

Title: The Keeping and Introduction of Fish (England) Regulations 2014 IA No: Defra1091 Lead department or agency: Department for Environment, Food and Rural Affairs Other departments or agencies: Environment Agency	Impact Assessment (IA)		
	Date: 04/07/2014		
	Stage: Final		
	Source of intervention: Domestic		
	Type of measure: Secondary legislation		
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Summary: Intervention and Options			RPC Opinion: EANCB Validated

Cost of Preferred (or more likely) Option			
Total Net Present Value	Business Net Present Value	Net cost to business per year (EANCB on 2009 prices)	In scope of One-In, Two-Out? Measure qualifies as
£1.06m	£0.38m	£-0.04m	Yes OUT

What is the problem under consideration? Why is government intervention necessary?

The management of native and non-native fish in English inland waters is necessary to reduce the likelihood of the introduction of invasive fish species and diseases, to protect biodiversity and to maintain and improve the performance of fish stocks. The current regulatory licencing/consent system for these introductions/movements and keeping of fish does not differentiate between operations posing different risks, thereby regulating all fish movements to a similar extent irrespective of risk. Government intervention is required to minimise the regulatory burden on industry and to introduce a less costly and more effective system for regulators.

What are the policy objectives and the intended effects?

The key policy objective is to minimise the risk posed by inappropriate and illegal fish movements in inland waters in a more efficient and risk based way. The intended effect is to maintain the protection of local fisheries and biodiversity, while reducing the regulatory burdens on the angling and fish trade industry. The proposed legislation, for England and the Border Esk catchment in Scotland, reduces burdens on industry through a simplified risk based permitting regime so contributes to Government's better regulation agenda.

What policy options have been considered, including any alternatives to regulation? Please justify preferred option (further details in Evidence Base)

Through the previous consultation on this proposal in late 2009, and from the 2012 Red Tape Challenge initiative, it was confirmed that there is potential for reduced costs in regulating the keeping and introduction of live fish in inland water. Two options were considered, in addition to the baseline of maintaining the current system:

- 1) introduce a new permit scheme with a risk-based approach to controls on keeping, releasing and removal of live fish in inland waters
- 2) introduce a new permit scheme with tight regulatory controls on all keeping, releasing and removal of live fish in inland waters.

Option 1 is the preferred option as it allows close control of high risk movements, without imposing unnecessary burdens on the industry or the regulators whereas the second option would be untargeted and apply disproportionate costs to non and low risk business activities.

Will the policy be reviewed? It will be reviewed. If applicable, set review date: 04/2019					
Does implementation go beyond minimum EU requirements?			N/A		
Are any of these organisations in scope? If Micros not exempted set out reason in Evidence Base.		Micro Yes	< 20 Yes	Small Yes	Medium Yes
What is the CO ₂ equivalent change in greenhouse gas emissions? (Million tonnes CO ₂ equivalent)				Traded: n/a	Non-traded: n/a

I have read the 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.

Signed by the responsible Minister: _____ **George Eustice** _____ Date: **5 November 2014**

Summary: Analysis & Evidence

Policy Option 1

Description: Introduce a permit scheme with a risk-based approach to controls on keeping, releasing and removal of live fish in inland waters

FULL ECONOMIC ASSESSMENT

Price Base Year 2012	PV Base Year 2014	Time Period Years 10	Net Benefit (Present Value (PV)) (£m)		
			Low: Optional	High: Optional	Best Estimate: 1.06

COSTS (£m)	Total Transition (Constant Price) Years	Average Annual (excl. Transition) (Constant Price)	Total Cost (Present Value)
Low	Optional	Optional	Optional
High	Optional	Optional	Optional
Best Estimate	0.09	0	0.09

Description and scale of key monetised costs by 'main affected groups'

The costs are incurred by the Environment Agency in the first year of implementation primarily due to their initial proactive bulk allocation of permits for industry. This is £0.09m. There are no costs to industry of this option as the proposed new permitting scheme represents a saving on the current licencing /consent system.

Other key non-monetised costs by 'main affected groups'

There are no other non monetised costs. There will be negligible transitional costs to industry as the new process is very similar to the current process, they are already aware of the changes anticipated and the Environment Agency will provide an initial set of new permits .

BENEFITS (£m)	Total Transition (Constant Price) Years	Average Annual (excl. Transition) (Constant Price)	Total Benefit (Present Value)
Low	Optional	Optional	Optional
High	Optional	Optional	Optional
Best Estimate	0	0.14	1.15

Description and scale of key monetised benefits by 'main affected groups'

Benefits estimated for industry of £0.46m (10 year annual average of £ 0.05m) and Government of £0.86m (10 year annual average of £0.09m) resulting from the reduced number of applications for licences/consents made and processed.

Other key non-monetised benefits by 'main affected groups'

These measures contribute to healthy and sustainable fisheries from which social and economic benefits are derived. However, it has not been possible to quantify these potential benefits. Better targeted measures will also reduce the risks arising from the spread of non-native species, and the analysis does not take into account the likely reduced need for Environment Agency expenditure on removing non-native fish species from inland waters.

Key assumptions/sensitivities/risks

Discount rate (%) 3.5

The main assumptions behind these calculations are the amount of time taken to complete an application for a licence/consents and permits, these are from Environment Agency/Cefas FHI (Fish Health Inspectorate) expert opinion from dealing with these licences for 40 years and have been tested through consultation and so are considered to be reasonably robust. The main risk associated with this policy is the movement to a risk based approach of permitting

BUSINESS ASSESSMENT (Option 1)

Direct impact on business (Equivalent Annual) £m:	In scope of OITO?	Measure qualifies as
Costs: .0	Yes	OUT
Benefits: 0.04		
Net: 0.04		

Summary: Analysis & Evidence

Policy Option 2

Description: Introduce a permit scheme with tighter regulatory controls on keeping, releasing and removal of live fish in inland waters

FULL ECONOMIC ASSESSMENT

Price Base Year 2012	PV Base Year 2014	Time Period Years 10	Net Benefit (Present Value (PV)) (£m)		
			Low: Optional	High: Optional	Best Estimate: 0.65

COSTS (£m)	Total Transition (Constant Price) Years	Average Annual (excl. Transition) (Constant Price)	Total Cost (Present Value)
Low	Optional	Optional	Optional
High	Optional	Optional	Optional
Best Estimate	0.10	0	0.10

Description and scale of key monetised costs by 'main affected groups'

The costs are incurred by the Environment Agency in the first year of implementation primarily due to proactive initial bulk allocation of permits for industry. This is £0.10m. Costs are higher than in option 1 as the Environment Agency will have to administer all notifications rather than just high risk notifications. There are no costs to industry of this option as the proposed new permitting scheme is a saving compared to the current licencing/consent system.

Other key non-monetised costs by 'main affected groups'

There are no other non-monetised costs. There will be negligible transitional costs to industry as the new process is very similar to the current process, they are already aware of the changes anticipated and the Environment Agency will provide an initial set of new permits.

BENEFITS (£m)	Total Transition (Constant Price) Years	Average Annual (excl. Transition) (Constant Price)	Total Benefit (Present Value)
Low	Optional	Optional	Optional
High	Optional	Optional	Optional
Best Estimate	0	0.09	0.75

Description and scale of key monetised benefits by 'main affected groups'

Benefits estimated for industry of £0.23m (10 year average annual of £ 0.02m) and Government of £0.70 (10 year average annual £0.07m) come from the reduced number of applications for licences/consents made and processed. Benefits are lower than for option 1 as notifications to the Environment Agency is required for all live fish movements/transfers and not just high risk movements.

Other key non-monetised benefits by 'main affected groups'

These measures contribute to healthy and sustainable fisheries from which social and economic benefits are derived. However, it has not been possible to quantify these potential benefits. Better targeted measures will also reduce the risks arising from the spread of non-native species, and does not take into account the likely reduced need for Environment Agency expenditure on removing non-native fish species from inland waters.

Key assumptions/sensitivities/risks	Discount rate (%)	3.5
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The main assumptions behind these calculations are the amount of time taken to complete an application for a licence/consents and permits, these are from Environment Agency/Cefas FHI expert opinion from 40 years of dealing with the licences and have been tested through consultation and so are felt to be reasonably robust.

BUSINESS ASSESSMENT (Option 2)

Direct impact on business (Equivalent Annual) £m:	In scope of OIOO?	Measure qualifies as
Costs: 0	Yes	OUT
Benefits: 0.02		
Net: 0.02		

Evidence Base

Introduction

1. The management of non-native fish and native fish in English inland waterways is necessary to reduce the likelihood of introduction of invasive species and diseases into our inland waters (see annex 1), to maintain and improve the performance of many fisheries, and to create new fisheries, which in turn can enhance the value of these waters and social and economic benefits derived from angling. Fish movements also support conservation and scientific activities such as restocking of salmon rivers.
2. The current legislative framework does not differentiate between operations posing different risks, it therefore regulates all fish movements to a similar extent irrespective of risk. Through consultation with industry it was recognised that there was potential to reduce the costs of the system by amending and simplifying the current regulatory regime.
3. A new system permitting system is proposed which will reduce the number times government approval is required for routine movements of fish between fisheries.
4. Thus this proposal maintains the policy aims of managing fish to prevent negative impacts on the environment while reducing burdens on industry and the regulator. Through this it contributes to Coalition Government priorities on growing the rural economy and improving the environment. The proposed amendment to the existing legislation, for England and the Border Esk catchment in Scotland, on the keeping and release of fish reduces burdens on industry so contributing to Government's better regulation agenda.

Rationale for Government Intervention

5. The introduction of fish, whether native or alien, into inland waters can result in negative externalities¹ and be detrimental to local and/ or national biodiversity through competition, predation, disease transfer and hybridisation, or through impacts on the aquatic habitat. Invasive alien species are considered to pose the second biggest threat to biodiversity after climate change and therefore government intervention is needed to correct this market failure.
6. The current legislative framework does not differentiate between operations posing different risks, thereby regulating all fish movements to a similar extent irrespective of risk. It is burdensome on the industry and costly to the Environment Agency which regulates it.
7. In addition, where releases of fish are made into inland water illegally, it is difficult to prove that it has taken place, when or by whom, unless the specific activity of introduction is witnessed. Given that the environmental damage arising from inappropriate fish releases may be irreversible, a more effective means of enforcement is also required. There is also a lack of accountability applicable to the fishery owner/occupier, both in terms of movement of fish to and from their fishery and the long term keeping of illegally or inappropriately introduced species. Hence, the existing regulations fail to prevent/minimise the risk of inappropriate movements to and from inland waters and the fisheries, and flora and fauna, they support. A more efficient and less costly approach which reduces the regulatory burdens on industry and introduces an effective enforcement regime is required.

Existing arrangements

8. Under current arrangements any person seeking to introduce any fish into an inland water in England requires a consent to do so; to introduce non-native fish into the wild in requires three permits. These are:
 - A licence for the keeping and release of specified non-native fish under the Import of Live Fish Act 1980 (ILFA licence).
 - A license to release non-native species into the wild under the Wildlife and Countryside Act (WCA licence).

¹ A negative externality occurs when the production or consumption of a good by one person has an impact on other people's consumption or production possibilities i.e. the impact of the production/consumption is not fully accounted for by the users.

- A consent to introduce any fish to an inland water site under section 30 of the Salmon and Freshwater Fisheries Act 1975 (S30 consent).
9. In England, ILFA and WCA licences for non-native fish are currently combined into a single licence and processed by the Centre for Environment, Fisheries & Aquaculture Science (Cefas) Fish Health Inspectorate -FHI. The licensing system under ILFA/WCA allows the placement of any conditions the Minister considers appropriate for the management of the listed species. This provides the flexibility to enable listed species to be kept; in facilities with specific levels of bio-security; according to the risk they pose to native environments and; according to the risk of fish release posed by a given industry sector. There is no charge for licences.
 10. The Environment Agency consent the introduction any fish to an inland water site under section 30 of the Salmon and Freshwater Fisheries Act. The Environment Agency considers the potential environmental risks from the introduction of the fish and the biosecurity at these sites. Section 30 consent (S30 consent) is required for each and every introduction of fish even if it is a native species and has been consented at that site many times previously. There is no charge for S30 consents.
 11. Examples of where S30 consents apply are when an angling club will require consent from the Environment Agency to replace trout in their lakes (trout may die naturally in lakes, be lost due to predation or be removed legally or illegally by anglers), or wildlife groups will introduce salmon fry into rivers to promote restoration of declining stock levels.
 12. While the introduction of all fish into inland water require a consent, the general presumption is not to release non-native fish into inland waters and only a limited number of non-native fish, such as carp, are allowed to be stocked in enclosed waters for angling purpose through an ILFA licence. Annex 2 provides a diagram of the key components of each regulation before and after the proposed changes.
 13. Even though some block S30 consents are issued, eg for trout in put-and-take fisheries some fisheries have to apply for many s30consents. For example, in 2005/6 the Environment Agency recorded that one supplier submitted 284 S30 consent applications to introduce fish each of which may have required 10-20 working days to process before receiving consent or refusal (in practice, most S30 consents are turned around in less than this). The vast majority of S30 consents only permit the execution of each operation on a single specified date. Sometimes there is a need to change the dates on which the operation is carried out, owing, for instance to adverse weather conditions. For the previous example given this meant an additional 159 date change requests were subsequently submitted.
 14. Scottish Government has in place a licensing system for ILFA and WCA under separate, but similar legislation. Section 30 consents in the Border Esk in Scotland, however, are managed by the Environment Agency in England through the Salmon and Freshwater Fisheries Act 1975 as rivers are best managed on a total catchment approach and historically England has managed fisheries in the Border Esk and Scotland manages the River Tweed.

The need for amended controls

15. Government is required to evaluate the effectiveness of the legislation it has in place. It has been recognised, through the previous consultation on this proposal in late 2009/early 2010 and from the 2012 Red Tape Challenge initiative, that there is potential for reduced costs and efficiencies to be made in simplifying the regulatory regime by:
 - reducing the number of permits required;
 - reducing the regulatory organisations involved; and
 - by moving the system to one that follows risk based Hampton principles ie that regulators and regulatory systems as a whole should use comprehensive risk assessment to concentrate resources on the areas that need them².
16. In addition, the current system requires improvements in terms of enforcement as unless someone is caught or witnessed in the act of introducing the fish it is difficult to prove that illegal releases have taken place, or who carried them out. Neither can the Agency intercept suspicious movements, but must wait until there is clear evidence of intent to introduce the fish before it can take enforcement

² <http://www.bis.gov.uk/brdo/resources/knowledge/better-regulation-principles#sthash.a7ca7S3q.dpuf>

action. Once an illegal fish introduction has happened, the environmental impact is often irrecoverable.

17. A more effective regulatory system in which the movement of alien species receives strict controls but also reduces the burden on businesses is important in order to safeguard fisheries and biodiversity in England. The enabling power to introduce this legislation is contained in the Marine and Coastal Access in 2009.
18. This policy is focussed on the management of the potential risks associated with the introduction and transfer ie movements of all live fish (including their eggs and gametes) for stocking or release purposes into our rivers, streams and lakes and the keeping of non-native fish in these inland waters. It also covers the keeping of native fish in some circumstances where there are designated special habitats. It will exclude those movements which are a result of fishing activities, where the species (e.g. eel) are harvested and transported live to slaughter. The proposal covers all inland waters in England, other than fish farms and aquaria which will remain the responsibility of the Fish Health Inspectorate (through a proposed amendment to 'The prohibition of keeping and release of live fish (specified species) (England) Order 2014') and garden/ornamental ponds where regulation on the general public would be disproportionate and unenforceable. It also excludes the River Tweed and its catchment areas as this river basin district is managed by Scottish Government but it is proposed to cover the river Border Esk catchment in Scotland which in managed by England through the Environment Agency. The proposal will not change the requirement for ILFA and WCA licences in the Border Esk under Scottish legislation.

The policy proposal

19. Under the new system fishery owners will require a single site Permit (LFM site permit), fish suppliers would require a supplier Permit to move fish between sites (LFM supplier permit), once the site and supplier Permits are in place, the same fish movement operations would only require the fish supplier to give advanced notification of high risk movements (estimated to be 20% of all movements) rather than all as at present. Notification would be required 2 full working days in advance of the movement of the fish. In addition, on-line applications may also allow the printing of consignment notes.
20. Thus the new scheme (see paragraphs 41-46 for proposed scheme overview) should facilitate the removal of unnecessary burdens on the industry and the Environment Agency. But also introduce new powers for the Environment Agency to address current shortfalls in the legislation relating to enforcement ie clearly requiring the owner of the body of water to be responsible for addressing the removal of the illegal fish.

Sectors affected and Value of the Industry

21. This proposal will impact on fish suppliers, and on owners or occupiers who remove fish from or release fish into their waters.
22. From information held by the Environment Agency and Cefas there are about 320 live fish suppliers and 5,500 inland waters in England. These suppliers can also provide other services to fisheries managers such as removal of unwanted fish stocks on their behalf for use in restocking other waters. The Environment Agency estimate the value of the fish stocked by the industry in 2007 as £29 million based on the number of fish moved as detailed in S30 consents and an industry average cost per fish/species (based of supplier price lists). The Environment Agency (who have been regulating this industry for 40 years) does not believe that there has been a significant increase in the industry in the intervening time.
23. A key sector affected by the proposals is recreational angling³, which is important both in terms of its contribution to the economy, particularly in rural areas, and in terms of social inclusion. Many game and coarse fisheries rely on managing the levels and species of stock present to improve catch rates. This involves both the removal of non-target species, and the stocking of additional species, numbers and size ranges. Should dedicated angling sites be affected by outbreaks of an invasive species or be closed down as a result of an eradication exercise, this could have adverse impacts on local businesses and economies.

³ The economic impact of freshwater angling in England & Wales. Environment Agency Science Report – SC050026/SR2

The Economic Impact of Freshwater Angling in England and Wales

Research commissioned jointly by the Environment Agency and Defra into the economic value of inland fisheries has found that expenditure by freshwater anglers in England and Wales supports about a billion pounds of household income equating to 37,000 full-time jobs¹.

The number of (freshwater) rod licences sold to anglers in England and Wales currently stands at around 1.4 million. The Environment Agency's income from these licences is around £22million. The majority of licences (typically 750,000 – 850,000) are sold to coarse fish anglers, and this group commonly fish at still water sites. Average annual expenditure by coarse anglers (on fishing permits, tackle, travel, accommodation and other costs directly associated with their fishing outings) is estimated at £859 per angler, although the distribution is vastly uneven with the median value being £314 per angler. The average expenditure per trip is estimated at £17 (median £10).

24. All of the individuals or organisations that will be affected can be classified as small and medium sized enterprises. (Information based on Environment Agency and Cefas' extensive knowledge of the sector). The measures are designed to reduce costs and administrative burdens for business as well as protect biodiversity and improve fisheries opportunities; these benefits derived will similarly apply to small firms and therefore there is no small firm exemption

ASSUMPTIONS/ INPUTS

25. A number of assumptions are used in this analysis and are listed below:
- The price base year is 2012 and the present value base year is 2014.
 - In line with guidance set out in the HMT Green Book⁴ and the Better Regulation Framework Manual analysis is over a 10 year period.
 - In line with guidance set out in the HMT Green Book and the Better Regulation Framework Manual the discount rate of 3.5% is used⁵.
 - Costs and benefits were originally calculated over financial years and so have been amended to calendar years. The analysis period starts from April 2014 as this is when it is expected that the changes will take effect from. Therefore all costs and benefits in this year are 75% of what they would be in subsequent years.
 - There are approximately 320 fish supplier and 5,500 inland fisheries in England.
 - There are only two stillwater in the Border Esk catchment actively stocking fish and eight have historically. Impact in the Border Esk catchment will be minimal.
 - The Environment Agency processes around 4,500 S30 consents a year. Cefas' Fish Health Inspectorate process 29 full licences and 10 renewals a year.
 - Industry costs used in the analysis are estimated from EA instead of ONS Annual Survey of Hours and Earnings (ASHE) as the Agency has considerable experience working in this area and a good idea about costs to this fisheries sector. The hourly rate is therefore estimated at £28.07 and includes overheads at 30% to account for other non-wage overheads, such as national insurance contributions, in line with standard cost model methodology⁶.
 - The Environment Agency hourly rate is £38.00. Labour costs include non-wage overheads, such as national insurance contributions, in line with standard cost model methodology. Cefas' Fish

⁴ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/220541/green_book_complete.pdf

⁵ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/211981/bis-13-1038-better-regulation-framework-manual-guidance-for-officials.pdf

⁶ The mean hourly rate (plus 30% overheads) from ASHE for ' Managers and proprietors in forestry, fishing and related services' is £20.475
<http://www.ons.gov.uk/ons/publications/re-reference-tables.html?edition=tcn%3A77-328218>

Health Inspectorate costs are £56 per hour for administrative work and £70 an hour for inspectorate level work. Labour costs include non-wage overheads, such as national insurance contributions, in line with standard cost model methodology.

26. The aim of the policy is to reduce the likelihood of the introduction of invasive species in a more efficient and risk based way. However, it is not possible to quantify the change in probability of introduction of invasive species resulting from this change in legislation. While recent information is available on the costs of eradication of topmouth gudgeon (see Annex 4), it is not appropriate to use the figures through value transfer to estimate the benefits of options because: It is not known if the costs of the eradication of topmouth gudgeon are applicable to the eradication of other potential non-native species; and The geographical scale of any potential spread of non-native species is unknown.

Evidence underpinning the costs and benefits to business.

27. The industry sector is small, the majority of fish introductions are through the fish supplier network (approx. 320 fish supplier) and the Environment Agency and Cefas have frequent contact and an open relationship with the industry (this includes liaison on general fisheries best practice and aquatic animal health issues). All S30 consents/ILFA licences are logged on a database and therefore the Environment Agency has direct contact details of the existing users of the S30 consent and ILFA system and therefore communicates with users directly and with representative trade bodies.
28. The Environment Agency and Cefas have managed the S30 consents and ILFA/WCA licencing systems for near 40 years and the timings used in the calculations are based on their considerable experience in managing the system and working with the industry. The Environment Agency also restock fish into rivers itself (for conservation purposes) and own some fisheries and while it is not allowed to consent itself for the introduction of fish it does have to follow all the same risk assessments and information requirements steps, record that information and then this is added to the Environment Agency database along with all other S30 consent applications. The Environment Agency also has sites with ILFA licences and again has direct experience of the steps required to obtain or modify a licence and the timings involved. Equally Cefas also has experience of obtaining both S30 consents and ILFA licences. The information required for permits in the new system is broadly similar to that already required and as such timings for the new system are based on the Environment Agency's extensive knowledge of the industry and the processes involved (See Annex 3 for comparative task list).
29. No comments were made on the timings/assumptions in response to the consultation package. Consideration has been given to commissioning a survey of businesses as supporting evidence for the time saving; however, the cost of such a study would be disproportionate to the likely benefits from the introduction of the measure.

OPTIONS CONSIDERED

30. Two options have been considered and are compared to the do nothing/business as usual option.

OPTION 0: Business as usual/do nothing

31. Doing nothing will require S30 consents for releases to continue to be sought on a case by case basis. ILFA/WCA licences will continue to be issued separately.

Costs to Industry

32. No charges are levied on industry for licences and S30 consents. However, there are costs associated with applying for the licences and consents.
33. Section 30 consents: Industry administration costs The Environment Agency processes on average **4,500 consents** for individual introductions of fish per year every year. In applying for consents industry has to provide details of the fish species and numbers of fish concerned, and the inland water site conditions they will be released into. It has been estimated by the Environment Agency on the basis of their significant knowledge from interaction with this sector and their personal experience in introducing fish into water that this takes industry on average **1 hour** to complete at a

cost of **£28.07** per hour. This equates to **£126k** per annum (£95k in 2014 due to the analysis period starting from April 2014) and **£1,231k** over the 10 year period.

34. ILFA/WCA licences: Industry administration costs Cefas' Fish Health Inspectorate (FHI) processes on average **29 full licence applications and 10 renewals** per year. In applying for licences industry has to provide details of the fish species and numbers of fish concerned, and the site conditions they will be released into. It has been estimated by the FHI (FHI have over 30 years' experience of the legislation and have applied for ILFA licences themselves) that this will take industry on average **1 hour to complete a renewal and 1.25 hours for a new application**. At an industry hourly rate **£28.07** this is a cost of **£1298** per annum (£974 in 2014) i.e. **£13k** over 10 years.

Therefore total 10 year cost to industry under the baseline is £1,244k (see Annex 5 Table 1).

Costs to Government

35. The costs to government are made up by the cost of processing S30 consents, ILFA/WCA licences and enforcement.
36. Section 30 consents: Environment Agency administration costs: In processing S30 consents, the Environment Agency has to consider the environmental risks associated with the fish concerned and the suitability of the site conditions for release and keeping of the fish. Of the **4,500** applications for introduction of fish into inland water – the majority of these applications that take an hour to assess, and therefore for the calculations it has been assumed that all applications take **1 hour** to assess. Using an hourly wage rate of **£38.00**, the annual total cost to the Environment Agency in processes S30 consents is estimated to be **£171k** per annum (£128k in 2014) ie **£1,667k** over the 10 year calendar period.
37. ILFA/WCA licences: Cefas' FHI administration costs: Processing a licence involves a mixture of administrative tasks and inspectorate input. The FHI consider the environmental risks associated with the fish concerned and the suitability of the site conditions. Cefas' Fish Health Inspectorate process on average **29 full licences a year and 10 renewals** and they estimate that their costs are **£3985** per annum (£2989 in 2014) i.e. **£40k** for 10 years based on their records.
38. Table 1 in annex 5 provides a summary of the key figures. Enforcement costs are not expected to change under any of the options.

The total 10 year cost to government under the baseline is £1707k (see Annex 5 Table 1).

Benefits

39. Continuing the status quo will present no additional costs or benefits to those involved in removing or stocking fish, or to the Environment Agency of Cefas FHI assuming fish movements continue at existing levels. By doing nothing, there would be no reduction in the administration costs for both business and government. There would also be no improvement in the ability to regulate fish movements, and no introduction of proportionate risk based management tools. By doing nothing, there would also be no ability to address existing problems, where fish have been inappropriately stocked. Given the inadequacies of enforcement under section 30 of the SAFFA (paragraph 16) there would be a continued risk arising from the spread of non-native species, arising from predation, displacement of fish, harm to freshwater fish habitats and the introduction of diseases not controlled by European legislation. This could inadvertently have a significant impact on business operation and, therefore, affect profitability should dedicated angling sites be affected by outbreaks of an invasive species or be closed down as a result of an eradication exercise.

OPTION 1: Introduce a permit scheme with a risk based approach to controls on keeping, and releasing live fish in inland waters

40. Under this option government would introduce a live fish movement scheme which would reduce the number of licences required for keeping of non-native fish in inland water (removing entirely the ILFA licence in inland water) and reducing the number of permits needed from one for every movement to one permit per company for low risk activities (which accounts for the majority of fish movements). This scheme will be managed entirely by the Environment Agency, whereby any inland water in England which is stocked, cropped or which contains certain species of fish would require a LFM site permit.

41. The LFM site permit will:
- set out what species can be introduced or released or removed from the site, and in the case of non-native species, or native species in certain waters (for example within or in proximity to designated waters), which species may be kept;
 - be held by a “responsible person” with a long term interest in the water (the owner, manager or an angling club official);
 - set out permissible fish movements consistent with the long term requirements of the holder, without risking harm to connected fisheries or the wider environment; and
 - include fixed conditions under which fish can be introduced or released, and kept, and other related requirements.
42. **Once the limitations of allowed movements are set on the permits, there should be no need for further regulatory intervention, and movements will then be determined by the owner/occupier.** In addition, the Permit will condition under what circumstances advanced notification to the Environment Agency by a fish supplier will be required. The Permits will be issued on a permanent basis. The Environment Agency would retain the right to revoke, suspend or amend them. Equally, the permit holder may apply to amend the permit at any time, or may surrender or transfer the permit. By also regulating the keeping of fish, fishery owners can be held responsible for illegal fish introductions.
43. A LFM Supplier Permit would be required for those wishing to supply introduce fish between sites. This permit will be automatically given to those already authorised under the Aquatic Animal Health Regulations by the Cefas as Authorised Production Businesses (APBs). Others (such as angling clubs or commercial fisheries who move their own fish) will need to apply for such a permit; this will be a very simple process. The Agency would issue a parallel authorisation to use otherwise prohibited gear when removing fish (e.g. nets, electric fishing equipment etc), thus obviating the need to apply for each separate removal authorisation which is currently required. The fish supplier would be required to carry relevant consignment documentation specifying the fish in transit (a procedure industry are already familiar with under Aquatic Animal Health Regulations). The LFM Supplier Permit will condition the fish supplier to meet the conditions on the LFM site based Permits for waters they introduce fish to. Again the Environment Agency will retain the right to revoke or suspend permits.
44. The LFM Site Permit will require the supplier to provide the Environment Agency with advance notification of movement of fish of high risk cases; only 20% of all live fish movements are currently regarded as high risk cases. Notification would be required 2 full working days in advance of the movement of the fish. Notification will not require the permit holder to await permission from the Agency. In addition, on-line applications may also allow the printing of consignment notes.
45. The new LFM Permit scheme will reduce the administrative costs and regulatory burden in respect of the majority of fish movements regarded as low risk movements. Low risk movements are those movements that currently do not warrant tight controls. At the outset of the new measures the Environment Agency will set out the criteria for which movements will be deemed high risk and permit holders will be advised. No additional costs have been estimated for this as the assessment will largely be based on existing work. To expedite smooth transition of the new scheme the Environment Agency will proactively issue site permit licences to approximately 2,500 existing water bodies owner/businesses.
46. The new proposal would be less onerous than the current arrangements of having to apply for both S30 consents and ILFA/WCA licences. The new scheme will be a telephone based scheme where the Environment Agency will record the information on their database and send the applicant a pre-populated permit. This will reduce the administrative costs and regulatory burden and reduces the need for familiarisation with the scheme (although the information requirements are so similar to the current scheme familiarisation is not considered an issue). Long term permits for most inland waters (under the new scheme) will lead to a significant reduction in suppliers’ time and costs associated with fish movement applications, and will remove the current twenty day period for S30 consent approval. This will allow greater freedom for fish suppliers and fisheries, particularly those engaged in low risk operations (see task list in Annex 4).

47. The new LFM scheme will enable the Environment Agency to redeploy resources from administration to focus on high risk categories of fish movements, illegal activity and, through setting and reviewing LFM Permits, work with fishery owners and operators to improve fisheries management and sustainability.
48. The savings in administration will enable the Environment Agency to focus more on enforcement of the illegal fish movements. This is a key deterrent to further illegal introductions of fish, particularly non-native species. To this end, the Agency is currently reviewing its operational enforcement activities, including how to make better use of intelligence information. The Agency will monitor the high risk notifications for compliance.
49. Whilst the permits and any resultant restrictions on movements will affect some parties more than others, this will be directly proportionate to the risk of the activities involved and the overall burden will be reduced.
50. Responsibilities and requirements for both owners/occupiers and suppliers will allow for better enforcement, which will in turn provide better protection to biological diversity and local fisheries.

Costs to industry

51. There are no additional costs to business or government of this option compared to the baseline as these changes to the existing system reduces the administrative burden of business and cost to government. There are no transitional costs to industry as:
 - a) the process is very similar to the current process, it just has steps removed
 - b) the consultation and ongoing dialogue with stakeholders means they are already aware of the changes
 - c) the Environment Agency plan to proactively issue an initial tranche of site permit for industry for the beginning of the scheme. Following permits will be issued as routine applications for site permits.

Benefits to industry

52. Under the new system, once the site and supplier permits are in place, the same fish movement operations would only require the fish supplier to give advanced notification of high risk movements (estimated to be 20% of movements). Low risk movements will no longer be subject to the same administrative demands and level of assessment as high risk movements as is currently required.
53. At present there are no charges for the issuing of S30 consents and there is currently no intention to introduce charges for the issuing of S30 consents.
54. **The savings to industry from this new permitting system are based on the reduction in the number of S30 consents and notifications required to move fish relative to baseline levels; this is driven by a risk based approach of this regime.** The detailed savings to industry are presented in Annex 5 in Table 2. The rationale for the numbers included and the profiling in the analysis is explained below and is based on the Environment Agency's extensive knowledge and interaction of this sector and their own experience of the process of introducing fish into inland waters.
 - **Proactive Site permits.** The Environment Agency has estimated there are 2500 waters that they know will need/want to be permitted from the introduction of the legislation. These comprise primarily of still water trout fisheries, and waters containing non-natives, within or affecting protected sites defined in by conservation legislation. The Environment Agency will prepare site permits for these existing low risk fisheries in advance (2014), so they can be issued as soon as the regulations come into force, therefore the cost to industry will be minimal and it is therefore estimated to take at most 15 minutes of their time as all the permit owner will need to do is check the information on their permit. (Site permit – proactive- 15minutes - £7.02). The remaining site permits for existing stocked fisheries will be issued in subsequent years, as and when those fisheries need to restock. **Total costs to industry over 10 years is £18k**
 - **Existing water site permits.** The Agency estimate from the current activity with S30 consent applications that around 5500 existing site permits are likely to be issued over the 10 year period. This will be made up of 1000 sites per annum applying for permission in the first few

years (these are the regular stockers/croppers of fish), falling to around 500 (the less regular operators) in subsequent years. It is estimated that the application process will take a maximum of 2 hours (at an estimated cost of £56.14 per application.) It is estimated that this will take on average 2 hours to complete reflect the differing degrees of experience new site permit owners may have. The system will be telephone based and for many existing water sites the information will already be available on the EA database, in these instances it will be simply a case of confirming details over the phone. For others this may involve more in depth discussion of the particular water body and possibly a site visit by EA and therefore a two hour average is used. **Total costs to industry over 10 years is £309k**

- **New water permit sites.** Based on current understanding of the industry and using previous new site take-up rates, the Environment Agency estimate that over the next 10 years around 2438 permits will be applied for. This will be made up of 400 new sites per annum when the measures come into place falling to a residual of around 50 per year. The application will be by telephone and is more likely to involve a site visit by EA and therefore it is estimated that the application process will take 2 hours (at an estimated cost of £56.14). **Total costs to industry over 10 years is £137k**
- **Supplier Permits.** It is estimated that 350 supplier permits will be applied for over the next 10 years Supplier permits are expected to take 10 minutes each as application will be by telephone and as the information EA already has available on the fish suppliers this is primarily verification of details in addition the trade has experience with the current system and S30 consents. There are approx. 150 known fish suppliers who will all require permits at the beginning of the scheme.. Based on the Environment Agencies experience there are likely to be a number of new entrants most years which we expect to decline to almost zero and certainly less than 5. The number of additional suppliers requiring permits will remain at 34 per year between 2015 -2020. (Supplier permit - 10 minutes - £4.68). **Total costs to industry over 10 years is £2k**
- **Notifications.** It is estimated that a total of 15,063 notifications will occur over 10 years Notifications will only be required for high risk cases (which currently account for 20% of all fish movements) and as it a simply notice of date of fish movement via telephone or email to the Environment Agency this is expected to take 6 minutes. (Notification – 6 minutes – £2.81). This will be cumulative as the number of site permits increases over the years . **Total costs to industry over 10 years is £42k**
- **Consignment notes.** It is estimated that there will be a total of 97125 consignment notes over the 10 year period. Similarly consignment notes which is simply recording the species and number of fish being moved is assumed to take about 6 minutes on average; for many this information will already be required to be recorded under Aquatic Animal Health legislation.. (Consignment note – 6 minutes – £2.81). This is the cumulative based on the number of permitted sites multiplied by the average number of fish movements per site (which is the Environment Agency has calculated as 1.2 per site). Notifications and consignments notes will increase as more sites and suppliers gain permits in the scheme; this will eventually plateau at around 12,000 per year.

Total costs to industry over 10 years is £273k

The total 10 year cost to industry of option 1 is £780k. Compared to the baseline industry costs of £1244k over the 10 year period this gives a net benefit to industry of option £465k⁷ (see Annex 5 Table 2).

55. It should be noted that the benefits are back loaded as they get larger over time as the permit process progresses.

56. The costs/savings to the Environment Agency/Cefas FHI of option 1 can be found in Annex 5 table 4.

Costs to Government

⁷ Allowing for rounding errors - £465k is the most accurate figure.

57. Overall, there are no additional costs to government of this option compared to the baseline as this is a deregulatory measure which reduces the burden of business and cost to government. The Environment Agency plan to proactively issue an initial tranche of site permit for industry for the beginning of the scheme. Following permits will be issued as routine applications for site permits take place. **This proactive issuing by the Environment Agency of this initial tranche of site permits on behalf of industry does result in a transitional cost to government in the first year (2014) of £94k based on the Environment Agency's cost of processing these permits.**

Benefits to Government

58. All Cefas' FHI costs in relation to inland waters will be removed as ILFA licence processing of non-native fish in inland waters will transfer to this new scheme⁸. With the application of the risk-based approach, the cost of processing applications will be lower than the baseline costs from the first year of implementation in 2014. It is anticipated that there will be no increase in enforcement or monitoring.

- Site permits for all new and existing waters are assumed to take two hours to complete. (Site permit – 2 hours- £76.00)
- Paperwork for supplier permits is assumed to take half an hour to complete. (Supplier permit – 30 minutes- £19.00)
- Paperwork for notifications is assumed to take about 5 minutes on average. (Notification – 5 minutes- £3.17)

The total 10 year cost to government of Option 1 is £851k compared to a cost for Option 0 of £1,707. Therefore, the net benefit to the Environment Agency/Cefas FHI of option 1 over option 0 over the 10 year period is £856k (see Annex 5 Table 4).

59. The benefit of this option, relative to the baseline option is shown in Table 1. Relative to the baseline, this option will lead to a reduction in cost for industry and a reduction in annual Environment Agency costs of processing permit applications. These cost savings represent the benefits of this policy option. This is a conservative estimate of the potential benefits as it does not take into account the likely reduced need for Environment Agency expenditure on removing non-native fish species from inland waters.
60. These measures contribute to healthy and sustainable fisheries from which social and economic benefits are derived. However, it has not been possible to quantify these potential benefits. Better targeted measures will also reduce the risks arising from the spread of non-native species, arising from predation, displacement of fish, harm to freshwater fish habitats and the introduction of diseases not controlled by European legislation.

Risks

61. The risks for biodiversity under Option 1 are mainly associated with the requirement to notify only high risk cases. The new live fish movement scheme will enable the Environment Agency to redeploy resources from administration to focus on high risk categories of fish movements, illegal activity and, through setting and reviewing Live Fish Movement Permits, work with fishery owners and operators to improve fisheries management and sustainability.

OPTION 2 – Introduce a permit scheme with tighter controls on keeping, releasing and removal of live fish in inland waters

62. The only difference between this option and option 1 is that notifications of movement of fish will be required at all risk levels (rather than just high risk as under option 1). The scheme will cover all movements of fish, both native and non-native. This will better protect against threats to fisheries and biodiversity, as all notifications are scrutinised but this will increase costs including for those movements that currently the Environment Agency considers do not warrant tight controls (on a case by case basis).

⁸ Cefas will still retain their costs in relation to fish farms and aquaria

Costs to Industry

63. Overall there are no additional costs to business of this option compared to the baseline as this is a deregulatory measure which reduces the burden of business and cost to government. There are no transitional costs to industry as the Environment Agency plan to proactively issue an initial tranche of site permit for industry for the beginning of the scheme. Following permits will be issued as routine applications for site permits take place.

Benefits to Industry

64. The calculation of administrative costs and savings to industry is shown in Annex 5 Table 3. Assumptions regarding the time taken to complete paperwork for different types of permits are the same as those for option 1. Assumptions on number of site and supplier permits, and consignment notes (paragraph 54) are also the same. In this option individual notifications will be required for all fish movements and it has been estimated that 12540 notifications will be issued per year by the end of the 10 year period (97125 aggregated over the 10 year period). There are still cost savings from this option compared to Option 0 which represent the benefits of this policy option. This is a again a conservative estimate of the potential benefits as it does not take into account the likely reduced need for Environment Agency expenditure on removing non-native fish species from inland waters.
65. These measures contribute to healthy and sustainable fisheries from which social and economic benefits are derived. However, it has not been possible to quantify these potential benefits. Better targeted measures will also reduce the risks arising from the spread of non-native species, arising from predation, displacement of fish, harm to freshwater fish habitats and the introduction of diseases not controlled by European legislation.

The 10 year cost to industry of Option 2 is £1,010k compared to £1,244 under Option 0. Therefore the net benefit to industry over the 10 year period compared to option 0 is £234k (see Annex 5 Table 3).

Costs to Government

66. Overall, there are no additional costs to government of this option compared to the baseline as this is a deregulatory measure which reduces the burden of business and cost to government. The Environment Agency plan to proactively issue an initial tranche of site permit for industry for the beginning of the scheme. Following permits will be issued as routine applications for site permits take place. **This proactive issuing by the Environment Agency of this initial tranche of site permits on behalf of industry does result in a transitional cost to government in the first year (2014) of £103k based on the Environment Agency's cost of processing these permits**

Benefits to Government

67. All Cefas' FHI costs will be removed as ILFA licence processing of non-native fish in inland waters will transfer to this new scheme. With the application of the risk-based approach, the cost of processing applications will be lower than the baseline costs from the first year of implementation in 2014. It is anticipated that there will be no increase in enforcement or monitoring.

The 10 year cost to government of Option 2 is £1,107 compared to £1,707 under Option 0. Therefore, the net benefit to the Environment Agency/Cefas FHI of option 2 over the 10 year period compared to option 0 is £600k (see Annex 5 Table 5).

68. This option will allow the Environment Agency to monitor all live fish movements and allow for improvements to biodiversity security in England and Wales. This option allows for some reductions to the administrative costs to the industry.

Risks

69. Option 2 will impose controls on all fish movements to and from inland waters. However, this option does not recognise that the majority of movements are of low environmental risk. A requirement to control each movement would impose an un-necessary burden on both the industry and the Environment Agency and is considered disproportionate.

Summary

70. Table 1 summarises the costs for each option and the comparative difference between the different options. Both option 1 and 2 involve savings for industry. The main difference is that under option 2 individual notifications will be required for all fish movements rather than 20% of movements and it has been estimated that 12540 notifications will be issued per year by the end of the 10 year period. For option1 notifications are required for high risk movements of fish only.
71. Option 1 provides a more cost effective means to regulate or restrict activities that may have an adverse effect on biodiversity, while at the same time creating a more flexible permitting system and that reduces the administrative burden on the industry and allows for better regulation and enforcement of high risk movements.

Table 1: Total costs of option 1 and 2 compared to option 0 for 10 year analysis period.

Comparative costs to industry for Option 0, Option 1 and Option 2 (Cost (k))					
	Option 0	Option 1	<i>Relative change of Option 0 to Option1</i>	Option 2	<i>Relative change of Option 0 to Option 2</i>
S 30 consents	1231	0	-1231	0	-1231
IFLA / WCA licence	13	0	-13	0	-13
LFM site permits	0	465	465	465	465
LFM supplier permit	0	2	2	2	2
Notifications	0	42	42	273	273
Consignment notes	0	273	273	273	273
Total costs*	1244	780	- 465	1012	-234

*Numbers extracted from totals in tables 1 and 2 in annex 5; any differences in calculations due to rounding factors

Table 2: Average annual benefits and total costs of option 1 and 2 for both Industry and Government compared to option 0

	Industry (£m)	Government (£m)	Total (£m)
Option 1 – Proposed permitting system and risk based notifications			
Transition costs	0.000	0.094	0.094
Average annual benefit	0.046	0.095	0.141
Total benefit	0.465	0.950	1.413
Total Costs	0.000	0.094	0.094
Net Benefit	0.465	0.856	1.320
Option 2 - Proposed permitting scheme with notifications for all fish movements			
Transition costs	0.000	0.103	0.103
Average annual benefit	0.023	0.070	0.094
Total benefit	0.234	0.703	0.937
Total Costs	0.000	0.103	0.103
Net Benefit	0.234	0.600	0.834

Table 3: Present Values of options 1 and 2 compared to option 0

	£m
Option 1	
Present value cost	0.09
Present value benefit	1.15
Net present value	1.06
EANCB	-0.04*
Option 2	
Present value cost	0.10
Present value benefit	0.75
Net present value	0.65
EANCB	-0.02*

* EANCB is in 2009 prices and 2010 present value base year

One In Two Out (OITO)

72. This proposal is an OUT under OITO. An OUT is applicable if ‘the direct incremental economic benefit to business of a measure exceeds the direct incremental economic cost to business’ and/or the change is deregulatory (in addition to the glossary definition, where Departments recast measures in order to reduce burdens on business will be included as deregulatory for the purposes of OITO (Section 1.9.11 of the Better Regulation Framework Manual).
73. This proposal is for a new affirmative statutory instrument which recasts existing provisions within primary legislation. This measure amends the existing regime for the regulator on managing live fish in inland water changing it to a risk based system which will reduce the burden on industry (as the level of permitting they have to apply for is reduced). It is therefore amending existing regulation to reduce the burden on industry and this is an OUT.

Equivalent Annual Net Cost Implementation to business

74. EANCB figures are calculated using the methodology in the guidance for OITO and uses the EANCB calculator to derive the figure. Table 4 shows the net benefits to business of option 1 over option 0 in each year of the analysis period, which were used to calculate the EANCB of the preferred policy option. A more detailed breakdown of these costs can be found in Annex 5 Table 2.

Table 4: Annual net benefits of option 1 compared to option 0* (000's)

Year	Option 0 costs to industry	Option 1 costs to industry	Net benefits of option 1 over option 0
2014	96.02	84.12	£11.91
2015	127.60	102.37	£25.23
2016	127.60	103.35	£24.25
2017	127.60	104.34	£23.26
2018	127.60	85.52	£42.07
2019	127.60	77.15	£50.45
2020	127.60	78.41	£49.19

2021	127.60	54.10	£73.50
2022	127.60	46.08	£81.52
2023	127.60	44.18	£83.42
Total	1244	780	465

*table numbers may not match exactly due to rounding

75. There is an overall benefit to business which results in an EANCB of -£0.04m for option 1 and -0.02m for option 2 (the negative sign indicates that this is a benefit rather than a cost to business) in 2009 prices and 2010 present value base year.

Small Business Assessment

76. The majority of fish farming businesses and fish suppliers are small businesses and all of the costs and benefits identified in this Impact Assessment are relevant to these sectors. No separate costs or benefits have been identified in respect of the size of their business.
77. This proposed legislation on live fish movements will have a beneficial effect on small and microbusinesses as they provide a saving, reducing administrative burdens by replace applications for each and every fish movement with fewer notifications and site permits which will be valid between three to ten years. There should be minimal transitional costs for industry as the Environment Agency will proactively issue permits for the sites which move fish most frequently in advance and further permits will be issued as the previous scheme licences/S30 consents are renewed. Given these measures no further mitigating actions is considered necessary.
78. The small and micro business assessment does not apply to this proposal as this is a fast track Red Tape Challenge recommendation.

Competition Assessment

79. These measures will impact directly on all fish suppliers and fisheries. Defining the market in which fish farmers operate is not straightforward, as each species has different markets and the levels of substitutability between markets varies considerably depending on the species and where it is caught.
80. No individual fish farm produces more than 10% of the total fish farmed in the UK and no single fish supplier has more than 10% of the market. The provisions will affect all fish farmers and fish suppliers in the same way and is unlikely to directly affect the market structure or change the number or the size of firms. It will not lead to higher set-up costs for new or potential firms that existing firms do not have to meet. This sector is not characterised by rapid technological changes and the proposal will not stop firms providing products or services that they would otherwise provide.
81. In view of this, it is unlikely that there will be an impact on competition and therefore, no requirement to undertake a detailed competition assessment is necessary

Justice Impact/Sanctions / enforcement

82. The Environment Agency is the enforcement authority for these provisions. Monitoring and enforcement responsibilities currently focus on ensuring compliance assessment of consented operations and detecting and taking action against illegal (unconsented) operations. The new scheme will enable the Environment Agency to better target compliance assessment at higher risk movements, thus releasing more resources to focus on illegal activities, including responding to intelligence gathered. Enforcement and monitoring efforts/resource overall are expected to remain the same.
83. The Environment Agency will have equivalent enforcement powers as are available to them in sections 31 to 33 and 36 of the Salmon and Freshwater Fisheries Act 1975. These powers include the ability to: enter and search land adjoining or near to any waters, enter suspected premises or land with a warrant, seize nets and other instruments, fish or samples of fish, require the production of consignment notes, and demand documents.
84. Under existing legislation, sanctions are restricted to a fine: there is no route for the offender to be required to remedy or mitigate for any fishery/environmental damage. Under the new scheme, sanctions will range from requirements to remove those fish illegally introduced via notices to fines.

Custodial sentences are not proposed as they would be disproportionate. The current legislation allows for fixed penalty notices, although these are not used at this time. Their possible use is kept under review. There have been three prosecutions under ILFA over the last five years and none involved legal aid. Those 3 prosecutions have resulted in fines of £500, £1,650 and £4,950 with costs awarded of £1,400, £2,000 and £30,000 the highest being for keeping the highly invasive species topmouth gudgeon. There have been no prosecutions under section 30 of the Salmon and Freshwater Fisheries Act 1975 over the same period. It is unlikely, even with the new powers in this proposal, that there will be any change in prosecutions levels. The Environment Agency work cooperatively with industry and any prosecutions would be a last resort. As now if an 'illegal' fish is found in inland waters, depending on the level of risk, the Environment Agency may issue a time limited permit to allow the owner to removal the fish in a timely fashion or work with the owner to remove the fish immediately. The impact of this proposal on the judicial service is expected to be, minimal and would likely to be the same level as for current legislation

85. The Environment Agency will monitor the movements of fish through the Live Fish Movements Database under both proposals. The database will highlight high risk movements and alert the Agency. Assuming that the necessary resources will be available for enforcement, this will allow the Environment Agency to better target their efforts. The rate at which illegal introductions are prevented will provide an indication of whether the Environment Agency is refocusing their efforts to the right areas.

Review

86. Defra will carry out periodic reviews of the operation of the scheme and the resources that the Environment Agency utilises in implementing it.

Devolution issues

87. The management of the movement of live fish in England and Wales is carried out by the Environment Agency in England and Natural Resources Wales in Wales. The Environment Agency's responsibilities extend to those parts of the Border River Esk catchment area that lies in Scotland, but excludes those parts of the River Tweed and its catchment area that lies in England (fisheries in this area are managed by Scotland). This arrangement has been part of an agreement to ensure that the Border Rivers can be managed on a catchment basis and was formally recognised in the Scotland Act 1998. Wales are intending to introduce parallel legislation shortly.

Stakeholder consultation

88. Formal public consultation on the proposal took place between 16 December 2009 and 10 March 2010. A total of 22 responses were received during the consultation⁹. The majority of respondents (17 ie 77%) agreed that the proposed risk based permit scheme should be introduced. Those who supported retention of the status quo (3) argued that the current regulation of movements was adequate, and that the new scheme presents benefits only to the regulator. There were no comments received on the times and costs presented in the impact assessment. No further information on costs was provided by any stakeholders. Stakeholder generally wanted further details on how the scheme would operate. In response to the concerns raised, the Environment Agency in 2011 has provided guidance to industry on what the permit scheme will contain and has provided regular updates and explanations through seminars (the latest being in April 2014) to industry and the angling bodies through an Environment Agency stakeholder group (the England Fisheries Group) .
89. The brunt of the transitional burden of the new scheme will be on the Environment Agency who plan to proactively issue permits for the start of the scheme. The tasks involved for the new measures are similar therefore existing fish suppliers and in land water owners will be very familiar with the requirements. We consider that once an owner or occupier has their permit overall administrative burdens will decrease considerably, that controls will be firmly but fairly enforced, and that those involved in low risk removals or releases will be able to do so without excessive oversight. This will make the legal trade in fish more straightforward.

⁹ <http://webarchive.nationalarchives.gov.uk/20100505154859/http://www.defra.gov.uk/corporate/consult/fish-movements/fish-movements-impact-assessment.pdf>.

90. The Government response was published in April 2010 and whilst recognising the concerns expressed we still consider that the current scheme is overly bureaucratic and inflexible¹⁰. All fish movements, whether high or low risk, require S30 consents and if, for whatever reason, the movement does not happen on the specified day or time a new S30 consent must be sought. The numbers and timings which form the basis for this current impact assessment have not changed materially since the original consultation.
91. Defra and the Environment Agency have actively engaged with industry stakeholders since the consultation in 2010 directly via letters to stakeholders and through a stakeholder forum – the England Fisheries Group. There is continued support for the proposal from these stakeholders.
92. These proposed changes were highlighted and supported as an improvement in regulation and reduction in burdens on industry in the 2012 Red Tape Challenge initiative for Marine and Water.

Conclusion

93. Option 1 is preferred as it ensures inland fisheries and the wider environment are protected in the most proportionate and effective way through prioritising, monitoring and enforcement efforts on high risk activities while streamlining processes for routine low risk activities. Option 1 reduces the administrative and financial costs for most operations and for the fish supply industry overall. Option 1 also supports many of the objectives of the Government's better regulation agenda.

¹⁰ <http://webarchive.nationalarchives.gov.uk/20100505154859/http://www.defra.gov.uk/corporate/consult/fish-movements/fish-movements-gov-response.pdf>

Risks from the introduction of fish, whether native or alien, into inland waters

The introduction of fish, whether native or alien, into inland waters can result in negative externalities - an externality occurs when the consumption or production of one person impacts the consumption or production possibilities of another - and be detrimental to local and/ or national biodiversity through competition, predation, disease transfer and hybridisation, or through impacts on the aquatic habitat. Invasive alien species are considered to pose the second biggest threat to biodiversity after climate change and therefore government intervention is needed to correct this market failure.

The environmental damage arising from inappropriate fish releases can be particularly serious given that the control or eradication of a fish species, once established, is extremely difficult and costly, and in many cases unachievable. This can be a particular concern with non-native species; while not all introduced non-native species will become invasive they can still have adverse impacts. For example, topmouth gudgeon is an extremely invasive non-native fish species that has been introduced to UK waters. It is highly destructive to native species, capable of outcompeting species such as roach and carp.

A Defra commissioned CABI report in 2010¹¹ estimated the current cost of all invasive non-native species to the British economy at approximately £1.7 billion per year. This includes costs to eradicate/control non-native species, loss of productivity and indirect costs (although these are small). While this figure includes introduction of animals other than fish it gives an idea of the overall magnitude of the problem for the UK economy. Inappropriate movements of native fish species such as common bream (*Abramis brama*) can also have adverse impacts in certain sensitive habitats. It is therefore important that such harmful introductions be minimised whilst recognising that the stocking of fish in some waters can enhance the value of those fisheries.

The need for effective targeted action on non-native species (including fish) is set out in the Invasive Non-Native Species Framework Strategy for Great Britain (GB). It sets a key objective to minimise the risk of invasive non-native species entering and becoming established in GB, and to reduce the risks associated with the movement of species outside their natural range within GB. It recognises that prevention and early intervention are the most successful and cost-effective approaches for controlling the spread and impact of non-native species, and focuses efforts around the three-pronged approach agreed under the Convention on Biological Diversity – i.e. prevention measures, early detection and then carefully considered appropriate action. The Strategy also recognises the crucial need for greater awareness of the issues across all stakeholders, including the public, to achieve this.

Fish are also susceptible to introduced pathogens. There are a number of non-native fish pathogens present in Great Britain which can pose significant risks to native fish stocks and the fisheries they support. Many disease outbreaks can be linked to illegal fish movements. The Environment Agency requires screening for these when consenting higher risk fish movements

¹¹ <https://secure.fera.defra.gov.uk/nonnativespecies/index.cfm?sectionid=55>

Management of the keeping and release of freshwater fish: current legislation and new proposed system

Key points of current legislative framework for the management of fish (yellow highlights areas that are changing as a result of proposals in this IA)

<p>Import of Live Fish (ILFA) Introduction/Prohibition of Keeping or Release of Live Fish (Specified Species) (England) Order 2014</p> <ul style="list-style-type: none"> ○ Applies to non -native fish ○ Covers aquaria/retail and inland water ○ Licence require to keep or release ○ Regulatory body: Fish Health Inspectorate and Environment Agency 	<p>Salmon and Freshwater Fisheries Act 1975 – Section 30</p> <ul style="list-style-type: none"> ○ Applies to all fish ○ Covers introductions into inland waters ○ Consent required every time to introduce/release fish ○ Regulatory body: Environment Agency 	<p>Wildlife and Countryside Act 1981</p> <ul style="list-style-type: none"> ○ Applies to non-native fish ○ Covers release into the wild ie inland water ○ Licence required to release ○ Regulatory body: Natural England
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Key points of the proposed new legislative framework system for the management of fish

- The proposed keeping and introduction of Fish (England) Regulations 2014, is highlighted in red
- **Key differences in the legislation before and after the new proposal comes into force are highlighted in yellow – the Wildlife and Countryside Act does not change. The box in red is the regulation that will be in place as a result of the changes set out in this IA.**
- The critical difference between measures relates to the keeping non- native fish inland waters. Keeping of non-native fish in inland waters in ILFA will transfer to the new legislation as will the S30 consents requirement under SAFFA providing an improved regulatory regime of introduction and keeping fish in inland water.

<p>Import of Live Fish (ILFA) Introduction/Prohibition of Keeping or Release of Live Fish (Specified Species) (England) Order 2014 – (proposal for a consequential amendment Order)</p> <ul style="list-style-type: none"> ○ Will apply to non -native fish ○ Covers aquaria/retail only ○ Licence required to keep or release ○ Regulatory body: Fish Health Inspectorate 	<p>The keeping and introduction of Fish (England) Regulations 2014 proposal</p> <ul style="list-style-type: none"> • Will apply to all fish • Covers inland waters • Permit required to introduce/release/keep • Regulatory body: Environment Agency • Only high risk movements need notifying 	<p>Wildlife and Countryside Act</p> <ul style="list-style-type: none"> ○ Applies to non-native fish ○ Covers release into the wild ie inland water ○ Licence required to release ○ Regulatory body: Natural England
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Current and proposed task list for industry for section 30 consents

Current regulations

Tasks for industry (mainly fish suppliers, but also some fishery owners/angling clubs):

1. Pre-application phone call;
2. Completion of Section 30 form or online system (including information gathering from customers);
3. Commission and submission of health check (where required);
4. Submission of form by post or fax (excluding on-line);
5. Receipt of consent (post or on-line);
6. Phone call where date change or other minor changes required (20%)
7. Completion of current Aquatic Animal Health Regulations and transport movement records.

New Regulations

Supply permit holders (fish suppliers, but also some angling clubs/fishery owners):

1. Issue of Supplier Permit at start of scheme (once only) – phone call to apply for a pre-populated permit;
2. Completion of Aquatic Animal Health Regulations and transport movement records (inclusive of new regulation requirements);
3. Submission of health check;
4. Notification by email or fax of high risk movements (10% of activities).

Site permit holders (fishery owners and angling clubs):

1. Issue of Site Permit (once only excluded 2500 sites sent permit proactively):
 - a. Phone call to apply for permit and discuss site visit arrangements for complex site operations (~10%);
 - b. Site visit for highest level of complex permits (~5%)
 - c. Receipt of pre-populated draft site permit;
 - d. Validation, confirmation and return
 - e. Receipt of permit
2. Request to amend site permit, should holder's requirements change, e.g. to add additional species to the permit

Cost for the eradication of Topmouth Gudgeon

Failure to control the introduction of non-native fish will result in the continued need to mitigate such actions and where necessary remove fish from high risk inland waters. For example, topmouth gudgeon is an extremely invasive non-native fish species that was been introduced to UK waters accidentally but subsequently was available in the ornamental trade for a limited period. It poses considerable health risks to native species, including disease transmission and disruption of natural reproduction. As such, it can have adverse impacts on aquatic ecosystem functions through declining native fish reproduction and consequent changes in food-web structure. With the exception of a single small eradication incidence of fathead minnow; topmouth gudgeon is currently the only non-native fish species that the Environment Agency is expending resources to eradicate. Case studies¹² of topmouth gudgeon eradications indicate that on average it costs £2 per m² to eradicate the species. Example costs are £61k, £50.8k and £18.1k at fisheries in Cumbria, the West Midlands and North Yorkshire, with the most expensive operation (£194k) having been recently undertaken in Devon.

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.

¹² Britton et al. 2008; Aquatic Conserv: Mar. Freshwat. Ecosyst. 18: 867–876.

Supporting tables for the calculation of costs/benefits

Table 1: Option 0 – costs to Industry and Government of business as usual*

	Do nothing (S.30 consents)			Do nothing (ILFA/WCA licence)							Total cost (£k)
	Number of Apps. (10 year total)	Cost per application (£) (wage rate x time taken)	Cost (10 year total) (£k)	Number of Apps. (10 year total)	Cost per application (£)(wage rate x time taken)	Cost (10 year total) (£k)	Number of Apps. (10 year total)	Cost per application (£)(wage rate x time taken)	Cost (10 year total) (£k)	Total cost (£k)	
industry	43875	28.07	1231	283	35.08	10	98	28.07	3	13	1244
EA/Cefas	43875	38	1667							40~	1707

*table numbers may not match exactly due to rounding

~Based on £3,985 per annum (£2,989 in 2014)

Table 2. Option 1 - Costs and savings to industry in calendar years*

Year	Site permits						Supplier permits		Notifications		Consignment notes		Total		Do nothing (S.30 consents)		Do nothing (ILFA/WCA licence)				Saving (£k)
	Proactive site permits		Existing water site permits		New water site permits		Number	Cost (£k)	Number	Cost (£k)	Number	Cost (£k)	Number	Cost (£k)	Number	Cost (£k)	Number	Cost (£k)	Number	Cost (£k)	
	Number	Cost (£k)	Number	Cost (£k)	Number	Cost (£k)															
2014	1875	13	750	42	300	17	113	1	585	2	3510	10	84	3375	95	29	1	10	0	1	12
2015	625	4	1000	56	400	22	63	0	865	2	5940	17	102	4500	126	29	1	10	0	1	25
2016	0	0	1000	56	400	22	34	0	1145	3	7620	21	103	4500	126	29	1	10	0	1	24
2017	0	0	1000	56	325	18	34	0	1410	4	9210	26	104	4500	126	29	1	10	0	1	23
2018	0	0	625	35	300	17	34	0	1595	4	10320	29	86	4500	126	29	1	10	0	1	42
2019	0	0	500	28	225	13	34	0	1740	5	11190	31	77	4500	126	29	1	10	0	1	50
2020	0	0	500	28	200	11	16	0	1880	5	12030	34	78	4500	126	29	1	10	0	1	49
2021	0	0	125	7	125	7	10	0	1930	5	12330	35	54	4500	126	29	1	10	0	1	73
2022	0	0	0	0	100	6	10	0	1950	5	12450	35	46	4500	126	29	1	10	0	1	82
2023	0	0	0	0	63	4	3	0	1963	6	12525	35	44	4500	126	29	1	10	0	1	83
total	2500	18	5500	309	2438	137	350	2	15063	42	97125	273	780	43875	1231	290	10	100	3	13	465

*table numbers may not match exactly due to rounding

**Net benefit

Table 3 Option 2 - Costs and savings to industry by calendar years*

Year	Site permits						Supplier permits		Notifications		Consignment notes		Total		Do nothing (s.30 consents)				Do nothing (ILFA/WCA licence)				Saving (£k)					
	Proactive site permits		Existing water site permits		New water site permits		Number	Cost (£k)	Number	Cost (£k)	Number	Cost (£k)	Number	Cost (£k)	Number	Cost (£k)	Number	Cost (£k)	Number	Cost (£k)	Number	Cost (£k)	Number	Cost (£k)	Number	Cost (£k)	Number	Cost (£k)
	Number	Cost (£k)	Number	Cost (£k)	Number	Cost (£k)																						
2014	1875	13	750	42	300	17	113	1	3510	10	10	3510	10	92	3375	95	29	1	10	0	1	4						
2015	625	4	1000	56	400	22	63	0	5940	17	17	5940	17	117	4500	126	29	1	10	0	1	11						
2016	0	0	1000	56	400	22	34	0	7620	21	21	7620	21	122	4500	126	29	1	10	0	1	6						
2017	0	0	1000	56	325	18	34	0	9210	26	26	9210	26	126	4500	126	29	1	10	0	1	1						
2018	0	0	625	35	300	17	34	0	10320	29	29	10320	29	110	4500	126	29	1	10	0	1	18						
2019	0	0	500	28	225	13	34	0	11190	31	31	11190	31	104	4500	126	29	1	10	0	1	24						
2020	0	0	500	28	200	11	16	0	12030	34	34	12030	34	107	4500	126	29	1	10	0	1	21						
2021	0	0	125	7	125	7	10	0	12330	35	35	12330	35	83	4500	126	29	1	10	0	1	44						
2022	0	0	0	0	100	6	10	0	12450	35	35	12450	35	76	4500	126	29	1	10	0	1	52						
2023	0	0	0	0	63	4	3	0	12525	35	35	12525	35	74	4500	126	29	1	10	0	1	54						
total	2500	18	5500	309	2438	137	350	2	97125	273	273	97125	273	1010	43875	1231	290	10	100	3	13	234						

*table numbers may not match exactly due to rounding

**Net benefit

Table 4 - Option 1 - Cost and savings for Environment Agency/Cefas by calendar years*

Year	Site permits (all)		Supplier permits		Notifications		Total Cost (£k)	Do nothing (S.30 consents)		Do nothing (Cefas ILFA/WCA) cost	Saving (£k)
	Number	Cost (£k)	Number	Cost (£k)	Number	Costs (£k)		Number	Cost (£k)		
2014	2925	£222	£113	£2	585	£2	£226	3375	£128	£4	-£94
2015	2025	£154	£63	£1	990	£3	£158	4500	£171	£4	£17
2016	1400	£106	£34	£1	1270	£4	£111	4500	£171	£4	£64
2017	1325	£101	£34	£1	1535	£5	£106	4500	£171	£4	£69
2018	925	£70	£34	£1	1720	£5	£76	4500	£171	£4	£99
2019	725	£55	£34	£1	1865	£6	£62	4500	£171	£4	£113
2020	700	£53	£16	£0	2005	£6	£60	4500	£171	£4	£115
2021	250	£19	£10	£0	2055	£7	£26	4500	£171	£4	£149
2022	100	£8	£10	£0	2075	£7	£14	4500	£171	£4	£161
2023	63	£5	£3	£0	2088	£7	£11	4500	£171	£4	£164
Total	10438	793	350	7	16188	51	851	43875	1667	40	856

*table numbers may not match exactly due to rounding

**Net benefit

Table 5 - Option 2 Cost and savings for Environment Agency/Cefas by calendar year*

Year	Site permits (all)		Supplier permits		Notifications		Total Cost (£k)	Do nothing (S.30 consents)		Do nothing (Cefas ILFA/WCA) cost	Saving (£k)
	Number	Cost (£k)	Number	Cost (£k)	Number	Costs (£k)		Number	Cost (£k)		
2014	2925	£222	112.5	£2	3510	£11	£236	3375	£128	£4	-£103
2015	2025	£154	63	£1	5940	£19	£174	4500	£171	£4	£1
2016	1400	£106	34	£1	7620	£24	£131	4500	£171	£4	£44
2017	1325	£101	34	£1	9210	£29	£131	4500	£171	£4	£44
2018	925	£70	34	£1	10320	£33	£104	4500	£171	£4	£71
2019	725	£55	34	£1	11190	£35	£91	4500	£171	£4	£84
2020	700	£53	16	£0	12030	£38	£92	4500	£171	£4	£83
2021	250	£19	10	£0	12330	£39	£58	4500	£171	£4	£117
2022	100	£8	10	£0	12450	£39	£47	4500	£171	£4	£128
2023	63	£5	3	£0	12525	£40	£44	4500	£171	£4	£131
Total	10438	£793	350	£7	97125	£308	£1,107	43875	£1,667	£40	£600

*table numbers may not match exactly due to rounding

**Net benefit