

# Protecting the livelihoods of small scale inshore fishermen

The case for spatial management in Scotland's inshore waters

# SCCFF



SCOTTISH CREEL FISHERMEN'S FEDERATION

The Right gear  
in the right  
place at the  
right time

33 member orgs, in 15 states  
Incorporating Approx 10,000  
fishers



# What is a Small Scale Fisher ?

Usually under  
12m

Small crew of 1~3

Fishing operation  
usually within 12  
miles

Normally fishing  
less than 24  
hours

Mostly owner  
operated

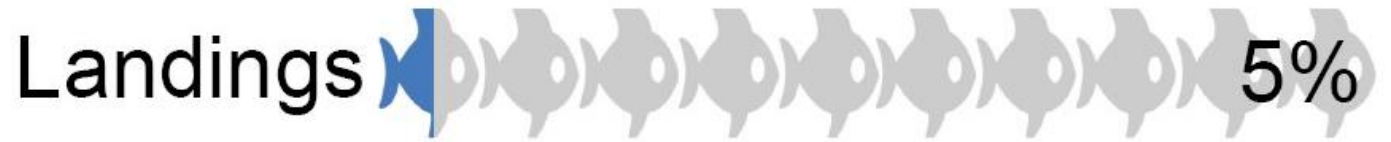
Deploying static  
gears

- The definition of 'small scale' in terms of fishing vessels within the European Union can be found in the European Maritime and Fisheries Fund Regulation 508/2014. Article 3(14) states that: "*small-scale coastal fishing*' means fishing carried out by fishing vessels of an overall length of less than 12 metres and not using towed fishing gear as listed in Table 3 of Annex I to Commission Regulation (EC) No 26/2004".



- Unlike countries like Norway which has a 12 mile limit on the use of mobile gears, Scotland does not use spatial management to protect or incentivize SSF or low impact fisheries

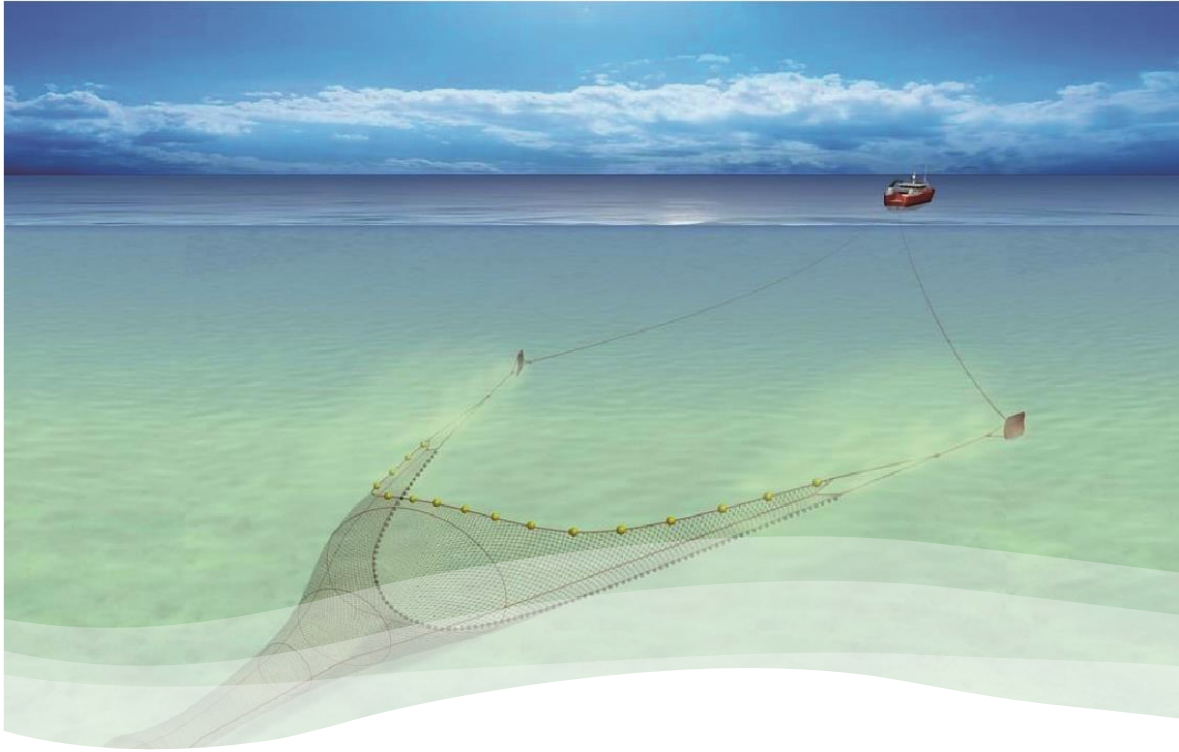
## Efficiency of the Under 10m Inshore Fleet



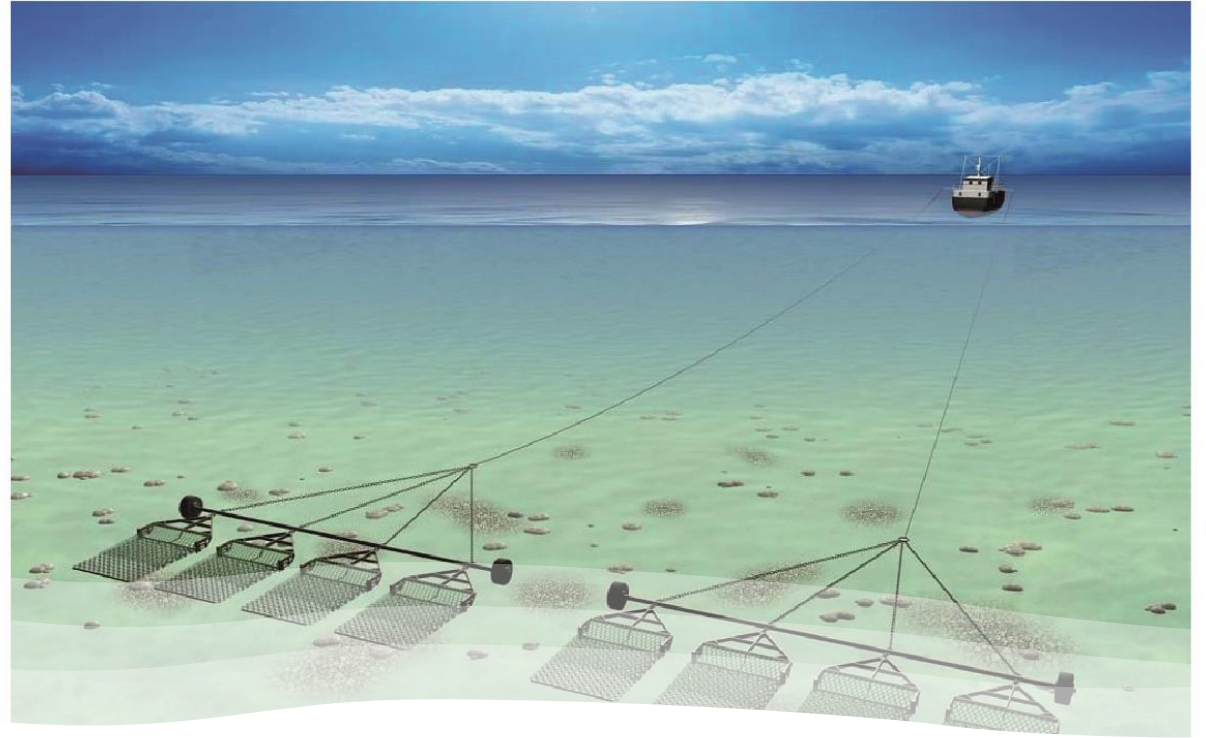
Why is it so important to protect Small Scale and Artisan Fishers?



## Demersal Trawl

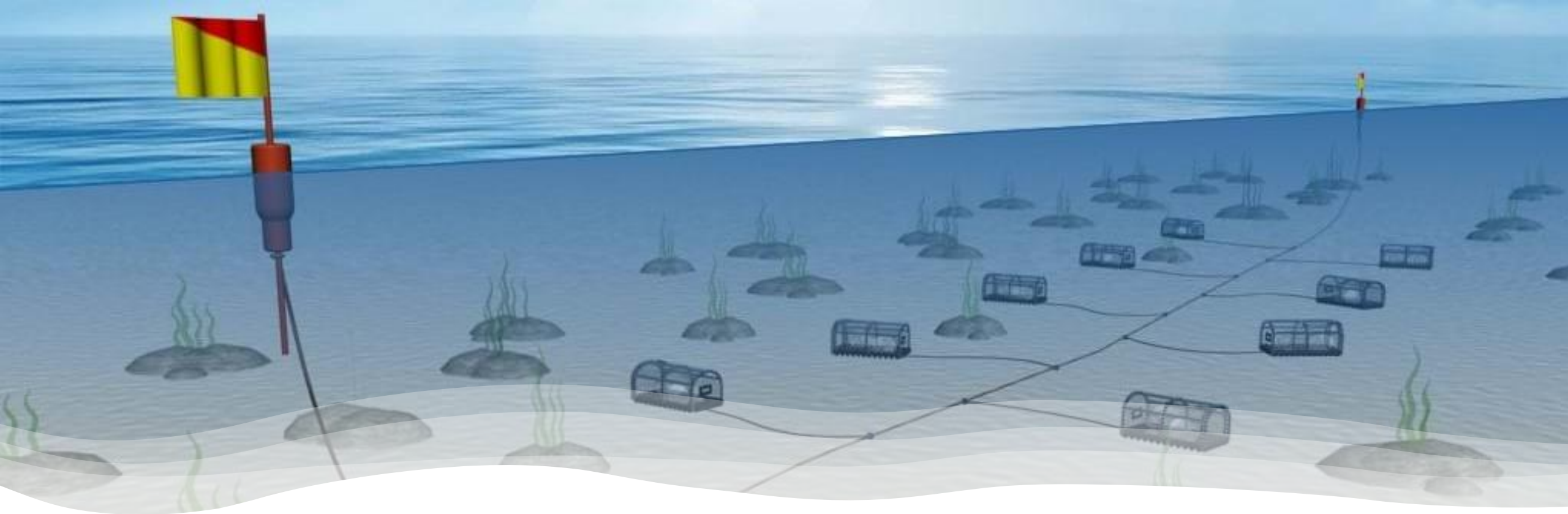


## Scallop Dredge



What are examples of low impact and high impact fishing gears?

- Towed demersal gears such as dredges and trawls can impact very extensive areas of seabed habitat and often suffer from poor selectivity between non target and target species



Creel Fishing is the principal static gear used in Scotland

- Our ecosystems and the creel fisheries themselves would benefit from improved management such as catch and effort limits.
- However even badly managed creel fisheries offer superior social, economic and environmental outcomes when compared to mobile gears!



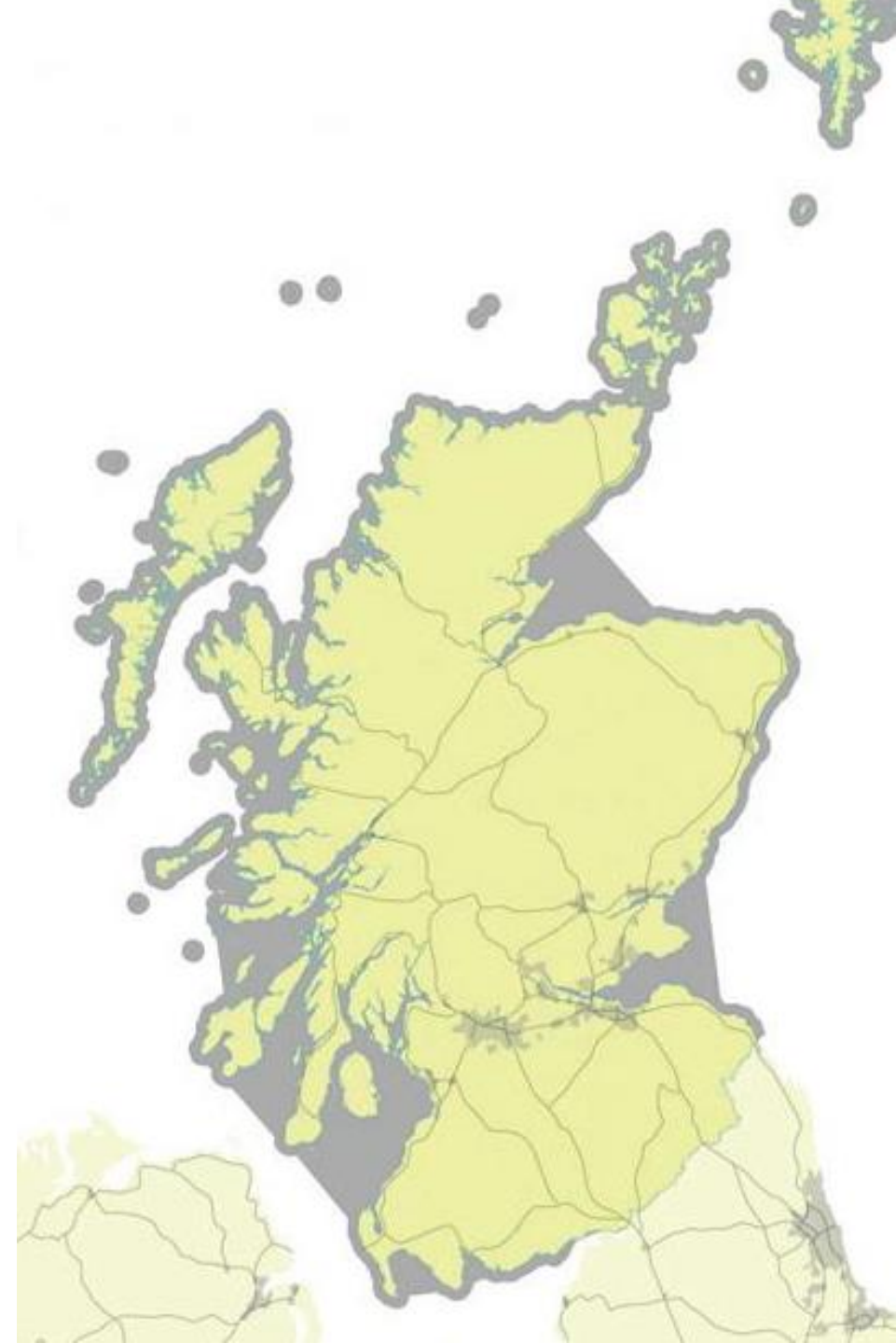


A lack of spatial management restricts the use of low impact gears



Historically  
Scotland had  
extensive spatial  
management in  
the Firths & the  
Three mile limit

- Trawl restrictions were in place round Scotland's inshore waters from 1889 until 1960's when the Firths were opened up then 1984 when the three mile limit was removed to allow demersal trawling.



# THE FIRTH of CLYDE

**Prior to the 1960's**

**Over 10,000 thousand  
tons of herring**

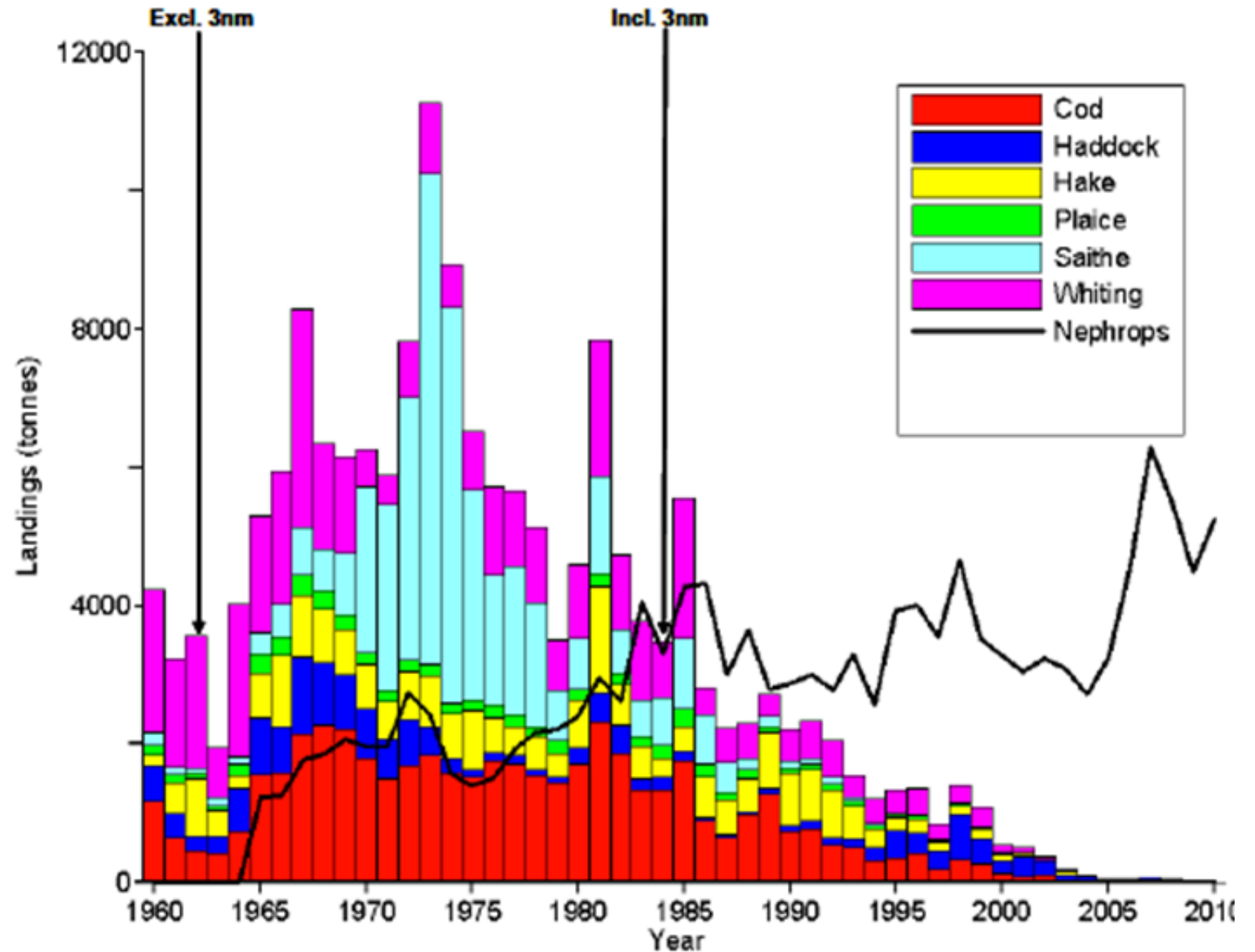
**And**

**Several thousand tons of  
demersal whitefish were  
landed from the Clyde in  
each year.**

**Current annual landings  
of all finfish from the  
whole Clyde sea area are  
near zero**

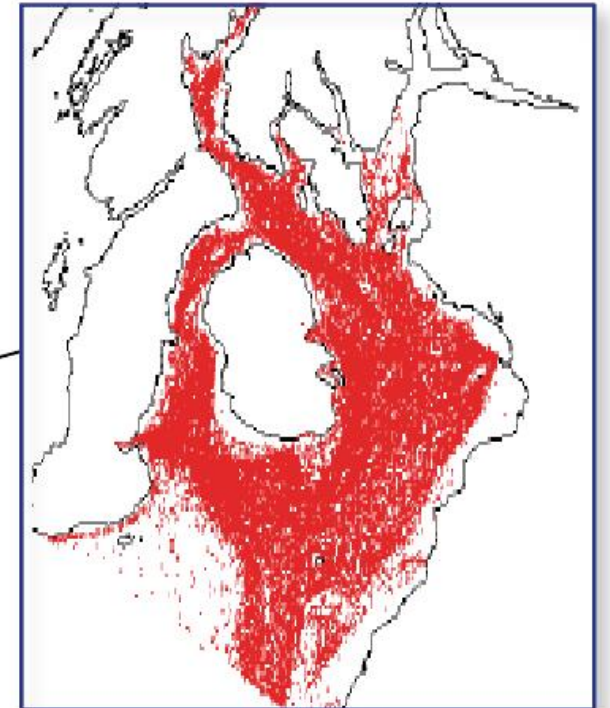
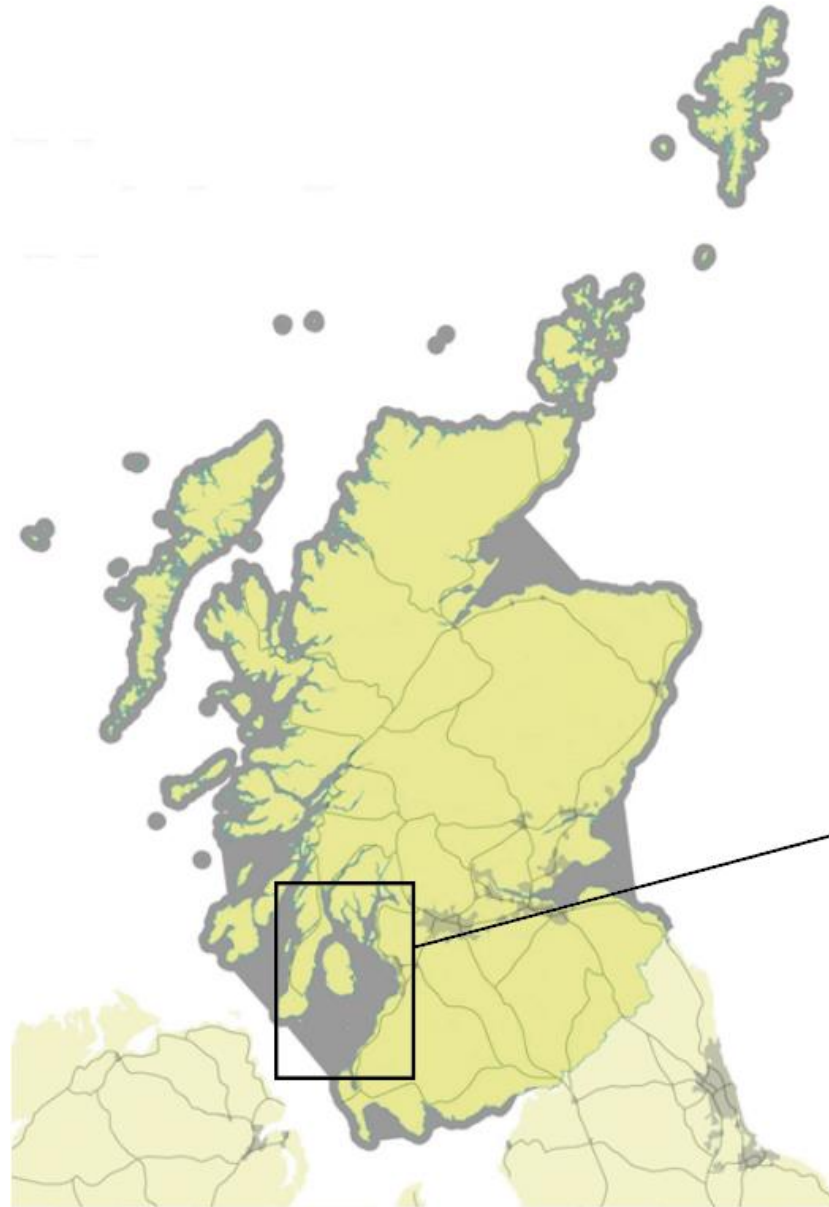


The introduction of extensive trawling precipitated the complete collapse of Demersal fish landings from the Clyde

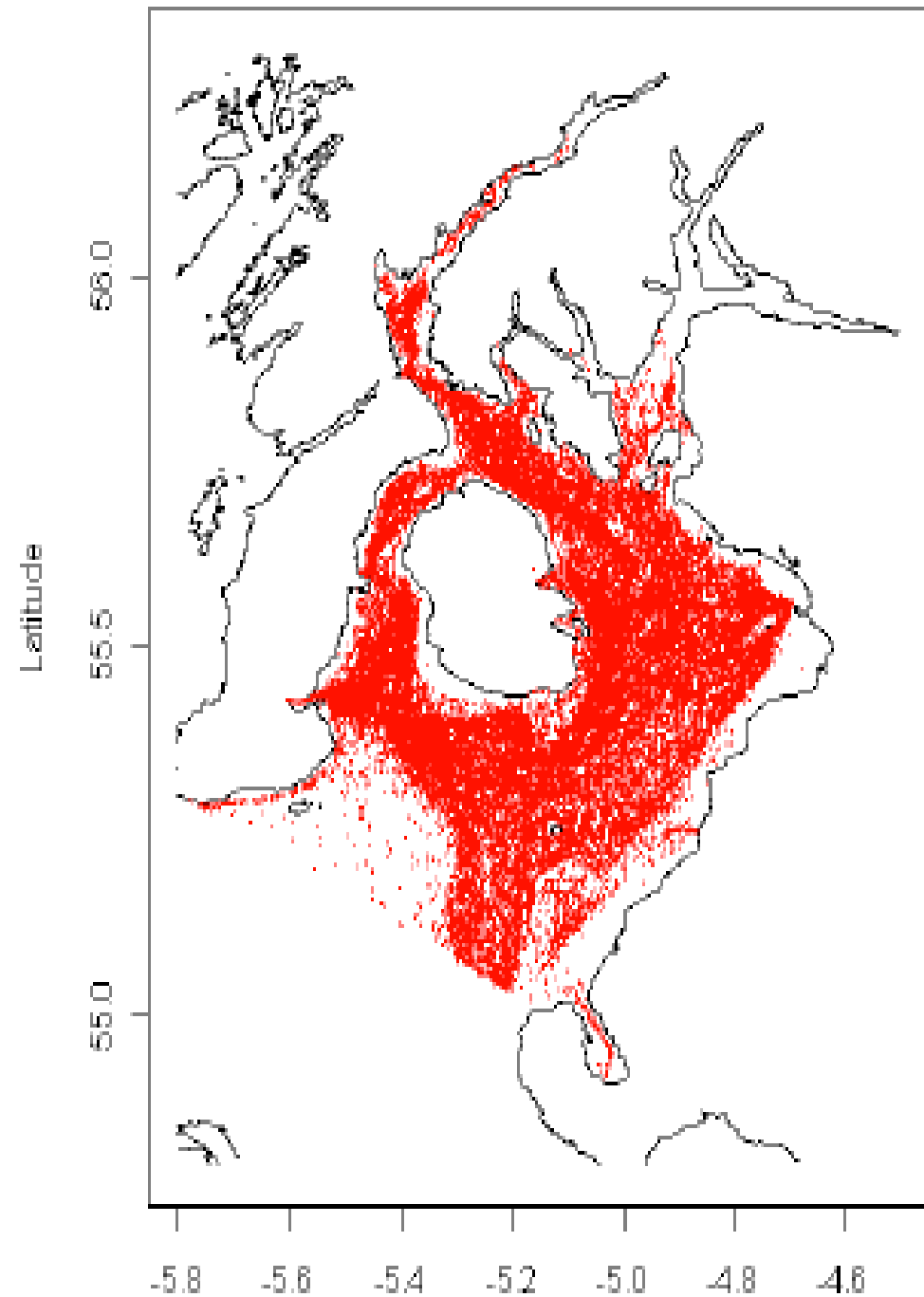




VMS pings  
from over 12m  
Nephrops trawl  
vessels in the  
Clyde show the  
extent of the  
seabed  
regularly  
impacted and  
the limited  
opportunity for  
creel fishing



Lack of Spatial management restricts the opportunity for low impact fisheries



## UK 2020 Fisheries Act

### Section 25

(3) When distributing catch quotas and effort quotas for use by fishing boats, the national fisheries authorities must seek to incentivise—

- (a) the use of selective fishing gear, and
- (b) the use of fishing techniques that have a reduced impact on the environment (for example that use less energy or cause less damage to habitats).

Like Art 17 of CFP





Our commitments  
via UN SDG's are  
clear about our  
obligations to  
provide access to  
fishing opportunity  
for SSF

- Target 14.b provide access of small-scale artisanal fishers to marine resources and markets.
- Do we have a plan, policy or framework to protect access to fishing opportunity for small scale and artisan fishers?

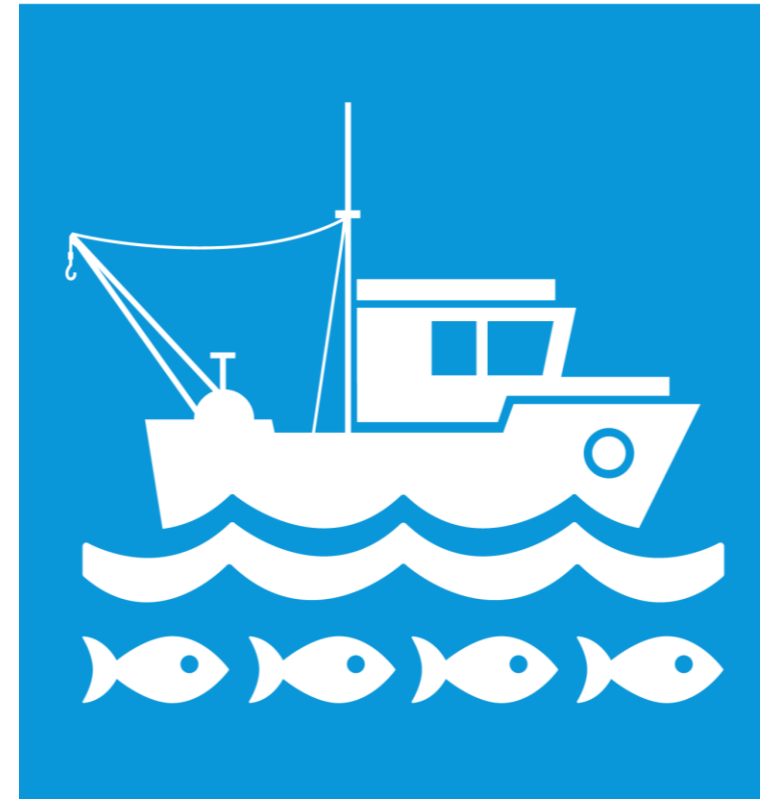
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**TARGET**

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**14 ▸ B**

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**SUPPORT SMALL SCALE  
FISHERS**

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## Industrial fishing fleets

**10%** of global fisheries employees

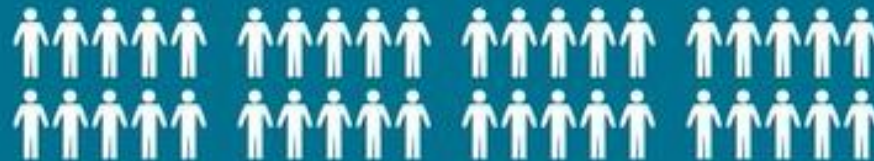
**1 job** per 100 tons of fish












## Small-scale fisheries

**90%** of global fisheries employees

**40 jobs** per 100 tons of fish



SSF generate more jobs and revenue per kg of fish

	LARGE SCALE 	SMALL SCALE 
Number of fishermen employed	 AROUND 500,000	 OVER 12,000,000
Annual catch of marine fish for human consumption	 AROUND 29 MILLION TONNES	 AROUND 24 MILLION TONNES
Capital cost of each job on fishing vessels	\$ \$ \$ \$ \$ 30,000-\$ 300,000	\$ \$ 250-2,500
Fishermen employed for each \$ 1 million Invested in fishing vessels	 5-30	 500-4,000
Fish destroyed at sea each year as by-catch in shrimp fisheries	 6-16 MILLION TONNES	NONE



Not only do SSF generally offer superior social and economic returns by employing more fishermen and maximising value, when compared to mobile demersal trawls they often have far superior environmental outcomes

## SEABED DISTURBANCE OF FISHING TYPES PER DAY SMALL INSHORE VESSELS

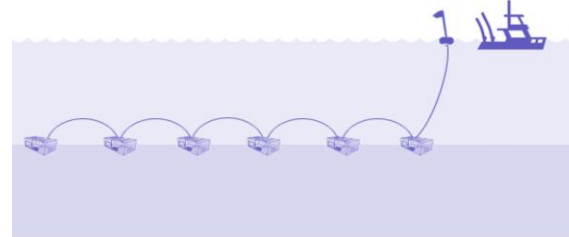
2 DIVERS

200m<sup>2</sup>



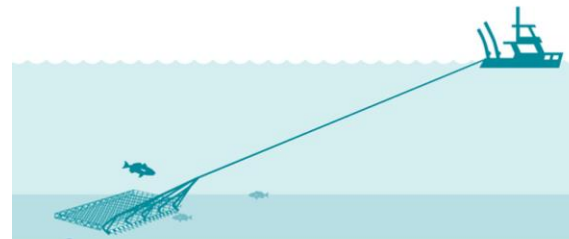
2 PERSON CREELER

500m<sup>2</sup>



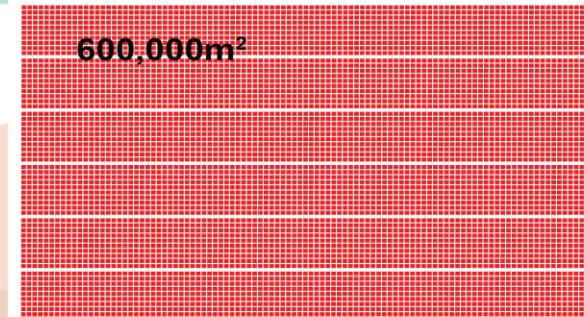
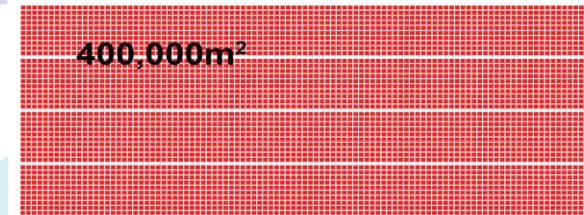
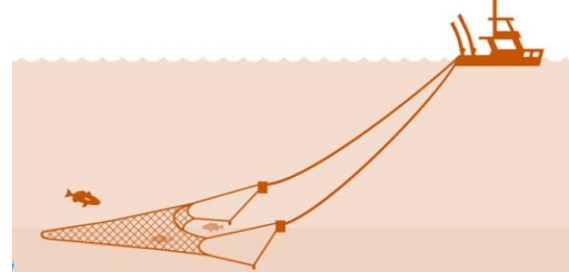
2 PERSON DREDGER

400,000m<sup>2</sup>



2 PERSON TRAWLER

600,000m<sup>2</sup>



# MSFD Good environmental status

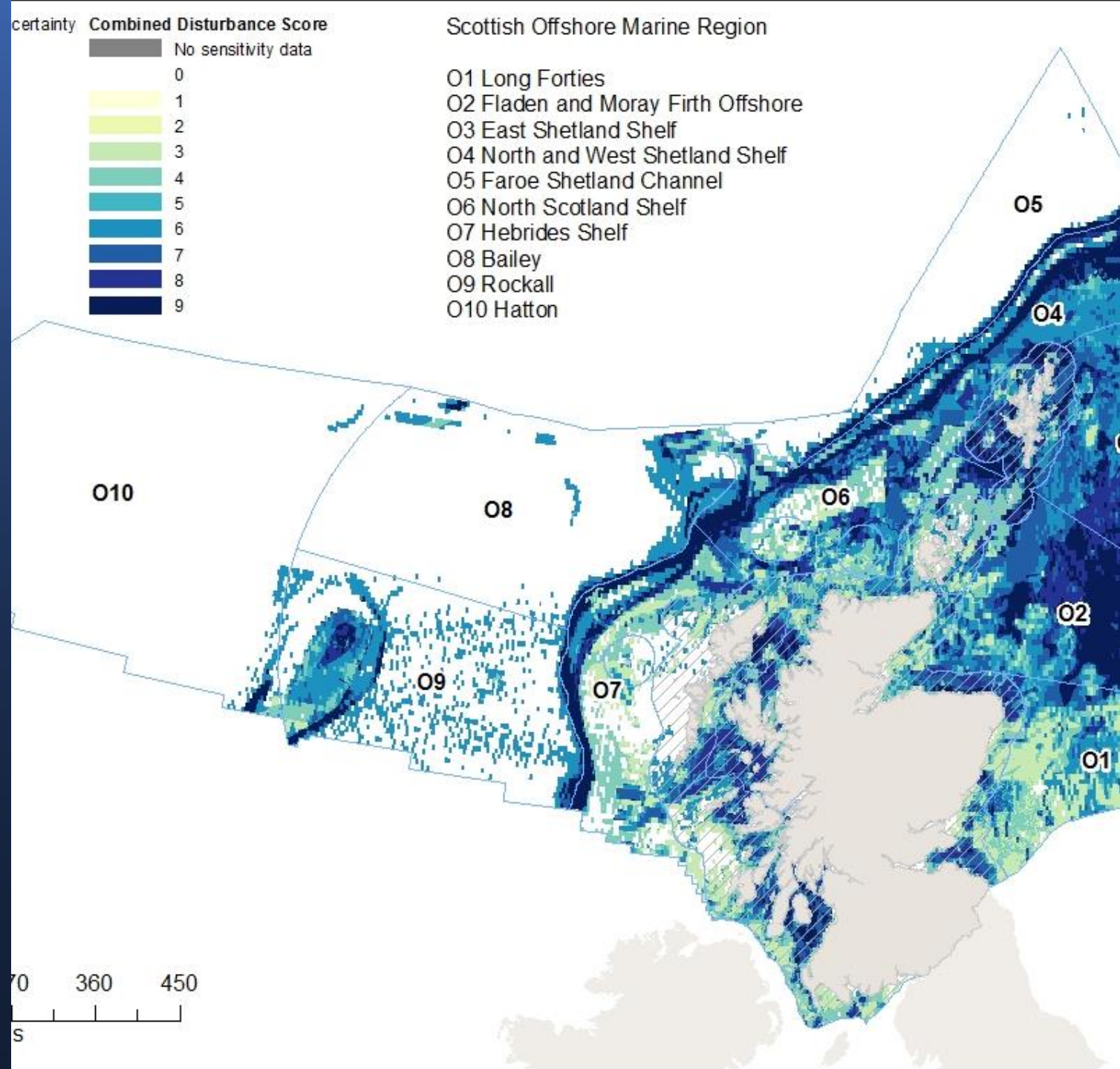
We currently fail of 7 out of the 11 indicators for GES

1. Biological diversity 	2. Non-indigenous species 	3. Population of commercial fish/shellfish 	4. Elements of marine food webs 
5. Eutrophication 	6. Sea floor integrity 	7. Alteration of hydrographical conditions 	8. Concentrations of contaminants 
9. Contaminants in fish/seafood for human consumption 	10. Marine litter 	11. Introduction of energy including underwater noise 	

Good Environmental Status

# Extent of Physical damage D1 - Biological Diversity D6 - Seafloor Integrity

86% of the assessed areas in the Greater North Sea and the Celtic Seas have physical disturbance, of which 58% showed higher disturbance.

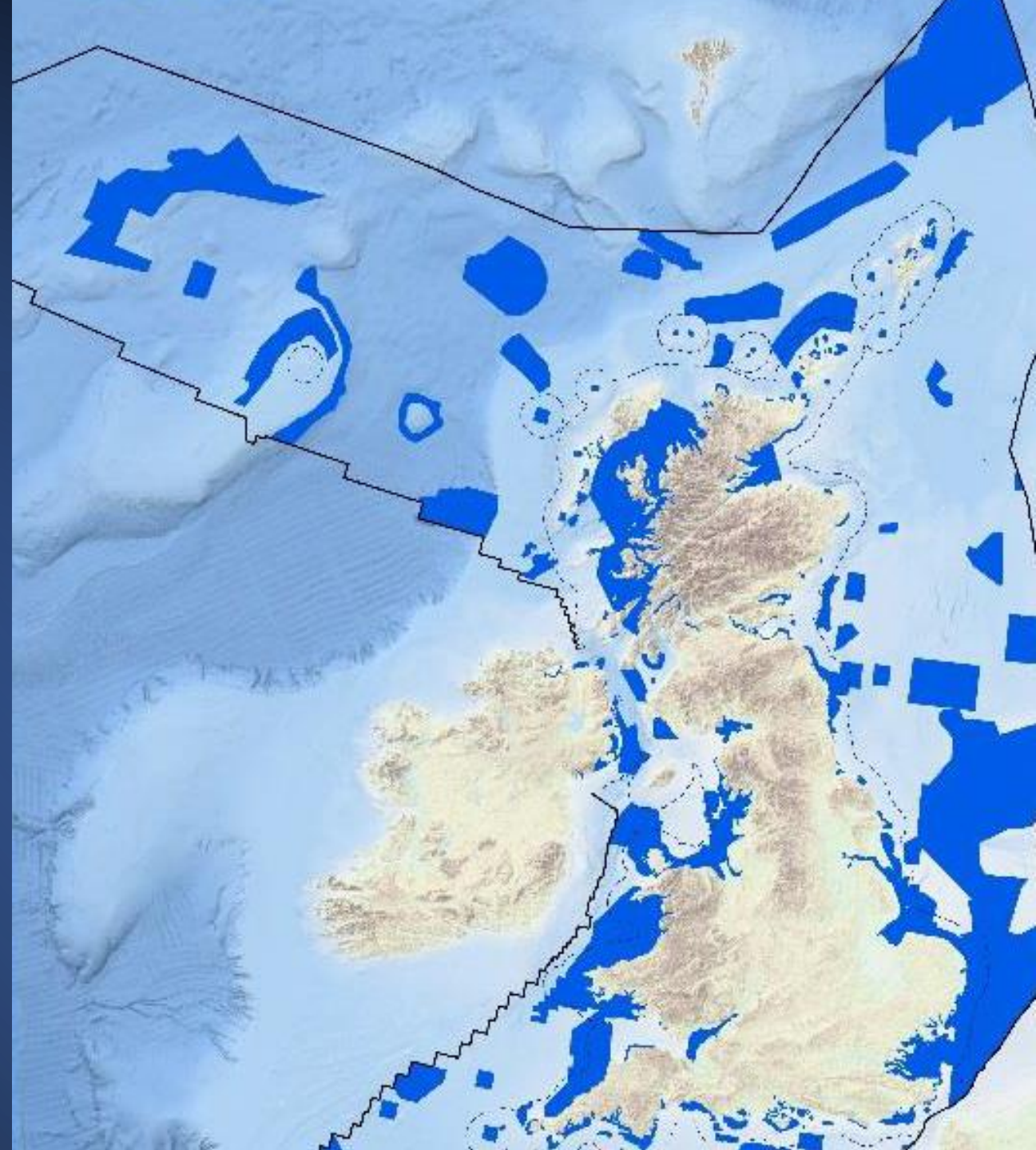




Scotland's current MPA network extends to 37% of our seas

Trawling & Dredging are only restricted in a small fraction of that area (Approx. 5%)

In order to meet our GES D1 seabed indicator those restrictions are anticipated to become far more extensive





# UK Fisheries Act 2020

**(1) When distributing catch quotas and effort quotas for use by fishing boats, the national fisheries authorities must use criteria that—**

***(a) are transparent and objective, and***

***(b) include criteria relating to environmental, social and economic factors.***

**(2) The criteria may in particular relate to—**

***(a) the impact of fishing on the environment;***

***(b) the history of compliance with regulatory requirements relating to fishing;***

***(c) the contribution of fishing to the local economy (d) historic catch levels.***

**(3) When distributing catch quotas and effort quotas for use by fishing boats, the national fisheries authorities must seek to incentivise**

***(a) the use of selective fishing gear, and***

***(b) the use of fishing techniques that have a reduced impact on the environment (for example that use less energy or cause less damage to habitats).***

Bringing together  
fishermen, conservationists,  
scientists and regulators to  
achieve a “win-win” model  
for fishing and conservation.

boats work together  
under a voluntary code  
to fish sustainably



**206** km<sup>2</sup>  
protected from  
bottom trawling

**84%**  
increase in species

more than  
**300**  
species found on  
Lyme Bay's reefs

**4x**  
more flora and fauna

**7x**

more pink sea fans  
(the largest colony  
in the UK)

**4.5x**

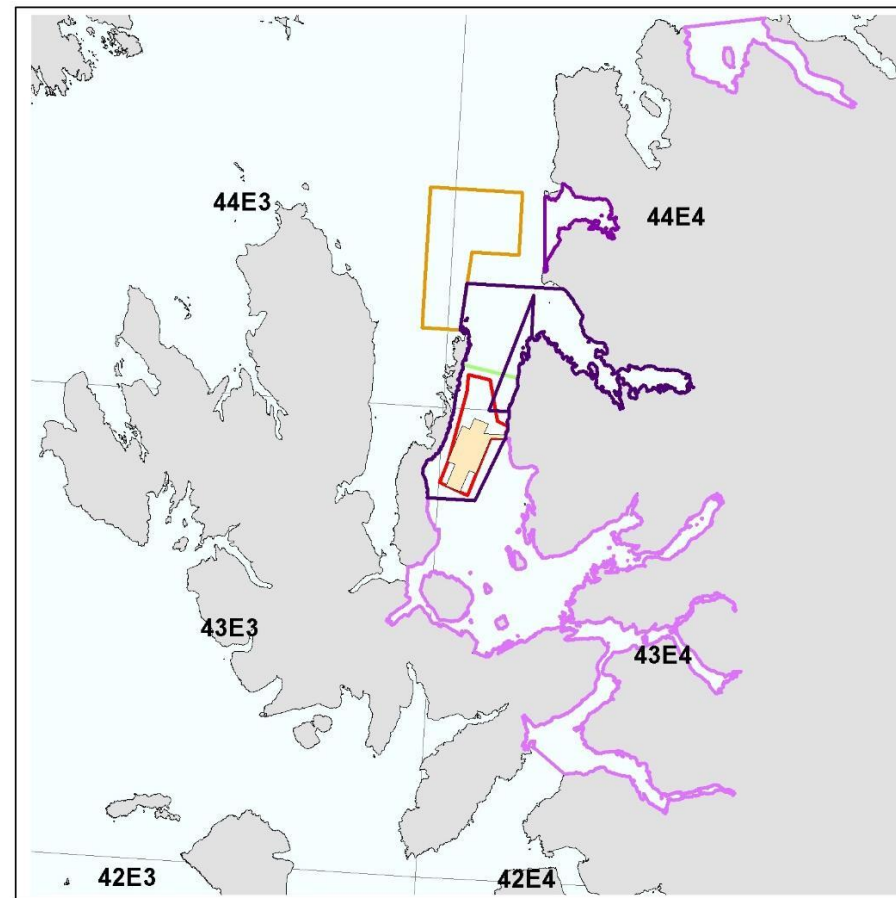
more juvenile lobsters

**7x**

more scallops inside the  
Reserve area compare  
to outside the area

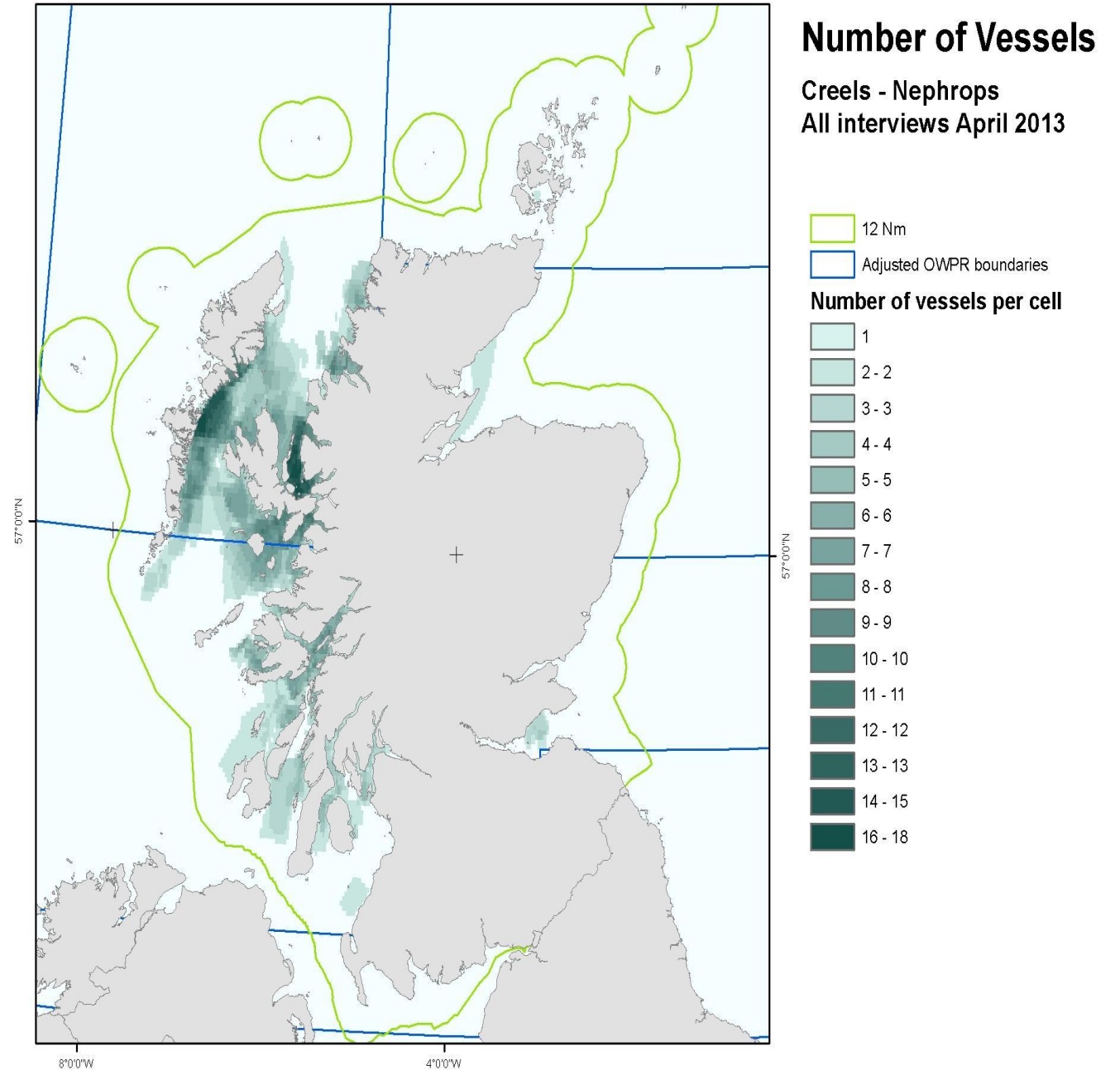
- There are few examples of spatial management in the UK
- However this example of a thriving fishery in Lyme Bay in England illustrates what can be achieved by restricting mobile gear and introducing fit for purpose management for the remaining static gears

The Inner Sound is exceptional in containing an extensive no take zone, creel only zones and not being fully opened to trawling all year round

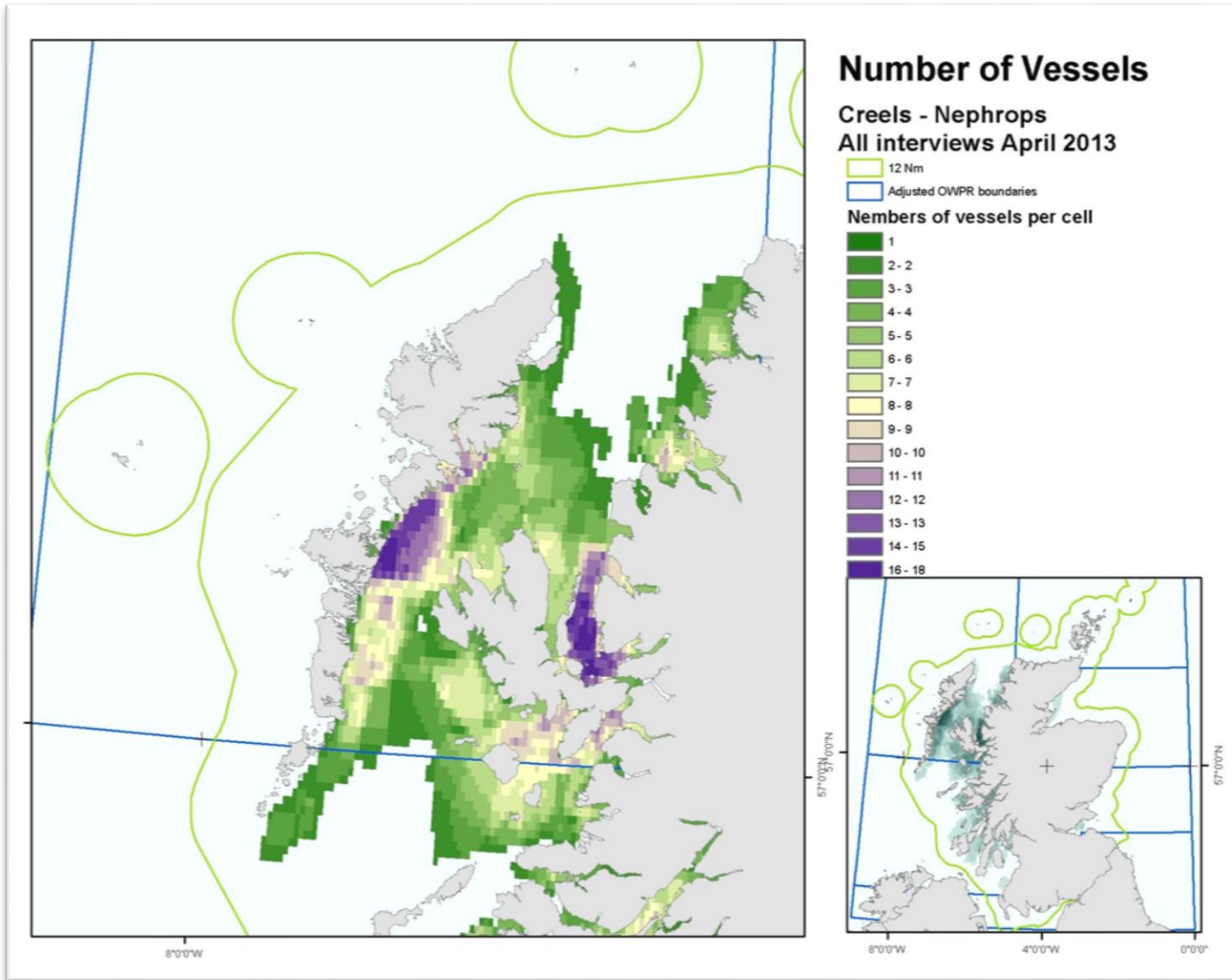




The Inner Sound  
Supports more  
vessels per Sq  
km than any  
other area in  
Scotland

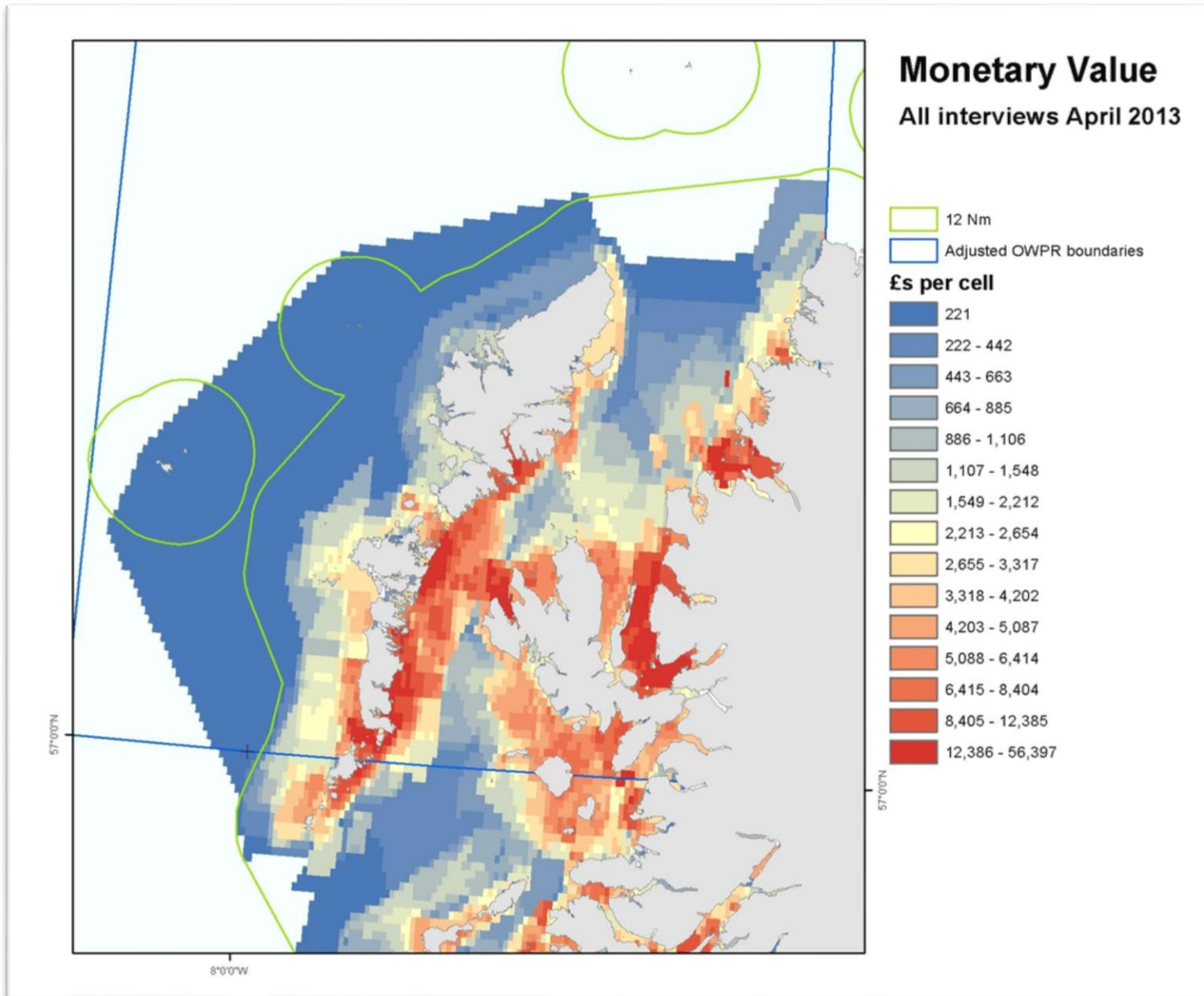






# More Fishing Jobs

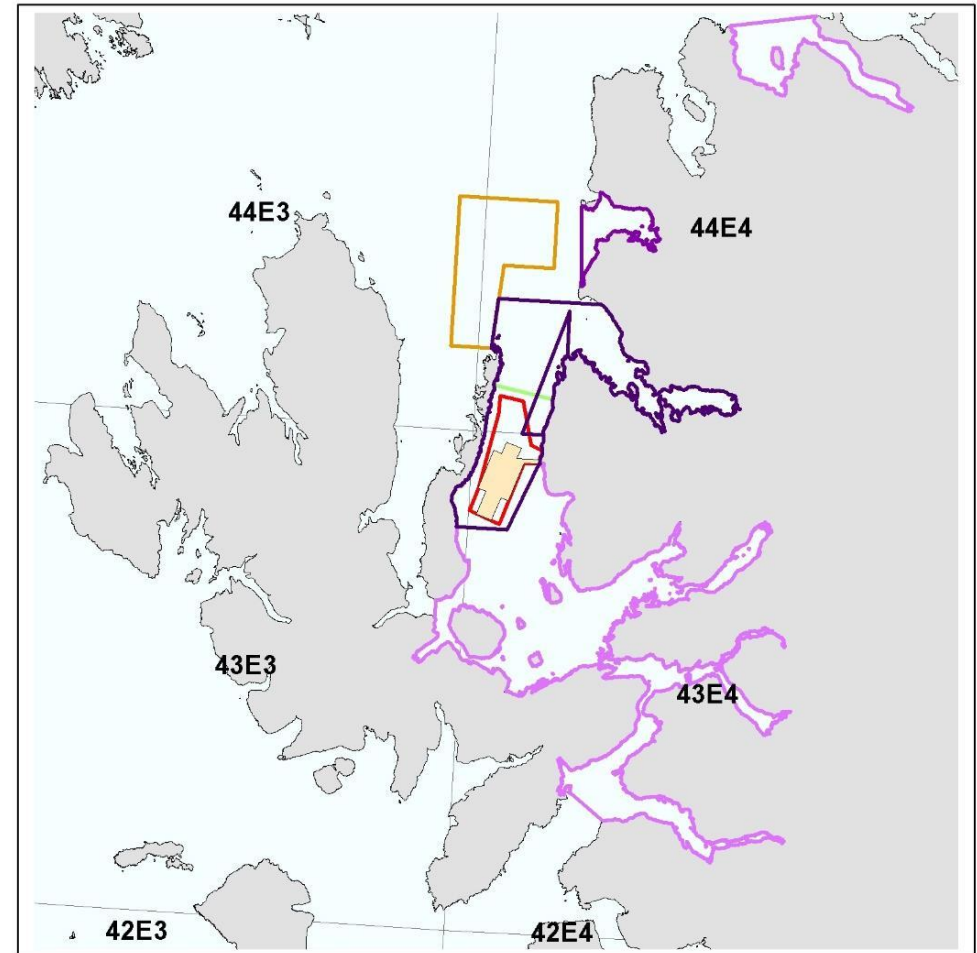
- Scotmap illustrates that due to restrictions on trawling and dredging the Inner Sound supports a higher density of vessels and therefore more jobs per Sq km than almost any other inshore fishery in Scotland.



# More Revenue

- Scotmap illustrates that the Inner Sound clearly generates more revenue per Sq km than almost any other fishery in the west coast of Scotland

Lyme Bay, the Inner Sound and the Norway model all demonstrate that Spatial Management is the way to incentivize low impact & SSF



#### Fishery Restricted Areas

- BUTEC - closed to all fishing
- BUTEC proposed Inner Sea Area
- BUTEC proposed Outer Sea Area
- Creel only zone
- Trawl only zone
- Closed to mobile gear
- Closed to mobile gears Oct to March



Extensive spatial management of High and Low impact fisheries will protect fishing jobs in our coastal communities and facilitate meeting our commitments for marine conservation





The Fisheries Act  
obliges us to  
introduce ecosystems  
based fisheries  
management plans

This has the potential  
to facilitate the  
required spatial  
management.

It's simple really

Large scale and high  
impact fisheries should not  
be allowed to displace SSF  
fisheries that offer superior  
social, economic and  
environmental outcomes!





Else we are not only failing to meet our national and international conservation commitments and our obligations to protect small scale fishers,

We are also unnecessarily sacrificing the jobs, revenues and the environments that our coastal communities depend on!





Ultimately...Protecting fishing  
Jobs and the environment comes  
down to...

Using the right gear  
In the right place  
At the right time!



Thank You!