

## Final Business and Regulatory Impact Assessment

### **Title OF Proposal**

The Alien and Locally Absent Species in Aquaculture (Scotland) Regulation 2015

### **Purpose and intended effect**

- **Background & Objective**

The Alien and Locally Absent Species in Aquaculture (Scotland) Regulations 2015 (“the 2015 Regulations”) make provision for the enforcement of Council Regulation (EC) No 708/2007 (“the EU Regulation”) and for the notification of both an intended movement of those species which are listed in Annex IV (with exceptions) of the EU Regulation and the translocation of a locally absent species from within the United Kingdom.

The EU Regulation places an obligation on Member States to ensure there is adequate protection of aquatic habitats from the risks associated with the use of alien and locally absent species in aquaculture, and contributing to the sustainable development of the aquaculture industry. It does this by providing for a system of permits and environmental risk assessment. Permits are required for the introduction of alien species and for the translocation of locally absent species between Member States. However, movements to closed aquaculture facilities are exempt but only where the species are transported under conditions which prevent the escape of those species and non-target species.

The EU Regulation exempts certain commonly used species, which are listed in Annex IV (Annex IV species) from the permitting requirements. However, Member States are able to place controls on the use of these species where they so wish.

The 2015 Regulations create a requirement for notifications of the movement of Annex IV species and an authorisation system but they also exempt from the notification requirements, movements of 2 of the Annex IV listed species – *Crassostrea gigas* (Pacific oyster) and *Oncorhynchus mykiss* (rainbow trout).

For the other Annex IV species listed the proposed movement must be notified and may then be allowed subject to any conditions, by means of a notice, or the movement may be prohibited. An environmental risk assessment may also be requested.

In the case of a locally absent species, persons must also notify before the species is moved. They will then be advised by means of a notice if there are grounds for foreseeing threats to the environment due to the translocation. In such cases the EU Regulation will apply and the individual must apply for a permit.

The 2015 Regulations make provision for decisions concerning the grant of permits and notices concerning Annex IV species or locally absent species to be appealed. Permits (and notices in respect of Annex IV species) may also be amended or, where there is non-compliance, suspended or revoked. Enforcement notices may also be issued to require compliance.

Similar regulations have been implemented for the rest of the United Kingdom.

- **Rationale for Government intervention**

Scotland has a celebrated aquaculture brand. The Scottish Government aims to support industry to grow in a sustainable manner. This includes a regulatory framework which is

flexible, proportionate and adaptable, and that is able to recognise the wide implications of the sector on Scotland's marine environment and climate change.

Alien species have been identified as one of the key causes for the loss of biodiversity in the EU and the world at large. They can have significant economic and social impacts, and could undermine the EU's sustainable development objectives. Aquaculture is a fast growing innovative industry, constantly looking for new outlets and markets. In order to fully adapt to market conditions and changes, it is important that the industry is able to diversify the species it cultures, but that this is balanced with appropriate safeguards for aquatic environments.

An example of the significant adverse environmental impact the introduction of an alien species can cause is well demonstrated in England and Wales by the North American signal crayfish. This species was imported in the late 1970s with government support, specifically for the development of small-scale aquaculture, in open ponds, as an agricultural extensification scheme. However, crayfish escaped from such sites and colonised many rivers in England and Wales. The species competes with the native white-clawed crayfish and carried a disease, crayfish plague, to which the native British crayfish have no immunity. Native white-clawed crayfish have now all but disappeared in the southern half of England. This case highlights the need for prior assessment of the potential impacts of species introduced for use in aquaculture.

The 2015 Regulations will provide a safeguard against the potential for adverse environmental effects associated with the use of alien and locally absent species in aquaculture, while also providing a Scottish focus. By their very nature, the Regulations consist largely of mitigation measures to provide these safeguards.

The introduction of the 2015 Regulations will be in line with the SG's National Outcome to value and enjoy our built and natural environment and protect it and enhance it for future generations. It will generate positive effects by safeguarding the coastal and marine environment through inherent mitigation, from the potential introduction of these species to Scotland. However, it is considered unlikely that many applications will be made for the use of such species beyond those currently exempt and therefore, it is likely that effects and any associated environmental effects would be, at most, minimal.

## **Consultation**

- **Within Government**

Discussions within the Scottish Government were on-going throughout the development of the Regulation. Most specifically, they involved:

- Scottish Government's Directorate for Environment and Forestry
- Marine Scotland Science Fish Health Inspectorate and researchers.
- Justice Directorate and the Crown Office and Procurator Fiscal Service (COPFS)
- Scottish Natural Heritage (SNH)

- **Public Consultation**

As the 2015 Regulations will implement the EU Regulation, which was fully consulted on, a formal public consultation was not required.

However, the Scottish Government carried out a 4 week public consultation from 14<sup>th</sup> October 2014 to 11<sup>th</sup> November 2014. The consultation received 3 responses, one of which

was not considered within the scope of the proposed Regulations. None of the 3 raised any significant issues. Therefore no amendments were made to the Regulations.

- **Business**

For the 2015 Regulations many individual businesses, and their representatives, were consulted. This was carried out during the public consultation process. This included making the following interested parties aware of the proposals:

- Scottish Salmon Producer Organisation
- British Trout Association
- Seafood Shetland
- Association of Scottish Shellfish Growers
- Shetland Aquaculture
- University of Stirling
- The Marine Alliance for Science and Technology for Scotland
- Scottish Association for Marine Science

Individual businesses or their representatives were also updated through the Minister for Environment's Shellfish Working Group.

## **Options**

Two options were considered:

**Option 1 – Draft Scottish Regulations.** This option was the one taken. The Scottish Government is obliged to implement the EU Regulation (as are all Member States). The Regulations, and the EU Regulations, will provide safeguards against the potential for adverse environmental effects associated with the use of alien and locally absent species in aquaculture, whilst also providing a Scottish focus.

**Option 2 - Do nothing** – This alternative course of action would not allow for the provisions specified in the EU Regulation to be implemented. It would also create risks should the use of alien and locally absent species in aquaculture take place in the future. The EU Regulation is binding in its entirety and directly applicable in all Member States. Whilst there are existing measures and controls in place in respect of protecting fish health in aquaculture and the authorisation of aquaculture production businesses, the EU Regulation requires a permit regime to be implemented specifically for the introduction of alien species and movements of locally absent species between Member States. Option 2 is therefore not a viable option.

### Sectors and groups affected

- *Scotland's aquaculture sector*
- *Scottish Government*
- *Anglers and other members of the public*

## **Benefits**

**Option 1** –The Regulations will provide a safeguard against the potential for adverse environmental effects associated with the use of alien and locally absent species in aquaculture, whilst also providing a Scottish focus. By their very nature, the Regulations consist largely of mitigation measures to provide these safeguards. The benefits will be:

- Reduction of the risks associated with the use of alien and locally absent

species which may have adverse impacts on anglers and other users of the natural environment.

- Ability to respond quickly with preventative measures.
- Maximisation of the potential for aquaculture industry to diversify and take advantage of profitable opportunities provided by locally absent species.

While assigning monetary values to native biodiversity, or the loss of an indigenous species, are problematic, the costs associated with eradicating invasive non-native species can be very high. This perhaps best illustrates the potential major benefits that are likely to result if effective regulatory controls are in place and the introduction of alien species adequately regulated.

By way of illustration, the high costs of eradicating an existing invasive species – topmouth gudgeon – are demonstrated by the following example:

Topmouth gudgeon were eradicated from a small infected lake in the Lake District using rotenone in March and April 2005. The capital cost of the rotenone was approximately £6,500. Determination of the total manpower cost was complex as the programme ran over a two year period. During the period of rotenone treatment alone, approximately 70 man-days were required to prepare the water for application and 50 man-days for the actual application. On the basis that 1 man-day costs an average of £260, and then the total cost of manpower just to apply the rotenone was £31,200.

Topmouth gudgeon were eradicated from another small (<1 ha), infected water in the West Midlands in 2006 and the capital cost alone was in the region of £20,000, with man-power costs estimated at over £20,000. The Environment Agency has borne the cost of such operations to date.

An economic impact assessment estimated the cost of a national eradication programme for topmouth gudgeon at: ≈£3 million per year initially, decreasing to £2.5 m per year after 10 years, £1.5 m per year after 15 years, and reaching zero at 20 years (assuming successful eradication). This was based on eradication costs only and did not include impacts to local and national economies.

Of course, topmouth gudgeon is just one example among many non-native fisheries that pose potential threats. These figures have been used as illustration only and have not been used as the basis for further quantification.

**Option 2** – Doing nothing would result in no additional requirement and associated costs being placed on the aquaculture industry or Scottish Government.

## **Costs**

**Scotland's aquaculture sector-** The additional requirements for the sector are through making provisions to apply for permits and carrying out environmental risk assessments.

There is also the requirement to notify both an intended movement of an Annex IV species and the translocation of a locally absent species from within the United Kingdom. However the Regulations do exempt from the notification requirement, movements of 2 of the Annex IV listed species - *Crassostrea gigas* (Pacific oyster) and *Oncorhynchus mykiss* (rainbow trout). The culture of these species is already well established and regulated in Scotland.

It is considered unlikely that many applications will be made for the use of species beyond those currently exempt and therefore it is likely that effects and any associated costs would

be, at most, minimal.

Where an application results in an environmental risk assessment, the costs to applicant businesses could be considerable – DEFRA<sup>1</sup> estimate £5,000 - £20,000 – but such situations are expected to occur very infrequently (less than one per year).

**Scottish Government** – The additional requirement for the Scottish Government would be the creation of a duty to assess notifications, assess environmental risk assessments and issue permits, on behalf of the Scottish Ministers.

This is likely to add minimal burden. As stated above it is considered unlikely that many applications will be made for the use of such species beyond those currently exempt and therefore, it is likely that the effects and any associated costs would be minimal. Also, as the Regulations will not have retrospective effect only new applications will be within the scope of the report.

**Number of applications:** The number of estimated applications per year is between 1 and 2. This is likely to cause minimal burden as the majority of these applications are expected to be from those looking to use closed facilities. The EU Regulation exempts closed aquaculture facilities where the species are transported under conditions which prevent the escape of those species and non-target species.

### **Scottish Firms Impact Test**

Consultation and discussions were carried out throughout the development of the Regulations. As detailed above, many individual businesses, and their representatives, were consulted. This was carried out during the public consultation process. This included making the following interested parties aware of the proposals:

- Scottish Salmon Producer Organisation
- British Trout Association
- Seafood Shetland
- Shetland Aquaculture
- Association of Scottish Shellfish Growers
- University of Stirling
- The Marine Alliance for Science and Technology for Scotland
- Scottish Association for Marine Science

Individual businesses or their representatives were also updated through the Minister for Environment's Shellfish Working Group.

The Scottish Salmon Producers Organisation, Association of Scottish Shellfish Growers and Seafood Shetland represent the interests of the majority of the businesses in the industry.

It is foreseen that the majority of applications will be made by research establishments using closed facilities. There is likely to be minimal impact on these businesses. The main research facilities likely to be affected were informed of the consultation process.

No comments were received from any business or research facility in response to the consultation.

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<sup>1</sup> DEFRA Impact Assessment 2010

[http://www.legislation.gov.uk/ukia/2010/349/pdfs/ukia\\_20100349\\_en.pdf](http://www.legislation.gov.uk/ukia/2010/349/pdfs/ukia_20100349_en.pdf)

### **Competition Assessment**

The 2015 Regulations have been assessed for their potential impact on competition. It is considered that the 2015 Regulations will not have an impact, as they will not:

- Directly limit the number or range of suppliers
- Indirectly limit the number or range of suppliers
- Limit the ability of suppliers to compete
- Reduce suppliers' incentives to compete vigorously

### **Test run of business forms**

Any new forms will be developed by the Scottish Government and a test run completed by Marine Scotland Science Fish Health Inspectorate. A guidance document will also be developed to accompany the 2015 Regulations.

### **Legal Aid Impact Test**

We do not consider that the proposals could result in expenditure from the legal aid fund.

### **Enforcement, sanctions and monitoring**

The Scottish Government will carefully monitor how the provisions are working in practice.

Enforcement and offences are those set out in Parts 5 and 6 of the 2015 Regulations.

Compliance and enforcement will be maintained by Marine Scotland Science (MSS) Fish Health Inspectorate.

### **Implementation and delivery plan**

Implementation will begin as soon as the 2015 Regulations come into force on 3<sup>rd</sup> April 2015.

- **Post-implementation review**

The Scottish Government, through Marine Scotland's Fish Health Inspectorate will carefully monitor the Regulations and reviews will be carried out if/when required.

**Summary and recommendation** After due consideration, with no objections received, the Scottish Ministers concluded that the 2015 Regulations provide the best means of implementing the EU Regulation. This will ensure there is adequate protection of aquatic habitats from the risks associated with the use of alien and locally absent species in aquaculture, and contributing to the sustainable development of the aquaculture industry.

**Summary costs and benefits table**

Option	Total benefit per annum: - economic, environmental, social	Total cost per annum: - economic, environmental, social - policy and administrative
1 – Draft Scottish Regulation	<p>Safeguard against potential for adverse environmental effects whilst providing a Scottish focus.</p> <p>Reduction of risk associated with use of alien and locally absent species.</p> <p>Ability to respond quickly with preventative measures.</p> <p>Maximise potential for aquaculture industry to diversify and take advantage of profitable opportunities provided by locally absent species.</p> <p>Continued access to varied and disease free fisheries is vital to the many thousands of resident and visiting anglers</p>	<p>Additional requirements for aquaculture sector through provision to notify, apply for permits and carry our environmental risk assessments.</p> <p>DEFRA estimate £5,000 - £20,000 cost to applicant if environmental risk assessment is required. Predicted to be limited to one or less applications per year and anticipate that most applications will come from research establishments which are unlikely to require full environmental risk assessment.</p> <p>The additional requirement for Scottish Government is the creation of a duty to assess notifications, environmental risk assessments and issue permits. Likely that effects and associated cost would be minimal.</p>
2 – Do nothing	No additional requirements and associated costs placed on aquaculture industry or Scottish Government	

**Declaration and publication**

I have read the Business and Regulatory Impact Assessment and I am satisfied that (a) it represents a fair and reasonable view of the expected costs, benefits and impact of the policy, and (b) that the benefits justify the costs. I am satisfied that business impact has been assessed with the support of businesses in Scotland.

**Signed:**

**Date:**

**Aileen McLeod  
Minister for Environment, Climate Change and Land Reform**

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