

# Impact Assessment

## Sussex IFCA Marine Protected Area Byelaw: Beachy Head West MCZ management

<p><b>Title:</b> Sussex IFCA MPA Byelaw - Beachy Head West MCZ management</p> <p><b>IA No:</b></p> <p><b>Lead department or agency:</b> Sussex IFCA</p> <p><b>Other departments or agencies:</b> Natural England, Marine Management Organisation, Defra</p>	<h3 style="margin: 0;">Impact Assessment (IA)</h3> <p><b>Date:</b> 27/06/16</p> <hr/> <p><b>Stage:</b> Consultation</p> <hr/> <p><b>Source of intervention:</b> Domestic</p> <hr/> <p><b>Type of measure:</b> Secondary Legislation</p> <hr/> <p><b>Contact for enquiries:</b> Tim Dapling, Chief Fisheries and Conservation Officer: 12a Riverside Business Centre, Shoreham-by-Sea, West Sussex, BN43 6RE, 01273 454 407, <a href="mailto:admin@sussex-ifca.gov.uk">admin@sussex-ifca.gov.uk</a></p>
<b>Summary: Intervention and Options</b>	<b>RPC Opinion:</b> N/A

Cost of Preferred (or more likely) Option				
Total Net Present Value	Business Net Present Value	Net cost to business per year (EANCB on 2009 prices)	In scope of One-In, Two-Out?	Measure qualifies as
-£1016k	-£1016k	£116k	No	N/A

**What is the problem under consideration?**  
The Sussex IFCA MPA Byelaw and associated Beachy Head West MCZ management measures are proposed to further the conservation objectives of this 1<sup>st</sup> tranche MCZ site, in order to help the government achieve their commitment to providing a well-managed ecologically coherent marine protected area network and in accordance with the duties of the IFCA under sections 125, 126, 153 and 154 of the Marine and Coastal Access Act 2009.

**Why is government intervention necessary?**  
Government intervention is required to redress market failure in the marine environment by implementing appropriate management measures (e.g. this byelaw) to conserve features to ensure negative externalities are reduced or suitably mitigated. Implementing this regulatory notice will support continued provision of public goods in the marine environment.

Specifically, this byelaw will help provide appropriate risk-based management and protection across Beachy Head West MCZ where fishing activities are deemed detrimental to achieving the protected features conservation objectives (see section 1.4, Table 1).

- What are the policy objectives and the intended effects?**
- To further the conservation objectives stated for Beachy Head West MCZ;
  - To ensure compliance with the Marine and Coastal Access Act 2009 and help achieve the government's commitment to a well-managed, ecologically coherent network of MPAs;

- To promote sustainable fisheries while conserving the marine environment;
- To reduce external negativities and ensure continued provision of public goods

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

- Option 0. Do nothing  
 Option 1 Voluntary agreement  
 Option 2 Sussex IFCA MPA Byelaw with associated Beachy Head West management and voluntary agreement  
 Option 3 Sussex IFCA Byelaw: Full site prohibition

All options are compared to option 0. The preferred option is option 2 which will promote both sustainable fisheries and conserve the marine environment while ensuring compliance with the Marine and Coastal Access Act 2009.

**Will the policy be reviewed? It will be reviewed. If applicable, set review date: 4 years**

Does implementation go beyond minimum EU requirements?			No		
Are any of these organisations in scope? If Micros not exempted set out reason in Evidence Base.	<b>Micro</b> Yes	<b>&lt; 20</b> Yes	<b>Small</b> Yes	<b>Medium</b> No	<b>Large</b> No
What is the CO <sub>2</sub> equivalent change in greenhouse gas emissions? (Million tonnes CO <sub>2</sub> equivalent)			<b>Traded:</b> N/A	<b>Non-traded:</b> N/A	

*I have read the impact assessment and I am satisfied that, given the available evidence, it represents a reasonable view of the likely costs, benefits and impact of the leading options.*

Signed by the responsible SELECT SIGNATORY: \_\_\_\_\_ Date: \_\_\_\_\_

## Summary: Analysis & Evidence Policy Option 2

### Description:

#### FULL ECONOMIC ASSESSMENT

Price Base Year	PV Base Year	Time Period Years	Net Benefit (Present Value (PV) (£k <sup>1</sup> ))		
			Low: Optional	High: Optional	Best Estimate:
2016	2016	10			-£1016

COSTS (£m)	Total Transition <sup>2</sup> (Constant Price) Years	Average Annual <sup>3</sup> (excluding transition) (Constant Price)	Total Cost <sup>4</sup> (Present Value)
Low	Optional	Optional	Optional
High	Optional	Optional	Optional
Best Estimate	£0	£118	£1016

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

A low number of mobile gear operators utilise the site therefore a low associated socio-economic impact of restrictions are envisaged. Monetised costs were estimated in Defra's MCZ Impact Assessment, as outlined in Section 6.1 of the evidence section. This suggests that the potential annual value of UK bottom trawls landings affected ranged from £0 (no additional management) to £30,000/yr (closure of site to trawls). These costs should be treated with caution. They are associated with a high degree of uncertainty and are overestimates due to: 1) the resolution of the fisheries model used; 2) estimates being based on an unknown number of operators; 3) most of the site already being closed seasonally to trawling under an existing byelaw.

Monetised costs estimated in Defra's MCZ consultation IA suggest that the potential annual value of UK nets, pots and traps landings affected ranged from £0 (no additional management) to £38,000/yr (50% reduction in static gear activity). No new regulatory management is proposed for potting, thus a low socio-economic impact of restrictions is envisaged. Netting effort management will be achieved through a future gear specific byelaw, with regulation proposed solely for restricting nets and lines set from the shore, which occurs at a very low level. A voluntary code of conduct developed with the community is recommended to ensure best conservation outcomes for the site. It is anticipated that any additional voluntary restrictions and regulatory restrictions for nets/lines from the shore would incur costs near the lower end of the range.

Costs to business associated with the intertidal hand gathering restrictions are anticipated to be zero as there is no legitimate commercial shellfish extraction in the area. No regulatory management is proposed for angling, thus a low socio-economic impact of restrictions is envisaged. A voluntary code of conduct developed with the community is recommended to ensure best conservation outcomes for the site.

A best estimate of £9,400/month for sea and land patrol costs, vessel tracking, monitoring/research

<sup>1</sup> Net Benefit - value of the total monetised benefits minus the total monetised costs. All monetised costs and benefits should be expressed in £m. In order to compare options you need to adjust the estimates by discounting the impacts to the same point in time, to estimate the Present Value (PV) of the impacts (see main evidence section for explanation).

<sup>2</sup> Transient, or one-off costs or benefits that occur, which normally relate to the implementation of the measure. Non-quantified transient or one-off costs should be documented in the non-monetised section

<sup>3</sup> Average Annual, These are the costs and benefits that will reoccur in every year while the policy measure remains in force (although the scale of the impact may change over time) and so should not include transition costs. These are expressed as an annual average (over the life of the policy). i.e. undiscounted.

<sup>4</sup> i.e. discounted as with NPV

and communications by Sussex IFCA is calculated, equating to a total of £112,800/yr. Enforcement of the regulatory notice will be met within the current budget and whenever feasible will be incorporated into existing business and patrol costs, thereby greatly reducing the estimated costs provided. Whenever possible Sussex IFCA will work with joint agency partners to conduct land or sea patrols making effective use of resources to achieve common objectives and further reducing estimated costs.

**Other key non-monetised costs by ‘main affected groups’**

Information gathered from fishers and other stakeholders during extensive pre-consultation and Sussex IFCA expert intel has been used to support the evidence base and assumptions. The information received was largely qualitative and anecdotal, thus refinement of the monetised costs for commercial fisheries in Defra’s MCZ IA were not possible.

Minimal displacement of vessels is anticipated due to low usage of the site by mobile gear operators and existing seasonal prohibitions within the area for this gear type.

<b>BENEFITS (£m)</b>	<b>Total Transition (Constant Price) Years</b>		<b>Average Annual (excl. Transition) (Constant Price)</b>	<b>Total Benefit (Present Value)</b>
<b>Low</b>	Optional		Optional	<b>Optional</b>
<b>High</b>	Optional		Optional	<b>Optional</b>
<b>Best Estimate</b>	£0		£0	<b>£0</b>

**Description and scale of key monetised benefits by ‘main affected groups’**

No monetised figures are available for the benefits of the recommended management. However, significant potential benefits are summarised below. It is considered that the potential environmental benefits of introducing the proposed regulatory notice outweigh the possible administrative burden.

**Other key non-monetised benefits by ‘main affected groups’**

Introduction of the proposed management will further the site’s conservation objectives. Protection of the site will have a range of environmental, sustainable fisheries and ecosystem services benefits and contribute to an ecologically coherent network of MPAs (see section 6.2). Evidence indicates that the management option of ‘do nothing’ would result in a decline of ecosystem services currently provided by the site and that the existing ecosystem services derived from Beachy Head West MCZ make a contribution to the local economy, primarily through fisheries and recreation activities.

<b>Key assumptions/sensitivities/risks</b>	<b>Discount rate (%)</b>	3.5%
That evidence and fisheries models are sufficient to reflect predicted outcomes.		

**BUSINESS ASSESSMENT (Option 1)**

<b>Direct impact on business (Equivalent Annual) £k:</b>			<b>In scope of OITO?</b>	<b>Measure qualifies as</b>
<b>Costs:</b> £116	<b>Benefits:</b> £0	<b>Net:</b> -£116	No	N/A

# Evidence base

## 1.0 Introduction

### 1.1 Impact Assessment purpose

This impact assessment (IA) outlines the costs and benefits of the proposed fishing activity management to protect the designated habitats and species of Beachy Head West MCZ and further their conservation objectives. This includes the Marine Protected Areas Byelaw with associated Beachy Head West MCZ management measures, the recommended voluntary codes of conduct and intertidal Educational Conservation Areas (ECA). The IA also indicates why the option being recommended is the preferred option for management. A draft of this IA will be subject to public consultation.

### 1.2 Marine Protected Area Network

The UK Government's vision is of 'clean, healthy, safe, productive and biologically diverse oceans and seas'. Under the Marine and Coastal Access Act 2009 (MCAA) the government committed to designating a well-managed ecologically coherent network of marine protected areas (MPAs), which is a key element for achieving this vision. This network will consist of existing MPAs including special areas of conservation (SACs), special protected areas (SPAs), sites of special scientific interest (SSSIs), Ramsar sites, and a new type of MPA called marine conservation zones (MCZs).

Within the Sussex Inshore Fisheries and Conservation Authority's (IFCA) district, Beachy Head West MCZ, Kingmere and Pagham Harbour were designated within a first tranche of MCZs in November 2013. Tranche 2 sites were designated in January 2016, and within the Sussex IFCA District include Utopia and a small section of Offshore Overfalls. Tranche 3 sites will be consulted on in summer 2017.

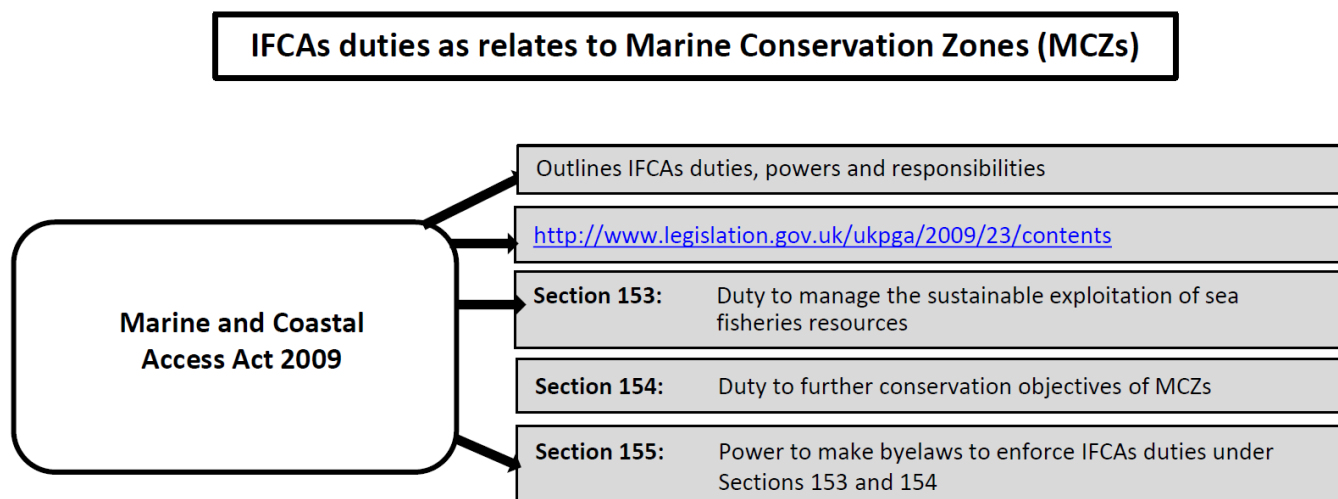
### 1.3 IFCAs MCZ duties

IFCAs are responsible for the management of inshore sea fisheries resources out to 6 nautical miles and the protection of the marine environment from fishing impacts within this area, balancing social, environmental and economic benefits.

Under section 154 of the MCAA IFCAs have a statutory duty to further the conservation objectives of any MCZ and are required to develop fisheries management measures for sites within 6nm to achieve this, as well as the subsequent enforcement. Figure 1

summaries IFCA’s duties under MCAA with regards to MCZs. This work has been embedded in Sussex IFCA’s annual plans, with development and introduction of management measures for Beachy Head West MCZ identified as a priority following Kingmere MCZ management formulation.

The development of management for designated MCZs within the Sussex IFCA District is a complex process and requires the Authority to take into consideration: the Authority’s legal duties; site conservation advice and objectives; and the socio-economic needs of the community, assessing how these can be accommodated within appropriate, practical and economically feasible management.



**Figure 1.** IFCAs duties as relates to MCZs

#### 1.4 Beachy Head West MCZ

Conservation of Beachy Head West MCZ contributes to the delivery of a well-managed ecologically coherent network of MPAs, together with Defra’s aim to conserve and enhance the marine environment and promote sustainable fisheries.

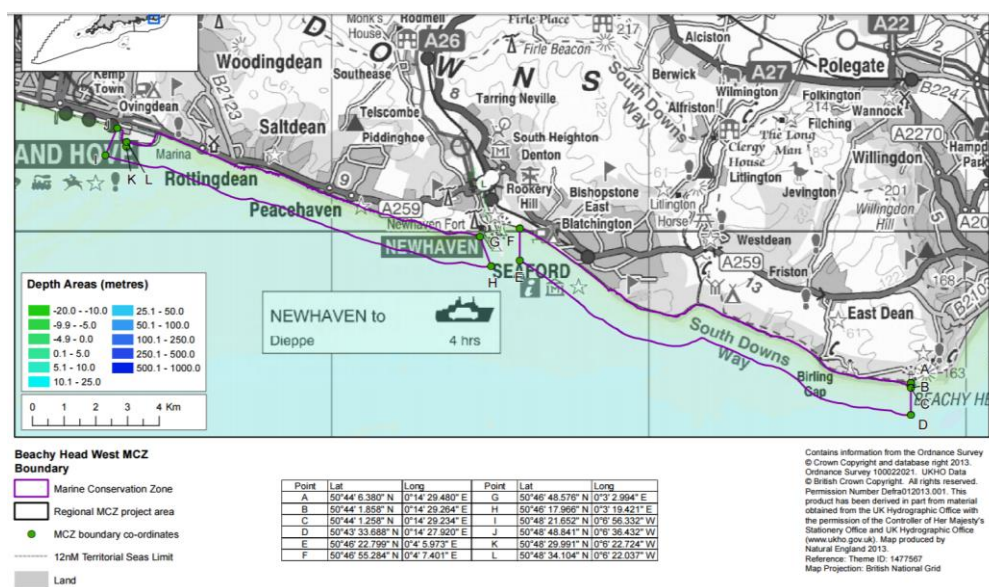
Beachy Head West MCZ consists of two spatially separate sites in the south-east of England. It comprises a 1/4nm strip adjoining the coastline from Beachy Head westwards to Brighton, with a gap at Newhaven, covering an area of approximately 24km<sup>2</sup> (Figure 2).

The site covers part of the Seven Sisters Voluntary Marine Conservation Area, a region designated in recognition of its marine biodiversity importance and its importance to the

local communities as one of the few remaining lengths of undeveloped coast in south-east England. It also borders the South Downs National Park and partially overlaps with the Seaford to Beachy Head Site of Special Scientific Interest (SSSI) and then Brighton to Newhaven Cliffs SSSI.

One of the main reasons for the designation of Beachy Head West MCZ are the extensive intertidal wave cut chalk platforms and subtidal chalk ridges, which are amongst the best examples of chalk habitat in the south-east. In a European context, the UK is very important, with over half of Europe's coastal chalk recorded from the southern and eastern coasts of England (NE web). Chalk reef is a fragile and rare marine habitat, and supports abundant wildlife including blue mussel beds, native oysters and sea squirts. The MCZ also provides good foraging areas for black-legged kittiwake, common tern and sandwich tern (Defra 2013a). Table 1 summarises Beachy Head West MCZ features, their respective conservation objectives, and the site's importance.

Natural England's broad conservation advice for the Beachy Head West MCZ site is that all the rock features need management in order to protect them and achieve the sites conservation objectives (see Section 2.2.3 for further details).



**Figure 2.** Beachy Head West MCZ location map (Beachy Head West 2013 designation map: [www.gov.uk](http://www.gov.uk))

**Table 1:**Beachy Head West 1<sup>st</sup> tranche MCZ features and importance

Description & Importance	Features for protection	Conservation objectives
<p>24km<sup>2</sup>. The MCZ is split into 2 zones, comprising a 1/4nm strip adjoining the coastline from Beachy Head westwards to Brighton, with a gap at Newhaven.</p> <p>One of the main reasons for site designation are the extensive intertidal wave cut chalk platforms and subtidal chalk ridges, which are considered amongst the best examples of chalk habitat in the south east.</p> <p>Chalk reef is a fragile and rare marine habitat. Littoral and sublittoral chalk are UK Biodiversity Action Plan Priority Habitats and listed in Annex I of the Habitats Directive.</p> <p>The site also contains rare and threatened species, including records of short snouted seahorses, native oysters and blue mussel beds. In addition there are extensive areas of sediment, some of which form a thin layer over the subtidal rocky reef, and the area is known to be a key nursery and spawning ground for several fish species.</p>	<p>Designated for 14 features:</p> <p><u>Sediments</u></p> <ul style="list-style-type: none"> <li>• Intertidal coarse sediment</li> <li>• Infralittoral sandy mud</li> <li>• Infralittoral muddy sand</li> <li>• Subtidal mixed sediment</li> <li>• Subtidal sand</li> <li>• Subtidal mud</li> </ul> <p><u>Rock</u></p> <ul style="list-style-type: none"> <li>• Low energy infralittoral rock and thin sandy sediment</li> <li>• Littoral chalk communities</li> <li>• Subtidal chalk</li> <li>• Moderate energy circalittoral rock</li> <li>• High energy circalittoral rock</li> </ul> <p><u>Species</u></p> <ul style="list-style-type: none"> <li>• Short-snouted seahorse (<i>Hippocampus hippocampus</i>)</li> <li>• Native oyster (<i>Ostrea edulis</i>)</li> <li>• Blue mussel beds (<i>Mytilus edulis</i>)</li> </ul>	<ul style="list-style-type: none"> <li>• Maintain</li> <li>• Maintain</li> <li>• Maintain</li> <li>• Maintain</li> <li>• Maintain</li> <li>• Maintain</li> <li>• Maintain*</li> <li>• Recover</li> <li>• Maintain*</li> <li>• Recover</li> <li>• Recover</li> <li>• Maintain</li> <li>• Maintain</li> <li>• Maintain</li> </ul>

\*See Table 2, Section 2.2.3, for further information on Natural England’s Conservation Advice on the sensitivity of these features and management requirement

## 2.0 Rationale for intervention

### 2.1 Overarching rationale for government intervention

IFCAs have duties to ensure that fish stocks are exploited in a sustainable manner, and that any impacts from that exploitation on designated features in the marine environment are reduced or suitably mitigated, by implementing appropriate management measures (e.g. this regulatory notice). Implementing this regulatory notice will ensure that fishing activities are conducted in a sustainable manner and that the marine environment is suitably protected.

Fishing activities can potentially cause negative outcomes as a result of ‘market failures’. 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 under-protection/provision. Sussex IFCA must ensure that the exploitation of sea fisheries resources is carried out in a sustainable way.

- Negative externalities – Negative externalities occur when the cost of damage to the marine environment is not fully borne by the users causing the damage. In many cases no monetary value is attached to the goods and services provided by the marine environment and this can lead to more damage occurring than would occur if the users had to pay the price of damage. Even for those marine harvestable goods that are traded (such as wild fish), market prices often do not reflect the full economic cost of the exploitation or of any damage caused to the environment by that exploitation. Sussex IFCA must 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 the recovery from, the effect of such 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.

Sussex IFCA must seek to balance the different needs of persons engaged in the exploitation of sea fisheries resources in the district. In summary, IFCA byelaws aim to redress these sources of market failure in the marine environment through the following ways:

- Management measures to conserve designated features of European marine sites (EMS) and 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 by restricting the catch taken and conserving the range of biodiversity within MCZs in the IFCA District
- Management measures will also support continued existence of common goods in the marine environment by reflecting the needs of commercial and recreational sectors, for example ensuring the long term sustainability of fish stocks in the IFCA District

## 2.2 Natural England Conservation Advice

IFCA's management measures for MCZ sites are guided by Natural England's (NE) conservation advice (CA) on what is compatible with site's conservation objectives, together with the outcome of the process to develop and define management measures with the community.

### 2.2.1 *Conservation Advice summary*

NE's conservation advice for the Beachy Head West MCZ site is that all the rock features – littoral chalk, subtidal chalk, moderate energy circalittoral rock, high energy circalittoral rock and low energy infralittoral rock and thin sandy sediment – need management in order to protect them and achieve the sites conservation objectives. The CA indicates that these features are currently vulnerable to damage from the level of existing activities within the site, or from the potential increase in intensity of activities. This advice was based on best available evidence on the sensitivity of the protected features to human activities which can damage them. See Table 2, Section 2.2.3, for further information on NE's CA and NE's online CA package at: <https://www.gov.uk/government/publications/conservation-advice-for-marine-conservation-zone-beachy-head-west-bs132>

### 2.2.2 *Conservation Objectives*

A Conservation Objective (CO) is a statement describing the desired ecological/geological state (the quality) of a feature for which an MCZ is designated – the aspiration for the site. The CO establishes whether the feature meets the desired state and should be maintained, or falls below it and should be recovered to favourable condition. Therefore 'favourable condition' is the overall aim and whether the features requires 'recovery to' or to be 'maintained in' is the action needed to achieve the objective. Protected sites in the UK use the term favourable condition to represent the desired state of their features. A 'feature' is one of the habitats, species or geodiversity intersts that MCZs are intended to conserve.

For details on the COs for Beachy Head West MCZ refer to its Designation Order 2013 in Annex I. This states that:

1) The Habitats should be in good condition, or be brought into and remain in good condition, which means:

(a) its extent is stable or increasing (where possible); (b) its structure and function, its quality and the composition of its characteristic species are such as to ensure that it remains in a condition which is healthy and not deteriorating.

2) For species:

a) the quality and quantity of its habitat, and b) the composition of its population (number, age and sex ration) ensure that the population is maintained in numbers which enable it to thrive.

### 2.2.3 Conservation Advice by gear type

Table 2 outlines the NE CA for each gear type grouping. The groupings comprise: Towed gear; Static gear (pots and nets) and angling.

In their letter to Sussex IFCA dated the 8<sup>th</sup> January 2016, NE welcome and support the management recommendations outlined in section 5.4 Tables 6 and 7, and state that they 'believe the proposal for a year round prohibition of trawling over the entire site will further the conservation objectives of the following features;

- Subtidal chalk
- Infralittoral chalk communities
- Low energy infralittoral rock and thin sandy sediments

*\*At this stage the additional rock features, moderate and high energy circalittoral rock, were proposed but not designated.*

Evidence has shown that these features are highly sensitive to even low levels of trawling, and therefore a single pass over an area of this feature may result in irreparable damage. Therefore Natural England support the IFCA's intention to introduce a byelaw to prevent this activity across the whole site, in which the features above are extensive in their distribution'.

**Table 2.** Natural England’s Conservation Advice – by gear type grouping

<b>Towed gear</b>	<b>Static gear</b>	<b>Angling</b>
<p><u>Rock features</u></p> <p>Advice from NE is that management is required for bottom towed gear over all protected rock features year round in order to achieve the sites Conservation Objectives (CO).</p> <p><i>Littoral chalk</i></p> <p>The littoral chalk feature has a ‘recover’ CO which means that some form of management is required in order to protect the feature from damaging activities. Despite interaction between trawling and littoral chalk being unlikely it would be damaging if it did occur thus NE’s CA indicates a precautionary approach should be taken with management.</p> <p><i>Subtidal chalk</i></p> <p>The CO for subtidal chalk is currently set at ‘maintain’. However, there is a move to bring MCZs in line with EMS advice and evidence in which bottom towed gear and rocky reef are classified as red risk and management is required to prevent any interaction. In light of this NE’s CA is that this rock feature is vulnerable to benthic trawling and should be treated as a ‘recover’ CO and managed accordingly.</p> <p><i>Infralittoral rock and thin sandy sediment</i></p> <p>Although classified as a sediment habitat, the CA indicates that from a sensitivity perspective the low energy infralittoral rock and thin sandy sediment feature should be treated like a rock feature and managed accordingly.</p> <p>Variation in the depth of the thin layer of sediment over rock throughout the site is unknown. Where</p>	<p><u>Rock features</u></p> <p>For pots and nets, there is a lack of impacts evidence to support the need for management over rock habitats, therefore NE’s CA indicates no management of these activities over rock habitats is required to achieve the sites COs.</p> <p>The impact of anchoring on rock features is not fully understood but on the absence of impacts evidence precautionary management, for example in the form of a voluntary code of conduct and education, is advised.</p> <p><u>Sediment features</u></p> <p>The CA for sediment features (intertidal coarse sediment, infralittoral sandy mud, subtidal mud, subtidal mixed sediment, infralittoral muddy sand, subtidal sand) is that due to a current lack of evidence on fisheries impacts on sediment habitats no additional management is required. Features will however need to be monitored and restrictions may have to be introduced in the future if condition declines.</p> <p><u>Species features</u></p> <p>All of the species (short-snouted seahorses, native oysters and blue mussel beds) have a ‘maintain’ CO.</p> <p>NE advises there is a need to increase understanding of seahorse numbers and habitat use within the site. Pots are deemed unlikely to have a negative impact on seahorses but towed gear is, therefore supporting trawling exclusion year round and throughout the site.</p>	<p><u>Rock features</u></p> <p>For angling, there is a lack of impacts evidence to support the need for management over rock habitats, therefore NE’s CA indicates no management of these activities over rock habitats is required to achieve the sites COs.</p> <p>The impact of anchoring on rock features is not fully understood but in the absence of impacts evidence precautionary management, for example in the form of a voluntary code of conduct and education, is advised.</p> <p>Piddock collection for bait, which involves breaking up the littoral chalk, has the potential to occur thus management to restrict this activity is advised.</p> <p>Trampling associated with angling and the collection of sea fisheries resources also has the potential to damage the littoral chalk, thus some form of management is recommended.</p> <p><u>Sediment features</u></p> <p>The CA for sediment features (intertidal coarse sediment, infralittoral sandy mud, subtidal mud, subtidal mixed sediment, infralittoral muddy sand, subtidal sand) is that due to a current lack of evidence on fisheries impacts on sediment habitats no additional management is required. Features will however need to be monitored and restrictions may have to be introduced in the future if condition declines.</p> <p><u>Species features</u></p> <p>All of the species (short-snouted seahorses, native oysters and blue mussel beds) have a ‘maintain’</p>

<p>the sediment layer is very shallow or rock is exposed it is assessed as sensitive to trawling impacts under the CA. In the absence of data on sediment depth variations precautionary management of trawling over the feature across the whole site is advised, despite current low trawling activity levels as this may change in the future.</p> <p><u>Sediment features</u></p> <p>The CA for sediment features (intertidal coarse sediment, infralittoral sandy mud, subtidal mud, subtidal mixed sediment, infralittoral muddy sand, subtidal sand) is that due to a current lack of evidence on fisheries impacts on sediment habitats no additional management is required. Features will however need to be monitored and restrictions may have to be introduced in the future if condition declines.</p> <p><u>Species features</u></p> <p>All of the protected species have a 'maintain' CO.</p> <p>NE advises there is a need to increase understanding of seahorse numbers and habitat use within the site. Pots are deemed unlikely to have a negative impact on seahorses but towed gear is, therefore supporting trawling exclusion year round and throughout the site.</p> <p>Management is already in place to prohibit oyster's commercial exploitation in the east of the district under Sussex IFCA's Fishing Instruments byelaw. Mussel dredges are prohibited under the Fishing Instruments byelaw thereby restricting commercial exploitation. Both blue mussel beds and oysters would also be afforded protection by excluding trawling within the site.</p>		<p>CO. NE advises there is a need to increase understanding of seahorse numbers and habitat use within the site.</p>
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### 3.0 Policy objectives and intended effects

#### 3.1 Underlying policy objective

The underlying policy objective of the proposed Beachy Head West MCZ management measures within the MPA Byelaw is to ensure Sussex IFCA's obligations to further the conservation objectives of MCZ sites are met. IFCA's have a duty under the MCAA to manage the exploitation of commercial and recreational sea fisheries resources in a sustainable way and to protect marine ecosystems from the impact of fishing in the 0-6nm limit off England. Their nationally agreed vision is to: *“lead, champion and manage a sustainable marine environment and inshore fisheries, by successfully securing the right balance between social, environmental and economic benefits to ensure healthy seas, sustainable fisheries and a viable industry”*.

Under Section 155 of the MCAA IFCA's may make byelaws for their district to enforce their duties under Sections 153 and 154, to manage the sustainable exploitation of sea fisheries resources and further the conservation objectives of MCZs respectively.

#### 3.2 Sussex IFCA principles underpinning MCZ management

***The Authority will:***

- ***Further the conservation objectives of the MCZ, in accordance with the conservation advice from the Government's Conservation Advisor, Natural England***
- ***Reflect the terms of the MCZ site Designation Order***
- ***Base decisions on best available evidence and allow, where possible, for the collection of further evidence***
- ***Take into account site user knowledge and wider stakeholder views, with the IFCA being the ultimate decision making body***
- ***Develop management which is proportionate, adaptive and subject to review***
- ***Strive to introduce management that promotes compliance and support from the community, whilst still adhering to the conservation objectives***
- ***Develop management that is economically viable, aims to minimise enforcement complexity and is sustainable for the IFCA***

The above principles will be achieved using the structure of the Authority's Principal Committee and its Technical Subcommittee.

### 4.0 Background

#### 4.1 IFCA evidence requirements

One of IFCA's success criteria is to make the best use of evidence to deliver their objectives. In order to sustainably manage sea fisheries resources, IFCA's need to gather evidence to inform decisions, evaluate options, propose management solutions and, where necessary, develop and agree byelaws. They also need to evaluate outcomes and review the effectiveness of any action taken. The Authority has conducted extensive work with the community to develop management measures which are widely supported – see section 4.6.

#### 4.2 Feature extent evidence

There is a high level of confidence in features location evidence in both the eastern and western zones of Beachy Head West MCZ. Refer to Annex II for the feature map, based on SCHIP1 data and NE data, including JNCC MESH, Seasearch, Sussex IFCA, SCHIP1 - refer to NE CA package.

Under the SCHIP1 project led by Sussex IFCA, the most fine-scale detailed habitat map of the majority of the IFCA's district out to 1km was created, working with the Channel Coastal Observatory (CCO) [www.channelcoast.org](http://www.channelcoast.org). This originally encompassed just the eastern zone of Beachy Head West MCZ and was provided to NE to inform the MCZ feature map. Previously, no acoustic data was available to inform CCO habitat maps for Newhaven to Hove, encompassing the western zone of the Beachy Head West MCZ site. This resulted in a broader scale feature map for this section with lower associated confidence in data, and an under representation of rock habitat. However, the acoustic data for this area was collected in early 2016 and the habitat maps for the western section were received in July 2016. The maps included now reflect this new higher resolution data, which represents the best available, most reliable data for the site and have been used to inform management, as advised by NE.

The condition of all features is not assessed (NE CA).

#### 4.3 Fishing activity evidence

There is a good understanding of fishing activity level and location within the site. Sussex IFCA conducted a review of observed fishing activity in Beachy Head West MCZ and constructed 2001-2015 activity and effort maps for each fishing gear type (Annexes III & IV). Fishing activity sightings data has been collected by Sussex IFCA, and its predecessor the Sussex Sea Fisheries Committee, for over 15 years.

The site is wholly within the 6 nautical mile limit and is only fished by UK vessels. Under the Authority’s Fishing Instruments byelaw the only towed gear types permitted within the district are trawling, oyster and scallop dredging (for the purpose of MCZ management options assessment drift nets are encompassed within netting management under the static gear grouping). Neither of these dredge types are permitted within the Beachy Head West MCZ area, with oyster dredges limited to west of Bognor and scallop dredges to outside 3nm under the byelaw. Thus, the only towed gear type requiring management within the site is trawling.

Table 3 summarises fishing activity information by gear type grouping, based on expert IFCO intel, IFCA sightings data, Defra’s site impact assessment, CVM interviews and workshop discussions.

**Table 3.** Fishing activity within Beachy Head West MCZ

<b>Towed gear</b>	<b>Static gear</b>	<b>Angling</b>
<p>Trawling occurs at low intensity within the site, with only 1-2 operators known to occasionally operate within the site boundary. Under an existing Trawling Exclusion Byelaw, trawling is prohibited 1/4nm seawards from the Lowest Astronomical Tide throughout much of the MCZ area seasonally (May to October).</p> <p>This activity occurs at medium to high intensity around the site, outside the MCZ boundary.</p>	<p>Parlour/inkwell pots targeting predominantly lobster with a bycatch of brown crab and whelk occur seasonally at high intensity within the site.</p> <p>There is minimal interaction with whelk pots on the south boundary of the site and no evidence of cuttlefish traps being observed within the site.</p> <p>Potentially 2-6 strings of pots, equating to up to 300 pots per vessel could occur within the site.</p> <p>Specific areas within the site are worked for lobster - Beachy Head Lighthouse to Seaford Head and Newhaven West Breakwater to Portobello outfall.</p> <p>There is high seasonal netting intensity within the site. Nets/lines from the shore occur at a very low level. Currently approximately 7-8 netting vessels, 5 potters/netters and 9 potting vessels use the site.</p>	<p>Angling occurs at minimal intensity within the site, and at medium seasonal intensity around the fringes of the site.</p> <p>10 yacht clubs, 13 sea angling clubs and 37 charter vessels (for divers and anglers) use the MCZ (StakMap, 2010 - in Defra, 2013a). Higher levels of angling occur in the extreme eastern part of the site around Beachy Head and to the east of the mouth of the River Cuckmere (Defra, 2013a).</p> <p>Predominantly angling by small vessels, with areas of shore angling where the terrain allows access.</p>



#### 4.4 Current management

Refer to Annex V for relevant current management within Beachy Head West MCZ.

#### 4.5 Impacts evidence

Table 4 summarises the level of confidence in existing impacts evidence for the different gear type groupings and key evidence gaps.

**Table 4.** Level of confidence in impacts evidence

<b>Towed gear</b>	<b>Static gear</b>	<b>Angling</b>
Level of confidence in impacts evidence – High.  There is a weight of evidence in peer reviewed literature with regard to the impacts of towed gear on marine features, in particular on rocky reef.	Level of confidence in impacts evidence – Low/Medium.  There is a limited body of evidence with regard to static gear impacts on rocky reef features. This evidence is growing with ongoing research.	Level of confidence in impacts evidence – Low/Medium.  Poor level of understanding around anchoring impacts on rocky reef.

Refer to NE's online Conservation Advice Package, specifically the Advice on Operations document with associated Activity-Pressure Justifications, for detailed advice on potential pressures from activities and supporting evidence references:

<https://www.gov.uk/government/publications/conservation-advice-for-marine-conservation-zone-beachy-head-west-bs132>

#### 4.6 Community engagement

##### 4.6.1 *Balanced Seas - site selection*

After over 2 years of discussion, taking into account social and economic factors alongside the best available scientific evidence, stakeholders passed 127 final site recommendations to Government advisory bodies in September 2011. All the MCZ sites went out for public consultation between December 2012 and March 2013, enabling further input from the community into the sites to be designated.

Management recommendations were developed for some sites at the site selection stage by stakeholders involved in the process, for details of those proposed for Beachy Head West MCZ refer to Annex VI. For more information on the Balanced Seas project visit: <http://webarchive.nationalarchives.gov.uk/20120502155440/http://www.balancedseas.org/page/home.html>

#### *4.6.2 Defra - proposed MCZs consultation*

The summary of responses from Defra's consultation on proposed MCZ sites between December 2012 and March 2013 (Defra, 2013b), indicated that responses to the Beachy Head West MCZ site were split. Those in favour of the site (local residents and conservationists) wanted it extended to include the Ouse and Cuckmere tidal estuaries and Beachy Head East. Most environmental organisations wanted the total area of the Seven Sisters Voluntary Marine Conservation Area to be included in the MCZ, together with protection for short-snouted and long-snouted seahorses, and inclusion of foraging/breeding seabirds.

Responses against the site were received from the inshore fishing fleet, which raised concerns about the Impact Assessment assumptions on the value of static gear fisheries potentially affected by the MCZ. A desire for the continuation of fishing activities on the seaward area was expressed, as well as existing trawling and netting byelaws to be taken into account. Concern was raised by the recreational sector regarding measures which may restrict mooring and anchorage, with the view expressed that voluntary measures should be considered before regulation.

#### *4.6.3 Sussex IFCA – Community Voice Method*

Sussex IFCA have conducted extensive informal pre-consultation to develop and generate support for potential management measures at Beachy Head West MCZ. Prior to the designation of 1st tranche MCZ sites at the end of 2013 the Authority had already begun its first stage of consulting with the community on management. Leading the process, Sussex IFCA worked with the Marine Conservation Society and independent consultants on an innovative project which utilises a film-based technique called Community Voice Method (CVM) to gather people's views on Sussex MCZ management.

The CVM project and process intended to inform the IFCA's decision-making on management of sites to maximise environmental benefit, satisfy the regulatory framework and the conservation objectives whilst achieving outcomes that balance the needs of sea-users. The work built on discussions that took place during the Balanced Seas project.

Forty-one filmed stakeholder interviews were conducted between November 2013 and April 2014, with people selected for interview based on their expert knowledge or involvement in relevant industries or sea user groups. The aim was to ensure as full a range of views and values as possible from across the area was captured and to build on discussions that took place during the Balanced Seas project. The 30 minute film produced was screened at 6 wider community MCZ management workshops conducted in October and November 2014. At the workshops, potential management options for differing fishing activities (categorised as mobile, static or angling activity – see Annex VII) within Beachy Head West MCZ were discussed. These were developed by Sussex IFCA in consultation with NE in response to the conservation advice for the site (see Annex VIII).

The potential management options put forward for consideration by the community aimed to encompass the range of potential management measures, from the most precautionary and least complex with regards to compliance, to measures that still have regard for the conservation advice but are as adaptive as possible, requiring more management complexity. Workshop participants were provided with the opportunity to input their views and consider a preferred option, including selecting individual measures from the different options or suggesting how they could be adapted, to arrive at a final option.

These workshops helped Sussex IFCA work closely with the community in the development of MCZ management measures for both Beachy Head West and Kingmere 1st tranche MCZ sites, and provided participants with the opportunity to discuss MCZ management scenarios with other stakeholders, Sussex IFCA and Natural England. Following the workshops, the outputs of discussions (made anonymous) were made available on Sussex IFCA's website to enable wider comment by those unable to attend. See [www.sussex-ifca.gov.uk/index.php?option=com\\_content&view=article&id=40&Itemid=206#cvmprogress](http://www.sussex-ifca.gov.uk/index.php?option=com_content&view=article&id=40&Itemid=206#cvmprogress) for further details.

#### *4.6.4 Sussex IFCA – other consultation*

Information on Beachy Head West MCZ, the informal consultation and all outputs have been kept updated on the Authority's website. Social and viral media (facebook, twitter) were utilised to advertise workshops and outputs in addition to direct mail outs, leaflet drops and posters in angling shops, clubs, ports etc.

#### 4.7 Management approach support

#### 4.7.1 CVM interviews

In questions where interviewees were **prompted** about the management measures recommended at the Balanced Seas stage, of those that responded:

- The majority (75%, n=16) supported a trawling byelaw extension to encompass the entire MCZ or sensitive features therein
- The majority (47%, n=15) were in favour of static gear management. A high proportion (40%, n=16) had mixed feelings attributed to: not being sure if it is a big enough issue; only if research shows it is necessary; dependant on what the site is supposed to protect.
- There was an equal split between those who were for or against managing fishing activities in respect to controlling anchoring related impacts (each at 35%, n=20). The remaining 30% had mixed feelings due to uncertainty around: extent of damage; the relevance given natural forces at work in the area; anchoring for safety; anchoring as part of static fishing gear placement; only if in limited areas and not the whole site

In **unprompted** responses from participants about the types of measures they felt would be appropriate:

- 17% of interviewees (n=41) raised the need to limit towed gear activity
- Only 2% indicated they felt limiting towed was not appropriate at Beachy Head West
- 17% of interviewees (n=41) raised the need to limit static gear activity
- Less people were concerned about managing angling activity than mobile or static gear management (raised by 2% of interviewees compared to 17% for towed and static gears, n=41)
- 7% of interviewees (n=41) raised the need to limit anchoring

#### 4.7.2 CVM wider community workshops

The preferred management options for each gear type indicated by the community within the CVM workshops are outlined in Table 5, together with some of the relevant key comments threads.

#### 4.8 IFCA Committee input

The Authority's Technical Subcommittee worked with officers to help develop the final proposed management. A detailed summary of their views on the issues and practical detail around management options is contained in Annex IX. The full Committee voted to proceed

with formal consultation and implementation of the final proposed measures at the April 2016 quarterly meeting.

**Table 5.** Management approach support – CVM workshops

	<b>Towed gear</b>	<b>Static gear</b>	<b>Angling</b>
<b>Preferred option</b>	<p>More people (42%, n=43) preferred Option 1 for mobile gear.</p> <p>This option included a year round trawling restriction over the whole site, with a modification of the existing seasonal trawling exclusion byelaw area to encompass the whole MCZ site as well as an appropriate buffer around the whole site.</p> <p>A high proportion (37%, n=43) of people abstained from voting for a preferred scenario for mobile gear. Both concerns about impacts on livelihoods and concerns about potential displacement and conflict were raised.</p>	<p>More people (56%, n=41) preferred Option 1 for static gear.</p> <p>This option included a cap on potting effort at current levels under the Shellfish Permit Byelaw and developing a mechanism to manage netting effort in the future to cap it at current levels, along with a requirement to supply static gear catch and fishing activity information and an IFCA-led voluntary code of conduct promoting highly sustainable fishing practices within the MCZ.</p>	<p>More people (47%, n=43) preferred Option 1 for angling and gathering.</p> <p>This option included a prohibition of activities which cause physical damage to rock features in the process of intertidal gathering of fisheries resources (including bait) and IFCA-led education and a voluntary code of conduct promoting sustainable angling and intertidal fisheries resources gathering within the MCZ, to be developed with the community.</p>
<b>Key comments threads</b>	<p>Some of the relevant key comments threads included:</p> <ul style="list-style-type: none"> <li>• Questions around enforcement and IFCA capacity for monitoring and enforcement</li> <li>• Concerns about taking a voluntary approach as opposed to a statutory approach</li> <li>• Suggestions that there are not many issues around conflict at this site</li> </ul>	<p>Some of the relevant key comments threads included:</p> <ul style="list-style-type: none"> <li>• Questions around enforcement and IFCA capacity for monitoring and enforcement</li> <li>• Concerns about taking a voluntary approach as opposed to a statutory approach</li> <li>• Suggestions that there are not many issues around conflict at this site</li> </ul>	<p>Some of the relevant key comments threads included:</p> <ul style="list-style-type: none"> <li>• Questions around enforcement and IFCA capacity for monitoring and enforcement</li> <li>• Concerns about taking a voluntary approach as opposed to a statutory approach</li> <li>• Suggestions that there are not many issues around conflict at this site</li> </ul>

## 5.0 Options

### 5.1 Evidence-based decision making cycle

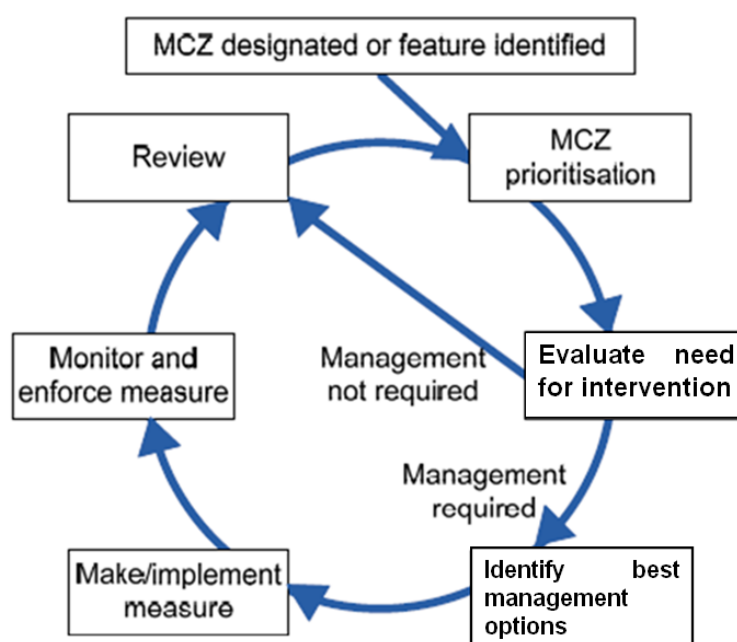
IFCAs must have a consistent approach to their decision making and be able to articulate clearly to stakeholders why they have chosen a certain approach. An evidence-based decision making cycle approach provides a common framework for decision making by

IFCAs and has been adopted in the current management options consideration for features and fishing activities within Beachy Head West MCZ.

Sussex IFCA aims to ensure that appropriate risk based management is implemented across Beachy Head West MCZ where activities are deemed detrimental to achieving the sites conservation objectives, in order to comply with Sections 125, 126, 153 and 154 of the Marine and Coastal Access Act (2009) (see Annex X for further details). It is the expectation of Defra that appropriate management measures for MCZs could involve both statutory and non-statutory measures to ensure adequate protection is achieved.

Management decisions should be based on the best available evidence, but using a precautionary approach where necessary. Management will be applied on a risk-prioritised, phased basis, with management implemented at MCZ sites most at risk of damage first. Figure 4 describes the management cycle to evaluate sites and assess the need for potential management measures to further site's conservation objectives.

**Figure 4.** Management cycle



## 5.2 Option 0: Do nothing

The 'do nothing' option would not achieve the sites conservation objectives. The general conservation advice from Natural England for Beachy Head West MCZ is that fisheries management is required in order to protect features that the site is designated for. As such, Option 0 has been rejected.

### 5.3 Option 1: Voluntary agreement

Solely voluntary measures are not deemed appropriate for the management of towed gear or some forms of intertidal hand gathering within the site due to the sensitivity of features. Where existing activities are having an impact on the achievement of a sites conservation objectives or where there is significant risk that they may do so either now or in the future, government indicates that statutory measures are likely to be required. As such, Option 1 has been rejected. The likelihood of compliance in any management arrangement and the risk associated with non-compliance also needs to be considered.

### 5.4 Option 2: Sussex IFCA Marine Protected Area Byelaw, incorporating Beachy Head West MCZ management measures, and voluntary agreement. Preferred option.

Option 2 is considered the most appropriate and proportionate management method to address risk to features and move towards achieving their conservation objectives, while balancing the needs of fishers in the area. High level management recommendations for each gear type grouping are outlined in Table 6, with further detail on measures in Table 7.

Sussex IFCA aims to introduce a combination of both voluntary agreement and regulation of commercial and recreational fishing that promotes compliance and support from the community, whilst meeting the conservation requirements of Beachy Head West MCZ. Solely voluntary measures are not deemed appropriate for the management of towed gear or some forms of intertidal fisheries resources gathering within the site due to the sensitivity of features. Where existing activities are having an impact on the achievement of a sites conservation objectives or where there is significant risk that they may do so either now or in the future, government indicates that statutory measures are likely to be required. The likelihood of compliance in any management arrangement and the risk associated with non-compliance also needs to be considered. Formulation of a Marine Protected Area Byelaw, incorporating Beachy Head West MCZ management measures, is recommended.

Proposed management measures include prohibition of towed gear throughout the site, year round, to protect rocky reef features within the site and adhere to NE's conservation advice (see section 2.2.3, Table 2). This includes subtidal chalk, littoral chalk, infralittoral rock and thin sandy sediment, moderate and high energy circalittoral rock features. Due to the small areas

available between rocky reef features, a zoned management approach is not considered feasible for this site.

It is anticipated that there will be a relatively low impact on trawlers as they will only be prohibited from a small additional area that is already encompassed within the existing seasonal Trawling Exclusion Byelaw (refer to Annex III fishing activity maps for the MCZ and exclusion byelaw relative areas). The move to a year round exclusion is likely to have minimal repercussions as sightings data indicates activity levels are low within the site outside of the season.

Prohibition of piddock, seahorse, native oyster and blue mussel collection is also proposed. Collection of piddocks involves breaking up the littoral chalk to access this organism for bait, thereby damaging the protected rock feature. This activity is known to occur in the vicinity thus management to restrict it is advised by NE. Seahorses are one of the features the site is designated to protect and are a rare and threatened species. Although seahorse collection is prohibited under the Wildlife and Countryside Act (1981) Sussex IFCA does not have the power to enforce this which inclusion in this regulatory notice would rectify. Native oysters are another rare and threatened species for which the proposed management would afford protection, and blue mussel beds are also a protected feature.

It is proposed that intertidal sea fisheries resources bag limits are introduced within the MCZ to encourage responsible harvesting. Environment Agency and Sussex IFCA intel indicate large scale harvesting of intertidal areas in the vicinity by organised groups on an industrial scale. The impact of such activity would include damage to the protected littoral chalk communities within the site. Due to the high level of activity that's been reported a voluntary approach is not deemed appropriate. Bag limits would respect the needs of recreational gatherers collecting for non-commercial needs and would only restrict the physical removal of organisms from the site, not their temporary collection by the public in rock pooling activities for example.

For potting and angling, no new additional regulatory management is proposed at this point in time. The new Shellfish Permit Byelaw introduced by Sussex IFCA will enable potting effort management. No restrictions are proposed when nets are set from vessels, with netting effort due to be dealt with in the future review of the Sussex IFCA Fixed Engine Byelaw. Year round prohibition of nets set/deployed from the shore and lines set on the shore (excluding angling or handlines) is recommended within the current regulatory notice. Such activity could cause



damage to the littoral chalk communities when anchoring nets with fixing equipment. The gear also risks hooking or emeshing birds, unwanted fish species, fish below the Minimum Conservation Reference Size (MCRS) or maturity and bass above the prescribed bag limit. Additional issues not associated with IFCA duties include: health and safety of the public; risk to dogs of hooking and enmeshing; risk of losing nets or lines and littering.

A voluntary code of conduct for recreational sea angling and commercial fishing is recommended, which would promote good practice and enhance the conservation outcomes for the site, potentially additionally benefiting the community and economy. A voluntary code would provide management for those elements not included in the regulatory management proposals, including anchoring management, seahorse protection through increased baseline data, maximum size benefits and catch returns information. NE advise that there is a need to increase understanding of seahorse numbers and habitat use within the site. They also advise precautionary management for anchoring, for example in the form of a voluntary code of conduct and education, in the absence of current impacts evidence to support regulatory management.

It is intended that in both the easterly and westerly zones of Beachy Head West MCZ that an area from datum to MHWS will be included in which intertidal hand gathering and retention of marine organisms is prohibited. These would function as educational conservation areas and enable data to be gathered to better understand what populations exist when no intertidal gathering occurs. These areas would also provide a good engagement and awareness tool, and tie in with the South Downs National Park and Biosphere areas.

Enforcement complexity associated with proposed measures is expected to be medium. Anticipated level of sectoral support and compliance levels is expected to be good.

**Table 6:** High level management recommendations

<b>Mobile gear</b>	<b>Intertidal gathering</b>	<b>Static gear</b>	<b>Angling</b>
Year round trawling prohibition over entire site	Prohibited for any person to collect piddocks, seahorses, native oysters or blue mussels	Prohibited to deploy nets and lines from the shore	Voluntary code of conduct
Buffer around site in which a VIMS is required	Intertidal gathering bag limits	Effort control under Shellfish Permit Byelaw and future netting regulation through fixed engine byelaw review	Educational conservation areas in which intertidal hand gathering and retention of marine organisms is prohibited

	Educational conservation areas in which intertidal gathering and retention of marine organisms is prohibited	Voluntary code of conduct	
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**Table 7: Detailed recommended options**

<b>Mobile gear</b>	<b>Intertidal gathering</b>	<b>Static gear</b>	<b>Angling</b>
Year round trawling prohibition over entire site	Prohibited for any person to collect, harm, kill or destroy piddocks, seahorses, native oysters and blue mussels, throughout the site	Prohibited set any net or lining gear from the shore throughout the site. This does not affect either angling or fishing with handlines from the shore	<p>IFCA-led voluntary code of conduct, to be developed within the community. Promoting highly sustainable angling practices within the MCZ, to achieve best conservation outcomes for the site.</p> <p>Recommendations of what could be included:</p> <ul style="list-style-type: none"> <li>* Best practice to avoid anchoring over sensitive areas (e.g. rocky reef), if anchoring over rock areas utilise equipment which minimises damage e.g. a low impact anchor such as a sacrificial anchor, consider drifting if practicable</li> <li>* Return seahorses directly if caught, report information to Sussex Biodiversity Records Centre (location, species, photograph), avoid areas where high seahorse bycatch</li> <li>* Adopt maximum landing sizes to protect larger, more fecund fish, and take photos rather than retain trophy fish</li> <li>* Follow the Angling Trust minimum sizes list to protect smaller fish</li> <li>* Use landing nets to lift fish into boats; wet hands before handling fish carefully; unhook fish while in the landing net; if a photo is desired, support the fish</li> </ul>

Mobile gear	Intertidal gathering	Static gear	Angling
			<p>while taking a photo and unhooking; if practicing catch and release, quickly return fish to the water</p> <ul style="list-style-type: none"> <li>* Return females in roe</li> <li>* If retaining fish dispatch quickly and cleanly</li> <li>* Maintain a catch and fishing activity log - see logsheet online at <a href="http://www.sussex-ifca.gov.uk">www.sussex-ifca.gov.uk</a> and submit as soon as possible</li> <li>* Encourage other fishers to understand and support the voluntary code</li> </ul>
<p>Buffer of 0.5nm around site in which a Vessel Information and Monitoring System (VIMS) is required.</p> <p>This means an acceptable working and active vessel monitoring system, of a type specified by the Authority and that has the capacity to utilise Global System for mobile communications or marine band VHF radio systems</p>	<p>Bag limits for intertidal gathering – the removal of sea fisheries resources whilst on the shore by hand or any handheld fishing gear.</p> <p>Suggested volumes are based on a quantity which would respect the needs of recreational gatherers collecting for non-commercial, personal consumption needs. The limits would mean any significant commercial activity would be deterred. Figures will be reviewed after 4 years, unless there is an evidence trigger.</p> <p>Prohibited throughout the site for a person to remove in any one day more than:</p> <ul style="list-style-type: none"> <li>* 2 lobsters, <i>Homarus gammarus</i> (with a recreational shellfish permit &amp; subject to MLS)</li> <li>* 5 edible crabs, <i>Cancer pagurus</i> (with a recreational shellfish permit &amp; subject to MLS)</li> </ul>	<p>Effort control under Shellfish Permit Byelaw and future netting regulation through Fixed Engine Byelaw review</p>	<p>Educational conservation areas in which intertidal gathering is prohibited, linking to existing environmental initiatives:</p> <ol style="list-style-type: none"> <li>1) Where South Downs National Park meets the sea. East to West - from Birling Gap staircase to the Beachy Head lighthouse. North to South – extending between the chalk cliff face and the sea to the point of Lowest Astronomical Tide (LAT).</li> <li>2) Within the Brighton and Lewes Downs Biosphere area. East to West – from end of Peacehaven undercliff to the end of the car park at Newhaven west beach. North to South – extending between the chalk cliff face and the sea to the point of LAT</li> </ol> <p>Refer to ECA maps in the BHW MCZ Regulatory Notice. Boundaries based on logical visual reference</p>

Mobile gear	Intertidal gathering	Static gear	Angling
	<ul style="list-style-type: none"> <li>* 20 crabs in total of any species other than <i>Cancer pagurus</i></li> <li>* 1kg of any bivalve or gastropod mollusc species, except piddocks, native oysters or blue mussels</li> <li>* 1kg of prawns and/or shrimps</li> <li>* 1kg of marine worms</li> <li>* 2kg of intertidal algae</li> </ul>		<p>points.</p> <p>These would function as educational areas and enable data to be gathered to understand what populations exist when no intertidal hand gathering exploitation occurs. Commercial potting will not be prohibited.</p> <p>Opportunities for schools/universities/Shoresearch research. The areas would also provide a good engagement and awareness tool, and offer sustainable tourism opportunities e.g. snorkelling</p>
	<p>Educational conservation areas in which intertidal gathering is prohibited, linking to existing environmental initiatives:</p> <p>1) Where South Downs National Park meets the sea. East to West - from Birling Gap staircase to the Beachy Head lighthouse. North to South – extending between the chalk cliff face and the sea to the point of Lowest Astronomical Tide (LAT).</p> <p>2) Within the Brighton and Lewes Downs Biosphere area. East to West – from end of Peacehaven undercliff to the end of the car park at Newhaven west beach. North to South – extending between the chalk cliff face and the sea to the point of LAT</p> <p>Refer to ECA maps in the BHW MCZ</p>	<p>IFCA-led voluntary code of conduct, to be developed with the community. Promoting highly sustainable fishing practices within the MCZ, to achieve best conservation outcomes for the site.</p> <p>Recommendations of what could include:</p> <ul style="list-style-type: none"> <li>* Best practice to avoid anchoring over sensitive areas (e.g. rocky reef) and the educational conservation areas</li> <li>* Utilise equipment that minimises damage to rock features when anchoring (e.g. chain/weight that drops into gullies rather than digging into reef)</li> <li>* Return seahorses directly if caught, report information to Sussex Biodiversity Records Centre (location, species, photograph), avoid areas of high seahorse bycatch</li> <li>* Adopt maximum</li> </ul>	

Mobile gear	Intertidal gathering	Static gear	Angling
	<p>Regulatory Notice. Boundaries based on logical visual reference points.</p> <p>These would function as educational areas and enable data to be gathered to understand what populations exist when no intertidal hand gathering exploitation occurs. Commercial potting will not be prohibited. Opportunities for schools/universities/Shoresearch research. The areas would also provide a good engagement and awareness tool, and offer sustainable tourism opportunities e.g. snorkelling</p>	<p>landing sizes to protect larger, more fecund organisms</p>	

### 5.5 Option 3: Sussex IFCA Regulatory Notice - Full site prohibition

The government's steer for MCZs is for them to be multiple use MPA sites, as opposed to no-take zones. Full site closure to all fishing activities within the MCZ is considered too conservative and cannot be justified. This option would go beyond NE's conservation advice for the site and thus has been rejected. Such a management measure would not be in line with IFCA's duty to sustainably manage the inshore marine environment 'ensuring healthy seas, sustainable fisheries and a viable industry'.

## 6.0 Costs and benefits

### 6.1 Key monetised and non-monetised costs

#### 6.1.1 Lost revenue

The best available evidence has been used to assess the impacts of the proposed management measures, taken from:

- Defra MCZ consultation on proposals for designation in 2013. 12<sup>th</sup> December 2012 to 1<sup>st</sup> April 2013. Annex I2 Option 2, Site Specific Impact Assessment: rMCZ 13.3 Beachy Head West
- Information gathered from fishers during pre-consultation engagement by Sussex IFCA

- Local IFCA officers expert knowledge

A very low number of mobile gear operators utilise the site therefore low associated socio-economic impact of restrictions are envisaged (see section 4.3, Table 3) . Monetised costs estimated in Defra's MCZ consultation IA for Beachy Head West suggest that the potential annual value of UK bottom trawls landings affected ranged from £0 (no additional management) to £30,000/yr (closure of site to trawls). The value attributed to potential management should be treated with caution. It is associated with a high degree of uncertainty and is an overestimate due to: 1) the resolution of the fisheries model used (reflects landings from a wider area than just the MCZ); 2) estimates being based on an unknown number of operators; 3) most of the site already being closed seasonally to trawling under an existing byelaw.

Monetised costs estimated in Defra's MCZ consultation IA suggest that the potential annual value of UK nets, pots and traps landings affected ranged from £0 (no additional management) to £38,000/yr (50% reduction in static gear activity). However, no new regulatory management is proposed for potting, thus a low socio-economic impact of restrictions is envisaged. Netting effort management will be achieved through a future gear specific byelaw, with regulation proposed solely for restricting nets and lines set from the shore, which occurs at a very low level. A voluntary code of conduct developed with the community is recommended to ensure best conservation outcomes for the site. It is anticipated that any additional voluntary restrictions and regulatory restrictions for nets/lines from the shore would incur costs near the lower end of Defra's IA estimated range.

Costs to business associated with the intertidal gathering restrictions are anticipated to be negligible as there is no legitimate commercial shellfish extraction in the area. No regulatory management is proposed for angling, thus a low socio-economic impact of restrictions is envisaged. A voluntary code of conduct developed with the community is recommended to ensure best conservation outcomes for the site.

### 6.1.2 *Displacement*

A low level of mobile gear displacement may result from the proposed restrictions. 1-2 trawlers are known to fish near to, and at low levels within, the site.

A current 1/4nm trawling exclusion byelaw already prohibits trawling within the majority of the site seasonally. Increasing the prohibited area to encompass the whole of the MCZ site and move to year round exclusion is not anticipated to result in much displacement. Out of season trawlers have not been observed by IFCOs to have fished within the 1/4nm strip when able to.

No displacement of pots is anticipated as it is not proposed to prohibit this activity in the site. Some low level netting/lining from the shore activity may be displaced. No displacement of angling is anticipated as it will also not be prohibited from the site under current recommendations.

#### 6.1.4 *Administrative burden*

Sussex IFCA will regulate and monitor the Beachy Head West MCZ site through the use of:

- *Education/Communication Strategies* – provide advice and information on Beachy Head West MCZ. This can be done via information packages, public events, community groups, festivals, signage that can be delivered during specific meetings or whilst conducting routine land or sea patrols
- *Land Based Patrols* – mobile land patrol conducting inspections on landings, premises, vehicle's and person's. Intelligence gathering, sightings and key communication messages delivery to the community.
- *Sea Based Patrols* – mobile sea patrol conducting boarding inspections, intelligence gathering, vessel sightings and key communication messages delivery to the fishing community
- *Joint Agency Working* – Working with joint agency partners in order to conduct land or sea mobile patrols utilising effective use of resources to achieve common objectives and deliver key communication messages
- *Monitoring/Research* - conducting regular research and gathering data to support the enforcement efforts within the site

Through regular enforcement patrols (land and sea), remote monitoring systems and return information the Authority will monitor fishing activity and develop a thorough understanding of permissible activities following the introduction of management. Compliance activities will reflect the developed risk based approach for MPA management. Where required mechanisms and technologies are not fully developed phased introductions will be implemented working with fishers (e.g. use of iVMS).

Enforcement of the proposed byelaw and regulatory order will be met within the current budget and wherever feasible will be incorporated into existing business and patrol commitments. Whenever possible Sussex IFCA will work with joint agency partners to conduct land or sea patrols making effective use of resources to achieve common objectives and further reducing estimated costs.

Using fully developed costings and an unconstrained model, a best estimate of £9,400/month for sea and land patrol costs, vessel tracking, monitoring/research and communications is calculated for Beachy Head West MCZ management. Table 8 details the estimated administrative costs breakdown. It should be noted that this is a top end, stand alone cost. Efficiencies will be made as above.

**Table 8.** Administrative costs estimates

	Costs (£/month)		
	Low	High	Best
Enforcement - Sea patrols	1,500	10,000	6,500
Enforcement – Land patrols	500	2,500	1,500
Vessel tracking monitoring			300
Monitoring/Research			1,000
Communication			100
<b>Totals</b>			<b>9,400</b>

\*Costs are based on the following daily rates: Watchful sea patrol including 5 crew (£3,500); Merlin sea patrol including 3 crew (£1,500); Individual enforcement officers (£200); Road Patrol 2 officers (£500)

It is important to highlight that low community support and resulting poor compliance will incur greater costs, thus Sussex IFCA has strived through extensive pre-consultation and work with the community to develop proposed measures to generate good support for management.

## 6.2 Benefits

### 6.2.1 Ecosystem services

The habitats, species and other ecological features of the MCZ contribute to the delivery of a range of ecosystem services. Designation of the MCZ is helping to protect its features and the ecosystem services that they provide against the risk of future degradation from



pressures caused by fishing activities. Potential improvement in the quantity and quality of the beneficial services they provide may increase the value (contribution to economic welfare) of them (Defra, 2013a). Examples of the ecosystem service Beachy Head West MCZ provides include:

- Commercial fisheries –intertidal rock habitats are important sources of larval plankton upon which commercially important fish species feed, including mussels and larval fish of plaice and mackerel. Subtidal rock and sediments support high biodiversity within the site and provide potential spawning and nursery grounds for many juvenile commercial fish species. Blue mussel beds provide habitat for shellfish and fish which are exploited by the fishing industry. This, together with the generally high biodiversity due to the complex habitats within the site help support potential on-site and off-site fisheries, contributing to the delivery of fish and shellfish for human consumption and recreation services (Fletcher et al., 2011, in Defra 2013a). Protection of the site will help move towards sustainable fisheries, although it is unclear whether the scale of habitat recovery and the magnitude of reduced harvesting will be enough to have a significant positive impact on commercial stocks (Defra, 2013a).
- Regulation of pollution - Marine sediments may act as temporary or permanent sinks for pollutants, particularly toxic metals (Fletcher et al., 2011, in Defra 2013a). The features of the site contribute to the bioremediation of waste (subtidal sediments), water filtration (Blue Mussel beds, Native Oyster) and sequestration of carbon (rock, Native Oyster, Blue Mussel beds and subtidal sediments) (Fletcher et al., 2011, in Defra 2013a).
- Nutrient cycling - Marine sediments have an important role in the global cycling of many elements including carbon and nitrogen. Nitrogen and phosphorous remineralisation provide a significant contribution to the nutrients required by primary producers in the water column.
- Environmental resilience - The features of the site also contribute to the resilience and continued regeneration of marine ecosystems, and local flood and storm protection (Fletcher et al., 2011, in Defra 2013a).

There is clear evidence that the management option of ‘do nothing’ would result in a decline of ecosystem services currently provided by the site and that the existing ecosystem services derived from Beachy Head West MCZ make a contribution to the local economy, primarily through fisheries and recreation activities (Fletcher et al., 2011, in Defra 2013a).

### 6.2.2 *Environmental benefits*

The proposed management of Beachy Head West MCZ will help achieve the site's conservation objectives. Management of the area has a vast range of environmental benefits, including protection of:

- The site contains rare and threatened species, including records of short snouted seahorses, native oysters and blue mussel beds. One of only four viable MCZ sites for the short-snouted seahorse
- Extensive intertidal wave cut chalk platforms and subtidal chalk ridges, which are considered amongst the best examples of chalk habitat in the south east. Chalk reef is a fragile and rare marine habitat. Littoral and sublittoral chalk are UK Biodiversity Action Plan Priority Habitats and listed in Annex I of the Habitats Directive.
- Extensive areas of sediment, some of which form a thin layer over the subtidal rocky reef, with the area known to be a key nursery and spawning ground for several fish species.
- Large areas of sea squirts (*Molgula*) beds, and FOCI habitat Ross coral and very unusual claystone reef (South-East features, Browning 2002, in Defra 2013a) within the site
- Good foraging area for Black-legged Kittiwake, Common Tern and Sandwich Tern (Balanced Seas 2011).
- Overlaps with Seven Sister Voluntary Marine Conservation Area
- The chalk foreshore reef is associated with notable algal communities that have been identified as an Important Plant Area (Brodie et al, 2007, in Defra 2013a)
- The site is within one of the Key Inshore Biodiversity Areas in the Balanced Seas region recommended as an MCZ by the South East England Biodiversity Forum (SEEBF 2010, in Defra 2013a)
- Seven Sisters was one of the recommendations put forward by the Marine Conservation Society as part of their Your Seas Your Voice campaign (MCS 2011, in Defra 2013a)
- A site which contributes to an ecologically coherent network of MPAs

### 6.2.3 *Research and education*

Monitoring of the MCZ, including comparisons with the intertidal no-take education zone, may help inform current understanding of how the marine environment is impacted by anthropogenic pressures and management intervention.

#### 6.2.4 *Recreation - wildlife watching, angling, diving*

Designation of this site may lead to an increase in diving trips as a result of publicity about the marine biodiversity and rare species found in the site, and potential biodiversity benefits of management. The site is a popular wildlife watching destination both on land and via charter vessels conducting wildlife watching trips. Designation may lead to an increase in wildlife watching, angling and recreational visits to the site which may benefit the local economy.

#### 6.6.5 *Intrinsic value*

Protection of the site will benefit the proportion of the UK population that values conservation of the MCZ features (existence value), the ecosystem services they provide, conservation of habitats and species for use by others in the current generation (altruistic value) or future generations (bequest value) and the site's contribution to an ecologically coherent network of MPAs (Defra, 2013a). In the MCS's 'Your Seas Your Voice' campaign, Seven Sisters, which is largely contained within this MCZ, was considered a special area enjoyed and appreciated by so many people in the over crowded South East and as important for national heritage. Its importance to the local and national economy through tourism is highlighted as it 'is a beautiful stretch of coastline with spectacular cliffs and attracts large numbers of visitors from the locality, nationwide and internationally' and its unique habitat 'the wave cut chalk platform is teeming with life' which attracts recreational users such as sea anglers to the site (Ranger et al 2011, in Defra 2013a).

#### 6.3 One In Two Out (OITO)

OITO is not applicable for byelaws implemented for MPA management as they are local government byelaws introducing local regulation and therefore not subject to central government processes.

#### 6.4 Small firms impact test and competition assessment

No firms are exempt from this byelaw as it applies to all firms who use the area, it does not have a disproportionate impact on small firms. It also has no impact on competition as it applies equally to all businesses that utilise the area.

#### 6.5 Risks and assumptions

Reputational risks are a potential hazard with management introduction at this site, in terms of being:

- Negatively perceived by fishing community and wider stakeholders due to restrictive measures
- Negatively perceived by stakeholders for not protecting the site
- Negatively perceived by government for not implementing legislation and statutory failure of duty

## **7.0 Conclusion**

It is considered that the environmental benefits of introducing the proposed management outlined in Option 2 outweigh the potential monitoring, administrative and enforcement burden and costs to industry.

This work contributes to the fulfilment of Sussex IFCA's responsibility to ensure the sustainable management of inshore fisheries balancing environmental, social and economic costs and benefits.

The proposed management to protect the designated habitats and species of Beachy Head West MCZ is a key component in Sussex IFCA carrying out its role locally in providing a well managed network of MPAs around the coast of England.

Sussex IFCA Beachy Head West MCZ management will be defined within a structured Site Management Plan that will reflect principles of a defined management cycle describing implementation, monitoring, review and refinement. A review period of four years will be set for the management plan and assessing the effectiveness of the recommended MPA Byelaw and associated Beachy Head West MCZ management measures, and the voluntary code of conduct.

In developing management measures for Beachy Head West MCZ, the Authority is fulfilling its obligations and commitments outlined in its annual plan for achieving the government's vision for clean, healthy, safe, productive and biologically diverse oceans and seas.

## **References**

1. Balanced Seas. 2011. Marine Conservation Zone: Selection Assessment Document. Beachy Head West rMCZ no.13.2. Balanced Seas
2. Defra. 2013a. Marine Conservation Zones: Consultation on proposals for designation in 2013. Annex I2 Option 2. Site Specific Impact Assessment materials. rMCZ 13.3 Beachy Head West. Department for Environment, Food and Rural Affairs

3. Defra. 2013b. Marine Conservation Zones: Site designations and summary of site-specific consultation responses. Beachy Head West. November 2013. Department for Environment, Food and Rural Affairs
4. JNCC & NE. 2012. JNCC and Natural England's advice to Defra on recommended Marine Conservation Zones. Marine Conservation Zone Project
5. Marine Conservation Society. 2011. Your Seas Your Voice Campaign

## **Annexes**

- |            |   |
|------------|---|
| Annex I    | The Beachy Head West Marine Conservation Zone Designation Order 2013 and 2016 amendment. Ministerial Order                              |
| Annex II   | Beachy Head West feature map, SCHIP1 and NE data  |
| Annex III  | Fishing activity maps for Beachy Head West MCZ, 2001-2015, Sussex IFCA  |
| Annex IV   | Fishing effort maps for Beachy Head West MCZ, 2001-2015, Sussex IFCA  |
| Annex V    | Relevant current Sussex IFCA management   |
| Annex VI   | Balanced Seas management recommendations  |
| Annex VII  | Gear type groupings   |
| Annex VIII | Community Voice Method workshops: Sussex IFCA Beachy Head West management options summary, based on Natural England Conservation Advice |
| Annex IX   | Technical Subcommittee meetings summary   |
| Annex X    | Marine and Coastal Access Act obligations   |

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MINISTERIAL ORDER

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2013 No. 2

WILDLIFE

ENVIRONMENTAL PROTECTION

MARINE MANAGEMENT

The Beachy Head West Marine Conservation Zones Designation  
Order 2013

*Made* 21st November 2013

*Coming into force* 12th December 2013

The Secretary of State thinks it desirable to make this Order for the purpose of conserving the marine habitats and the species of marine fauna specified in Table 2 of Schedules 1 and 2 to this Order.

The Secretary of State has had regard to any obligations under EU or international law that relate to the conservation or improvement of the marine environment in accordance with section 123(5) of the Marine and Coastal Access Act 2009(a).

The Secretary of State has—

- (a) published notice of the proposal to make this Order in accordance with section 119(2) and (3) of that Act; and
- (b) consulted persons who are likely to be interested in, or affected by, the making of this Order in accordance with section 119(4) of that Act.

The Secretary of State makes the following Order in exercise of the powers conferred by sections 116(1), 117(1), (2) and (7), 118(1) and (6), and 123(1) of that Act.

**Citation and commencement**

1. This Order may be cited as the Beachy Head West Marine Conservation Zones Designation Order 2013 and comes into force on 12th December 2013.

**Interpretation**

2. In this Order—

“co-ordinate” means a co-ordinate on the World Geodetic System 1984(b);

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(a) 2009 c.23. For the definition of the “appropriate authority” see sections 116(5) and 147(1) of that Act.

(b) For the definition of “World Geodetic System 1984” see the National Geospatial-Intelligence Agency Technical Report TR8350.2, “Department of Defense World Geodetic System 1984, Its Definition and Relationships With Local Geodetic Systems”, Third Edition, 4 July 1997.

“protected feature”, in relation to the Zones, has the meaning given by article 4; and  
“the Zones” means the areas designated by article 3(1) as marine conservation zones.

#### Areas designated

- 3.—(1) The areas described in paragraph (2) are designated as marine conservation zones.
- (2) The areas are—
- (a) the marine area enclosed by the six boundary lines which are described in Table 1 of Schedule 1 (“Beachy Head to Newhaven”); and
  - (b) the marine area enclosed by the six boundary lines which are described in Table 1 of Schedule 2 (“Newhaven to Brighton Marina”).
- (3) In paragraph (2)—
- (a) “described” means described in each case by reference to—
    - (i) the co-ordinates of the points joined by the line; and
    - (ii) a topographical description of the line; and
  - (b) “marine area”, in relation to an area designated, means—
    - (i) any area of seabed or other land (whether or not covered by water) within that area; and
    - (ii) all of the water covering any part of that seabed or other land.
- (4) The Zones may together be referred to as “the Beachy Head West Marine Conservation Zones”.

#### Protected features

4. The protected features are specified in the Schedules as follows—
- (a) in relation to Beachy Head to Newhaven, in Table 2 of Schedule 1; and
  - (b) in relation to Newhaven to Brighton Marina, in Table 2 of Schedule 2.

#### Conservation objective

- 5.—(1) The conservation objective of each of the Zones is that the protected features—
- (a) so far as already in favourable condition, remain in such condition; and
  - (b) so far as not already in favourable condition, be brought into such condition, and remain in such condition.
- (2) In paragraph (1), “favourable condition”—
- (a) with respect to a broadscale marine habitat or a marine habitat within a Zone, means that—
    - (i) its extent is stable or increasing; and
    - (ii) its structures and functions, its quality, and the composition of its characteristic biological communities are such as to ensure that it remains in a condition which is healthy and not deteriorating;
  - (b) with respect to a species of marine fauna within a Zone, means that the quality and quantity of its habitat and the composition of its population in terms of number, age and sex ratio are such as to ensure that the population is maintained in numbers which enable it to thrive.
- (3) In paragraph (2)(a)(ii), the reference to the composition of the characteristic biological communities of a habitat includes a reference to the diversity and abundance of species forming part of or inhabiting that habitat.
- (4) For the purposes of paragraph (2)(a)(ii), any temporary deterioration in condition is to be disregarded if the habitat is sufficiently healthy and resilient to enable its recovery.

(5) For the purposes of paragraph (2)(b), any temporary reduction of numbers is to be disregarded if the population is sufficiently thriving and resilient to enable its recovery.

(6) For the purpose of determining whether a protected feature is in favourable condition within the meaning of paragraph (2), any alteration to that feature brought about entirely by natural processes is to be disregarded.

21st November 2013

*George Eustice*  
Parliamentary Under Secretary of State  
Department for Environment, Food and Rural Affairs

**SCHEDULE 1** Articles 3(2)(a) and 4(a)  
**Beachy Head to Newhaven**

**Table 1**  
**Area designated – boundary lines**

<i>Boundary line</i>	<i>Set of co-ordinates of points which boundary line joins</i>	<i>Topographical description of boundary line</i>
1.	A, B	Geodesic line
2.	B, C	The line shown coloured red on the Map
3.	C, D	Geodesic line
4.	D, E	Line seaward of and parallel to mean high water line at a distance from that line (taking the shortest distance from any given point on that line) of 0.5 nautical miles
5.	E, F	Geodesic line
6.	F, A	Mean high water line

where—

“A” is 50° 44’ 06.380” N and 00° 14’ 29.480” E;

“B” is 50° 44’ 01.858” N and 00° 14’ 29.264” E;

“C” is 50° 44’ 01.258” N and 00° 14’ 29.234” E;

“D” is 50° 43’ 33.688” N and 00° 14’ 27.920” E;

“E” is 50° 46’ 22.799” N and 00° 04’ 05.973” E;

“F” is 50° 46’ 55.284” N and 00° 04’ 07.401” E; and

“the Map” means the map marked “Beachy Head West MCZ Boundary Around Lighthouse”, dated 21st November 2013, and signed by the Parliamentary Under Secretary of State, Department for Environment, Food and Rural Affairs(a).

(a) A copy of this map may be seen at <https://www.gov.uk/government/publications?departments%5B%5D=department-for-environment-food-rural-affairs> or obtained by writing to the Sussex Inshore Fisheries and Conservation Authority, 12A Riverside Business Centre, Shoreham-by-Sea, West Sussex, BN43 6RE.



**Table 2****Protected features**

<i>Protected feature</i>	<i>Type of feature</i>
Intertidal coarse sediment	Broadscale marine habitat
Subtidal mixed sediments	Broadscale marine habitat
Subtidal mud	Broadscale marine habitat
Subtidal sand	Broadscale marine habitat
Blue mussel ( <i>Mytilus edulis</i> ) beds	Marine habitat
Infralittoral muddy sand	Marine habitat
Infralittoral sandy mud	Marine habitat
Low energy infralittoral rock and thin sandy sediment	Marine habitat
Littoral chalk communities	Marine habitat
Subtidal chalk	Marine habitat
Native oyster ( <i>Ostrea edulis</i> )	Species of marine fauna

**SCHEDULE 2**

Articles 3(2)(b) and 4(b)

**Newhaven to Brighton Marina****Table 1****Area designated – boundary lines**

<i>Boundary line</i>	<i>Set of co-ordinates of points which boundary line joins</i>	<i>Topographical description of boundary line</i>
1.	G, H	Geodesic line
2.	H, I	Line seaward of and parallel to mean high water line at a distance from that line (taking the shortest distance from any given point on that line) of 0.5 nautical miles
3.	I, J	Geodesic line
4.	J, K	Mean high water line
5.	K, L	Geodesic line
6.	L, G	Mean high water line

where—

“G” is 50° 46′ 48.576″ N and 00° 03′ 02.994″ E;

“H” is 50° 46′ 17.966″ N and 00° 03′ 19.421″ E;

“I” is 50° 48′ 21.652″ N and 00° 06′ 56.332″ W;

“J” is 50° 48′ 48.841″ N and 00° 06′ 36.432″ W;

“K” is 50° 48′ 29.991″ N and 00° 06′ 22.724″ W; and

“L” is 50° 48′ 34.104″ N and 00° 06′ 22.037″ W.

**Table 2****Protected features**

<i>Protected feature</i>	<i>Type of feature</i>
Intertidal coarse sediment	Broadscale marine habitat
Subtidal mixed sediments	Broadscale marine habitat
Subtidal mud	Broadscale marine habitat
Subtidal sand	Broadscale marine habitat
Blue mussel ( <i>Mytilus edulis</i> ) beds	Marine habitat
Infralittoral muddy sand	Marine habitat
Infralittoral sandy mud	Marine habitat
Low energy infralittoral rock and thin sandy sediment	Marine habitat
Littoral chalk communities	Marine habitat
Subtidal chalk	Marine habitat
Native oyster ( <i>Ostrea edulis</i> )	Species of marine fauna
Short-snouted seahorse ( <i>Hippocampus hippocampus</i> )	Species of marine fauna

**EXPLANATORY NOTE**

*(This note is not part of the Order)*

This Order designates two areas as marine conservation zones (which may together be referred to as “the Beachy Head West Marine Conservation Zones”). The areas designated are defined in article 3 and Table 1 of each of Schedules 1 and 2. The protected features of the Zones are specified by article 4 and in Table 2 of each of Schedules 1 and 2. The conservation objective of the Zones (in each case) is set out in article 5.

A full impact assessment of the effect that this instrument will have on the costs of business and the voluntary sector may be seen at [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/82721/mcz-designate-ia-20121213.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/82721/mcz-designate-ia-20121213.pdf).

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MINISTERIAL ORDER

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2016 No. 24

WILDLIFE

ENVIRONMENTAL|PROTECTION

MARINE MANAGEMENT

The Beachy Head West Marine Conservation Zones Designation  
(Amendment) Order 2016

*Made* - - - - - 12th January 2016

*Coming into force* - - - - - 29th January 2016

The Secretary of State thinks it desirable to make this Order for the purpose of conserving the marine habitats referred to in article 2(2) and (3) of this Order.

The Secretary of State has had regard to any obligations under EU or international law that relate to the conservation or improvement of the marine environment in accordance with section 123(5) of the Marine and Coastal Access Act 2009(a).

The Secretary of State has—

- (a) published notice of the proposal to make this Order in accordance with section 119(2) and (3) of that Act; and
- (b) consulted persons who are likely to be interested in, or affected by, the making of this Order in accordance with section 119(4) of that Act.

The Secretary of State makes the following Order in exercise of the powers conferred by sections 116(1), 117(1), (2) and (7), 118(1) and (6), 122(1) and 123(1) of that Act.

**Citation and commencement**

1. This Order may be cited as the Beachy Head West Marine Conservation Zones Designation (Amendment) Order 2016 and comes into force on 29th January 2016.

**Amendment to the Beachy Head West Marine Conservation Zones Designation Order 2013**

2.—(1) The Beachy Head West Marine Conservation Zones Designation Order 2013(b) is amended as follows.

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(a) 2009 c.23. For the definition of “appropriate authority” see sections 116(5) and 147(1).  
(b) Ministerial Order 2013 No. 2.

- (2) In Table 2 (protected features) of Schedule 1 (Beachy Head to Newhaven)—
- (a) before the entry in the first row (intertidal coarse sediment), insert—
    - (i) in the first column, “High energy circalittoral rock”;
    - (ii) in the second column, “Broadscale marine habitat”.
  - (b) after the entry in the first row, insert—
    - (i) in the first column, “Moderate energy circalittoral rock”;
    - (ii) in the second column, “Broadscale marine habitat”.
- (3) In Table 2 (protected features) of Schedule 2 (Newhaven to Brighton Marina)—
- (a) before the entry in the first row (intertidal coarse sediment), insert—
    - (i) in the first column, “High energy circalittoral rock”;
    - (ii) in the second column, “Broadscale marine habitat”;
  - (b) after the entry in the first row, insert—
    - (i) in the first column, “Moderate energy circalittoral rock”;
    - (ii) in the second column, “Broadscale marine habitat”.

*George Eustice*  
Minister of State

12th January 2016

Department for Environment, Food and Rural Affairs

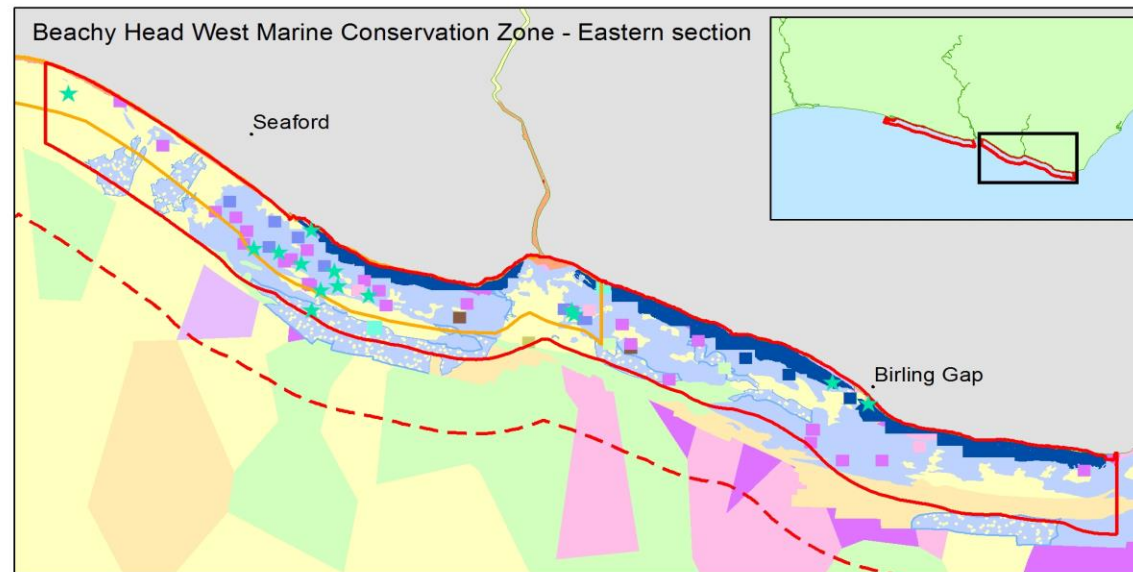
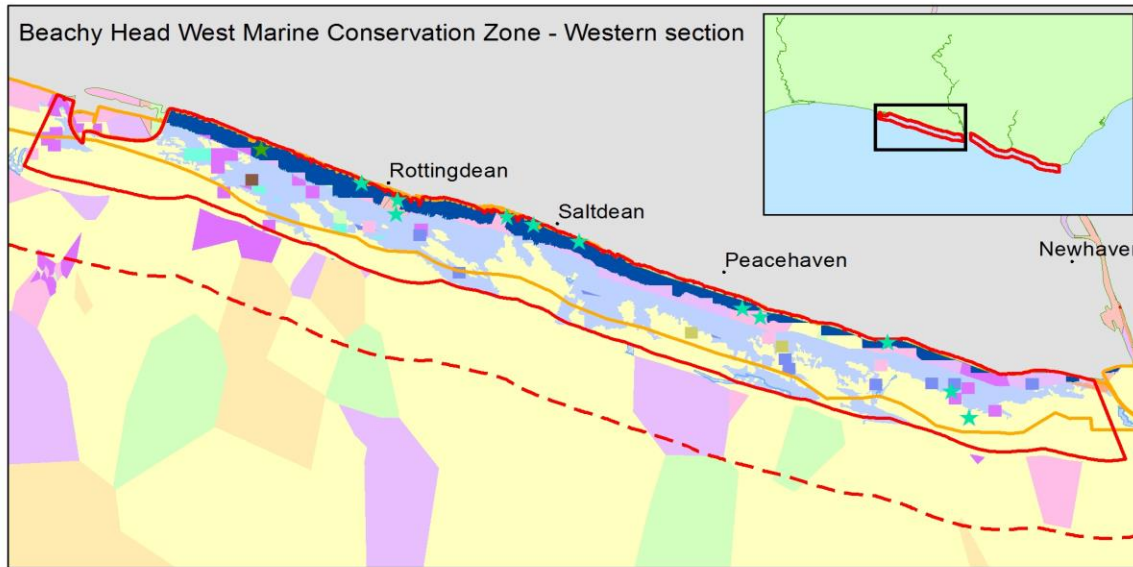
#### EXPLANATORY NOTE

*(This note is not part of the Order)*

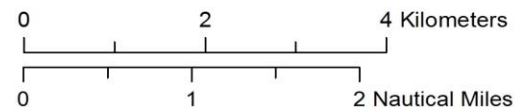
This Order amends the Beachy Head West Marine Conservation Zones Designation Order 2013 (Ministerial Order 2013 No.2) to add high energy circalittoral rock and moderate energy circalittoral rock as protected features in that Order.

A full impact assessment of the effect that this instrument will have on the costs of business and the voluntary sector is available from the Marine Protected Areas team at the Department for Environment, Food and Rural Affairs, Nobel House, 17 Smith Square, London SW1P 3JR and at <https://www.gov.uk/government/consultations/marine-conservation-zones-second-tranche-of-designations>.

**Annex II.** Beachy Head West feature maps, SCHIP1 and NE data



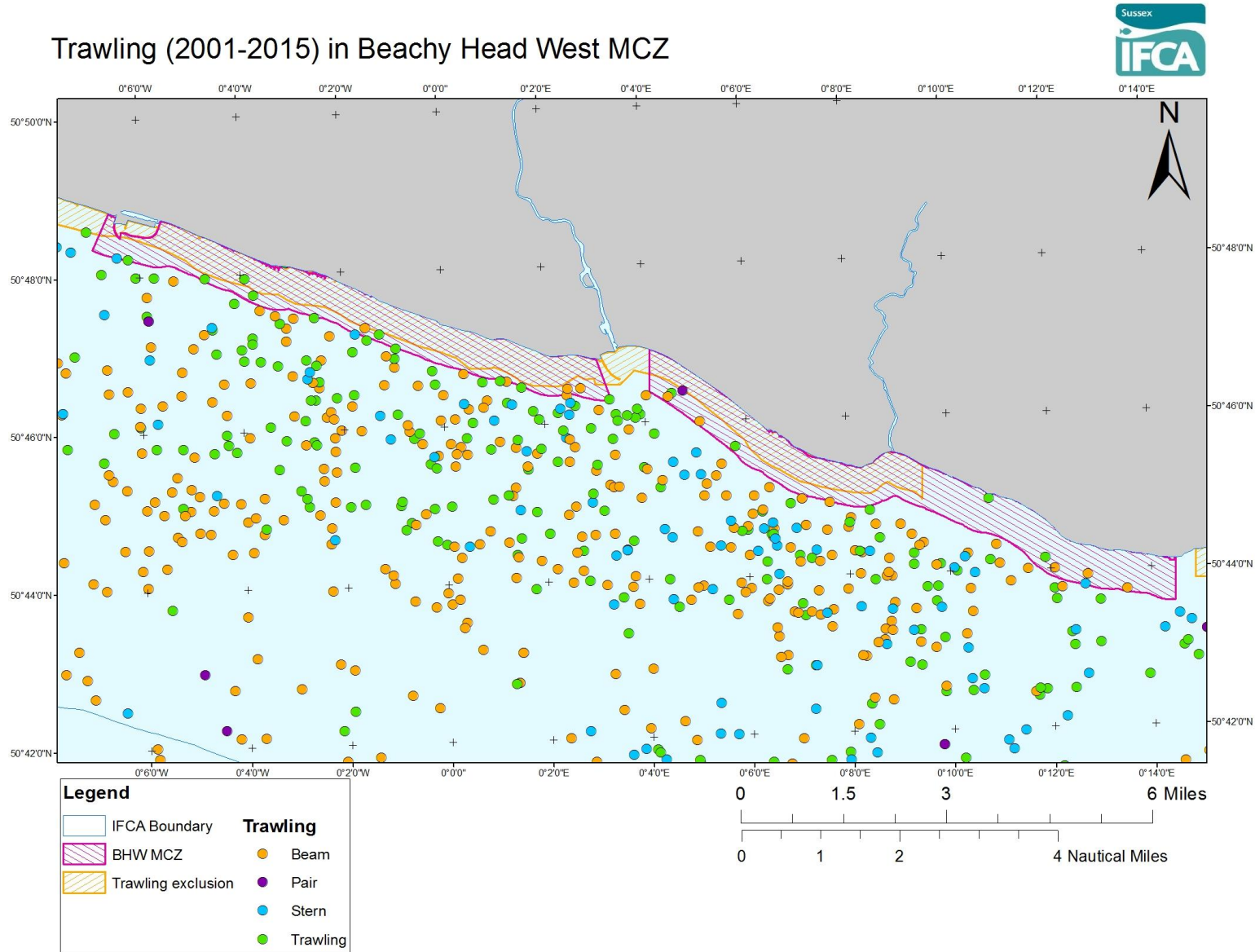
- ▭ Marine Conservation Zone
- - - MCZ boundary plus 0.5NM
- ▭ Trawling exclusion byelaw
- ▭ Intertidal coarse sediment
- ▭ Littoral chalk communities
- ▭ Subtidal chalk
- ▭ High energy circalittoral rock
- ▭ Moderate energy circalittoral rock
- ▭ Low energy infralittoral rock
- ▭ Low energy infralittoral rock and thin sandy sediment
- ▭ Subtidal coarse sediment
- ▭ Subtidal sand
- ▭ Subtidal mixed sediment
- ▭ Subtidal mud
- ▭ Infralittoral muddy sand
- ▭ Blue mussel (*Mytilus edulis*) beds
- ★ Native oyster (*Ostrea edulis*)
- ★ Short-snouted seahorse (*Hippocampus hippocampus*)



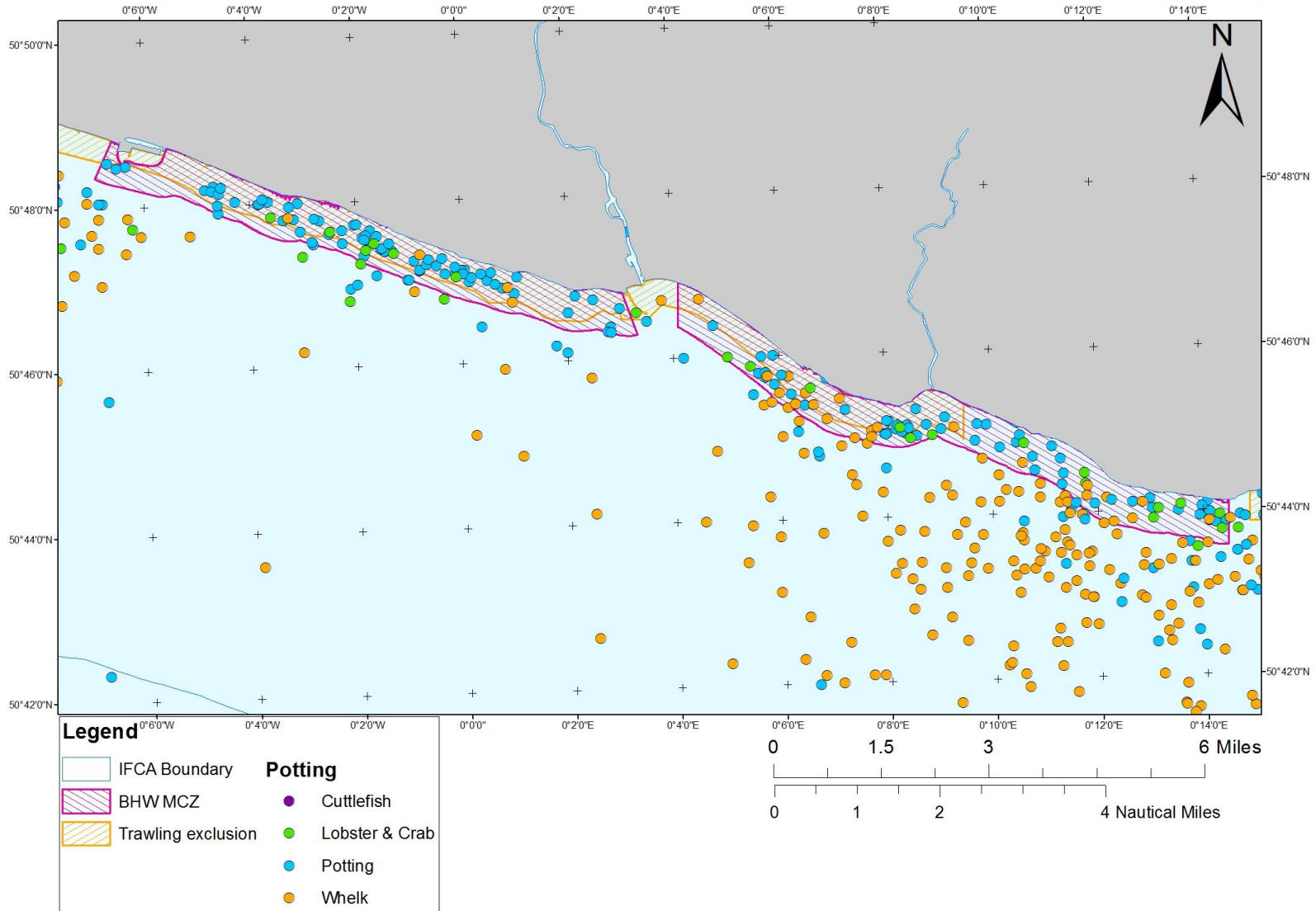
Habitat data copyright of Natural England and CCO.  
Maps created by Sussex IFCA July 2016.



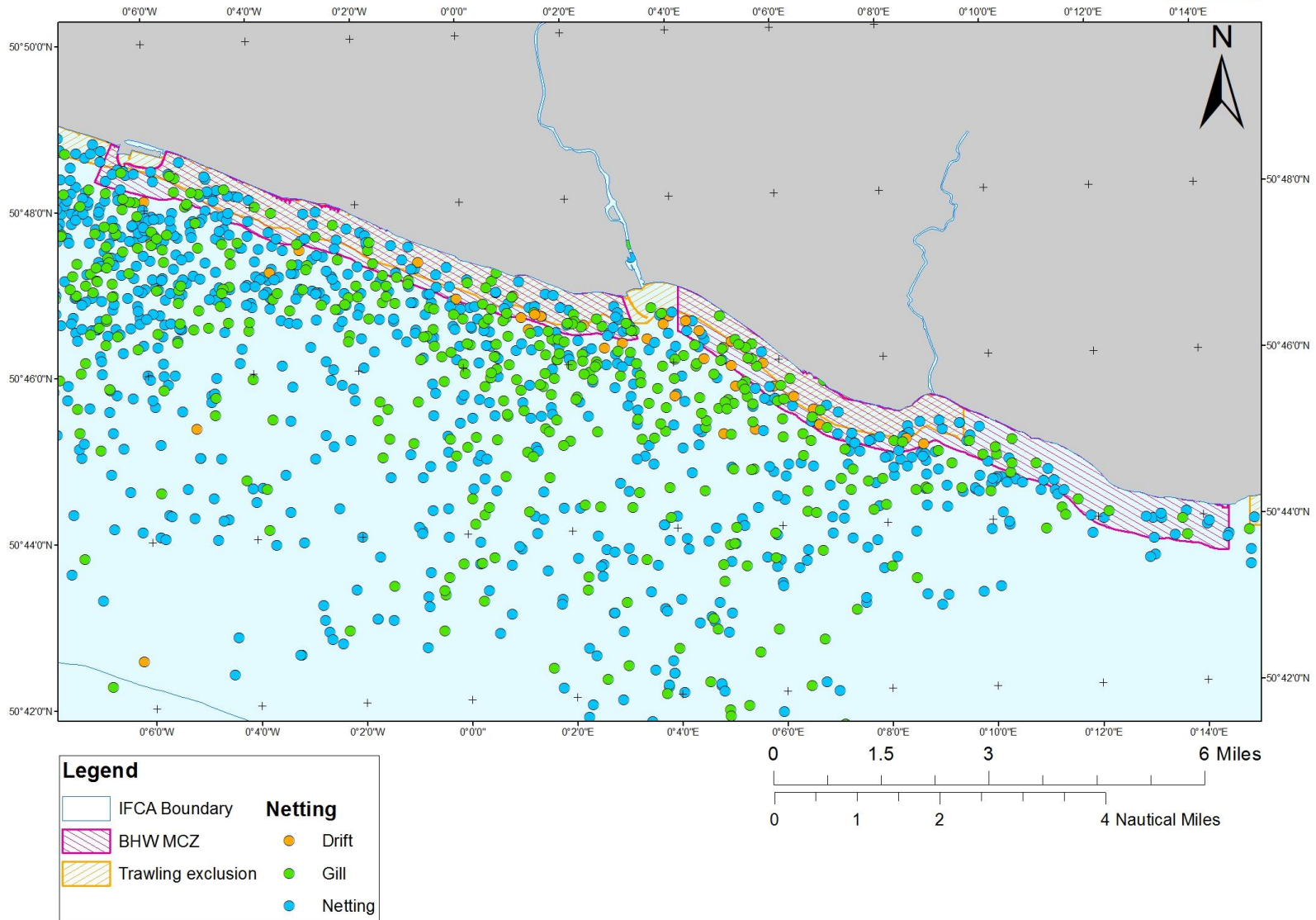
Annex III Fishing Activity Maps for Beachy Head West MCZ, 2001-2015, Sussex IFCA



# Potting (2001-2015) in Beachy Head West MCZ

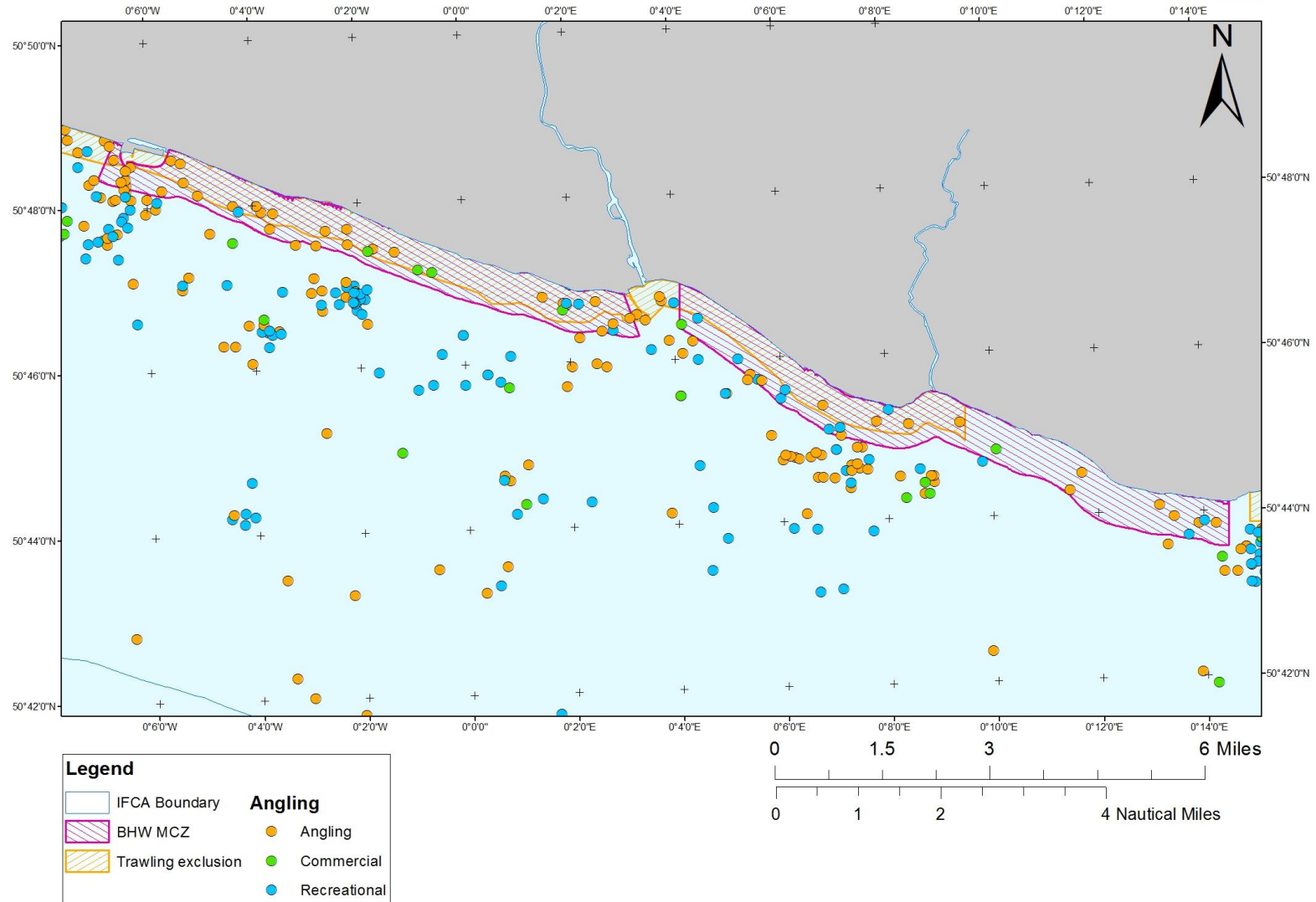


# Netting (2001-2015) in Beachy Head West MCZ

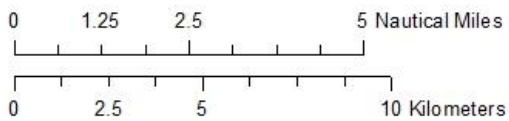
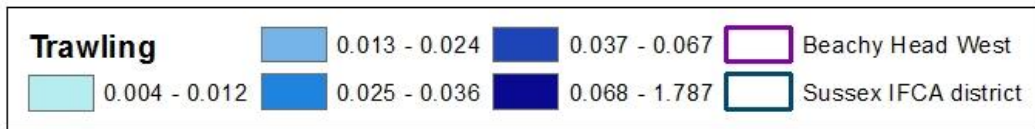
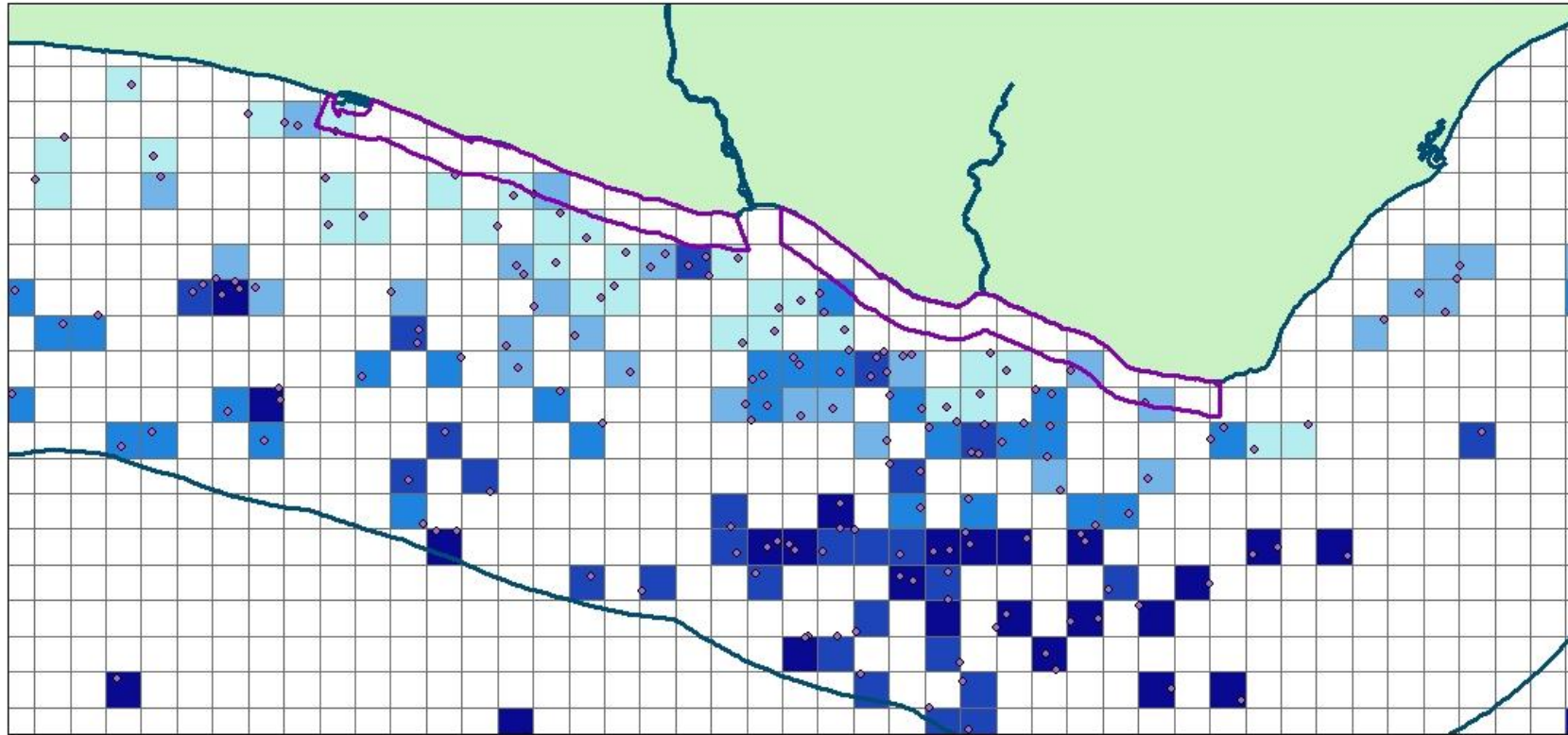




# Angling (2001-2015) in Beachy Head West MCZ



### Fishing Effort - Beachy Head West Marine Conservation Zone



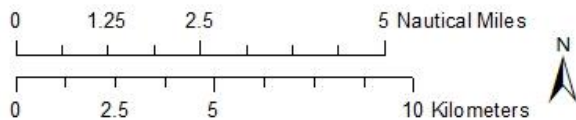
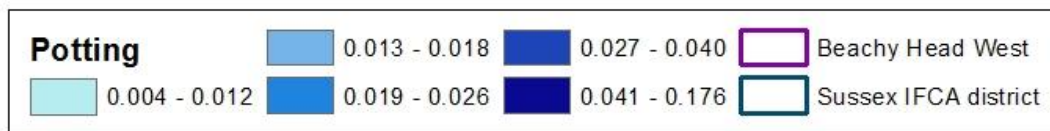
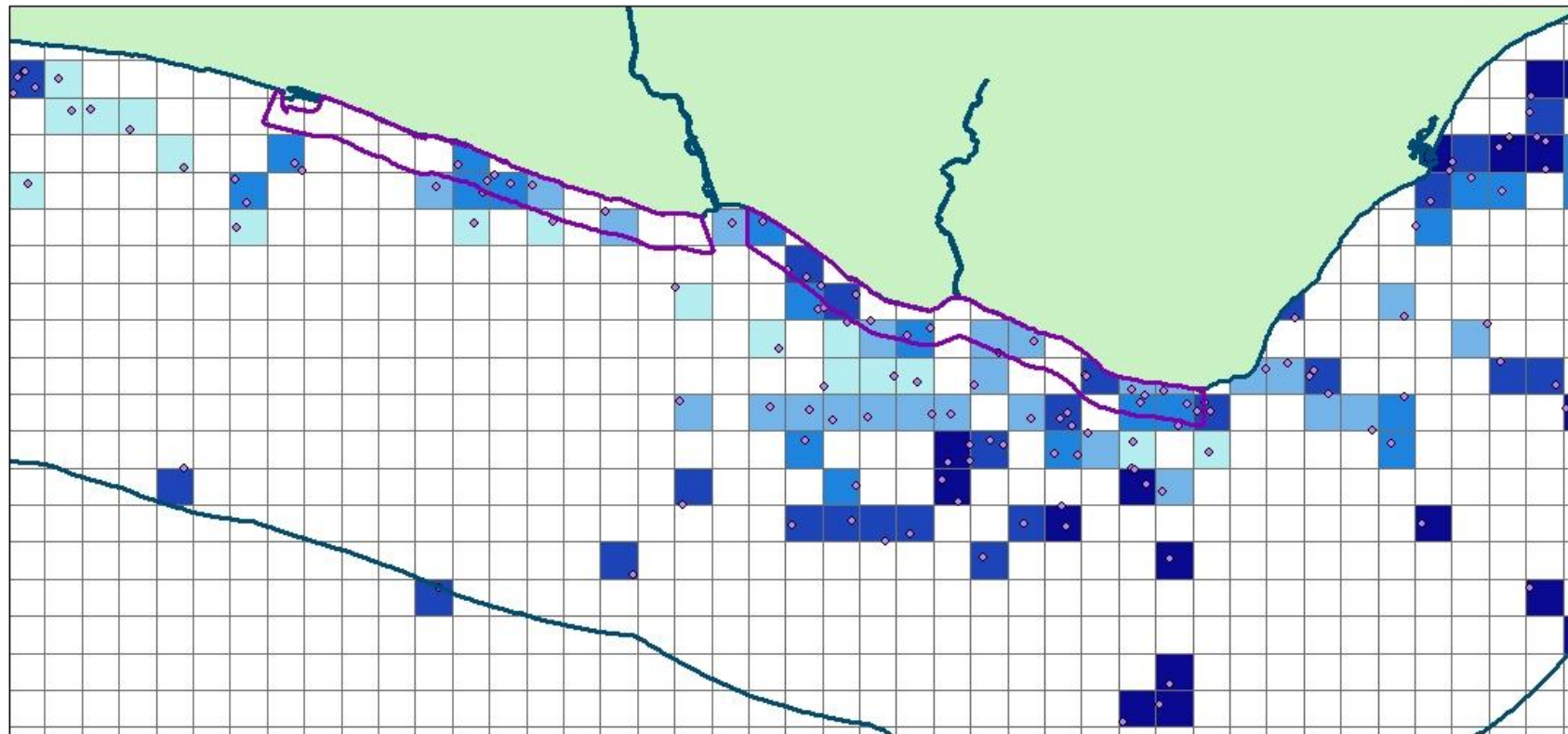
Fishing vessel sightings data copyright Sussex IFCA (2015).  
 Sussex coastline copyright OS open data (2015).  
 British National Grid.

Number of fishing vessels observed from FPV Watchful per square kilometre of sea patrolled by FPV Watchful (up to 2km either side of FPV Watchful's track) per year. Average 2011-2015. 1km sq grid cells.

Quantile classification (5 classes): there are an equal number of cells in each class, highlights areas of low/high effort.

Point data is sightings of fishing vessels, total 2011-2015.

# Fishing Effort - Beachy Head West Marine Conservation Zone



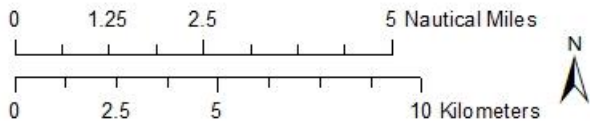
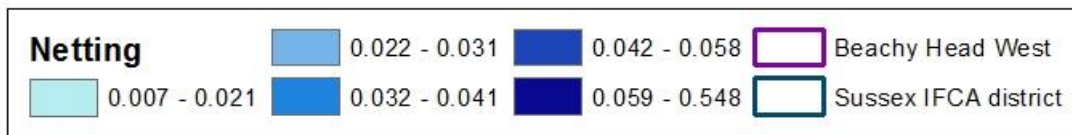
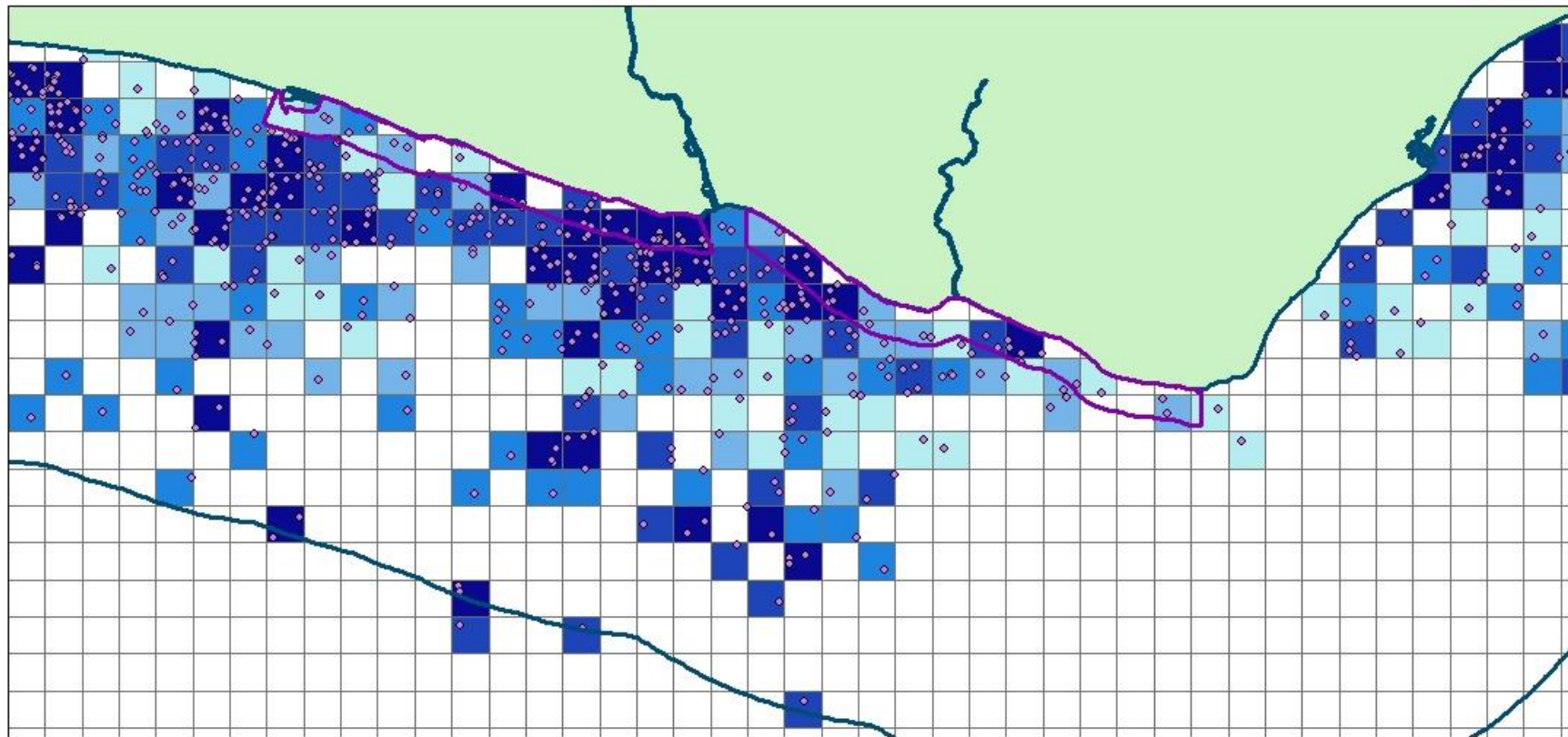
Fishing vessel sightings data copyright Sussex IFCA (2015).  
 Sussex coastline copyright OS open data (2015).  
 British National Grid.

Number of fishing vessels observed from FPV Watchful per square kilometre of sea patrolled by FPV Watchful (up to 2km either side of FPV Watchful's track) per year. Average 2011-2015. 1km sq grid cells.

Quantile classification (5 classes): there are an equal number of cells in each class, highlights areas of low/high effort.

Point data is sightings of fishing vessels, total 2011-2015.

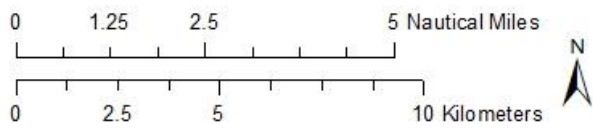
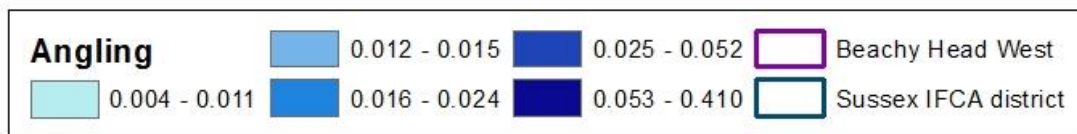
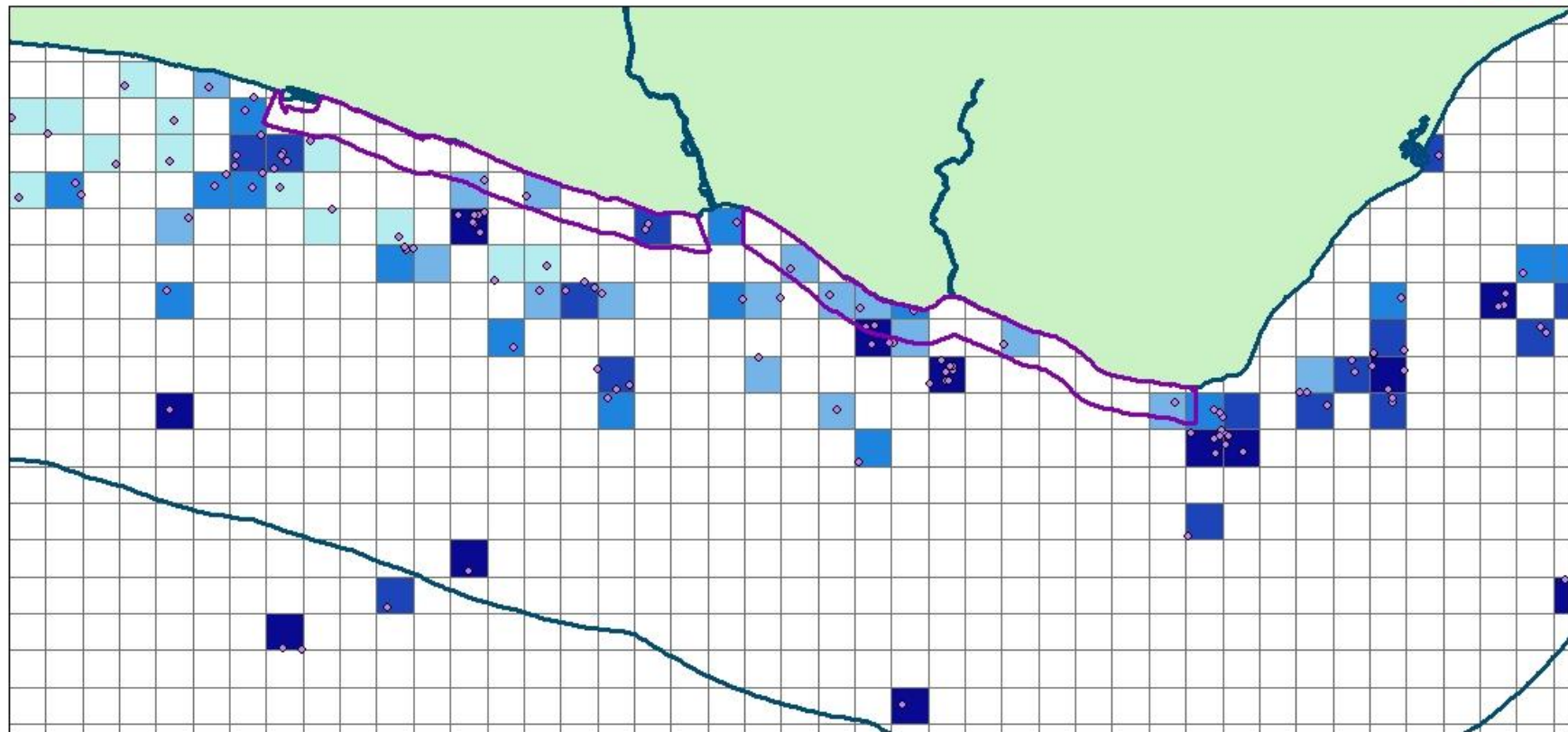
# Fishing Effort - Beachy Head West Marine Conservation Zone



Fishing vessel sightings data copyright Sussex IFCA (2015).  
 Sussex coastline copyright OS open data (2015).  
 British National Grid.

Number of fishing vessels observed from FPV Watchful per square kilometre of sea patrolled by FPV Watchful (up to 2km either side of FPV Watchful's track) per year. Average 2011-2015. 1km sq grid cells. Quantile classification (5 classes): there are an equal number of cells in each class, highlights areas of low/high effort. Point data is sightings of fishing vessels, total 2011-2015.

# Fishing Effort - Beachy Head West Marine Conservation Zone



Fishing vessel sightings data copyright Sussex IFCA (2015).  
 Sussex coastline copyright OS open data (2015).  
 British National Grid.

Number of fishing vessels observed from FPV Watchful per square kilometre of sea patrolled by FPV Watchful (up to 2km either side of FPV Watchful's track) per year. Average 2011-2015.  
 1km sq grid cells.  
 Quantile classification (5 classes): there are an equal number of cells in each class, highlights areas of low/high effort.  
 Point data is sightings of fishing vessels, total 2011-2015.

## Annex V Relevant current Sussex IFCA management

Site	Current Sussex IFCA Management
<b>Beachy Head West</b>	For existing Sussex IFCA byelaws see: <a href="http://www.sussex-ifca.gov.uk/index.php?option=com_content&amp;view=article&amp;id=98&amp;Itemid=184">http://www.sussex-ifca.gov.uk/index.php?option=com_content&amp;view=article&amp;id=98&amp;Itemid=184</a>
	Trawling Exclusion Byelaw: Trawling excluded seasonally (May-Oct) 1/4nm seawards from the Lowest Astronomical Tode (LAT)
	Fixed Engines byelaw: Area is subject to seasonal (May-Sept) netting exclusions
	Vessel length byelaw: No vessel which exceeds 14m in length can be used in fishing for seafish within the district (with few historic rights exceptions)
	Fishing Instruments Byelaw: Only defined fishing instruments may be used for fishing within the district. Scallop dredging is not permitted within the 3nm limit
	Lobster Permit: Applies out to 3nm. Permit from Sussex IFCA required for taking more than two lobsters a day. Maximum 300 pots/vessel

## Annex VI Balanced Seas management recommendations

- Management of fishing activity with respect to controlling anchoring related impacts on sensitive rock features
- Static gear effort management

*Note: At the time of Balanced Seas discussions stakeholders believed the entire site was encompassed within the existing Sussex IFCA Trawling Exclusion Byelaw, year round. This was later revealed to neither fully encompass the whole MCZ site nor be year round.*

## **Annex VII** Gear Categories and fishing method

Examples of the gear types included within each category are below

### **Mobile (towed)**

Beam trawls

Otter/demersal trawls (single boat)

Multi rigged trawls

Pair Trawls

Fly dragging

Scallop dredges

Oyster dredges

Mussel Dredges

\*Pelagic trawl

All other dredging methods including suction dredges

### **Static Gear (to include all passive netting)**

Gill nets

Trammel nets

Tangle nets

Drift nets

Purse seines

Ring nets

Pots

Traps

Long lines

### **Angling**

Single line with single or multiple hooks used from a rod

\*Note: The IFCA has no evidence that pelagic mobile gear is currently used at the site. To address future development of any pelagic trawls operations and associated impacts, all trawling needs to be restricted within the MCZ during the bream season due to potential bream catch and disturbance impacts. Over the rest of the year, any pelagic trawl gear would be encompassed within mobile gear management prescriptions due to the risk of potential interaction with the seabed in this shallow site and compliance management requirements.

GEAR GROUPING	OPTION 1	OPTION 2	OPTION 3 <i>Community's preferred measures from Options 1 &amp; 2, additional management proposals and code of conduct ideas</i>
<p><b>Mobile Gear</b></p>	<p><b>1M1: Whole MCZ site, year round trawling restriction</b> Modify existing seasonal trawling exclusion byelaw area to encompass the whole MCZ site and to be year round</p> <p><b>1M2</b> Appropriate buffer around whole site</p>	<p><b>2M1: Whole MCZ site, spatial management over protected rock features</b> Modify existing seasonal trawling exclusion byelaw area to encompass the whole MCZ site and:</p> <ul style="list-style-type: none"> <li>▪ to be year round over protected rock features (littoral chalk, subtidal chalk, infralittoral rock and thin sandy sediments)</li> <li>▪ to remain seasonal (May-Oct) over sediment features*<sup>1</sup></li> </ul> <p><b>2M2</b> Appropriate buffer around protected rock features</p> <p><b>2M3</b> iVMS system fitted</p> <p><b>2M4</b> Requirement to supply catch and fishing activity information</p>	
<p><b>Static Gear</b></p>	<p><b>1S1</b> Under pending Shellfish Permit byelaw cap potting effort at current levels, and develop mechanism to manage netting effort in the future to cap at current levels</p> <p><b>1S2</b> Requirement to supply static gear catch and fishing activity information</p> <p><b>1S3</b> IFCA-led voluntary code of conduct promoting highly sustainable fishing practices within the MCZ, to be developed with the community*<sup>2</sup></p>	<p><b>2S1</b> Review status of static gear fishery and features, and in future set appropriate static gear effort limits</p> <p><b>2S2</b> Requirement to supply static gear catch and fishing activity information</p> <p><b>2S3</b> Community-led and developed voluntary code of conduct promoting highly sustainable fishing practices within the MCZ*<sup>2</sup></p>	
<p><b>Angling &amp; intertidal fisheries resources gathering</b></p>	<p><b>1A1</b> Prohibition of activities which cause physical damage to rock features, in the process of intertidal gathering of fisheries resources (including bait)</p> <p><b>1A2</b> IFCA-led education and voluntary code of conduct promoting sustainable angling and intertidal fisheries resources gathering within the MCZ, to be developed with the community*<sup>3</sup></p>	<p><b>2A1</b> Community-led education and voluntary code of conduct promoting sustainable angling and intertidal fisheries resources gathering within the MCZ*<sup>3</sup></p>	



Annex IX IFCA Technical Subcommittee – Beachy Head West MCZ management

	<b>Towed gear</b>	<b>Angling</b>	<b>Static gear</b>
<b>IFCA Technical Subcommittee input (in addition to CVM workshops participation)</b>	<p><b>18<sup>th</sup> December 2014 Technical Subcommittee meeting: Summary of breakout group discussions around potential Beachy Head West MCZ management options for mobile gear.</b></p> <ul style="list-style-type: none"> <li>• A number of members present advocated Option 1 for all gears (refer to Annex IV). 2 member’s unsure best approach.</li> <li>• Small size of site raised, thereby minimising any potential economic impact of restrictions.</li> <li>• Strong support for complete trawling exclusion within the site raised by 2 members.</li> <li>• Need for buffer if feature based management considered raised. And subsequent requirement for iVMS and cameras if adopted.</li> <li>• Difficulties around enforcement of option 2 for trawling raised and the need for practical simple spatial boundaries.</li> </ul>	<p><b>18<sup>th</sup> December 2014 Technical Subcommittee meeting: Breakout group discussions around potential Beachy Head West MCZ management options for angling.</b></p> <ul style="list-style-type: none"> <li>•A number of members present advocated Option 1 for all gears (refer to Annex IV). 2 member’s unsure best approach.</li> <li>•Concern around voluntary codes of conduct working raised.</li> <li>•IFCA-led voluntary code preferred.</li> <li>•Support for regulation to prohibit activities which cause physical damage to rock feature voiced.</li> </ul>	<p><b>18<sup>th</sup> December 2014 Technical Subcommittee meeting: Breakout group discussions around potential Beachy Head West MCZ management options for static gear.</b></p> <ul style="list-style-type: none"> <li>• A number of members present advocated Option 1 for all gears (refer to Annex IV). 2 member’s unsure best approach.</li> <li>• Concerns around using site for gear stowage.</li> <li>• Use of new Shellfish Permit Byelaw for controlling potting effort within the site raised.</li> <li>• Query around enforcement of catch returns requirement and concern around overburdening fishermen or duplicating MMO data collection. Inability to get the MMO data to the resolution needed discussed, too broad to get down to MCZ site information.</li> <li>• Concern around voluntary codes of conduct working raised.</li> <li>•IFCA-led voluntary code preferred.</li> </ul>

## **Annex X** Marine and Coastal Access Act obligations

- Duty in relation to MCZ implementation

The duty in section 125 requires public authorities, so far as is consistent with the proper exercise of their functions, to exercise their functions:

- i. in the manner which the authority considers best furthers the conservation objectives for the MCZ; or, where this is not possible;
- ii. in a manner which the authority considers least hinders the achievement of the conservation objectives.

Section 126 applies to all public authorities with responsibility for authorising applications for activities (such as shellfish extraction) capable of affecting:

- i. a protected feature of an MCZ; or,
- ii. any ecological or geomorphological processes on which the conservation of an MCZ feature is partially or wholly dependent.

The duty in section 154 requires IFCAs to further the conservation objectives of MCZs.

- Provisions for management

Sections 129 to 132 of the Act give MMO the power to make byelaws, including emergency and interim byelaws, for the purpose of furthering the conservation objective of an MCZ.

Section 140 of the Act makes it an offence for any person to intentionally or recklessly damage the protected features of an MCZ in such a way that the conservation objectives have, or may have, been significantly hindered.

The purpose of this section is intended to prevent:

- i. Acts of environmental vandalism – intentional acts where the purpose is to damage the designated feature of an MCZ;
- ii. Reckless damaging behaviour – where the person was aware (or should reasonably be expected to have been aware) that damage was a likely consequence of their actions, but they continued regardless.

Sections 155 to 157 of the Act give IFCAs the powers to make byelaws, including emergency byelaws, for the purpose of furthering the conservation objectives of an MCZ.

Section 156 sets out a non-exhaustive list of the types of activities for which IFCAs may make byelaws (including emergency byelaws) to manage sea fisheries resources in their district. Provisions that may be made by a byelaw under this section include prohibiting or restricting the exploitation of sea fisheries:

- i. in specified areas or during specified periods;
- ii. limiting the amount of sea fisheries resources a person or vessel may take in a specified period.

The provisions cover:

- i. permits (including conditions for the issue, cost and use of permits);

- ii. vessels;
  - iii. methods and gear, (including the possession, use, retention on board, storage or transportation of specified items).
- Risk and uncertainty

In carrying out their duties under Part 5 of the Act, it is inevitable that public authorities will be required to take decisions on the basis of incomplete or uncertain information. For example, it will sometimes be impossible or impractical to establish with certainty:

- i. whether an activity or proposed development is capable of affecting an MCZ, and whether the impact is insignificant;
- ii. whether or not a proposed development may 'hinder the achievement' of an MCZ's conservation objective;
- iii. the extent of any damage to the environment;
- iv. or whether equivalent environmental benefit measures will secure the desired outcome.

Decision-making should be reasonable and proportionate to the level of risk and potential impact. Decisions should be based on the balance of best available evidence and have regard to any advice from Statutory Nature Conservation Bodies (SNCBs). In cases where the risk to the conservation objectives of the site could be high, it may be appropriate to follow a precautionary approach. Where evidence is inconclusive, regulators should make reasonable efforts to fill evidence gaps but will also need to apply precaution within an overall risk-based approach. This means that if the risks from an activity are uncertain preventative measures may be required.

- Monitoring in regard to MCZ reporting

Section 124 requires an assessment every 6 years, outlining the extent to which conservation objectives have been achieved across the MCZs, and the contribution of sites towards achieving an ecologically coherent network of MPAs.

Subsection 3 directs the appropriate SNCB to carry out the monitoring of MCZs.

The report should contain:

- i. the number of MCZs which the authority has designated during the relevant period;
- ii. in relation to each such MCZ.
  - the size of the MCZ, and
  - the conservation objectives which have been stated for the MCZ;
- iii. the number of MCZs designated by the authority in which the following activities are prohibited or significantly restricted;
  - any licensable marine activity;
  - fishing for or taking animals or plants from the sea.
- v. information about any amendments which the authority has made to any designation orders;
- vi. the extent to which the conservation objectives stated for each MCZ which it has designated have been achieved;
- vii. any further steps which are required to be taken in relation to any MCZ in order to achieve the conservation objectives stated for it.