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Assembly

Research and Information Service Bill Paper

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Fisheries Bill: Inland fisheries

NIAR 538-15

This Bill Paper provides an overview of the inland fisheries elements of the Fisheries Bill, as introduced to the Assembly on 7th December 2015. The paper identifies areas within the Bill which may benefit from further scrutiny.

This Bill Paper should be read in conjunction with NIAR 176-15 which examines the sea fishing elements of the Bill, and NIAR 685-15 which provides a framework for financial scrutiny of the Bill.

Key Points

- The Fisheries Bill deals with provisions relating to both sea and inland fisheries, and thus has elements which are the responsibility of the Department of Agriculture and Rural Affairs (DARD) and the Department of Culture, Arts and Leisure (DCAL) respectively;
- DARD and DCAL conducted a public consultation on a range of potential legislative proposals between August and November 2014;
- The Fisheries Bill was introduced to the Assembly on 7th December 2015;
- The Bill has 19 clauses, dealing with sea fisheries, inland fisheries, fixed penalty notices and general issues. This paper focuses on those elements which concern inland fisheries exclusively, that is, Clauses 10–13.
- There are a number of areas relating to these clauses which may benefit from further scrutiny; for example:
 - **Clause 10:** This would remove the requirement that a certificate from a Justice of the Peace accompany a fish dealer's licence application, but could the removal of this requirement increase the number of dealers to a level which may threaten inland fish stocks? There are currently 190 licensed fish dealers in Northern Ireland, more than twice as many as in 2009.
 - **Clause 11:** This would extend the current requirement that permission from DCAL must be acquired for the removal of material from a river bed to lakes also, in order to protect potential spawning grounds. Planning permission and an Environmental Impact Assessment are required for all new sand and gravel extraction operations, so does the extension of a permit from DCAL to include lake beds constitute unnecessary additional regulation?
 - **Clause 12:** This would enable DCAL to remove dams where an owner cannot be traced, but would such action destroy potentially important features of the historic environment? There may be costs associated with any archaeological mitigation measures.
 - **Clause 13:** This would require anyone taking water from a river, such as mill and hydropower operators, to fit a grill of 10mm aperture or less (but only for new installations). Is the scientific evidence base for the impact of small hydroelectric installations sufficiently robust to justify an amendment to legislation? Would the installation of permanent grills with small apertures pose a greater flood risk?
 - In terms of the broad justification for the inland fisheries clauses in the Bill, salmon and eel numbers have been in decline for at least four decades. However, while there will always be a degree of variation in stock numbers year-on-year, does a recent uplift in both species suggest that these legislative measures may not now be urgent?

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1 Background and context of the bill

1.1 Broad intentions of the bill

The Department of Agriculture and Rural Development (DARD) has indicated that the Fisheries Bill¹ is being introduced with the following intention:

The primary aim of the legislation would be to allow DARD to directly meet its EU obligations; provide adequate protection of marine environments; modernise enforcement powers; and allow effective and proportionate enforcement of sea fisheries and aquaculture licensing².

With regard to inland fisheries, the Department of Culture, Arts and Leisure (DCAL) is seeking to achieve the following aims in bringing forward the Bill:

DCAL is also proposing to take the opportunity to take powers to modernise its enforcement activity and to align, within the new legislation, the inland fisheries aspects of the 1966 Act with its obligations under EU Directives such as the Water Framework Directive and the EU Services Directive³.

1.2 Clauses of the Bill which deal with inland fisheries

The current Bill is seeking to make changes across a number of policy areas, including both sea fishing and inland fisheries. This paper focuses on the inland fisheries provisions within the Bill, specifically the following clauses:

Clause	Title	Brief description
10	Fish dealer's licence: no need for certificate of Justice of the Peace	This removes the requirement that a certificate from a Justice of the Peace must accompany a fish dealer's licence application.
11	Restriction on removal of material from bed of lake	Extends restrictions on the removal of material from the bed of a river to apply to lake beds as well.
12	Dams in rivers: fish passes etc	Current legislation stipulates that dam owners must provide and maintain fish passage in river dams for salmon, trout and eels; this would extend fish passes to lampreys. This clause also empowers the Department to remove a dam where an owner cannot be identified and where the construction of a fish passage is not considered feasible.
13	Gratings in certain watercourses	Requires anyone taking water from a river, such as mill and hydropower operators, to fit a grill of not more than 10mm aperture. This will only apply to new installations.

Table 1: Clauses within the Fisheries Bill examined in this paper

In addition, Clause 14 empowers DARD and DCAL to introduce fixed penalties for fishery offences. It should be noted that this Bill Paper does not examine Clause 14. While this clause would have an effect on the management of inland fisheries, since it

¹ Fisheries Bill: <http://nia1.me/2w3> Northern Ireland Assembly Bill 74/11–16.

² Department of Agriculture and Rural Development. 8.8.14. Correspondence to the Committee for Agriculture and Rural Development: 'Joint DARD/DCAL consultation on policy proposals for a Fisheries Bill'.

³ As above.

also relates to sea fishing it is unlikely that these provisions will be taken forward at this time.

1.3 Existing inland fisheries legislation in Northern Ireland

The most extensive piece of fisheries legislation in force in Northern Ireland is the Fisheries Act (Northern Ireland) 1966⁴. This Act was originally designed to extend the functions of the Ministry of Agriculture to fisheries, and to consolidate amendments to the previous Fisheries Acts, from 1842 to 1954.

The Act also established the Fisheries Conservancy Board (FCB) and defined its functions and responsibilities. The FCB was established in 1966 with responsibility for the conservation and protection of the salmon and inland fisheries of Northern Ireland, other than those which fall within the responsibility of the Loughs Agency. The FCB was abolished in 2009 and its functions passed to DCAL.

The structure of the Fisheries Act (Northern Ireland) 1966 is as follows:

Part	Brief description
1	Functions of the Ministry of Agriculture: including their role in the supervision and protection of fisheries, and in fostering the establishment and development of fisheries.
2	Fisheries Conservancy Board: sets out FCB's role in enforcing the Act, liaising with the department and any other relevant bodies, and making byelaws where necessary.
3	Fishing licences: includes the use of rods and fishing engines, the keeping and inspection of catch records, and the enforcement of fines for illegal fishing.
4	Protection of fisheries: includes the protection of young and breeding fish, the prohibition of pollution or poisoning of freshwater, and the prevention of trade in under-sized fish.
5	Regulation for fishing of salmon, eels and freshwater fish: covers the prohibition of certain fishing techniques, penalties for contravention, and the regulation of nets, traps and weirs.
6	Times of fishing for salmon, trout, pollen and eels: prescribes the existence of a closed season for the catching of these types of fish.
7	Restrictions on dealings in salmon, trout and eels: covers the prohibition of any kind of sale of illegally caught fish, the prohibition of any salmon, trout or eel sales at certain times of the year, the granting of fish trading licences, and the clear labelling of packages containing these types of fish.
8	Sea-fishing: includes the overall regulation of sea fishing, the registration of boats, the prohibition of certain forms of fishing engine or gear, and the setting of seasons.
9	Shell-fish and marine fish licences: covers the issuing of the various forms of licence, and activities deemed an offence, such as damage to, or dredging of, a shell-fish fishery.
10	Miscellaneous offences: these include the obstruction of lawful fishing, and unauthorised entry onto private or restricted fishing areas.
11	Authorised persons: prescribes the role of police officers and Fisheries Conservancy Board staff, and outlines procedures by which private water bailiffs are appointed for the protection of fisheries. The role and powers of private water bailiffs are also set out.
12	Supplemental provisions: covers such subjects as forfeitures, penalties, forms of evidence required, and the role of the Appeals Commission.

Table 2: An overview of the Fisheries Act (Northern Ireland) 1966

⁴ Fisheries Act (Northern Ireland) 1966: <http://www.legislation.gov.uk/apni/1966/17/part/VIII>

1.4 European legislation

Various European Union directives and regulations have been cited by DARD and DCAL as having relevance to the current Fisheries Bill. With regard to those clauses which relate specifically to inland fisheries, the following instruments are of particular note.

Water Framework Directive

The Water Framework Directive (2000/60/EC)⁵ establishes long-term objectives for water protection in the EU, applying to surface waters (lakes and rivers), transitional waters (estuaries), coastal waters (up to one nautical mile from land), and to ground waters (water below the surface of the ground).⁶ Its aim is to achieve 'good ecological and chemical status' for waters within the European Union by 2015.

The key principles within the WFD are:

- expanding the scope of water protection to all waters, surface waters and groundwater;
- achieving 'good status' for all waters by a set deadline;
- water management based on river basins;
- a 'combined approach' of emission limit values and quality standards;
- ensuring correct water pricing based on 'true costs';
- promoting greater public involvement;
- streamlining legislation by rationalising seven European directives into one.

As a response to this, a Statutory Rule was introduced in 2003 which sets out the responsibilities under the Directive for the relevant departments⁷. The Department of the Environment (DOE) acts as the lead department in implementing and regulating the necessary measures.

Other departments are also named as having a direct responsibility under this legislation, with DARD, the Department for Regional Development (DRD), and DCAL required to 'exercise their relevant functions in a manner which secures compliance with the requirements of the Directive'.

Therefore, if DCAL does not, through the Fisheries Act (Northern Ireland) 1966 and associated legislation, keep up with its responsibilities towards inland fisheries, it may

⁵ Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy [online] available from: <http://nia1.me/vv>

⁶ Directive 2000/60/EC, as above: Articles 1&2.

⁷ Statutory Rule 2003 No. 544: The Water Environment (Water Framework Directive) Regulations (Northern Ireland) 2003. Office of Public Sector Information: <http://www.opsi.gov.uk/sr/sr2003/20030544.htm> Accessed 29.9.10.

contravene obligations under the Water Framework Directive to achieve good ecological status⁸.

The 'Eel Regulation'

In 2007, a new eel regulation was approved by the European Council, intended to implement measures 'for the recovery of the European eel'. Council Regulation (EC) No 1100/2007⁹ sets out the following measures:

- Each member state must introduce an Eel Management Plan for each eel river basin within their region. These should be subjected to evaluation by the Scientific, Technical and Economic Committee for Fisheries (STEF);
- Special measures must be taken to increase the numbers of eels less than 12 cm in length released into European waters as well as for the transfer of eel less than 20 cm in length for the purpose of restocking;
- By 2013, 60% of eels less than 12 cm in length caught annually should be reserved for restocking;
- A control and monitoring system should be established;
- Measures to ensure control and enforcement of imports and exports of eel;
- Measures to be implemented 'as soon as possible to reduce the eel mortality caused by factors outside the fishery, including hydroelectric turbines, pumps or predators'.

As a result of this Regulation, DCAL introduced an Eel Management Plan in 2010, along with a Statutory Rule¹⁰ to amend the current Northern Ireland legislation. For the three river basins of Northern Ireland, this plan has the following effect:

- The Lough Neagh Bann catchment, Europe's largest wild eel fishery, will continue to operate at current levels, which have been judged sustainable. The fishery will be subject to close regulation and monitoring.
- The Lough Erne fishery, part of the North West catchment area, has been judged unsustainable. As such commercial fishing in the area has ceased.
- The North East basin contains no eel fisheries and will not be affected.

⁸ Scotland Northern Ireland Forum for Environmental Research. 2011. *Impact of Run-of-River Hydro-Schemes upon Fish Populations. Phase 1: Literature Review*. SNIFFER: Project WFD114: <http://nia1.me/2vx>: p3.

⁹ Council Regulation (EC) No 1100/2007 of 18 September 2007, establishing measures for the recovery of the stock of European eel, *Official Journal of the European Union*: <http://bit.ly/bYotHH> Accessed 27.9.10.

¹⁰ Statutory Rule 2010 No. 166: Fisheries – Eel Fishing Regulations (Northern Ireland) 2010. Office of Public Sector Information: http://www.opsi.gov.uk/sr/sr2010/nisr_20100166_en_1 Accessed 1.10.10.

Habitats Directive

The consultation document published by DARD and DCAL states that,

*'In order to ensure DCAL meets its obligations under the Water Framework Directive to ensure free passage of fish and to ensure that salmon are protected as required by the Habitats Directive, a number of amendments to the 1966 Act are proposed.'*¹¹

The Habitats Directive¹² was introduced in 1992 and is intended 'to help maintain biodiversity in the Member States by defining a common framework for the conservation of wild plants and animals and habitats of Community interest'.

The Atlantic salmon (*Salmo salar*) is listed in Annex 2 of the Habitats Directive, and is therefore a 'species of community interest whose conservation requires the designation of special areas of conservation'. There are currently 57 special areas of conservation in Northern Ireland, with five featuring populations of Atlantic salmon. These are¹³:

- River Faughan and Tributaries
- River Foyle and Tributaries
- River Roe and Tributaries
- Lough Melvin, Fermanagh
- Owenkillew River, Tyrone

Furthermore, the Atlantic salmon is listed in Annex 5 as a species 'whose taking in the wild and exploitation may be subject to management measures'.

The Conservation (Natural Habitats etc.) Regulations (Northern Ireland) 1995¹⁴ update Northern Ireland legislation and address the interface with the Habitats Directive. Salmon is included in Schedule 3 of the 1995 regulations, which sets out prohibited methods for capturing or killing the species.

In March 2014, three regulations¹⁵ were passed in order to 'implement mandatory catch and release for salmon and sea trout angling and to prohibit commercial salmon and sea trout netting'¹⁶.

¹¹ Department of Agriculture and Rural Development & Department of Culture, Arts and Leisure. 2014. *Consultation on Policy Proposals for a Fisheries Bill*.

¹² European Commission: Environment. Habitats Directive: <http://nia1.me/qu>

¹³ Joint Nature Conservation Committee. 'Special Areas of Conservation: 1106 Atlantic salmon *Salmo salar*': <http://nia1.me/qt> Accessed 21.12.15.

¹⁴ Statutory Rule 1995 No. 380: The Conservation (Natural Habitats, etc.) Regulations (Northern Ireland) 1995. Office of Public Sector Information: http://www.opsi.gov.uk/sr/sr2009/nisr_20090008_en_1 Accessed 28.9.10.

¹⁵ Fisheries Regulations (Northern Ireland) 2014: <http://www.legislation.gov.uk/nisr/2014/17/contents/made>; Salmon Drift Net Regulations (Northern Ireland) 2014: <http://www.legislation.gov.uk/nisr/2014/16/contents/made>; Salmon Netting Regulations (Northern Ireland) 2014: <http://www.legislation.gov.uk/nisr/2014/15/contents/made>

¹⁶ Department of Culture, Arts and Leisure. <https://www.dcalni.gov.uk/articles/salmon-conservation> Page accessed 21.12.15.

European Services Directive

The intention of the European Services Directive is 'to realise the full potential of services markets in Europe by removing legal and administrative barriers to trade'¹⁷. As is set out in Section 2 of this paper, the Services Directive seeks to ensure that applications for trading licences, such as a fish dealer's licence, can be made from a distance and entirely electronically.

Further detail is provided on the European Services Directive, below.

1.5 Public consultation

DARD and DCAL conducted a public consultation on proposals for the introduction of amended fisheries legislation between August and November 2014¹⁸.

The Departments informed around 1800 stakeholders of the consultation process and also advertised the process within the local press.

Whilst no formal consultation meetings were held, 57 written responses were submitted to the Departments from a range of different sectoral interests, including:

- sea-fisheries producer organisation (ANIFPO);
- environmental organisations/interests;
- a sea-angling representative group (IFSAs);
- angling clubs;
- Irish Federation of Sea Anglers;
- mill/hydroelectric providers;
- a quarry industry representative;
- The Honourable the Irish Society;
- Waterways Ireland;
- two district councils;
- Inland Fisheries Ireland;
- Ulster Coarse Fishing Federation;
- Centre for Maritime Archaeology, Ulster University;
- the Lough Neagh Fishermen's Association; and
- a number of individuals.

¹⁷ European Commission: Internal Market, Industry, Entrepreneurship and SMEs. 'Services Directive': http://ec.europa.eu/growth/single-market/services/services-directive/index_en.htm Page consulted 8.12.15.

¹⁸ Department of Agriculture and Rural Development & Department of Culture, Arts and Leisure. 2014. *Consultation on Policy Proposals for a Fisheries Bill*.

1.6 Does the evidence suggest that inland fish stocks are declining?

The Explanatory Memorandum for the Bill states that,

With regard to inland fisheries, there is increased pressure to conserve protected fish species while accommodating the interests of those in the hydro industry and maintaining sustainable stocks at levels required to be attractive to local and tourist anglers. As such, regulation is required to manage the various competing interests¹⁹.

The following paragraphs examine some of the available data for both wild salmon stocks and eel stocks.

Salmon

DCAL states the following with regard to the current status of salmon stocks:

It is now widely acknowledged that stocks of wild Atlantic salmon across its range are in serious decline and southern stocks, including some in North America and Europe, are threatened with extinction...Long term monitoring of the survival of salmon during the marine phase of their life cycle at Bushmills Salmon Station shows a decline from around 30% returning from the sea prior to 1997 to less than 5% today²⁰.

In order to monitor the status of salmon stocks, countries which are a party to the North Atlantic Salmon Conservation Organisation (NASCO) define conservation limits (CL) for a number of rivers. Levels of egg deposition in gravels at the base of the river are used to monitor the percentage of compliance with these conservation limits. A compliance level below 100% indicates that the conservation limit was not met.

The percentage compliance for a number of rivers within the DCAL administered area is as follows²¹:

River	Fishery year						
	2007	2008	2009	2010	2011	2012	2013
Blackwater	-	-	-	-	64	83	45
Bush	170	103	62	56	46	79	137
Clady	-	-	-	-	163	120	159
Glendun	77	96	33	64	76	88	178
Maine	96	170	68	61	77	129	53
Shimna	-	-	-	99	53	-	-

Table 3: Percentage compliance with conservation limits for rivers in the DCAL area

¹⁹ Department of Agriculture & Rural Development & Department of Culture, Arts and Leisure. 2015. *Fisheries Bill: Explanatory and Financial Memorandum*: p5.

²⁰ Department of Culture, Arts and Leisure. 'Salmon conservation': <https://www.dcalni.gov.uk/articles/salmon-conservation> Page accessed 21.12.15.

²¹ Department of Culture, Arts and Leisure & Northern Ireland Statistics & Research Agency. 2015. *Digest of Statistics for Salmon and Inland Fisheries in the DCAL Jurisdiction*: DCAL Findings 16/2014-15: <http://nia1.me/2w1>: p16–17.

It can be seen from this table that for the Bush River, the Clady River and the Glendun River the conservation limits were met in 2013. The Blackwater River and the Maine River did not meet their conservation limits while the Shimna was not monitored in 2012 or 2013.

A further issue in monitoring the numbers of the salmon population is the proportion of salmon returning to rivers to spawn each winter. The results of long term monitoring of the survival of salmon during the marine phase of their lifecycle at the Bushmills Salmon Station can be seen below²².

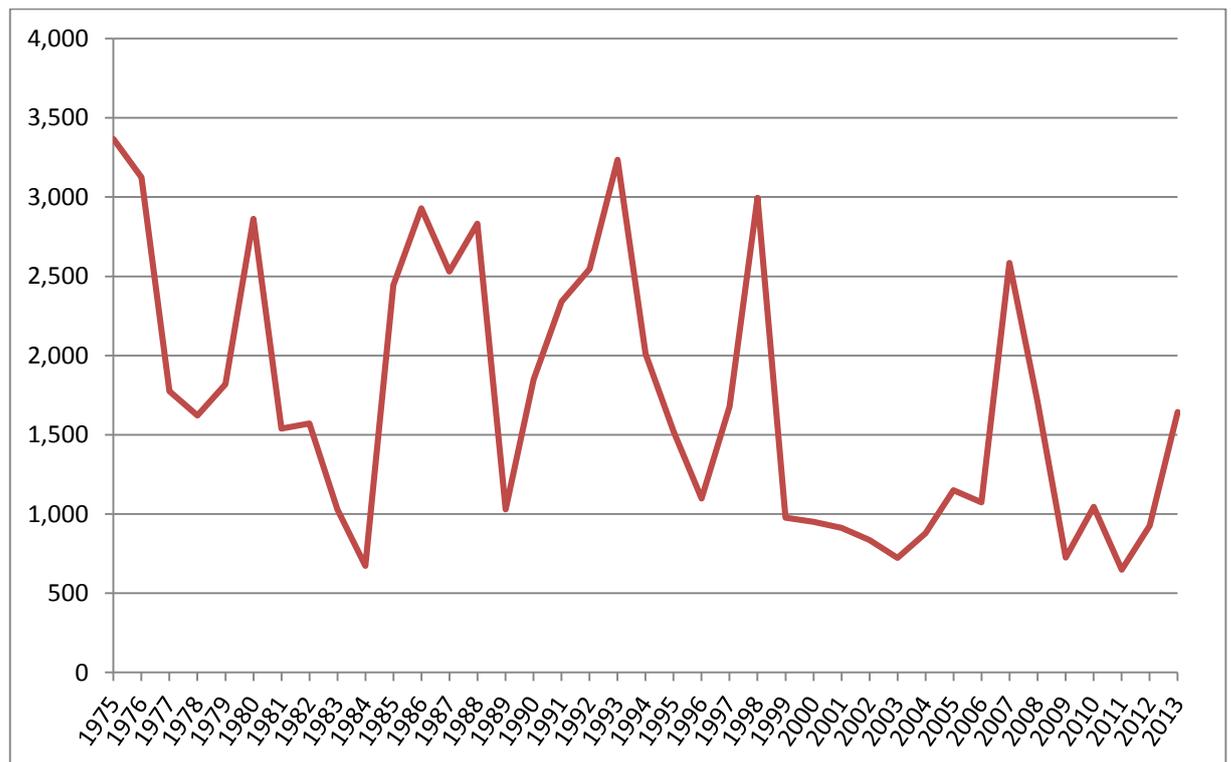


Figure 1: Wild adult salmon numbers returning to the River Bush each year 1975–2013

While year-on-year fluctuation can be caused by a wide variety of factors, the overall trend from the 1970s until the 2010s can be seen from this data to have been one of decline. However, the number of wild adult salmon returning to the River Bush in 2013 (1,644) was higher than the previous year (926), and the 2013 figure is well above the previous ten year average (2003–2012), of 1,147²³.

Data on the abundance of fry (baby salmon up to the age of six weeks) also indicates an increase in salmon numbers in 2013 compared with the previous year. Fry abundance is measured on all salmon index rivers every year at precisely the same sites so that comparisons can be made year-on-year²⁴. Figures for the River Bush

²² Department of Culture, Arts and Leisure & Northern Ireland Statistics & Research Agency. 2015. *Digest of Statistics for Salmon and Inland Fisheries in the DCAL Jurisdiction: DCAL Findings 16/2014-15*: <http://nia1.me/2w1>: p13.

²³ Department of Culture, Arts and Leisure & Northern Ireland Statistics & Research Agency. 2015. *Digest of Statistics for Salmon and Inland Fisheries in the DCAL Jurisdiction: DCAL Findings 16/2014-15*: <http://nia1.me/2w1>: p13.

²⁴ Crozier, WW & Kennedy, GJA 1994. 'Application of semi-quantitative electrofishing to juvenile salmonid stock surveys'. *Journal of Fish Biology* 45 (1): 159-164.

indicate an increase in 2013 to 13.5, from 8.9 the previous year. The figure for 2013 is also the second highest recorded, and more than double the previous ten year average (2003–2012) of 6.4²⁵.

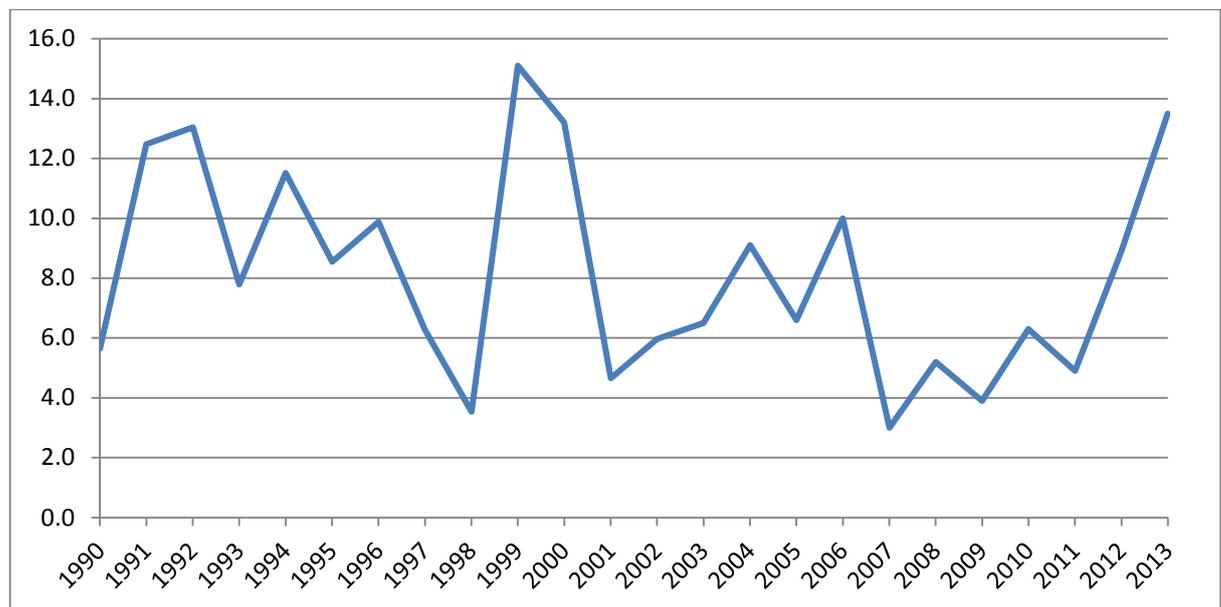


Figure 2: Salmon fry index for the River Bush each year 1990–2013

Eels

DCAL states the following with regard to the current status of eel stocks:

The European eel stock has been in rapid decline since around 1980. This long term decline continues to show no sign of recovery and is a matter for considerable concern. A number of causes have been suggested including changes in ocean climate, habitat loss, predation, hydroelectric turbine mortality, over-exploitation, pollution and parasites²⁶.

One measure of the abundance of eels is the number naturally recruited by the capture and upstream transport of glass eel in the estuary of the River Bann using hoop and drag nets²⁷. The following line graph shows the number of eels naturally recruited to Lough Neagh from 1965 to 2013.

²⁵ Department of Culture, Arts and Leisure & Northern Ireland Statistics & Research Agency. 2015. *Digest of Statistics for Salmon and Inland Fisheries in the DCAL Jurisdiction*: DCAL Findings 16/2014-15: <http://nia1.me/2w1>: p7.

²⁶ Department of Culture, Arts and Leisure. 'Eel conservation': <https://www.dcalni.gov.uk/articles/eel-conservation> Page accessed 21.12.15.

²⁷ Evans, DW. 2004. *Northern Ireland Glass Eel Survey*. DARD Science and Queens University Belfast, Internal report to DCAL NI; Evans, D. 2005. *Report on Glass Eel surveys*. Unpublished report to the Department of Culture, Arts and Leisure for Northern Ireland, Inland Fisheries Branch: both cited in Department of Culture, Arts and Leisure & Northern Ireland Statistics & Research Agency. 2015. *Digest of Statistics for Salmon and Inland Fisheries in the DCAL Jurisdiction*: DCAL Findings 16/2014-15: <http://nia1.me/2w1>

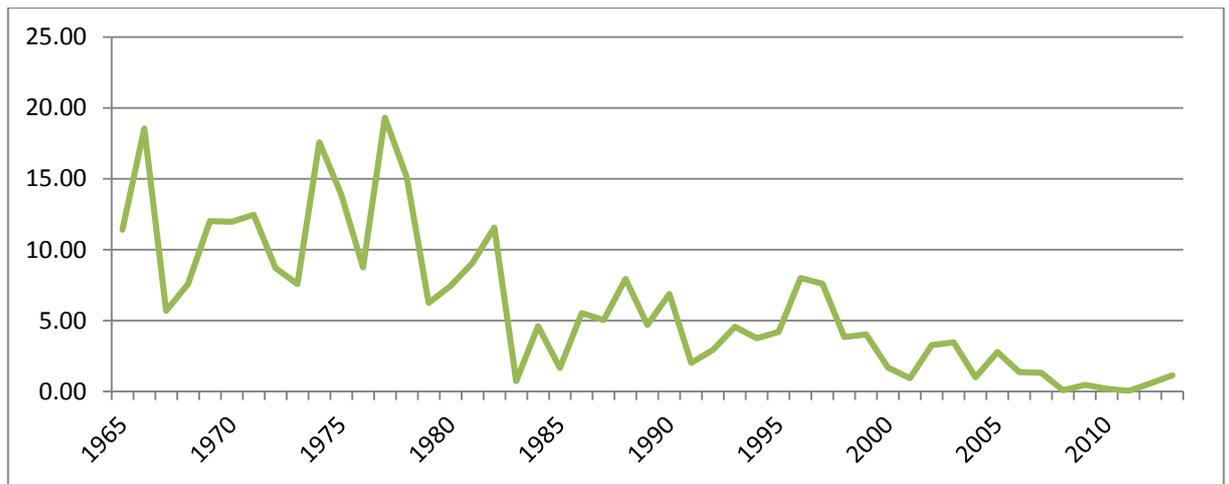


Figure 3: Natural recruitment of eels to Lough Neagh each year 1965–2013 (figures in millions)²⁸

It can be seen from this figure that in the decade from 1965 (1965–1974), the average annual natural recruitment of eels was 11.36 million. In the following decades, the average annual natural recruitment of eels declined from 9.68 million (1975–1984), to 4.51 million (1985–1994) and then 3.81 million (1995–2004). The average annual natural recruitment of eels in the most recent decade (2004–2013) was 0.9 million.

From 1984, additional glass eels (eels which have just arrived in riverine waters from the sea) were purchased from elsewhere and introduced to Lough Neagh.

In 2013, 1.15 million eels arrived in Lough Neagh naturally, compared with 0.57 million in 2012, 0.05 million in 2011 and 0.20 million in 2010.

The paragraphs which follow examine each of the specific clauses associated with inland fisheries in the Fisheries Bill.

²⁸ Department of Culture, Arts and Leisure & Northern Ireland Statistics & Research Agency. 2015. *Digest of Statistics for Salmon and Inland Fisheries in the DCAL Jurisdiction: DCAL Findings 16/2014-15*: <http://nia1.me/2w1>: p23.

2 Bill provisions relating to inland fisheries

The following paragraphs describe each of the proposed amendments to existing legislation contained within the Fisheries Bill, and suggest some areas for potential scrutiny.

2.1 Clause 10: Changes to requirements for a fish dealer's licence

Clause 10 of the Bill seeks to change the nature of the application for a fish dealer's licence. The Explanatory and Financial Memorandum states in more detail that,

This clause amends section 114 of the Fisheries (Northern Ireland) Act 1966 to remove the need for an application for a fish dealer's licence to be accompanied by a certificate from a Justice of the Peace stating that the applicant is a fit and proper person to hold such a licence²⁹.

Elsewhere in the Explanatory and Financial Memorandum, it is suggested that such a change is required in order to 're-align' the Fisheries Act (Northern Ireland) 1966 with obligations under EU Directives, specifically in this case the EU Services Directive. The intention of this Directive is 'to realise the full potential of services markets in Europe by removing legal and administrative barriers to trade'³⁰. Under Article 5, Paragraph 1 of the Directive states that,

Member States shall examine the procedures and formalities applicable to access to a service activity and to the exercise thereof. Where procedures and formalities examined under this paragraph are not sufficiently simple, Member States shall simplify them.

Among the 'legal and administrative barriers to trade', the following may be of particular relevance here. Article 3 states that,

Where Member States require a provider or recipient to supply a certificate, attestation or any other document proving that a requirement has been satisfied, they shall accept any document from another Member State which serves an equivalent purpose or from which it is clear that the requirement in question has been satisfied. They may not require a document from another Member State to be produced in its original form...

Furthermore, under Article 8: Procedures By Electronic Means, the Directive states that,

Member States shall ensure that all procedures and formalities relating to access to a service activity and to the exercise thereof may be easily

²⁹ Department of Agriculture & Rural Development & Department of Culture, Arts and Leisure. 2015. *Fisheries Bill: Explanatory and Financial Memorandum*: p8.

³⁰ European Commission: Internal Market, Industry, Entrepreneurship and SMEs. 'Services Directive': http://ec.europa.eu/growth/single-market/services/services-directive/index_en.htm Page consulted 8.12.15.

completed, at a distance and by electronic means, through the relevant point of single contact and with the relevant competent authorities.

The Directive came into force through the Provision of Services Regulations 2009³¹.

There are currently 190 licensed fish dealers in Northern Ireland³², more than twice as many as the figure for 2009 (81)³³.

A view was expressed during the consultation process that removing the need to involve a Justice of the Peace in the licensing process may potentially make it easier for a licence to be acquired. For example, the Ulster Coarse Fishing Federation stated that,

We can follow the argument that the current practice of involving a JP in the process could be viewed by the EU as a barrier to trade. However, if the possibility of relaxing the issue of Fish Dealer's Licences is to be considered it should be countered with a tightening of the regulations under which they operate³⁴.

Is it possible that the removal of a requirement for a certificate from a Justice of the Peace will increase the number of such dealers to a level which may threaten the sustainability of inland fish stocks?

2.2 Clause 11: Restriction on removal of material from the lake bed

Clause 11 of the Bill seeks to amend Section 48 of the Fisheries Act (Northern Ireland) 1966. At present, this Section states that,

(5) If any person removes any material from the bed of any river— .

*(a) without the consent of the Department under subsection (6);
or,*

(b) otherwise than in accordance with the conditions of a consent granted by the Department under subsection (6), he shall be guilty of an offence.

(6) The Department may, on the application of any person, grant its consent to the removal of material from the bed of a river on such conditions as it thinks fit.

Clause 11 would add 'or lake' into these Subsections, as well as Subsection 8 (which confines permission to a specific stretch of water).

³¹ Provision of Services Regulations 2009: http://www.legislation.gov.uk/uksi/2009/2999/pdfs/ukxi_20092999_en.pdf

³² Information provided by the Department of Culture, Arts and Leisure following an information request, 8.12.15.

³³ Department of Culture, Arts and Leisure & Northern Ireland Statistics & Research Agency. 2015. *Digest of Statistics for Salmon and Inland Fisheries in the DCAL Jurisdiction: DCAL Findings 16/2014-15*: <http://nia1.me/2w1>: p42.

³⁴ Ulster Coarse Fishing Federation. 2014. *Response to Consultation on Policy Proposals for a Fisheries Bill*.

The consultation document states that this change is proposed in order ‘to encompass all bodies of water which act as spawning beds for fish’.

Doubts have been raised about this proposal by consultation respondents in two main respects. Firstly, some anglers questioned the feasibility of the Department being able to prove that a particular stretch of water was specifically a spawning ground³⁵. Secondly, the Quarry Products Association stated that ‘permitting for dredging of spawning beds of fish is certainly appropriate where no other regulation exists to prevent damage’, but that such activities are already permitted through planning conditions³⁶.

Indeed, if dredging is considered as the working of minerals, then this would constitute a mining operation, as stated in Section 250 of the Planning Act (Northern Ireland) 2011³⁷. Under Section 23 of that Act, mining operations are classed as ‘development’, and therefore require planning permission. The Planning (Environmental Impact Assessment) Regulations (NI) 2012³⁸ requires that such permission be granted and, in addition, in assessing any application that would impact on Lough Neagh Special Protection Areas, a Habitats Regulations Assessment must also be conducted.

The Planning (Environmental Impact Assessment) Regulations (Northern Ireland) 2015³⁹ state in Schedule 2 that any development involving the ‘extraction of minerals by fluvial or marine dredging’ requires an Environmental Impact Assessment.

However, with regard to sand extraction from the bed of Lough Neagh, the Minister for the Environment has indicated that ‘there is currently no planning permission for sand extraction on the Lough’ and that ‘unauthorised extraction of sand from Lough Neagh has been continuing over a period of years’⁴⁰. It is not clear to what extent such operations are carried out on sections of the lake bed which constitute spawning grounds.

The nature of this regulatory context prompts a number of potential scrutiny points. **For example, if planning permission and an Environmental Impact Assessment is required for all new sand and gravel extraction operations, does the extension of a permit from DCAL to include extraction from lake beds constitute an unnecessary additional regulation?**

For DCAL to successfully pursue a conviction under the Fisheries Act (Northern Ireland) 1966 for unauthorised removal of sand and gravel from a lake bed, would it have to prove that it was a spawning ground?

³⁵ For example, Inler Angling Club, Comber. 2014. *Response to Consultation on Policy Proposals for a Fisheries Bill*.

³⁶ Quarry Products Association. 2014. *Response to Consultation on Policy Proposals for a Fisheries Bill*.

³⁷ Planning Act (Northern Ireland) 2011: <http://www.legislation.gov.uk/nia/2011/25/contents>

³⁸ Planning (Environmental Impact Assessment) Regulations (NI) 2012: <http://www.legislation.gov.uk/nisr/2012/59/made>

³⁹ The Planning (Environmental Impact Assessment) Regulations (Northern Ireland) 2015:

<http://www.legislation.gov.uk/nisr/2015/74/contents/made>

⁴⁰ Written response from the Minister of the Environment to Assembly Question AQW 31750/11-15, 28.3.14.

Is the nature of baseline data on spawning grounds currently sufficient to allow for effective monitoring and enforcement?

2.3 Clause 12: Removal of dams in rivers

Addition of lampreys

Clause 12 of the Bill amends Section 54 of the Fisheries Act (Northern Ireland) 1966 which requires dam owners to provide fish passage for salmon, trout and eels. At present, Section 54 of the 1966 Act specifies these three species only.

Allowing free passage for eels is particularly important as they first migrate upstream from the ocean to freshwater as 'glass eels', prior to becoming elvers. For salmon and some trout, migration upstream occurs instead when the fish is an adult and it returns to the river to spawn.

The amendment proposed by Clause 12 would add lampreys to this list of species. It is not clear whether this refers to the sea lamprey, the river lamprey, the brook lamprey, or simply all species of lamprey. The brook lamprey (*Lampetra planeri*), the river lamprey (*Lampetra fluviatilis*) and the sea lamprey (*Petromyzon marinus*) are all specified in Annex 2 of the Habitats Directive which lists 'animal and plant species of community interest whose conservation requires the designation of special areas of conservation', and the river lamprey is also named in Annex 5, 'species of community interest subject to management measures'. The river lamprey is named as a Priority Species in the *Northern Ireland Biodiversity Strategy* of 2002⁴¹.

The consultation document which preceded the Fisheries Bill stated that,

*River lampreys in particular, are poor swimmers and are less able to pass barriers than sea lampreys and thus warrant special attention*⁴².

However, respondents to the consultation raised complaints that fish passes suited to lampreys may also allow other, less desirable, species through⁴³, and that lampreys are in fact a pest which act as a parasite on salmon⁴⁴.

⁴¹ Department of the Environment. 2002. *Northern Ireland Biodiversity Strategy*.

⁴² Department of Agriculture & Rural Development & Department of Culture, Arts and Leisure. 2014. *Consultation on Policy Proposals for a Fisheries Bill*: p38.

⁴³ Glens Angling Club. 2014. *Response to Consultation on Policy Proposals for a Fisheries Bill*.

⁴⁴ The Honourable the Irish Society. 2014. *Response to Consultation on Policy Proposals for a Fisheries Bill*.

Removal of dams

Clause 12 would also enable DCAL to,

...(instead of causing a fish pass to be constructed under subsection (5)) cause the dam to be removed.

This clause states that the power to remove a dam will only be exercised,

Where the Department is unable to establish who owns the dam despite taking reasonable steps to do so...

Some mill owners have expressed concern through the consultation process that the arbitrary construction date of 10th August 1842, dams built after which may be removed, may cause industrial heritage from the later nineteenth and early twentieth centuries to be damaged. For example, one such owner responded to the consultation as follows:

These structures by their nature are very old and unstable once modified. They form a valuable part of the industrial heritage and the imposition of fish passes to many of these could lead to their destruction and the loss of valuable historical assets⁴⁵.

It may be the case that mill features for which an owner cannot be established may be features of some antiquity. Indeed, a consultation response from the Centre for Maritime Archaeology at Ulster University questioned the nature of the process through which a dam may be removed.

In summary, we feel that these amendments give DCAL the power to alter structures that may be of archaeological/historic significance. However, the consultation document does not make clear whether historic environment issues will be consulted on (with the appropriate specialists) or will even be considered.

If Clause 12 provides the Department with the power to remove a dam if an owner cannot be traced, it may be relevant to ascertain whether they will be considered a developer within the planning system and therefore subject to the guidance provided by the Department of the Environment in Planning Policy Statement 6: Planning Archaeology and the Built Heritage⁴⁶. The following table describes the three policies which may be of particular relevance in this regard.

⁴⁵ Alterity Investments. 2014. *Response to Consultation on Policy Proposals for a Fisheries Bill*.

⁴⁶ Department of the Environment. *PPS 6: Planning, Archaeology and the Built Heritage*: <http://nia1.me/2w2>

Policy	Guidance
BH2	Development proposals which would adversely affect archaeological sites or monuments which are of local importance or their settings will only be permitted where the Department considers the importance of the proposed development or other material considerations outweigh the value of the remains in question.
BH3	Where the impact of a development proposal on important archaeological remains is unclear, or the relative importance of such remains is uncertain, the Department will normally require developers to provide further information in the form of an archaeological assessment or an archaeological evaluation. Where such information is requested but not made available the Department will normally refuse planning permission.
BH4	Where it is decided to grant planning permission for development which will affect sites known to contain archaeological remains, the Department will impose conditions to ensure that appropriate measures are taken for the identification and mitigation of the archaeological impacts of the development, including where appropriate the completion of a licensed excavation and recording of remains before development commences.

Table 3: Policy statements within PPS 6 which may be relevant in considering Clause 12 of the Bill

It is unclear how many such dams or associated features are in existence in Northern Ireland, and more difficult still to ascertain for how many ownership is unknown.

The Northern Ireland Sites and Monuments Record returns seven records using the search term ‘water mill’, though these are likely to relate to more ancient mill features identified specifically through archaeological work⁴⁷. The Industrial Heritage Record lists 4,225 entries for sites which are probably water powered mills, but when a broader categorisation of mill ponds, races and dams are also taken into account the total figure for sites related to water mills is 6,773⁴⁸.

Not all such water mills will necessarily have had a dam, as, historically, smaller mills – particularly those in the countryside – would not have made use of a mill dam or pond, with the flow of the watercourse passing directly on to the mill⁴⁹. Nevertheless, given the number of water mills in use over the last four centuries in particular, and consequently the nature of the surviving industrial heritage in Northern Ireland, it is a possibility that a number of historic mill sites may be significantly altered or entirely removed as a result of Clause 12. The process through which such removals would occur is not made clear in the Bill but, as Table 3 indicates, an archaeological assessment, evaluation or mitigation exercise may need to be carried out prior to removal or modification. If this is the case, there would be a financial impact for the Department.

Has DCAL made an estimate of the number of installations for which an owner cannot be traced and which it would seek to modify or remove?

For any such actions, would historic or archaeological structures be subject to the same planning conditions as other development work? If so, has the

⁴⁷ Northern Ireland Sites and Monuments Record: <http://apps.ehnsni.gov.uk/ambit/Default.aspx> Database consulted on 11.12.15, with further advice provided by Historic Environment Division, Department of the Environment on 14.12.15.

⁴⁸ Information provided by Historic Environment Division, Department of the Environment on 14.12.15 following an information request.

⁴⁹ McCutcheon, WA. 1980. *The Industrial Archaeology of Northern Ireland*: Her Majesty's Stationery Office: p235.

Department made any estimates of the total cost of such works, including recording, mitigation and any subsequent construction?

Does the Fisheries Bill need to specify which lamprey is to be accommodated in fish passes and would this have a knock-on effect on salmon?

2.4 Clause 13: Gratings in watercourses

Clause 13 of the Bill would amend Section 59 of the 1966 Act which states that where water is to be abstracted from lakes or rivers, a grating must be set within the watercourse to prevent fish from entering and being injured or killed by the abstraction process. For example, in the case of a mill race or a diversion channel for a hydropower installation, at present a grating with a maximum clearance of either 25mm or 51mm must be installed, depending on the age and position of the grating.

Clause 13 of the current Bill would change this such that ‘in the case of any grating installed or renewed on or after the relevant date’ the maximum grating size would be 10mm.

Specifications for existing gratings remain the same, as does the requirement that an additional wire lattice ‘of such dimensions as to effectually prevent the admission of fry or small fish into the watercourse’ is fitted over 25mm and 51mm gratings ‘during the months of March, April and May and at any other time when the fry of salmon or trout are descending the river or lake’. Clause 13 would effectively remove the need for an additional wire lattice over new gratings. The consultation document which DARD and DCAL published in August 2014 stated that,

It would be unfair on current mill users to implement this retrospectively and so the wire lattice requirement will remain for historical mills⁵⁰.

Furthermore, the Explanatory and Financial Memorandum states that ‘exemptions will be permitted where the Department is satisfied that sufficient arrangements will be made by means other than a 10mm grill size⁵¹.

The earlier consultation document described the purpose of the proposed amendment of 10mm for all *new* gratings as follows:

The purpose of these provisions is to prevent ascending fish from being attracted into the narrow leads used in connection with mill dams where they would be easy to catch by illegal means. The placing of wire lattices is to protect the entry into these waterways of small fish descending the river in spring.

⁵⁰ Department of Agriculture and Rural Development & Department of Culture, Arts and Leisure. 2014. *Consultation on Policy Proposals for a Fisheries Bill* : p39.

⁵¹ Department of Agriculture and Rural Development & Department of Culture, Arts and Leisure. 2015. *Fisheries Bill: Explanatory and Financial Memorandum*: p9.

While the Explanatory and Financial Memorandum does not state specifically that active mills or hydropower turbines damage or kill fish, the consultation document mentions that,

The proposals focus on mitigating the influences of man-made barriers such as dams, weirs, sluices and hydroelectric turbines⁵².

A number of consultation respondents, particularly owners or operators of such installations, have stated that the evidence that fish are damaged or killed by hydroelectric installations is mixed and that different turbine designs will have different effects on fish passage⁵³. For example, studies commissioned by the Environment Agency in England and published in 2007⁵⁴ and 2008⁵⁵ indicated low levels of damage and diversion to salmonid species and eels from Archimedes screw turbines.

In 2011 and 2012, the Scotland and Northern Ireland Forum for Environmental Research (SNIFFER) funded a piece of research carried out by the Hull International Fisheries Institute which examined the impact of hydro-schemes on fish populations⁵⁶. This research found difficulties in assessing impacts with certainty in cases of smaller hydro-schemes as most of the existing evidence derives from large installations. Furthermore, evidence gathering of impacts at smaller schemes has been impeded by natural variations in fish numbers year-to-year, making it difficult to assess the impact of a single hydro-scheme on fish migration⁵⁷.

In lieu of good quality and reliable data from smaller schemes, the evidence from larger schemes was used by the SNIFFER project team to make the following conclusions:

Large scale and run-of-river hydropower schemes were found to have impacts on fisheries related to impoundment structures impeding migration, altered flow regime in the depleted channel associated with diversion of water through the turbine, risks of fish entrainment through the turbines and associated mortality or damage as they pass through the turbines, loss of weir pool fish spawning and nursery habitat, plus potential cumulative effects of multiple schemes on the same river⁵⁸.

However, the SNIFFER project team also noted that there is a degree of variation in impacts depending on such factors as turbine design, screening and whether fish pass

⁵² DARD & DCAL. 2014. *Consultation on Policy Proposals for a Fisheries Bill* : p40.

⁵³ For example, see responses to *Consultation on Policy Proposals for a Fisheries Bill* (2014) from British Hydropower Association, Carncairn Hydroelectric, Ballivey Hydro Ltd and a number of individual installation owners.

⁵⁴ Kibel, P. 2007. *Fish Monitoring and Live Fish Trials. Archimedes Screw Turbine, River Dart*. FISHTEK Consulting.

⁵⁵ Kibel, P & Coe, T. 2008. *Archimedes Screw Turbine Fisheries Assessment. Phase II: Eels and Kelts*. FISHTEK Consulting.

⁵⁶ Scotland Northern Ireland Forum for Environmental Research. 2011. *Impact of Run-of-River Hydro-Schemes upon Fish Populations. Phase 1: Literature Review*. SNIFFER: Project WFD114: <http://nia1.me/2vx>

⁵⁷ Hull International Fisheries Institute. 2012. *Impact of Run-of-River Hydro-Schemes upon Fish Populations: Phase 2*. SNIFFER: WFD114: <http://nia1.me/2vy> : p3–4.

⁵⁸ SNIFFER 2011, as above: p4.

facilities have been installed. In the Republic of Ireland⁵⁹, Scotland⁶⁰ and England⁶¹, guidelines exist to advise potential developers of hydro-schemes on the designs which are likely to have the least environmental impact. Northern Ireland does not yet have guidance of this nature.

The SNIFFER research also examined the effects which variation in grating design and placement may have in preventing fish from entering a hydropower system. It concluded that behavioural screens, such as strobe lighting and sound pulses, are rarely effective in deterring strong swimming, migratory fish such as salmon and trout⁶². By contrast, physical screens such as meshes and grills 'have been successfully deployed in temperate rivers in the northern hemisphere'⁶³. However, the researchers also note that 'the positioning of the screens is critical'. While the current Bill seeks to amend the maximum mesh size of new gratings, it does not seek to impose any specifications for the position of such gratings. For example, some best practice guidance advises that gratings should be angled so that they do not just deter fish from entering a channel, but also direct them towards an alternative route⁶⁴.

A number of consultation respondents described an increased flood risk as a result of gratings with a smaller clearance, potentially caused by a greater build-up of debris. This risk may be increased for both the inflow channel but perhaps especially the discharge flow where it rejoins the river.

Under the existing Section 59 of the Fisheries Act (Northern Ireland) 1966, 'every such grating... shall be kept in constant repair' by 'the owner or occupier of any premises to which the watercourse leads, or any other person who made, uses or has the care or maintenance of the watercourse'⁶⁵.

Clause 13 prompts a number of scrutiny points. **For example, is the scientific evidence base for the impact of small, run-of-river hydroelectric installations sufficiently robust to justify an amendment to legislation?**

If the evidence is indeed strong and robust, is the installation of a permanent 10mm grating for all new installations the best protection for migrating fish? If so, should further specification be made of the angle and position of gratings? Would the installation of permanent grills with small apertures pose a greater flood risk?

⁵⁹ Department of Communications, Energy and Natural Resources & Fisheries Ireland. 2007. *Guidelines on the Planning, Design, Construction & Operation of Small-Scale Hydro-Electric Schemes and Fisheries*: http://www.seai.ie/Renewables/Hydro_Energy/Guidelines_Planning_design_construction_operation_of_SS_Hydro.pdf

⁶⁰ Scottish Natural Heritage. 2015. *Hydroelectric Schemes and the Natural Heritage*: <http://www.snh.gov.uk/docs/A1521095.pdf>

⁶¹ Environment Agency. 2013. *Guidance for Run-of-River Hydro Development*:

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/297147/LIT_4122_5f91bb.pdf

⁶² SNIFFER 2011, as above: p53.

⁶³ SNIFFER 2011, as above: p54.

⁶⁴ Turnpenny, AWH & O'Keeffe, N. 2005. *Screening for Intake and Outfalls: A Best Practice Guide*. Bristol: Environment Agency Science Report SC030231: <http://nia1.me/2vz>: p112-113.

⁶⁵ Fisheries (Northern Ireland) Act 1966, Section 59 (1)(d) and (2): <http://www.legislation.gov.uk/apni/1966/17/section/59>

Rather than, or in addition to, legislation, does Northern Ireland need guidelines to advise potential developers of hydro-schemes on the designs which are likely to have the least environmental impact, as exists in other jurisdictions?

2.5 Other proposals made in consultation responses

A number of the consultation responses made suggestions about further proposals which could have been addressed in a Fisheries Bill but which currently are not. Among these, the following suggestions were made:

- A single, unified rod licence structure covering both the Public Angling Estate and the territory over-seen by the Loughs Agency could be created⁶⁶;
- The Bill represents an opportunity to protect bass as a game angling species⁶⁷;
- A fish dealer's licence should also cover coarse fish⁶⁸;
- The legislative framework for a salmon conservation levy, similar to that which is in operation in the Republic of Ireland, could have been formed by this Bill⁶⁹.

The consultation document also included a proposal to amend the closure period for mill sluices which was not subsequently included in the Bill. At present, the Fisheries Act (Northern Ireland) 1966 stipulates that the mill sluice nearest to the point where water is abstracted from a river and the waste gates should be kept shut for 24 consecutive hours at some point between six o'clock on Saturday afternoon and six o'clock on Monday morning. It was proposed that this weekend closure period should be replaced by a 24 hour period as defined by the Department. The consultation document suggested that 'this would provide a more flexible arrangement tailored to the requirements of mill owners and the Department'⁷⁰. **Will this option be pursued through subsequent legislation, or has this proposed change now been dropped entirely?**

⁶⁶ The Honourable the Irish Society. 2014. *Response to Consultation on Policy Proposals for a Fisheries Bill*.

⁶⁷ Inland Fisheries Ireland. 2014. *Response to Consultation on Policy Proposals for a Fisheries Bill*.

⁶⁸ Ulster Coarse Fishing Federation. 2014. *Response to Consultation on Policy Proposals for a Fisheries Bill*.

⁶⁹ Loughs Agency. 2014. *Response to Consultation on Policy Proposals for a Fisheries Bill*.

⁷⁰ DARD & DCAL. 2014. *Consultation on Policy Proposals for a Fisheries Bill* : p39.

3 Specific issues for consideration

This paper has highlighted a number of specific issues with the inland fisheries aspects of the Fisheries Bill which Members may wish to scrutinise further. In summary, these issues are as follows:

3.1 Clause 10: Changes to requirements for a fish dealer's licence

- Is it possible that the removal of a requirement for a certificate from a Justice of the Peace will increase the number of such dealers to a level which may threaten the sustainability of inland fish stocks? There are currently 190 licensed fish dealers in Northern Ireland, more than twice as many as the figure for 2009 (81).

3.2 Clause 11: Restriction on removal of material from the lake bed

- If planning permission and an Environmental Impact Assessment is required for all new sand and gravel extraction operations, does the extension of a permit from DCAL to include extraction from lake beds constitute an unnecessary additional regulation?
- For DCAL to successfully pursue a conviction under the Fisheries Act (Northern Ireland) 1966 for unauthorised removal of sand and gravel from a lake bed, would it have to prove that it was a spawning ground?
- Is the nature of baseline data on spawning grounds currently sufficient to allow for effective monitoring and enforcement?

3.3 Clause 12: Removal of dams in rivers

- Has DCAL made an estimate of the number of installations for which an owner cannot be traced and which it would seek to modify or remove?
- For any such actions, would historic or archaeological structures be subject to the same planning conditions as other development work? If so, has the Department made any estimates of the total cost of such works, including recording, mitigation and any subsequent construction?
- Does the Fisheries Act need to specify which lamprey is to be accommodated in fish passes and would this have a knock-on effect on salmon?

3.4 Clause 13: Gratings in watercourses

- Is the scientific evidence base for the impact of small, run-of-river hydroelectric installations sufficiently robust to justify an amendment to legislation?
- If the evidence is indeed strong and robust, is the installation of a permanent 10mm grating for all new installations the best protection for migrating fish? If so, should further specification be made of the angle and position of gratings?

- Would the installation of permanent grills with small apertures pose a greater flood risk?
- Instead of, or in addition to, legislation, does Northern Ireland need guidelines to advise potential developers of hydro-schemes on the designs which are likely to have the least environmental impact, as exists in other jurisdictions?

3.5 Additional points

- While both salmon and eel numbers have generally been in decline for at least four decades, does a recent uplift in numbers suggest that these legislative measures may not be as urgent as three or four years ago?
- Will the option of a more flexible closure period for mill sluices be pursued through subsequent legislation, or has this proposed change now been dropped entirely?