

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

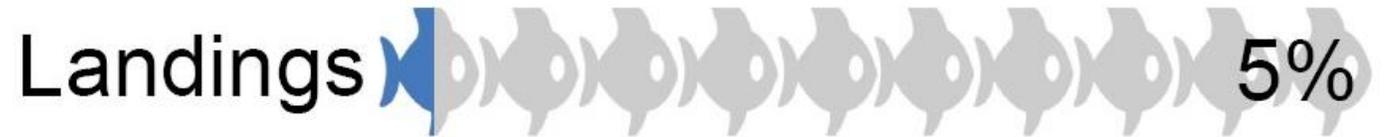
- The definition of ‘small scale’ in terms of fishing vessels within the European Union can be found in the European Maritime and Fisheries Fund Regulation 508/2014. Article 3(14) states that: “*small-scale coastal fishing’ means fishing carried out by fishing vessels of an overall length of less than 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

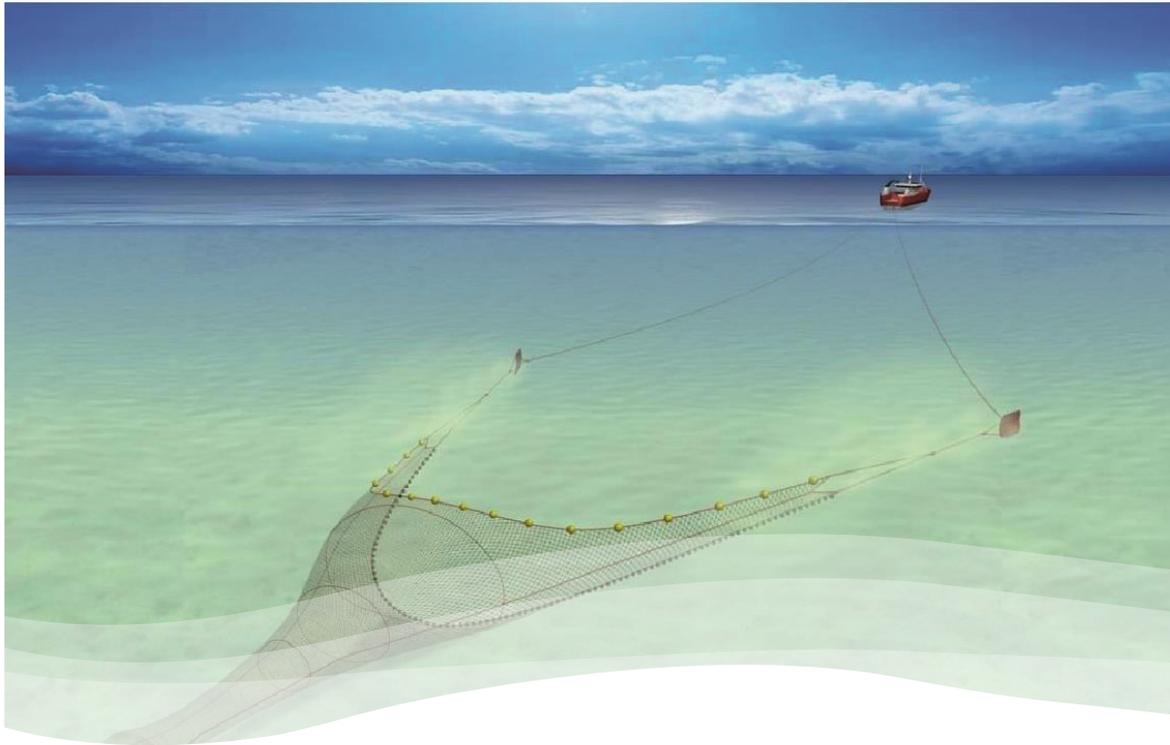
Why is it so important to protect Small Scale and Artisan Fishers?

Efficiency of the Under 10m Inshore Fleet

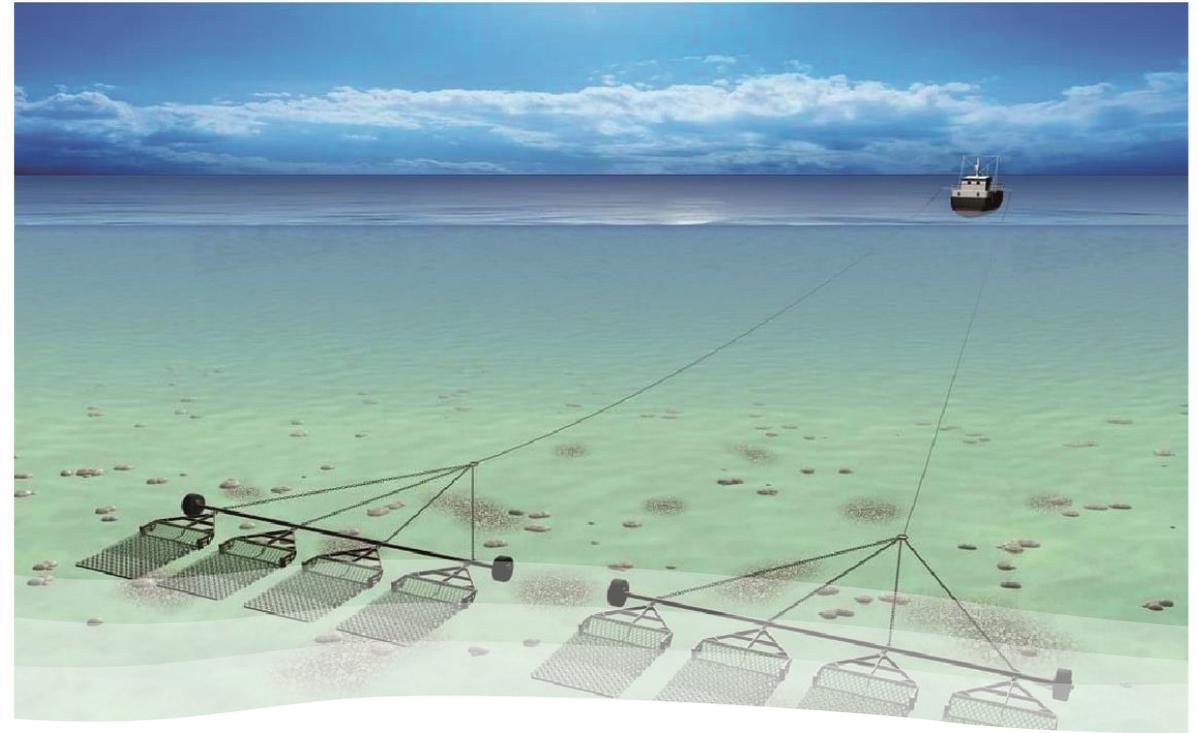


* SPICe briefing 2019

Demersal Trawl

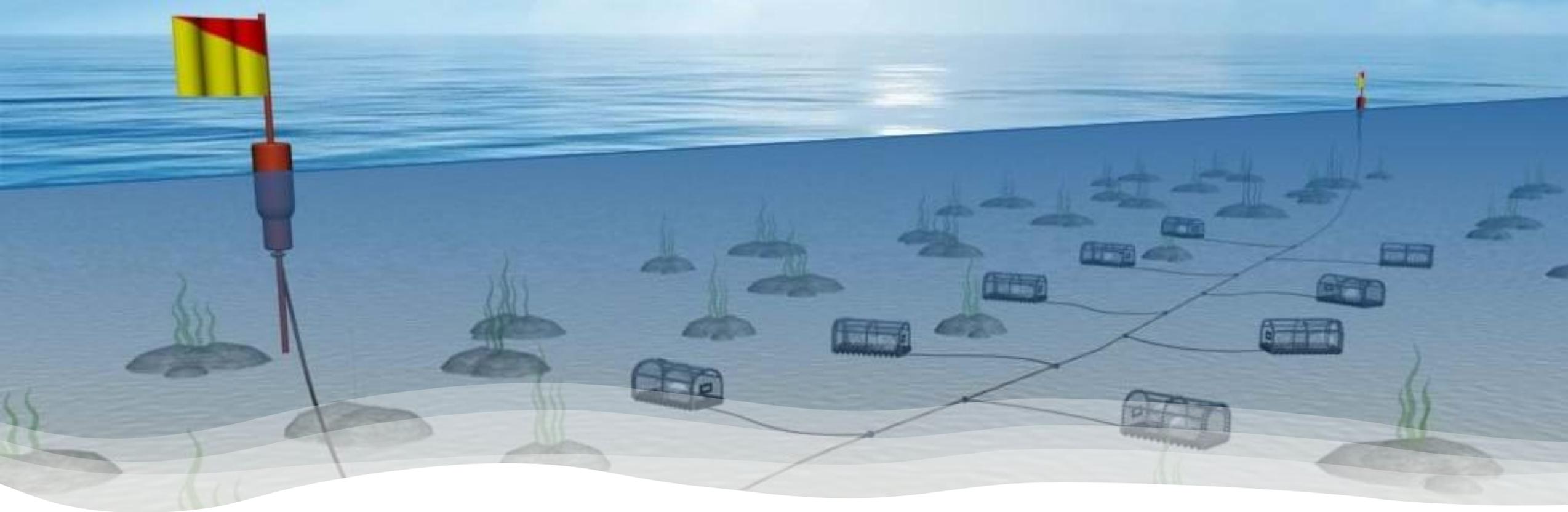


Scallop Dredge



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!



FMIG: Marine spatial squeeze and intelligent fishing 29/09/22

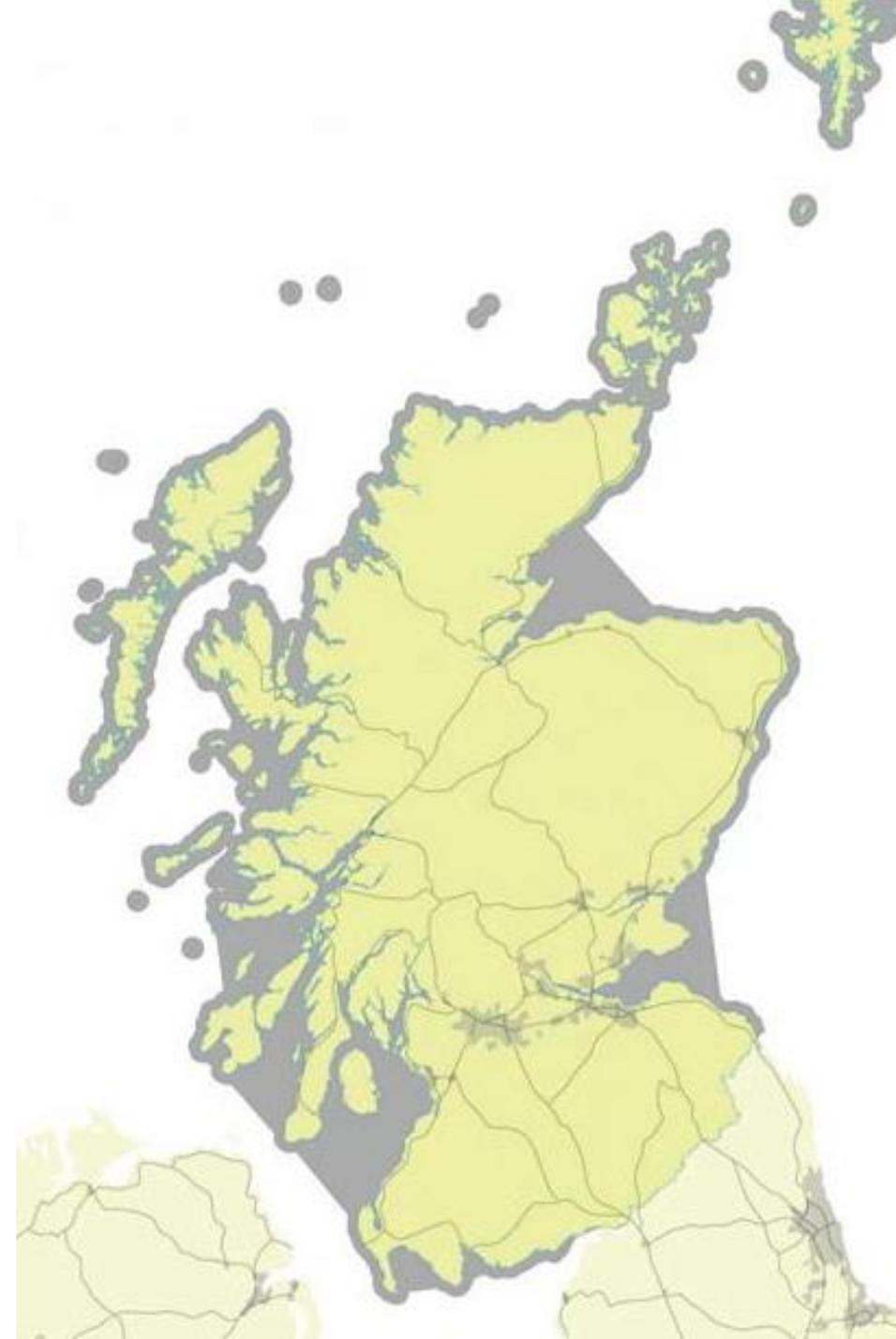
- This meeting will look at two key issues for the UK catching sector: marine spatial squeeze and the competition for maritime space; and maximising selective gear innovations to help the UK fishing industry advance economic, environmental and social sustainability.
- What was not on the agenda was protecting or expanding the low impact and highly selective gears that are used by the majority of the UK's Fishermen and which are also impacted by spatial squeeze!
- Which is concerning as these gears already offer superior social, economic and environmental outcomes!



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

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

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



THE FIRTH of CLYDE

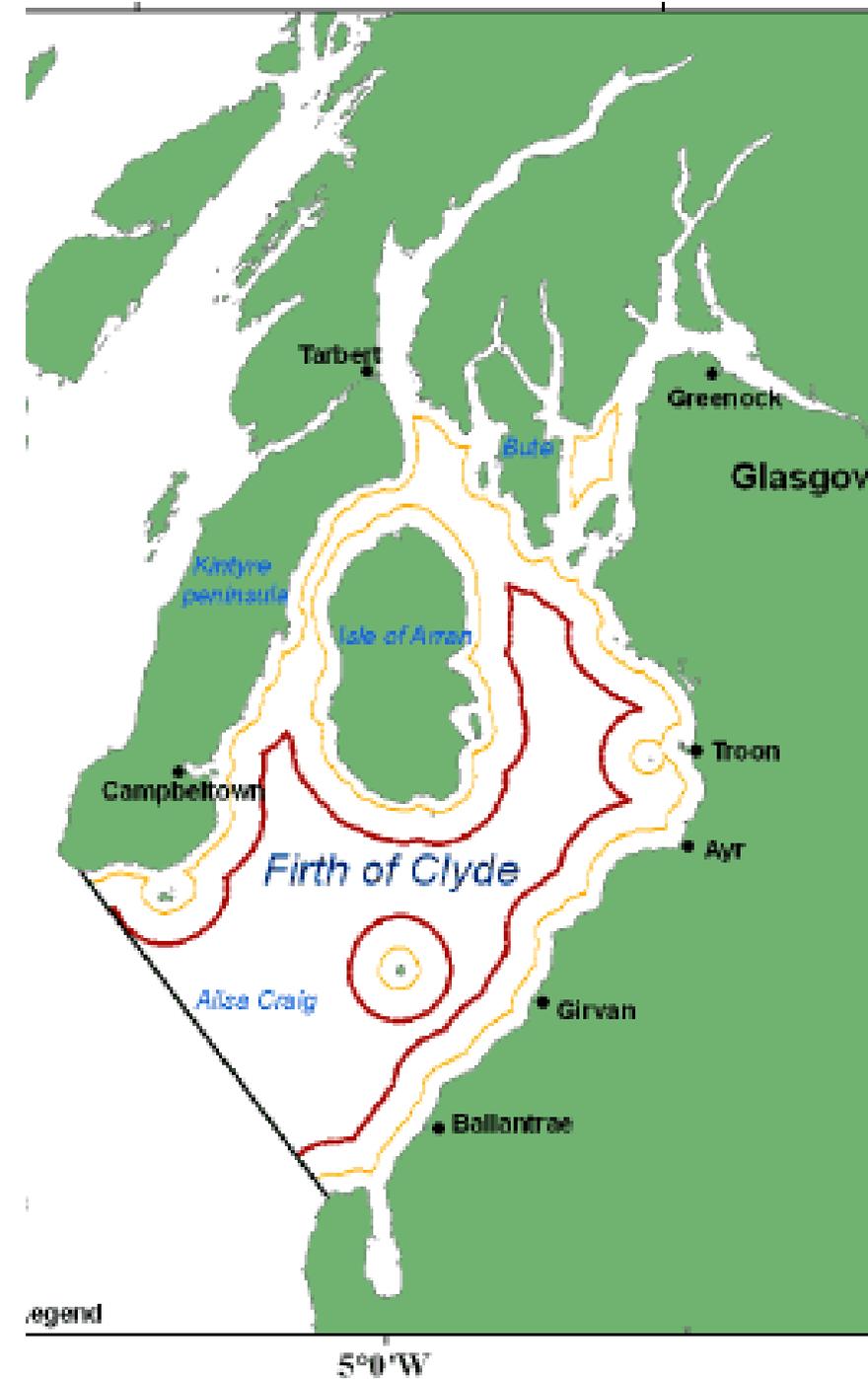
Prior to the 1960's

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

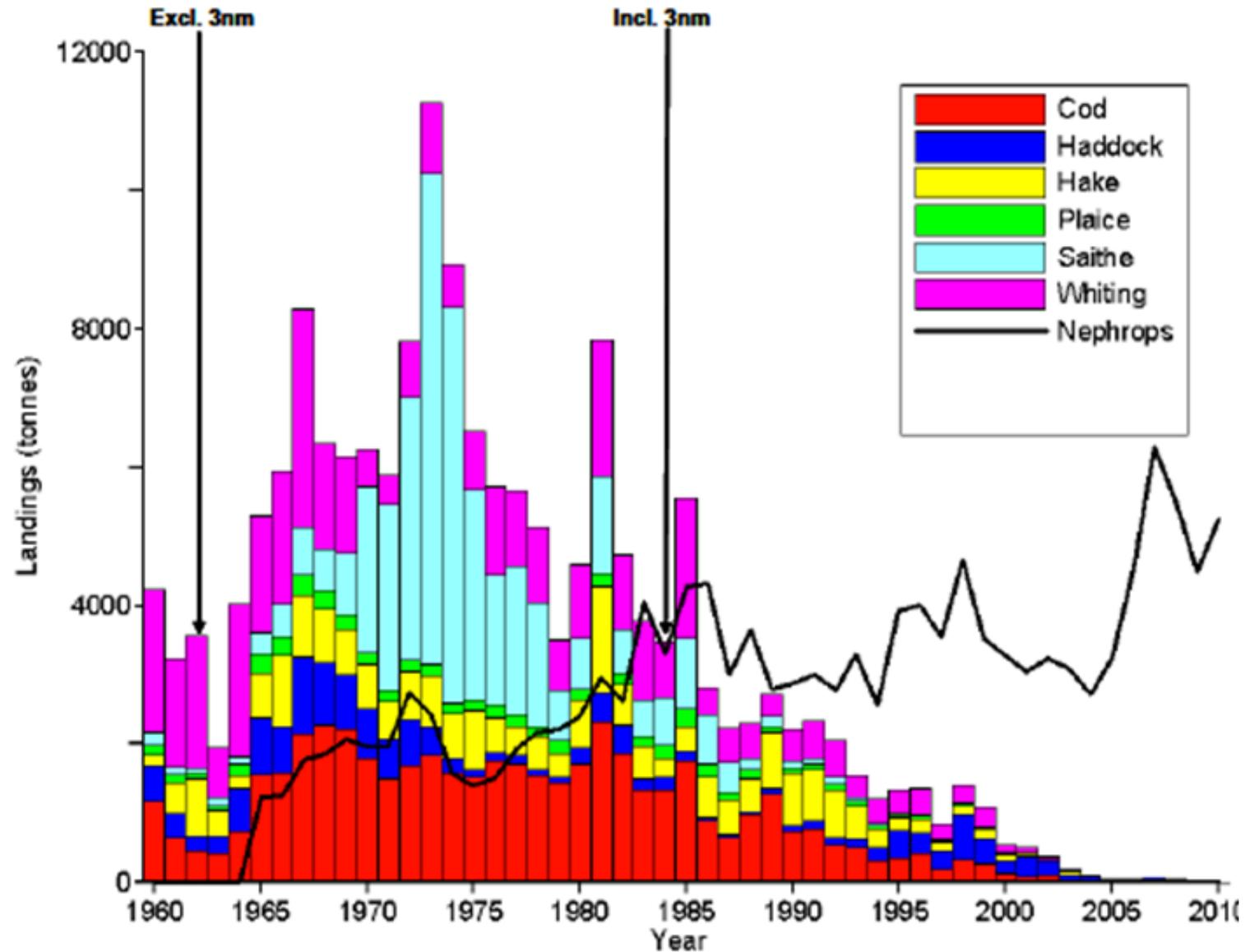
And

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

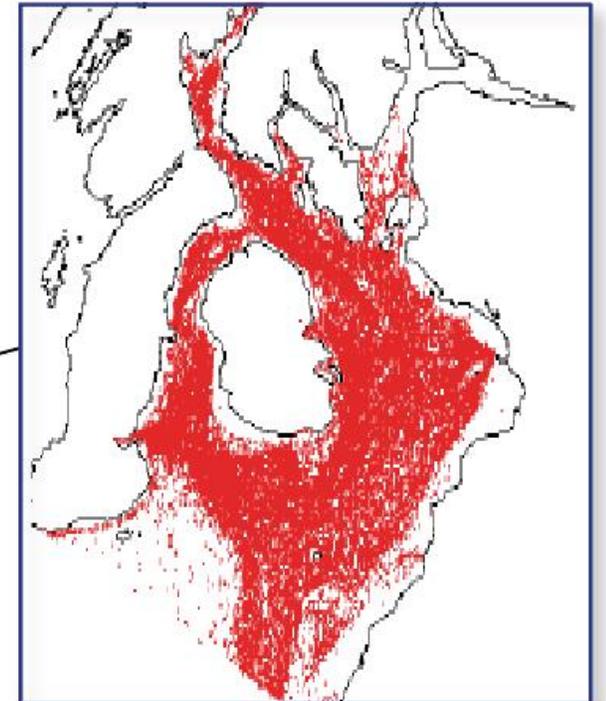
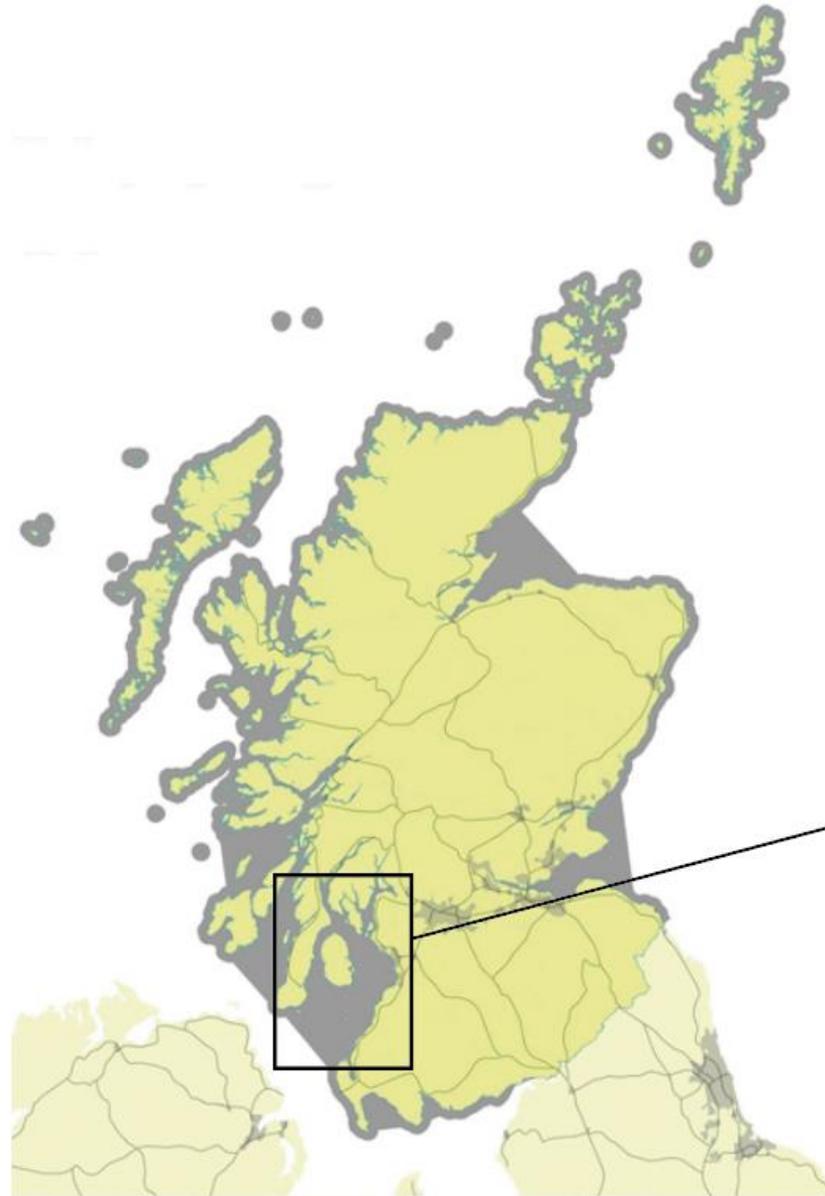
**Current annual landings
of all finfish from the
whole Clyde sea area are
near zero**



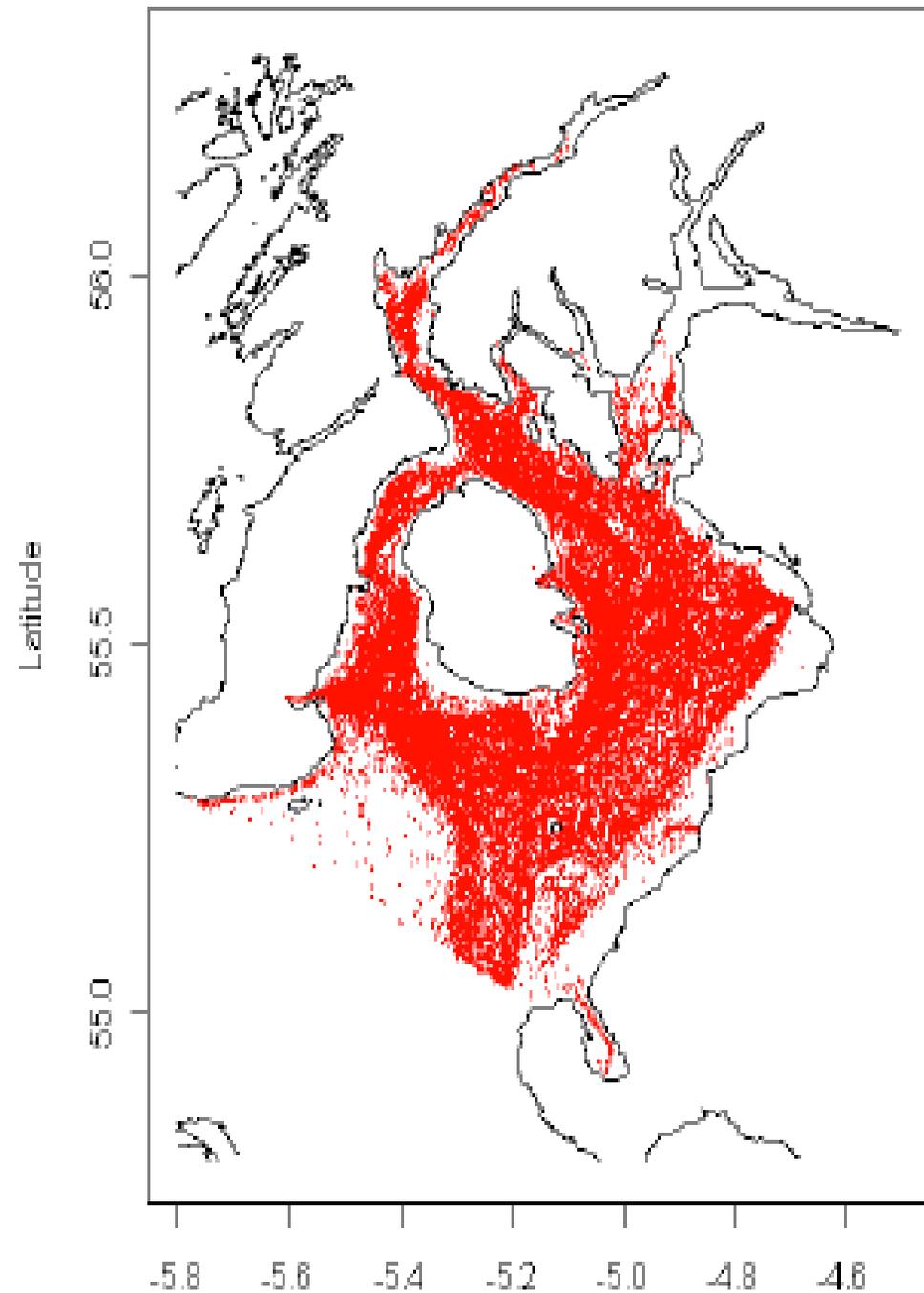
The introduction of extensive trawling precipitated the complete collapse of Demersal fish landings from the Clyde



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

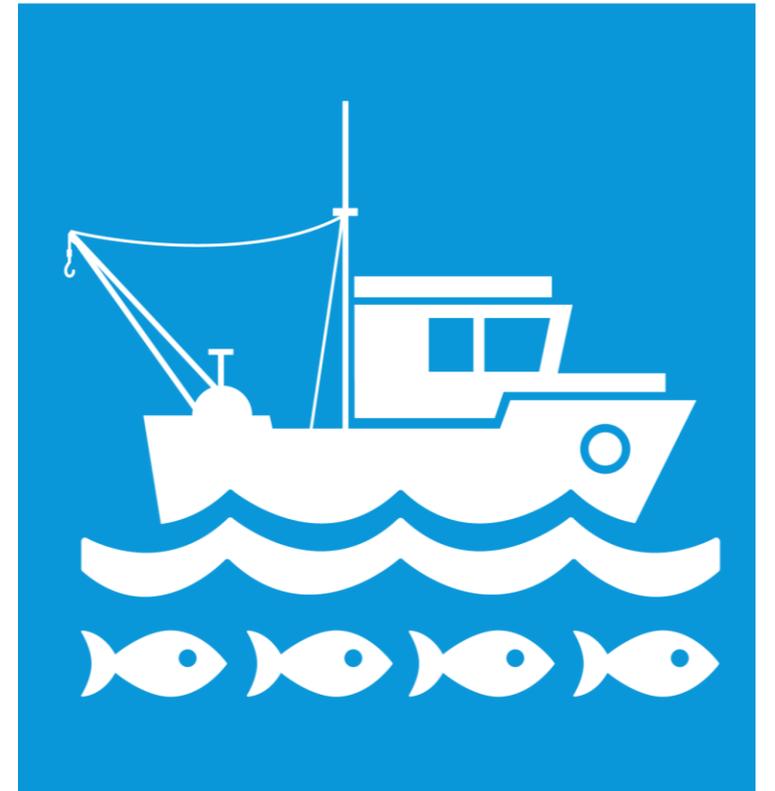


Our commitments
via UN SDG's are
clear about our
obligations to
provide access to
fishing opportunity
for SSF

- 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?

TARGET

14 ▸ B



**SUPPORT SMALL SCALE
FISHERS**



Industrial fishing fleets

10% of global fisheries employees

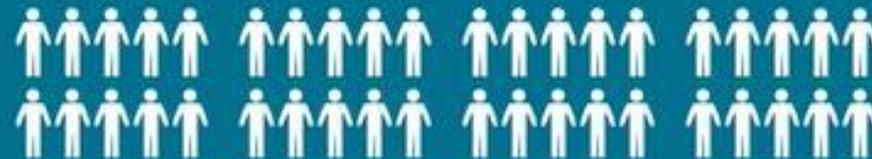
1 job per 100 tons of fish



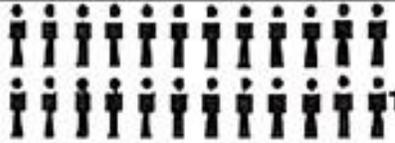
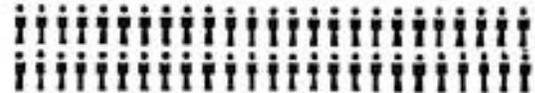
Small-scale fisheries

90% of global fisheries employees

40 jobs per 100 tons of fish



SSF generate more jobs and revenue per kg of fish

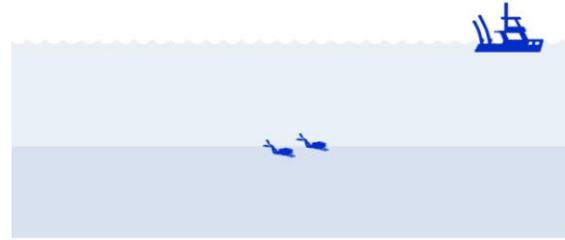
	LARGE SCALE 	SMALL SCALE 
Number of fishermen employed	 AROUND 500,000	 OVER 12,000,000
Annual catch of marine fish for human consumption	 AROUND 29 MILLION TONNES	 AROUND 24 MILLION TONNES
Capital cost of each job on fishing vessels	\$ \$ \$ \$ \$ 30,000-\$ 300,000	\$ \$ 250-2,500
Fishermen employed 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

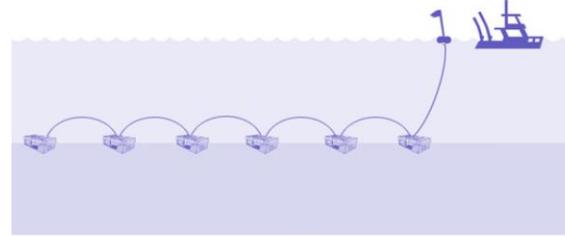
2 DIVERS

200m²



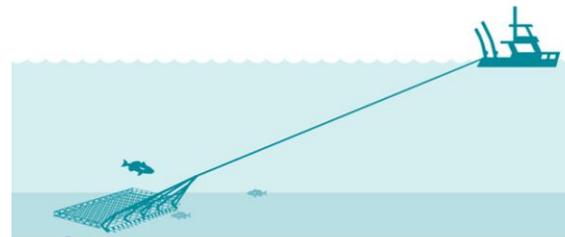
2 PERSON CREELER

500m²



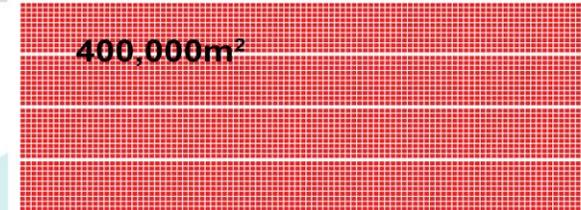
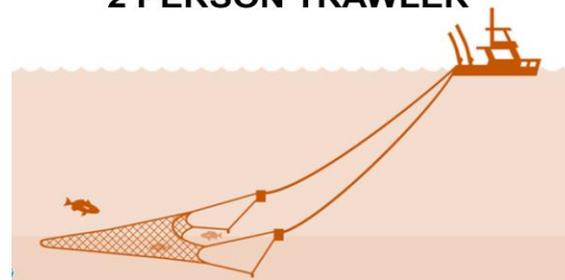
2 PERSON DREDGER

400,000m²



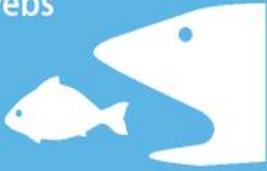
2 PERSON TRAWLER

600,000m²



MSFD Good environmental status

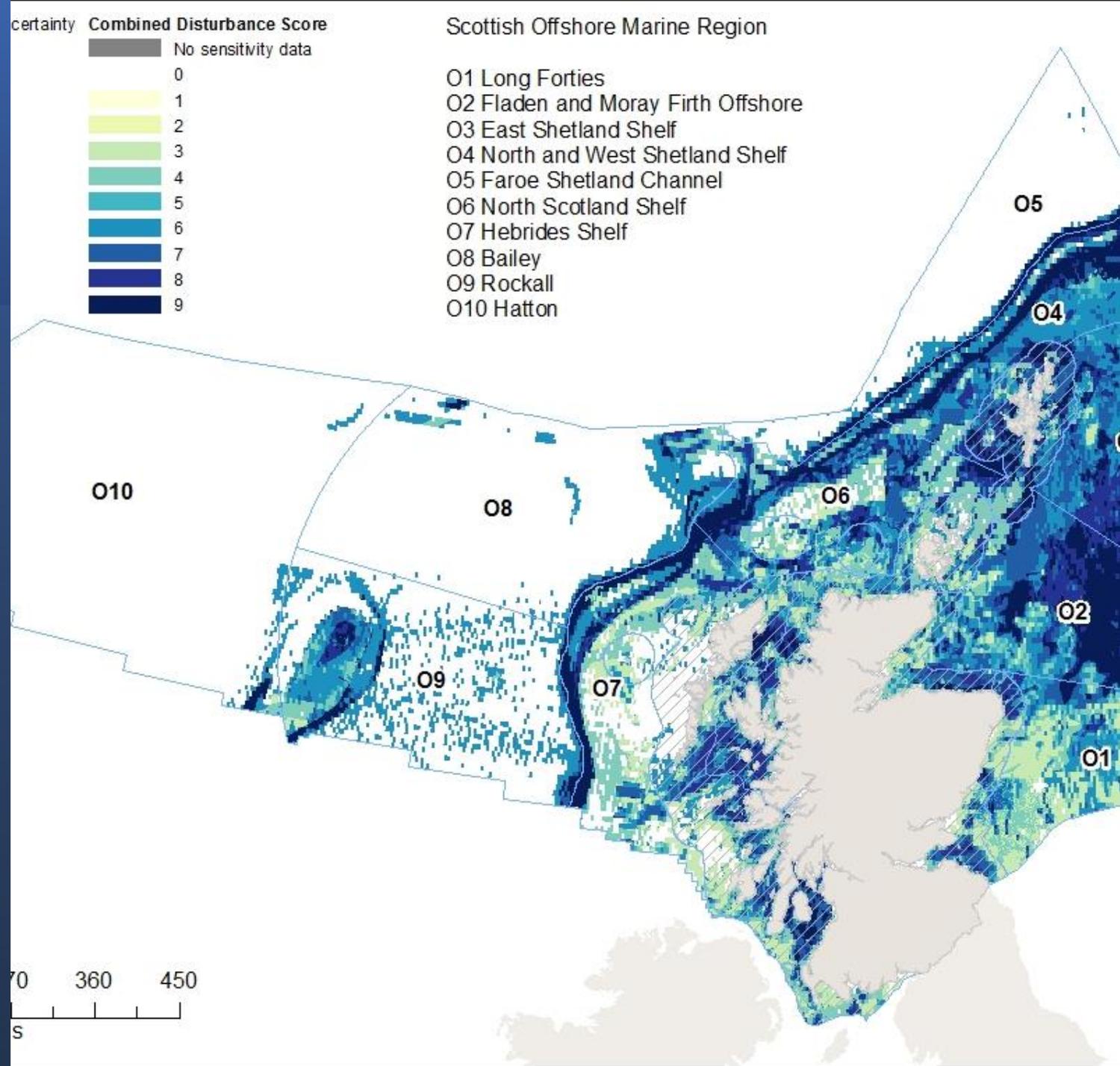
We currently fail of 7 out of the 11 indicators for GES

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 km²
protected from
bottom trawling

84%
increase in species

more than
300
species found on
Lyme Bay's reefs

4x
more flora and fauna

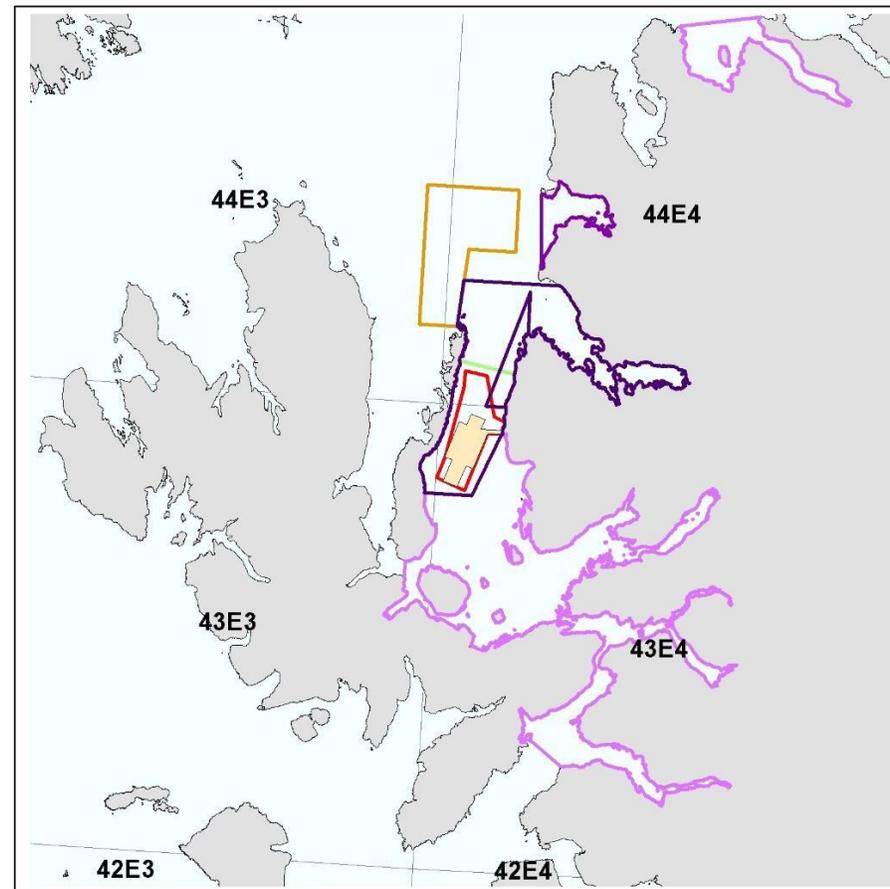
7x
more pink sea fans
(the largest colony
in the UK)

4.5x
more juvenile lobsters

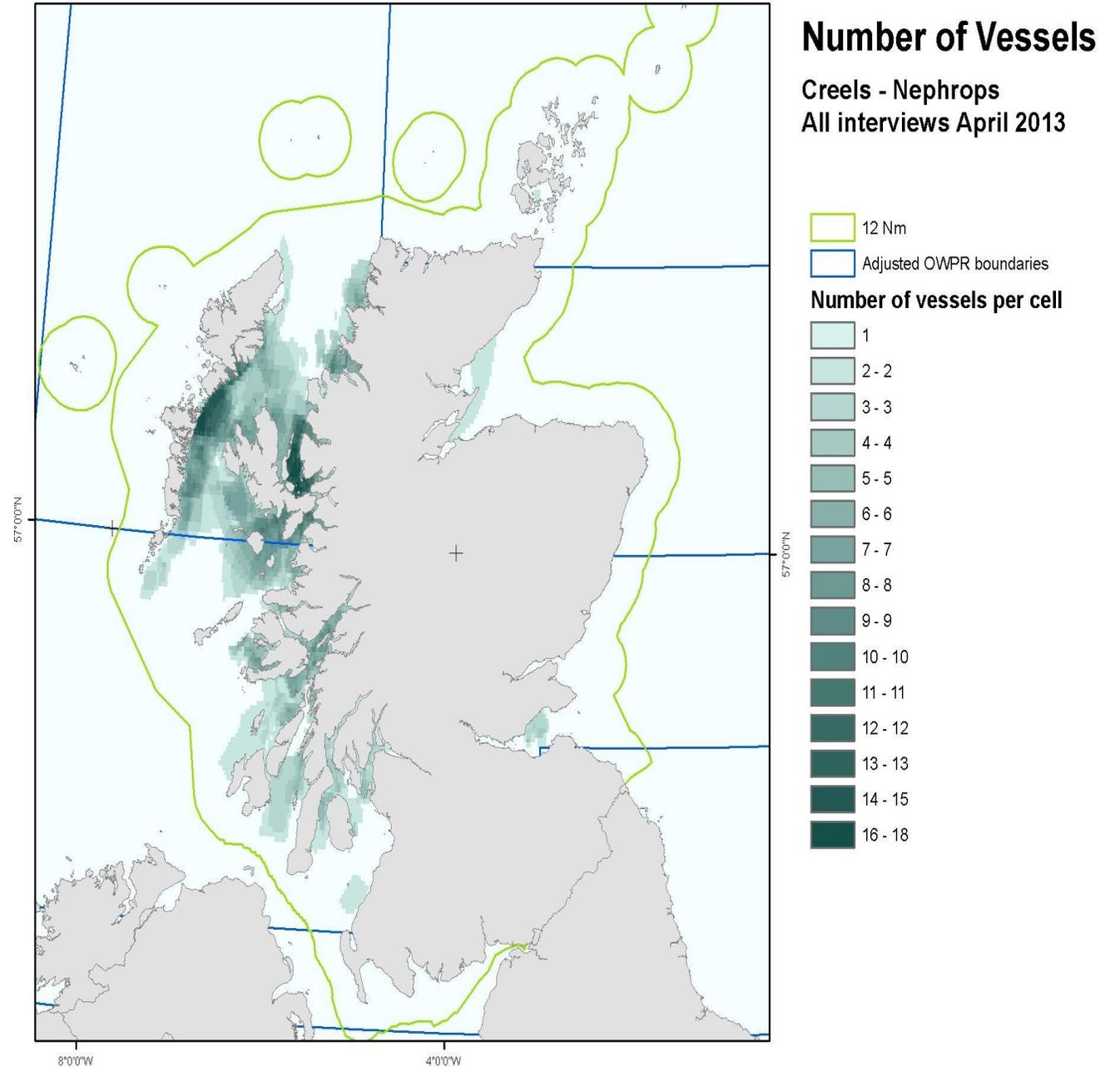
7x
more scallops inside the
Reserve area compare
to outside the area

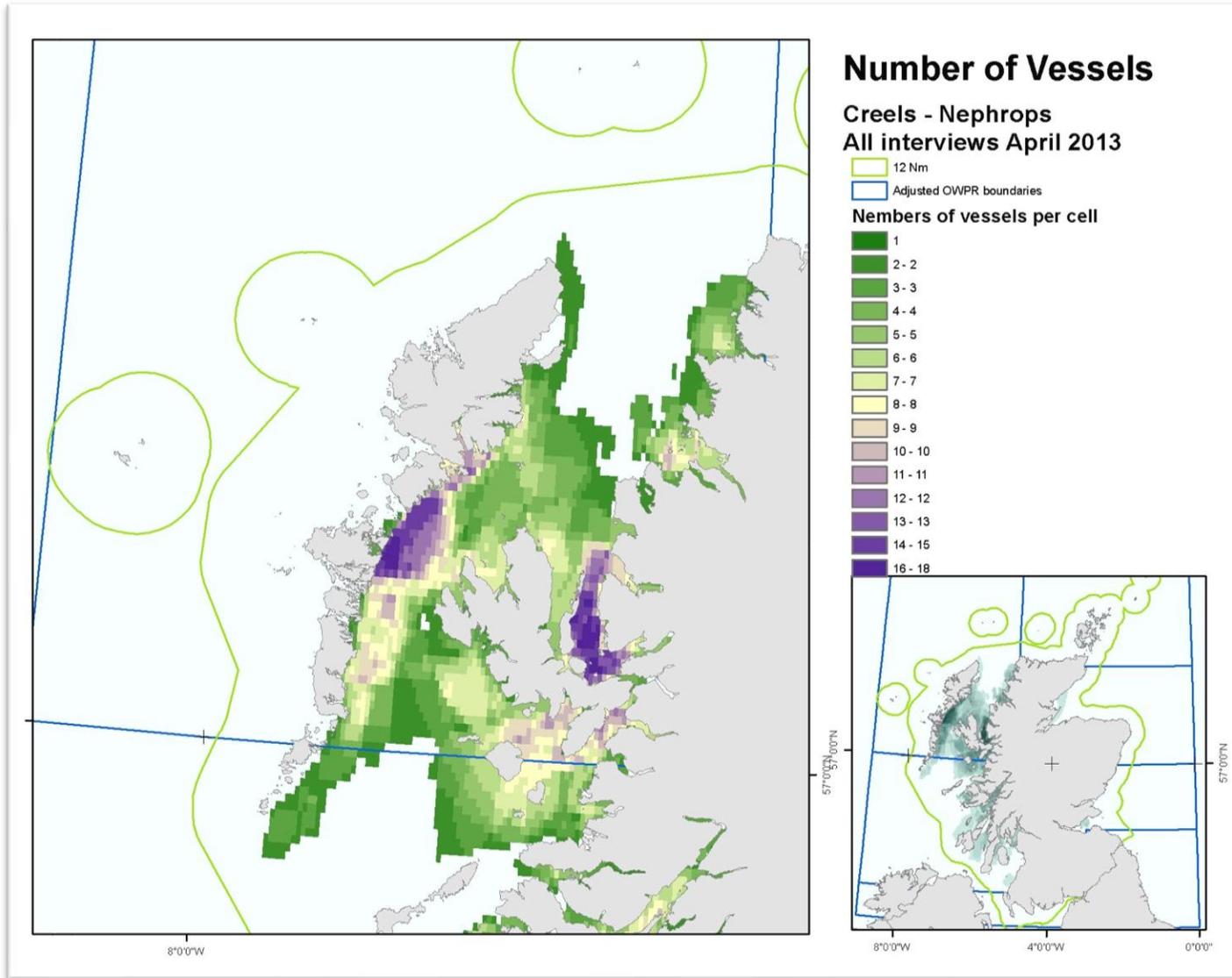
- There are few examples of spatial management in the UK
- However this example of a thriving fishery in Lyme Bay in England illustrates what can be achieved by restricting mobile gear and introducing fit for purpose management for the remaining static gears

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



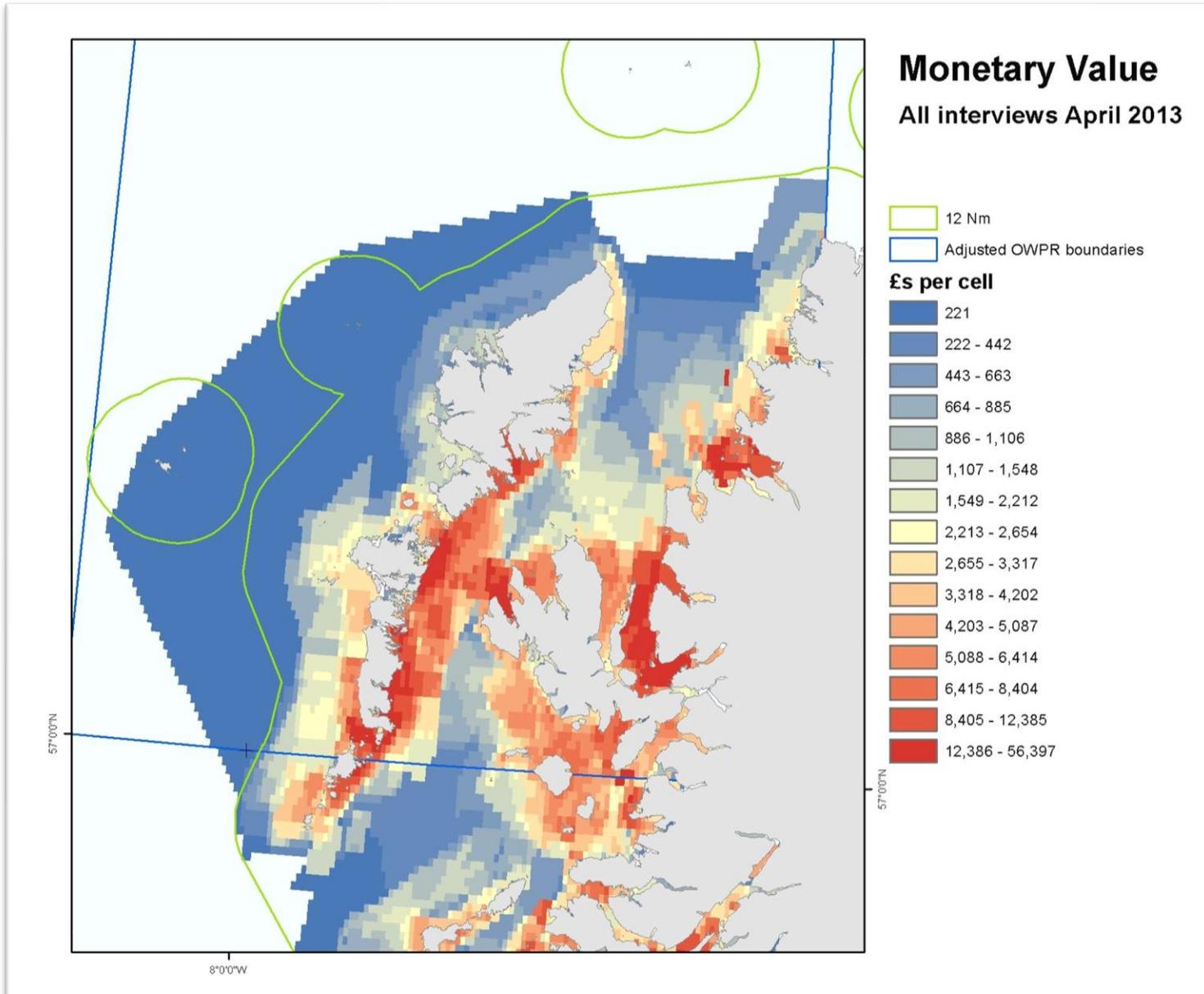


More Fishing Jobs

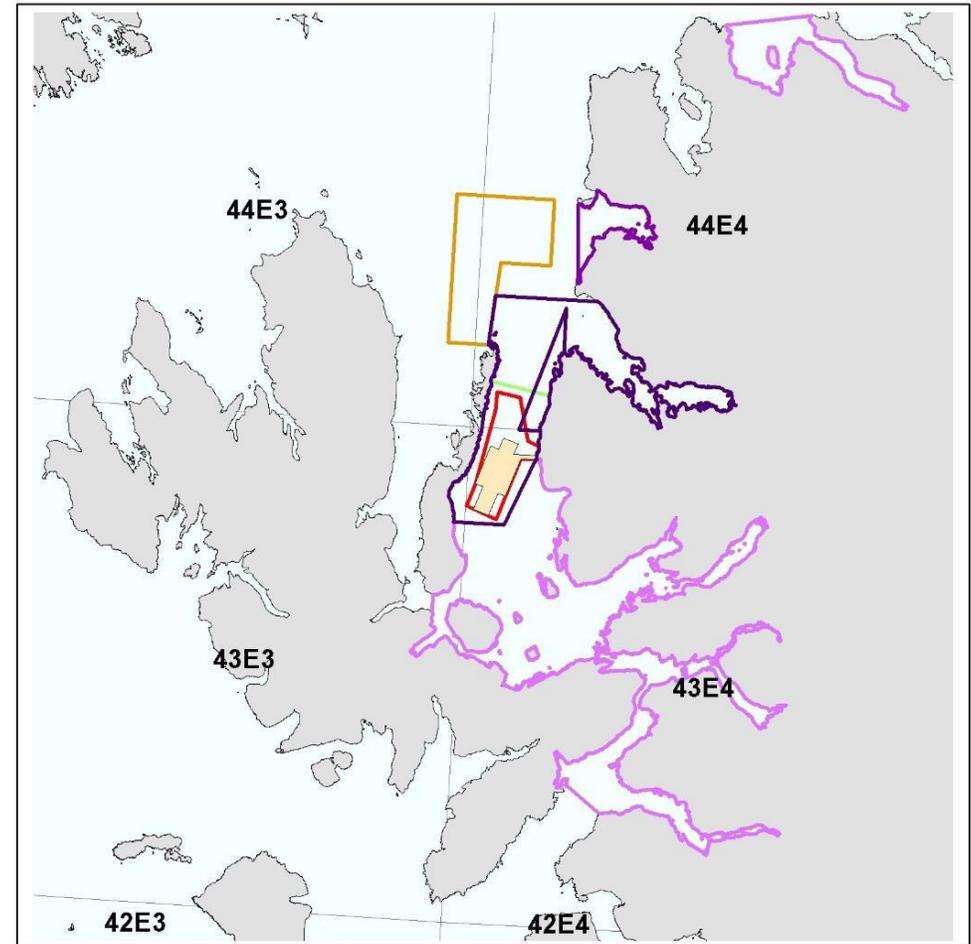
- Scotmap illustrates that due to restrictions on trawling and dredging the Inner Sound supports a higher density of vessels and therefore more jobs per Sq km than almost any other inshore fishery in Scotland.

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



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!