

Title: Southern IFCA ‘Poole Harbour Dredge Permit’ Byelaw IA No: SIFCA 009 Lead department or agency: Southern Inshore Fisheries and Conservation Authority (SIFCA) Other departments or agencies: Natural England	Impact Assessment (IA)
	Date: 03/09/2014
	Stage: Development/Options/consultation
	Source of intervention: Domestic
	Type of measure: Secondary legislation
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Summary: Intervention and Options

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

The fishing for oysters, mussels and clams within much of Poole Harbour’s waters is currently managed through the Poole Order 1985ⁱ, a hybridised Regulating Order and Several Order which is due to expire in June 2015. Since the introduction of the existing Regulating Order a substantial Manila clam (*Tapes philippinarum*) fishery has developed within Poole Harbour following the naturalisation of the species during the late 1980’sⁱⁱ. Under the existing Regulating Order Southern IFCA currently issues a limited number of licenses to fish for clams. These licenses specify temporal and spatial measures and the way in which clams may be caught, following consideration of the environmental and fisheries sustainability of the harbour.

Clam and cockle species co-exist, and to a certain extent overlap, within the harbour and they are mostly targeted using very similar fishing methods, either through the use of a hand operated dredge or a mechanically operated pump scoop dredge. The similarity between habitats and fishing methods therefore represents similar issues when considering the impacts of the fisheries on Marine Protected Areas and the management of compliance with regulations.

Much of Poole Harbour is environmentally designated as a Special Protection Area (SPA)ⁱⁱⁱ, a Ramsar site^{iv} and a Site of Special Scientific Interest (SSSI)^v because it supports wildlife and/or habitats that are of European or National importance. This site contains some of England’s most vulnerable marine wildlife and habitats including for example seagrass beds, over-wintering and nesting bird populations. When important social and economic activities such as fishing, recreation and other industries take place within environmentally designated sites it is important that we ensure that these activities occur in a manner that is consistent with the protection of the site.

Under Article 6 of the EU Habitats Directive^{vi}, within European Marine Sites including SPAs and RAMSAR sites, fisheries regulators are required to ensure that fisheries do not damage, disturb or have an adverse effect on the wildlife or habitats for which the site is legally protected. In a similar manner, under the Wildlife and Countryside Act 1981^{vii}, fisheries regulators must take reasonable steps, consistent with the proper exercise of the authority’s functions, to further the conservation and enhancement of features for which the is designated. The Conservation of Habitats and Species Regulations 2010^{viii} requires that the IFCA exercise its functions, which are relevant to marine conservation so as to secure compliance with the requirements of the Habitats Directive. Furthermore, the functions (including any power to make byelaws) of Southern IFCA, as the relevant authority, are to be exercised under the management scheme established for Poole Harbour (Poole Harbour Aquatic Management Plan^{ix}) so as to secure in relation to the site compliance with the requirements of the Habitats Directive.

The subject of this IA is the proposed introduction of a Southern IFCA ‘Poole Harbour Dredge Permit’ byelaw^x. The proposed byelaw will in part fulfil Southern IFCA’s duties in MaCAA (2009)^{xi} and as the relevant and competent authority for the purposes of the Habitats Regulations 1994^{xii} as amended.

What are the policy objectives and the intended effects?

1. To introduce effective and robust management for Poole Harbour’s shellfish fisheries.
2. To introduce management for Poole Harbour’s shellfish fisheries following the expiry of the Poole Harbour Regulating Order in June 2015.
3. To further the conservation objectives of Poole Harbour’s environmentally designated areas through protecting over-wintering and nesting bird populations within Poole Harbour.
4. To enhance the environmental, socio-economic and fisheries sustainability of Poole Harbour.

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

1. Do nothing.
2. Create a SIFCA byelaw to permit the use, retention on board, storage or transportation of dredges within Poole Harbour.
3. Renew the Poole Harbour Regulating Order.
4. Voluntary measures.
5. MMO management measure.

The preferred option is **OPTION 2**. A byelaw to permit the use, retention on board, storage or transportation of dredges within Poole Harbour is the most effective approach for Southern IFCA to secure compliance with the provisions of the Habitats Directive and Birds Directive and the Conservation of Habitats and Species Regulations 2010. This approach will enable Southern IFCA to fulfil their obligations under Section 153 of the Marine and Coastal Access Act, 2009. IFCAs are the lead fisheries management authority in inshore waters.

Will the policy be reviewed? It will be reviewed. **If applicable, set review date:** 01/01/2017

What is the basis for this review? Duty to review. **If applicable, set sunset clause date:** Month/Year

Are there arrangements in place that will allow a systematic collection of monitoring information for future policy review?

Yes

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 Chairman: _____ Date: _____

Summary: Analysis & Evidence

Policy Option 2

Description:

FULL ECONOMIC ASSESSMENT

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

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	£27,000	1 £12,600	-

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

The cost of a permit will be £300 for the first year with a maximum annual cost of £1000, as detailed in the proposed byelaw. It is anticipated that a maximum of approximately 40-45 permits will be issued in the first year, subject to a habitats regulations assessment. Consequentially the estimated cost of purchasing a permit to the Poole fishing industry is £12,600 per year. Although there is the potential for the catches and incomes of some fishers to decrease as a result of the recommended option, it is not Southern IFCA's intention for there to be any decrease in the value of the Poole Harbour shellfish fisheries. It is estimated that the administrative cost incurred by Southern IFCA in introducing the recommended byelaw will be approximately £25,000 plus approximately £2,000 in legal costs. This is discussed further in section 7.

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

The recommended byelaw would prohibit the use, retention on board, storage or transportation of a dredge within Poole Harbour without an appropriate permit or dispensation. Permits will only be issued to registered, licensed fishing vessels; therefore there is the potential for approximately 20-25 unregistered, unlicensed fishing vessels to lose access to the Poole Harbour shellfish fisheries. There is the potential for new vessels to lose access to the fisheries, as additional permit applications will be managed through a waiting list. There is the potential for a loss of catch and income for some vessels as a result of the permit conditions introduced. Southern IFCA will monitor the effects of the revised management and, should the need arise will vary permit conditions to address any reduction in the value of the fisheries. It is not possible to estimate the additional cost to enforcement as likely levels of compliance are not known. This is discussed further in section 7.

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	-	£12,600	-

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

It is estimated that approximately £12,600 will be generated by the sale of permits by Southern IFCA. The income gained from the sale of permits will be used by Southern IFCA to cover the additional administrative and management costs associated with issuing permits, carrying out research and assessing the environmental impacts of the fishery. It is anticipated that the additional management, funded through revenue gained through the sale of permits, will lead to an increase in the socio-economic value and environmental sustainability of the Poole Harbour shellfish fisheries.

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

The recommended byelaw has significant environmental benefits through the protection of sensitive features that may be otherwise vulnerable to potentially damaging fishing techniques. It is anticipated that through the development of the recommended byelaw and permit conditions fisheries regulations within Poole Harbour will become more robust and compliance levels will increase, potentially increasing catches and income. Under the proposed permit conditions there will be increased access to some areas of the fishery, potentially increasing catches and income. It is not possible to estimate the potential increase in income through increased catches. This is discussed further in section 7.

Key assumptions/sensitivities/risks (%)

Discount rate

Information has been gathered from stakeholders through stakeholder consultation meetings (annexes 3 and 4). Information gathered from IFCA officers' and members' personal knowledge is anecdotal. A key assumption of intervention is that levels of compliance will be high and that the byelaw will lead to habitat protection and a potential increase in the sustainability of the Poole Harbour shellfish fisheries.

BUSINESS ASSESSMENT (Option 2)

Direct impact on business (Equivalent Annual) £m:				In scope of OIOO?	Measure qualifies as
Costs:	NA	Benefits:	NA	Net:	NA
				No	IN/OUT/Zero net cost

Evidence Base (for summary sheets)

1. Introduction
2. Rationale for intervention
3. Policy objectives
4. The options
5. Evidence base
6. Sectors affected
7. Analysis of costs and benefits
 - Costs
 - Analysis of fisheries costs
 - Analysis of administration costs
 - Benefits
 - Analysis of fisheries and environmental benefits
 - Analysis of socio-economic benefits
8. Summary

References

Annexes

Annex 1: A chart showing the area of Poole Harbour currently covered by the Poole Order, 1985

Annex 2: A summary of pre-consultation feedback – 20th February 2014

Annex 3: A summary of pre-consultation feedback – 20th June 2014

Evidence Base

1. Introduction

- 1.1 The nationally agreed vision of the IFCA is that they will *“lead, champion and manage a sustainable marine environment and inshore fisheries within their Districts by successfully securing the right balance between social, environmental and economic benefits to ensure healthy seas, sustainable fisheries and a viable industry”*.
- 1.2 Section 153 of the Marine and Coastal Access Act, 2009 (MaCAA) requires that for the management of inshore fisheries:-
 - (1) The authority for an IFC district must manage the exploitation of sea fisheries resources in that district.
 - (2) In performing its duty under subsection (1), the authority for an IFC district must:
 - (a) Seek to ensure that the exploitation of sea fisheries resources is carried out in a sustainable way,
 - (b) Seek to balance the social and economic benefits of exploiting the sea fisheries resources of the district with the need to protect the marine environment from, or promote its recovery from, the effects of such exploitation,
 - (c) Take any other steps which in the authority's opinion are necessary or expedient for the purpose of making a contribution to the achievement of sustainable development, and
 - (d) Seek to balance the different needs of persons engaged in the exploitation of sea fisheries resources in the district.
- 1.3 Under article 6(2) of the EU Habitats Directive and Birds Directive *“Member States shall take appropriate steps to avoid, in the special areas of conservation, the deterioration of natural habitats and the habitats of species as well as disturbance of the species for which the areas have been designated, in so far as such disturbance could be significant in relation to the objectives of this Directive”*.
- 1.4 Under section 28G of the Wildlife and Countryside Act 1981, fisheries regulators must take reasonable steps, consistent with the proper exercise of the authority's functions, to further the conservation and enhancement of features for which the is designated.
- 1.5 The Conservation of Habitats and Species Regulations 2010 requires that the IFCA exercise its functions, which are relevant to marine conservation so as to secure compliance with the requirements of the Habitats Directive. Furthermore, the functions (including any power to make byelaws) of Southern IFCA, as the relevant authority, are to be exercised under the management scheme established for Poole Harbour (the Aquatic Management Plan) so as to secure in relation to the site compliance with the requirements of the Habitats Directive.
- 1.6 The Poole Fishery Order (1985) is a hybrid Several Order and Regulating Order which allows for the development and promotion of aquaculture and the regulation of wild shellfish harvesting for clam. The present Order was

originally created in 1915 under the Sea Fisheries (Shellfish) Act 1967^{xiii} with the last renewal in 1985. The area covered by the Order within the Harbour is leased by the Southern IFCA from the Crown Estate.

2. Rationale for intervention

- 2.1 The Poole Fishery Order (1985) is due to expire on 30th June 2015. The Poole Fishery Order (1985) regulates the fishing for oysters, mussels and clams within much, but not all of Poole Harbour's waters (annex 1). Poole Harbour supports substantial clam and cockle fisheries, producing combined landings values of £420,067.50^{xiv}. The Native oyster (*Ostrea edulis*) fishery within Poole Harbour experienced a decline in productivity in the 1980's due to an outbreak of *Bonamia* and oysters do not currently exist in high enough densities to support a commercial fishery. Since the introduction of the existing Regulating Order a lucrative Manila clam (*Tapes philippinarum*) fishery has developed within Poole Harbour, following the naturalisation of the species during the late 1980's. Under the existing Regulating Order Southern IFCA currently issues a limited number of licenses (25) to fish for principally Manila clams, however the Native clam (*Tapes decussatus*), the American hard-shelled clam (*Mercinaria mercinaria*) and razor clams (*Ensis* spp.) are also commercially caught within the Harbour. The licenses issued specify temporal and spatial restrictions for the fishery and also restrictions on the fishing methods used following consideration of the environmental and fisheries sustainability of the Harbour.
- 2.2 The relatively high return against investment through fishing for both clams and cockles has often proved to be too great a temptation to individuals using non-licensed fishing vessels, leading to non-compliance issues as loopholes in existing legislation are exploited.
- 2.3 Clam and cockle species co-exist, and to a certain extent overlap, within Poole Harbour and they are mostly targeted using very similar fishing methods, either through the use of a hand operated dredge or a mechanically operated pump scoop dredge. The similarity between habitats and fishing methods therefore represent similar issues when considering the impacts of the fisheries on Marine Protected Areas and the management of compliance with regulations.
- 2.4 Poole Harbour was classified as a SPA for birds because it supports an assemblage of over 20,000 waterfowl, internationally important populations of overwintering shelduck and black tailed godwit and over 1% of three species listed on annex 1 of the Birds Directive (overwintering avocet, breeding common tern and breeding Mediterranean gull).
- 2.5 Poole Harbour is also a wetland of international importance under the Ramsar convention because it regularly supports over 20,000 waterfowl and over 1% of populations of avocet, black tailed godwit, common tern, Mediterranean gull and shelduck while also being a good example of an estuary, supporting an appreciable assemblage of rare, vulnerable or endangered species and being of special value for maintaining the genetic and ecological diversity of a region because of the quality and peculiarities of its flora and fauna including

supporting the nationally scarce plants narrow leaved eelgrass *Zostera augustifolia* and dwarf eelgrass *Zostera noltii*.

- 2.6 Poole Harbour is also recognised as nationally important for its extensive mudflats and marshes, which together with the permanent channels support large populations of overwintering waders and wildfowl. The fringing habitats support further rare and scarce fauna and flora including nesting birds. Several rare marine invertebrates also occur within the Harbour. With respect to nesting birds, the Poole Harbour condition assessment in 2010 noted the Harbour was nationally important for its breeding populations of common and Sandwich terns, Mediterranean and Black-headed gulls, Cetti's warbler, bearded tit and water rail. In a local context, the breeding population of the amber-listed redshank and reed bunting are also important. Other relevant species recorded breeding and part of the breeding bird assemblage include shelduck, little egret, grey heron, teal, mute swan, snipe, ringed plover, oystercatcher and reed warbler^{xv}.
- 2.7 A proposal from a Southern IFCA working group to manage the Poole Harbour shellfisheries through a dredge permit byelaw was agreed by the Southern IFC Authority at a Joint Committee meeting on the 6th March 2014. The proposed byelaw will manage the method of fishing through the use, retention on board, storage or transportation a dredge, rather than by species, forming robust and effective legislation to maintain the sustainability of the fisheries and marine environment, supported through a greater ability to reduce the impacts of illegal fishing activity. The regular review of permit conditions will install a degree of flexibility into the management framework to allow Southern IFCA to work with Harbour users to balance the needs of all stakeholders.

3. Policy objective

- 3.1 The policy objective pertinent to this impact assessment is to ensure that effective and robust management is introduced for Poole Harbour's shellfish fisheries. Clam and cockle species co-exist, and to a certain extent overlap, within the Harbour and they are mostly targeted using very similar fishing methods, either through the use of a hand operated dredge or a mechanically operated pump scoop dredge. The similarity between habitats and fishing methods therefore represents similar issues when considering the impacts of the fisheries on Marine Protected Areas and the management of compliance with regulations.
- 3.2 The Poole Fishery Order (1985) is due to expire on 30th June 2015 and the introduction of a dredge permit byelaw, introduced through s155 of MaCAA, will ensure that Poole Harbour's shellfish fisheries are appropriately managed in the future. The Poole Fishery Order (1985) currently regulates the fishing for oysters, mussels and clams within much, but not all of Poole Harbour's waters. The cockle fishery within Poole Harbour is currently regulated through a Southern IFCA 'Cockle' byelaw^{xvi}.
- 3.3 Much of Poole Harbour is environmentally designated as a Special Protection Area (SPA), a RAMSAR site and a Site of Special Scientific Interest (SSSI) because it supports wildlife and/or habitats that are of European or National

importance. This site contains some of England's most vulnerable marine wildlife and habitats including for example seagrass beds, over-wintering and nesting bird populations. Under article 6 of the EU Habitats Directive and Birds Directive and section 28G of the Wildlife and Countryside Act 1981, when managing fishing activities, Southern IFCA has a duty to protect the designated features within Poole Harbour. The Conservation of Habitats and Species Regulations 2010 requires that the IFCA exercise its functions, which are relevant to marine conservation so as to secure compliance with the requirements of the Habitats Directive. Furthermore, the functions (including any power to make byelaws) of Southern IFCA, as the relevant authority, are to be exercised under the management scheme established for Poole Harbour (the Aquatic Management Plan) so as to secure in relation to the site compliance with the requirements of the Habitats Directive.

- 3.4 Through developing a Poole Harbour dredge permit byelaw, Southern IFCA is seeking to enhance the environmental, socio-economic and fisheries sustainability of Poole Harbour, thus fulfilling their obligations under Section 153 of the Marine and Coastal Access Act, 2009.

4. The options

- 4.1 As part of Southern IFCA's review of shellfish fisheries management for Poole Harbour a range of options were considered:

4.2 Option 1 'Do Nothing'

- 4.2.1 This option would involve allowing the regulation of Poole Harbour's oyster, mussel and clam fisheries through the Poole Fishery Order (1985) to lapse and therefore returning the fisheries for these species to the public fishery. Under the Poole Regulating Order a limited number of clam fishing licenses (25) are issued each year with license conditions attached to regulate the fishing methods and equipment used, together with spatial and temporal restrictions. The number of licenses issued and the conditions attached to these licenses are designed following an Appropriate Assessment to ensure that there is no adverse effect to Poole Harbour's environmentally protected features.

- 4.2.2 Should the Authority chose to follow this option the level of restriction would be reduced on the fishing for oysters, mussels and clams within areas of Poole Harbour, potentially threatening the environmental, fisheries and socio-economic sustainability of the area. There is the potential that Southern IFCA's obligations under Article 6 of the Habitats and Birds Directives, under Section 28G of the Wildlife and Countryside Act 1981, under the Conservation of Habitats and Species Regulations 2010, and under MaCAA would not be met.

4.3 Recommended option

Option 2 A Southern IFCA 'Poole Harbour Dredge Permit' byelaw.

- 4.3.1 Under this option any person and vessel wishing to use retain on board, store or transport a dredge within Poole Harbour must hold an appropriate Southern IFCA permit or an appropriate dispensation issued under this byelaw. A person and vessel must then comply with conditions attached to the permit that may include restrictions on catch and reporting, gear types, gear construction, spatial and temporal access and the fitting of specified equipment to vessels. The holder of the permit must be on board the named vessel when using or transporting a dredge. The Authority will have the ability to limit the number of permits issued under this byelaw. In the first year the Authority intends to issue permits based on existing legal commercial shellfish dredging access within the Harbour, provided that applicants meet the criteria set by the Authority. There is the potential for a permit to be issued to a second person for a named vessel. The number of permits issued will ultimately be reliant upon a Habitats Regulations Assessment to demonstrate that there will be no adverse effect upon the site. The number of permits shall be capped at a first year number to ensure that in the first instance there is no increase in the number of vessels fishing for shellfish within Poole Harbour. Access to the fishery following this point will be managed through a waiting list for permits and the number of permits issued in subsequent years shall be determined by the Southern IFC Authority, following a Habitats Regulations Assessment.
- 4.3.2 As described, under the conditions attached to permits at the introduction of this byelaw there will be a series of both seasonal and permanent spatial closures to permit holders. A series of bird sensitive areas in Ower Bay, Newton Bay, Wych Lake and Middlebere Lake, Arne and Keyworth are currently closed permanently under a Southern IFCA byelaw. Under the additional permit conditions these areas, plus the southern and western section of Brands Bay will be seasonally closed during periods of sensitivity to overwintering and nesting bird species. Outside of these sensitive periods permit holders will be permitted to fish within these previously closed areas. Due to the particular sensitivity to over-wintering bird species in the most southern reaches of Wych Lake and Middlebere Lake, and due to concerns over the recoverability of sediment due to the low energy encountered within these areas, both sites will closed throughout the year as a permit condition to ensure that there is no adverse effect to the features of the site. Both Holes Bay and Lychett Bay will be closed throughout the year as a permit condition to provide areas where shellfish populations can recover and provide brood stock for the Poole Harbour fisheries. Both Holes Bay and Lychett Bay are currently inaccessible to commercial shellfish dredging due to a shellfish waters prohibition within Lychett Bay and the non-classification of Holes Bay.
- 4.3.3 Under the permit conditions a seven month fishing season will be introduced from the 25th May to 24th December each year. Fishing would be permitted from 06.00 – 18.00 each day and fishing would not be permitted during weekends.
- 4.3.4 Under the permit conditions there will be restrictions on the design of the dredge and other fishing equipment used. These restrictions include the spacing of bars on the dredge to prevent the capture of undersized shellfish,

the use of a riddle for the sorting of shellfish and restrictions on the spray bars attached to dredges to ensure that non-mobile sediments are not fluidised through fishing.

- 4.3.5 A permit byelaw would allow a degree of flexibility associated with the review of permit conditions. There would be the potential for permit conditions to be reviewed and changed depending on the evidence available and subject to consultation, as detailed in the recommended byelaw. There is also the potential for further measures to be introduced to regulate catch restrictions and reporting, gear construction and restriction, spatial and temporal restrictions and the fitting of specified equipment to vessels.

4.4 **Option 3 Renewal of the Poole Harbour Regulating Order**

- 4.4.1 IFCA's have been established as the lead regulator for the sustainable management of inshore fisheries. As such, Southern IFCA is the most appropriate authority to implement, manage and enforce fisheries management measures within 6 nautical miles. Under the Marine and Coastal Access Act, 2009 IFCA's received powers to manage fisheries through the issue of permits, therefore negating the need to for a Regulating Order in this instance.

- 4.4.2 This option may involve the management of the Poole Harbour clam fishery in isolation to the harbour's cockle fishery. There would be the potential to include the management of cockles as an additional species under the Regulating Order, however both approaches would focus on the management of fishing for a species, rather than the management of a fishing method. Clam and cockle species co-exist, and to a certain extent overlap, within the harbour and they are mostly targeted using very similar fishing methods, either through the use of a hand operated dredge or a mechanically operated pump scoop dredge. The similarity between habitats and fishing methods therefore represents similar issues when considering the impacts of the fisheries on Marine Protected Areas and the management of compliance with regulations.

- 4.4.3 In order to establish a Regulating Order it is necessary to obtain the landowner's consent. Poole Harbour is divided between a number of landowners and it is uncertain whether consent would be granted for a Regulating Order that covers the complete extent of the harbour, without which significant compliance issues would exist.

- 4.5 Other management options have been considered and rejected based on the following rationale:

4.5.1 Voluntary Agreement

Due to the area of Poole Harbour, the value of the shellfish fisheries and the history of non-compliance that exists, it is believed that a voluntary agreement would be impractical and would pose too greater risk to the overall

sustainability of the harbour's fisheries and the integrity of the environmental designations.

- 4.5.2 MMO management measure – permanent byelaw or fishing licence condition
IFCAs have been established as the lead regulator for the sustainable management of inshore fisheries. As such, the SIFCA is the most appropriate authority to implement, manage and enforce fisheries management measures within 6 nautical miles.

5. Evidence base

5.1 Poole Harbour Special Protection Area (SPA)

- 5.1.1 The qualifying features for the Poole Harbour SPA are Common shelduck (Non-breeding), Pied avocet (non-breeding), Black-tailed godwit (non-breeding), Mediterranean gull (breeding), Common tern (breeding) and the water-bird assemblage. In addition, little egret and aquatic warbler were identified as qualifying features by the UK SPA Review in 2001. However, more recent data suggests aquatic warbler no longer qualify in terms of numbers. Breeding sandwich terns are however now occurring in internationally important numbers and therefore qualify.

- 5.1.2 The key sub features (or habitats for the SPA qualifying features) are listed in the Regulation 33 advice Package for Poole Harbour as:

1) Internationally important populations of the regularly occurring annex 1 species

a) Shallow Inshore Waters including Lagoons - Shallow tidal waters provide key feeding habitat for the annex 1 species common tern, avocet, and Mediterranean gull. Brownsea Island lagoon is an essential feeding area for wintering avocet. It also provides key nesting islands for common tern, however these are above highest astronomical tide and therefore not within the EMS boundary. Shallow inshore waters are of importance for feeding common terns and to a lesser extent, for the qualifying population of breeding Mediterranean gulls which will also occasionally feed in these areas;

b) Intertidal Sediment Communities - Mudflats and sandflats support rich populations of intertidal invertebrate species, which in turn provide a food source for wintering avocets and breeding Mediterranean gull. Although avocets occasionally swim, they generally feed whilst wading on the intertidal sediments in areas of very shallow water. These habitats also provide important roosting areas for both species;

c) Saltmarsh Communities - This habitat is of importance for providing roosting, feeding and nesting habitat. Upper saltmarsh is of importance as nesting habitat for both common tern and Mediterranean gull, whilst saltmarsh habitats, and in particular the associated creeks are also used as a feeding

area by Mediterranean gull. Saltmarsh provides ideal high water roosts for all annex 1 species.

2) Internationally important assemblage of waterfowl including internationally important populations of regularly occurring migratory bird species

a) Shallow Inshore Waters including Lagoons - Shallow tidal waters provide key feeding and roosting habitat for the internationally important populations of wintering shelduck. Shallow tidal waters also provide key feeding habitat for nationally important populations of goldeneye, red-breasted merganser and cormorant, which feed on fish and small molluscs.

b) Intertidal Sediment Communities Mudflats and sandflats support rich populations of intertidal invertebrate species, which in turn provide a food source for the internationally important populations of black-tailed godwit and shelduck. Nationally important populations including dunlin, teal, curlew, spotted redshank, greenshank, redshank and black-headed gull also feed on these rich populations of intertidal invertebrate species. Nationally important populations of dark-bellied brent geese feed on *Zostera* and *Enteromorpha* that grow on the intertidal sediment communities. These habitats provide important roosting areas for all of these species.

c) Saltmarsh Communities - Upper and lower saltmarsh provide important feeding areas for the internationally important assemblage of waterfowl and its qualifying species. Upper saltmarsh in particular also makes ideal high water roost sites. Dark-bellied brent geese and teal feed on saltmarsh plants and their seeds.

d) Reedbeds - These provide feeding and roosting areas for a proportion of the internationally important assemblage of waterfowl. They are of particular importance for teal and pochard. Reed beds also play a key role in providing shelter for adjacent sub features.

5.2 Bird disturbance

5.2.1 Over the winter 2011/2012 a study of disturbance took place with respect to bird behaviour (waders and wildfowl) in relation to activities in the Harbour^{xvii}. The report found disturbance levels appeared to affect the distribution of birds within the harbour with bird densities lower where more people or boats were observed. The report found water based activities were generally more disturbing than intertidal activities with shore based activities the least disturbing. Although the study did not focus on the areas where shell fishing activity took place, major fights were observed to occur at Wareham channel and the frequency at which the activity was observed more widely to take place in proximity to important areas for feeding and roosting birds was deemed a concern. It cannot be dismissed therefore that shellfish dredging together with other disturbance factors are not causing a significant disturbance to the features of the SPA when taking place in proximity to key feeding and roosting habitat (e.g. saltmarsh and shallow inshore waters).

5.2.2 Shellfish dredging activity can cause noise and visual disturbance (either alone or in combination with other plans and projects) to the features listed above when taking place at key times of the year for the overwintering and in proximity to important feeding and roosting sites. The significance of this disturbance is likely to depend on the availability of alternative undisturbed areas for birds; and the frequency and intensity at which shellfish dredging takes place^{xviii}.

5.3 Food availability (function and supporting process)

5.3.1 Sediment disturbance as a result of shellfish dredging (and in combination with other activities (e.g. bait digging and bait dragging) can potentially impact on bird prey availability, prey size and the ability of birds to forage. This can be through removal (mortality) of target and non-target species and impacts on non-target prey availability through changes in habitat structure of the intertidal sediment communities.

5.3.2 Dredging on muddy habitats has generally been found to have a greater impact on benthic communities compared to mobile sands. Dredge scars on deeper, more stable habitats appear to persist longer than more mobile intertidal habitats. Impacts on sediment disturbance are likely to be related to whether the impact takes place at a high energy site or a sheltered site, with sediment recovery slower at the latter. Most small-scale experimental studies have shown that recovery of communities following cessation of fishing can generally occur within months to a year. However, the longer-term impacts of broad scale, intensive and frequent disturbances to benthic communities has not been well researched^{xviii}.

5.3.3 The length of time that harvested areas would require for recovery will be a function of the amount of natural disturbance experienced in that environment, and the timing of harvesting in relation to larval recruitment of target and non-target species^{xix}.

5.3.4 Release of sediment contaminants such as heavy metals from sediment disturbance by shellfish dredging could also impact on prey availability.

5.4 Poole Harbour Ramsar

5.4.1 In addition to overwintering waders and wildfowl, the Ramsar site is also designated for its eelgrass beds. As stated above, physical damage could occur from shellfish dredging if it takes place within this habitat. The direct impact of shellfish dredging on seagrass beds is significant through uprooting shoots and cutting through shoots which immediately reduces seagrass density and biomass^{xix}. The Southern IFCA Bottom Towed Fishing Gear byelaw^{xix}, recently introduced to prohibit towed gear over the main eelgrass beds in Poole Harbour, is an important mitigation measure to avoid an impact from this activity.

5.5 Poole Harbour SSSI

5.5.1 In addition to the bird features for which the SPA is classified, the SSSI is designated for nesting birds using the fringing reed bed and saltmarsh habitats of Poole Harbour and marine invertebrates. Shellfish dredging activity has the potential to damage the breeding bird assemblage feature through disturbance to breeding birds effecting breeding productivity when taking place in proximity to their nesting and feeding sites. Unusually dense forests of the peacock worm *Sabella pavonina* were recorded in the channels of the Harbour in the 1980's associated with the subtidal fine sands of the central harbour and towed gear could potentially damage this feature if it was to take place over these channels^{xx}.

5.6 Bird sensitive areas

5.6.1 These are areas, identified in the Poole Harbour Aquatic Management Plan, where at present there is relatively little disturbance, or areas where the geographically enclosed nature of the bays means that activities such as shellfish dredging would have the potential to disturb birds over a large area. They are also areas where birds appear to be preferentially feeding and roosting and where the key bird interests for which the Harbour is recognised as important reside^{xxi}. The Poole Harbour Aquatic Management Plan has identified that it is essential that disturbance in the 'Overwintering Bird Sensitive Areas' are kept to a minimum to ensure migratory birds have every opportunity to feed and rest.

5.6.2 Bird count data (WeBs data) analysed by Natural England in 2012 highlighted declines in the numbers of overwintering birds in some sectors of the Harbour. The data analysis highlighted in particular there was concern regarding declines in some species in Lytchett Bay (shelduck, redshank and dunlin) Brands Bay (shelduck, redshank, dark bellied brent geese, dunlin) and Wych (shelduck, black tailed godwit, dunlin).

5.7 Dredge and bar spacing

5.7.1 The minimum size for clam species is measured by individual length, whereas fishing dredges sort shellfish by the minimum dimension, which in the case of clams is width. Analysis of clam dimension measurements taken as part of Southern IFCA's regular evidence gathering indicates that a dredge bar width spacing of 18mm has been found to retain 79-99% clams greater than 35mm in length. An 18mm dredge bar spacing was observed to retain approximately 5-10% clams less than 35mm in Poole Harbour, and throughout the Southern IFCA District the catch composition based on an 18mm bar spacing has been estimated to contain a range of between 2-16% clams less than 35mm (Pengelly, 2010 and 2012)^{xxii}. The minimum dimension size measurement for cockles within the Southern IFCA District is 23.8mm, therefore the catch would require additional sorting if a dredge with 18mm bar spacing is used.

5.8 Poole Harbour shellfish landings data

- 5.8.1 Marine Management Organisation landings data indicates that the 2011 annual value of Poole Harbour clam species landings totalled £271,085.30. During the same year the landings of cockles totalled £148,982.20, giving a combined shellfish landings value of £420,067.50 for 2011. Landings have significantly reduced during 2012 and 2013, producing combined species values of £186,408.40 and £174,824.20 respectively. This reduction in landings values is believed to be partly due to significantly reduced cockle fisheries during these years. It is estimated that as much as 50% of Poole Harbour's shellfish landings are not accurately recorded by unregistered, unlicensed fishing vessels and by vessels fishing outside of designated seasons.
- 5.8.2 A total of 42 registered, licensed fishing vessels have landed and sold clams and cockles from Poole Harbour between 2011 and July 2014. In addition to these vessels a further five registered, licensed fishing vessels currently hold a Poole Harbour clam license issued by Southern IFCA. It is anticipated that approximately 42 fishing vessels would qualify for a Poole Harbour Dredge Permit under the recommended byelaw.

6. Sectors affected

6.1 Fishing

- 6.1.1 All fishing vessels that operate within Poole Harbour using dredges will potentially be affected by a difference to current management.
- 6.1.2 There is the immediate potential for unregistered, unlicensed vessels to experience an immediate loss in access to the Poole Harbour shellfish fisheries when fishing using a vessel. Due access being controlled through a permit scheme registered, licensed fishing vessels may not gain immediate access to the Poole Harbour shellfish fisheries in the future.
- 6.1.3 There is the potential for permit holders to experience an increase in catches and income as the permit scheme will provide Southern IFCA with a greater ability to manage the Poole Harbour shellfish fisheries.
- 6.1.4 The wider financial costs and benefits to the District's fishing industry are outlined in section 7.

6.2 Local economies and society

- 6.2.1 There is the potential for industries associated with the shellfish industry and the dredge fishing sector to be affected by the proposed byelaw.
- 6.2.2 The wider benefit of protecting the environmentally designated areas of Poole Harbour and the marine fisheries resources within the harbour is outlined in section 7.

6.3 Enforcement bodies

6.3.1 The lead responsibility of enforcing the proposed closed area would fall to the Southern IFCA. There is the potential for an increase in enforcement costs as a consequence of the proposed byelaw. The cost associated with enforcement and administration is outlined in section 7.

7. Analysis of costs and benefits

7.1 Costs for the recommended option

7.1.1 The introduction of a Southern IFCA 'Poole Harbour Dredge Permit' byelaw to manage the use, retention on board, storage or transportation of a dredge within Poole Harbour may result in the following costs:

- Loss of access to Poole Harbour's shellfisheries to unregistered, unlicensed fishing vessels
- Potential limit on the number of new fishing vessels that will enter Poole Harbour's shellfish fisheries
- An annual cost to permit holders of buying a permit
- Potential loss in catch and income for existing Poole Harbour clam license holders as the number of vessels legally exploiting the fishery is increased
- Potential loss in catch and income for existing Poole Harbour clam and cockle fishers as the length of fishing season is reduced and weekend and night-time curfews are introduced
- Potential loss in catch and income through a loss of access to the southern and western sections of Brand's Bay during the sensitive overwintering and nesting bird periods
- Potential loss in fishing efficiency and loss in catch and income for existing Poole Harbour cockle fishers through the limit to one spray bar per dredge
- A potential increase in enforcement and administration costs associated with policing and administering the new byelaw

7.1.2 Potential loss of access to fisheries for recreational vessels and new entrants, the potential loss of catch and income and enforcement costs are difficult to value and are therefore described here as non-monetised costs.

7.2 Analysis of fisheries costs

7.2.1 It is estimated that approximately 20 – 25 unregistered, unlicensed vessels fish for shellfish within Poole Harbour using dredges, many of which are believed to be non-compliant with existing fisheries legislation as they are suspected of selling their catch and they do not hold a Poole Harbour clam license which enables holders to fish for clams within much of Poole Harbour (annex 1). The levels of non-compliance experienced within the Poole Harbour shellfish fisheries have been highlighted as a priority issue for action under Natural England's Poole Harbour Improvement Programme for England's Natura 2000 Sites (IPENS)^{xxiii}. The introduction of the proposed

byelaw will prevent unregistered, unlicensed vessels from using, retaining on board, storing or transporting dredges within Poole Harbour without an appropriate dispensation.

- 7.2.2 Feedback from two periods of pre-consultation (annex 2 and annex 3) for the proposed byelaw held by Southern IFCA indicates that stakeholders feel that it is necessary to improve current compliance levels within the Poole Harbour shellfish fisheries. Comments received include:

“Too many unlicensed boats, not enough powers”

“Not enough done about poaching”

“Clams being caught all over the Harbour by anyone with a boat supposedly coming from Brands Bay – the loophole. Poorly enforced byelaws because of this loophole”

“No way to stop unlawful fishing”

“More done about unlicensed boats, feels like thousands spent of boats is a waste of time when you look at all the unlicensed boats getting out of control”

“Nothing seems to be done about unlicensed and unregistered vessels”

- 7.2.3 Southern IFCA officers are commonly informed that the shellfish caught by unregistered, unlicensed vessels fishing within Poole Harbour is for their own consumption. It is currently possible to fish for shellfish by hand from the shore and catch quantities that would satisfy the own consumption of fishers within areas of Poole Harbour. It is estimated that the illegal fishing activity within Poole Harbour currently removes in excess of 50% the total shellfish caught within the harbour, including the removal of juvenile shellfish, thus reducing the long-term sustainability of the fishery. There are also significant social and environmental impacts resulting from extensive non-compliance activities which will potentially be reduced through the introduction of the proposed byelaw.

- 7.2.4 Under the Poole Harbour Regulating Order, 25 clam licenses are currently issued and access to the fishery is managed through a waiting list from which candidates are interviewed when a license becomes available. Access is open to the cockle fishery within the Harbour and to the clam fishery within small areas that fall outside of the Regulating Order, including Brand's Bay, however fishers must hold a license in order to sell their catch. Under the proposed byelaw the Authority's intention is for the current number of registered, licensed fishing vessels operating legally within the Harbour to be reflected in the number of permits issued, subject to a Habitats Regulations Assessment. Thereafter a waiting list will be established and the allocation of vacant permits will be managed accordingly. There will be the potential for the number of permits issued to vary each year, subject to a Habitats Regulations Assessment. The proposed byelaw will potentially restrict access for new applicants to Poole Harbour's shellfish fisheries. The financial cost of this restriction is difficult to quantify.

- 7.2.5 The cost of a permit will be £300 for the first year with a maximum annual cost of £1000, as detailed in the proposed byelaw. The current cost of a Poole clam license is £300. The income gained from the sale of permits will be used

by Southern IFCA to cover the additional administrative and management costs associated with issuing permits, carrying out research and assessing the environmental impacts of the fishery. It is anticipated that this additional work funded by the sale of permits will result in an increase in the socio-economic value and environmental sustainability of the fishery. During the second stage of pre-consultation for the proposed byelaw stakeholders were asked whether a £300 permit fee reflects the value of Poole Harbour's clam and cockle fisheries. The following relevant responses were provided:

"£300 would reflect 9 months fishing as a good value but not 6 months minus weekends that you are proposing"

"Yes"

"No, needs to increase for better management"

"Yes at present, would like to see it rise in stages maybe up to £1000 to discourage part-timers holding on to permits and not using them"

"I don't know it seems quite a cheap licence knowing what we pay. If the money goes back into the fishery then a larger fee may be a good idea. Anything to create a fishery is good"

"£300 is about right but if you aren't fishing you shouldn't be able to have/keep a permit. It wouldn't matter if it went up if some money was put back in the fishery. It needs to be enforced properly though, the cost needs to reflect enforcement and giving back to the fishery"

"Yes I think that £300 is a fair price but I think that anyone with a licenced/registered boat should automatically get one if they pay for it"

"Any fee charged should just be for bottom towed gear for all species. The money charged should go towards supporting the fishery and laying spat. Permit should be for a year from the date paid with the ability to hold a permit without paying, no fish means no pay"

"If the season was 9 months I would pay £300, if it was 6 months I wouldn't pay anything. The income could be used for enforcement or research"

"Unless the situation changes i.e. no illegal fishing and better stocks on the ground I think there should be no charge. There is already enough expense and red tape involved with fishing. If there is an increase on £300 I don't think people will pay it"

"No, I want 8 months to be happy"

"No it should be cheaper"

"At present the cost of the clam licence to the current value of the clam fishery in Poole Harbour is probably just about worth the paper it's written on and no more. The cockle fishery however is, this is probably because they're not the target species for poachers and being a public fishery not within the Poole Order. When the clam and cockle fisheries are combined within the dredging permit I believe that the cost should be no more than £200 with a review after five years. After this time the fishery should be back on its feet and able to get a better perspective on its current value. It may be worth noting that the cost of a licence or permit for a London cab driver is only £50 on an annual basis, which in turn is controlled by a public body and a higher value than ours"

7.2.6 It is anticipated that approximately 40-45 permits will be issued under the proposed byelaw, based on the criteria that a permit will be issued to a registered, licensed fishing vessel and that the permit holder has used the

vessel to fish for shellfish within Poole Harbour since 2011, or the permit holder currently holds a Poole clam license.

- 7.2.7 As a result of the increase in vessels fishing for clams within much of Poole Harbour there is the potential for the catches of clams to be reduced and for the existing Poole clam license holders to experience a reduction in income as a result. There is also the potential for existing clam fishers, operating outside of the Poole Fishery Order, and cockle fishers, operating throughout the Harbour to experience a loss in catches through the reduction of fishing time to a seven month fishing season and weekend and night-time curfews under the proposed permit conditions.
- 7.28 It is not Southern IFCA's intention for there to be a reduction in the value of the Poole Harbour shellfish fisheries as a result of the recommended management. Southern IFCA will monitor the impacts of the change in management and the effectiveness of permit conditions will be reviewed accordingly. If necessary, permit conditions can be varied to help address any reduction in the value of the fishery.
- 7.2.9 There will be a loss of access to fishers to southern and western areas of Brand's Bay during sensitive periods for overwintering and nesting birds. This area of Poole Harbour is currently fished for shellfish throughout the year, but due to the small size of the site it is not possible to attribute a cost to the loss of fishing area.
- 7.2.10 In order to ensure that sediment stability is maintained within low energy areas of the harbour fishers will be restricted to the use of a single spray bar on their dredge. When using a toothed dredge fishers will not be allowed to angle their spray bar directly at the sea bed in front of the dredge. A double spray bar is currently used by some fishers when fishing for cockles within Poole Harbour, particularly when operating within sandy areas. Under the proposed additional permit conditions two spray bars will not be permitted and there is the potential for some cockle fishers to experience a reduction in catch and income as a result.

7.3 Analysis of administrative costs

- 7.3.1 The lead responsibility of enforcing an IFCA byelaw under section 153 of the Marine and Coastal Access Act 2009 will fall to the Southern IFCA. The existing routine and directed patrols undertaken by the IFCA within Poole Harbour would be the most likely and effective method of enforcement. It is not possible to estimate the additional cost to enforcement through introducing the recommended byelaw as likely levels of compliance are not known.
- 7.3.2 At this juncture only a rough estimate the administrative costs of this process can be made. It is expected that officer time will be in the order of magnitude of 0.75 FTE over a one year period of the review, consultation and impact assessment process. It is estimated that the administrative cost of introducing the recommended byelaw, including the costs associated with advertising the new byelaw will be approximately £25,000. Legal advice will be sought over

this period also and it is estimated that the legal costs of introducing the byelaw will be approximately £2,000.

7.3.3 Following the introduction of the byelaw it is anticipated that the administrative costs associated with issuing and managing permits will be in the order of magnitude of 18 days per year at a cost of approximately £3,600 per year. This represents an increase of 6 days and approximately £1,200 from the administrative costs associated with the Poole clam license. It is anticipated that all administrative costs will be covered by the income earned from the sale of permits.

7.4 Benefits for the recommended option

7.4.1 The introduction of a Southern IFCA 'Poole Harbour Dredge Permit' byelaw to manage the use, retention on board, storage or transportation of a dredge within Poole Harbour may result in the following benefits:

- Potential increase in the sustainability of the Poole Harbour shellfish fisheries
- Potential increase in the environmental sustainability of Poole Harbour
- Potential increase in the compliance with fisheries regulations
- Potential increase in shellfish catch and income within Poole Harbour
- Increased access to the Poole Harbour clam fishery
- Increased access to bird sensitive areas within Poole Harbour during periods of low sensitivity
- A greater use of data and knowledge to develop Poole Harbour's shellfish fisheries through flexible management
- The development of a stakeholder-led partnership approach to fisheries management

7.4.2 Potential benefits to the sustainability of Poole Harbour's shellfish fisheries, environmental sustainability and socio economic benefits are difficult to value and are therefore described here as non-monetised costs.

7.5 Analysis of fisheries and environmental benefits

7.5.1 The quantification of the potential benefits to the sustainability of shellfish stocks within Poole Harbour as a result of the recommended option is difficult. At the peak of the Poole Harbour clam fishery in 2001 the estimated annual value of landings was approximately £1.5m-2m. The productivity of the clam fishery in particular has experienced a decline in the past 10-15 years, potentially due to over-exploitation and non-compliance with regulations. In 2013 the value of clam and cockle landings within Poole Harbour was £174,824.20 and the average value of the fisheries between 2011- 2013 was recorded as £260,433.30. Through developing a more robust management regime and developing compliance it is believed that the sustainability and productivity of both the clam and cockle fisheries will increase.

7.5.2 Poole Harbour is recognised as a nationally important site for its extensive mudflats and marshes, which together with the permanent channels support

large populations of overwintering waders and wildfowl. The fringing habitats support further rare and scarce fauna and flora including nesting birds. Several rare marine invertebrates also occur within the Harbour. Through the management of the Poole Harbour shellfish fisheries as a result of the recommended option it is anticipated that there will be no adverse effect on the marine environment, and through the addition of the Brand's Bay bird sensitive area and the Wych Lake, Middlebere Lake, Holes Bay and Lychett Bay permanent closure area to the existing regulations it is anticipated that the declines in shelduck, redshank, dark bellied brent geese and dunlin in these areas may be reduced.

- 7.5.3 It is anticipated that the proposed byelaw will lead to an increase in compliance within Poole Harbour. As previously discussed, it is believed that in excess of 50% of the shellfish caught within Poole Harbour is taken by non-compliant fishing vessels. It is anticipated that there will be a greater quantity of shellfish available to permit holders as a result of increased compliance and, through the additional permit conditions, there is the ability for Southern IFCA to adapt management to increase the sustainability of shellfish stocks in the future. Through a significant increase in compliance it is anticipated that the impact of shellfish dredging upon the marine environment will be significantly reduced.
- 7.5.4 The recommended byelaw will increase access for approximately 20 more permitted vessels to the area of the current Poole Harbour licensed clam fishery (annex 1). Under the proposed permit conditions the permitted vessels will be able to fish for a further four months of the year, extending the period by which permit holders can generate an income through fishing for clams within Poole Harbour.
- 7.5.5 Under the proposed permit conditions permit holders will have full fishing access to the bird sensitive areas during July, August, September and October each year. These areas are currently closed to all shellfish collection activities, however prior their closure in 2006 they formed an important part of the fishery. The annual Poole Harbour bivalve stock survey, carried out by Southern IFCA, has found that the bird sensitive areas support good populations of clam and cockle species. It is anticipated that these areas will be mainly fished during September and October as the high densities of algal mat found within these sheltered bays during the summer months will restrict vessel access and the use of a dredge within these areas during this period.
- 7.5.6 It is anticipated that the permanent closure of Holes Bay and Lychett Bay will benefit the fisheries within the wider Harbour through the export of larvae⁵³. Inside these sensitive areas it is anticipated that populations will increase in size, and individuals live longer, grow larger and develop increased reproductive potential.
- 7.5.7 The quantification of the potential benefits to the sustainability of shellfish stocks within Poole Harbour as a result of the recommended option is difficult.

7.6 **Analysis of socio-economic benefits**

7.6.1 Through the recommended byelaw there is the potential to flexibly amend permit conditions. As stated in the byelaw, it is necessary to review available data and advice, consult with permit holders and consider stakeholder feedback when reviewing the suitability of permit conditions. This procedure will allow for better use of scientific data to drive the management of the Poole Harbour shellfish fisheries whilst providing a greater opportunity for the permit holders, the fishing community and all users of Poole Harbour to input into and inform the way in which the Poole Harbour shellfish fisheries are managed in the future. This byelaw will develop a greater bottom-up approach to the management of Poole Harbour shellfish fisheries, something that the local fishing community felt was important when developing this byelaw, as reflected in the pre-consultation comments when asked what they would like to see in future management:

“Fishermen input”

“More meetings to come up with solutions”

“Fishermen being involved in making decisions about the future”

“Listen to the fishermen and more open consultation”

7.6.2 It is anticipated that this byelaw will manage the fishery-ecosystem interaction, supporting marine biodiversity within Poole Harbour. The effective management of the use of fishing dredges within a Marine Protected Area demonstrates that these fisheries are managed in an appropriate way within sensitive marine areas. This byelaw therefore provides these fisheries with the opportunity to demonstrate their environmental credentials. In an ever-more environmentally aware society, this information may increase consumer confidence in these fisheries which may in turn have associated socio and economic benefits.

8. Summary

8.1 Under Article 6 of the EU Habitats Directive, within European Marine Sites including SPAs and RAMSAR sites, fisheries regulators are required to ensure that fisheries do not damage, disturb or have an adverse effect on the wildlife or habitats for which the site is legally protected. In a similar manner, under the Wildlife and Countryside Act 1981, fisheries regulators must take reasonable steps, consistent with the proper exercise of the authority's functions, to further the conservation and enhancement of features for which the site is designated. The Conservation of Habitats and Species Regulations 2010 requires that the IFCA exercise its functions, which are relevant to marine conservation so as to secure compliance with the requirements of the Habitats Directive. Furthermore, the functions (including any power to make byelaws) of Southern IFCA, as the relevant authority, are to be exercised under the management scheme established for Poole Harbour (Poole Harbour Aquatic Management Plan) so as to secure in relation to the site compliance with the requirements of the Habitats Directive.

- 8.2 To bring fisheries in line with other activities, the Department for Environment, Food and Rural Affairs (Defra) announced on the 14th August 2012 a new approach to manage fishing activities within EMSs. This change in approach will promote sustainable fisheries while conserving the marine environment and resources, securing a sustainable future for both.
- 8.3 Under MaCAA 2009, Southern IFCA has a responsibility to manage the exploitation of sea fisheries resources in their district, ensuring the sustainable exploitation of sea fisheries resources whilst balancing the social and economic benefits with the need to protect the marine environment from, or promote its recovery from, the effects of such exploitation. The proposed byelaw will in part fulfil Southern IFCA's duties in MaCAA (2009)⁸
- 8.4 The Poole Fishery Order (1985) is a hybrid Several and Regulating Order which allows for the development and promotion of aquaculture and the regulation of wild shellfish harvesting for clams. The Poole Fishery Order (1985) regulates the fishing for oysters, mussels and clams within much, but not all of Poole Harbour's waters. The present Order was originally created in 1915 under the Sea Fisheries (Shellfish) Act 1967 with the last renewal in 1985. The area covered by the Order within the Harbour is leased by the Southern IFCA from the Crown Estate. The Poole Fishery Order (1985) is due to expire on 30th June 2015 and the introduction of a dredge permit byelaw, introduced through s155 of MaCAA, will ensure that Poole Harbour's shellfish fisheries are appropriately managed in the future.
- 8.5 Under the recommended byelaw any person and vessel wishing to use retain on board, store or transport a dredge within Poole Harbour must hold an appropriate Southern IFCA permit or an appropriate dispensation issued under this byelaw. A person and vessel must then comply with conditions attached to the permit.
- 8.6 As a result of the recommended byelaw there is the potential for approximately 20-25 unregistered and unlicensed vessels to be prevented from using, retaining on board, storing or transporting dredges within Poole Harbour without an appropriate dispensation. The proposed byelaw will potentially restrict access for new applicants to Poole Harbour's shellfish fisheries. The financial cost of this restriction is difficult to quantify. The proposed cost of a permit will be £300 for the first year with a maximum annual cost of £1000. The current cost of a Poole clam license is currently £300. The income gained from the sale of permits will be used by Southern IFCA to cover the additional administrative and management costs associated with issuing permits, carrying out research and assessing the environmental impacts of the fishery. There is the potential for current Poole Harbour clam license holders to experience a reduction in catch and income due to the increased number of vessels accessing the fishery. It is not possible to estimate enforcement costs as the likely level of compliance is not known at this point. It is estimated that the administrative cost of introducing the recommended byelaw will be approximately £25,000 with approximate legal costs of be approximately £2,000. The ongoing cost of administering the

permits will be approximately £3,600, an increase of approximately £1,200 from the current administration of Poole Harbour clam licenses.

- 8.7 The recommended byelaw has significant environmental benefits through the protection of sensitive features that may be otherwise vulnerable to potentially damaging fishing techniques. It is anticipated that through the development of the recommended byelaw and permit conditions fisheries regulations within Poole Harbour will become more robust and compliance levels will increase. Through a significant increase in compliance it is anticipated that the impact of shellfish dredging upon the marine environment will be significantly reduced and the quantity of shellfish available for capture to permitted vessels will increase, together with the long-term sustainability of the fishery. The recommended byelaw will increase access for approximately 20 more permitted persons and vessels to the area of the current Poole Harbour licensed clam fishery. Under the proposed permit conditions these permitted persons and vessels will be able to fish for a further four months of the year and, for four months within previously closed bird sensitive areas, increasing the potential catch and income to permit holders. It is anticipated that the permanent closure of Holes Bay and Lychett Bay will benefit the fisheries within the wider Harbour through the export of larvae, potentially increasing future catches. The potential to flexibly amend permit conditions will allow for better use of scientific data to drive the management of the Poole Harbour shellfish fisheries whilst providing a greater opportunity for the permit holders, fishing community and all users of Poole Harbour to input into and inform the way in which the Poole Harbour shellfish fisheries are managed in the future. The effectiveness of the recommended byelaw will be reviewed within 3 years of its introduction. The byelaw offers the ability to vary permit conditions, if necessary.

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no.	
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