

Title: Byelaw XXXII: Shellfish Permit Byelaw IA No: NEIFCA_16_3 Lead department or agency: NEIFCA Other departments or agencies: N/A	Impact Assessment (IA)
	Date: 13/12/2016
	Stage: Consultation
	Source of intervention: Domestic
	Type of measure: Secondary Legislation
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Summary: Intervention and Options	RPC Opinion: N/A

Cost of Preferred (or more likely) Option				
Total Net Present Value	Business Net Present Value	Net cost to business per year	In scope of One-In, Two-Out?	Measure qualifies as
- £93,844	- £93,844	£0	N/A	N/A
What is the problem under consideration?				
i) Management of over-capacity within the recreational potting sector, non-compliance with prescribed daily bag limits and enforcement of recreational fishing effort. ii) Technology creep leading to increasing commercial pot sizes and catching efficiency. iii) Poor gear marking, impairing monitoring and enforcement.				
Why is government intervention necessary?				
Intervention is required to reduce latent capacity in recreational fishing effort and address increasing catching capacity from commercial pots, supporting the continued provision of public and common goods in the marine environment whilst ensuring that negative externalities are reduced.				

What are the policy objectives and the intended effects?

1. To reduce latent capacity in the recreational sector through a reduction in permitted potting entitlement from 10 to 5 pots.
2. To improve recreational fishers compliance in relation to daily bag limits.
3. To update the Shellfish Permit Byelaw from SFC legacy.
4. To address increasing pot sizes, with a higher catching capacity within NEIFCA's jurisdiction.
5. To standardise gear marking, supporting enforcement and reducing gear conflict.

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

The following policy options have been considered:-

0. Do nothing - maintain the existing management regime.
1. Regulatory management - Restrict hobby effort to 5 pots and introduce a maximum pot size.
2. Use of non-regulatory measures - Request voluntary adoption of measures.

Option 1 is preferred;

- A reduced capacity in LSP potting entitlement will support compliance with daily bag limits.
- A maximum pot size will address increasing catching capacity.
- Standardised gear marking will support monitoring, enforcement and compliance of the byelaw.

Will the policy be reviewed? It will be reviewed. If applicable, set review date: 3 years from implementation

Does implementation go beyond minimum EU requirements?			Yes		
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	Large 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, given the available evidence, it represents a reasonable view of the likely costs, benefits and impact of the leading options.

Signed by the responsible
SELECT SIGNATORY:



Date: 13 December 2016

Summary: Analysis & Evidence Policy Option 1

Description:

FULL ECONOMIC ASSESSMENT

Price Base Year	PV Base Year	Time Period Years	Net Benefit (Present Value (PV)) (£)		
			Low: -£68,250	High: -£119,438	Best Estimate: -£93,844
2016	2016	10			

COSTS (£m)	Total Transition (Constant Price) Years	Average Annual (excluding transition) (Constant Price)	Total Cost (Present Value)
Low	£68,250	£0	£68,250
High	£119,438	£0	£119,438
Best Estimate (£)	£93,844	£0	£93,844

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

As the LSP permit authorises recreational fishing only, no monetary impacts are envisaged.

The maximum pot size has been designated in consultation with the commercial industry to encompass the largest pots in current usage so no monetary impacts are anticipated.

Estimates of £10 (optimistic), £13.75 (best) and £17.50 (pessimistic) have been used for surface markers.

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

Marker loss per vessel varies considerably by operator and location and cannot be accurately estimated.

LSP (Hobby) vessel costs have not been included as pot use varies considerably and the impacts associated with the introduction of surface markers are considered to be negligible.

BENEFITS (£)	Total Transition (Constant Price) Years	Average Annual (excl. Transition) (Constant Price)	Total Benefit (Present Value)
Low	N/A	N/A	N/A
High	N/A	N/A	N/A
Best Estimate	£0	£0	£0

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

None

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

None

Key assumptions/sensitivities/risks	Discount rate (%)	3.5%
100% compliance		

BUSINESS ASSESSMENT (Option 1)

Direct impact on business (Equivalent Annual) £:			In scope of OITO?	Measure qualifies as
Costs: £	Benefits: £0	Net: £0	N/A	N/A

Evidence base

1. Introduction

North Eastern IFCA (NEIFCA) is charged with the sustainable management of fisheries within its jurisdiction, authorised through section 153 of the Marine and Coastal Access Act (2009). In support of the sustainable management of common goods, namely shellfish species including European lobster, edible crab, velvet crab and common whelks a limited shellfish permit (LSP) was introduced to manage excessive recreational exploitation in 2007. In review of this byelaw a degree of over capacity has been identified in the recreational entitlement, which is in some cases providing opportunity for non-compliance with the regulations prescribed daily bag limits.

Technology creep in the commercial potting sector is resulting in ever increasing pot sizes. There is concern that the increased catch efficiency could undermine the sustainable management of targeted shellfish species. Significant industry representation has been made to NEIFCA regarding the inappropriate marking of pot fleets resulting in gear conflict and loss of gear as well as impacting enforcement efficiency.

2. Rationale for intervention

Inshore Fisheries and Conservation Authorities have duties to ensure that fish stocks are exploited in a sustainable manner by implementing appropriate management measures. Implementing this byelaw will ensure that fishing activities are conducted in a sustainable manner and that the marine environment is suitably protected.

Fishing activities can potentially cause negative outcomes as a result of 'market failures'. The failures in this case relate to public goods and services, negative externalities and common goods.

- Public goods and services - A number of goods and services provided by the marine environment such as biological diversity are 'public goods' (no-one can be excluded from benefiting from them, but use of the goods does not diminish the goods being available to others). The characteristics of public goods, being available to all but belonging to no-one, means that individuals do not necessarily have an incentive to voluntarily ensure the continued existence of these goods which can lead to under-protection/provision.
- Negative externalities – Negative externalities occur when the cost of damage to the marine environment is not fully borne by the users causing the damage. In many cases no monetary value

is attached to the goods and services provided by the marine environment and this can lead to more damage occurring than would occur if the users had to pay the price of damage. Even for those marine harvestable goods that are traded (such as wild fish), market prices often do not reflect the full economic cost of the exploitation or of any damage caused to the environment by that exploitation.

- Common goods - A number of goods and services provided by the marine environment, such as populations of wild fish, are 'common goods' (no-one can be excluded from benefiting from those goods however consumption of the goods does diminish that available to others). The characteristics of common goods (being available but belonging to no-one, and of a diminishing quantity), mean that individuals do not necessarily have an individual economic incentive to ensure the long term existence of these goods which can lead, in fisheries terms, to potential overfishing. Furthermore, it is in the interest of each individual to catch as much as possible, as quickly as possible so that competitors do not take all the benefits. This can lead to an inefficient amount of effort and unsustainable exploitation.

IFCA byelaws aim to redress these sources of market failure in the marine environment in the following ways:

- Measures will support the continued provision of public goods and services in the marine environment, for example conserving the range of biodiversity in the sea of the IFCA District.
- Measures will ensure that negative externalities are reduced or sufficiently mitigated.
- Measures will support continued existence of common goods in the marine environment, for example ensuring the long term sustainability of fish stocks in the IFCA District.

3. Policy objectives and intended effects

The key objectives of the proposed management are;

1. To reduce latent capacity in the recreational sector and support compliance with daily bag limits.
2. To update the Shellfish permit byelaw to the new IFCA format
3. To limit the maximum commercial pot size within the NEIFCA district.
4. To standardise gear marking, supporting monitoring and compliance of fishing gear.

The intended effect of this management measure is to address over capacity in the recreational sector, support enforcement of recreational shellfish and sustainably manage shellfish resources.

1. Background

An increase in recreational exploitation, where some hobby fishers worked significant numbers of pots was the initial driver for implementation of a restricted LSP in 2007. Following extensive consultation in 2004, 2005 and 2006 a daily bag limit of 2 lobsters, 10 crabs and 30 whelks was introduced in the byelaw alongside a restricted potting entitlement of 10 pots per permit. Since implementation in 2007 officers have observed that the daily bag limit for lobsters can generally be captured with 3-5 pots in the main season. As a consequence of the excessive pot entitlement a minority of permit holders are regularly detected exceeding the daily bag limits and NEIFCA Officers are proposing to address this issue through a reduction in pot number. An informal consultation with stakeholders in 2014/2015 received 11 responses from ~1500 LSP permit holders with mixed views from the respondents (*Pers. Comm. David McCandless*).

Following a suite of effort limitation consultations in 2014, 2015 and 2016 operators have trialled a series of new style pots of increasingly significant sizes, which can now be supported through advancements in self-hauling and self-shooting vessel technology. Officers consider that the potential for increased catch efficiency may undermine the sustainable management plan for European lobster and edible crab stocks currently being implemented by the IFCA. As such Officers are recommending that the specification of maximum pot dimensions align with the maximum size currently in use of 107cm(l) x 60cm(w) x 45(h)cm.

The surface marking of fleets of pots has altered significantly with the expansion and continual development of the potting fleet. During a series of consultations in relation to the impending effort limitation byelaw, significant industry representation has been made over the poor marking of gear, with gear conflict becoming more common place as gear saturation occurs inshore. Officers have also reported

that inappropriate gear marking hinders the identification of fleet positions and negatively impacts enforcement capacity. In review of options, Officers are recommending that gear marking should be formalised to a generic format.

2. Policy Options

Option 0: Do nothing - This option would see the continued use of 10 pots per LSP permit and unrestricted pot sizes. This would not address issues with over capacity, increasing catch efficiency or enforcement of recreational effort.

Option 1: Recreational effort reduction, maximum pot size and specific surface markers – This option would reduce potential recreational effort by 50%, decreasing over capacity and supporting enforcement within NEIFCA jurisdiction. A maximum pot size restriction would address increasing pot sizes and support the upcoming effort limitation byelaw. Specified surface markers will assist monitoring and enforcement, supporting the impending effort limitation byelaw.

Option 2: Use of non-regulatory measures – The Authority could request that all fishers voluntarily adopt the measures. Whilst we believe this would be supported by the majority of LSP permit holders, we believe this would not address issues with non-compliance.

Option 1 is preferred. Regulatory management would allow the NEIFCA to reduce recreational effort by 50%, support enforcement and improve compliance with daily bag limits. Management intervention would allow NEIFCA to pro-actively introduce maximum pot size dimensions, to address increasing sizes and more efficient catching capacity. Introducing specified surface marker design will support monitoring and enforcement of the commercial and recreational potting sectors.

3. Summary of Option 1 impacts on fishery

i. A reduction in recreational potting entitlement

The Authority estimates that a reduction of recreational effort to 5 pots per permit should result in zero cost implications for hobby fishers.

ii. Maximum Pot Size

A maximum pot size will maintain catching efficiency at current levels and address increasing pot sizes. The implementation of the regulation will support enforcement and the sustainable management of crustacean stocks in the district.

iii. Specified Surface Markers

Various designs of surface marker are in use throughout the NEIFCA district, with usage varying by port and region. To generate financial estimates a series of significant assumptions have been made and where values have a high degree of uncertainty Officers have used pessimistic estimates on a pre-cautionary basis. The financial impact estimate process can be detailed as;

- a) 160 vessels provided DEFRA shellfish returns detailing active fishing in 2015.
- b) All vessels north of Saltburn have been discounted in consideration of transitional costs as they almost exclusively use compliant dahn surface markers (35)
- c) The number of pots per fleet was then estimated for each commercial vessel based on size and scaled by reported total pot number on their shellfish catch returns. This was in turn doubled to represent the estimated number of surface markers in use. (6,825).
- d) A series of marker values have been used to estimate the impacts ranging from optimistic (£10), pessimistic (£17.50) and best (£13.75).
- e) This equates to annual financial impacts of optimistic (£68,250), pessimistic (£119,438) and best (£93,844).
- f) Based impacted vessels, the average costs per vessel are estimated between optimistic (£546), pessimistic (£955.50) and best (£750.75) per operator.

4. Conclusion

Recommendation: Option 1

The proposed regulation will reduce over-capacity in the NEIFCA district, support compliance with daily bag limits and support sustainable management of crustacean resources.

Annex I

Annual profile of monetised costs*

	Y ₀	Y ₁	Y ₂	Y ₃	Y ₄	Y ₅	Y ₆	Y ₇	Y ₈	Y ₉
Transition costs	£93,844									
Annual recurring cost – Best estimate	£0	0	0	0	0	0	0	0	0	0
Total present value of annual costs*:										£0
*For the estimation the Impact Assessment Calculator (https://www.gov.uk/government/publications/impact-assessment-calculator--3) was used considering a 3.5% discount rate, a 10 years appraisal period and 2014 as the price and present value base year.										

Net Impact*

	Y ₀	Y ₁	Y ₂	Y ₃	Y ₄	Y ₅	Y ₆	Y ₇	Y ₈	Y ₉
Transition Costs	£93,844	0	0	0	0	0	0	0	0	0
Annual Costs	0	0	0	0	0	0	0	0	0	0
Annual Benefits	0	0	0	0	0	0	0	0	0	0
Net Impact	-£93,844	0	0	0	0	0	0	0	0	0
*For the estimation the Impact Assessment Calculator (https://www.gov.uk/government/publications/impact-assessment-calculator--3) was used considering a 3.5% discount rate, a 10 years appraisal period and 2014 as the price and present value base year.										