, including infilling.
ARC 02	Stocking or re-stocking with fish.
ARC 03	Blasting, drilling, dredging or otherwise removing or disturbing fossils, rock, minerals, mud, sand, gravel or other sediment.
ARC 04	All activities relating to turf cutting and/or peat extraction.
ARC 05	Cutting, uprooting or otherwise removing plants. [Consent is not required for harvesting of cultivated crops, or for grazing or mowing.]
ARC 06	Introduction, or re-introduction, of plants or animals not found in the area. [Consent is not required for the planting of crops on established reseeded grassland or cultivated land.]
ARC 09	Construction or alteration of tracks, paths, roads, bridges, culverts or access routes.
ARC 10	Construction, removal or alteration of fences, stone walls, hedgerows, banks or any field boundary other than temporary electric fencing. [Consent is not required for normal maintenance.]
ARC 11	Digging, ploughing, harrowing or otherwise disturbing soil or substrate. [Consent is not required for these activities on established reseeded grassland or cultivated land provided it

is greater than 50m from a river, stream, floodplain, wetland, lake, turlough or pond.]

ARC 12 Applying inorganic or organic fertiliser, including slurry and farmyard manure. [Consent is not required for these activities on established reseeded grassland or cultivated land provided it is greater than 20m from a river, stream or floodplain; or greater than 50m from a wetland, lake, turlough or pond.]

ARC 13 Applying lime. [Consent is not required for this activity on established reseeded grassland or cultivated land provided it is greater than 20m from a river, stream or floodplain; or greater than 50m from a wetland, lake, turlough or pond.]

ARC 14 Storage, burial, disposal or recovery of any materials. [Consent is not required for these activities on established reseeded grassland or cultivated land provided it is greater than 20m from a river, stream or floodplain; or greater than 50m from a wetland, lake, turlough or pond.]

ARC 15 Burning, topping, clearing scrub or rough vegetation or reseeding. [Consent is not required for these activities on established reseeded grassland or cultivated land provided it is greater than 20m from a river, stream or floodplain; or greater than 50m from a wetland, lake, turlough or pond.]

ARC 18 Application of pesticides, including herbicides. [Consent is not required for these activities on established reseeded grassland or cultivated land provided it is greater than 20m from a river, stream or floodplain; or greater than 50m from a wetland, lake, turlough or pond.]

ARC 19 Supplementary feeding of livestock. [Consent is not required for this activity on established reseeded grassland or cultivated land provided it is greater than 20m from a river, stream or floodplain; or greater than 50m from a wetland, lake, turlough or pond.]

ARC 20 Significant changes in livestock density (including introduction of grazing), changes in livestock type or grazing season, other than on established reseeded grassland. [Consent is not required for changes of less than 20% in livestock density unless notice has been given that a lower percentage is applicable to a particular site.]

ARC 21 Grazing of livestock between 1st April and 31st October on traditional winterages.

ARC 22 Changing of agricultural use from hay meadow to any other use.

ARC 24	Works on, or alterations to, the banks, bed or flow of a drain, watercourse or waterbody.
ARC 25	Drainage works including digging, deepening, widening or blocking a drain, watercourse or waterbody.
ARC 26	Entry of livestock or machinery into stretches of river containing, or upstream from, freshwater pearl mussel.
ARC 27	Water abstraction, sinking of boreholes and wells.
ARC 28	Felling of trees or removing timber, including dead wood.
ARC 29	Planting of trees or multi-annual bioenergy crops.
ARC 31	Developing or consenting to the development or operation of commercial recreational/visitor facilities or organised recreational activities.
ARC 34	Alteration, renovation or removal of buildings, ruins or other structures.
ARC 38	Lighting up caves, buildings or other places used by bats for roosts.

L.S.

GIVEN under my Official Seal,
27 July, 2022.

[redacted]
Minister for Housing, Local Government and Heritage.

EXPLANATORY NOTE

(*This note is not part of the Instrument and does not purport to be a legal interpretation.*)

The European Union's Habitats Directive (92/43/EEC) (as amended) requires Member States to protect habitats and wildlife areas of European interest by, among other things, designating sites as Special Areas of Conservation in order to create a coherent European ecological network. The hyperlink: http://ec.europa.eu/environment/nature/legislation/habitatsdirective/index_en.htm which connects to the European Commission Environment (Nature and Biodiversity) website also contains a further link to the text of the Habitats Directive.

The effect of these Regulations is to complete the formal designation of the site as a Special Area of Conservation in accordance with Article 4 of the Directive. The geographical area of the Special Area of Conservation designated by these Regulations is defined in Schedule 1 (a map of the area) and Schedule 2 (a list of the townlands in question or a description of the area). For more detailed maps than those contained in Schedule 1, or for greater detail on boundary delineation, contact should be made with the National Parks and Wildlife Service of the Department of Housing, Local Government and Heritage or by viewing the relevant text or map details on www.npws.ie.

The natural habitat types and animal and plant species lists cited in Schedule 3 of these Regulations are specified, in accordance with the Directive, in order to ensure their conservation (i.e. the measures required to maintain or restore the natural habitats and the populations of species of wild fauna and flora at a favourable status). The updated list of published conservation objectives referred to in Regulation 3 is available on www.npws.ie. Public authorities should have regard to these objectives when undertaking a screening or appropriate assessment of plans or projects in accordance with the EU Habitats Directive.

Those activities that require consent of the Minister or in some circumstances another public authority listed at Schedule 4 to these Regulations are cited for their potential to cause disturbance or damage to the natural habitat types and animal and plant species specified in Schedule 3 of these Regulations. Landowners or occupiers should contact the local National Parks and Wildlife Service office of the Department of Housing, Local Government and Heritage before undertaking any of the works listed at Schedule 4. (See www.npws.ie for contact details). Please note that activities other than those listed at Schedule 4 to these Regulations, such as effluent discharge, construction work, aquaculture, fishing or forestry require a licence or permission from the appropriate consent authority.

These Regulations provide (Regulations 6 and 7) that contravention of the provisions of these Regulations shall constitute an offence. Regulation 6 also provides for penalties.

BAILE ÁTHA CLIATH
ARNA FHOILSIÚ AG OIFIG AN tSOLÁTHAIR
Le ceannach díreach ó
FOILSEACHÁIN RIALTAIS,
BÓTHAR BHAILE UÍ BHEOLÁIN,
CILL MHAIGHNEANN,
BAILE ÁTHA CLIATH 8,
D08 XAO6

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National Coarse Fishing
Federation of Ireland
www.ncffi.ie

19th September 2022

[redacted]
Chief Executive Officer
Inland Fisheries Ireland, IFI

Long Term Management Plan for the Great Western Lakes
NCFFI Response to the Draft For Consultation

Dear [redacted],

The National Coarse Fishing Federation of Ireland is the recognised NGB for coarse and predator angling on the island of Ireland. We also represent several game and angling clubs. Affiliated to the world sporting bodies the federation hosts world championships in Ireland which serve to showcase our waters and respect for and protection of our aquatic biodiversity to anglers worldwide.

Whilst the NCFFI understand the needs of fishery management we object to the unnecessary slaughter of our fish stocks and native wildlife. Already this takes place under the current management of Pike stocks through gill netting and electro fishing on the same waters and will be further enhanced by the removal of statutory protection.

It should be remembered that some of the Western Lakes are also known as top class pike fisheries and are attractive to overseas visitors who provide a source of income to these areas.

We see Western Lakes Plan as a backward step in protecting and conserving our freshwater biodiversity and our members do not support nor welcome the Draft Long Term Management Plan for several reasons:

- It proposes the removal of the Pike Bye-law 809 in certain fisheries.
- It proposes the removal of the Coarse Fish Bye-law 806 in the same fisheries.
- The removal of said byelaws on specific fisheries only would increase the difficulty Inland Fisheries already face with fishery protection and would open the door for misinformed anglers to practise catch & kill on all waters.
- It is untenable that a decision is taken to kill more pike and coarse fish to enhance and protect trout stocks. Particularly so, as trout stocks are healthy and the fishing is good. This is not necessarily the case for anglers fishing on the fly who are slow to adapt to a fast changing environment. Limiting the amount and size of trout killed in competition would have a more beneficial effect. At present it is common practise to apply for an exemption to said byelaws for use in competition where all fish are killed. This practise is then replicated by anglers fishing as an individual.

- There is considerable content regarding genetic studies for Pike and their introduction to Ireland which includes research suggesting their presence as 4,000 ybp. How can IFI now determine that they are non-native?
- There is no proven research that trout are in danger of predation from other species
- It also mentions the term 'newly introduced' which is ambiguous. Who will determine the exact meaning of this term?
- There is reference to the stock management of Bream on Lough Mask where Bream are removed and killed with no regard for movement to another location. This, in our opinion, is not stock management. As anglers we always practise catch & release, and our focus is respect for wildlife and the environment. In this context we propose that this plan must include a section outlining details on rehoming of removed fish in suitable waters 'if 'such movement is required.
- Management methodologies to include gill netting and electro fishing refer only to the re-homing of coarse fish 'in some instances' and 'where feasible'.
- There is mention that there are no stock management measurements for the control of Roach and Perch but where they are encountered during other removal programmes they may be retained. But it does not clarify what if any plans are proposed for the coarse fish retained.
- How do Inland Fisheries propose to manage waters such as Lough Sheelin where its primary river, the Inny is a mixed fishery?
- It does not focus correctly on the issues facing the fisheries in question with prioritisation on those issues. For example, it is evident that water quality should be the priority #1 in this plan with a focus on stream enhancement works to restore the required environment for spawning.

We believe that this plan would not demonstrate a respect for our freshwater biodiversity and would greatly harm Ireland's image internationally. It would also serve to disimprove Ireland as an attractive and welcoming angling tourism destination.

We have submitted the view of our members, representing coarse, predator and game angling on the island of Ireland to Inland Fisheries Ireland, IFI and the respective Ministers on several occasions as published here [redacted]

Yours Sincerely,

[redacted]

[redacted] National Coarse Fishing Federation of Ireland

[redacted]

From: Western Lakes Plan
Sent: Tuesday 9 August 2022 13:46
To: Western Lakes Plan
Subject: Great Western Lakes Questionnaire

Iascach Intíre Éireann
Inland Fisheries Ireland

Submitted on Tue, 09/08/2022 - 13:44

Contact details

Name
[redacted]

Email address
[redacted]

[redacted]

From: Western Lakes Plan
Sent: Tuesday 9 August 2022 17:45
To: Western Lakes Plan
Subject: Great Western Lakes Questionnaire

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Please be aware that although the from address of this email suggests that it has come from within your organisation, it was in fact sent from an external source, and therefore may not be genuine. Please treat with caution. Verbally verify with the sender or an IT administrator before taking any actions based on it.

This warning has been inserted by the Topsec email filter.

****

Submitted on Tue, 09/08/2022 - 17:44

Contact details

Name
[redacted]

Email address
[redacted]

[redacted]

From: Western Lakes Plan
Sent: Tuesday 9 August 2022 18:03
To: Western Lakes Plan
Subject: Great Western Lakes Questionnaire

Iascach Intíre Éireann
Inland Fisheries Ireland

Submitted on Tue, 09/08/2022 - 17:56

Contact details

Name
[redacted]

Email address
[redacted]

Feedback Details

Fish
Consultation unclear on evidence that supports the removal of pike, including ruling out a negative ecological impact or detriment to salmonoid species.

Fisheries Management and Climate Change
Restoring habitat in feeder rivers should be prioritised to reverse the catastrophic effects of drainage schemes

Water Quality
IFI need to be a stronger part of planning applications where there's potential for negative impacts on fisheries

Feedback Details

Stock Management
Consultation rightly emphasised supporting wild stocks rather than stocking

Habitat Management
Focus on inflowing feeder streams to reverse impact of drainage schemes

Research, Current Information and knowledge gaps
Evidence to justify pike remove seems weak



Maureen Daly

From: Western Lakes Plan
Sent: Tuesday 9 August 2022 18:34
To: Western Lakes Plan
Subject: Great Western Lakes Questionnaire

Follow Up Flag: Follow up
Flag Status: Completed

Iascach Intíre Éireann
Inland Fisheries Ireland

Submitted on Tue, 09/08/2022 - 18:33

Contact details

Name
William O'Connor

Email address
william.oconnor@ecofact.ie

Feedback Details

Other feedback
So no Appropriate Assessment for this major plan affecting several Natura 2000 sites was undertaken! A Screening is not an Appropriate Assessment. Future screening and preparing NIS documents for elements of this plan is not an approach compatible with the Habitats Directive.

[redacted]

From: Western Lakes Plan
Sent: Tuesday 9 August 2022 20:12
To: Western Lakes Plan
Subject: Great Western Lakes Questionnaire

Iascach Intíre Éireann
Inland Fisheries Ireland

Submitted on Tue, 09/08/2022 - 18:54

Contact details

Name
[redacted]

Email address
[redacted]

Feedback Details

The Great Western Lakes
The western Loughs are a such a unique and valuable resource and have such an incredible angling heritage in addition to providing Ireland's finest wildlife habitats that they deserve the utmost protection and those agencies charged with their protection should be afforded the highest powers and resources available.

Fish
Given the huge number of habitats for coarse fish populations in Ireland, I believe that the Irish Limestone Loughs should be managed for indigenous wild salmonid populations. We should take pride in managing these iconic locations which are rich in angling heritage and traditions, there is nowhere else in earth where environment and heritage fuse so completely and it's imperative that these unique populations are protected

Stakeholder Engagement
Any initiative will fail unless there is a but in from important stakeholders

Fisheries Management and Climate Change
All mitigation actions possible should be implemented to protect against climate change

Water Quality
water treatment plants, nitrates action plans, slurry run off and soil leacheat must be identified and controlled. Upgraded treatment plant facilities, buffer strips, agricultural policies changes must be implemented as well as control of pesticides in the vicinity of waterways to stop the culture of pollution

Feedback Details

Invasive Species
Plans must be place to control invasive species such as Hogweed, pennywort, mink and cormorant populations

Stock Management
A 4 fish limit is too generous for wild fish, where size is limited by high populations a 2 fish limit is acceptable.
Modern anglers are aware of conservation ethos and ethnics so are quite prepared to largely catch photograph and release.
Large brood stock and ferox should be strictly protected , it is no longer acceptable to kill these important fish which are the foundation of a fishery, a strict size limit must be imposed and the agency should produce plastic length measures for anglers to stick on the boat.

Habitat Management
Habitat management to enhance recruitment is the essence of stock management when we consider the ample rod pressure on the Loughs.
Amazing results can be produced by these initiatives as on the Six Mile Water in Lough Neagh, and the lough Neaghs dollaghan populations. The techniques are well documented by the wild trout trust.

Research, Current Information and knowledge gaps
Conservation should aim at habitat enhancement, predator control, pollution control, stock exploitation reduction.
As mentioned, recent studies by DAERA and Richard Kennedy et al is readily accessible online and demonstrate stunning recruitment and conservation measures

Timelines / High level objectives
To save the Loughs action must be taken now before it's too late



[redacted]

From: Western Lakes Plan
Sent: Friday 12 August 2022 12:50
To: Western Lakes Plan
Subject: Great Western Lakes Questionnaire

Iascach Intíre Éireann
Inland Fisheries Ireland

Submitted on Fri, 12/08/2022 - 12:37

Contact details

Name
[redacted]

Email address
[redacted]

Feedback Details

Introduction
Dear Reader,

Thank you for consulting with Stakeholders in regards to long-term management of the Great Western Lakes. I would like to take this opportunity to submit my feedback on the approach proposed in the long-term management of the Great Western Lakes 2022 (document reference: IFI/2022/1-4618).
I firmly support the Designation of the Great Western Lakes as a Salmonid Waters, as well as the management of the Great Western Lakes in order to;
• Protect, manage and where they have been damaged, restore the natural attributes and biodiversity of the designated Great Western Lake waterbodies.

• Optimise existing habitat and its potential to support sustainable wild brown trout and salmon fisheries.

• Ensure the sustainability of salmonid fish within the designated waterbodies and to introduce measures to mitigate against the pressures currently impacting on their ecological integrity.
Furthermore, I strongly support;
• Planning and action by IFI Officers to reduce pollution and water eutrophication in the Great Western Lakes.

• Stock management plans to reduce impacts on salmonids from other fish populations.

• Removal of any legislative protection conferred on pike (e.g. Bye-law 809), Roach, Bream, Perch (e.g. Bye-

law 809) in the Great Western Lakes and previously uncolonized waters.

• IFI Officers deployment to manage and remove Pike, Roach, Bream, Perch and Curly waterweed in the Great Western Lakes and previously uncolonized waters.

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• Incentives, initiatives and action organised by IFI Officers to support and encourage the planting of optimal native flora and Woodland in the Great Western Lakes riparian area.

• Incentives, initiatives and action organised by IFI Officers to discourage the planting of non-native flora in the Great Western Lakes riparian area. In particular, non-native coniferous Plantations should be targeted for removal

I strongly support the management of Great Western Lakes in order to protect and enhance stocks of the following vulnerable, native species;
• Atlantic Salmon (Salmo salar)
• Brown Trout (Salmo trutta)
• Arctic Char (Salvelinus alpinus)
• European Eel (Anguilla anguilla)
• Brook Lamprey (lampetra planerii)
• white-clawed crayfish (Austropotamobius pallipes)
• freshwater pearl mussel (Margaritifera margaritifera)

I strongly support the management of Great Western Lakes in order to reduce stocks of the following non-native species;
• Curly waterweed (Lagarosiphon major)
• Pink Salmon (Oncorrhyncus gorbusha)
• Chub (Squalius cephalus)
• Roach (Rutilus rutilus)
• Bream (Abramis brama)
• Pike (Esox licuis)
• Perch (Perca fluviatilis)
I believe water quality management, habit management, habitat restoration, non-native and invasive species control should be the key objectives of the long-term management of the Great Western Lakes.

Best regards,
[redacted]

The Great Western Lakes
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Best regards,
[redacted]

Fisheries Management and Climate Change
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• Roach (Rutilus rutilus)
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• Pike (Esox licuis)
• Perch (Perca fluviatilis)
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Best regards,
[redacted]

Water Quality
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Feedback Details

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Stock Management
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Other feedback
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Theme
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Timelines / High level objectives
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[redacted]

[redacted]

From: Western Lakes Plan
Sent: Friday 12 August 2022 19:35
To: Western Lakes Plan
Subject: Great Western Lakes Questionnaire

****

Please be aware that although the from address of this email suggests that it has come from within your organisation, it was in fact sent from an external source, and therefore may not be genuine. Please treat with caution. Verbally verify with the sender or an IT administrator before taking any actions based on it.

This warning has been inserted by the Topsec email filter.

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Iascach Intíre Éireann
Inland Fisheries Ireland

Submitted on Fri, 12/08/2022 - 19:25

Contact details

Name
[redacted]

Email address
[redacted]

Feedback Details

Water Quality
Can more not be done to address this. It's stated in the report and very obvious, that eutrophication is a huge issue. The Zebra mussels help, perversely given they are not native but it seems that they or the conditions which they love (eg eutrophication) are having other effects. Lower Loch Corrib is a disgrace in terms of trout habitat. The Upper Lake has regular algal blooms but more significantly mayfly and other ephemeroptera seem to be suffering and hatches which used to be prolific and predictable are now sporadic, and patchy and are happening more often in July and August than in May. Add to that the increased level of buzzer hatches in areas that never had them.. I can only speak about Loch Corrib but it appears the same in Mask and Conn. This is a badly needed plan but it needs more teeth.

[redacted]

From: Western Lakes Plan
Sent: Monday 15 August 2022 13:23
To: Western Lakes Plan
Subject: Great Western Lakes Questionnaire

Iascach Intíre Éireann
Inland Fisheries Ireland

Submitted on Mon, 15/08/2022 - 13:08

Contact details

Name
[redacted]

Email address
[redacted]

Feedback Details

Introduction
The introduction gives a clear view of what lakes are covered by the report and the issues they face

The Great Western Lakes
Logical they are all in the west bar Sheelin.

Fish
The report clearly identifies the native and non native species

Water Quality
The action out lined here is not strong enough and there needs to be one body with the resources and the legal authority to enforce legislation and prosecute offenders. fines etc for breaches are not a strong enough deterrent

Feedback Details

Invasive Species
It seems clear what fish and native and what are invasive and this feeds into the stock management plan. The spread of certain species eg Bream around the lakes would seem to be a planned action by certain individuals

Stock Management
It seems logical to do this on a case by case basis.

Habitat Management
This will need government funding to insure buy in and implementation by the agriculture lobby.

Research, Current Information and knowledge gaps
There are always knowledge gaps and research is essential in the management of the lakes particularly with the declining water quality and climate change issues.

Other feedback
The western lakes attract large numbers of angling tourists each year to fish for trout. A change in the management regime towards mixed stock fisheries would significantly damage this business. Ireland already has a wealth of coarse and pike venues but the trout fisheries offer a unique product for angling tourism in Europe and the status quo should be maintained.



[redacted]

From: Western Lakes Plan
Sent: Wednesday 17 August 2022 14:18
To: Western Lakes Plan
Subject: Great Western Lakes Questionnaire

Iascach Intíre Éireann
Inland Fisheries Ireland

Submitted on Wed, 17/08/2022 - 13:30

Contact details

Name
[redacted]

Email address
[redacted]

Feedback Details

Introduction
The broad introduction of IFI responsibility is a good one - however not sure these objectives have changed over the years . Yet here we are again, clearly climate change has had a major effect on the fisheries and the impacts need to be addressed along with invasive species and pollution at the top of that list.

The Great Western Lakes
Carra , Mask and Corrirb share very similar geological features which is in the main the limestone base - clearly each lake is interlinked through underwater aquifers and rivers above ground - so as such have to be treated as a separate group, from the other lakes in this submission. Pollution is the major problem as run off can travel through these aquifers probably from Carra then down into mask and Corrib. Major urban centers , Ballionrobe , Cong, Oughterard, Headford sewerage management must be crucial - plus we have huge afforestation in the mountains around these lakes - plus a myriad of one off houses - given the interaction there needs to be strong pollution measures and fines - there seems to be a very big reduction in insect life too - on which the trout fishing relies -so the monitoring of agricultural sprays in the catchment area needs to be instigated.

Access to lakes is needs to addressed to prevent transmission of invasives and as more people trailer their boats - there is a big demand for extra slipways.

Fish
As far as I can ascertain Trout stocks are good but the higher water temps bring lower oxygen which stresses the fish - pike (non native) and perch seem to prosper in these conditions and to protect the native

salmonids there needs to be active pike reduction .

There is a lot of talk of C&R but this is already practiced by many and many anglers enjoy consumption of trout. I am unaware of any evidence that this practice on large waters has any effect and distracts from more effective methods of improving trout population - for example Sea Trout in Connemara C&R for years no effect -2 Fish Limits in Sheeling and Lene no effect on catch returns - Sheeling competition & pleasure angling catch returns are extremely lower than Corrib/Mask with a 4 fish limit - no need for change mandatory limits here plus cant be policed effectively so just a waste of time - Anglers not forced to keep fish they could always put them back voluntarily as many already do - education key here not by laws.

Stakeholder Engagement
There are many clubs on these lakes that make very positive contribution to the fisheries - and these activities take time and money - yet any angler can fish these waters (dependent of relevant fisheries permit - again very little policing of this)- guides take guests out with without any contribution to the water either, this is ridiculous - why should locals pay through club memberships for these visitors fishing - if not member of local angling club- angling visitor's should need a permit - no where else in Europe or UK can you arrive at a fishery without signing up to some kind of permit system- but for locals its not fair to ask to pay on the double plus they have contributed over the years.

Local anglers and associations should not be dictated to by non local ones especial out of state organization's such as the British Pike Angling Society for example - as has happened in the past

Fisheries Management and Climate Change
Climate change is a very worrying pressure on the system and has made negative impacts on salmonids who are less able to manage higher water temp - clearly spawning streams will be effected in low water too - these streams need to developed to be more tolerant of dryer conditions with groys and pools dug out if necessary. Insects numbers are significantly down - mayfly in particular is almost extinct from Corrib,Mask and Carra - can they be reseeded as they allegedly were on shellin?

Water Quality
The zebra mussel filters the water to make it much clearer but the pollutants are still there - does the zebra mussel also filter out planktonic forms of the various aquatic flies that once but no more inhabited these lakes or can it all be blamed on invisable eutrophication

Feedback Details

Invasive Species
Pike - no catch or size limits on capture in great salmonoid lakes
IFI to continue electrofishing , netting and what ever to control populations

Stock Management
4 Fish bag limit has made no negative impact on population - no change
Upper limit of trout 45 cm - to preserve spawning
Lower limit 30cm - few survive C&R as it is plus they are just being taken by predators anyway

Habitat Management
Pollution measurement and control
Control/eradication of harmful agricultural sprays
Better low water tolerance for streams
Improved redds and over grown banks

Research, Current Information and knowledge gaps
Insects - where are they ?
Why are the gone?

Other feedback
None

Theme
Stock enhancement / Pollution/ Invasive Control

Timelines / High level objectives
ASAP on theme

[redacted]

From: Western Lakes Plan
Sent: Wednesday 17 August 2022 17:38
To: Western Lakes Plan
Subject: Great Western Lakes Questionnaire

Iascach Intíre Éireann
Inland Fisheries Ireland

Submitted on Wed, 17/08/2022 - 17:05

Contact details

Name
[redacted]

Email address
[redacted]

Feedback Details

Introduction
Agreed

The Great Western Lakes
This should also include Lough Ennell.

Fish
Agreed a bag limit for Lough Conn / Cullin makes sense.

Management of Pike will be of benefit - This plan recommends the removal of any legislative protection conferred on pike (e.g. Bye-law 809) in waters where they are newly introduced. It also recommends that teams of IFI officers are deployed to manage and remove pike rapidly, if they are discovered in previously uncolonized waters.

Stakeholder Engagement
I agree with the proposed engagement.

Fisheries Management and Climate Change
Climate change will be a serious challenge. The proposals management of forestry riparian areas make sense.

Water Quality
A multi-agency approach is the only way to manage this challenge.

Feedback Details

Invasive Species
Control / removal of Curly waterweed and Zebra mussels should be prioritised.

Stock Management
Agreed

Habitat Management
Habitat improvement is vital particularly spawning streams. There should be a programme of active management of these streams.

The removal or alteration of man made barriers should be done.

Other feedback
Get this implemented for the good of our lakes.

Timelines / High level objectives
Invasive Species management started is a positive.

Habitat Restoration is underway which is a positive.



[redacted]

From: Western Lakes Plan
Sent: Thursday 18 August 2022 10:33
To: Western Lakes Plan
Subject: Great Western Lakes Questionnaire

Iascach Intíre Éireann
Inland Fisheries Ireland

Submitted on Thu, 18/08/2022 - 09:42

Contact details

Name
[redacted]

Email address
[redacted]

Feedback Details

Introduction
no comment

The Great Western Lakes
very informative

Fish
very informative

Stakeholder Engagement
It will be very difficult to get engagement from the stake holders while the punitive measures indirectly targeting salmon/trout fish stocks remain in place. Altering the protective bye-laws governing fish such as Pike so that the fishing fraternity can freely remove such predatory fish, would save IFI resources. Resources that could then be used to
educate those involved in the agriculture sector. A sector who's everyday actions (such as slurry spreading) pose the greatest threat to our great western loughs.

Fisheries Management and Climate Change
Allowing the fishing clubs to freely remove Pike & Perch without the need for a permit will save: Time, PUBLIC Money and ultimately our Salmonids.

Water Quality
Direct more funding to the education of the agriculture sector (farming). Education is the key to solving ignorance.

Feedback Details

Invasive Species
Change the Bye-laws. Enable the fishing clubs to remove all evasive fish species. Possibly introduce a cull period during which a bounty could be placed on such species.

Stock Management
1. Reduce the trout season to 31st August.
2. Introduce a catch and release policy for trout during May & June.
3. Re-engage the hatcheries that have been closed.
4. Introduce a permit system for all visiting visitors.
5. Create a Tax-clearance system for those operating as fishing guides on the loughs.

Habitat Management
Education Programmes for the agricultural sector

Research, Current Information and knowledge gaps
No comment

Other feedback
IFI needs to show that it is an independent Institution. An Institution that is not influenced by private enterprise. an institution that can be trusted to do the right thing every time.

[redacted]

From: Western Lakes Plan
Sent: Thursday 18 August 2022 11:17
To: Western Lakes Plan
Subject: Great Western Lakes Questionnaire

Iascach Intíre Éireann
Inland Fisheries Ireland

Submitted on Thu, 18/08/2022 - 11:05

Contact details

Name
[redacted]

Email address
[redacted]

Feedback Details

Introduction
I am an angler for over 50 years and fish Mask Sheelin and Corrib a number of times a year

The Great Western Lakes
These are not only salmonoid fisheries.. The IFI are a disgrace for their slaughter of NATIVE PIKE.

Fish
Pike

Water Quality
IFI should be more concerned with pollution than killing native pike

Feedback Details

Invasive Species
Pike are not an invasive species and should be treated as such

Stock Management
more action needs to be taken to improve spawning beds for trout and salmon and funds should not be spent on killing native Pike

Research, Current Information and knowledge gaps
assumption that pike are introduced into small waters

[redacted]

From: Western Lakes Plan
Sent: Saturday 20 August 2022 13:08
To: Western Lakes Plan
Subject: Great Western Lakes Questionnaire

Iascach Intíre Éireann
Inland Fisheries Ireland

Submitted on Sat, 20/08/2022 - 12:49

Contact details

Name
[redacted]

Email address
[redacted]

Feedback Details

The Great Western Lakes
Alas subject to increased use with slowly more people living near them. Enrichment is the enemy of all the Salmonid species.
Better control of phosphate and nitrate entering the system is required.

Fish
Pike have been shown to have been present in Ireland for much longer than previously thought. I'd have thought that IFI and WRFB had killed enough pike by now to show that it only produces lots of small pike with a higher metabolic rate* than adult fish. (*that was in Johnsons scientific paper)The belief that small pike eat only invertebrates doesn't tally with my experience on Mask where very small pike frequently take lures and deadbaits.

Stakeholder Engagement
Kill the pike and i'll not be travelling over buying food and fuel at local stores.

Fisheries Management and Climate Change
I'm afraid IFI can do nothing about climate change. That is one for world governments.

Water Quality
Similar to above but substitute your for world.

Feedback Details

Invasive Species
too late I'm afraid the damage has been done with zebra mussels.
pike are not invasive so that's not an issue

Stock Management
Pointless unless you have evidence of improved trout and salmon fishing after culling retsarted in 1996 after a 13 year cessation. Very few trout fisheries do not now operate catch and release.

Habitat Management
The state of Cloon lough on the Aille river is a disgrace. Brown trout have to pass through this to get to their spawning grounds. It has silted up badly in the last 30 years.

Research, Current Information and knowledge gaps
The key mistake IFI makes is refering back to data on pike from the 1950s. Some of the conclusions obtained were little short of fantasy. I'll not be the person to challenge you but others will [redacted]

Other feedback
The most beautiful lakes i've ever fished. [redacted].
The way things are going we would be better selling up and moving to a more enlightened country such as Holland.

[redacted]

From: Western Lakes Plan
Sent: Tuesday 23 August 2022 14:56
To: Western Lakes Plan
Subject: Great Western Lakes Questionnaire

Iascach Intíre Éireann
Inland Fisheries Ireland

Submitted on Tue, 23/08/2022 - 14:27

Contact details

Name
[redacted]

Email address
[redacted]

Feedback Details

The Great Western Lakes
Need to be managed as Salmonid fisheries and not mixed or coarse fisheries

Fish
Predator species need managed on Salmonid fisheries and this needs to take priority

Stakeholder Engagement
All groups need to be advised in what is happening

Fisheries Management and Climate Change
Spawning streams need managed correctlt

Water Quality
Regular water monitoring with publicised outcomes and indicators of red Amber and green which relate to lakes and spawning streams and are updated every month

Feedback Details

Invasive Species
Need removed! Not managed or monitored but removed

Stock Management
Enhance spawning streams and supplement as required.

Habitat Management
Manage and monitor spawning streams as necessary. There needs to be a minimum standard which All spawning streams should adhere to... Start at the beginning

Research, Current Information and knowledge gaps
Create lake ambassador roles to monitor water quality and send for testing. These people could be trained and able to advise local clubs and people



[redacted]

From: Western Lakes Plan
Sent: Thursday 25 August 2022 21:13
To: Western Lakes Plan
Subject: Great Western Lakes Questionnaire

Iascach Intíre Éireann
Inland Fisheries Ireland

Submitted on Thu, 25/08/2022 - 21:04

Contact details

Name
[redacted]

Email address
[redacted]

Feedback Details

Introduction
So many studies have been carried out over the years. Is it not obvious that the western lakes are under huge pressure particularly from phosphates, nitrates and sewage. Then there is the invasive species.

The Great Western Lakes
Just look at the state of Lough Cara. This is a warning of what is to come. Look at how green the bed of the river Corrib is in Galway. People swimming in the lake are getting rashes.
Are we the generation that sees these lakes die? Is Europe going to fine us billions.

Fish
No real insight into Fish, would
Like to see more action taken to support the native trout & salmon in favour of course fish.

Stakeholder Engagement
Please, just one co-ordinates organisation made responsibility for the lakes..

Water Quality
As mentioned above we are watching the lakes choke and change fundamentally in my lifetime due to intensive farming techniques and lack of proper sewage treatment. What big, significant steps are we going to do about it, instead of let it get worse as we are doing today?



[redacted]

From: Western Lakes Plan
Sent: Friday 26 August 2022 17:24
To: Western Lakes Plan
Subject: Great Western Lakes Questionnaire

Iascach Intíre Éireann
Inland Fisheries Ireland

Submitted on Fri, 26/08/2022 - 16:30

Contact details

Name
[redacted]

Email address
[redacted]

Feedback Details

Introduction
While it is appreciated that the main focus of IFI is on fisheries and supporting habitats, it is suggested that there should be greater acknowledgement of other aspects and benefits of the western lakes e.g. recreation other than angling, sources for water supply.
The title "Long Term Management Plan for the Great Western Lakes" suggests a broader scope than is covered in the plan.
P8 "It is widely recognised that native fish stocks, water and habitat quality have declined on the western lakes over the last three decades." It would be helpful to have more information on the extent and cause of the decline in setting the context and basis for the actions proposed in the plan.

The Great Western Lakes
- Need for a clearer scope statement in terms geographic coverage e.g. in terms of inflowing and outflowing rivers and catchments
- Provide clarity on how the plan fits in an overall Integrated Water Resources Management (IWRM) approach and the Third Cycle Draft River Basin Management Plan 2022-2027

Stakeholder Engagement
- Consideration of a broader cohort of stakeholders to reflect the broader benefits provided by the Great Western Lakes (links with comment on the introduction)
- The Plan acknowledges the role of community based groups in the respective catchments of the western lakes. It is not clear as to why the focus is solely on Catchment [Management] Associations and seems to exclude River Trusts

The FAQ - "Who is responsible for management of the lakes?" - includes a response "Various bodies are responsible for various aspects of lakes." It would be helpful if the plan provided an overview of these bodies, their roles and any dependencies in terms of the scope of the plan.

Feedback Details

Other feedback
General comments:
- the term "designated" is used in a number of places in the report and in some instances the context is not clear

I support the high level objectives and supporting actions of the Plan and the feedback provided above is intended as positive engagement with the consultation process

[redacted]

From: Western Lakes Plan
Sent: Tuesday 30 August 2022 08:51
To: Western Lakes Plan
Subject: Great Western Lakes Questionnaire

Iascach Intíre Éireann
Inland Fisheries Ireland

Submitted on Tue, 30/08/2022 - 08:20

Contact details

Name
[redacted]

Email address
[redacted]

Feedback Details

The Great Western Lakes
The Great Western Lakes account for a large proportion of Ireland's freshwater. They should be a resource for all, not just managed to the benefit of a small minority of trout anglers.

Stakeholder Engagement
While I fully understand the importance of the Great Western Lakes as Trout Fishing destinations, the fact is that fishing habits are changing with more people now opting to fish for pike or multiple species, rather than solely for salmonids. I do not consider that it is "fair" for one set of anglers demands (an increasingly minority group) to be given preference over others.

This is not even to mention the impact that this has on potential tourists, who are choosing other destinations (such as Sweden and Holland) instead of travelling to Ireland. Given the difficult economic environment, I am constantly surprised that Irish Tourism finds itself in a position to ignore this large section of potential customers.

Water Quality
Probably the most important issue; incredible that valuable resources that could be better used understanding this issue are being spent on removing Pike, especially given that there is no evidence that the removal has ever benefitted the Trout population.

Feedback Details

Invasive Species
It is truly disappointing that IFI continue to label Pike as an invasive species, especially when your own research would suggest they are not. It is also disappointing that research IFI conducted that confirms that Pike do not predate preferentially on Trout, seems also to be ignored. Your own findings confirm that each of the Western Lakes are now full of coarse fish and that IFI also struggle to manage the numbers of said species, yet you remove the one species (Pike) who would go a long way to controlling their numbers. Any pike angler will tell you, on waters like these if you find the coarse fish shoals, you will find the Pike.

Stock Management
I will use an anecdotal response here - Pike numbers have been "managed" for years on Lough Conn/Cullin, but each week on the IFI social media outlets we are told of poor fishing returns. If removing Pike hasn't helped the fishing returns, then why bother removing Pike? Maybe it is other factors at play - money used to remove Pike could be better spent elsewhere, on research that might actually make a difference?

Research, Current Information and knowledge gaps
I would argue that producing research is a bit pointless - the 2 major papers IFI have produced recently confirmed a) that pike were likely a native species to Ireland, and b) they showed no preference to predate on Trout. Yet these outcomes clearly didn't fit whatever pre-determined narrative in play as they have been mostly ignored or fudged. If IFI are going to undertake further (costly) research then I would suggest that the outcomes, whatever they are, are given more countenance.



[redacted]

From: Western Lakes Plan
Sent: Tuesday 30 August 2022 09:10
To: Western Lakes Plan
Subject: Great Western Lakes Questionnaire

Iascach Intíre Éireann
Inland Fisheries Ireland

Submitted on Tue, 30/08/2022 - 07:30

Contact details

Name
[redacted]

Email address
[redacted]

Feedback Details

Introduction
I am an [redacted] of Sligo Anglers Association and [redacted] of L.Arrow Anglers and Tormakeady Anglers of L..Mask. In the past I was [redacted] by associated Clubs and [redacted] Anglers on the Western River Basin Advisory Council, My prime concerns and observations for consideration in the plan are outlined as follows.

The Great Western Lakes
i have fished all the associated lakes with this project for more than 45 years and have seen a dramatic decline in water quality, fish stocks, insect life, fresh water shellfish and other natural species. Invasive species such as Zebra mussels, Aquatic weed, and a huge abundance of coarse fish has taken over and is increasing every year and is having a negative impact mainly on the trout populations in all these lakes.

Fish
In particular L.Arrow has accumulated a huge abundance of Roach. This is a huge problem for this lake and needs to be addressed. Massive shoals now exist and are feeding on the now declined insect life that trout always thrived on. The numbers of anglers has declined in Sligo and indeed throughout Ireland due to the poor catch returns and this in turn is affecting tourism. Stocking programs that were productive in the past have been discontinued by IFI, decided from recommendations by Scientists for reasons that make absolutely no sense in most for the lakes where it should have continued. All stocking has been withdrawn except in the case where Striploides can be provided at huge cost and this does not improve natural bloodstock. Nothing has been put in place by the Department such as onsite hatcheries and no funding has been provided to set up programs of this nature to enhance the natural stocks. This needs to be considered now in the Plan for the future so as the stock doesn't eventually run into extinction.

Stakeholder Engagement
Angling Clubs need to be involved with their ideas for decision making by the Department. After all the angler is in the front line and sees what is going on day by day and like any job, the experienced person has the knowledge and needs to be listened too and the provisions made by the Authorities to make things happen.

Fisheries Management and Climate Change
With regard to Fisheries management; It appears from my and others point of view in this day and age that Inland Fisheries Ireland (IFI) have dramatically fallen by the wayside. In the past the local Officers took personal interest and were able to get on with local issues. But now its as if everything they do needs to go through head office and they cant move until approved by hed office in Dublin. I can see that this would be very demotivating in their position.
Climate change without doubt is and will be a serious issue in the future.. Drought conditions are killing stocks throughout the country. Low water and flooding is a concern. Forestry and farm runoff in flood and drought damages feeder streams and juvenile fish stocks and redds. Applications for and authorization of discharge licences granted by Co.Councils needs to be reviwed.

Water Quality
Afforestation, Farming, and Septic Tanks are established the main contributors to the decline in water quality. The Government has failed to implement the plan proposed by the Western River Basin Advisory Council 10 years ago. Eutrophication is having a major affect on weed growth in all these lakes. In particular L.Arrow is becoming overgrown with weed and an all lake plan needs to be developed to extend the pilot plan set up a few years ago near Flynn's Pier.

Feedback Details

Invasive Species
L.Arrow - needs attention to rid of hugh shoals of Roach.
-Invasive Weed growth needs to be tackled in the plan.

Stock Management
L.Arrow- A project to set up a small hatchery should be introduced.

Habitat Management
L.Arrow - Weed growth is getting out of control.

Research, Current Information and knowledge gaps
L.Arrow- Haven't seen any recent fish surveys

Other feedback
So much resource, money and time is spent of developing Plans that never happen. But now with this new plan, instead of writing and talking about it, provide an achievable timeline for all the individual aspects of the plan to happen..

Timelines / High level objectives
1. Rid of invasive fish ie. Roach in L.Arrow A.S.A.P.
2. Address Weed growth in L.Arrow.
3. Acquire funding for a small trout hatchery on L.Arrow

[redacted]

From: Western Lakes Plan
Sent: Sunday 4 September 2022 18:22
To: Western Lakes Plan
Subject: Great Western Lakes Questionnaire

Iascach Intíre Éireann
Inland Fisheries Ireland

Submitted on Sun, 04/09/2022 - 16:26

Contact details

Name
[redacted]

Email address
[redacted]

Feedback Details

Introduction
[redacted]**a number of clubs(5) on western corridor and frequent those fisheries on a regular basis over the last 30/40 years. The clubs are involved in the promotion of salmon and brown trout fisheries.**

The Great Western Lakes
I fish Lough Corrib, Mask, Carra and Sheelin.

Fish
Bag limits....at the moment they are too generous. Salmon tags should be reduced to 1 Spring fish until May. The bag limits for trout ought to be 2 fish across the Western lakes and c/r should be encouraged by all. Competitions as they stand are not fit for purpose....after all this is about conservation. IFI should encourage clubs/competitions to be c/r.. Provide them with incentives to release all fish fish caught in competitions....and not have the sight of unclaimed fish left hanging to achieve what? I fished multiple competitions under IFSA and they were all c/r.....thats 30 years ago.Its time to wake up and smell the coffee!!

Stakeholder Engagement
I think the progressive step here is to get a team separate from each of the stakeholders but drawn from the members of each group with the purpose of tackling this issue head on. This is not meant to isolate any of the stakeholders but can have its own autonomy and way of thinking.This group should report direct to Minister.

Fisheries Management and Climate Change

The management structure of overall supervision should be changed. Each agency is doing its own thing in spite of the narrative.A body should be put together comprising of IFI, NPWS, EPA,COILLTE reporting directly to Minister. I dont believe this is happening to good effect at moment and I believe that some agencies act as if they have a right to do what want in order to achieve gains eg Coillte. They need to be taken to account on the type of husbandry that they have persisted with despite the knock on for the environment.

Water Quality
Farmers, Co.Councils and Coillte have a lot to answer for and are directly responsible for the mess that currently exists. Prohibition by law should be enforced on farmers spreading any slurry within a specified distance from any river or lake. Farmers drawing water/washing out slurry tanks should face serious fines for their use in such instances. Farmers ought to be compensated for setting aside their lands in such circumstances. I refer to findings of the FEALE REPORT which makes for interesting reading.

Feedback Details

Invasive Species
No comment.

Stock Management
No comment.

Habitat Management
Until you get cooperation from the govt agencies involved it is difficult to move forward. The management of habitat is crucial and is let down by such incidents as is currently for example on River Boyne. How could this be allowed to happen? The IFI need to establish a pollution section with a supervisor and a set skilled team to report direct to Minister...capable of analysing/tracking/sourcing the sources of pollution.Being autonomous in other words.They also need to be mobile at short notice as thats what it requires.

Research, Current Information and knowledge gaps
Research shows that in particular the Corrib is on a downward curve. The heretofore idea of allowing houses/commercial premises being constructed close to waterways can now be seen in a negative light. There should be no more planning applications entertained within a specified distance from waterways.In my view no premises should be within 100 m of any lake or stream.

Other feedback
Predation. This is the elephant in the room.The issue with cormorants and their effect on fisheries needs no research. Something must be done as they in my experience are becoming more numerous than ever particularly on Lough Mask. IFI must make some effort to engage govt opinion and decision on this matter.If you ask any angler about his/her concern with regard to conservation then this will be one of the main ones coupled with water quality.

Timelines / High level objectives
1959 Fisheries Consolidation Act. This is outdated and antiquated law for the times we live in. This Act needs to be either abolished or updated to meet the challenges of modern times.The Co.Councils, the farmers and Coillte need to be tackled on the discharge and spreading of effluent. If that was managed and each of these stakeholders cooperated in a positive way, then progress could be made.



[redacted]

From: Western Lakes Plan
Sent: Monday 5 September 2022 00:24
To: Western Lakes Plan
Subject: Great Western Lakes Questionnaire

Iascach Intíre Éireann
Inland Fisheries Ireland

Submitted on Sun, 04/09/2022 - 22:28

Contact details

Name
[redacted]

Email address
[redacted]

Feedback Details

Introduction
I am the [redacted] Community Development Council. As everyone is aware of, for may years Angling has been one of the major tourism benefits to [redacted] with anglers coming from all parts of Europe and further afield bringing a much needed financial boost to the town. Over the past number of years the number of anglers coming to our town has seen an alarming drop off and in recent years has almost come to a standstill. [redacted] and other towns in this region are very much depending on tourism spend by these anglers for there very existence. The closure of so many guest houses, BandBs, Self catering accommodation. not to mention the many pub and restaurant closures over the past few years has been a serious blow to the town. Nearly every household in close proximity to Lough Mask earned good money each season from boating anglers on the lake. This is now almost non existent. Mainly due to the down turn in angling tourism

The Great Western Lakes
In the past the Great Western lakes were justifiably World famous for their fantastic Wild Brown Trout fishing. Unfortunately this is no longer the case. With Failte Ireland recently stating it was no longer possible to promote them as good fishing Lakes. This has got to be on of the biggest disasters ever to hit this country and all involved should hang their heads in shame. I can only hope and pray with this plan we can start to redress this decline and in time bring these lake back to their previous World class fishing.

Fish
Obviously the main reason Tourism Anglers come to fish these Lakes is for our unique Wild Brown Trout.. The explosion of other invasive species in the recent years has to be a cause of real concern. While I accept

Pike management is an important to the future of our Wild Brown Trout, a big worry would be this could lead to an even a bigger population of course fish.

Stakeholder Engagement
The very future of our Lakes is depending on all stakeholders being involved in future planing. It is no longer acceptable that anglers can fish on them and not make some contribution towards their development. There has to be consultation and agreement between all involved as to how this should come about but is is vital to the future of these lakes that this should happen.

Fisheries Management and Climate Change
The one biggest worry about the future of Great Western Lakes is the serious decline in insect population. Above all else I believe this is the one problem the problem that has to be addressed. The decline in the Mayfly, Sedge. Caenis,etc. population really is a real cause of serious concern.

Water Quality
The water quality while it needs to be monitored on an ongoing basis would not be my biggest concern especially on my local lake of Lough Mask. Other Lakes especially Lough Carra seem to have more serious problems and remedial work on these Lakes is vital to their future.

Feedback Details

Invasive Species
As previously stated invasive species are a cause of real concern especially in recent years. The future of our Wild Brown Trout fishing could be under serious threat if they are not controlled.

Stock Management
In recent surveys it was stated that less than .5%of the mortality rate of Wild Brown Trout is caused by Angling.Give this statistic I do not believe Catch and release does make a big difference to the fish stocks in our Lakes. A real concern would be that the vast majority of Anglers have no knowledge of how to catch and release properly there by leading to the returned fish dying a horrible death and possibly even bringing disease into the lake.

Habitat Management
Habitat management must be the most important of any future plan for these lakes. The Lakes themselves are only the end product. The streams and rivers are the vital element and without proper management of them the lakes have no hope of surviving. To implement this Habitat management there has to be serious increase in staff to carry it out. The amount of fisheries officers in this area has seriously declined in this area(Mask, Carra) over the past number of years. This has to be redressed and the numbers brought back to previous levels as matter of urgency.

Research, Current Information and knowledge gaps
Research once again is of Major importance to the future of our Lakes. In the Past people like [redacted] and others carried out invaluable work and identified many problems as they happened. That these people are replaced by others of equal ability has to be a major priority.

Other feedback
Tourism is of major importance in this area of the West of Ireland that has very little other employment potential and Angling Tourism is of serious importance the the future of tourism in this area. It is Incumbent on every on Government, Inland Fisheries, Failte Ireland and other relevant bodies. Anglers, Angling Tourism operators etc. to all work together to return these lake to their great former glory.

Timelines / High level objectives
The timeline is yesterday. No time must be wasted in putting this plan into operation. It can not be over stated the very future of our lakes is at stake here and every day is of vital importance.



[redacted]

From: Western Lakes Plan
Sent: Monday 5 September 2022 15:35
To: Western Lakes Plan
Subject: Great Western Lakes Questionnaire

Iascach Intíre Éireann
Inland Fisheries Ireland

Submitted on Mon, 05/09/2022 - 15:02

Contact details

Name
[redacted]

Email address
[redacted]

Feedback Details

Introduction
I have been fishing the Western lakes for over 30 years . I have watched the decline of these great lakes over this time and am delighted that a development plan is being drawn up to address the issues. However actions needs to be swift, decisive and wide-ranging to halt and reverse the alarming decline in the fishing in these unique lakes.
Time is running out fast to save these unique habitats from being lost for all generations to come.
One only has to look at the decline of sea trout fishing to realize what is staring us in the face !!! We must not let the same happen to our brown trout fisheries .....

The Great Western Lakes
It is very noticeable the decline in the insect life on he lakes in the past ten years. Hatches are diminishing each year. This is down to the quality of the water in the lakes and must be addressed urgently.

Fish
Minimum Fish size needs to go to 14 inches .

Fisheries Management and Climate Change

Water Quality

Local Authorities need to be held accountable for any and all actions, inactions or negligences which adversely impact the quality of the water in the lakes.

Feedback Details

Invasive Species
Considerable work is needed to address the explosion of coarse fish in these fisheries . This is having a huge impact on the habitat and feeding patterns of the trout on these lakes.
Aggressive action needs to be taken urgently to address the explosion of coarse fish in the lakes before it is too late.

Stock Management
Minimum fish size needs to be increased to 14 inches immediately.
A maximum bag limit of 2 trout per day needs to be put in place.

Habitat Management
Those accountable for pollution of the lakes need to be held more accountable and brought to court and pay for their actions - whether it if farming, businesses, local authorities etc.

Other feedback
The start of the fishing season needs to be pushed back from 15th February to March 1st . February 15th is just too early as fish are ravenous after a long winter and need time to feed and build themselves up before the season commences.



[redacted]

From: Western Lakes Plan
Sent: Monday 5 September 2022 18:05
To: Western Lakes Plan
Subject: Great Western Lakes Questionnaire

Iascach Intíre Éireann
Inland Fisheries Ireland

Submitted on Mon, 05/09/2022 - 17:42

Contact details

Name
[redacted]

Email address
[redacted]

Feedback Details

Introduction
Brief Introduction: I'm an angler who keeps a low profile but have fished the western lakes for the past 40 Years. In particular [redacted] since 1970 and therefore would have closely witnessed great changes to the trout fishing over the past 5 decades.

Feedback Details

Invasive Species
In terms of this submission on invasive species , my ask is simply as follows;

To strategically manage the Coarse Fish Population in the Great Western Lakes with a balanced approach to all species ensuring full consideration is given to match the best locations and habitats for all species to Thrive in their most suitable waters.

Stock Management
In Terms of Stock Management my submission is simply ;

To reduce the daily Trout bag limit to 2 Trout.

Other feedback

Special Thank You to the IFI for this fantastic initiative and particularly for facilitating the regular angler to input and have a say.

[redacted]

From: Western Lakes Plan
Sent: Tuesday 6 September 2022 09:37
To: Western Lakes Plan
Subject: Great Western Lakes Questionnaire

Iascach Intíre Éireann
Inland Fisheries Ireland

Submitted on Tue, 06/09/2022 - 09:05

Contact details

Name
[redacted]

Email address
[redacted]

Feedback Details

Introduction
I support the plan and wish to reinforced the following points in the plan

Fish
The salmonid population should be protected by a strong stock managment program.
Bag limit.
2 brown trout per angler. Maximum of 4 brown trout per boat.
Size Limit.
No Brown trout may be remove OVER 40cm.
(This protects the most valuable brood stock)

Stakeholder Engagement
Stakeholder are not just Anglers. IFI need to address catchment management. IFI need involvement with the IFA.

Fisheries Management and Climate Change
Stock managment.
Stock management should cover All fish, birds and animals that pose a treat to the salmonid population.
Angling session for brown trout.
1st March to 30th September.

Water Quality
We need more environmental officers with greater powers. More focused on catchment management.

Feedback Details

Stock Management
Stock managment.
Stock management should cover All fish, birds and animals that pose a treat to the salmonid population.

Habitat Management
River enhancement and water quality are hand in hand

Increase the numbers of staff on the ground working in river enhancement and stock managment.
Increase the number of environmental officers.
Update the powers to shadow the powers off the NPWS.

Research, Current Information and knowledge gaps
The research unit need to make recommendations whis should be the back bone on protect the salmonid population

[redacted]

From: Western Lakes Plan
Sent: Tuesday 6 September 2022 12:16
To: Western Lakes Plan
Subject: Great Western Lakes Questionnaire

Iascach Intíre Éireann
Inland Fisheries Ireland

Submitted on Tue, 06/09/2022 - 12:00

Contact details

Name
[redacted]

Email address
[redacted]

Feedback Details

Fish
Two Brown Trout per angler.
Max 4 brown trout per boat
Size Limit. No Brown trout over 40cm to be removed (Valuable brood stock)

Fisheries Management and Climate Change
Angling season to change to March 1st to Sept 30th.

Water Quality
Improved River enhancement equates to better water quality within the lakes

Feedback Details

Stock Management
Stock management to cover ALL fish ,birds ,mammals that are impactive on stocks of salmonids. Deep water studies of fish populations mor pro active.

Habitat Management
Increase the number of staff on the ground working on river enhancement.

Increase the number of environmental officers
Update the powers to shadow the powers of the NPWS.

[redacted]

From: Western Lakes Plan
Sent: Tuesday 6 September 2022 21:28
To: Western Lakes Plan
Subject: Great Western Lakes Questionnaire

Iascach Intíre Éireann
Inland Fisheries Ireland

Submitted on Tue, 06/09/2022 - 20:55

Contact details

Name
[redacted]

Email address
[redacted]

Feedback Details

Introduction
As a keen angler for brown trout and pike I welcome the plans for engagement to try and slow down the obvious pressures that befall our salmonoid species throughout Ireland and none under as much threat as the Great Western Lakes outlined in the draft.

The Great Western Lakes
As an angler of more than just brown trout across numerous lakes and rivers across Ireland , I feel that protecting the brown trout and salmon stocks in the highlighted lakes is vitally important. Course fishing is enjoyed all over the country in thousands of streams, rivers, ponds and lakes and I believe protecting one of our prized species on only 7 of our great wild lakes is a poor reflection of how far we have allowed numerous factors to effect our native salmonoid populations so much. However, I am a realist and putting my personal thoughts on the matter aside I believe it is only right that we try to protect and do everything in our powers to protect and help the salmonoid fisheries to try and recover to their former glories.

Fish
>I would support the introduction of a 2 fish bag limit on the great western lakes- this will bring it in line with the same bye laws for other catchments eg Lough Derg, Lough Sheelin- this will make implementation of fishery bye laws easier to understand for the angler and also clear for prosecution also.
>I would support the introduction of an increased size limit of 14 inches or 35.5 cms with the added protection of a maximum limit of 51 cms or 20 inches which will provide protection to spawning stock.
>I believe the trout angling season on the western lakes should be brought in line with other catchments across Ireland, namely 1st of March on majority of lakes or indeed I support the date of opening the season

on 15th March as is what we campaigned for on Lough Derg to protect trout that are trying to recover their energy and condition after spawning.
>I would advocate strongly for the management of invasive coarse fish that are impacting so negatively on salmonoid stocks in the lakes.
>I support that no pike over 100cms are killed in any proposed pike management as these female large pike are important in controlling the other invasive coarse fish. More large pike and less numbers of small pike is a better way of managing salmonoid and pike cohabitation in the lakes
>I would urge the IFI to reconsider taking no action on the roach population.

Fisheries Management and Climate Change
>I would like to see severe penalties for poaching and illegal fishing- current penalties are laughable and do nothing to prevent this damaging practice.
>I would implore the IFI to increase its stream enhancement programmes to try and restore these vital 'veins' for salmonoids to allow for stocks to try and recover to previous levels.
>The IFI need to lobby government to create agriculture schemes/grant schemes that pro actively reward farming systems and operations that protect our watercourses and habitats as opposed to the current policies of rewarding intense agriculture that has lead to >80% of our rivers now having a poor quality rating

Water Quality
>IFI need to have more powers and better engagement with other watercourse protectors such as local authorities and EPA to protect our river catchments.
>Severe penalties for offenders who have caused pollution to our watercourses. Current penalties and fines are not severe enough for people and businesses that cause pollution incidents and fish kills in our catchments and do provide any deterrent.There is very few prosecutions vrs incidents of pollution on our rivers and lakes.
>The IFI need to lobby government to create agriculture schemes/grant schemes that pro actively reward farming systems and operations that protect our watercourses and habitats as opposed to the current policies of rewarding intense agriculture that has lead to >80% of our rivers now having a poor quality rating



[redacted]

From: Western Lakes Plan
Sent: Wednesday 7 September 2022 07:07
To: Western Lakes Plan
Subject: Great Western Lakes Questionnaire

Iascach Intíre Éireann
Inland Fisheries Ireland

Submitted on Wed, 07/09/2022 - 06:00

Contact details

Name
[redacted]

Email address
[redacted]

Feedback Details

Introduction
I am a native of [redacted] and I and my family have fished on [redacted] and the sourounding lakes and rivers all our lives

The Great Western Lakes
Lough corrib

Fish
Trout, salmon,perch,pike

Fisheries Management and Climate Change
I would ask IFI to fulfill its obligations as the legal body in charge of protecting lough corrib and its tributaries

Water Quality
Maintain and enforce water quality to the standard required to protect our fishing and spawning areas

Feedback Details

Invasive Species
The removal of pike or any other invasive fish from the owenriff spawning river, and from the any river or lake which flows into it, or from it or is on the system,

Stock Management
Maintain and protect the salmon and trout stocks in order to in courage future anglers to come to fish and support local economy for the long term, The 4 trout limit per day be maintained or removed but not lowered. The pike Limit should at least match or exceed it. Catch and release be a personal decision and not a policy

Habitat Management
Protection of the marine habitat through proactive responsive action

Other feedback
No wind farms should be allowed around lough corrib in order to maintain its high scenic value from the lake while fishing etc .Also to protect the spawning areas from from bog slides etc as seen in derrybrien.

Theme
No more wind farms we all ready have the biggest in Europe

Timelines / High level objectives
2022 onwards, invasive fish removal and and protection of pearl mussel

[redacted]

From: Western Lakes Plan
Sent: Wednesday 7 September 2022 12:08
To: Western Lakes Plan
Subject: Great Western Lakes Questionnaire

Iascach Intíre Éireann
Inland Fisheries Ireland

Submitted on Wed, 07/09/2022 - 12:01

Contact details

Name
[redacted]

Email address
[redacted]

Feedback Details

Introduction
I am a [redacted] who go fishes Lough Corrib and surrounding lakes with my family. [redacted] [redacted] the Community rib fisheries board.

The Great Western Lakes
Lough Corrib

Fish
Salmon
Trout

Fisheries Management and Climate Change
I feel that the management of the culling of pike should be enforced to save our low salon and trout stocks.

Water Quality
I feel that more could be done by county council to reduce pollution higher in lake system



[redacted]

From: Western Lakes Plan
Sent: Wednesday 7 September 2022 17:08
To: Western Lakes Plan
Subject: Great Western Lakes Questionnaire

Iascach Intíre Éireann
Inland Fisheries Ireland

Submitted on Wed, 07/09/2022 - 14:37

Contact details

Name
[redacted]

Email address
[redacted]

Feedback Details

Introduction
We broadly welcome The Great Western Lakes Plan and are happy to see this engagement with anglers. The loughs included and their catchments, are vital to the future of worthwhile trout angling in Ireland and it is essential they are properly looked after.

Much of the Plan we would describe as "highlevel" but it does cover most of the issues that need to be addressed.

The Great Western Lakes
...

Fish
Brown Trout are not stated as a Qualifying Interest in either the Lough Corrib or Carra Mask SACs (Special Areas of Conservation) and we feel they should be. The necessity for this Great Western Lakes Plan in itself suggests that trout (like the salmon of Corrib) should receive an annex II classification.

Stakeholder Engagement
We very much welcome the stakeholder engagement. While much of what we anglers have to contribute is sometimes anecdotal and is not always supported by science, nonetheless it is of value and comes from people who are invested in the loughs in diverse ways and whose concerns are sincere.

Leading on from Stakeholder Engagement the next step is to Stakeholder Involvement. There are people in

most clubs who are prepared to help with work on the ground...but many clubs do not have the capacity to deal with the paperwork or someone to provide the proper lead. This is an area where IFI can step in to deal with paperwork and lead clubs in the implementation of smaller suitable local projects such as stream enhancement, ciitizen science and such like. There are people willing to help and become involved and the challenge for IFI is to tap in to that. If that can be properly tapped into then considerably more will be achieved.

Fisheries Management and Climate Change
Climate Change will be with us for many decades and the ideas put forward for cooling waters in specific areas with tree planting for shading etc needs to be progressed and this is an area where clubs can (and in some places are) help.

Water Quality
Water quality has become an area of increasing concern to anglers, not just from anecdotal observation over many years but, for example, scientifically with what has been shown for Lough Carra. But the time for action is now and this must be given a very high priority. Specifically, we must be avoid a plan that focuses only on data collection.....we cannot allow a situation pertain where we reach the end of 5 years and are still looking at data and talking....what is needed is corrective action to deal with the issues and the sooner these are tackled the better.

Feedback Details

Invasive Species
Invasive Species are a concern. We note and support what the plan proposes for addressing issues with pike. We have concerns over the explosion of roach numbers and the bream and roach / bream hybrids on Lough Mask. What we do not know is what damage these may be doing by digging up important fly larva holding weed, or the vast quantities of larva, nymphs and flies these invasive fish are consuming at the expense of the trout's larder. We do not know what impact this is having on trout stocks...but logic suggests there must be considerable competition for the available food. Anecdotally anglers are increasingly reporting reduced fly hatches and very many reduced numbers of trout rising on the surface to flies. We appreciate there are other factors at play which may be impacting on fly hatches but this whole area of what quantities of food the invasive species are consuming and its impact on the trout population may warrant scientific investigation.

Stock Management
A reduction in daily bag limits for trout anglers may be a delicate and divisive issue and we do not need division. However, what is clear from our observation is the gradual and steady increase in Catch & Release across broad categories of angler. In some circles anglers need to be apologetic if they wish to take a fish. There is of course more room for improvement in this area and we believe that will come of itself. Increasingly competitions, which are important to the very fabric and comradery of social angling, are becoming C&R.

Habitat Management
A crucial area and one where IFI has scope to tap into the goodwill of clubs by providing leadership and undertaking paperwork so that a greater amount of habitat improvement work can be achieved in the future.

Our [redacted] has just recently completed an [redacted] project and frankly the level of paperwork required was very little short of overwhelming. The level was such that we would be reluctant to take on a habitant improvement programme .....but there are areas of trout spawning habitat locally which we feel need regravelling. We need help with the paperwork and leadership from IFI to assist us in doing this work. Our club is prepared to contribute financially.

Research, Current Information and knowledge gaps
Further up in this Feedback we have suggested the need for:
- Research on the apparent decline of fly life in our loughs.
- Research on the damage to trout food stocks by invasive bream & roach & hybrids.

Clubs can assist with citizen science projects which may be of help to IFI in its work.

Other feedback

1 - High Speed Angling Boats - In recent years more and more high horsepower fast moving non-traditional type specialised angling boats are appearing on our loughs. The boats referred to are generally powered by 40 to 70hp engines and move at great pace from one end of the lough to the other often motoring at great

speed through sensitive shallow water fly fishing areas with detrimental impacts for angling. These boats can throw a considerable wake / wave and hence are a danger to traditional type angling boats drifting in shallow water in rocky areas. It is not unknown for the wake of one of these high powered boats to pitch a traditional type boat onto rocks in shallow water. The power boat can often be far into the distance and not be aware of the danger it has caused behind it. Because of this danger the time has surely come to impose an upper limit in the horse power of all angling boats to somewhere in the region of 20hp in the interests of general safety and before a life is lost.

2 - Use of multi treble hooks when spinning and practicing C&R. In recent years there is an increase in spinning for trout from static or drifting fishing boats (ie non traditional trolling boats). While C&R is often practiced we believe the use of multiple treble hooks is incompatible with the desired objective of Catch and Release - ie minimum damage to the trout. We often hear of large numbers of fish captured on such methods, particularly early in the season but the damage caused when compared to a much smaller single and sometimes barbless fly hook must be considerable in terms of fish survival. Indeed with smaller trout the use of even a single treble may cause fatal damage. This is something which needs to be examined.

Timelines / High level objectives
Now is the time for action in the critical area of water quality.

[redacted]

From: Western Lakes Plan
Sent: Wednesday 7 September 2022 19:36
To: Western Lakes Plan
Subject: Great Western Lakes Questionnaire

Iascach Intíre Éireann
Inland Fisheries Ireland

Submitted on Wed, 07/09/2022 - 19:04

Contact details

Name
[redacted]

Email address
[redacted]

Feedback Details

Introduction
We have already made a submission but on rechecking I notice I omitted an important point

Feedback Details

Habitat Management
Run of River hydro electricity generation:

At Tourmakeady on the western shores of Lough Mask a local community group [redacted] are currently giving consideration to progressing a project to construct 4 separate Run Of River electricity generation stations on 4 different tributaries of L Mask, all of which are trout spawning and nursery streams.

Our knowledge and research of such installations indicates they come with a definite and certain cost to salmonid stocks which may and frequently prove to be significant. Problems may arise from a myriad of sources including loss of spawning habitat, varying degrees of difficulty for mature trout in upstream and downstream migration, problems for fry in downstream migration, increased predation where adult trout gather together when held up in tailraces or headponds, sedimentation, changes in water temperature, turbulence....the list goes on.

Every spawning stream on our western loughs is a precious resource and must be protected in its natural state and certainly not be exposed to the unintended consequences of well meaning but damaging projects. Ireland already has ample proof of the severe damage caused to our salmonids by hydro electricity generation from both large and small installations.

[redacted]

From: Western Lakes Plan
Sent: Thursday 8 September 2022 19:31
To: Western Lakes Plan
Subject: Great Western Lakes Questionnaire

Iascach Intíre Éireann
Inland Fisheries Ireland

Submitted on Thu, 08/09/2022 - 19:03

Contact details

Name
[redacted]

Email address
[redacted]

Feedback Details

Introduction
In Lough Corrib tyres have been used as fenders for boats for over 80years. I agree that this is the case but do we know the effect of so many tyres on the fish and water quality on the lake? You may say, sure there is not that many of them but I assure you that going around the whole lake from Oughterard, Mamm Cross, Cong, Headford, Greenfields, Inis Quinn and the commercial boat club in Galway that there is a lot of tyres. Tyres built into piers, under water, under bushes, you get the idea.

Fish
So, what is in the tyres? It is not just the rubber, but Tyres contain a total of approximately 1.5% by weight of hazardous waste compounds listed in Annex 1 of the Basel Convention. These compounds are encased in the rubber compound or present as an alloying element.
Compounds leaching from car tyres include benzothiazoles, phthalates, and phenols, where benzothiazole is typically observed in the highest quanties(Lied 2010, Liompart et d 2013)
Benzothiazole are known to emboytoxic in fish and manuals.
Benzothiazole is an aromatic heterocyclic compound with the chemical formula C 7H 5NS. It is colourless, slightly viscous liquid.

Water Quality
When we look at the rubber it breaks down to microparticles. Microparticles of end of life tyres are regarded as one of the greatest contributors to microplastic pollution. These effect the water, the fish, everything in

the lake and when a fish consumes the microplastic and we consume the fish it will lead to the same health problems. There are very few fresh water studies on the effects of tyres in fresh water. However, . The potential for ingestion of microplastics in humans may arise through bathing or other recreational activities in contaminated waters or through consumption of water from contaminated abstraction water bodies. This potential is likely to increase closer to point sources, particularly in lakes where there is less dispersal. Epa report on plastic pollution in waterways. EPA waste data release, 15 Oct. 2021. Latest reference year 2019.

Waste tyres pose a threat to the atmosphere, to land, soil, water, plants and animals if they are not managed properly. Where they are dumped in our environment, they have a significant negative visual impact on our landscape

Feedback Details

Research, Current Information and knowledge gaps
How to persuade lake users to remove the tyres when they see them in the water, and not to use them when building new moorings'.
The more difficult problem is to remove them from existing moorings, some of which may have been built up to 100 years ago. I think it would take legislation to make that happen?
Could we organise groups around the lake to start a conversation around the tyres

Theme
Tyres in the Lough Corrib

Timelines / High level objectives
To take out the tyres which are embedded underwater and to ask the fishermen to take the tyres away from the shore during the winter when the fishing is closed.



[redacted]

From: Western Lakes Plan
Sent: Friday 9 September 2022 10:52
To: Western Lakes Plan
Subject: Great Western Lakes Questionnaire

Iascach Intíre Éireann
Inland Fisheries Ireland

Submitted on Fri, 09/09/2022 - 09:21

Contact details

Name
[redacted]

Email address
[redacted]

Feedback Details

The Great Western Lakes
In the IFI Byelaw Submission dated August 2021, IFI make it very clear at p3 par.2 that the Western Lakes must be exempted from Byelaws 806 and 809. The Draft Plan now published resiles considerably from this recommendation, which is only 1 year old. The August 2021 recommendation in full must be enshrined in the new Plan.

Fish
Predator control is paramount. Much much more needs to be done.

Stakeholder Engagement
This is very important. I hope the new CEO embraces this fully. It was totally ignored under the previous CEO and certain personnel.

Fisheries Management and Climate Change
A lot more resources need to be put in place to deal with stream enhancement. This is vital.

Water Quality
IFI must adopt a far more proactive role in this area. Agricultural pollution is a biggest threat to our waters. Farmers building slatted units without planning permission and spreading slurry is rampant. IFI must use their Statutory powers to tackle this problem and not rely on Local Authorities, who after all are major offenders.



[redacted]

From: Western Lakes Plan
Sent: Friday 9 September 2022 20:36
To: Western Lakes Plan
Subject: Great Western Lakes Questionnaire

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Iascach Intíre Éireann
Inland Fisheries Ireland

Submitted on Fri, 09/09/2022 - 20:32

Contact details

Name
[redacted]

Email address
[redacted]

Feedback Details

Introduction
I emailed a response some time ago but have not had a reply

Feedback Details

Stock Management
I have made a number of suggestions via email but have had no response

[redacted]

From: Western Lakes Plan
Sent: Sunday 11 September 2022 14:34
To: Western Lakes Plan
Subject: Great Western Lakes Questionnaire

Iascach Intíre Éireann
Inland Fisheries Ireland

Submitted on Sun, 11/09/2022 - 13:54

Contact details

Name
[redacted]

Email address
[redacted]

Feedback Details

Introduction
i am a native of [redacted],and have been fishing on lough corrib all my life and also fishing on the mountain lakes aswell

The Great Western Lakes
lough corrib , is where i wish

Fish
i fish for trout and salmon and have seen the pike destroy all of them,this needs to sto,all the mountain lakes are gone,its a disgrace how this not been addressed by the ifi

Fisheries Management and Climate Change
i would like to see the ifi remove the pike from the owenriff river and any other mountain lakes where they were illegaly introduced and gates opened at the mountain lakes for fishermen to access them.where pike has been introduced all our trout and salmon have been killed,resulting in them been pike onyl lakes

Feedback Details

Invasive Species
i want to see the pike removed from the owenriff river inorder to protect the trout and salmon stocks, as the

gene pool of trout and salmon is being decimated ,which also inpacts the pearl mussel

Stock Management
restore our river and trout stock to pre pike levels

Other feedback
i want to see the 4 trout limit removed and the 1 pike limit removed aswell



[redacted]

From: Western Lakes Plan
Sent: Sunday 11 September 2022 19:23
To: Western Lakes Plan
Subject: Great Western Lakes Questionnaire

Iascach Intíre Éireann
Inland Fisheries Ireland

Submitted on Sun, 11/09/2022 - 17:31

Contact details

Name
[redacted]

Email address
[redacted]

Feedback Details

Introduction
This refers to a plan which may be a day late and a dollar short, the horse has bolted, on your watch. To say that native fish stocks and habitat quality have declined over the past 30 years is an epic understatement for which IFI are partially responsible in co-operation with county councils, EPA and the Dept. of aggriculture, and also worth a mention is Forrestry. There has been little or no policing of the use of fertilizers and slurry directly adjacent to lakes, rivers and feedwater streams, county council landfill leachate is tankered to waste water treatment facilities which are incapable of treatment of this type, and mostly primary sedimentation and secondary aeration in type, and totally unsuitable and lacking in capacity, over run is then returned to waterways and thus to rivers and streams.....are the councils going to prosecute themselves and why are IFI not taking legal actions against them? Hang your heads in shame. IFI is undermanned and politically out-gunned and not fit for purpose in its current form, also lacking the funds to do much about any of this, unless Europe intervenes.

The Great Western Lakes
I fish on Lough Conn, Cullin, Arrow, Mask, Corrib, Sheelin and Melvin mostly. All are declining with a marked decline in 2022 in anecdotal estimated salmonid stocks and visibly declining water quality, with increased weed growth, trout behaviour and feeding habits have changed, environmental effects such as drought and weather have dropped the water levels and increased the water temperature during the summer, and there is rapid increases in Nitrate, ammonia and Phosphate levels. This observation is common to all the lakes mentioned above to a greater or lesser degree. The proliferation of coarse fish is evident with the greatest increase observable in ROACH numbers. The European directive protecting cormorants has had a detrimental effect on trout stocks with vast flocks of cormorants visiting these lakes daily with no control

measures taken to control these populations within reasonable levels. The western lakes and most of the lakes in Ireland are dying along with their unique habitats.....the warning was ignored at the extinction of Arctic Char, no actions taken. Most of the great western lakes are transitioning to mixed fisheries of coarse and game fish, with a catastrophic collapse in insect life and I'm wondering where the IFI funded entomologists are. Lough Cara has been completely destroyed by uncontrolled agricultural activity and over-run from septic tanks which are not accessed in either county Mayo nor Galway. [redacted] with a WWTP of my own, I have not had a visit from anybody in the last 20 years to check on its suitability and operation. Its time IFI, The Dept. of Agg, and the EPA, and the county councils started working together instead of empire building.

Fish
Fish populations rise and fall but significant imbalances in population proportions in one given habitat, towards one given species should ring alarm bells. The populations Roach have risen significantly in all the great western lakes and are competing for a finite food source. Perch, Pike and Roach would be the most threatening to salmonid populations, with the decline in water quality also contributing to the demise of trout stocks and salmon stocks. IFI should also be consulted where dams and water flow restrictions are planned for construction in rivers and streams. Drainage schemes, including the Moy catchment have been detrimental to the balance of the habitats and should be reviewed. I would agree that the presence of Rudd would not be detrimental to salmonid populations, but the eel populations have been devastated

Stakeholder Engagement
Involve some of the fishing clubs, their members are on the lakes much more than anyone else. I do not think that many of these lakes will achieve a water quality of 'GOOD' over the immediate future due to agricultural enrichment combined with increased temperature in lake waters providing a concentration of the Nitrate and Phosphate levels.....but there is NO CONTROLS. Section 4.2 mentions LAWPRO....yet the county councils themselves are probably the biggest offenders.....time you took legal actions to prevent the county council plants discharging inadequately treated wastewater and leachate into waterways.....this is a very regular occurance, so if the county councils are the lead agency, there needs to be a review.

Fisheries Management and Climate Change
I have no idea how you can decrease the Roach populations, unless improvement in the water quality is achieved and the conclusion that this improved conditions on Sheelin is correct. Control of Pike populations can be achieved by electrofishing jack-pike at points where spawning rivers and streams enter these lakes, mature Pike pose relatively little treat to salmonid numbers as they take a fish every couple of weeks. Cormorant control is far more important. Perch numbers are significant but not an immediate threat, in my personal opinion.

Water Quality
Disaster.....biggest problem on the rivers and lakes. The resonsibility lies with 1. Agricultue 2. WWTP's 3. Leachates including from biocycles, dumps and septic tanks 4. Forrestry
There is NO CONTROL, NO PENALTIES and no policing or enforcement by any of the statutory bodies.....they are all guilty.... I have very little confidence in any statutory body in this regard, absolutely huge resources have to be invested. The lakes are dying, the water quality is moderate to poor, nobody is doing anything to stop or control it, hopefully Europe will intervene and impose such penalties that this has to be addressed. As phosphates cannot be chemically removed, the day will arrive soon that the water from these lakes will no longer be treatable as a potable water source. A good start would be to withdraw payments to farmers using fertilizers or spreading slurry, under adverse weather conditions, at the wrong time of year, or within perhaps 1 kilometer of a river , stream, drain, or lake. This can be controlled by satellite imagery quite easily. This would slowly depress the rate of increase in nutrient enrichment, but it would probably take a generation for the levels to fall significantly. There remains the problem of silt build up due to enrichment and agricultural run off, also weed growth, weed could be harvested as a landfill material, but removal of silts is a difficulty. I believe farmers should have the facility of a centralised digestor in each county to which they can bring slurry in return for free electricity which could be generated by the bacteriological (Anaerobic) breakdown of the waste slurry. The resultant solids can be spread on land with little or no environmental impact.

Feedback Details

Invasive Species
Legislate for invasive species entering Ireland.....there are no controls.....see what happens in Australia, this is for both flora and fauna. I dont see anyone in prison for introducing apex preditors to previously salmonid waterways....your bad. Eradicate mink.

Stock Management
Its too late

Habitat Management
A lot of investment required, some consultation with the angling clubs required.....Angling clubs probably

do more fund raising and instream work anyway. Learn from previously made mistakes.....Moy drainage, most drainage schemes need reversing, all that flooded land served a purpose, it shouldn't be growing grass and being polluted with slurry. Many spawning streams are overgrown, and full of mink.

Research, Current Information and knowledge gaps
I will be very interested in the results of the recent population surveys especially on Conn and Cullen..... you should prepare yourselves for a shock.

Timelines / High level objectives
HLO 3 most important....but you need numbers, money and determination
HLO 4 Legislate
HLO 5 Too late I fear

There are a lot of action plans, but no actions to speak of for a very long time and not enough people with an angling background who know the issues and would come to the job with a level of knowlege which would be advantageous.
Too many report writers.



[redacted]

From: Western Lakes Plan
Sent: Monday 12 September 2022 12:23
To: Western Lakes Plan
Subject: Great Western Lakes Questionnaire

Iascach Intíre Éireann
Inland Fisheries Ireland

Submitted on Mon, 12/09/2022 - 09:58

Contact details

Name
[redacted]

Email address
[redacted]

Feedback Details

Introduction
[redacted]**Anglers Association**

Club submission to the Plan

The Great Western Lakes
Lough Corrib is an extremely important lake to the members of the above club. The clubs three overriding objective are to Protect, Develop and Promote our heritage and tradition for future generations.
These principles can be be clearly demonstrated by the work the club has undertaking through out its lifetime.

Fish
We have a very strong believe that the lake should be managed as a salmonid water body.
All species of coarse fish need to be managed in accordance with the appropriate scientific assessments.
A method must also be found to control the numbers of predator birds such as cormorants.

Stakeholder Engagement
The main problem in the past was the lack of communication from IFI and the secrecy of plans.
Without this there is a clear disjoint leading to suspicion and a lack of respect.
This plan should reflect a clear and open working relationship, this will generate must higher levels of trust and generate greater synergies.

Fisheries Management and Climate Change
IFI policy should include very definite plans to manage future climate change.
Low levels of water on our rivers will lead to a lack of oxygen and a loss of habitat.
Coherent polices in this area must be included in all future river development plans.

Water Quality
This is the most important and urgent area for our club.
Water Quality should be and must be the number 1 objective for all IFI personnel. Targeted measures must be put in place to ensure results are delivered,
All evidence shows a continued deterioration in water quality.
IFI must increase the numbers of environmental officers, these staff must be in the field not in offices. IFI officers and operatives must be given the powers and the training to actively monitor and investigate the management and operations of farms, especially dairy farms and in know "hot spots".
Prosecutions must happen in cases where their is a breach of regulations, this will also lead to a clear message that he who pollutes pays.

Feedback Details

Invasive Species
The IFI and NPWS need to have a much more coherent working relationship to adequately manage and control invasive species.

Stock Management
The club supports the following:

Game angling season March 1st to September 30th

Bag limit of 2 trout per anglers per day.

33 cm size limit to continue.

Habitat Management
The IFI need to increase the numbers of operatives working in this area.
IFI must lead the work of OPW in key spawning rivers, with the inclusion of the stakeholder and with adequate funding serious results could be achieved.
The Black River should be prioritised and have a full plan to develop completely within a 5 year period. This river has the potential to be the top spawning river on the Corrib catchment.

Other feedback
Without the necessary funding this plan will sit on the shelf.
IFI will yet again lose face and be admonished by all.

Once funding is in place and implementation plan must be prepared and shared with the stakeholders.
The stakeholders will work closely with the IFI to ensure the best results are achieved.



[redacted]

From: Western Lakes Plan
Sent: Monday 12 September 2022 15:45
To: Western Lakes Plan
Subject: Great Western Lakes Questionnaire

Iascach Intíre Éireann
Inland Fisheries Ireland

Submitted on Mon, 12/09/2022 - 14:52

Contact details

Name
[redacted]

Email address
[redacted]

Feedback Details

Invasive Species
The following is my observations on invasive species:

Much discussion has taken place as to the providence of pike as an indigenous species or and introduced species of fish. This is a pointless discussion regarding the management of the waters listed in the plan and is irrelevant.
Pike are an established apex predator and the affect that the presence of pike have on the Great Western Lakes is unknown. This statement is accurate because there is no baseline records in existence from before the time of the presence of pike in these lakes. In the absence of such records it is not possible to determine the affect that the presence of pike has on the trout and salmon stocks in the Great Western lakes.
To extrapolate from smaller trout/salmon waters into which pike have been introduced is inherently flawed as such waters are not representative of the Great Western lakes by virtue of size and the passing of time.
The practice of gill netting pike may have had merit in waters before the introduction of roach into the Great Western Lakes as a method to assist trout/ salmon numbers in these lakes. Gill netting is an antiquated practice which no longer accounts for the changes which have occurred in the Great Western Lakes by the presence and proliferation of roach.
In waters where roach co-exist with trout there is considerable competition for food (a limited resource). Figure 8.1 of the draft plan (page 37) shows that trout and salmon are significantly outnumbered by perch and roach. To assist the rejuvenation of the Great Western lakes the numbers of roach and perch need to be reduced/controlled. The Inland Fisheries Ireland have no means by which roach and perch can be controlled.
The use of pike as an apex predator can be used as a control measure to control these species.
The removal of large pike and apex predator from the lakes leads to a distortion of the food chain and in my

experience as an angler leads to a proliferation of small pike. The removal of an apex predator from a food chain will result in an explosion of prey fish. As roach and perch are currently the most abundant species of fish, they have most to gain by the removal of pike. As stated previously this will further reduce the amount of food available for trout to eat.

Stock Management

The practice of gill netting pike may have had merit in waters before the introduction of roach into the Great Western Lakes as a method to assist trout/ salmon numbers in these lakes. Gill netting is an antiquated practice which no longer accounts for the changes which have occurred in the Great Western Lakes by the presence and proliferation of roach.
In waters where roach co-exist with trout there is considerable competition for food (a limited resource). Figure 8.1 of the draft plan (page 37) shows that trout and salmon are significantly outnumbered by perch and roach. To assist the rejuvenation of the Great Western lakes the numbers of roach and perch need to be reduced/controlled. The Inland Fisheries Ireland have no means by which roach and perch can be controlled. The use of pike as an apex predator can be used as a control measure to control these species.
The removal of large pike and apex predator from the lakes leads to a distortion of the food chain and in my experience as an angler leads to a proliferation of small pike. The removal of an apex predator from a food chain will result in an explosion of prey fish. As roach and perch are currently the most abundant species of fish, they have most to gain by the removal of pike. As sated previously this will further reduce the amount of food available for trout to eat.

The conservation of pike Bye law No. 809 2006 should be retained and enforced. This is importance of this bye law cannot be overstated.

Habitat Management
The movement of live fish from one waterbody to another by private individuals, fishing clubs or the IFI to be discontinued. In some cases where pike fishing competitions are held (blue barrel competitions). The larger captured pike are reported to be relocated to other bodies of water. This practice has the potential to introduce diseases from one waterbody to another.

Research, Current Information and knowledge gaps
I would request that the practice of gill netting be discontinued until the following has been scientifically examined:
1) Quantify the number of pike present in a water. In Lough Carra the difficulty in catching pike would suggest that they are not present in significant numbers.

2) Quantify if the pike which are present in a waterbody are of net benefit/hinderance to the trout/salmon in the water. This will require the capture of pike and examination of their stomach contents.

3) Clear key performance indicators be put in place to measure the effectiveness of any gill netting which is taking place. At present it would appear that gill netting is taking place simply because it has always taken place. There is no clear benchmark by which the effectiveness of this practice can be measured. It is possible that gill netting has little or no benefit to the head of stock of trout/ salmon contained in a water or worse it could be putting further pressure on the very fish which are preferentially managed by the I.F.I.

Other feedback
The practice of gill netting and using poor markers on the gill nets needs to cease. If nets are to be used then proper marker buoys need to be used. The failure to use proper bouys is dangerous to other lake users.



[redacted]

From: Western Lakes Plan
Sent: Monday 12 September 2022 16:18
To: Western Lakes Plan
Subject: Great Western Lakes Questionnaire

Iascach Intíre Éireann
Inland Fisheries Ireland

Submitted on Mon, 12/09/2022 - 14:38

Contact details

Name
[redacted] **Angling Club**

Email address
[redacted]

Feedback Details

Introduction
[redacted] **Angling Club is in full agreement with the stated aims of IFI and in it's efforts to conserve and maintain the water catchment areas covering the 7 Lakes in the proposed Plan. However, since Annaghdown Angling Club is located on Lough Corrib, we would ask that Corrib be designated as a salmonid lake rather than just be "managed" as such. This approach would enhance the lake and would return the waters into pristine condition as heretofore. The deterioration of the water quality over the past few years cannot be allowed to continue. Every effort must be made to engage with the parties which are contributing to this deterioration in a meaningful manner and get the support of the culprits.** [redacted] **Angling Club is a** [redacted] **which was formed with the aims of : Improvement in the Water Quality of our Rivers feeding into Lough Corrib ; Trout Stream Development and Habitat Enhancement ; Maintenance and Conservation. These aims are contained in the Constitution of both the Club and ECA. In fact they mirror the aims and objectives of IFI. We feel that Stakeholder involvement is vital in progressing the "common catchment management goals". indeed, as part of the ECA,** [redacted] **has engaged very actively with IFI in recent weeks in works on the Kilroe River near Headford in Co Galway. We fully intend to continue our involvement with IFI in the coming years. Plans are fine in themselves but adequate and sufficient resources must be provided to carry out the Plans. This includes funding and Staff.**

The Great Western Lakes
The focus of this Submission is on Lough Corrib but we would be fully behind other submissions for the other 6 lakes. Corrib has been long accepted as the prime wild brown trout lake in Europe but there is a danger that this reputation will be tarnished unless very serious efforts are put in place to address this issue. Much effort is currently being put in to address the Lagarosiphon Major, the most highly invasive

species in the lake at present and this must continue into the future with no let-up. Funding and other resources must be provided until such time as this weed can be eradicated in so far as is reasonably practicable. The 7 Lakes are special and must be treated as such.
There are other issues on the lake which concern us, issues which can have detrimental effects on the water quality, fish stocks and the work already carried out in trying to deal with the Lagarosiphon weed. we see these as :
1. The proliferation of the use of jetskis and speedboats. We are in the process of persuading Galway Co Co to introduce a Bye-law in Lough Corrib banning their use on the lake. It is a health and safety issue but is also an issue which has adverse effects on the trout and salmon stocks.
2. There has been a very noticeable increase in the numbers of cormorants on the lake and we would advocate that a cull should be carried out on their numbers.

Fish
[redacted]Angling Club fully supports IFI in the efforts at Stock Management and in particular the management of pike, perch and roach. The Bye-law prohibiting the taking of only one pike per angler and the upper limit on size must be addressed to ensure the Bye-law does not adversely increase pike numbers. Telling Anglers that they can only take one pike while at the same time allowing 4 trout is ridiculous. We are not saying that the law should reduce the trout take to one but that the 1 pike should be increased to 4. This would help in the control of the pike stock in Lough Corrib. Research must be carried out on the best means of removing perch and roach from the lake. Lough Corrib is a wild brown trout and salmon lake and must be fully protected from these introduced species. Consideration should be given to delaying the opening date for the start of fishing on Lough Corrib.. 15 February is far too early and fish are not in good condition after spawning at that time. We would advocate 01 March or even 17 March as being more appropriate. We feel that the bag limit could be examined with a view to reducing it to possibly 3 per Angler / Rod. We also feel that the upper limit for removing trout should be identified so as not to reduce the brood hen fish. why put an upper limit on pike but not on trout in a trout lake.

Stakeholder Engagement
Stakeholder engagement with IFI in drawing up plans, implementation of those plans and supporting those plans is vitally important and must be encouraged in a positive way. This is not meant to be interfering with the work of IFI but supporting, conserving and maintaining the good work which is being carried out.
[redacted] Angling Club nis of the opinion that there must be co-operation at the highest level between IFI, Lawpro, OPW and National Parks & Wildlife on an ongoing basis. These bodies have broadly similar Aims and Objectives and there must be close co-ordination. Maybe the time is ripe to have an over-reaching Supervisory Body to oversee the working of State Agencies tasked with responsibility for achieving stated aims ?

Fisheries Management and Climate Change
The management of our Fisheries must be adequately resourced with finance, machinery, materials and in particular Staffing. If the first three are provided but there is no Staff to implement Plans, then we should despair. Boots on the ground are vital and from our experience of working with the current there is a willingness to work, to implement, improve and protect our waters. Staffing is also vital for an enforcement point of view and prosecutions of offenders for cases of pollution from run-off, deliberate polluting of streams and waterways must be serious. Fear of offending polluters must not be tolerated but the full force of the law must be pursued.

Water Quality
Excellent Water Quality is vital for our rivers and lakes but surveys must be truthful, accurate and consistent. There must be co-ordination between the Environmental Officers of IFI, EPA and Lawpro. They must all be singing from the same hymnbook. We contend that the water quality reading / samplings are at variance with what is on the ground. EPA class the water quality in the Western Lakes areas as "Good" but from our own readings we find this not the case.

Feedback Details

Invasive Species
We advocate the continued stock management of pike, perch and roach. In fact we would hope that this process will be increased. The 7 Western Lakes must not be permitted to deteriorate into coarse fisheries as some advocates insist. There are many, many coarse fisheries but very few wild brown trout and salmon fisheries.
Preventing the spread of Lagarosiphon is vital.

Stock Management
Greater emphasis must be placed on Stock Management and all invasive fish species must be curtailed, managed and controlled.

Habitat Management
Habitat Management is vital. Proper river management and design is vital to the health of trout and salmon..

OPW must be "trained" and educated in Habitat Management. Farmers and Landowners across whose land rivers cross should be forced by law to provide protection to rivers, river banks and sources of water such as springs. [redacted] Angling Club has carried out tree and shrub planting along the banks of the Kilroe River with the permission of Landowners with the aim of providing Riparian Zones. As a member of the [redacted] we have provided funding for the purchase of materials to be used in blocking off slips, repair of banks and restoration of the surrounding habitat.

Research, Current Information and knowledge gaps
Research in all areas of the provision of excellent water quality with plenty of oxygen, little phosphates, nitrates and nitrites must be enhanced and supported. Our current Climate Crisis is too important to ignore and a co-ordinated approach must be facilitated.
More involvement with Schoolchildren is to be encouraged. Their minds are wide open to learning and soaking up information, knowledge and experiencing both good and bad practices is vital going forward. Teachers in Schools are only too willing to engage with IFI in advancing and informing Students of the importance of protecting, conserving and maintaining our waters and habitat. Teach them young and you have them forever.

Other feedback
Whilec we have mentioned the proliferation of Comorants on the lake, great harm is also being done by the presence of mink. They are vicious species and kill for the sake of killing. Here in Annaghdown Bay their presence is having very serious effects on other wildlife like duck, swans, waterhens, chickens, fish. Strenuous efforts should be made to eradicate this pest.



[redacted]

From: Western Lakes Plan
Sent: Monday 12 September 2022 23:35
To: Western Lakes Plan
Subject: Great Western Lakes Questionnaire

Iascach Intíre Éireann
Inland Fisheries Ireland

Submitted on Mon, 12/09/2022 - 22:49

Contact details

Name
[redacted]

Email address
[redacted]

Feedback Details

Introduction
Carra Mask Corrib Water Protection Group has been monitoring Lough Corrib since 2018 . This included kick sampling, measuring Oxygen, pH , conductivity, Ammonia, Nitrite, Nitrate and Phosphate levels. We have recently acquired a Hach monitoring system . Sadly the results have shown a degraded system. These results have been sent by separate email.

The Great Western Lakes
The lakes are a huge resource which are being allowed to deteriorate. They provide drinking water , habitat for many species, recreation value and tourism income to name some of the benefits.

Fish
The 7 lakes have always been managed for Salmonids which are native fish , management for these species will benefit many others as they require clean , oxygenated water.

Stakeholder Engagement
Continuous interaction with stakeholders is essential . This can take many forms , reporting pollution incidents , Citizen science , assistance in river management etc.

Fisheries Management and Climate Change
By managing our rivers and lakes by planting trees and creating pools we " cool" the rivers and also slow down storm flows . With predicted warmer, drier climate it will become essential to retain water within the system rather than treating it as a glorified drain.

Water Quality
Please see separate email ! Water quality has deteriorated within the last few decades , regular surveying and monitoring is a priority.

Feedback Details

Invasive Species
Invasive species need to be controlled and if possible eradicated. Movement of watercraft needs to be regulated to avoid the introduction of non natives.
Removal of species such as Pike where they are affecting Salmonid (i.e. predating on migrating smolts) recruitment is essential .

Stock Management
As our findings have shown spawning streams and rivers are at risk from nutrient pollution. Without healthy spawning areas stock will decline.

Habitat Management
Fencing stock away from streams and rivers and planting the fenced area will have immense benefits. Prevention of nutrient excess is essential .

Research, Current Information and knowledge gaps
Research is needed about the effect that billions of gallons of acidic slurry have on a recycling system that has been in place and successful for eons. What effect is slurry having on the bacteria, fungii , earthworms ,beetles etc. that have traditionally recycled nutrients ?

Other feedback
Please see my separate email with the results of 4 years of sampling of Lough Corrib and some spawning streams. I am unable to attach these results to this submission.

Theme
Spawning stream/river water quality

Timelines / High level objectives
Urgent , immediate action needs to be taken as a significant amount of sp[awning habitat is severely degraded.



[redacted]

From: Western Lakes Plan
Sent: Tuesday 13 September 2022 23:05
To: Western Lakes Plan
Subject: Great Western Lakes Questionnaire

Iascach Intíre Éireann
Inland Fisheries Ireland

Submitted on Tue, 13/09/2022 - 22:44

Contact details

Name
[redacted]

Email address
[redacted]

Feedback Details

Introduction
Disgraceful behavior, natural vandalism at its finest.

The Great Western Lakes
Your own research teams have rubbished your plan and distance themselves from it.

Fish
Kill everything that not a trout? When the biggest loss of native fish is at the hands of trout anglers!

Stakeholder Engagement
Why bother asking anyone's feedback? A body that doesn't even respond to poaching calls!

Fisheries Management and Climate Change
Government body completely out of touch with reality.

Water Quality
Removing an apex predator? How will that affect water quality when roach populations explode? Duh

Feedback Details

Invasive Species
Can't remove chub from the inny how do u think your going to increase trout numbers when trout anglers kill everything they catch? Everything that isn't a trout is an invasive species in trout anglers eyes.

Stock Management
Natural balance, ever hear of that? If you remove an apex predator what do you think will happen? Trout numbers will not increase I guarantee you that.

Habitat Management
Maybe repair fish passes for a start? Ardnacrusha dam maybe where migratory eels die every year? Oh wait, they aren't trout so they don't matter.

Research, Current Information and knowledge gaps
If your research is anything like another government body in the west of Ireland I doubt its worth the paper it's written on.

Other feedback
Scrap the plan, scrap the board, scrap the ifi and get angling clubs and groups or societies who actually know what is happening manage the lakes.

Theme
Make all trout angling catch and release

Timelines / High level objectives
Ban the killing of trout, may give the trout a chance to increase natural numbers instead of trout anglers killing every one they catch and killing everything else that isn't a trout .



[redacted]

From: Western Lakes Plan
Sent: Tuesday 13 September 2022 23:43
To: Western Lakes Plan
Subject: Great Western Lakes Questionnaire

Iascach Intíre Éireann
Inland Fisheries Ireland

Submitted on Tue, 13/09/2022 - 23:10

Contact details

Name
[redacted]

Email address
[redacted]

Feedback Details

Invasive Species
Fulltime crews needed until invasive weed has been removed especially from shallow water on Lower Corrib.
Pike Limit should be removed completely.

Stock Management
Rod limit of 4 fish per rod should be replaced with boat limit of 4 fish per boat except for competitions.
I have been checked once in 35 years fishing on Lough Corrib and that was this year on a fine day when your "officers" were just up the lake for a spin in the rib.
Why are "officers" permitted to take holidays during the Mayfly to go gullieing with tourists when this is the most important time for catches to be monitored?
Why do "IFI officers" need to be wasting their time checking salmon licenses in private fisheries in Connemara?

Habitat Management
The state of the Clare and it's tributaries are a testament to the the ineffectiveness of your organization.
Resources need to be reallocated from landing Salmon in at the Weir for West Brits to removing weeds, cleaning banks, rebuilding spawning beds.

Other feedback
You are the appointed custodians of Irelands waterways, you are accountable to no one and have let down

this country since you formation. Recent events have shown this to be true, Your organization is directly accountable for the decimation of angling tourism in Ireland. This remould is an opportunity to salvage your reputation and do some service for our Country.

[redacted]

From: Western Lakes Plan
Sent: Wednesday 14 September 2022 10:14
To: Western Lakes Plan
Subject: Great Western Lakes Questionnaire

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Iascach Intíre Éireann
Inland Fisheries Ireland

Submitted on Wed, 14/09/2022 - 10:07

Contact details

Name
[redacted]

Email address
[redacted]

Feedback Details

Fish
Pike ARE a native species to Ireland as is blatantly obvious from the most recent indepth study. The fact that Ireland has its own strain of pike which has its own unique DNA not found anywhere else in Europe or the UK proves this undoubtedly. The IFI cannot continue to ignore this fact and until this is addressed the removal of native Irish pike needs to cease immediately and this whole draft cannot continue until that is rectified.

Feedback Details

Invasive Species
Pike cannot be classed as invasive as they are not invasive and they are native to Ireland.



[redacted]

From: Western Lakes Plan
Sent: Wednesday 14 September 2022 14:23
To: Western Lakes Plan
Subject: Great Western Lakes Questionnaire

Iascach Intíre Éireann
Inland Fisheries Ireland

Submitted on Wed, 14/09/2022 - 14:21

Contact details

Name
[redacted]

Email address
[redacted]

Feedback Details

The Great Western Lakes
I totally disagree with the culling of pike in the western lakes

Fish
Pike

[redacted]

From: Western Lakes Plan
Sent: Wednesday 14 September 2022 21:00
To: Western Lakes Plan
Subject: Great Western Lakes Questionnaire

Iascach Intíre Éireann
Inland Fisheries Ireland

Submitted on Wed, 14/09/2022 - 20:45

Contact details

Name
[redacted]

Email address
[redacted]

Feedback Details

Fish
I disagree with the plan to killpike. Evidence has shown pike feed mostly on roach. If pike are culled you will end up with a increase in roach population. This culling of pike will also reduce pike fishing in the area which will reduce fishing tourism and reduce revenue to the local economy.

The bag limit for brown trout should be reduced to 1 per day. Also all large trout over 50cm should be catch and release.

Feedback Details

Invasive Species
I disagree with the plan to killpike. Evidence has shown pike feed mostly on roach. If pike are culled you will end up with a increase in roach population. This culling of pike will also reduce pike fishing in the area which will reduce fishing tourism and reduce revenue to the local economy.



[redacted]

From: Western Lakes Plan
Sent: Wednesday 14 September 2022 22:56
To: Western Lakes Plan
Subject: Great Western Lakes Questionnaire

Iascach Intíre Éireann
Inland Fisheries Ireland

Submitted on Wed, 14/09/2022 - 22:43

Contact details

Name
[redacted]

Email address
[redacted]

Feedback Details

Introductio[redacted] and I have no interest in the management plan itself. I and simply seeing barbaric movements to try and remove pike from the irish water systems and its disgusting and I wanted to add another voice to the mix.

Fish
I cannot see any sense behind this movement of people who seem to hate pike. Whether they are considered "invasive" or not, they have existed in ireland for thousands of years. If they were a threat to trout, we wouldn't have trout.

If there is a threat to trout, its roaches. They have only been in Ireland for under 100 years, and yet they seem to have infested every fishable body of water. Literally the only thing keeping them in check are the pike. If the pike are gone, the coach population explodes, they spread disease without any predators to kill off the sick, and disease spreads to the trout.

This is basic logic, and I assume anyone with an official position in the IFI is aware of all this and won't these nut jobs have their way, but I have seen too many things get influenced by the loud minority lately.

Feedback Details

Invasive Species
Roach over eating and spreading disease is the biggest danger to irish waters. Pike are the solution..



[redacted]

From: Western Lakes Plan
Sent: Wednesday 14 September 2022 23:20
To: Western Lakes Plan
Subject: Great Western Lakes Questionnaire

Iascach Intíre Éireann
Inland Fisheries Ireland

Submitted on Wed, 14/09/2022 - 21:46

Contact details

[redacted]

Email address
[redacted]

Feedback Details

Fish
IFI's threat to pike in lakes in which genetic studies have shown them to be present for considerably longer than previously thought is worrying. A natural balance is being threatened by those who should be protecting it.

Feedback Details

Stock Management
IFI's continuation to both undertake and promote the killing of the apex predator pike despite their admission that they are unaware how long pike have been in the western lakes (genetic evidence suggesting 4,000 years or more) is a huge disservice to anglers, local businesses, future generations and most importantly the natural balance of the lakes as it has been for thousands of years.

Habitat Management
The admission that a 'super abundance' of roach may result from the high removal rates of pike. Such an event could be extremely damaging to the environment and salmonid stocks.



[redacted]

From: Western Lakes Plan
Sent: Thursday 15 September 2022 12:42
To: Western Lakes Plan
Subject: Great Western Lakes Questionnaire

Iascach Intíre Éireann
Inland Fisheries Ireland

Submitted on Thu, 15/09/2022 - 12:22

Contact details

Name
[redacted]

Email address
[redacted]

Feedback Details

Introduction
I am interested mainly in L.Arrow

The Great Western Lakes
L.Arrow

Fish
Trout

Stakeholder Engagement
Interested angler who fishes L.Arrow for over 60 Years

Fisheries Management and Climate Change
What input resources do IFI provide for L.Arrow and what are there day to day duties on the lake.

Water Quality
Water quality poor. What will action plan be to bring quality back?

Feedback Details

Invasive Species
1. Roach invasion

2. Excessive Weed growth

Stock Management
1. trout stocking.

2, Fish stock surveys

Habitat Management
1.Weeds becoming a huge problem

2. Coarse fish mainly roach taking over habitat for sustainable native trout stocks.

3. Fly and insect life has disappeared mainly duckfly, sedges, Morrow, and Greenpeter.

4. Pollution- Peagreen colour of the lake in late summer and autum

Research, Current Information and knowledge gaps
I dont know what is planned to tackle these problems or is there any plan to address these issues in the new plan.

Timelines / High level objectives
Provide a an action plan with achievable dates.



[redacted]

From: Western Lakes Plan
Sent: Thursday 15 September 2022 14:51
To: Western Lakes Plan
Subject: Great Western Lakes Questionnaire

Iascach Intíre Éireann
Inland Fisheries Ireland

Submitted on Thu, 15/09/2022 - 12:54

Contact details

Name
[redacted]

Email address
[redacted]

Feedback Details

Introduction
These lakes are an itegral part of EU Natura 2000 network and are unique in Europe. All other wild brown trout fisheries on the mainland have gone due to pollution/invasive species. These waterbodies are Special Area of Conservation (SAC) where native species are being depleted by pollution & non-native fish.

The Great Western Lakes
The recent surveys that have assigned any of these lakes an ecological status "good" (the minimum standard under the Water Framework Directive) are flawed. All 7 lakes are suffering from run-off from intense farming practices, non-native fish like pike/perch/roach etc. How can an Irish salmonid lake be assigned good status when they are infested with non-native species & have massive algea blooms every year.

Fish
The fact that there are 15 species of fish in most of these lakes when only 7 are designated as native to Ireland tells us that state agencies have failed in their duties to protect these unique eco systems. The non-native fish have been given protection under Irish law (bye-laws 806 & 809). These bye-laws where introduced without Appropriate Assessments & are a complete contradiction to the Habitats Directive.

Stakeholder Engagement
When the River Basin Management Plan was introduce about 20 years ago anglers where told at its launch that Ireland would acheive good water quality by 2015. Six years later and Irelands rivers & lakes have massive pollution issues. The RBMP has failed and LAWPRO are a blunt instrument when it comes to protecting our water-bodies.

Fisheries Management and Climate Change
The Carra/Mask/Corrib Water Protection Group was set up in 2000 and is still active in highlighting water pollution issues. To date there activities have recieved no cooperation from any state agencies. Climate change is relevent to the whole planet but the most urgent problems with these water-bodies can be remedy by stopping at source the pollution and an increase in control of non-native fish species.

Water Quality
All of these 7 lakes suffer from pollution, mainly from bad farming pratice. The Water Framework Directive is not being implemented by the EPA & LAWPRO. IFI have powers under the Local Authorities Water Pollution Act & Fisheries Act to stop slurry etc. from entering rivers and lakes. Angling clubs, C/M/C Water Prot. Gr., Lough Corrib Angling Federation have in the past gone to the EU Court of Justice to highlight Irish state agencies in action on water pollution issues. It is time IFI stood up to the farming lobby.

Feedback Details

Invasive Species
Invasive species include all non-native fish species. Irish bye laws 806 & 809 are illegal and should be struck off nationwide. They are not inline with the Habitat Directive.

Stock Management
There should be an increase in pike culls on all lakes, as these apex predators are having a devastating effect on salmonid stocks. There are numerous examples in Ireland where salmonids have disappeared from lakes due to predation i.e Ross Lake, Co. Galway. The Lough Corrib Angling Federation trout hatchery is run as a back-up due to pressure on Lough Corrib trout stocks and is also used as an educational tool for local schools & youth groups.Over the years IFI officals have been an obstacle to voluntary anglers running this facility, when they should be helping them with this important work.

Habitat Management
In 2007 Lough Corrib had an outbreak of crypto and Galway residents could not drink there tap water. The source of pollution i.e. farming run-off & untreated sewage was not stopped. Galway Co. Co. just upgraded the water treatment facility. Tackle the pollution at source. Angling clubs have done great work over the decades to enhance & develop river spawning areas only to see pollution distroy all there voluntary efforts.

Research, Current Information and knowledge gaps
Research and surveys have been numerous on these lakes yet water quality continues to degraded & non-native fish species continue to have negative impact on native salmonids. To solve the problems on these water-bodies IFI need to remedy both these issues.

Other feedback
The illegal bye-laws 806 & 809 need to be taken of the Irish statute. The farming lobby need to obey the Water Framework Directive.

Theme
The full implementation of the Habitats Directive & the Water Framework Directive

Timelines / High level objectives
Water pollution & non-native fish species need urgent state action on these 7 unique salmonid lakes

[redacted]

From: Western Lakes Plan
Sent: Thursday 15 September 2022 16:12
To: Western Lakes Plan
Subject: Great Western Lakes Questionnaire

Iascach Intíre Éireann
Inland Fisheries Ireland

Submitted on Thu, 15/09/2022 - 15:57

Contact details

Name
[redacted]

Email address
[redacted]

Feedback Details

Introduction
I would like to indicate that I am Salmon, Trout and Pike angler alike and my submission is founded by the care of all fish in Ireland.

The Great Western Lakes
The designated 7 waters are stunning and unique salmonoids fisheries. By all means, they deserve protection. I am opposing the Draft Plan in its current form, however, as it is not fit for purpose. It is not only scientifically unfounded but in direct opposition to research results founded by IFI and conducted by Debbi Pedreschi. The results of the current bye-laws harm salmonoids instead of protecting them, as well as result in barbaric practices of native pike killing. The culling itself is done in a very unprofessional manner, which screams animal cruelty.

Fish
As proven in the research by Debbi Pedreschi, pike ARE native fish to Ireland. IFI is statutorily obliged to protect them the same as salmon and trout.

Feedback Details

Invasive Species
It has been proven beyond doubt by the research done by Debbi Pedreschi, that pike ARE indeed native to

Ireland and their unique DNA strain, isolated to Ireland alone, proves it beyond any doubt.

Stock Management
My submission is to:

1. Continue with the designation of the 7 waters, however, re-define the protection methods to one that works, are aligned with research and do not involve killing native Pike.

2. Introduce stricter size and bag limits for salmonoids as the primary method of protection. Consider C&R rules.

3. Realise that big Pike is the best controller of smaller Pike, as well as other species. It will control the pike population far better than any human.

4. Realise that removing big Pike, resulted over the years in an explosion of coarse fish and perch, which both create predation for juvenile salmonoids and create food competition for all year classes of salmonoids. All those non-salmonoids also change the environment and the chemical make of the water in those designated fisheries, which further deteriorates them as salmonoids fisheries. I suggest research is conducted to assess these changes.

5. I request that the barbaric practices of pike culling are stopped. For as long as the decision remains to remove pike from the waters (as incorrect as it is in light of the research and as explained above), the pike should be transferred alive to other non-designated waters and not killed.

Other feedback
Ireland is such a stunning country, you still have the unprecedented opportunity to create it being the very best fishing destination in Europe, which can attract millions of € in the form of angling industry and everything that goes with it. There are jobs to be created and huge amounts of money to be made. The majority of anglers will support you and stand behind you. But you have to do what is right.



[redacted]

From: Western Lakes Plan
Sent: Thursday 15 September 2022 16:26
To: Western Lakes Plan
Subject: Great Western Lakes Questionnaire

Iascach Intíre Éireann
Inland Fisheries Ireland

Submitted on Thu, 15/09/2022 - 15:00

Contact details

Name
[redacted]

Email address
[redacted]

Feedback Details

The Great Western Lakes
Pike are an angling and environmental asset. They are a much sought after fish by the angling tourist. Their culling by ill informed locals and fishery board staff is a national disgrace.
I fish for trout and salmon. These salmonids are predated by perch, otters, birds etc as well as pike. Why are pike demonised on these large waters? They do more good than harm.

Fish
Pike are the subject of a great deal of prejudice. They are a valuable asset in the eco system and have survived alongside salmonids in Ireland and other countries for hundreds of years. They are not the problem. Water quality and good spawning grounds are key. Are you going to cull cormorants, otters etc?

Feedback Details

Stock Management
The culling of pike is not going to benefit the salmonid population. This sort of thinking is hugely flawed. Killing large pike leads to a huge increase in small pike (pike predate pike) and roach etc. Perch shoals do much more damage. And are cormorants and other birds, alongside otters to be culled?

Habitat Management
This is key. Good water quality and clean spawning beds are key to a healthy salmonid population.



[redacted]

From: Western Lakes Plan
Sent: Thursday 15 September 2022 17:50
To: Western Lakes Plan
Subject: Great Western Lakes Questionnaire

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Iascach Intíre Éireann
Inland Fisheries Ireland

Submitted on Thu, 15/09/2022 - 17:37

Contact details

Name
[redacted]

Email address
[redacted]

Feedback Details

Invasive Species
I think this term is used too freely and at what point does a species need to be introduced to a country(naturally) and how many years is it before their part of our eco system. Look at a pheasant, these are introduced to the countryside every year but not classed as invasive, although they originated from Asia.

Stock Management
I don't understand why the slaughter of Pike fish going on in Irish loughs?
Game anglers kill every trout they catch over the legal limit.

Habitat Management
Trout anglers complain about trout are a big part of a pikes diet. They have been living side by side for 1000s of years. What about zebra mussels, pollution from human sewage and fertilisers and run offs from the land around loughs and rivers. Surly there's a bigger picture and pike aren't the trouts worse enemy.

Other feedback
We must be the only country in the EU that's netting pike. Think of the tourism potential, as pike fishing is just growing.



[redacted]

From: Western Lakes Plan
Sent: Thursday 15 September 2022 20:25
To: Western Lakes Plan
Subject: Great Western Lakes Questionnaire

Iascach Intíre Éireann
Inland Fisheries Ireland

Submitted on Thu, 15/09/2022 - 16:27

Contact details

Name
[redacted]
Email address
[redacted]

Feedback Details

Introduction
Agree in principle especially on the farming front however immediate steps required to enhance trout numbers. Proactive and urgent steps to run in parallel with the Western Lakes plan,is removal (asap)of as many of the invasive specious as possible,introduce a trout hatchery programme,ranched from local trout meaning for instance Conn trout for Conn waters.

The Great Western Lakes
In general the plan is somewhat aspirational not that I want to knock anything that might improve the present dire situation.Programs in the past especially L Arrow with the removal of invasive species and improving nursery
streams that a decline in fishing continues is worrying.
Lough Conn with the ever increasing no's of invasive species and habitat decline the Duck fly/Mayfly are becoming less and less. Case in point Cloughans Bay,only up to 3seasons ago was still regarded as a reasonable mayfly bay (even then a shadow of its former self) ...not a mayfly to be found now,sad.
Lough Cullin.
The classification given to this lake as Moderate/Poor would be a overstatement. Ask any angler it's a disaster,castlebar town local hotel pollution and nutrient runoff have turned a wonderful little lake into a sorry and much lemented state of affairs.
Immediate action as described in my introduction section to run parallel to the general plan.
L Carra.
This lake is a prime example of agency/government ineptitude and lack of resource and management however it is what is I hope the plan improves the situation.

Lough Mask.
When I think of the old days ie 20 and more years ago this lake brought so much business to Ballinrobe and surrounding areas sadly no more. Considering the West shore is mountain sheep country this lake should not have suffered as badly as it's northern breathern ironically a medium sized stream on the Tourmakeedy side was/is heavily polluted. Mask can still have it's days but the empty Bars and B&B in the area would beg to differ.Again let's hope the plan improves the situation.
Lough Corrib.
Mesotrophic ie intermediate level of productivity.Hopefully the productivity can improve with the new plan. kingsmill Moore left the corrib in the early sixties quoting " my daily count dropped from 8 to 6 to 4 to 2 I left the Corrib".
Lough Sheelin.
I know little of sheelin other than its had its trials & tribulations .The many Reports and surveys have done little to improve the situation..

Fish
Trout, Salmon and Pike to be managed .... That's a good thing.

Stakeholder Engagement
More involvement with the Angling Clubs would be a positive step.

Fisheries Management and Climate Change
Not much we can do about climate change however Buffer zones and native tree planting is a productive investment.Enforcement and management of catchment areas is a priority especially Nutrient and sewage runoff. Consideration must be given to monitor stations placed at all relevant rivers entering watercourses.

Water Quality
As above.

Feedback Details

Invasive Species
As stated I feel a 2prong approach going forward,

The Western Lakes plan .. Fine

Immediate action to run in tandem with plan,
Removal of all invasive species, pike reduction limited to control levels. This will mean more man hrs or a redirection of manpower whatever,as more netting will be required. Local Clubs may be of assistance here.

Stock Management
Waiting for water quality to improve could take years,especially in the case of Lough Cullin hence the Roach population will continue to thrive and trout stocks continue to decline. Pollution monitor stations and netting along with hatchery or trout augmentation solutions in the interim to run alongside plan should help to maintain the status quo.A proper serious netting programme must be a priority and local angling clubs should be encouraged to participate.

Habitat Management
Bring back the Fly Life please. Whatever it takes.
Reintroduction of mayfly apparently had some success on the Midland lakes .Is this possible for the Western lakes!

Theme
Entomology

Timelines / High level objectives
Undertake a study to establish the reason for the drastic reduction in flylife, ie hire a Entomologist . This would be a clarification of what most of us anglers already know.



[redacted]

From: Western Lakes Plan
Sent: Friday 16 September 2022 09:39
To: Western Lakes Plan
Subject: Great Western Lakes Questionnaire

Iascach Intíre Éireann
Inland Fisheries Ireland

Submitted on Fri, 16/09/2022 - 09:14

Contact details

Name
[redacted]

Email address
[redacted]

Feedback Details

Introduction
[redacted]**are fishing Lough Corrib for over 50 years. We have seen great changes over the years on the lake, all of them for the worst.**

The Great Western Lakes
The great Western Lakes are SACs protected under the habitats directive and water framework directive. These lakes need full protection from all invasive species.

Stakeholder Engagement
Indigenous riparian stakeholder.

Water Quality
Pollution is a major problem that needs to be addressed by IFI.

Feedback Details

Invasive Species
How on earth can you have a wild brown trout fishery by protecting non native fish. Remove bye-law 806/809 immediately on all SACs

Habitat Management
If the rivers and lakes are not protected from invasive species or salmonid species that we have will continue to decline.

Theme
Remove Bye-Law 806/809

Timelines / High level objectives
Remove Bye-Law 806/809
Work on pollution
Work on invasive weeds

[redacted]

From: Western Lakes Plan
Sent: Friday 16 September 2022 13:43
To: Western Lakes Plan
Subject: Great Western Lakes Questionnaire

Iascach Intíre Éireann
Inland Fisheries Ireland

Submitted on Fri, 16/09/2022 - 11:45

Contact details

Name
[redacted]

Email address
[redacted]

Feedback Details

Introduction
The plan looks good once you adhere to the EUHD

The Great Western Lakes
Having fished all of the western lakes since 1970 i see i can see a vast decline in the number of fish being caught and I mean trout and the huge increase in predators such as cormorants and pike and roach, bream, and hybrids for that end the bye laws 806 and 809 should be scrapped .
In order to control inland fisheries should go back to nets and electro fishing .

Fish
All my life i have fished for trout and salmon and have seen fisheries decline in some lakes the size of trout have gone up but there are less of them predation, loss of habitat, water quality,

Stakeholder Engagement
I have been involved with kilbride anglers for many years in [redacted] with the help of [redacted] we undertook work on the kells Blackwater river and tributaries and the difference that made to the stock was huge and our work is still ongoing.

Fisheries Management and Climate Change
Our spawning streams are vitally important and in low water conditions it can be very stressful for the young fingerlings when we were working on our feeder streams we dug deep holes with big rocks in in to give them

shelter.

Water Quality
I [redacted] banks of the liffey in lucan and the only person they were afraid of was [redacted] from inland fisheries [redacted] inspected the surface drains going into the river it was my job that the oil separators were keept clean.it is vital that there should be more environment officers to be proactive instead of reactive.
..

Feedback Details

Invasive Species
I have fished all my life for trout and salmon on all the western lakes the most viable is the amount of cormorants one could come across 40 to 50 on an island. The amount of pike and course fish has got out of hand and in designated trout and salmon lakes this should be addressed by getting rid of by law 806 and 809.

Stock Management
Every method should be employed to remove invasive species nets electro fishing etc.

Habitat Management
One of the most important things to trout and salmon is good habitat we have found that out ourselves if ifi could make it easier for the clubs to engage in habitat enhancement there is a wealth of willingness to work with ifi

Other feedback
You people know what has to be done and the tools are there under EUHD

Timelines / High level objectives
Get rid of 806 and 809 more enviroment inspectors with increased powers



[redacted]

From: Western Lakes Plan
Sent: Friday 16 September 2022 15:11
To: Western Lakes Plan
Subject: Great Western Lakes Questionnaire

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Iascach Intíre Éireann
Inland Fisheries Ireland

Submitted on Fri, 16/09/2022 - 14:03

Contact details

Name
[redacted]

Email address
[redacted]

Feedback Details

Introduction
I troll, fly fish and Dap on Lough Corrib, nearly 40 years now.

The Great Western Lakes
The Western Lakes and all other SACs are protected by the Habitats Directive and Water Framework Directive. Why are non native species protected without an appropriate assessment screening carried out.

Fish
All invasive coarse fish and non native pike do not come under the Water Framework Directive as native. Why is IFI giving these fish more protection than our native salmonids?.

Stakeholder Engagement
I am a [redacted] Stakeholder.

Fisheries Management and Climate Change
IFI need to start doing more electro fishing of the rivers starting at source and carry out more gill netting on the lakes all year round.

Water Quality
Water quality is a big problem on all our lakes IFI must address this issue and impose greater fines for pollution offences. Working with Stakeholders and landowners not against them.

Feedback Details

Invasive Species
All invasive coarse fish and pike must be removed 806 & 809 have to be removed to protect our SACs. How can you have a Wild Brown Trout Designated Fishery?. if you are even thinking about protecting non native fish?. Once these Bye-laws are removed IFI and stakeholders can conduct proper management of salmonid waters. If these Bye-laws are not removed the predation of our native salmonids will continue.

Stock Management
All invasive fish and birds that pose a treat to salmonid populations should be controlled.

Habitat Management
IFI need more staff on the ground working on river enhancement and habitat improving water quality.

Research, Current Information and knowledge gaps
Non-native pike and coarse fish do not come under the WFD but are classed as "non-native influencing ecology" therefore how can they be conserved under 2 Bye-laws?

Other feedback
Invasive weeds, Zebra mussels what next IFI ..?? Its time to stop the movement of boats in and out of our SACs. To protect them from more invasive species and spreading them to other SACs. These lakes are a national treasure which have being handed down from generation to generation as trout fisheries and will disappear as such unless pike are not effectively controlled.

Theme
Habitat integrity of SACs

Timelines / High level objectives
- Remove Bye-laws 806 & 809
- Stream enhancement work and habitat
- Remove invasive weeds
- Stop the spread of invasive species
- Work with stakeholder's



[redacted]

From: Western Lakes Plan
Sent: Friday 16 September 2022 16:39
To: Western Lakes Plan
Subject: Great Western Lakes Questionnaire

Iascach Intíre Éireann
Inland Fisheries Ireland

Submitted on Fri, 16/09/2022 - 16:33

Contact details

Name
[redacted]

Email address
[redacted]

Feedback Details

The Great Western Lakes
Lough Corrib

Fish
Should remove bylaws 806 and 809

Fisheries Management and Climate Change
Needs more ifi staff patrolling lakes

Water Quality
I've found it getting bad last few yrs

Feedback Details

Invasive Species
I've noticed a huge increase in course fish and pike over the last 10 years . This needs better control management

Habitat Management
Invasive weed needs better controlling

Other feedback
Spawning streams need to be worked on and improved to get numbers of trout back up



[redacted]

From: Western Lakes Plan
Sent: Friday 16 September 2022 20:59
To: Western Lakes Plan
Subject: Great Western Lakes Questionnaire

Iascach Intíre Éireann
Inland Fisheries Ireland

Submitted on Fri, 16/09/2022 - 20:57

Contact details

Name
[redacted]

Email address
[redacted]

[redacted]

From: Western Lakes Plan
Sent: Saturday 17 September 2022 00:05
To: Western Lakes Plan
Subject: Great Western Lakes Questionnaire

Iascach Intíre Éireann
Inland Fisheries Ireland

Submitted on Fri, 16/09/2022 - 23:15

Contact details

Name
[redacted]

Email address
[redacted]

Feedback Details

Introduction
Its just more of what we have seen and read over the years offering nothing new or innovative only rehashing the usual Dept soundbytes.

The Great Western Lakes
Some of the Western lakes are the last remaining great wild Salmonid lakes of Europe.
Previous administrations have ignored them and only for the local angling clubs imput they would have died out as fisheries years ago

Fish
Once thriving with predominately trout and salmon they have now become like a bag of Dolly mixtures with numerous invasive species allowed flourish due to the dismissive approach taken by the bodies charged with managing them

Stakeholder Engagement
Stakeholder engagement is only a smokescreen to give the impression the state is listening to anglers.
When you have people like [redacted] working in the Dept driving a certain agenda and ignoring anglers concerns then we have no confidence in anything the Dept say or propose

Fisheries Management and Climate Change
Fisheries Management needs to involve anglers and angling clubs. Byelaws 806 and 809 need to be removed to allow these Salmonid lakes reach their Full potential. The state cannot manage these fisheries without

local clubs taking the lead role as they have done for generations

Water Quality
Water quality is the single biggest threat facing fisheries in this country. The state lacks the resources to effectively stop the further deterioration of our waters. More resources needs to be allocated to fund a dedicated dept within IFI to tackle this.

Feedback Details

Invasive Species
Bylaws 806 and 809 need to be removed as a matter of urgency to help control the further spread of invasive fish populations into salmomid fisheries.

Stock Management
Management of pike populations needs to be expanded on the western lakes to ensure the survival of the Salmonid species into the future and the irradiation of pike after recent introductions in other Salmonid waters before they do more damage.

Habitat Management
This work needs to be expanded accross all systems in cooperation with local angling clubs

Research, Current Information and knowledge gaps
Engage, listen and empower local clubs to help carry out research. They are the experts on the ground with the most up to date information and know where the knowledge gaps are.

Other feedback
Bylaws 806 and 809 need to be removed from the Western lakes immediately.

Timelines / High level objectives
Bylaws 806 and 809 need to be removed immediately and as a matter of priority.



[redacted]

From: Western Lakes Plan
Sent: Saturday 17 September 2022 10:27
To: Western Lakes Plan
Subject: Great Western Lakes Questionnaire

Iascach Intíre Éireann
Inland Fisheries Ireland

Submitted on Sat, 17/09/2022 - 09:12

Contact details

Name
[redacted]

Email address
[redacted]

Feedback Details

Introduction
As a UK angler visiting the Great Western lakes including Conn, Sheelin, Mask, Carra and Corrib for over 50 years I am sadly conscious of the deterioration in quality and quantity of the brown trout populations in these remarkable waters. I am therefore very happy to support the constructive approach taken by the Management plan.

The Great Western Lakes
I believe the great western lakes to be unique in Europe and beyond, not only biologically but also economically for stakeholders in Ireland

Fish
In many waters in the UK and worldwide brown trout have beenreplaced by non-native species of trout (eg rainbows), predators (pike) and by introduced food-competitive non native species (eg roach. All of which are uncontrolled and harmful to native species such as brown rout.

Stakeholder Engagement
The management plan arguing for cohesion in in this area is to be warmly applauded. As a visitor to Ireland I have seen the detriment in some areas where interest groups do not co-operate. I have also seen the benefits where regional fishing clubs have co-operated both with anglers and with IFI eg. in stream enhancement

Fisheries Management and Climate Change

A hugely import issue which will impact the great lakes. I fully agree with the mamagement plan.

Water Quality
Should be closely monitored in all lakes. The disasterous effects of farming practices (relating to chemical pest control destroying insects and sewage releases affecting water chemistry have been very well known for a long time but still rife.

Feedback Details

Invasive Species
Roach and roach hybrid species are probably responsible for brown trout deterioration and should be controlled.

Stock Management
I agree with the Plan

Habitat Management
Also very important for health of lakes,

Research, Current Information and knowledge gaps
Needs for further investment in these area well identified in the Plan.

Other feedback
I regard the Management Plan as an excellent and very well informed contribution. I am sure that the general approach evident in this document will hearten everyone with an interest in the environment and future well-being of the Greta Lakes.

Timelines / High level objectives
Only to say that the very evident deterioration of these lakes is likely to accelerate and the measures discussed in the plan are therefore urgent..



[redacted]

From: Western Lakes Plan
Sent: Saturday 17 September 2022 12:47
To: Western Lakes Plan
Subject: Great Western Lakes Questionnaire

Iascach Intíre Éireann
Inland Fisheries Ireland

Submitted on Sat, 17/09/2022 - 12:41

Contact details

Name
[redacted]

Email address
[redacted]

Feedback Details

Introduction
East Corrib Alliance (ECA) was established with three Aims / Objectives :
1. Improvement in the water quality of our Rivers &N Lough Corrib
2. Trout Stream Development & Habitat Enhancement
3. Maintenance & Conservation

• Our focus is on Lough Corrib and we would ask that every effort be made to have Lough Corrib designated as a Salmonid Fishery
• Deterioration in water quality over the past number of years must be reversed
• Stakeholder engagement is vital
• Plans must be developed and implemented

The Great Western Lakes
• Focus on Lough Corrib but all 7 Great Western Lakes must be protected, improved, maintained and conserved.
• Major causes of concern : Water Quality, Invasive species including weeds & fish
• Harmful wildlife to include Mink & Comorants
• Chemical run-off from fertilised lands
• Increase in & training of Fisheries Staff Members
• Adequate Funding to implement the Plans and increase Staff.
• IFI Officers to be given more powers for Inspections on lands effecting rivers and water sources,

particularly during Winter when water tables are high. Also greater powers to pin responsibility and bring prosecutions before the Courts

Fish
• Adequate and effective Stock Management
• Removal or control fish species that adversely impact on the salmonid population and their habits
• Limit removal of trout from the lake to TWO fish per Angler
• Opening of Season to be 01 March
• Revoke Bye-laws 809 (2006) & 806 (2006)

Stakeholder Engagement
• Adequate and effective Stock Management
• Removal or control fish species that adversely impact on the salmonid population and their habits
• Limit removal of trout from the lake to TWO fish per Angler
• Opening of Season to be 01 March
• Revoke Bye-laws 809 (2006) & 806 (2006)

Fisheries Management and Climate Change
• Comply with all known scientific data and practices

Water Quality
• Of the utmost importance
• Currently NOT acceptable
• Variance with EPA figures
• Scoring System should be put in place for all lakes, rivers and other water bodies.

Feedback Details

Invasive Species
• Lagorasiphon Major eradication efforts to be continued
• Fish species that adversely impact on the salmonid population be removed from the Great Western Lakes. Where not feasible, then they must be controlled in a very pro-active manner.
• Training / Retraining to be provided to all IFI Staff Members

Stock Management
• Continued efforts for the control of Invasive species.
• Additional Staff trained in this function

Habitat Management
• IFI to take ownership of this vital area and OPW to take instructions and suggestions from IFI
• Engagement with Landowners to encourage involvement
• Engagement with Lawpro, National Parks & Wildlife and OPW

Research, Current Information and knowledge gaps
• Engage with University knowledge, know-how, expertise and facilities locally. Tap in to Student expertise by liaising with College Staff and Department Heads
• Include in a Scoring System
• Share Current Information with Stakeholders

Other feedback
• Control of Mink, Comorants
• Protection of other wildlife species such as swans, cygnets, duck, waterhens, farm animals often the victims of mink



[redacted]

From: Western Lakes Plan
Sent: Saturday 17 September 2022 13:10
To: Western Lakes Plan
Subject: Great Western Lakes Questionnaire

Iascach Intíre Éireann
Inland Fisheries Ireland

Submitted on Sat, 17/09/2022 - 12:54

Contact details

Name
[redacted]

Email address
[redacted]

Feedback Details

The Great Western Lakes
it is clear that water quality is not what it should be on Corrib. The same problems afflict waters in the UK and the UK government is not acting quickly to prevent enrichment. I would hope Ireland with a small population will be able to tackle eutrophication more efficiently than the UK.

Fish
Fisheries which have never had pike populations (last 20 years) should be concentrated on regarding pike removal. The Western Lakes such as Corrib where pike have been established for at least 400 years have seen brown trout populations maintained. Pike removal on an organised basis is something that has only been carried out in the last 60 years. Despite this the brown trout and salmon fishing has continued to decline. So what is the point in ruining what was once the best big pike fishing in Europe? (big pike being 35lb plus) Lough mask having produced 28 such fish, Lough Corrib 8 and Conn 17

Stakeholder Engagement
I fish in Ireland regularly i but food and fuel

Fisheries Management and Climate Change
Nothing in the short term can be done about climate change

Water Quality
Vital to improve this

Feedback Details

Invasive Species
Most of the invasive species are present in many of the waters. IFI were too late doing anything about this

Stock Management
Huge waste of money culling pike, money better spent on reducing nutrient inputs.

Habitat Management
same as above culling pike wont improve water quality

Research, Current Information and knowledge gaps
Peer reviewed research is vital. A lot of the material used by IFI years ago would not pass inspection today

Other feedback
Don't ruin other peoples fishing. Save the salmon, char and trout if they need saving but not at the expense of the pike

Timelines / High level objectives
probably too late

[redacted]

From: Western Lakes Plan
Sent: Saturday 17 September 2022 17:51
To: Western Lakes Plan
Subject: Great Western Lakes Questionnaire

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Iascach Intíre Éireann
Inland Fisheries Ireland

Submitted on Sat, 17/09/2022 - 15:00

Contact details

Name
[redacted]**District Trout Anglers Association**

Email address
[redacted]

Feedback Details

Introduction
This submission represents 120 angler members of our club BDTAA who fish mainly on Lough Mask but also fish and care about the other Great Western Lakes. We are pleased that IFI is developing a plan to improve and protect these Salmonid Waters. We are very concerned about the decline in water quality, fly life and trout fishing on Mask et al. We agree that the Plan needs to be long-term and not just a one-off act and leave it scheme, requires multi-disciplinary and multi-agency approaches and should engage communities and stakeholders. Once IFI begins to implement its plans it will benefit from an Adaptive approach as more will be learnt from actions taken that will inform future requirements going forward.

The Great Western Lakes
Whilst we have concerns for all trout lakes, our particular concerns are for Lough Mask where our Association, Clubhouse and facilities are based. We are most aware of the deterioration in trout fishing and the causes of the decline on this lake. Although we also actively and financially support the Lough Carra Catchment Association with their efforts to halt the decline and hopefully reverse it on Lough Carra.

Fish
We are concerned at how our lakes, that should be designated as Wild Brown Trout Lakes, have been allowed to change into Mixed Fisheries with invasive species increasing in numbers over the years with consequent damage to trout habitats and feeding grounds.

Stakeholder Engagement
It is very important to bring and keep stakeholders on board with any Plan. As anglers we would be amongst

the most caring groups that want the best for the Lakes' condition and actively do what we can to help and protect lakes, rivers and streams. The success of any plans will depend on how you manage stakeholders that currently contribute to the lakes' decline by changing their ways. That will require careful and difficult management perhaps more by "carrot" than "stick". Establishing Catchment Management Associations won't work if only angling groups, and not e.g. Farming groups that have less interest in the lakes as fisheries, are involved.

Fisheries Management and Climate Change
Aquatic buffer zones, wetlands, natural Irish tree planting to help ameliorate the problems of nutrient and sediment run-off are the sort of actions that are desperately needed to combat the nutrification of our lakes. The nutrients have drastically changed the fauna and consequently the flora, insect life in our waters and ruined trout feeding habitats. Hopefully by trying various such schemes you can learn from the scientific studies of the outcomes how best to gradually improve the buffer zone system of lake improvement. Clearly, all actions need to take account of Climate Change on a world basis and on the micro-climate basis that would affect our lakes.

Water Quality
The area size of the lakes is vast and would need considerably more fisheries environmental officers to protect the waters from water quality offences. It is far too easy for these offences to go undetected and so more resources are needed for IFI, even if some efficiencies in ways of working can be achieved through improved working relationships with other key environmental authorities. We note that the current statutory powers of IFI officers are insufficient to enforce Regulations. Having to call mon other authorities to use their much stronger powers is not a very efficient way of handling situations that require lasting effective actions.

Feedback Details

Invasive Species
If the lakes were actually designated Wild Brown Trout (or salmonid) Waters, then there needs to be a policy of removing species that are not native to these lakes, and not just allowing them to continue to ruin trout habitats and feeding grounds. Roach, perch, pike and bream should not be there. Perhaps pike are not the most damaging species for trout but why are there such ridiculously restrictive regulations about how much pike can be removed per day. The pike daily bag limit could be increased considerably and that might be enough to go some way to lessen the damage to trout stocks. We feel the worst fauna invasive species is Bream. It has non predator to keep the numbers down. it breeds faster than trout. Bream grow considerably in size feeding on a diet that takes away from trout feeding opportunities.. For example, Bream go into bays as large shoals and bottom-feed the pupae, churning up mud and sediment, damaging plant-life and changing the whole habitat. with the pupae devastation, there is then little to hatch into insect and fly life that trout would feed on. Trout are thus not going to spend much time in the bays and shallows when there are no longer the flies that they used to feed on. This partly explains why the fishing in shallow areas and bays is now so poor that anglers have little choice after May than to go fish for daphnia-feeding trout in the deep water on Lough Mask. Remove the Bream! That is desperately needed, urgently..
The rest of your Plans for dealing with Invasive Species will help too!

Stock Management
The stock management actions planned seem ok but as yet lack much evidential information. The IFI will need to be given the budgetary backing to employ more officers to check fish stocks on the lakes and not as a one-off check but as an on-going collection and use of data. Surveys using trout DNA would be very useful to give a true picture of what is happening if traced back to which rivers each DNA type is associated with. Such surveys of rod-caught trout over a season, and not just from one or a few competitions, could provide very valuable information of which spawning streams trout are from. It could be analysed what percentage of trout came from each stream and would inform a targeted approach to work to improve those rivers most in need of help. The last such attempt at collecting DNA was about 10 years ago but ended up being rushed by taking World Cup caught trout which would be mainly the deep water fish, and not a more general rod caught sample from around the lake. These DNA sampling actions would need to be done regularly, say every 3 years, in order to see the big picture and see how actions taken to improve the lake were successful. this would need the necessary Human Resources to be properly funded.
Stocks of trout could be conserved better and we would be supportive of reducing the Bag Limit from 4 trout to just 2 trout per day.
Abolish ALL protective legislation for coarse fish on the Trout Lakes as these are currently better protected than trout by Bye-Laws anyway.

Habitat Management
Actions suggested for restoring Habitats look to be on track already and we support the speeding up of progression through administrative hurdles.

Research, Current Information and knowledge gaps
Research through collecting the necessary information to inform future actions whilst making a start on known issues would be good. DNA research as mentioned above. Need the Human Resources to manage the

research.

Other feedback
Overall, we welcome this Great Western Lakes Plan and agree with the HLOs. The IFI have done very well to put this together and give the concerns about our lakes the attention they deserve. We wish you all the resources that you will need to carry out this plan and every success going forward. IFI has our support.

Timelines / High level objectives
The HLOs are well set out and as with any good Development Plan attempts have been made to schedule actions over a period of time to make best use of limited resources. 5 years for the Plan is a good start although we all want improvement as urgently as it can be achieved We understand that limited resources will dictate to a large extent how well progress can be made. The schedules of events are sketchy but that is understandable at the start of a project. Detailed planning can come in as more research, information and findings from earlier actions provide guidance for future activities. Also, without some guarantees of sufficient funding, any Plan would be difficult to schedule and succeed.

[redacted]

From: Western Lakes Plan
Sent: Sunday 18 September 2022 01:31
To: Western Lakes Plan
Subject: Great Western Lakes Questionnaire

Iascach Intíre Éireann
Inland Fisheries Ireland

Submitted on Sat, 17/09/2022 - 23:46

Contact details

Name
[redacted]

Email address
[redacted]

Feedback Details

Introduction
I am a [redacted] fishing guide on the Great western lakes with a guest house located on the eastern side of Lough Corrib which depends greatly on Angling tourism. My views are based on 20 years guiding professionally on these great fisheries with anglers coming to me from all over the world.
I hope to express my opinions on Conservation measures, Habitat restoration and development, Protection, Stock management, and water quality, which all need to be addressed to make our Great Western Lakes some of the best wild fisheries in the world.

The Great Western Lakes
My main focus would be on Loughs Corrib, Mask and Cara but all the great fisheries in this draft plan are of equal importance.
I am familiar with all 7 great Lakes and each are unique in their own way but equally each face very similar problems which need to be addressed.

Fish
Fish are the resource that make these amazing waters Fisheries.
They are paramount in the plan and therefore need proper protection and conservation measures.
I feel it imperative to reduce the bag limit on loughs Corrib, Mask and Cara to two fish and a total catch limit of 4 fish per boat.
This measure would have huge benefits for the stock density in all 3 waters and I believe would be welcomed by anglers both resident and tourist.
The annual opening date for Corrib ,Mask and Cara should be moved forward two weeks to March the 1st

which coincidentally would match the opening date of Lough Sheelin.
My reasons for this is that many trout would have just returned from the spawning streams and are in poor condition, they are susceptible to any available food source and therefore are easily targeted by anglers during the first two weeks of the season. The argument against this change will be tradition but tradition can continue but just on a slightly later date.
The management of all coarse fish needs to be addressed and where possible they should be removed to other more suitable waters.
Ferox trout are a very special genetic species and need more conservation measures. At the moment the bag limit allows the removal of one Ferox over 10lb in weight and another 3 to an individual weight of 9lb 15oz. These incredible fish deserve much better conservation measures and in my opinion a lower takeable size limit.

Stakeholder Engagement
Its hugely important to have good working relationships between IFI, other government organisations and all stakeholders.
Angling Clubs, Development groups ,accommodation providers, guides, all have positive contributions to make to our fisheries.
IFI should pursue all groups interested in helping with the protection and development of our Great Western lakes and build on relationships to work together for the enhancement of our Lakes.

Water Quality
This is of utmost importance, without clean water we have nothing. A scoring system should be in place for all our lakes and rivers..

Feedback Details

Invasive Species
The continued management of all invasive species is essential.
Lagorasiphon Major, Mink, Comorants, non native fish species all need management.

Stock Management
The management of all Coarse fish on our lakes is of vital importance.
Ferox trout need more stringent conservation measures, a lower takeable size limit would be a great consideration.

Habitat Management
IFI need to be more proactive in habitat development and enhancement.
Working more closely with the OPW, NPWS ,Lawpro, landowners and stakeholders is the way forward.

Research, Current Information and knowledge gaps
Much more focus is needed in research. More engagement with University's and college staff could be helpful.

[redacted]

From: Western Lakes Plan
Sent: Sunday 18 September 2022 12:56
To: Western Lakes Plan
Subject: Great Western Lakes Questionnaire

****

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Iascach Intíre Éireann
Inland Fisheries Ireland

Submitted on Sun, 18/09/2022 - 12:37

Contact details

Name
[redacted]

Email address
[redacted]

Feedback Details

Fish
The introduction of non native, invasive species into the Western Lakes is a serious and growing concern for both anglers and communities impacted by angling in the Western region. There needs to be a comprehensive plan put in place to deal with it. Education on the damage and impact of these species is great but it needs to be backed up by legislation and heavy penalties for those who flaunt the rules. Also the continuing existence of outdated and inappropriate by laws such as 809 which actually discourages the elimination of invasive species in some water courses is bizarre and counterproductive in my opinion. It needs to be addressed and removed as quickly as possible and a program of systemic elimination of these species put in place where appropriate.

Stakeholder Engagement
A greater level of input from local fishing and tourist associations needs to be put in place. This public consultation is a good start but needs to be built on and formalised on a statutory basis.

Water Quality
Water quality particularly in terms of raw sewerage and farm effluent openly entering the western lakes needs to be addressed and resolved at local level. In particular local authorities need to be held accountable for their lack of action and tolerance of inadequate sewerage management needs to be called out and dealt with.,



[redacted]

From: Western Lakes Plan
Sent: Sunday 18 September 2022 12:56
To: Western Lakes Plan
Subject: Great Western Lakes Questionnaire

Iascach Intíre Éireann
Inland Fisheries Ireland

Submitted on Sun, 18/09/2022 - 12:31

Contact details

Name
[redacted]

Email address
[redacted]

Feedback Details

Introduction
I agree with most of the plan. I am still in school, so it is important to me that the lakes are not polluted and I will be able to catch trout in the years to come.

Fish
It is important to me that native fish are protected from invasive species.

Water Quality
Lough Corrib is currently being polluted. I can see green on the bottom of the lake in shallow places. Can more of your staff not be available to keep a check on any sources of pollution and stop it from happening

Feedback Details

Invasive Species
It is important to keep the weeds and non native fish out of the lakes. There are not enough controls in place

Stock Management
Invasive species should be controlled better. I would like to be able to catch brownies in small lakes but roach and pike have eaten the most of them



[redacted]

From: Western Lakes Plan
Sent: Sunday 18 September 2022 14:48
To: Western Lakes Plan
Subject: Great Western Lakes Questionnaire

Iascach Intíre Éireann
Inland Fisheries Ireland

Submitted on Sun, 18/09/2022 - 13:59

Contact details

Name
[redacted]

Email address
[redacted]

Feedback Details

Introduction
My name is [redacted]. I have been fishing on Lough Corrib for all of my [redacted] life and in that time I have seen a drastic decline in fish quantities and there condition condition all related to climate change management both government and inland fisheries all be it the latter do try to do there best but with out much better help this could all be in veine

The Great Western Lakes
Lough Corrib is one of the last remaining fresh water natural lakes in Europe we need to save it

Fish
The fish salmon trout pike and all kinds of course fish are in the lake and unfortunately zebra mussels

Stakeholder Engagement
I like to think as a citizen of my country and a lover of fishing that not only I but all who fish in Lough Corrib our stakeholders in it

Fisheries Management and Climate Change
The fisheries have a massive part to play in the recovery of Lough Corrib. I have no doubt they have tried over decades to help in what they have done to help Corrib but they cannot do it alone. The climate change has very much added to the problem to Lough Corribs demise over these decades all man made and so it's up to us to revert what has happened if we are to have a lake at all

Water Quality
The water quality I think is getting worse because of home owners ie holiday makers local resident's farming and other factors. I have seen in many areas the little tributaries that flow into Lough Corrib blocked with debre and what looks like pollution. These little streams are a life line to any lake for the simp ok e purpose of spawning fish if the water quality is poor no fish simple

Feedback Details

Invasive Species
Pike Roach Rud and others zebra mussels are not good for the lake ,and where possible should be removed are at least controlled if possible. I believe there is a balance to be had here there is a part to play for all living creatures but I do hope going forward that more can be done about this to control invasive species

Stock Management
It is my belief that Lough Corrib is stocked with wild brown trout most years but that may have changed over recent years. It needs to continue that is my belief

Habitat Management
As I said previously. The habitats surrounding the shores of Lough Corrib rivers streams must be managed better if we are to have a lake at all

Research, Current Information and knowledge gaps
More and more research most be carried out on the lake for all the reasons I have said above. More and more information that is collected and knowledge gathered will I hope help restore in some way the lake to what it once was

Timelines / High level objectives
The government and all relative authority's must spend vast sums of money and all of us to play our parts to get lough Corrib back to what it once was



[redacted]

From: Western Lakes Plan
Sent: Sunday 18 September 2022 16:22
To: Western Lakes Plan
Subject: Great Western Lakes Questionnaire

Iascach Intíre Éireann
Inland Fisheries Ireland

Submitted on Sun, 18/09/2022 - 16:12

Contact details

Name
[redacted]

Email address
[redacted]

Feedback Details

Introduction
IFI need to collaborate more effectively with other government bodies to reduce sources of pollution
remove bylaws 809 and 806

The Great Western Lakes
Stream enhancement

Fish
More control of invasive species,
Laws protecting pike need to be abolished

Stakeholder Engagement
Oughterard is a town that is heavily dependent on tourism so would like quality of lake water to be improved.

Fisheries Management and Climate Change
Set levels of nitrates in the water that all government bodies will work towards

Water Quality
A lot of swimmers reported that they and kids had broken out in a rash on their skin after swimming also a lot of slime and dirty water at the peir

Feedback Details

Invasive Species
Reduce invasive species eg pike should not be protected

[redacted]

From: Western Lakes Plan
Sent: Sunday 18 September 2022 17:20
To: Western Lakes Plan
Subject: Great Western Lakes Questionnaire

Iascach Intíre Éireann
Inland Fisheries Ireland

Submitted on Sun, 18/09/2022 - 16:50

Contact details

Name
[redacted]

Email address
[redacted]

Feedback Details

Introduction
***I hope it's not to late to fix the salmonid population on the great western lakes.**
*** Lough Conn and Cullen nursery streams are been neglected.**
*** Council Sewage systems out of date and overflow into rivers.**
*** IFI have no power to prosecute an other state body.**

The Great Western Lakes
*** I fish the western lakes and have noticed a huge decline in the fish and fly population.**
*** I blame Roach and Rudd for eating the different stages of the life cycle of the fly (nymph pupa and emerger) etc.**
*** Cormorants need to be managed they eat twice their own weight a day plus release a taper worm which throat eat and cause a parasite which eats on the fish till it kills them.**
*** Mink and pike in our rivers eating all the smolts.**
*** Pike management needed all year around (netting and electic).**
*** Pike management is needed due to breeding pike egg population far exceeds Salmonid egg population.**

Fish
*** Fish population declined in the last 5 years.**
*** Pike , Roach and Rudd have to be controlled.**
*** Most of the fish in Lough Conn are between 10/ 11 inches and they breed at that.**
*** The gilaroo trout should be protected.**

Stakeholder Engagement
*** Working with stake holders is key.**
*** Some of the stakeholders are the biggest problem s for the lakes and rivers ie county council.**
*** Fishing clubs should have more input with IFI.**

Fisheries Management and Climate Change
*** PIke management is key to these lakes.**
*** Roach and Rudd have to be managed.**
*** Water quality needs to be checked due to climate change.**
*** Salmonid hatchery to help the nature of the lakes due to climate change (Hatchery at Healy hotel circa 1940/1950.)**
*** Season closes on the 30th of September for all spices of fish.**

Water Quality
*** Quality is low due to agriculture, councils sewage systems out of date, forestry, incorrect septic tanks at private houses along SAC areas, water logged ground.**
*** Department of agriculture needs to be more efficient regarding slurry spreading eg dry weather on close season not allowed to spread. Open season wet weather , tanks full, ALLOWED to spread**

Feedback Details

Invasive Species
*** Not enough government controls to prevent invasive species eg mink , cormorant and seals.**
*****

Stock Management
*** Development of all streams.**
*** Hatchery**
*** Pike control.**

Habitat Management
*** Development of rivers with local angling clubs.**

Research, Current Information and knowledge gaps
*** Fisheries should share information with angling clubs and stakeholders about surveys and fish population.**

Timelines / High level objectives
*** To much red tape holding up environmental work been done.**
*** All talk no action.**
*** SOONER we start the sooner the recovery.**

[redacted]

From: Western Lakes Plan
Sent: Sunday 18 September 2022 17:26
To: Western Lakes Plan
Subject: Great Western Lakes Questionnaire

Iascach Intíre Éireann
Inland Fisheries Ireland

Submitted on Sun, 18/09/2022 - 16:27

Contact details

Name
[redacted]

Email address
[redacted]

Feedback Details

Introduction
I welcome the plan but heaven knows that the decline of these once great fisheries has been evident for many many years. Hopefully with full commitment, funding and combined effort by all the major stakeholders they can be brought back to what they once were.

The Great Western Lakes
The "once" great western lakes! Its incredible that it has come to this. To hear that Sheelin still has major euthrophic issues and would not be fishable only for the zebra mussell impact. Intensive farming has a major negative impact and maybe I missed it but all the farming organisations must be involved.

Stakeholder Engagement
Its critical that all stakeholders take responsibility for implementing all aspects of the draft plan. Its also critical that stakeholders are held responsible for non-action and that all stakeholders are kept informed of progress and bottlenecks if and when they occur.

Fisheries Management and Climate Change
Climate change is in everyone's hand. In relation to fisheries management, all survey results should be made available in a timely manner to all stakeholders. As anglers we know that stocks have declined dramatically in all these western lakes so survey results should be as accurate as possible as its not an exact science

Water Quality
There must be a Hot Line to report all instances of pollution and confirmation that action has or will take

place.. Without this people may not bother to report as they see that nothing is ever done. One of the stakeholders Must have ultimate responsibility to ensure compliance with the plans objectives.

Feedback Details

Invasive Species
Once established very hard to control. Is there any information regarding the control / eradication of the zebra mussel anywhere across Europe? A combined EU study might be beneficial if not already done.

Stock Management
Stock management must link directly to habitat management. While some good work has been carried out there are two spawning streams on Lough Mask that needs major work - The Owenbrin is severe need of restoration along with the Cloghbrack river. The latter is a disgrace and it seems that industry takes precedance over everything in a gaelteacht area. let the politicians answer for this. There should be no political interference in achieving the objectives of this plan

Habitat Management
As above work on the spawning streams is paramount in achieving the plan objectives and it needs to be done immediately. Tree planting benefit is a longer term fix and very beneficial

Other feedback
While the cormorant is a protected species, I believe they should be culled particularly on the western lakes. Perhaps a byelaw could be passed for culling over a short given period as the amount of fish eaten over time is staggering.



[redacted]

From: Western Lakes Plan
Sent: Sunday 18 September 2022 21:33
To: Western Lakes Plan
Subject: Great Western Lakes Questionnaire

****

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Iascach Intíre Éireann
Inland Fisheries Ireland

Submitted on Sun, 18/09/2022 - 21:08

Contact details

Name
[redacted]

Email address
[redacted]

Feedback Details

Introduction
[redacted]**he banks of Lough Corrib and access the lake at Portacarron pier. I wish to make the following suggestions:**

The Great Western Lakes

Remove bylaws 809 and 806
Stream enhancement

Fish
More control of invasive species.

Stakeholder Engagement
The IFI need to collaborate more effectively with other government bodies to reduce sources of pollution

Fisheries Management and Climate Change

Adequate resources on the ground to to oversee all improvements.

Water Quality
Set out all agreed specific targets rather than general non-specific, eg set a level for nitrates in the water that all government bodies will work towards.

Feedback Details

Invasive Species
Agree a plan of action to monitor and implementation of same

Stock Management
Carry out regular monitoring of all fish numbers and species.

Habitat Management
Clear posted signage to make lake users aware of the possible dangers to habitats and preservation of same.

[redacted]

From: Western Lakes Plan
Sent: Sunday 18 September 2022 22:46
To: Western Lakes Plan
Subject: Great Western Lakes Questionnaire

****

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Iascach Intíre Éireann
Inland Fisheries Ireland

Submitted on Sun, 18/09/2022 - 20:23

Contact details

Name
[redacted]

Email address
[redacted]

Feedback Details

Introduction
I have angling as my principal pastime since my youth and unfortunately have noted a serious decline on the river fergus and Inchiquin lake in Clare and a similar decline on Lough Carra followed by a slower decline on Lough Mask. I have fished the Western Lakes very regularly since 1970

The Great Western Lakes
Lough Carra was a favourite of mine for the quality of its free rising trout from 1970 to 2000. Deteriorating water quality has manifested itself in the decline of the famous mayfly hatches I remember and is also true of other fly life eg Sedges, olives etc. Is there need to improve the powers of the protection staff in order to bring prosecutions to a satisfactory conclusion and I feel the punishment in many cases does not fit the crime. The decline on Mask though at a slower pace mainly because of its size is also noticeable with changes in fly angling practice in the 2nd part of the Season since 2000.

Fish
Much of the legislation introduced in the past number of years governing pike does not make any sense if we wish to seriously preserve these waters in the salmonid category. The introduction of roach and hybrids etc is proving disastrous to the shallow bays of mask. I would like to see some control over the number of trout caught by trolling especially on Mask. If catches at competitions are used in fish survey analysis on Mask please note that any competitions run after mid July will not give a true reading as anglers tend

towards fishing the depths for a blacker coloured trout which may run a specific spawning stream and affecting results of surveys dealing with the prolificacy of streams.

Stakeholder Engagement
My experience as a regular officer at the local club is that we have good relations with our local Fisheries office, I dont know if this applies to other stakeholder groups. However IFI staff on the ground are becoming so scarce that it is difficult to see how any impact can be made on the work that is to be done to address the many problems given the sheer size of the western lakes and their all important spawning streams

Fisheries Management and Climate Change
Having gone through a few recent years when the future of these lakes as salmonid seemed to be threatened, we feel now that the future is more secure especially if IFI succeed in increasing their staff and training to maximum ability. It has been encouraging for me to become acquainted with some very able and commited Fisheries staff throughout my years, some of who are now deceased. Climate change will pose more problems but if we are to go down the road of allowing the use of what remains of our spawning streams for electricity generation !!

Water Quality
I have already referred to this problem which is at the very core of many issurs related to fisheries. Loughs Mask and Corrib is now a huge reservoir servicing an ever increasing area of the province of Connacht. For this reason one would think that there would be sufficient safeguards at play to protect these lakes. One wonders if the general public made the connection. The increase in output from dairy farming in particular in the past few years has seen a similar decrease in water quality throughout the country. An increase in staff qualified to bring successful prosecutions and more power transferred to IFI should be a help.



[redacted]

From: Western Lakes Plan
Sent: Sunday 18 September 2022 23:23
To: Western Lakes Plan
Subject: Great Western Lakes Questionnaire

Iascach Intíre Éireann
Inland Fisheries Ireland

Submitted on Sun, 18/09/2022 - 22:39

Contact details

Name
[redacted]

Email address
[redacted]

Feedback Details

Introduction
I am a keen fly fisherman and most of my angling is conducted on Lough Corrib which I have fished all my life ie. for the past 45 years! It is great to have the opportunity to make submissions and also the information meeting IFI held in Oughterard was a great idea.So well done on both counts.

The Great Western Lakes
The great Western lakes are recognised among the greatest Wild Brown trout fisheries and it is preservation of Salmonoids and their habitat that should form the basis of any plan

Fish
Pike numbers have increased greatly on the lake and their illegal introduction to a major spawning catchment the Owenriff system has seriously compromised the recruitment of trout.Byelaws 806 and 809 must be removed for the great western lakes and S.A.Cs.

Stakeholder Engagement
it is clear that the I.FI staff are

Fisheries Management and Climate Change
Pollution has steadily worsened with each passing decade. The Cryptosporidium outbreak and the Curly water weed outbreak are proof that increased fines are needed to combat polluters. Warm water increases the risk of algae blooms and increases all algae growth .I.FI need increased powers to combat agricultural and other polluters as well as preventing invasive fauna.

Water Quality
Water quality is diminishing in the great Western Lakes .Each successive year I have witnessed more Algae blooms and the nitrate levels are rising. Water quality must be urgently addressed in the plan it is already in a crisis state.

Feedback Details

Invasive Species
Pike must be removed for the Corrib and byelaw 809 abolished. Stricter fines must be imposed for the introduction of illegal species.

Stock Management
Pike must be removed from the great western lakes as they prey principally on salmonids. Coarse fish should not be protected under byelaws 806 and 809.

Habitat Management
Every major spawning stream and river should be managed and enhanced. More IFI workers on the ground will be needed for this .A simple system for Angling Clubs to help with this should be introduced.

Research, Current Information and knowledge gaps
In my opinion the habitats directive should be fully implemented and invasive species and fauna should not be protected.

Other feedback
The western Lakes are under serious threat .The priorities are Water quality ,invasive species removal and spawning enhancement.

Timelines / High level objectives
Removal of invasive species and fauna.
Increase the water quality.
Enhance protect and manage salmonid spawning areas.

[redacted]

From: Western Lakes Plan
Sent: Monday 19 September 2022 00:19
To: Western Lakes Plan
Subject: Great Western Lakes Questionnaire

Iascach Intíre Éireann
Inland Fisheries Ireland

Submitted on Sun, 18/09/2022 - 23:34

Contact details

Name
[redacted]**Moycullen Angling Club**

Email address
[redacted]

Feedback Details

Introduction
I am making this submission as [redacted] **Moycullen Angling club on behalf of our club.**

The Great Western Lakes
All of our members fish lough Corrib and most fish the other Western Lakes.We welcome the Development plan and the opportunity to make a submission on behalf of our Club.

Fish
Moycullen angling club believes that the Corrib and the Great Western lakes should be managed as Salmonoid Fisheries as is directed by the habitats directive.Pike should be removed and bylelaw 809 removed.

Stakeholder Engagement
Our club has been active in indentifying threats to the Corrib. Our Club engaged with the ownwer of the Hydro Dam and turbine on the Kip river and it was removed. Our lobbying and protesting led to the creation of a new sewerage works for Moycullen as the previous one was polluting the Corrib.The Corrib and the other western lakes and the trout fishing they provide is part of our heritage and should be preserved for future generations of anglers to enjoy.

Fisheries Management and Climate Change
Climate change is increasing the current pollution problem and it along with an increase of predators largely pike and cormorants is deminishing spawning oppotunities for trout.Any management plan must recognise

these factors and increase predator control as well as doing everything possible to address polltion from agricutlure,industry,domestic and all other sources.

Water Quality
Water quality is diminishing at an alarming rate.The water testing of the various state bodies and independent testing by clubs and Water Protection groups cleary show this.Moycullen Angling club asks that these issues be immediately and urgently addressed in the Development plan.

Feedback Details

Invasive Species
Moycullen angling club feel that Pike should be removed from the Western Lakes and that byelaws 806 and 809 be removed.Pike gather at the mouths of all the major spawning streams and rivers and prey on adult salmonids assending to spawn and on juvenile salmonids returning.

Stock Management
Worm fishing and indeed all angling on major spawning streams in September should be made illegal.This has happened on some rivers and on others it continues and in many cases bag limits are exceeded.We feel such measures along with water quality improvement and predator control are far more important and a much bigger priority than any change to existing bag limits.

Habitat Management
Moycullen Angling Club believes that more IFI staff are needed on the ground to manage ,enhance and protect spawning streams and that a simple system be developed to enable Angling Clubs to help with this.Invasive speceis to be removed and stricter measures introduced to stop their introduction.

Research, Current Information and knowledge gaps
Huge numbers of pike are being observed by our anglers anywhere there is a concentration of trout.Many of our members have caught lots of pike at buzzer holes during Duckfly and Campto hatches.Pike gather in huge numbers at the mouth of spawning rivers preying on asending adult salmonids and desending juvenile ones. This invasive speceis must be removed

Timelines / High level objectives
Immediate improvement of Water Quality by stricter pollution laws and more rigourous enforcing of existing laws.Predator removal and abolision of byelaws 806 and 809

[redacted]

From: Western Lakes Plan
Sent: Monday 19 September 2022 00:21
To: Western Lakes Plan
Subject: Great Western Lakes Questionnaire

Iascach Intíre Éireann
Inland Fisheries Ireland

Submitted on Sun, 18/09/2022 - 23:30

Contact details

Name
[redacted]

Email address
[redacted]

Feedback Details

Introduction
I have been going to Lough Corrib, the Oughterard area, since I was 5 years old, enjoying the lake, the fishing and the locality. I am a member of the Oughterard Anglers and also Corrib Beo a community organisation with an interest in developing the cultural, historic and other aspects of the Lough Corrib area. I have viewed Dr Declan Cookes video and I am most impressed with the plan. My concern I suppose is funding the plan and getting the political support for its implementation and alterations in law and the setting of timelines for the implementation of any plan is important. Sadly I note that the implementation of the plan will depend on resources and if adequate resources are not provided teh delivery of the plan may not occur. I assume this means funding from the department of fisheries?? Does IFI obtain funding from other sources? If its funding is entirely dependent on government then engagement with relevant politicians will be necessary. I think a meeting of all relevant stakeholders might be something that would encourage the various groups interested in the lakes to come together with the statutory bodies such as the IFI and for all to work together in the interest of the preservation and development of the lakes and what they can offer.

The Great Western Lakes
My interest is in Lough Corrib predominantly. I am a casual angler and have seen the deterioration in fishing in Lough Corrib over the years. I note the great work of IFI in dealing with the Curly Water Weed. Personally, I am aware of several international and domestic fishing persons who will not be returning to fish Lough Corrib, particularly at Mayfly time given the poor fishing in recent years. There has been a major decline in Mayfly hatches (unscientific assessment) I expect because of water quality issues?? I am not sure I see any reference to species such as the mayfly in the report but I may have missed this?? The days of experiencing Mayfly hitting the back of one's head while in the boat fishing during the Mayfly has well past sadly.

Fish
I was interested to hear of the potential damage that Bream may do and did not know of the impact of roach. I have always had concern about the introduction of pike to previously pike free salmonid lakes. Can voluntary bodies or groups be of assistance to the IFI in dealing with this issue.

Stakeholder Engagement
I note the engagement of the IFI with the catchment association of Lough Carra. Clearly, a similar organisation needs to be set up for Lough Corrib. Who will draw the relevant interests groups together. Are you aware of Corrib Beo?? If not, I can provide help in contacting the main organiser of the group whose aims are similar to those in the Western Lakes Plan.

Fisheries Management and Climate Change
What do I know? Not a lot. Control of invasive species and pike in the various catchments appears to be essential, particularly in waters not previously associated with invasive species. Right now, September 18th, I have never seen in my lifetime the lake so low, resulting from the low rainfall in the past month or more. This is likely related to climate change.

Water Quality
Again, the plan highlights the main reasons for the deterioration in the quality of water, related mainly to agriculture. In the area I frequent at Oughterard, cows are allowed to wander around the peninsula, depositing their excretory products extremely close to the water. There seems to be little regard for the water by some involved in Agriculture. I note that domestic sewage waste is still a contributor to water quality. It appears to me that an expansion of the areas for septic tank grants needs to be made. Our dwelling is 30metres from the lake both front and back and according to the interactive map for grants is not eligible for a grant. I find this extraordinary. Surely the grant system needs to be expanded??

Feedback Details

Invasive Species
I have nothing further to add to comments above. I have been educated in respect of pike been a predator of roach which are an invasive species. As the great western lakes are salmonid lakes, the by law for pike preservation, at least in these lakes seems odd. Predation of salmonids at entry to the lake appears important and it is clear a lot more research is needed in assessment of the impact of pike on salmonids. None the less I am unclear from the plan if roach have a detrimental impact on salmonid stocks. Can this be clarified??

Stock Management
I have nothing further to add but it seems clear from the report that resources are an issue in general and this seems to me to be a political issue.

Habitat Management
I have no expertise but noted the comments by Declan Cooke in this regard. More resources are probably required??

Research, Current Information and knowledge gaps
I note the potential role of citizen scientists and this needs to be encouraged, possibly throught the catchment associations??

Other feedback
Work on the impact of ecological change on the various fly species may be of importance. Why have mayfly hatches deteriorated??

Timelines / High level objectives
Unless the plan is resourced the objectives will not be met and note is made of the dearth of fishery officers for instance. Collaboration between the respective bodies seems most important and a possible expansion of those who can prosecute offenders should be considered??



[redacted]

From: Western Lakes Plan
Sent: Monday 19 September 2022 12:00
To: Western Lakes Plan
Subject: Great Western Lakes Questionnaire

Iascach Intíre Éireann
Inland Fisheries Ireland

Submitted on Mon, 19/09/2022 - 10:43

Contact details

Name
[redacted]

Email address
[redacted]

Feedback Details

Introduction
Maintaining the status of the Western Lakes as being Salmonid Lakes has to be a requirement of any plans moving forward and it is great to see this called out in the introduction. These lakes are some of the few wild Salmonid fisheries left in Europe and their status as such has to be maintained. Any plans that propose managing the lakes on a mixed fishery model cannot be countenanced.

The Great Western Lakes
The Western lakes continue to suffer as a result of invasive species, deteriorating water quality arising from run-off from agriculture and badly maintained sewage treatment plants both private and public.

Fish
The continued management of non-native invasive species is of particular concern and efforts to not only control the spread of these species but also active management to reduce their numbers to the greatest extent possible is of vital importance. Whether it be fish competing with Salmonids for habitat and/or food, or predatory fish who target Salmonids, on-going stock management needs to be ramped up. This includes in the Western lakes themselves and not limited to smaller systems as called out in the draft plan.

SI's 806 and 809 both need to be removed as they apply to the Western Lakes.. It is widely known yet ignored that no appropriate assessments were carried out prior to their introduction and as such they should have no legal standing. As it stands, introduced species such as Pike, Perch and Roach are afforded higher levels of protection than native Salmonids.

Stakeholder Engagement
On-going stakeholder engagement and plans to continue with this is acknowledged and is an important part of any plans moving forward. However, there needs to be clear ownership and responsibility defined in these plans. Having projects bounced from the different bodies with none taking responsibility for actual work reduces confidence in these bodies to be anything other than window dressing.

Fisheries Management and Climate Change
Climate change is with us and plans to mitigate the effects on Salmonids is hugely important. Habitat protection and improvements needs to continue. Our local angling club is very active in this regard and we need continued investment in headcount in Fisheries Ireland to lead and drive this work. Local anglers and clubs naturally have a vested interest in creating the optimal conditions and historically have supported fisheries management as it pertains to habitat.

Water Quality
Water quality in the Western Lakes continues to deteriorate and we conveniently ignore tackling the sources of the pollution. Run off from slurry spreading and intensive farming has contributed to this deterioration yet this never appears to be tackled. Similarly, effluent discharge from private septic tanks or indeed town schemes continues. Major investment from bodies such as Irish water has to continue and tackling the issues arising from agricultural practices has to happen. Fisheries Ireland must use it's influence to address these issues.

Feedback Details

Invasive Species
As already mentioned in my feedback I fully support the removal of bye-laws 806 and 809 as they apply to the Western Lakes. That no appropriate assessment was carried out prior to the introduction of these bye-laws where they apply to SAC's means that legally they should have no standing.

The on-going management of invasive species while feeling like an uphill battle is of vital importance to continue to protect native species be they plant or animal.

Stock Management
Feedback with regard to non-native species is included above.

With regard to brown trout and specifically referring to Lough Corrib there should be no change to the 4 trout over 13' limit. Many anglers practice catch and release already and research carried out by [redacted] acknowledged that in a large system such as Corrib, angling pressure from rod and line on trout stocks is negligible.

Habitat Management
Habitat management is again an on-going battle but forms an important part of the overall plan.

Other feedback
Overall I am in support of the plan as drafted by Fisheries Ireland. It is great to see that plans to continue to maintain the Great Western Lakes as Salmonid lakes will be enshrined in the overall plans going forward. For too long, it appeared that leadership in Fisheries Ireland was only focussed on box ticking and money saving exercises. The renewed focus and hopefully investment in feed on the ground and active management is welcomed and angling clubs associated with the lakes will continue to work with you.

[redacted]

From: Western Lakes Plan
Sent: Monday 19 September 2022 12:22
To: Western Lakes Plan
Subject: Great Western Lakes Questionnaire

Iascach Intíre Éireann
Inland Fisheries Ireland

Submitted on Mon, 19/09/2022 - 12:09

Contact details

Name
[redacted]

Email address
[redacted]

Feedback Details

Introduction
[redacted] **OUGHTERARD CO GALWAY I am willing to support the Western lakes plan I cannot state how important the trout and salmon fishing is to the economy in the west , I fell that all steps nissary to preserve the lake should be taken to lowering bag numbers per day to promote winter course fishing of puke etc as this along with trout and salmon bring to the lake by Germans I've spoken to that fish all year for this fish in my opinion it would also help lower the population of pike along with managing them to reduce there impact on the lakes and rivers feeding it**

[redacted]

From: Western Lakes Plan
Sent: Monday 19 September 2022 12:57
To: Western Lakes Plan
Subject: Great Western Lakes Questionnaire

Iascach Intíre Éireann
Inland Fisheries Ireland

Submitted on Mon, 19/09/2022 - 12:54

Contact details

Name
[redacted]

Email address
[redacted]

Feedback Details

Introduction
Hi just a test

[redacted]

From: Western Lakes Plan
Sent: Monday 19 September 2022 13:15
To: Western Lakes Plan
Subject: Great Western Lakes Questionnaire

Iascach Intíre Éireann
Inland Fisheries Ireland

Submitted on Mon, 19/09/2022 - 13:11

Contact details

Name
[redacted]

Email address
[redacted]

[redacted]

From: Western Lakes Plan
Sent: Monday 19 September 2022 14:35
To: Western Lakes Plan
Subject: Great Western Lakes Questionnaire

Iascach Intíre Éireann
Inland Fisheries Ireland

Submitted on Mon, 19/09/2022 - 13:40

Contact details

Name
[redacted]

Email address
[redacted]

Feedback Details

Introduction
Greater power needed for protection officers whether they fishery staff, county council staff or E.P.A. in prosecuting individuals or other bodies engaged in pollution of waterways.

The Great Western Lakes
Proper water monitoring required with serious up grading of spawning facilities badly required. Removal of invasive bream and predatory pike from main lake and spawning nursery streams. If this work is carried out and water quality improvement we can look forward to the lakes providing good recreational angling for locals and visitors.

Fish
Removal of invasive predators and bream as they are very competitive bottom feeders that seriously compete with trout for food

Stakeholder Engagement
All the agencies are in place to deal with water quality issues but unfortunately they don't seem to have the powers to enforce the law. So I hope the multi agency approach doesn't end up been a talking shop. It's more powers to give the existence bodies that's needed so they can do their job

Fisheries Management and Climate Change
As the climate warms more emphasis has to be put on relocation of juvenile fish in streams to deeper pools as low oxegan levels Leeds to mortality in mountain streams.

Water Quality
More protection officers required, more monitoring of sewerage plants and bad farming including forestry practices to be implemented.

Feedback Details

Invasive Species
Removal of predatory pike and bream especially as they compete with trout for food.

Stock Management
Return of predator control and bream and any other invasive species not native

Habitat Management
Restoration of damaged habitat to enhance trout and salmon numbers



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