Title: Bottom Towed Fishing Gear Byelaw 2023

IA No: SIFCA 0123 RPC Reference No:

Lead department or agency: Southern Inshore Fisheries and

Conservation Authority

Other departments or agencies: Marine Management Organisation,

Natural England

Impact Assessment (IA)

Date: 08/06/2023

Stage: Development

Source of intervention: Domestic

Type of measure: Secondary Legislation

Contact for enquiries: Southern Inshore Fisheries and Conservation Authority, 01202 721373, enquiries@southern-ifca.gov.uk

Summary: Intervention and Options

RPC Opinion: RPC Opinion Status

Cost of Preferred (or more likely) Option (in 2019 prices)						
Total Net Present Social Value	Business Net Present Value	Net cost to business per year	Business Impact Target Status Qualifying provision			
£m -0.21236	£m -0.21236	£m 0.024670	Qualifying provision			

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

Bottom towed fishing gears, or mobile demersal gears, such as otter trawls or shellfish dredges, have the potential to impact or adversely affect certain sensitive features for which Marine Protected Areas (MPAs) are designated. Management intervention is required to ensure that the Southern IFCA can continue to meet its duties under the Marine and Coastal Access Act 2009 and the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 to manage fishing activities for MPAs to ensure that designated features are not adversely affected (SACs and SPAs), and that Conservation Objectives of the sites (MCZs) are furthered. A review of the existing Southern IFCA BTFG Byelaw 2016 is required in response to the creation of new Marine Conservation Zones (MCZs) within the Southern IFCA District and updated evidence on location and extent of designated features in other MPAs.

In accordance with the Government's Environmental Improvement Plan 2023, IFCAs are required to ensure that management measures are in place for designated features in MPAs by 2024 in order for the Government to achieve an interim target where 48% of designated features in MPAs are in a favourable position by 31st January 2028, with the ultimate target where 70% of designated features in MPAs are in a favourable position, with the remainder in a recovering condition by 2042.

What are the policy objectives of the action or intervention and the intended effects?

- To avoid adverse impact from bottom towed fishing activity on SACs and SPAs, and further the conservation objectives of MCZs in the Southern IFCA District
- To incorporate updates to the Marine Protected Area network in spatial management of bottom towed fishing gear
- To review existing spatial management of bottom towed fishing gear to ensure that it is based on best available evidence
- To manage bottom towed fishing activity proportionately by considering management for designated features within MCZs and designated features within or adjacent to SACs and SPAs
- To enhance environmental sustainability within the Southern IFCA District
- Intended effect is protection of designated sensitive features in MPAs from bottom towed fishing gear, success of this measure is measured by compliance with the regulation, measured through outputs from compliance and enforcement monitoring and, if required, associated enforcement action

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

- 0. Do nothing.
- Update an existing Southern IFCA byelaw in order to introduce new and revised spatial management for bottom towed fishing gear in Marine Protected Areas, ensuring feature protection consistent with Southern IFCA legal duties for SACs, SPAs and MCZs.
- 2. Create a Southern IFCA byelaw to prohibit bottom towed fishing gear across the full extent of all Marine Protected Areas.
- 3. Voluntary measures.

The preferred option is **Option 1**. The revocation of the 'Bottom Towed Fishing Gear Byelaw 2016' and the creation of the 'Bottom Towed Fishing Gear Byelaw 2023' would best enable Southern IFCA to meet its duties. The use of spatial management in MPAs utilising a feature-based approach is in line with the current legal duties of the Southern IFCA and is a proportionate response to ensuring appropriate protection of the marine environment from bottom towed fishing gear.

Will the policy be reviewed? It will be reviewed. If applicable, set review date:						
Is this measure likely to impact on international trade and investment?						
Are any of these organisations in scope? Micro Yes			Mediu Yes	ım	Large Yes	
What is the CO ₂ equivalent change in greenhouse gas emissions? (Million tonnes CO ₂ equivalent)		Traded: N/A		Nor N/A	n-traded: \	

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 CHAIR:	Date:			

Summary: Analysis & Evidence

Description:

FULL ECONOMIC ASSESSMENT

Price Base	PV Base	Time Period	Net Benefit (Present Value (PV)) (£m)			
Year 2019	Year 2020	Years	Low: Optional	High: Optional	Best Estimate: -0.212356	

COSTS (£m)	Total Tra (Constant Price)	nsition Years	Average Annual (excl. Transition) (Constant Price)	Total Cost (Present Value)
Low	Optional		Optional	Optional
High	Optional		Optional	Optional
Best Estimate	0.179640		0.007515	0.212356

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

The average annual monetised costs for the UK fishing industry following the introduction of the proposed measures is estimated to be £75,147.32. These costs are likely to arise as a consequence of loss of fishing access. The cost to Southern IFCA associated with ensuring compliance with the new measures is estimated to be £14,970 and would come in the first year of the byelaw, the transitional phase. Ongoing compliance costs would form part of the normal annual delivery of work by Southern IFCA.

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

As a consequence of loss of access to certain areas, there is the potential for displacement of fishing effort to other areas, potentially creating additional conflict with other users and reducing the sustainability of fisheries and the marine environment.

BENEFITS (£m)	Total Tra (Constant Price)	nsition Years	Average Annual (excl. Transition) (Constant Price)	Total Benefit (Present Value)
Low	Optional		Optional	Optional
High	Optional		Optional	Optional
Best Estimate	-		-	-

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

It is not possible to estimate monetised benefits at this point.

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

It is anticipated that the proposed measures will benefit the sustainability of the marine environment through the protection of sensitive designated features within MCZs and within or adjacent to SACs and SPAs (definition of adjacent is provided in S.1.26 of this IA) that would otherwise be vulnerable to potentially damaging fishing techniques. These features can act as important nursery, feeding, breeding and protective areas for fish & shellfish with the potential for net migration of species & larvae into adjacent areas benefiting commercial and recreational fisheries. Recreational users and commercial static gear fishers are anticipated to benefit from the closed areas, potentially benefiting the local economy. Certain protected habitats are also blue carbon habitats contributing to offsetting climate change. Such benefits are difficult to quantify.

Key assumptions/sensitivities/risks

Discount rate (%)

3.5

A key assumption is that the management intervention will be successful in preventing bottom towed fishing gear from fishing within prohibited areas and that the exclusion of these activities will lead to maintenance and/or recovery of designated sensitive features. Costs to industry have been calculated using MMO landings data with the information required to be generalised over the district concerning the origin and distribution of catches within that data. Landings data is fishery dependent and assumes catches and landings have been correctly reported.

BUSINESS ASSESSMENT (Option 1)

Direct impact on bus	siness (Equivalent Aı	nnual) £m:	Score for Business Impact Target (qualifying
Costs: 0.024670	Benefits: N/A	Net: 0.02467	provisions only) £m: 0.1234

Evidence Base

1. Problem Under Consideration and Rationale for Intervention

- 1.1 This Impact Assessment (IA) is for the Southern Inshore Fisheries and Conservation Authority (IFCA) Bottom Towed Fishing Gear Byelaw 2023 ("the Byelaw"). The Byelaw will manage bottom towed fishing gear in the Southern IFCA District and has been developed through reviews of MPA management and bottom towed fishing gear undertaken by the Southern IFC Authority.
- 1.2 Bottom towed fishing gear fisheries (from here on referred to as "BTFG fisheries") refer to fisheries where fishing gear is pushed or pulled along the seabed and occur across the Southern IFCA district for a variety of fish and shellfish species. Southern IFCA require commercial fishers to hold a Southern IFCA permit to fish in the district (freely available) and when applying for a permit, indicate types of fishing activity carried out. From these records, there are currently 159 fishers engaged in bottom towed fishing gear fisheries within the district, this incorporates fishers who have indicated either 'trawling' or 'dredging' or both on for their permit to fish. There is no pelagic trawling in the Southern IFCA district therefore 'trawling' is taken to mean bottom towed fishing gear.
- 1.3 Bottom towed fishing activity can potentially cause negative outcomes as a result of 'market failures'. These failures can be described as:
 - 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, mean that individuals do not necessarily have an incentive to
 voluntarily ensure the continued existence of these goods which can lead to underprotection/provision.
 - Negative externalities Negative externalities occurs 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 damaging 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.
- 1.4 The Byelaw aims to redress these sources of market failure in the marine environment through the following ways:
 - Management measures to ensure that designated features and supporting habitats are not adversely affected (SACs and SPAs) and to ensure that Conservation Objectives

- are furthered (MCZs) will ensure negative externalities are reduced or suitably mitigated.
- Management measures will support continued existence of public goods in the marine environment, for example conserving the range of biodiversity in the Southern IFC District.
- Management measures will also support continued existence of common goods in the marine environment, for example ensuring the long-term sustainability of stocks of sea fisheries resources in the IFC District.

Southern IFCA Legal Duties

- 1.5 Southern IFCA is responsible for the management of fishing activities in the coastal waters of Dorset, Hampshire and the Isle of Wight. These waters contain highly biodiverse and ecologically rich habitats, providing a range of valuable ecosystem services. The value of these habitats and species is recognised through a range of Marine Protected Area (MPA) designations, collectively contributing to the UK's MPA Network ("the National Site Network").
- 1.6 Southern IFCA has duties under section 154 of the Marine and Coastal Access Act 2009¹ ("the MaCAA") for the protection of features within marine conservation zones as follows:
 - (1) The authority for an IFC district must seek to ensure that the conservation objectives of any MCZ in the district are furthered.
 - (2) Nothing in section 153(2) is to affect the performance of the duty imposed by this section.
 - (3) In this section
 - a. "MCZ" means a marine conservation zone designated by an order under section 116;
 - b. the reference to the conservation objectives of an MCZ is a reference to the conservation objectives stated for the MCZ under section 117(2)(b)
- 1.7 Section 125 of the MaCAA also requires that public bodies (which includes the IFCA) exercises its functions in a manner to best further (or, if not possible, least hinder) the conservation objectives for MCZs.
- 1.8 Southern IFCA has duties under the Conservation of Habitats and Species Regulations 2017² and the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019³ (referred to jointly in this document as the "Conservation Regulations"). The Conservation Regulations transpose the land and marine aspects of the Habitats Directive and Wild Birds Directive into domestic law and outlines how the National Site Network will be managed.
- 1.9 The National Site Network is a network of protected sites which are designated for rare and threatened species and rare natural habitat types. These sites include Special Areas of Conservation (SACs) and Special Protection Areas (SPAs), designated under the EC Habitats Directive 1992⁴ and the EC Birds Directive 2009⁵, respectively. The National Site Network also includes MCZs designated under the MaCAA.

¹ Marine and Coastal Access Act 2009 (legislation.gov.uk)

² The Conservation of Habitats and Species Regulations 2017 (legislation.gov.uk)

³ The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 (legislation.gov.uk)

⁴ EUR-Lex - 31992L0043 - EN - EUR-Lex (europa.eu)

⁵ EUR-Lex - 32009L0147 - EN - EUR-Lex (europa.eu)

- 1.10 Under Regulation 6 of the Conservation of Habitats and Species Regulations 2017, Southern IFCA, as a named competent authority, must ensure that fishing activity within or adjacent to an SAC or SPA does not damage, disturb or lead to a deterioration of a species which receives protection under the relevant designation, so as to ensure compliance with the Habitats Directive and Birds Directive.
- 1.11 For MCZs, where section 154 of the MaCAA states that an IFCA's performance in meeting the duty to further Conservation Objectives for features within an MCZ should not be affected by anything listed in the general IFCA duties under section 153, this includes social or economic considerations. Likewise, for SACs and SPAs, the overarching legislation does not provide for the consideration of social or economic factors/impacts when making management decisions which are required to ensure that the duty of no adverse effect is met for activity within or adjacent to these sites.

Review of Bottom Towed Fishing Gear Management

- 1.12 Bottom towed fishing gears, or mobile demersal gears such as otter trawls or shellfish dredges, have been used by fishers for generations in the coastal waters of Dorset, Hampshire and the Isle of Wight. In certain areas these techniques have the potential to adversely affect sensitive habitats and species.
- 1.13 In line with the duties of the Southern IFCA, in 2020 Members of the Southern IFC Authority considered the need for a review of management of bottom towed fishing gear in the district in response to a change in the National Site Network through the addition of new MCZs under Tranche 3, the addition of new features to already designated MCZs and updates to the best-available evidence which had been used to inform the Bottom Towed Fishing Gear Byelaw 2016 the current management mechanism for these gear types in the district.
- 1.14 The evidence to support this review was collated through a series of environmental assessments for MCZs, SACs and SPAs.
- 1.15 In order to document and determine whether management measures are required to further the Conservation Objectives of MCZs, Southern IFCA is required to undertake an assessment relevant to fishing activities.
- 1.16 The assessment process is staged, comprising of an initial screening stage to establish whether an activity occurs or is anticipated to occur/has the potential to occur within the site. Activities which are not screened out are subject to a simple 'Part A' assessment, akin to the Test of Likely Significant Effect required under the Habitats Directive. The aim of this assessment is to identify pressures capable of significantly affecting designated features or their related processes. Fishing activities and their associated pressures which are not screened out in the Part A assessment are then subject to a more detailed 'Part B' assessment, where assessment is undertaken on a gear type basis. The Part B assessment is akin to the Appropriate Assessment required under the Habitats Directive. The aim of this assessment is to determine whether there is a significant risk of the activity hindering the Conservation Objectives of the MCZ. If the Part B assessment is unable to conclude that there is no significant risk of an activity hindering the Conservation Objectives of the MCZ, then the activity may be subject to management.
- 1.17 In relation to bottom towed fishing gear and MCZs, assessments were undertaken for the following areas so as to secure compliance with the MaCAA:

- Bembridge MCZ
- Yarmouth to Cowes MCZ
- The Needles MCZ
- Southbourne Rough MCZ
- Poole Rocks MCZ
- Studland Bay MCZ
- Purbeck Coast MCZ
- South of Portland MCZ
- Chesil Beach and Stennis Ledges MCZ
- 1.18 In order to document and determine whether management measures are required to ensure no adverse effect on the features and supporting habitats for which SACs and SPAs are designated, Southern IFCA is required to undertake an assessment relevant to fishing activities.
- 1.19 The first stage to this assessment is a Test of Likely Significant Effect (TLSE), which is designed to test whether a fishing activity is likely to cause a significant effect on the designated features of an SAC or SPA. All the features/sub-features and supporting habitats for a site are subject to the TLSE assessment. Where the potential for a likely significant effect cannot be excluded an Appropriate Assessment must then be undertaken which must consider, in detail, the potential effects of the activity being assessed on any features/sub-features and supporting habitats where a likely significant effect has been identified and indicate whether management of that activity is required to ensure no adverse effect. The full assessment (TLSE and Appropriate Assessment) is referred to as a Habitats Regulations Assessment (HRA).
- 1.20 In relation to bottom towed fishing gear and SACs/SPAs, assessments were undertaken for the following areas so as to secure compliance with the Conservation Regulations:
 - Solent Maritime SAC
 - Chichester and Langstone Harbour SPA
 - Portsmouth Harbour SPA
 - Solent and Southampton Water SPA
 - District-wide HRAs for seagrass and reef as features of multiple sites
- 1.21 The outcomes of the assessments indicated that a review of management of bottom towed fishing gear in the Southern IFC District was required to meet the legal duties of the Southern IFCA in relation to MPAs, driven by updates to the National Site Network and a need to review existing spatial management as a result of an update to best-available evidence on feature/supporting habitat location and extent.
- 1.22 In 2023, The Environmental Improvement Plan 2023 was introduced by Government as the first revision of the 25 Year Environment Plan. The Environment Plan identified the Government's intention to support progress towards the UN's Sustainable Development Goals under the Global Biodiversity Framework which includes protection of 30% of the global ocean by 2030. At a domestic level, the Government aim to achieve this by enhancing protection for MPAs. Under the Goal of Thriving Plants and Wildlife in the Environment Improvement Plan 2023, there is a target for 70% of designated features in MPAs to be in favourable condition by 2042 with the remainder in recovering condition and a new interim target of 48% of this to be achieved by 31st January 2028. The delivery of this is to be supported through strengthened protections in MPAs by 2024. Appropriate regulators, including IFCAs, are required to ensure that management measures are in place for all

- MPAs by 2024 in order for this interim target to be achieved. This includes the management of bottom towed fishing gear in MPAs.
- 1.23 In order to meet the Government target, Southern IFCA identified a need to prioritise workstreams and adopt a phased approach to the delivery of the bottom towed fishing gear review. This is based on the resource requirements for meeting the Government target and aims to allow for the consideration of wider district wide sensitive habitat management following an initial consideration of feature-based management for MPAs.
- 1.24 Consideration of feature-based management for MPAs is in line with the legal duties of Southern IFCA in relation to the different designations of MPA. In all cases the term 'feature' is used to refer to designated features and supporting habitats for designated features under SPA designations. For MCZs, under S154 of the MaCAA, Southern IFCA must ensure that the Conservation Objectives of any MCZ in the district are furthered. Under Article 6 of the Conservation Regulations, Southern IFCA as a named competent authority must ensure that fishing activity occurring within or adjacent to an SAC or SPA does not damage, disturb or lead to a deterioration of a species or habitat which receives protection under the relevant designation, so as to ensure compliance with the Habitats Directive and Birds Directive. These legal duties are related to the phased approach to bottom towed fishing gear management in the below sections.
- 1.25 The phased approach is split into two, Phase 1 and Phase 2.
- 1.26 Phase 1: To consider feature based management interventions within MPAs: sites designated under the National Site Network (Special Areas of Conservation [SACs], Special Protection Areas [SPAs] and Marine Conservation Zones [MCZs])
 - Phase 1 will consider management of bottom towed fishing gear for features which exist within any MCZ and which exist within or adjacent to any SAC/SPA. For the purposes of Phase 1, 'adjacent' means a feature (to include any buffer) which extends across the boundary of the designated site, to ensure that the integrity of that part of the feature which exists within the boundary of the site is not affected by activity occurring over that same feature where it extends outside the boundary of the site. The Authority has developed a set of principles for Phase 1 in order to guide and maintain consistency in decision making which will ensure that any subsequent management is applied equally and with full transparency across the Southern IFCA District, where applicable.

1.27 Phase 2: To consider district wide management interventions for sensitive habitats.

- Following the completion of Phase 1 it is the intention of the Authority to commence Phase 2 of the review. Phase 2 would consider features which exist adjacent to an MCZ boundary (i.e., any part of a feature which extends across the boundary of an MCZ) as well as any sensitive habitats and species (yet to be defined, pending the scope of Phase 2) across the district, both inside and outside National Site Network Sites and MCZs. This would also include consideration of features and sensitive habitats/species within Sites of Special Scientific Interest (SSSIs) which are not also designated under overlapping MPAs, where IFCA duties under the Wildlife and Countryside Act (1981) require the Authority to take 'reasonable steps, consistent with the proper exerciser of the authority's functions' to further Conservation Objectives for features within these sites.
- Phase 2 will also consider those areas which are currently closed under the Bottom Towed Fishing Gear Byelaw 2016 which, according to the principles developed for Phase 1 (S.1.31), will remain closed under Phase 1 of the review. In order to determine if any spatial changes are needed for these areas, socio-economic and environmental assessments will be carried out to create an evidence base to ensure all potential impacts of any potential change are considered.

- Under this Phase, social and economic factors/impacts can be considered alongside the need for protection of the marine environment, operating under the IFCA duties outlined under S153 of the MaCAA, namely balancing the protection of the marine environment with a sustainable fishing industry, balancing the needs of different persons engaged in the exploitation of sea fisheries resources and ensuring sustainable fishing and continued sustainable development. In addition, Phase 2 will allow for the consideration of outcomes of currently ongoing restoration projects for specified habitats and consideration of how the IFCA can align with the Government's Vision of protecting 30% of land and sea by 2030 ("30x30").
- 1.28 A phased approach allows for the consideration of wider sensitive habitat management beyond the feature-based management approach taken in Phase 1. In staging the approach, Phase 2 will benefit from the inclusion of outcomes from ongoing research programmes and projects, currently underway in the district, to include those which are specifically focused on areas which may provide habitat restoration potential, ecosystem services, blue carbon habitats and Natural Capital benefits. Research in these areas will contribute vital information to help the IFCA to contribute to wider conservation targets and understand how the wider management of sensitive habitats can contribute to meeting the objectives of the Fisheries Act 2020. In addition, during Phase 2, and in order to deliver Southern IFCA's core duties under the MaCAA, extensive consultation across the district's communities will be required to capture site specific information regarding the social and economic benefits of fishing, coupled with the need to protect the marine environment.
- 1.29 The phased approach to the delivery of this workstream was adopted by the Southern IFC Authority at their meeting on 16th March 2023. This development of the Bottom Towed Fishing Gear Byelaw 2023 falls under Phase 1 of this phased approach.
- 1.30 Members of the Southern IFC Authority agreed, through a series of Working Groups in early 2023 and following consideration of the outcomes of the IFCA Technical Advisory Committee in May 2023, a set of principles which would underpin management decision defining management of bottom towed fishing gear under Phase 1 of the review. Defining these principles ensures a transparent approach and that the approach is applied consistently across the district.

1.31 The principles are as follows:

- 1. Proposed closed areas are considered for designated features within MCZs
- 2. Proposed closed areas are considered for designated features within and adjacent to SACs and SPAs
- 3. Proposed closed areas for feature-based protections under Principles 1 & 2 incorporate buffers in accordance with national JNCC/NE buffer guidance
- 4. The best available evidence used to inform feature-based protection is the Natural England database provided to Southern IFCA in 2020
- 5. With the exception of seagrass, the extent and distribution of feature-based management in the Solent Maritime SAC and district wide SPAs will be informed by outcomes of the relevant Habitats Regulations Assessment (HRA)
- 6. Existing 2016 BTFG closures which do not meet Principles 1 & 2 will remain in place under Phase 1. These areas will be subject to socio-economic and environmental assessments in Phase 2, forming an evidence base to allow for the consideration of any changes to the spatial extent of these areas to ensure that all potential impacts are considered

1.32 More detail on the principles concerning best available evidence, use of buffers and feature-based management in the Solent Maritime SAC and District wide SPAs (excluding seagrass) can be found in the Bottom Towed Fishing Gear Byelaw 2023 Management Intentions Document.

2. Rationale and evidence to justify the level of analysis used in the IA (proportionality approach)

- 2.1 The level of evidence presented through the environmental assessments to inform management intervention is appropriate to the problem under consideration. These assessments have been based on best available evidence of feature/supporting habitat location and extent in MPAs as provided to the Southern IFCA by Natural England, as the Government's Nature Conservation Advisors, in 2020. In understanding the location of features/supporting habitats and the sensitivity of these to fishing activity, Southern IFCA utilise information made available by Natural England through their Designated Sites View⁶.
- 2.2 Given the phased approach adopted by Southern IFCA and the development of the Bottom Towed Fishing Gear Byelaw 2023 under Phase 1, namely considering feature-based management interventions for designated features within MCZs and within and adjacent to SACs and SPAs, the development of management through the Bottom Towed Fishing Gear Byelaw 2023 is unable to consider social or economic factors.
- 2.3 Information has been sought from MMO landings data to inform the anticipated cost to industry through the implementation of the Byelaw, however no further information on socio-economic impacts of the prohibited areas under the Byelaw has been sought from the industry on the prohibited areas as defined in the Bottom Towed Fishing Gear Byelaw 2023 given the inability for the IFCA to consider this information when making feature based management decisions for MPAs under the National Site Network.
- 2.4 Once the Southern IFCA begin undertaking Phase 2 of the review of bottom towed fishing gear, extensive consultation will be held with all interested parties, reflecting the ability (outside of feature-based management under Principles 1 & 2 of Phase 1 of the review) for the Southern IFCA to consider potential management under its wider duties under the MaCAA, namely to 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 to promote its recovery from the effects of such exploitation.

3. Description of options considered

3.1 Option 0: Do Nothing

Under this option, management of bottom towed fishing gear would continue to be managed under the Bottom Towed Fishing Gear Byelaw 2016.

3.1.1 This would result in no management of bottom towed fishing gear within MCZs designated under Tranche 3 and would not provide full feature-based protection for features/supporting habitats, in line with the duties of Southern IFCA, in relation to their location/extent under the updated best available evidence base. Under this approach, the

_

⁶ Site Search (naturalengland.org.uk)

Southern IFCA would not meet its duties under the MaCAA or the Conservation Regulations.

3.2 RECOMMENDED OPTION

Option 1: Update an existing Southern IFCA byelaw in order to introduce new and revised spatial management for bottom towed fishing gear in Marine Protected Areas, ensuring feature protection consistent with Southern IFCA legal duties for SACs, SPAs and MCZs

Under this option a byelaw would be created to replace the Bottom Towed Fishing Gear Byelaw 2016 to introduce new and revised feature-based spatial management for bottom towed fishing gear in Marine Protected Areas under the National Site Network (SACs, SPAs, MCZs).

- 3.2.1 This option would allow Southern IFCA to meet its duties for MCZs under the MaCAA and for SACs and SPAs under the Conservation Regulations. This option, operating under Phase 1 of the review of bottom towed fishing gear and under the principles defined by the Authority will allow the IFCA to meet the Government target of ensuring that management measures are in place for all MPAs by 2024.
- 3.2.2 Under this option the Southern IFCA 'Bottom Towed Fishing Gear Byelaw 2016' would be revoked.

3.3 Option 2: Create a Southern IFCA byelaw to prohibit bottom towed fishing gear across the full extent of all Marine Protected Areas.

Under this option a single byelaw would be created to prohibit bottom towed fishing gear use within the full spatial extent of all MPAs under the National Site Network (SACs, SPAs, MCZs).

3.3.1 This approach would allow Southern IFCA to meet its duties under the MaCAA, however under the Conservation Regulations, Southern IFCA must ensure that fishing activity does not damage, disturb or have an adverse impact upon the features for which an SAC or SPA has been legally protected. As such, full spatial closures of MPAs would not align to the legislative requirements upon IFCAs under the Conservation Regulations.

3.4 Option 3: Voluntary measures

Due to the total area and environmental value of the District's MPAs, coupled with the number of fishery participants and the complexity of the different types of bottom towed fishing gear, it is believed that a voluntary agreement would pose too great a risk to the integrity of the environmental designations. In addition, when Defra implemented the Revised Approach to the management of commercial fisheries in the then European Marine Sites (EMS) (now National Site Network), it was Defra's expectation that regulatory management measures would be introduced. The ongoing management of bottom towed fishing gear in the National Site Network is a continuation of the initial management implemented through the Revised Approach.

4. Policy objectives

- 4.1 The Policy Objectives of the Bottom Towed Fishing Gear Byelaw 2023 are:
 - To avoid adverse impact from bottom towed fishing activity on SACs and SPAs, and further the conservation objectives of MCZs in the Southern IFCA District

- To incorporate updates to the Marine Protected Area network in spatial management of bottom towed fishing gear
- To review existing spatial management to ensure that it is based on best available evidence
- To manage bottom towed fishing activity proportionately by considering management for designated features within MCZs and designated features within or adjacent to SACs and SPAs
- To enhance environmental sustainability within the Southern IFCA District
- Intended effect is protection of designated sensitive features in MPAs from bottom towed fishing gear, success of this measure is measured by compliance with the regulation, measured through outputs from compliance and enforcement monitoring and, if required, associated enforcement action

5. The Bottom Towed Fishing Gear Byelaw 2023

- 5.1 Building on the 2016 Byelaw (currently in force), the Bottom Towed Fishing Gear Byelaw 2023 will introduce a series of prohibited areas across the Southern IFCA District within which the used of bottom towed fishing gear for the exploitation of sea fisheries resources is prohibited.
- 5.2 The byelaw will prohibit the use of bottom towed fishing gear in 42 areas of the District (Table 1). The Area numbers align with those in the schedule of the byelaw and Annex 2 of the Management Intentions Document.

Area of District	BTFG Prohibition Area Numbers
Chichester and Langstone Harbours	1 – 6
Portsmouth Harbour	7 – 12
Southampton Water	13 – 18
Lymington, Keyhaven and Beaulieu	19 – 21
Yarmouth	22
Yarmouth to Cowes	23 – 24
The Medina, Cowes and Osbourne Bay	25 – 28
Ryde to South Wight	29 – 31
South Wight	32
Poole Bay	33 – 34
Poole Harbour	35 – 36
Studland Bay	37
Purbeck Coast	38
Portland and Stennis Ledges	39 – 40
Chesil Beach and The Fleet	41 – 42
Lyme Bay	43

5.3 The Byelaw requires a vessel carrying bottom towed fishing gear while transiting through a prohibited area to have that gear inboard and above the sea.

- 5.4 The Byelaw provides for the Authority to issue a written dispensation to any person committing an act which would otherwise constitute an offence against the byelaw if the act is for the purpose of educational, scientific, stocking or breeding purposes, is being undertaken in accordance with that purpose and the dispensation is carried on board and produced for inspection when requested by an IFCO of the Authority or any other person authorised by the Authority to make such a request.
- 5.5 The Byelaw provides for the Authority to review the suitability of the byelaw in accordance with any changes in evidence, to include any statutory evidence provided by Natural England or other such bodies, organisations or persons as the Authority deems fit. At the time that any such evidence is available, prior to any review taking place, consideration will be given to the evidence provided in conjunction with the IFCA's priority workstreams, balancing any identified need for a review with resource capacity.
- 5.6 There have been prohibited areas for bottom towed fishing gear across the Southern IFCA District since the introduction of the Bottom Towed Fishing Gear Byelaw in 2013. The network of prohibited areas was increased following the introduction of the Bottom Towed Fishing Gear Byelaw 2016. In adopting the principles agreed by the Authority to define the prohibited areas under the 2023 Byelaw, the resulting prohibited areas represent a combination of extensions to previous closures and the inclusion of new prohibited areas.
- 5.7 The total area closed to bottom towed fishing gear through the prohibited areas under the Byelaw is 743.12km² representing 27.2% of the Southern IFCA District. This is compared to a total area closed under the Bottom Towed Fishing Gear Byelaw 2016 of 696.3km² representing 25.5% of the District. The difference between the 2016 and 2023 byelaws is an increase in the total area closed of 46.8km² or 1.7% of the District.

6. Consultation

6.1 Informal Consultation

- 6.1.1 An informal consultation on an initial set of proposed prohibited areas developed by the Authority prior to the decision to adopt a phased approach was held between 17th June and 1st August 2022.
- 6.1.2 Responses were invited by email, post and via an online form. Throughout the consultation period, Southern IFCA officers contacted key stakeholders to inform them of the consultation and engaged with fishers whilst out on patrol. Officers helped fill out response forms where required and signposted fishers to the consultation document.
- 6.1.3 A total of 74 responses were received by the Authority through the duration of the consultation⁷.

6.2 Formal Consultation

6.2.1 To be added following completion of Formal Consultation.

⁷ The Summary of Responses document for the informal consultation is available upon request from the Southern IFCA.

7. Monetised and non-monetised costs and benefits

- 7.1 Option 1 will be analysed in comparison to Option 0
- 7.2 The creation of the Southern IFCA Net Fishing Byelaw may result in the following costs:
 - Direct costs to the fishing industry as a result of reduced access or loss of access to fishing grounds;
 - Indirect costs to the fishing industry associated with displacement to other fishing grounds;
 - Costs to Southern IFCA for compliance and enforcement activities
- 7.3 Costs to the fishing industry from reduced access or loss of access to fishing grounds and compliance costs to Southern IFCA can be monetised and these estimated values have been collated and presented as part of this IA.
- 7.4 Indirect costs to the fishing industry associated with displacement are difficult to value and are therefore described here as non-monetised costs.

Costs to the fishing industry

- 7.5 Bottom towed fishing gear users have the potential to incur costs as a result of reduced access or loss of access to fishing grounds within prohibition areas under the Byelaw. These costs will be incurred as a direct result of the closure of the fishing area.
- 7.6 Southern IFCA require commercial fishers to hold a Southern IFCA permit to fish in the district (freely available) and when applying for a permit, indicate types of fishing activity carried out. From these records, there are currently 159 fishers engaged in bottom towed fishing gear fisheries within the district, this incorporates fishers who have indicated either 'trawling' or 'dredging' or both on for their permit to fish. There is no pelagic trawling in the Southern IFCA district therefore 'trawling' is taken to mean bottom towed fishing gear.
- 7.7 To estimate the economic costs of the proposed management, Marine Management Organisation (MMO) catch data for bottom towed fishing gear catches landed to ports within the District between 2021 and 2023 (to Feb 2023) from UK registered vessels was analysed. Table 2 provides the quantity landed (kg) and the associated value (£) of all species landed by either trawling or dredging into ports in the Southern IFCA District for those years.

Year		of all species TFG (tonnes)	Total value of all species landed by BTFG (£)		
	Dredges	Trawls	Dredges	Trawls	
2021	1093.90	246.00	2,265,420.56	920,376.30	
2022	1219.00	218.97	2,273,778.66	1,081,131.24	
2023	75.58	34.57	194,097.50	151,716.63	
(to Feb 2023)					
Total for 2 full years (2021 and 2022)	2,312.90	464.97	4,539,199.22	2,001,507.54	
Average per year (based on 2021 and 2022)	1156.45	232.49	2,269,599.61	1,000,753.77	

^(*) Note the 2023 data only represents two months of the year

- 7.8 It has to be assumed that the landings into these ports were made by vessels which are registered with the Southern IFCA under the Fish for Sale permit. On this basis, splitting the average values from the above table equally between the 159 registered vessels equates to an estimated average landings value per vessel of £14,274.21 per year for dredging and £6,294.05 for trawling.
- 7.9 These figures can be based on access to the area of the District available to bottom towed fishing gear under the Bottom Towed Fishing Gear Byelaw 2016 = 2036.7km². Converting the average value of landings for 2021 and 2022 for each gear type to a (£) value per square km, and then applying this value to the additional area which is proposed to be closed through prohibited areas under the 2023 Byelaw compared to the 2016 byelaw, an average value per year can be estimated of the proposed cost to industry from the new byelaw. This equates to an approximate annual cost (across all fishery participants) of £52,151.65 for dredging and £22,995.67 per year for trawling. Giving a combined approximate annual cost of £75,147.32. Dividing this cost by the 159 BTFG vessels in the District equates to an estimated cost of £472.62 per vessel per year.

Costs to Southern IFCA

- 7.10 Southern IFCA is anticipating that additional costs for compliance and enforcement as a result of the Byelaw, over and above those already directed towards compliance and enforcement for the Bottom Towed Fishing Gear Byelaw 2016, will be minised due to the total footprint of prohibited areas changing by 46.8km² from the Bottom Towed Fishing Gear Byelaw 2016 (1.7% increase).
- 7.11 Under section 153 of the MaCAA, Southern IFCA has the lead responsibility of enforcing an IFCA byelaw. The Authority's existing compliance and enforcement strategy would be the most likely and effective method of enforcing the recommended byelaw.
- 7.12 Based on knowledge of the compliance and enforcement resource requirements for the Bottom Towed Fishing Gear Byelaw 2016 and the relatively small increase in total prohibited area size across the District it is anticipated that, in the first year of the byelaw being in place, there would be a day required per Fisheries Protection Vessel to update plotter information relating to positions of prohibited areas, this is anticipated at a total cost of £1,290 based on three patrol vessels. In the first year there would also be a requirement for 10 additional sea patrols across the District to engage with the bottom towed fishing gear industry on changes to prohibited areas, the cost of this would be £14,970.
- 7.13 The best form of engagement will be with the industry whilst they are on the water therefore the increased costs are based around sea patrols. It is anticipated that, given the relatively small increase in total prohibited area size across the District, there will not be a need for additional land patrols utilising assets such as the Southern IFCA drone, the current level of land patrols will be sufficient to ensure compliance and enforcement activities can be carried out in relation to the new byelaw.

Total monetised costs

7.14 The Equivalent Annual Net Direct Costs to Business (EANDCB) as a result of the proposed measures are estimated to be £24,670.00

Non-monetised costs

- 7.15 There is likely to be displacement of bottom towed fishing gear activity as a result of the proposed byelaw. The consequences of this displacement include potential conflict with other users, an increase in exploitation of other fisheries and an increased environmental impact as a result of increased bottom towed fishing gear in other areas.
- The level of displacement cannot be quantified, however the combination of management measures for gear types across the Southern IFCA District will provide a form of mitigation in relation to an increase in exploitation of other fisheries. The likely increase may be in the form of pot fishing, net fishing or shore gathering activities. The former two are aiming to be managed through Southern IFCA byelaws which are currently undergoing scrutiny through the MMO QA process prior to being considered by the Secretary of State. These byelaws seek to regulate the use of these gear types to limit impacts on stocks (whelk fisheries) and impacts on fish species utilising habitats for feeding, breeding and protection and impacts on migratory fish species and other sensitive species (net fisheries). The Southern IFCA are also undertaking a review of shore gathering activity across the National Site Network in the District which will inform appropriate management to avoid any adverse impact to the marine environment. Phase 2 of the bottom towed fishing gear review will also consider management of sensitive habitats in the wider District, both inside and outside of MPAs.

Benefits

- 7.17 The creation of the Bottom Towed Fishing Gear Byelaw 2023 may result in the following benefits:
 - Improved sustainability of the marine environment through the protection of sensitive designated features within MCZs and within or adjacent to SACs and SPAs that would otherwise be vulnerable to potentially damaging fishing techniques
 - A potential increase in the delivery of ecosystem services
 - A potential increase in the sustainability of the fisheries, leading to a socio-economic benefit for fishermen and associated businesses
 - A potential increase in opportunities for other fishing gear types
 - Potential reputational benefits to bottom towed fishing gear users and the fishing industry
- 7.18 These benefits are difficult to value and are therefore described here as non-monetised benefits.
- 7.19 The MCZ and HRA assessments carried out to inform the review of bottom towed fishing gear demonstrate that methods of bottom towed fishing gear are likely to have a significant effect on certain sensitive features/supporting-habitats for which sites in the District are designated and therefore prevent the furthering of Conservation Objectives for MCZs and lead to an adverse effect on features within or adjacent to SACs and SPAs, in all cases affecting overall site integrity. The creation of prohibited areas under the Byelaw provides a benefit to these MPAs through protection of these sensitive features/supporting-habitats allowing them to be maintained and/or recovered where required contributing to the achievement of overall site integrity.
- 7.20 The sensitive habitats and species designated for the National Site Network sites in the Southern IFCA District which relate to the assessments for bottom towed fishing gear include: seagrass, reef features, estuarine habitats (i.e. saltmarsh, intertidal sediments), sea-pens and burrowing megafauna, subtidal sediment habitats, black seabream, native oyster, maerl beds, pink sea fans and bird species with associated supporting habitats.

The outputs from the assessments indicate that abrasion, penetration or disturbance of the seabed, removal of non-target and target species, changes in suspended solids, smothering and siltation rates and disturbance of bird species were identified as the main pressures which required management consideration. The degree to which each of these pressures requires management in relation to bottom towed fishing gear will vary between sites taking into account the evidence in literature as to the potential impacts of different types of fishing gear on each habitat/species.

- 7.21 The sensitive habitats and species listed above contribute to the biodiversity of the marine environment and provide a variety of roles in supporting food webs, providing areas for feeding, breeding, roosting and protection for species and supporting the development of species communities and characteristic biotopes. These services would be maintained and potentially enhanced by the Byelaw.
- 7.22 Protection of these features/supporting habitats is also anticipated to deliver additional ecosystem services. The range of habitats and species protected within the prohibited areas are known to provide a degree of coastal protection (reefs, saltmarsh, mudflats) and are important areas for nutrient cycling, carbon and nitrogen fixing and sediment stabilisation. By protecting areas of sensitive habitat, a natural refuge is created for populations of exploited and bycatch species.
- 7.23 It is anticipated that the closure of sensitive areas will benefit adjacent fisheries through two mechanisms: net emigration of adults and juveniles across borders (termed 'spill over') and the export of pelagic eggs and larvae. Inside the prohibited areas, there is the potential for populations to increase in size, with individuals able to live longer, grow larger and develop increased reproductive potential. This has the potential to lead to increased catches outside of these areas. Within carefully managed, sustainable fisheries, additional fishing opportunities provided through increased catches may potentially offer employment opportunities, thus supporting the local economy.
- 7.24 In some areas, methods of towed fishing gear can restrict opportunities for other fishing activities such as static gear, shore gathering and recreational sea angling due to the potential for damage to fishing gear or through competition for a resource. Previous experience from the Lyme Bay area suggests that closures to bottom towed fishing gear may lead to an increase in fishing opportunities for other gear types such as pot fisheries. Within carefully managed, sustainable fisheries additional fishing opportunities may potentially offer employment opportunities, thus supporting the local economy.
- 7.25 It is anticipated that this byelaw will manage the fishery-ecosystem interaction, supporting biodiversity within the prohibited areas. The effective management of bottom towed fishing gear in MPAs demonstrates that these fisheries can be managed in an appropriate way in designated sites. 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 social and economic benefits.

8. Risks and assumptions

8.1 Cost estimates are based on estimates of UK landings values. Landings information is reported by port landed into and therefore it is not possible to ascertain what proportion of the landings value was derived directly from the proposed prohibited areas under the Byelaw.

- 8.2 The number of potentially affected vessels has been obtained through analysing the number of fishers in the District who have indicated to the Authority when registering to fish for sale, that they fish with either trawls or dredges or both. From officer knowledge, it is known that there are no pelagic trawling vessels operating in the Southern IFCA District therefore trawling is taken to represent bottom towed fishing gear.
- 8.3 Displacement of fishing effort is difficult to quantity, and impossible to predict where exactly activities will be displaced to.
- 8.4 Estimated costs to the fishing industry are likely to be an overestimate, as vessels are likely to offset some of the lost revenue by fishing in other areas. It is also possible that the increased environmental status within the prohibited areas could coincide with relatively more abundant fishing grounds, and therefore the analysis may have underestimated the value of reduced fishing ground.

9. Impact on small and micro businesses

- 9.1 The Byelaw will impact micro businesses (1-9 employees). There are two fishing vessels operating in the Southern IFCA District using bottom towed fishing gear which are >12m, all other vessels are <12m. The majority of vessels operate as a single business operated by one owner. Vessels will operate both single handed with only a skipper, and with a skipper and crew (maximum 2 crew).
- 9.2 It would not be possible to exempt small and micro businesses from the Byelaw.
- 9.3 Due to the size and range of these vessels, some may not be able to access alternative sources of income. These businesses may fail as a result. This has aimed to be mitigated by aligning the prohibited areas with the principles developed by the Authority to ensure consistency in approach across the District and ensure that closures are developed around feature-based management in MPAs in line with the Southern IFCA duties for different designation types. This has resulted in some new prohibited areas and extensions to some existing prohibited areas. The total difference in area closed to bottom towed fishing gear between the 2016 byelaw and the 2023 byelaw is 46.8km² (696.3km² under the 2016 byelaw compared to 743.12km² under the 2023 byelaw), this equates to a difference in the percentage of the District closed to bottom towed fishing gear of 1.7% (from 25.5% under the 2016 byelaw to 27.2% under the 2023 byelaw).

10. Wider impacts

- 10.1 There is the potential for businesses directly related to fishing to be affected as a result of the proposed measures. This is aimed to be abated through the mitigation to the fishing industry by the relatively small difference in the total size of the prohibited areas within the District.
- 10.2 As a result of possible environmental and fisheries benefits, there is the potential for other fishing and environmental businesses to benefit from the proposed measures, for example due to increased fishing opportunities.
- 10.3 There are potential social implications associated with the proposed byelaw, these have the potential to include the suppliers, fuel costs and time costs associated with sourcing new suppliers, travelling to and utilising alternative fishing grounds.

- 10.4 It is anticipated that the introduction of the proposed measures will achieve the conservation objectives of the MPAs within the district in the National Site Network (SACs, SPAs, MCZs) thus maintaining the overall integrity of these sites.
- 10.5 Increases in the density and biodiversity of species in the prohibited areas will positively contribute towards the health of the marine environment.

10.6 South Marine Plan

As per paragraph 58(3) of the MaCAA, Southern IFCA must have regard to the South Marine Plan⁸ when undertaking any decision which is not an authorisation or enforcement decision. By definition, as per paragraph 58(4), a byelaw would fall under the definition of 'authorisation or enforcement decision'.

- 10.6.1 That said, the proposed measures ensure compatibility with the following objectives and policies of the South Marine Plan:
 - Objective 3: To support the diversification of a sustainable fishing industry S-FISH-1
 - Objective 10: To support marine protected aera objectives and a well-managed ecologically coherent network with enhanced resilience and capability to adapt to change S-MPA-1, S-MPA-2
 - Objective 12: To safeguard space for, and improve the quality of, the natural marine environment, including to enable continue provision of ecosystem goods and services, particularly in relation to coastal and seabed habitats, fisheries and cumulative impacts on highly mobile species S-BIO-3

11. Monitoring and evaluation

- 11.1 The Authority is able to review the suitability of the byelaw in accordance with any changes in evidence, to include any statutory evidence provided by Natural England or other such bodies, organisations or persons as the Authority deems fit. At the time that any such evidence is available, prior to any review taking place, consideration will be given to the evidence provided in conjunction with the IFCA's priority workstreams, balancing any identified need for a review with resource capacity.
- 11.2 Monitoring of compliance with the Byelaw will be carried out through the Authority's compliance and enforcement framework⁹.

⁸ https://www.gov.uk/government/collections/south-marine-plans

_

⁹ Compliance-and-Enforcement-Framework-2023.pdf (toolkitfiles.co.uk)