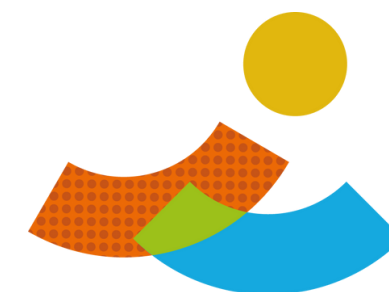




Coastal Futures Conference 2025

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Session Five

Future Fishing

How will future fishing be balanced with
restoration efforts & space for
renewable energy?

Chair

Daniel Owen,
Fenners Chambers

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Session Five

Future Fishing

Fail to plan / plan to fail: the need for
a strategic approach to managing
fisheries and the marine space

Mike Cohen,
CEO, National Federation of
Fishermen's Organisations



Fail to Plan : Plan to Fail

**The need for a strategic approach to managing fisheries and
the marine space**

Mike Cohen

Fishing Matters

Commercial fishing has existed for centuries. It provides opportunity, income and a sense of community in places that are often, in every sense, on the margins.

Well managed, fishing can provide sustainable, healthy food, with a low carbon footprint.

Its value in coastal economies is far greater than its contribution to GDP implies.





Sharing the Sea

Today, there are many users of the sea:

Oil and gas, aggregates, wind power, telecoms, transport, leisure, waste disposal, conservation, defence and more.

Some pass through, others establish a permanent presence.

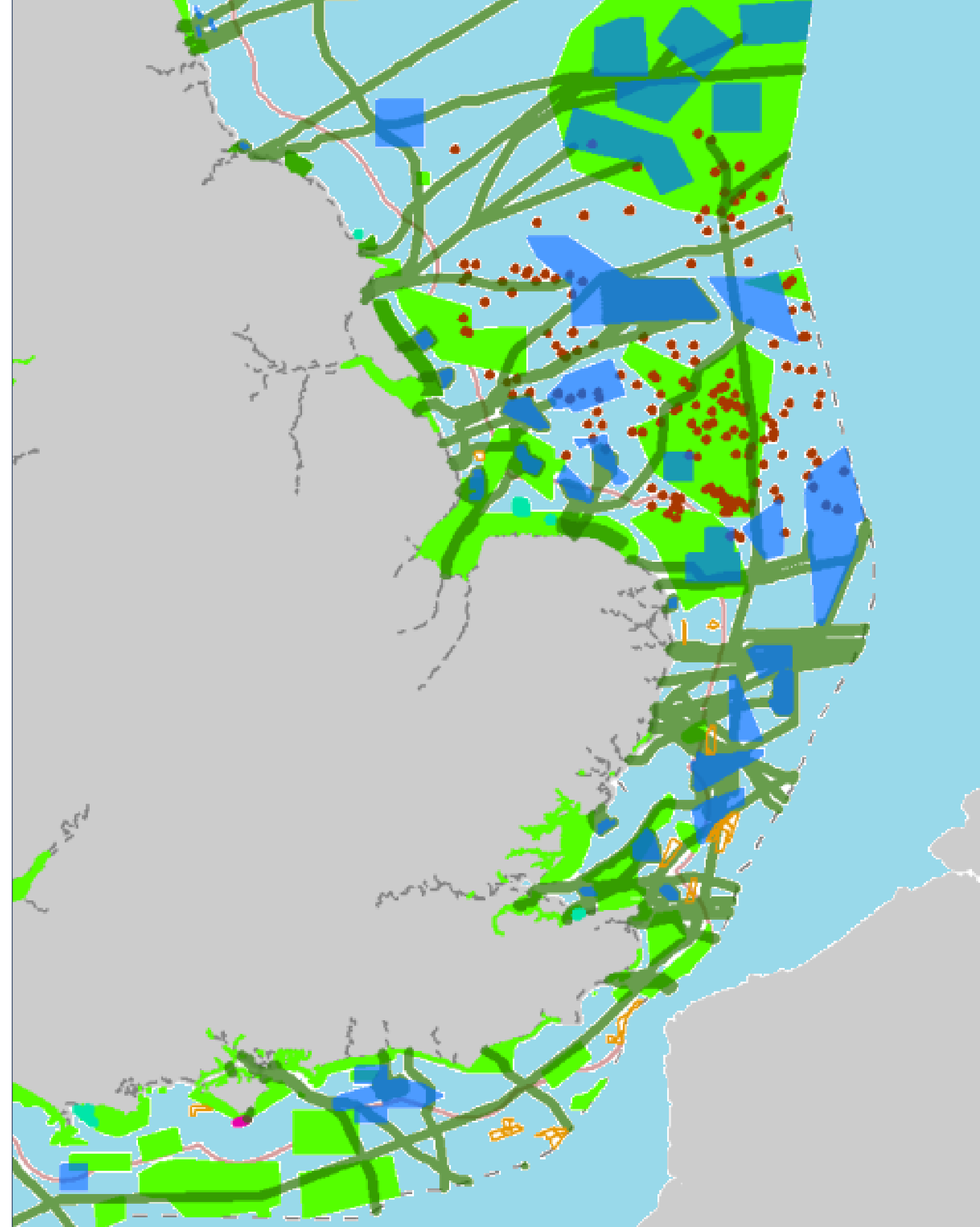
The seascape has changed.

Spatial Squeeze

Planners and policy-makers have repeatedly assumed that, when they assign a new use to a particular sea area, fishing will simply go somewhere else.

Fishing cannot be displaced indefinitely. Fishermen are being squeezed out of their traditional grounds.

This is unintentional, but it threatens coastal communities and degrades national food security.





Plans and Policies

Many different regulations, administered by many different agencies determine what fishermen can catch, where, how and from what boat. Policy on energy, environment, immigration, trade education, safety, transportation and more drive this

...and all of that is ***absolutely fine***.

The difficulty is not that the problem is complex, it is that the response is disorganised

Shaping the Future

Without clarity about its place and its purpose, the fishing industry will continue to be sidelined in favour of sectors with better articulated policy visions.

Fishing, energy, nature, communication, trade, defence and all the other maritime sectors will never be successfully balanced by tinkering.

We need an industrial strategy for fishing. The alternative is predictable failure.





What should a fishing strategy cover?

- Protect core fishing grounds.
- Evidence-based, long term, sustainable harvest plans.
- Improve safety and welfare.
- Ensure fair recompense for labour.
- Promote fleet modernisation.
- Support job creation and domestic crew training.
- Strengthen domestic supply chains.
- Develop new domestic and export market opportunities.
- Promote fishing as core part of coastal economies.



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Session Five

Future Fishing

An assessment framework for a just
transition for mobile gear fisheries

Joe Richards,
Blue Marine Foundation



BLUE MARINE
FOUNDATION

Blue Marine Foundation

**An assessment framework for a just
transition for mobile gear fisheries**

Coastal Futures 2025

Joe@bluemarinefoundation.com

Strategic Goals

1. Securing Marine Protected Areas.
2. Tackling overfishing, supporting sustainable, equitable use of the sea.
3. Restoring marine habitats.

What is a 'Just Transition'?

- Concept of just transition has been adopted widely in policy making.
- To date, no universally accepted definition.

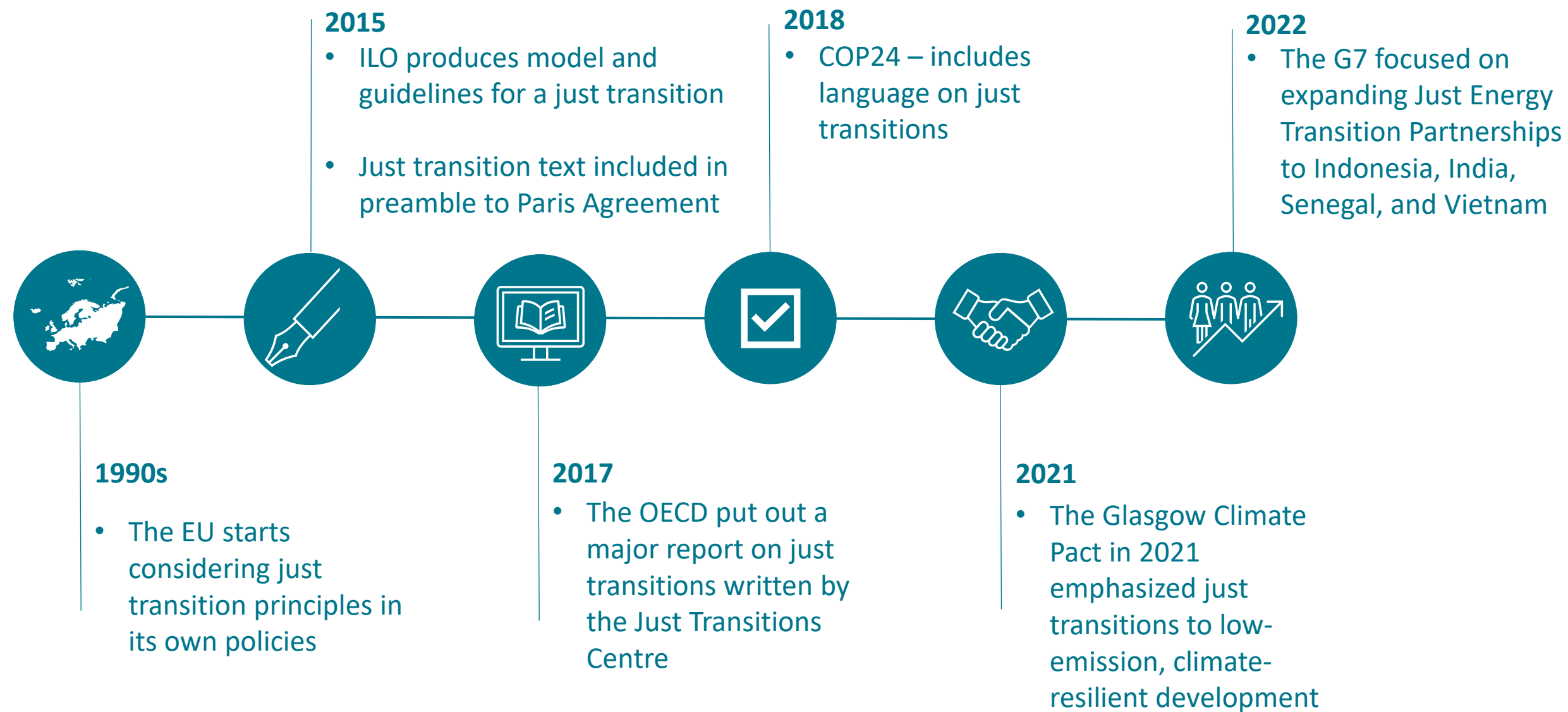


Figure 1: Milestones in the definition of "just transition" (source: eftec)





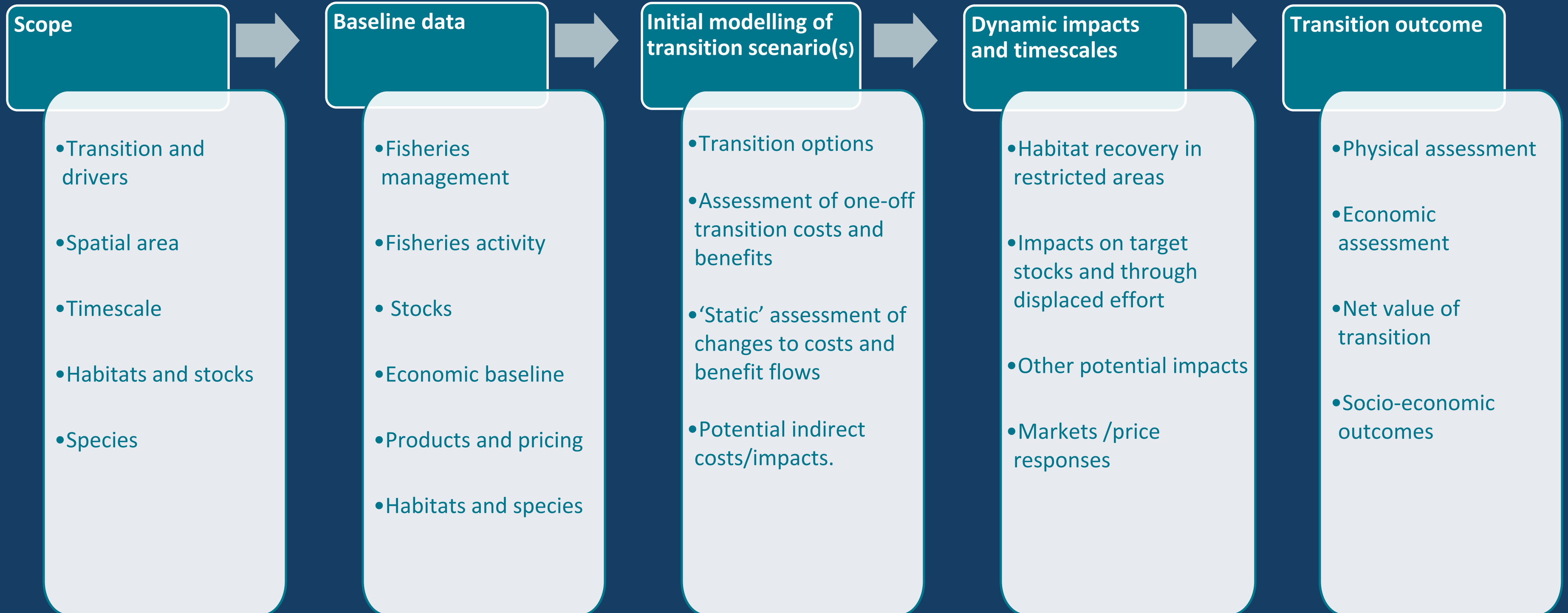
Purpose

- To create a framework for assessing future fisheries transitions;
- To assess the costs and benefits of a transition from higher impact fishing activity to lower impact gear or away from fishing using environmental, social, and economic indicators;
- To understand and quantify practical costs for transitioning;
- To provide evidence and outline potential financial mechanisms that can support fishermen if such a transition was undertaken.



BLUE MARINE
FOUNDATION

Fisheries Transition Analysis Framework:



Application of the fisheries transition framework

1. Change of catch method within the same fishery or target stock:

- E.g. Nephrop trawl to nephrop creel.

2. Moving to a different target stock / area:

- E.g. Demersal white fish to static netting.

3. Moving to a different marine industry:

- E.g. Scallop dredge to offshore wind / recreational dive / fishing boat operator.



Wider application of the fisheries transition framework

- Inform transitions to greener more sustainable inshore fisheries.
- Be considered during the development of future Impact Assessments.
- Identify and inform transition options following any displacement from activities such as offshore energy development.
- Diversification – inform costs and benefits of moving to more sustainable lower impact fishing gear / technologies.



Conclusions

A just transition in fishing requires:

- A multifaceted approach that addresses the environmental, economic and social dimensions of fisheries management and involves stakeholders.
- Understanding the scale of costs and benefits (environmental, social and economic) and who, and what, will be impacted.
- Access to robust data.
- Careful planning and investment.
- Adoption of transition principles into national policy on spatial management is key to a fair and equitable just transition.





BLUE MARINE
FOUNDATION

Thank you!

Joe@bluemarinefoundation.com





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Session Five Future Fishing

The case for spatial management in
Scotland's inshore fisheries'

Alistair Bally Philp,
Scottish Creel Fishermen's
Federation

Protecting the livelihoods of small scale inshore fishermen

The case for spatial management in Scotland's inshore waters

SCFF



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

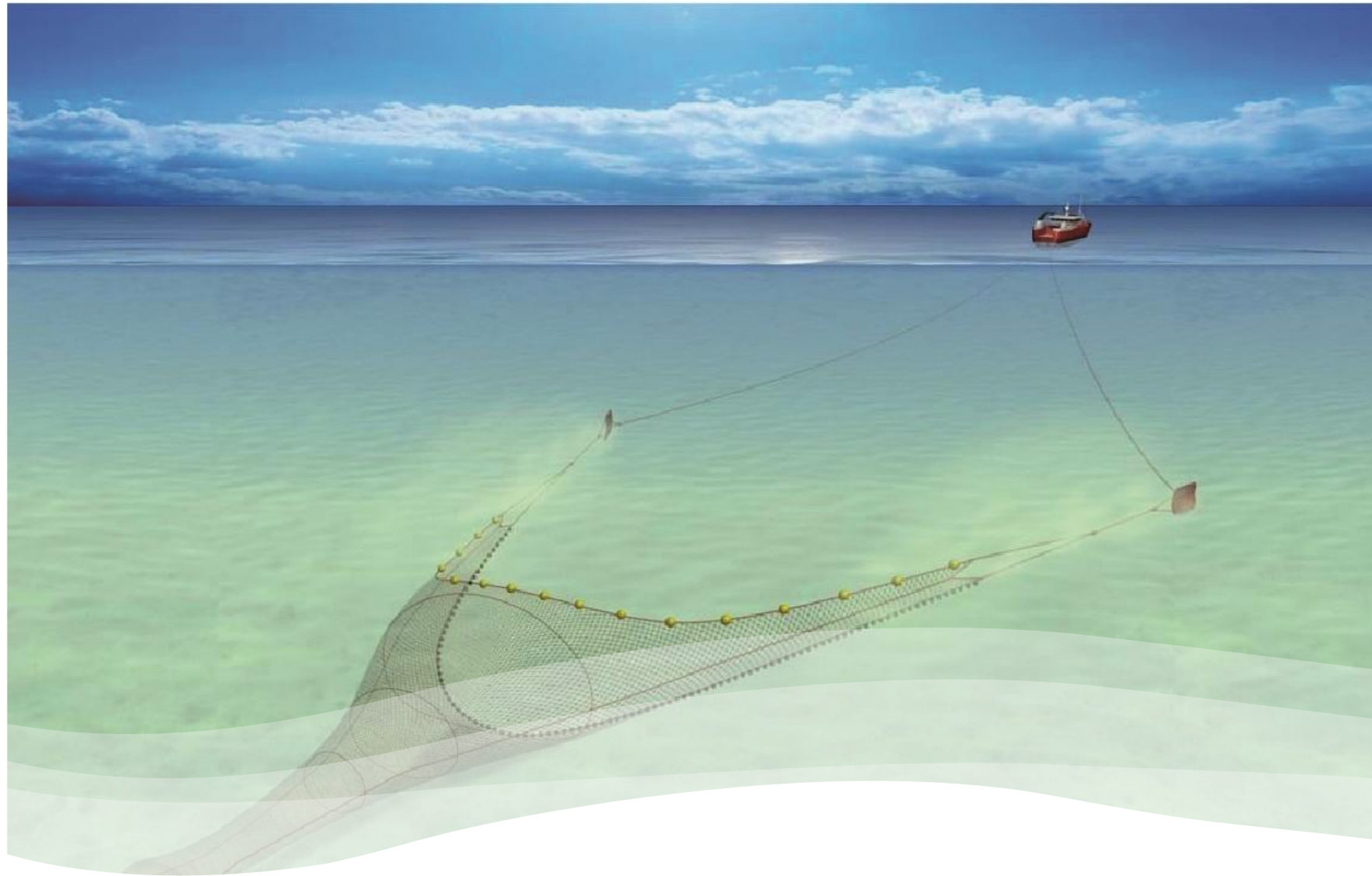
Landings  5%

Value  10%

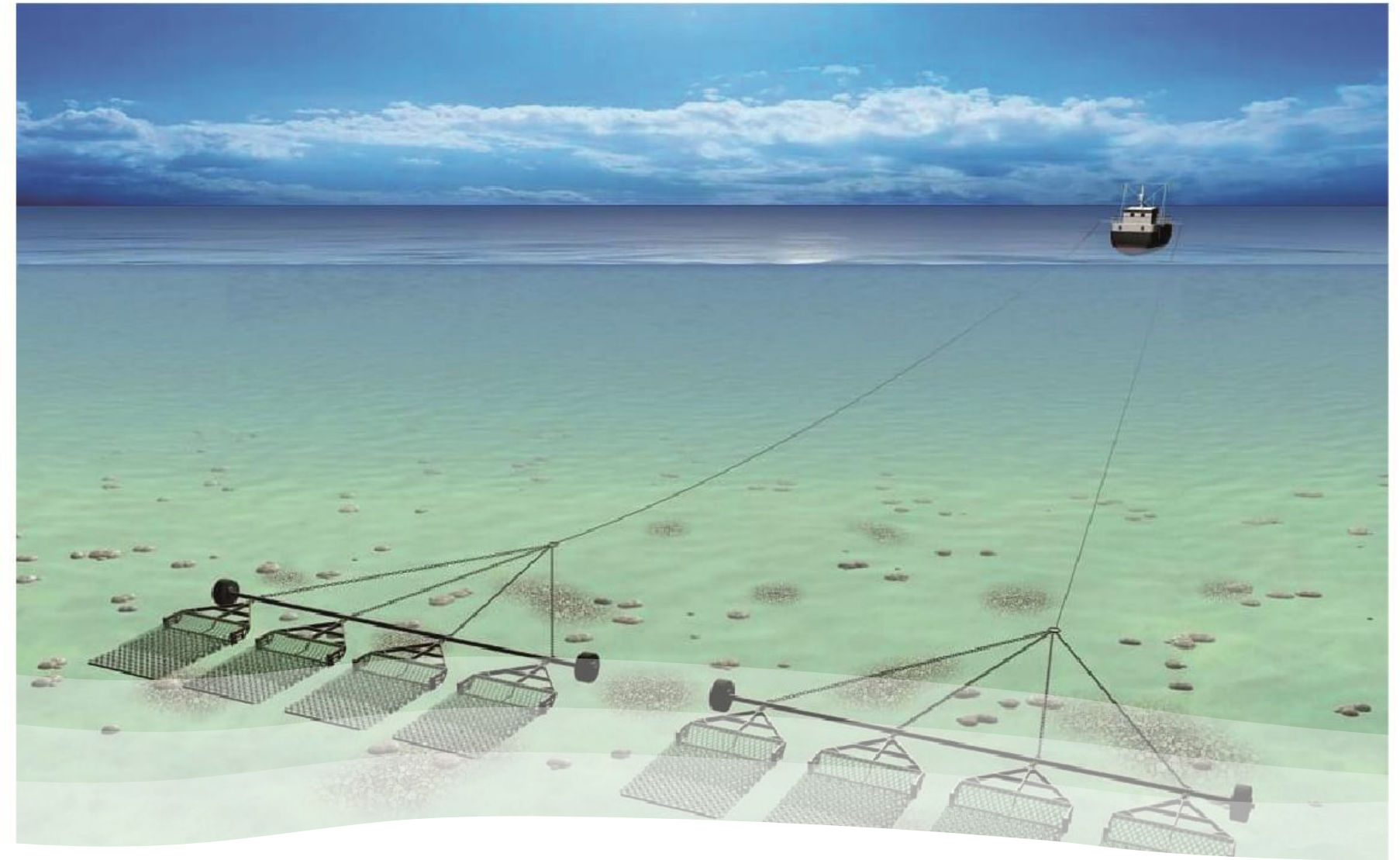
All Jobs  2/3

** SPICe breifing 2019*

Demersal Trawl

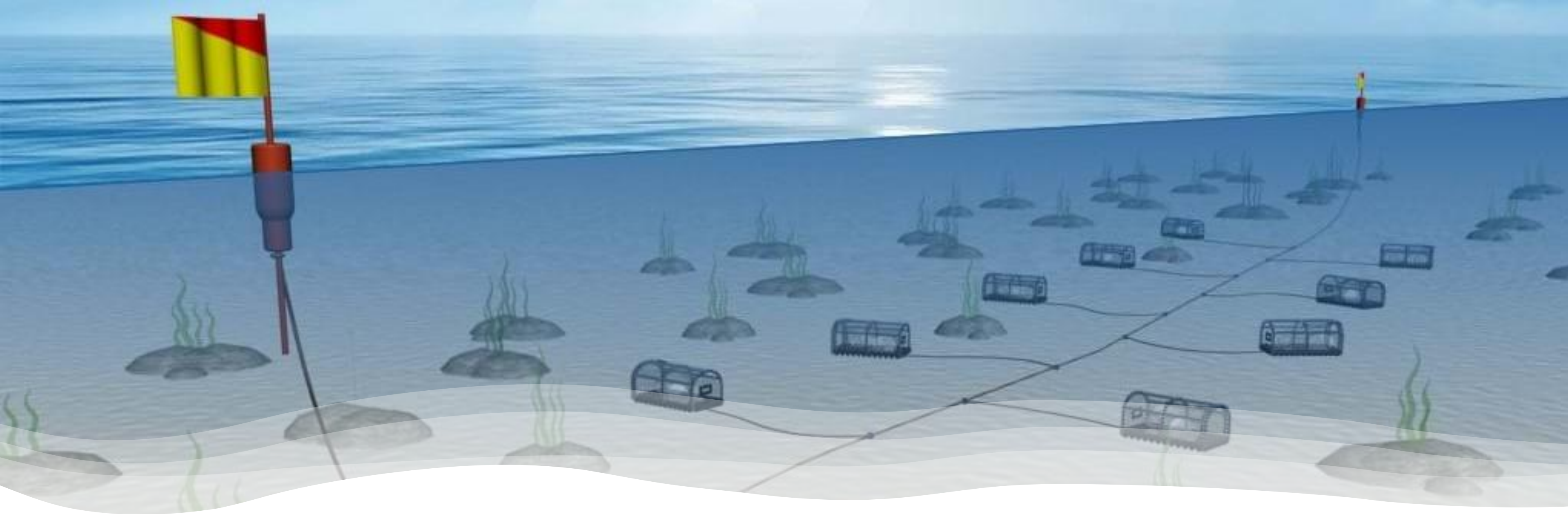


Scallop Dredge



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



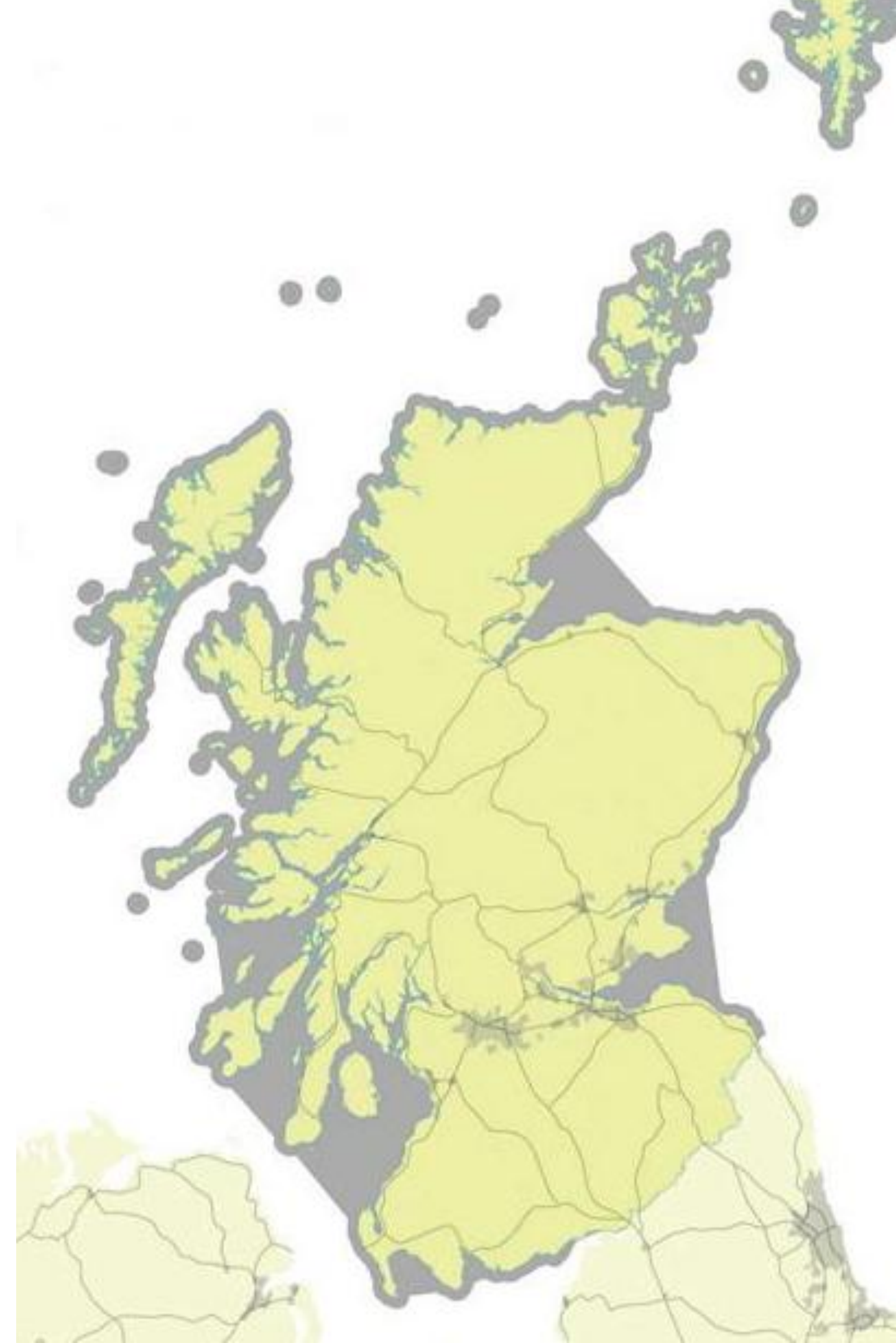
Creel Fishing is the principal static gear used in Scotland

- 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!



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

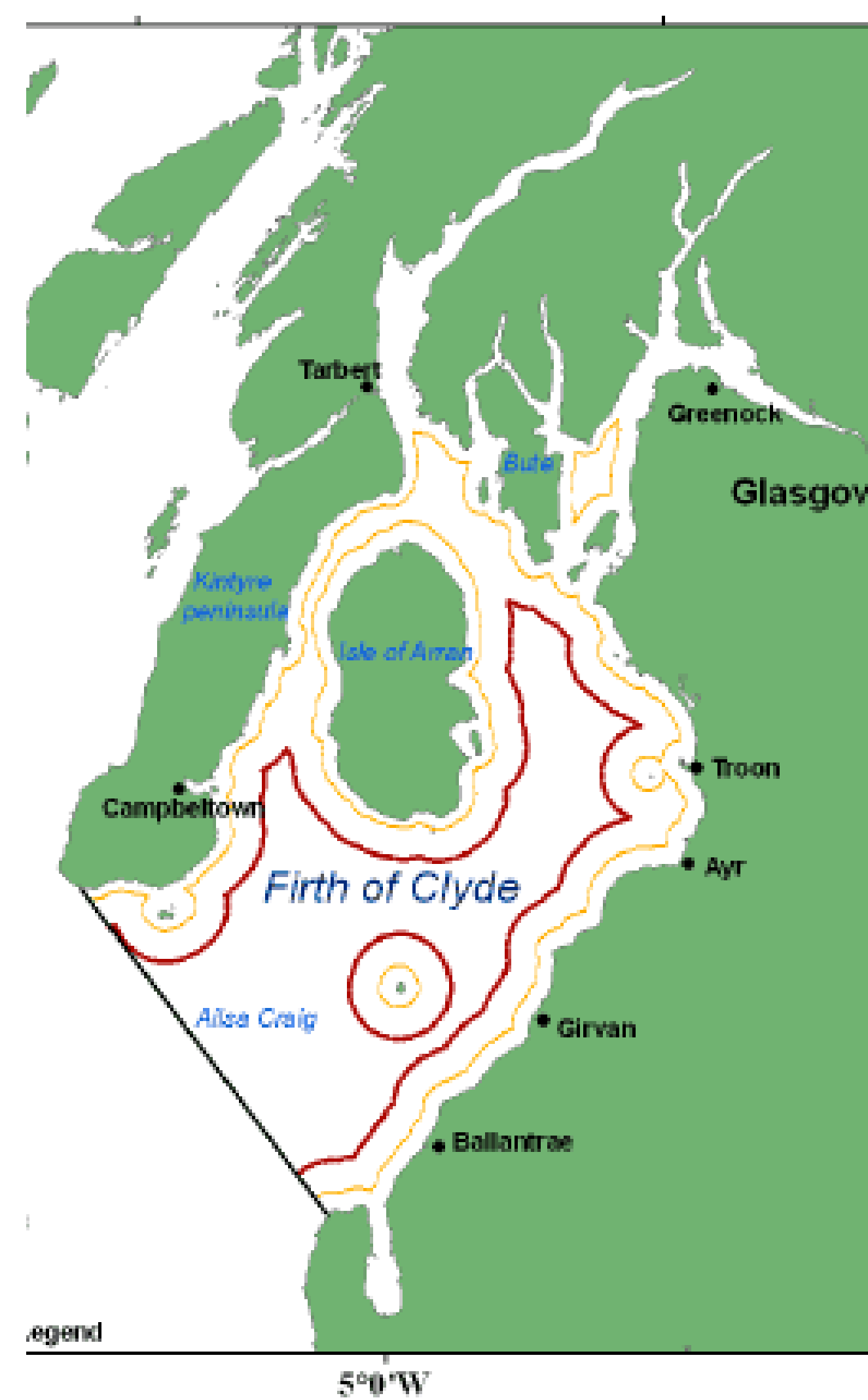
Prior to the 1960's

Over 10,000 thousand
tons of herring

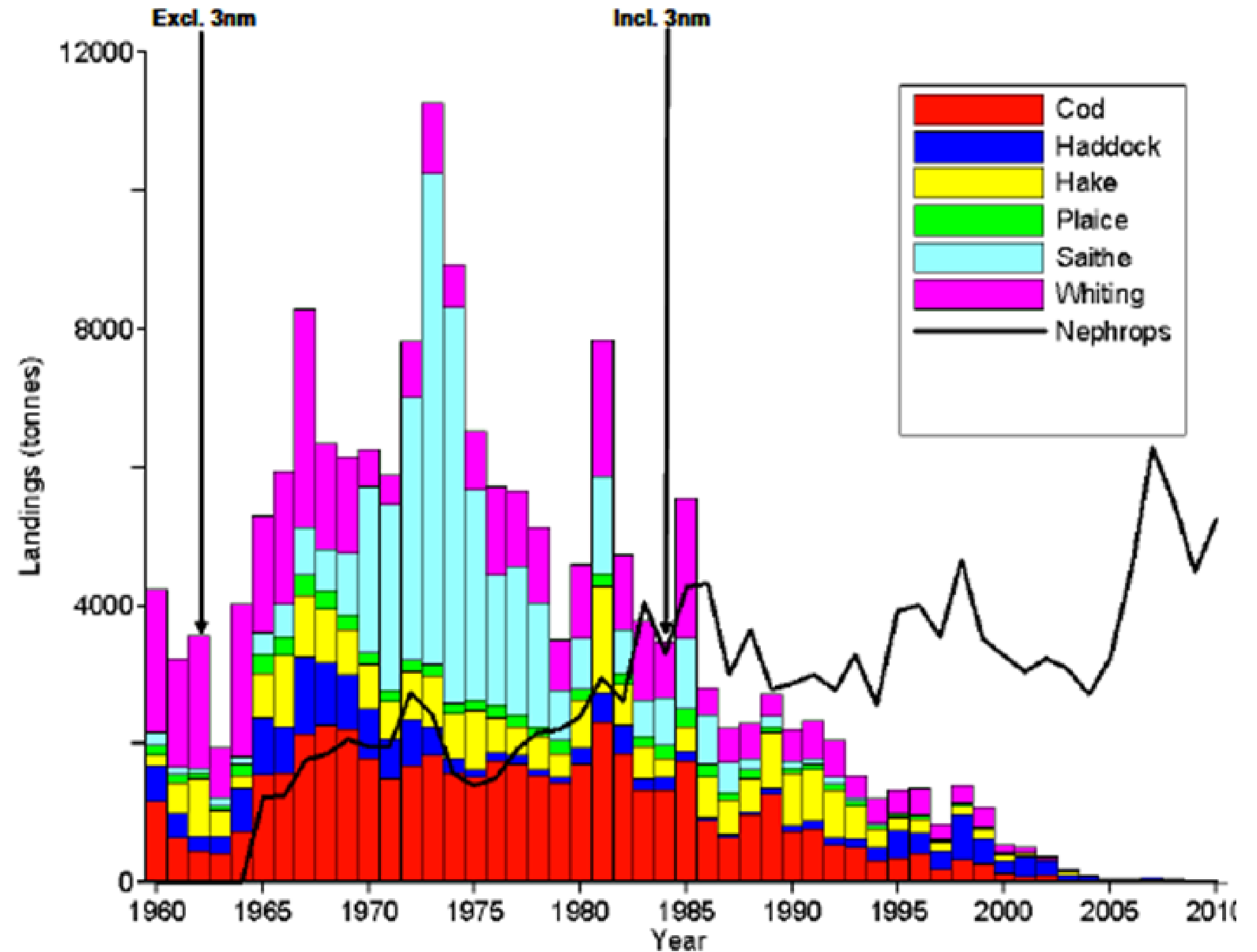
And

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

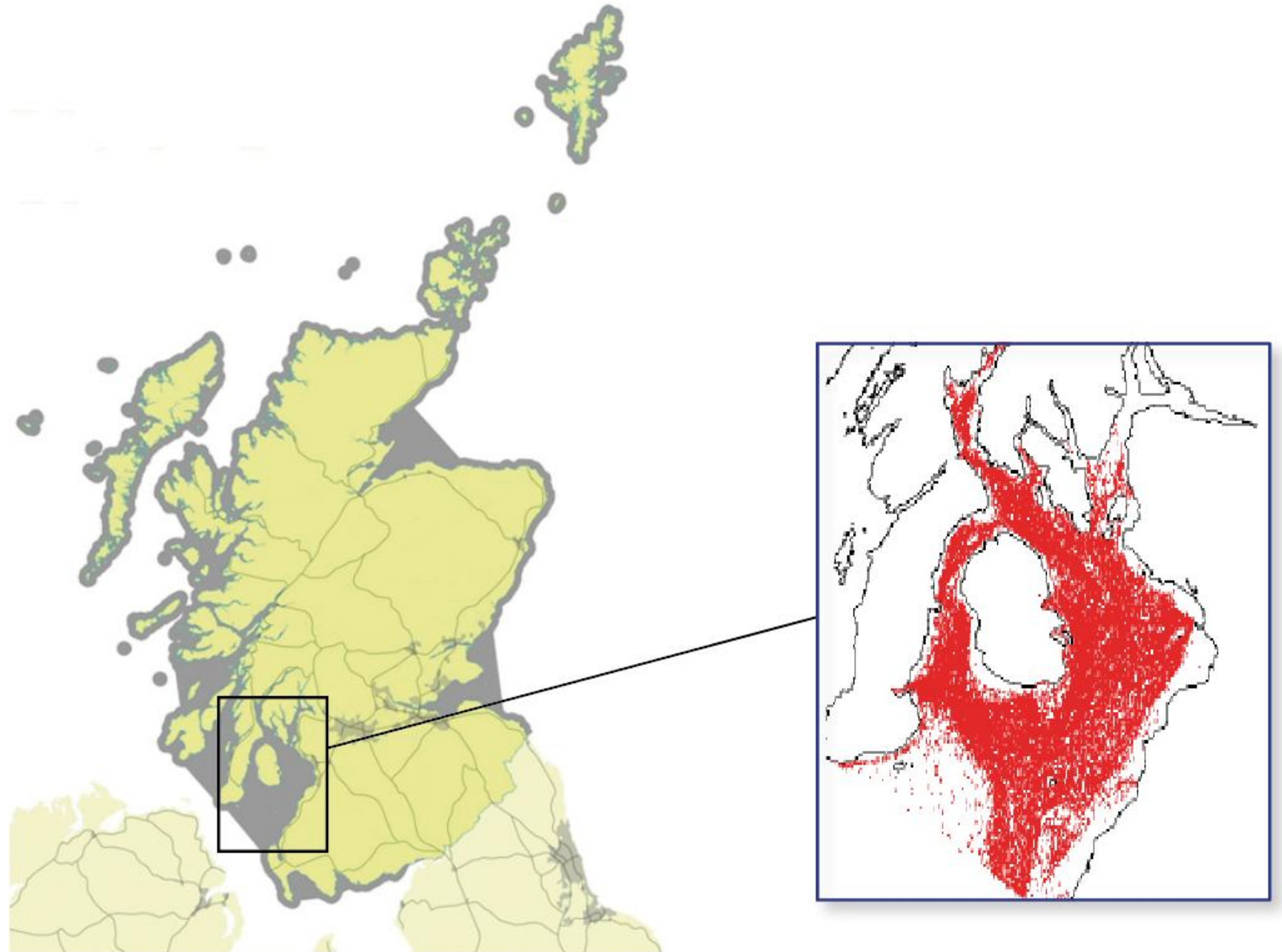
Current annual landings
of all finfish from the
whole Clyde sea area are
near zero



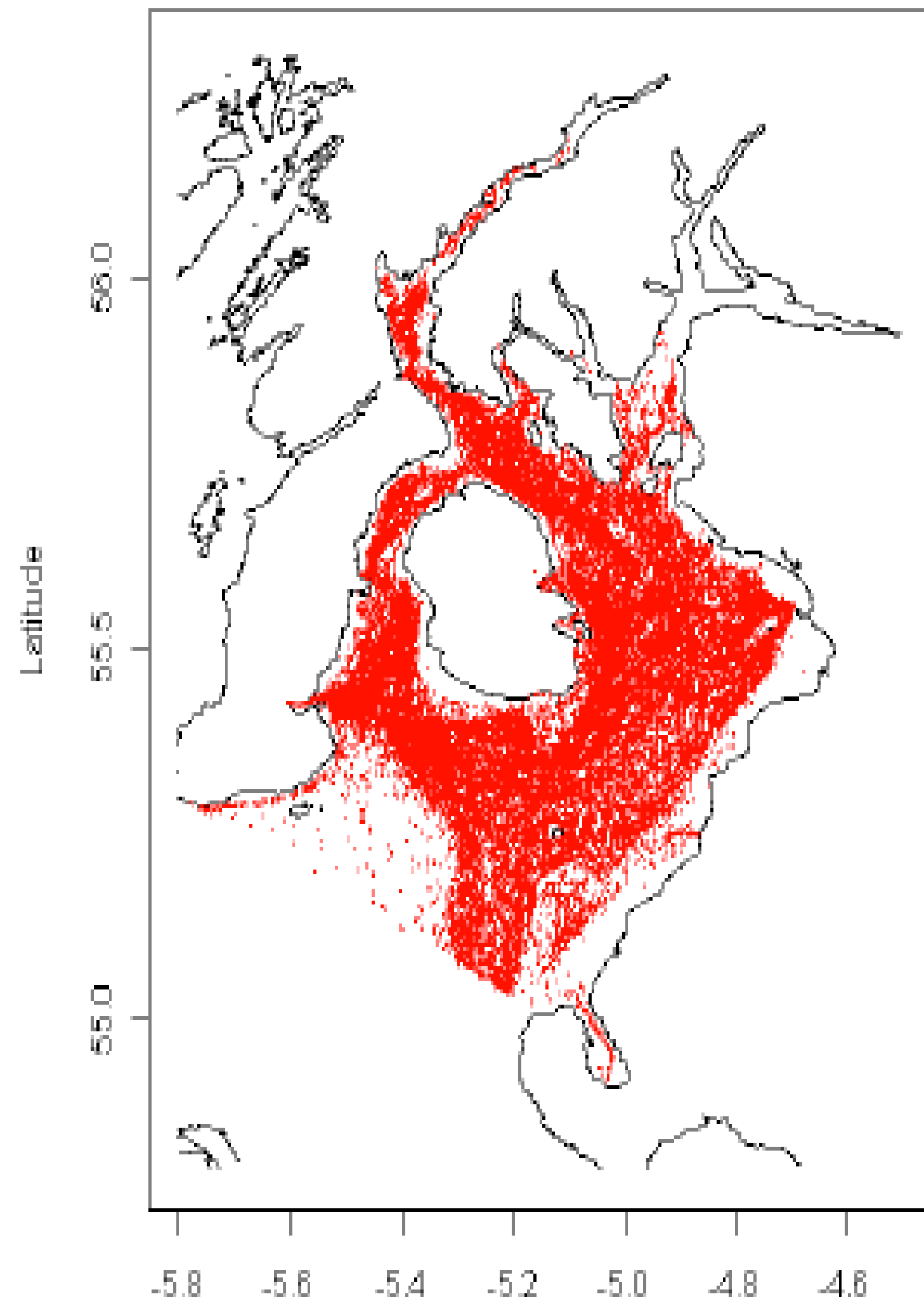
The introduction of extensive trawling precipitated the complete collapse of Demersal fish landings from the Clyde



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).

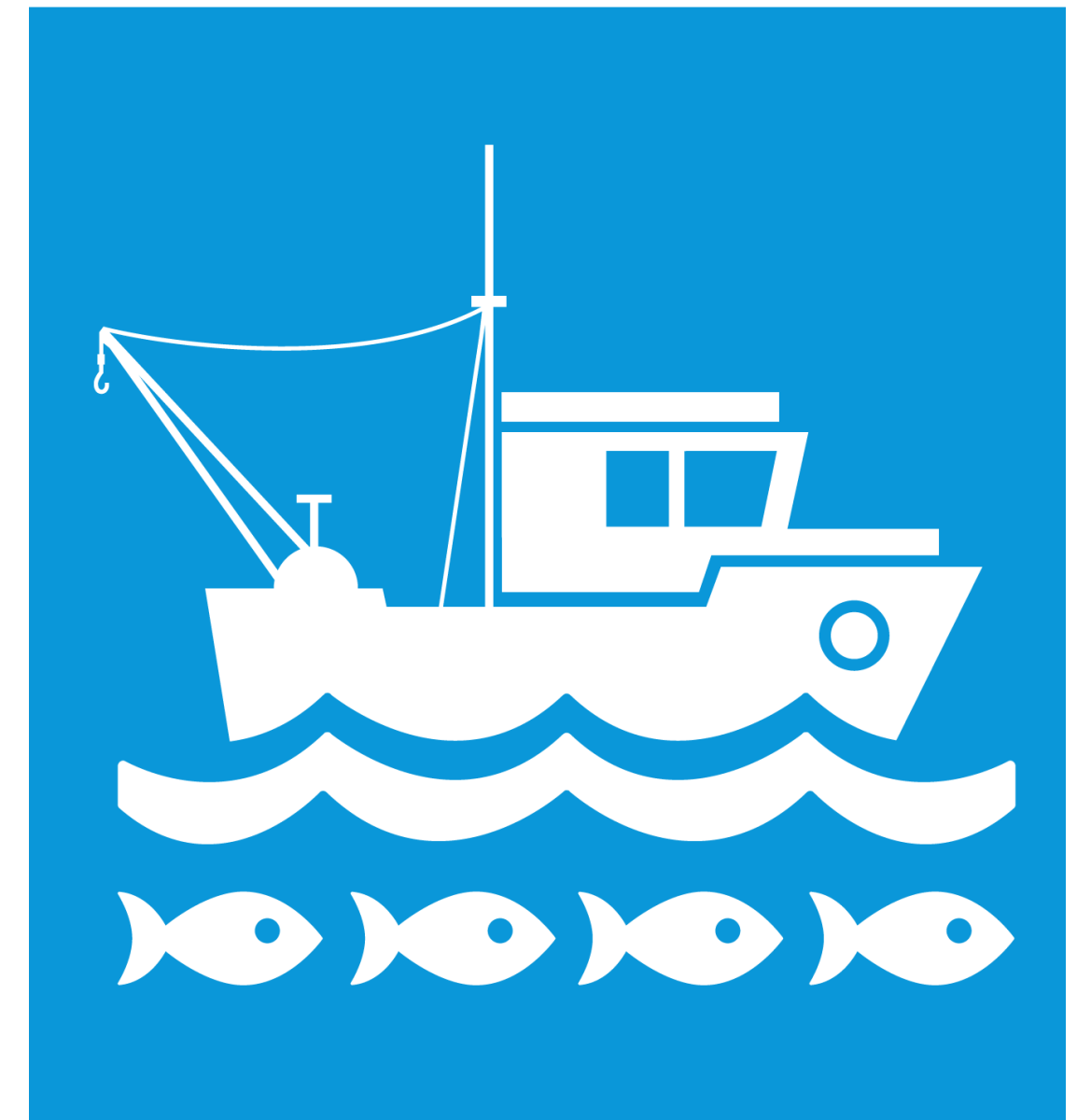
Like Art 17 of CFP



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?

TARGET

14•B

**SUPPORT SMALL SCALE
FISHERS**



Industrial fishing fleets

10% of global fisheries employees

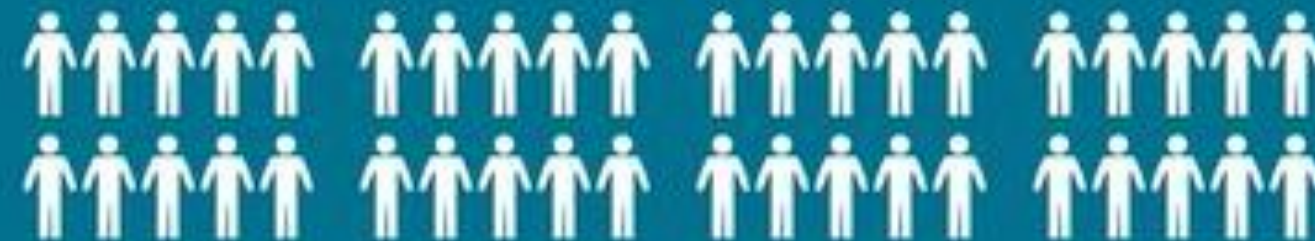
1 job per 100 tons of fish










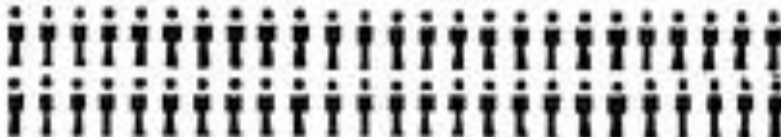

Small-scale fisheries

90% of global fisheries employees

40 jobs per 100 tons of fish



SSF generate
more jobs
and revenue
per kg of fish

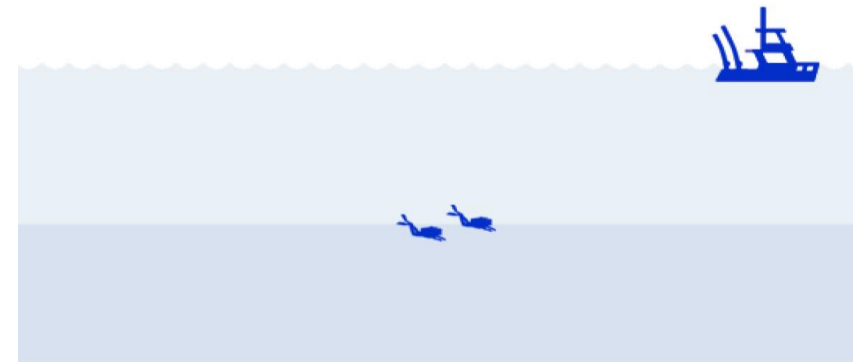
	LARGE SCALE 	SMALL SCALE 
Number of fishermen employed	 AROUND 500,000	 OVER 12,000,000
Annual catch of marine fish for human consumption	 AROUND 29 MILLION TONNES	 AROUND 24 MILLION TONNES
Capital cost of each job on fishing vessels	\$ \$ \$ \$ \$ 30,000-\$ 300,000	\$ \$ 250-2,500
Fishermen employed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

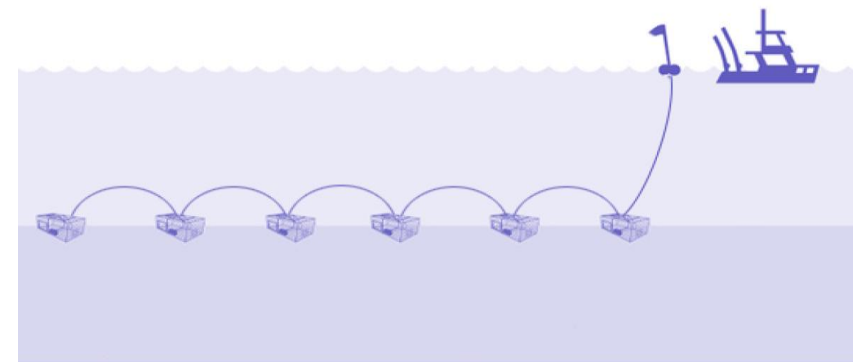
2 DIVERS

200m²



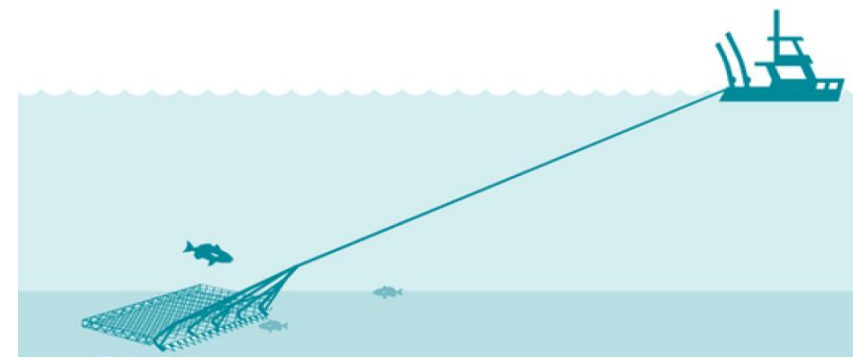
2 PERSON CREELER

500m²



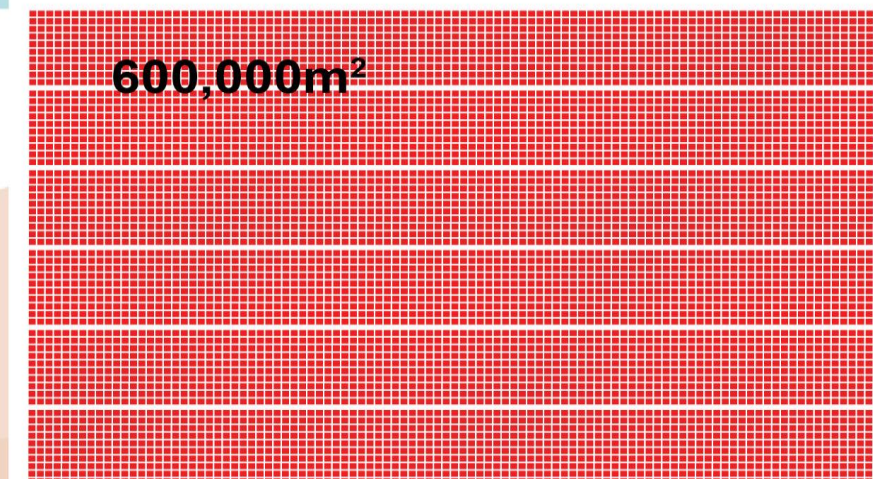
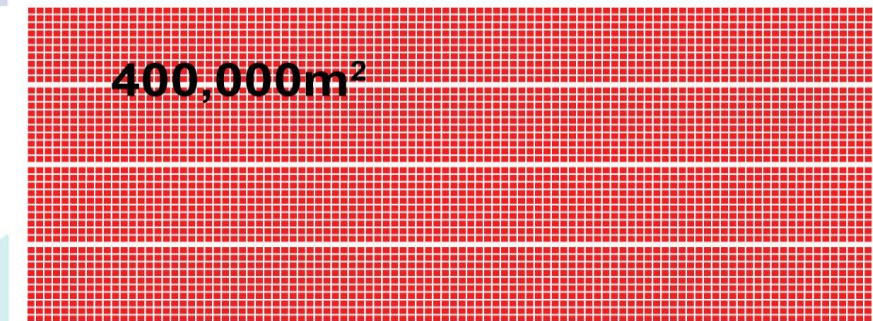
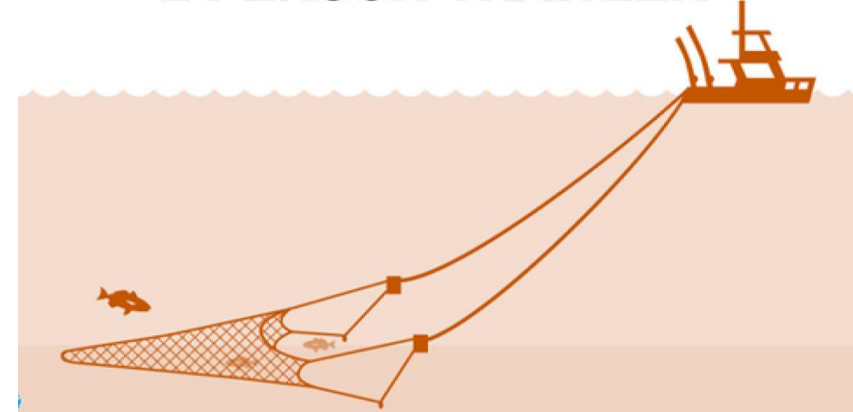
2 PERSON DREDGER

400,000m²



2 PERSON TRAWLER

600,000m²



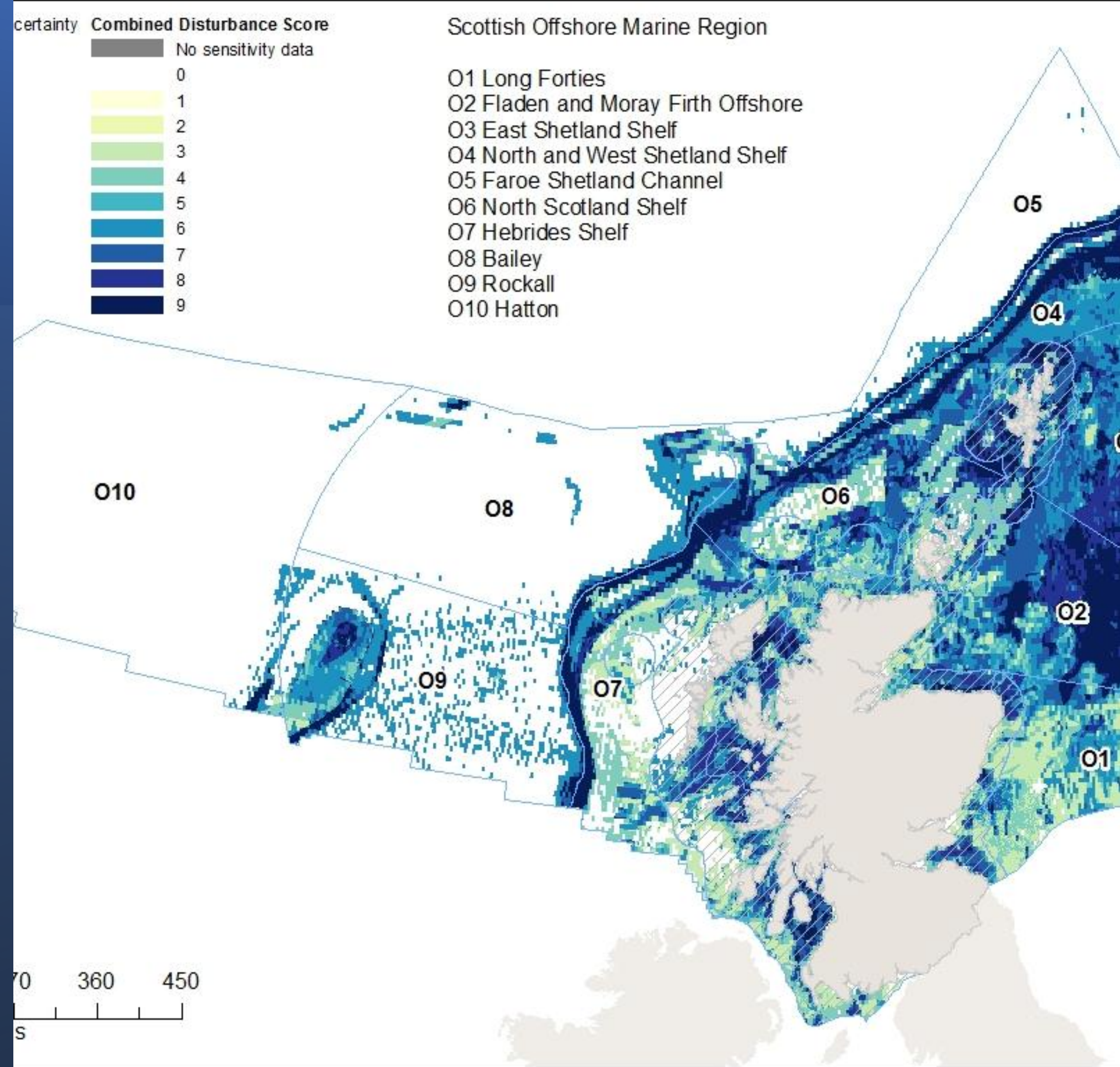
MSFD Good environmental status

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



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;

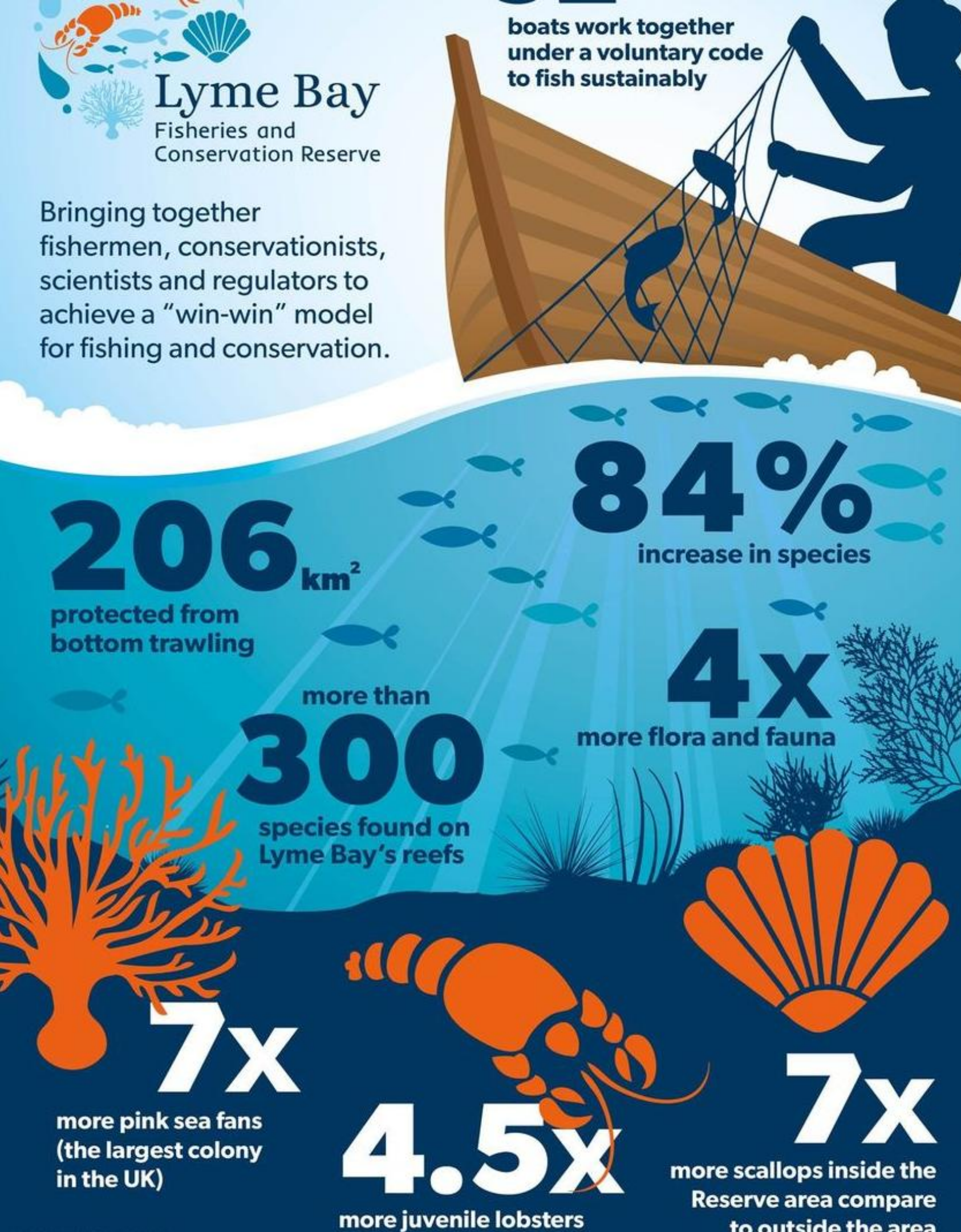
(b) the history of compliance with regulatory requirements relating to fishing;

(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

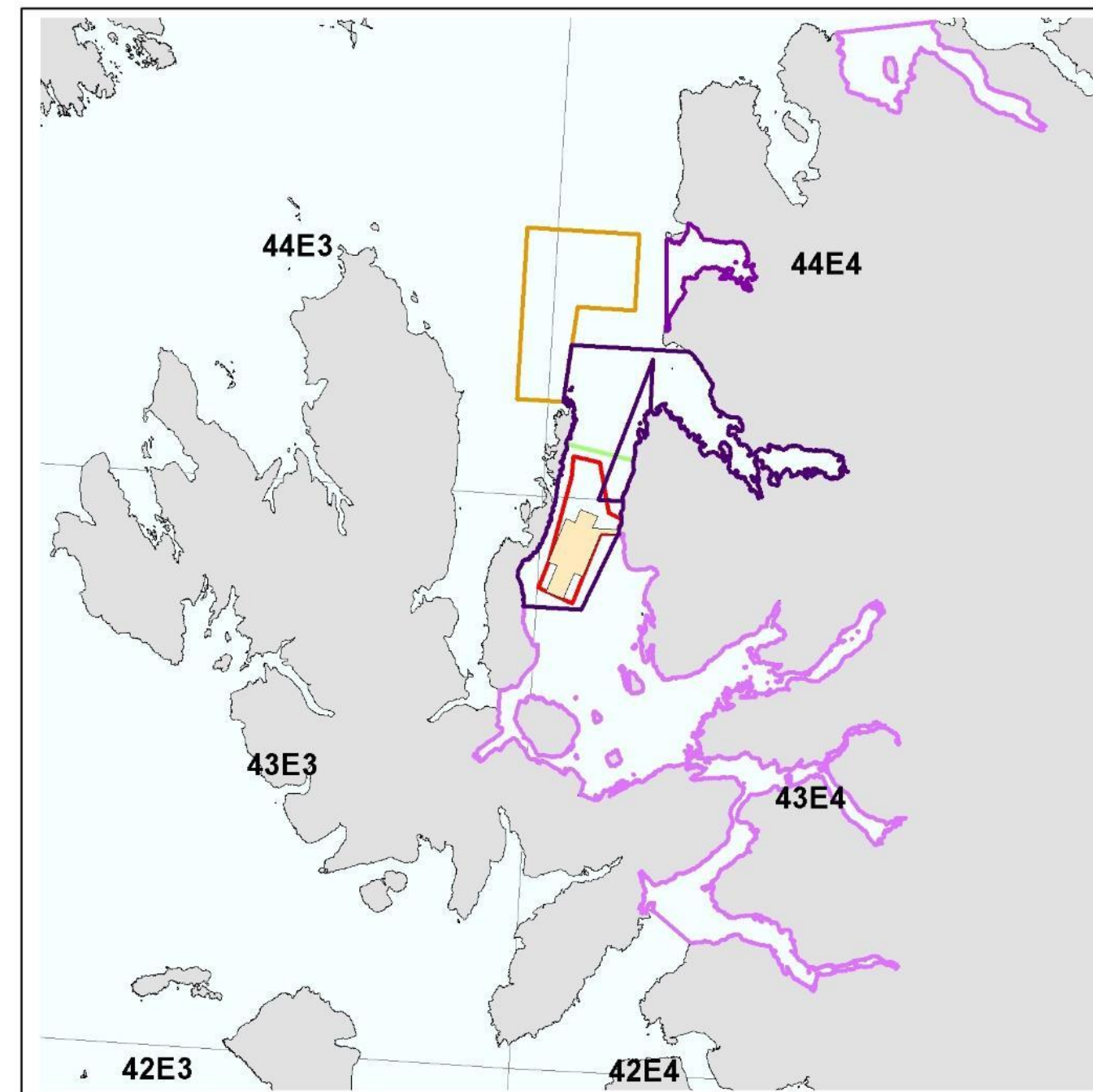
(a) the use of selective fishing gear, and

(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).



- 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

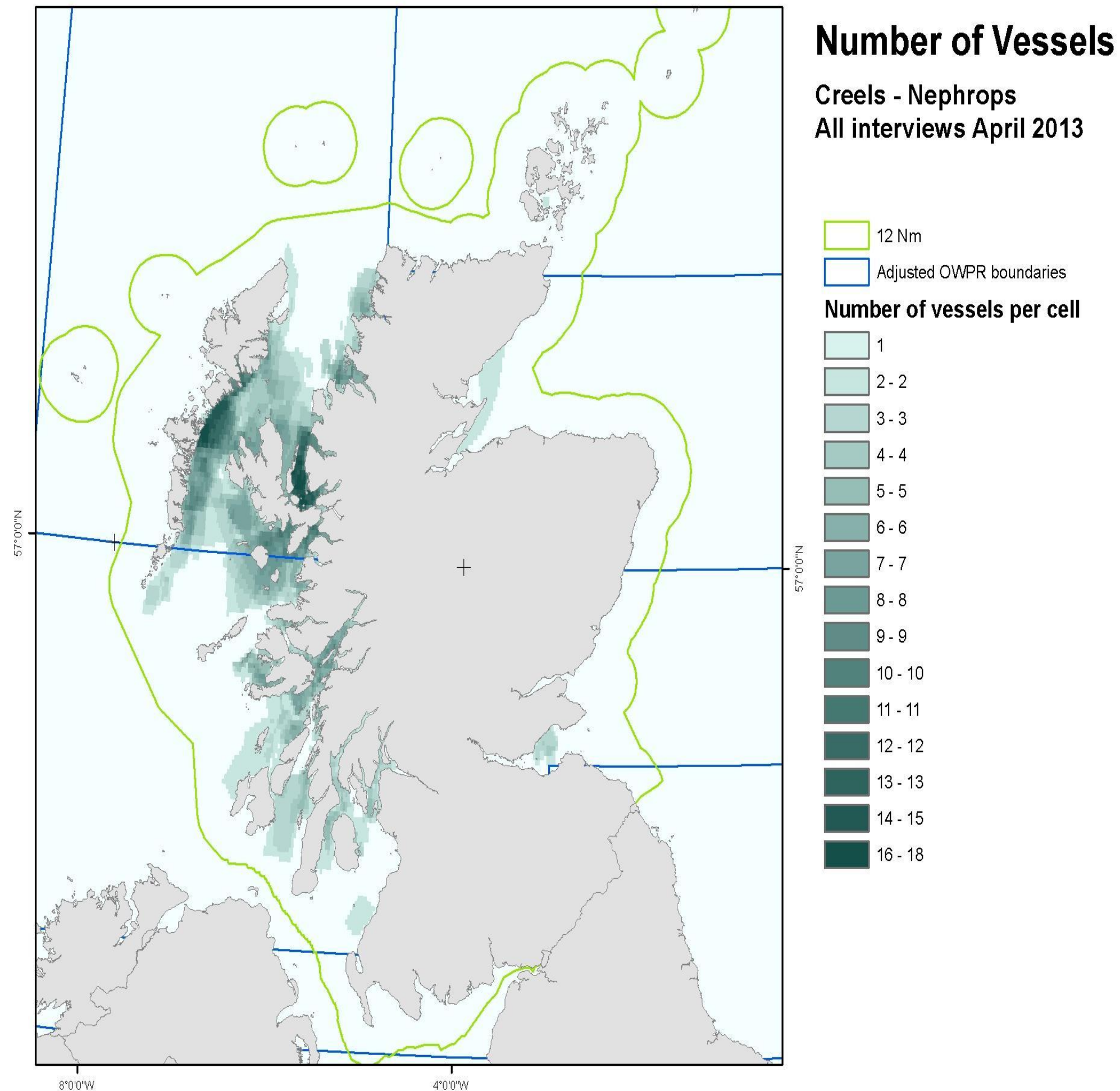
The Inner Sound is exceptional in containing an extensive no take zone, creel only zones and not being fully opened to trawling all year round



Fishery Restricted Areas

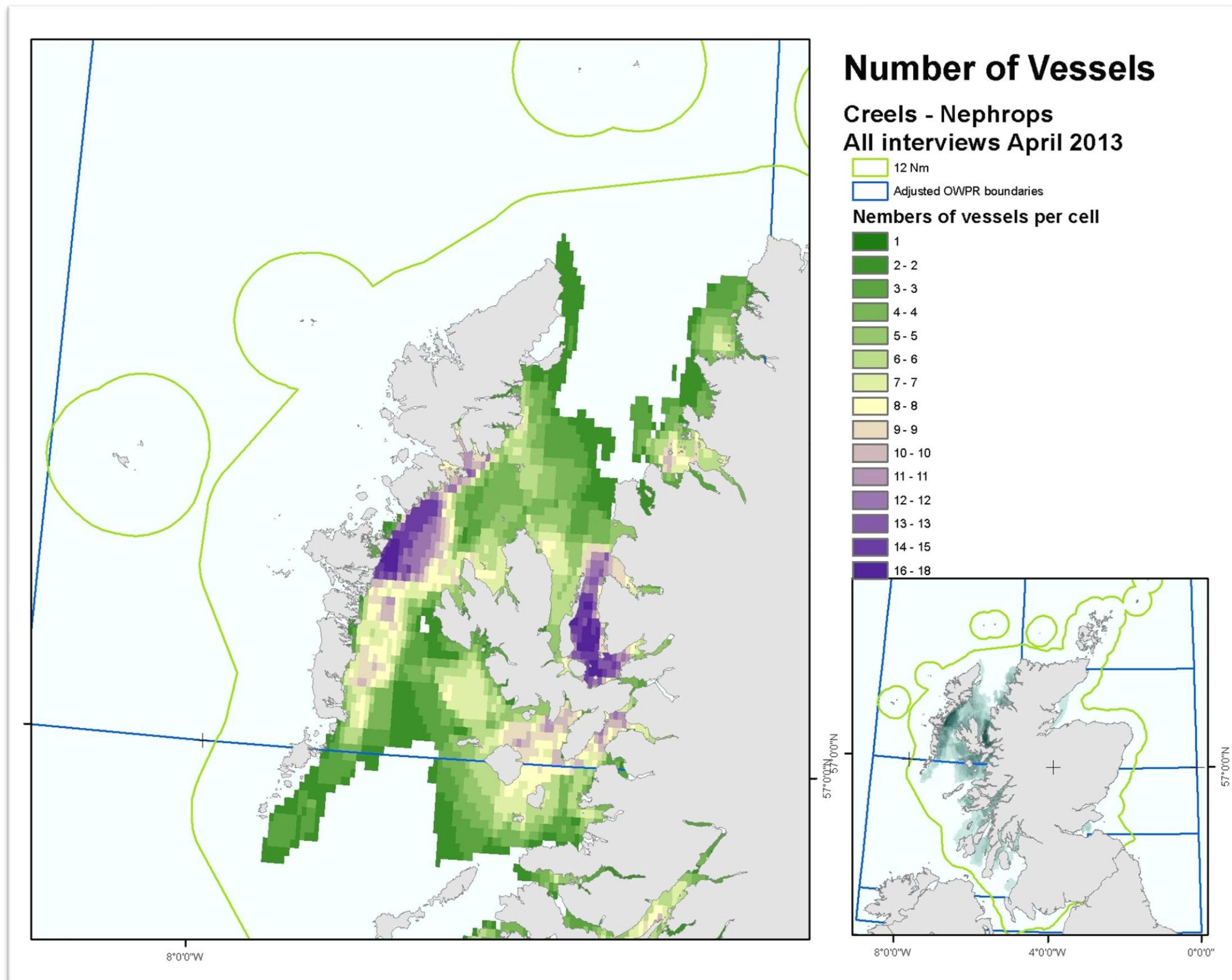
- BUTEC - closed to all fishing
- BUTEC proposed Inner Sea Area
- BUTEC proposed Outer Sea Area
- Creel only zone
- Trawl only zone
- Closed to mobile gear
- Closed to mobile gears Oct to March

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.

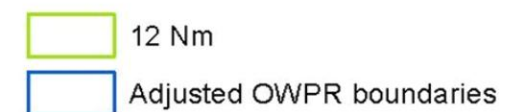


More Revenue

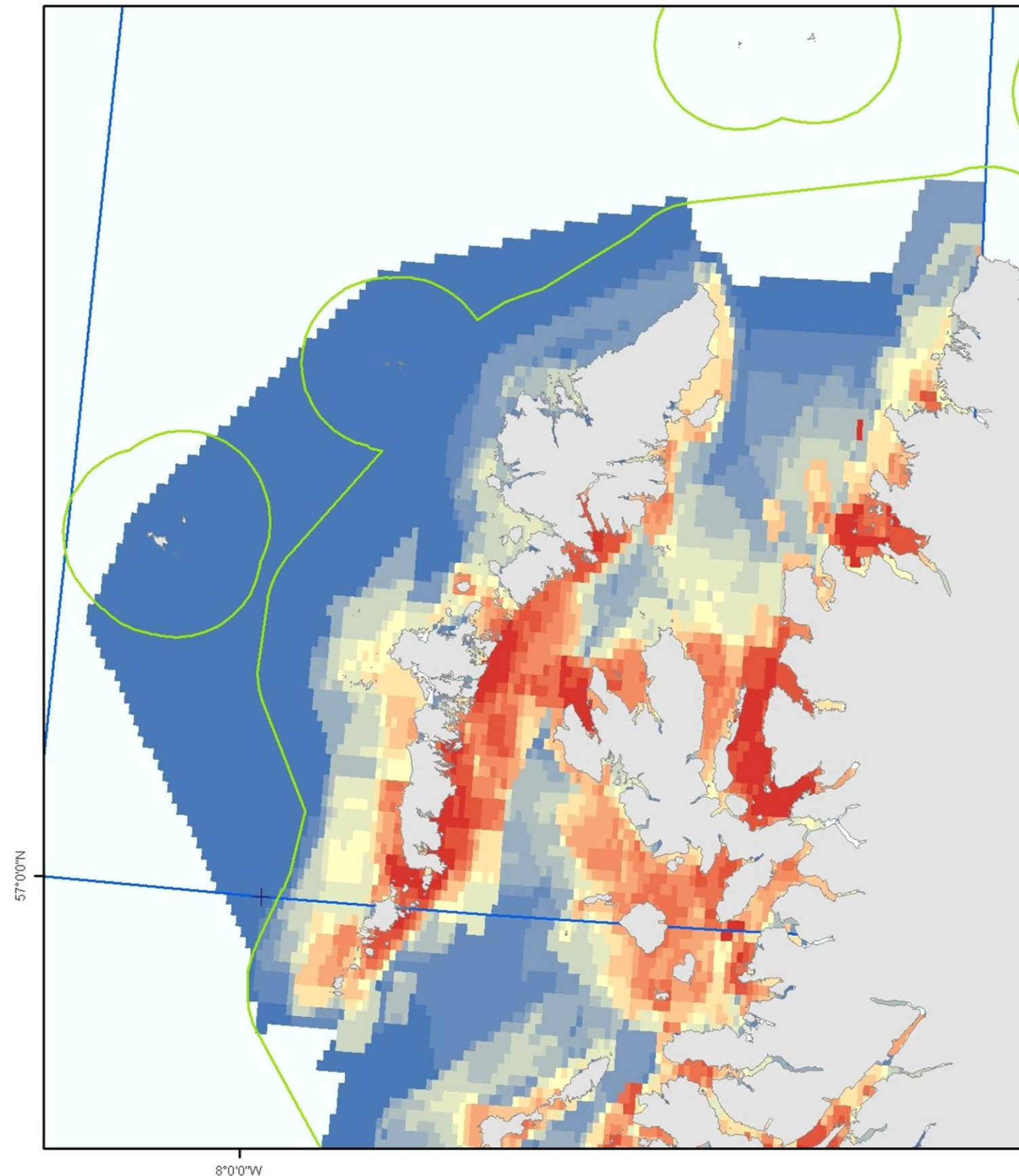
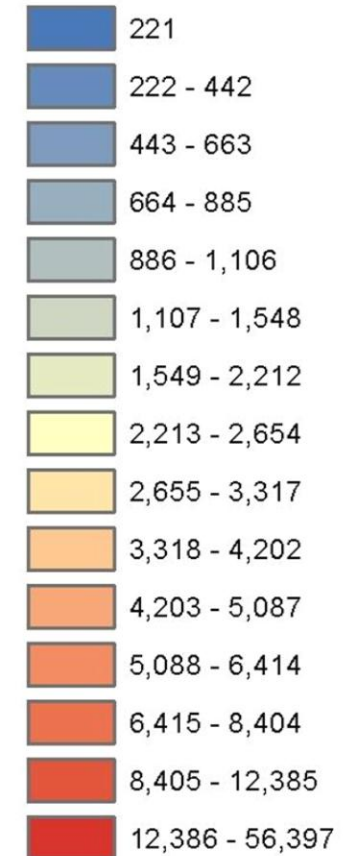
- Scotmap illustrates that the Inner Sound clearly generates more revenue per Sq km than almost any other fishery in the west coast of Scotland

Monetary Value

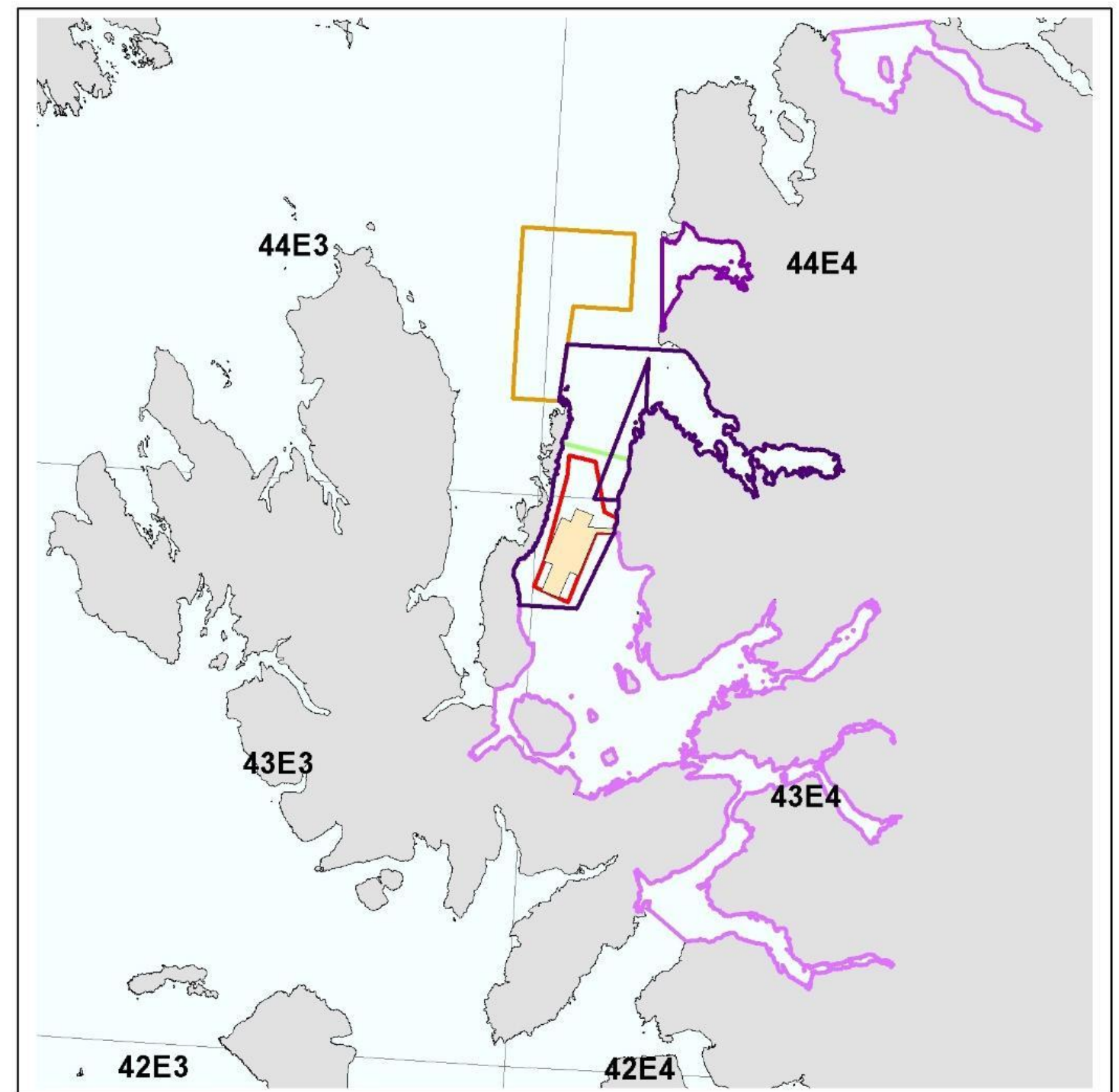
All interviews April 2013



£s per cell



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!



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Future Fishing

Recognising and harnessing the national
benefit of sustainable fisheries across
the UK: You don't know what you've got
'til it's gone'

Rob Clark,
CEO, Association of Inshore Fisheries
and Conservation Authorities



Securing Sustainable Inshore Fisheries in the UK: navigating a roadmap for change.

Robert Clark



SUSTAINABLE FISHING

LEAVING ENOUGH
fish in the OCEAN,

RESPECTING HABITATS

and ENSURING...

people who *DEPEND* on fishing
CAN MAINTAIN their LIVELIHOODS



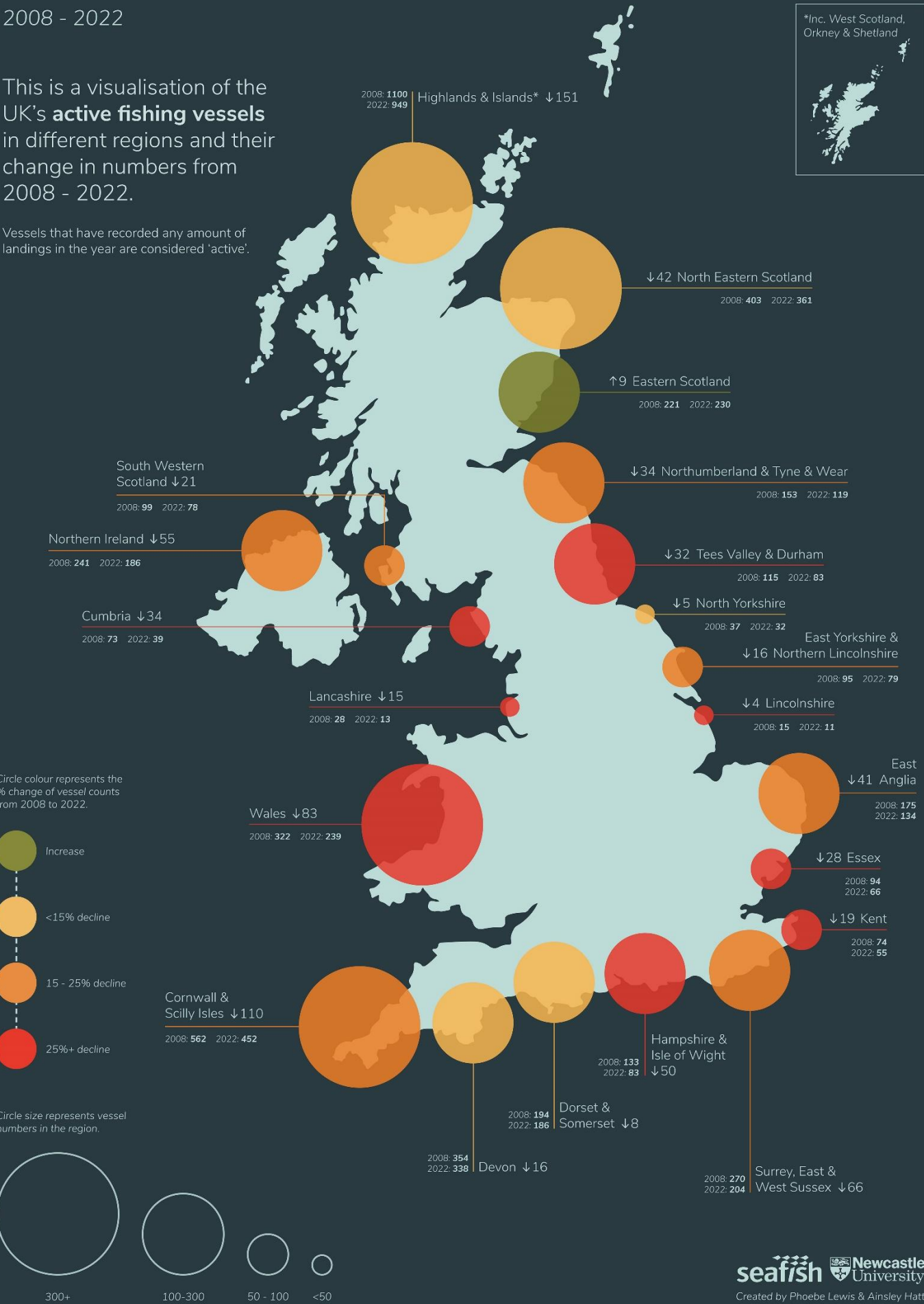
Fishing Vessel Numbers UK

Data from Seafish, using two static points of 2008 and 2022 at NUTS2 level.

2008 - 2022

This is a visualisation of the UK's **active fishing vessels** in different regions and their change in numbers from 2008 - 2022.

Vessels that have recorded any amount of landings in the year are considered 'active'.

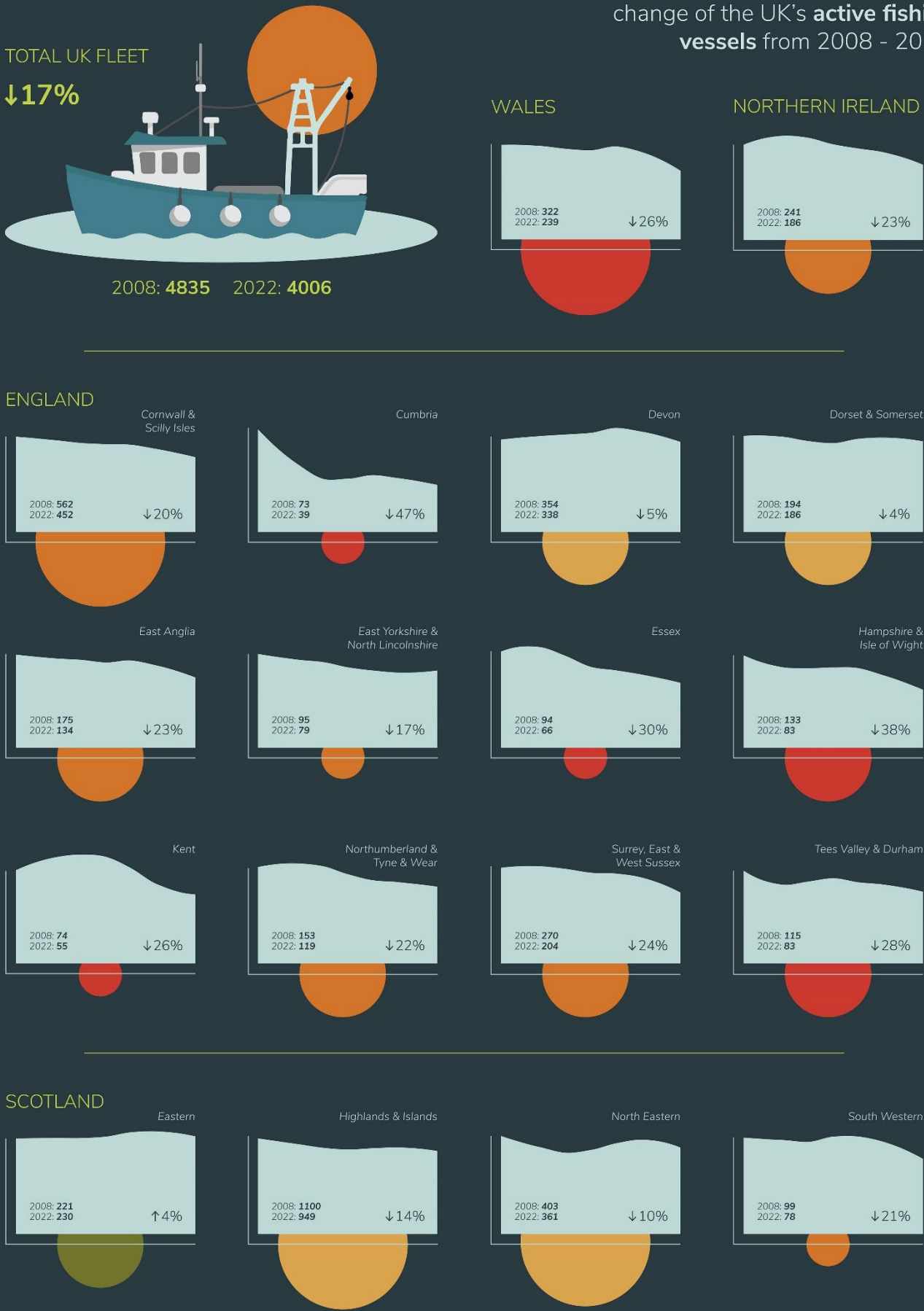


Fishing Vessel Numbers UK

Data from Seafish at NUTS2 level. Regions with fewer than 50 vessels are not included.

2008 - 2022

This visualisation shows the % change of the UK's **active fishing vessels** from 2008 - 2022.

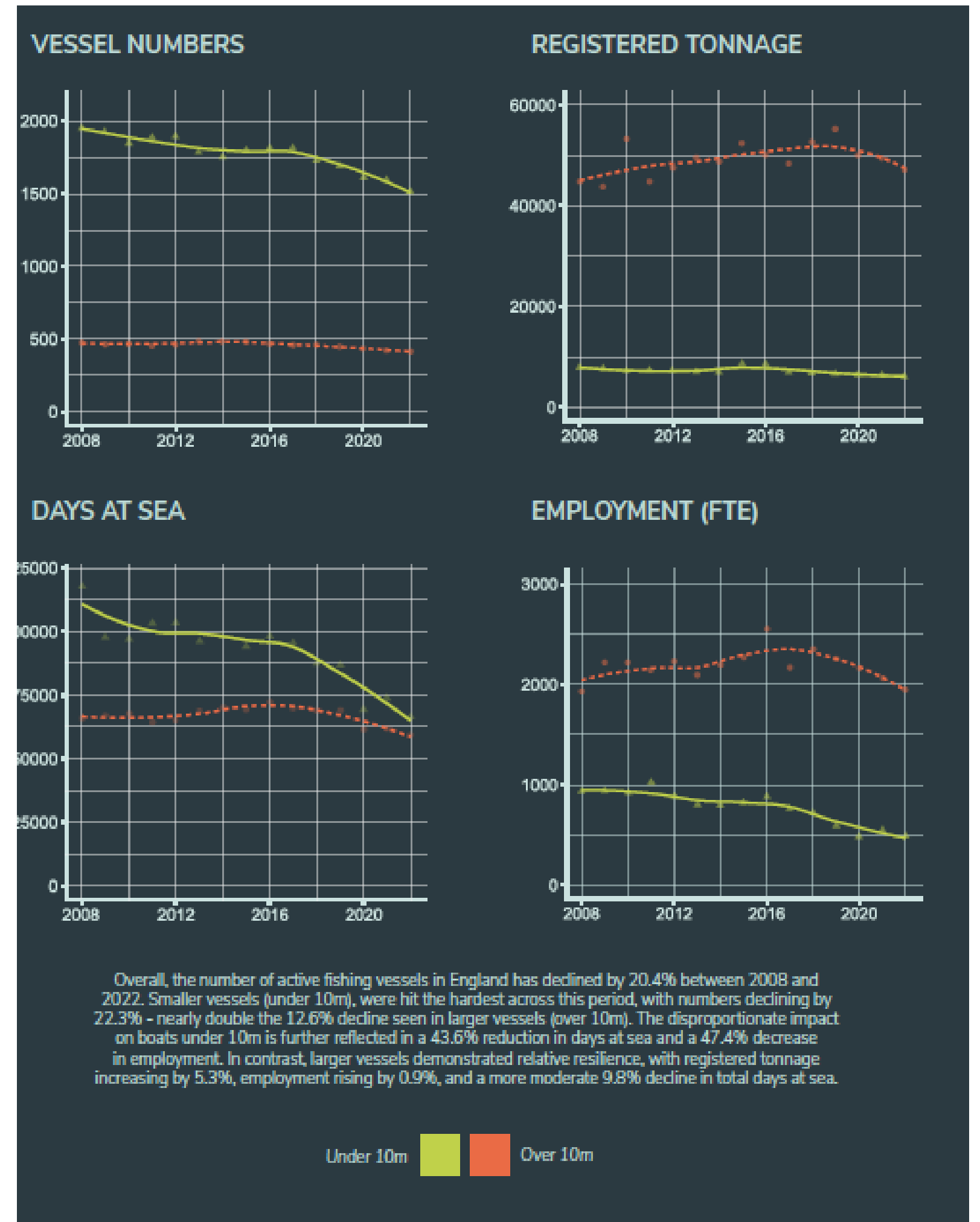


What is the nature of the decline in the fishing fleet?

Sector disparity in England with under 10m sector being hard hit

Between 2008-2022 (England data)

- Overall decline in active fishing vessels 20.4%
- Under 10m boats declined by 22.3% compared with 12.6% decline in over 10m vessels
- 30% of under 10m boats land their catch in rural areas relative to 13% over 10m vessels, indicates the fleet decline may hit rural areas harder



The public values our fleet

- Social values research in fishing towns of Cromer, Whitby and North Shields.

(Newcastle University, AIFCA and Natural England)



THE DATA...

is VERY CLEAR.



Autumn 2024: Inshore and small-scale fisheries workshops – addressing decline in the fleet

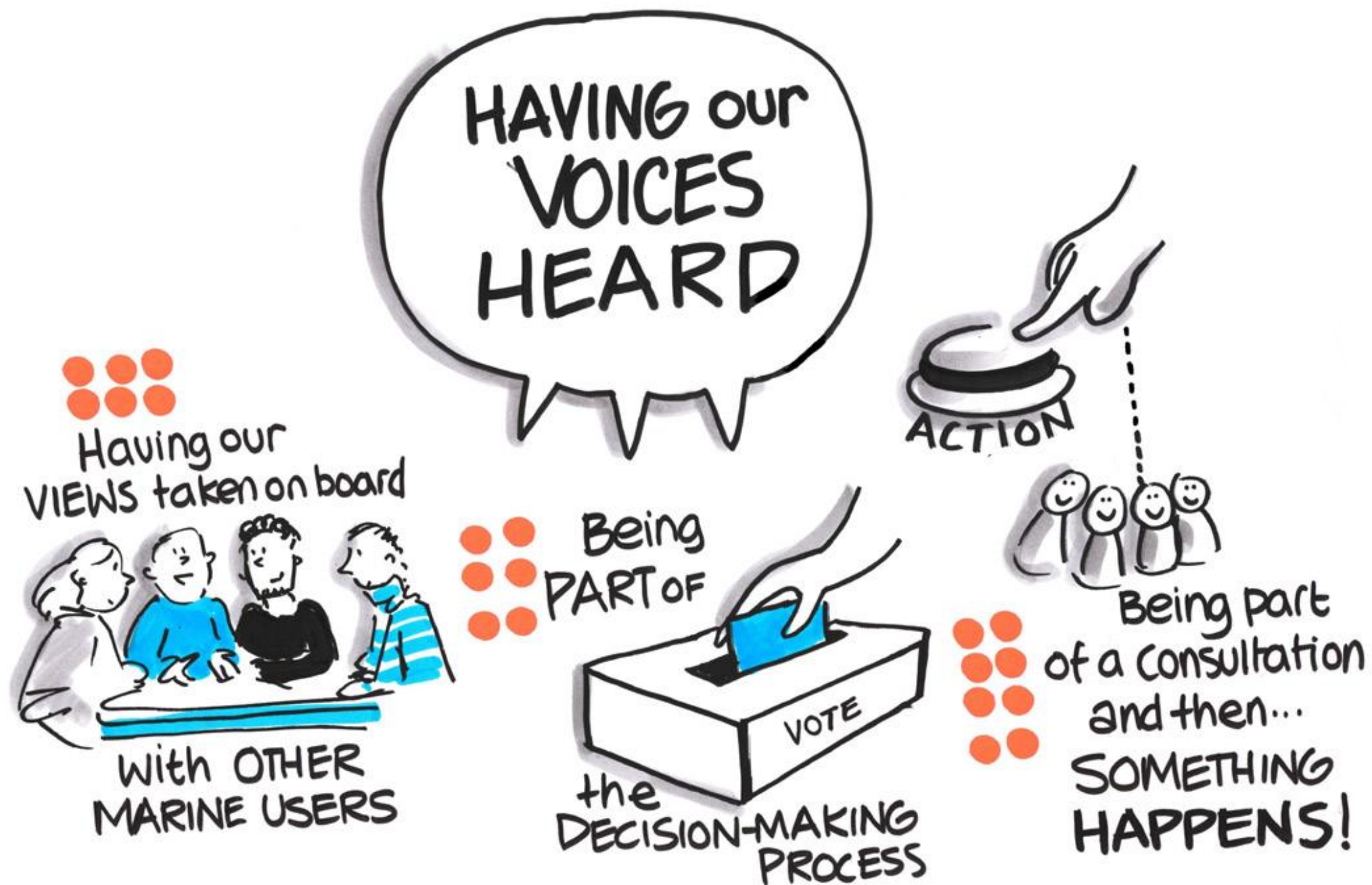
Consortium of 7 organisations (facilitated by Esmée Fairbairn Foundation funding).

Poole (southern) and Whitby (northern), 120 participants, 55 of which were active fishermen

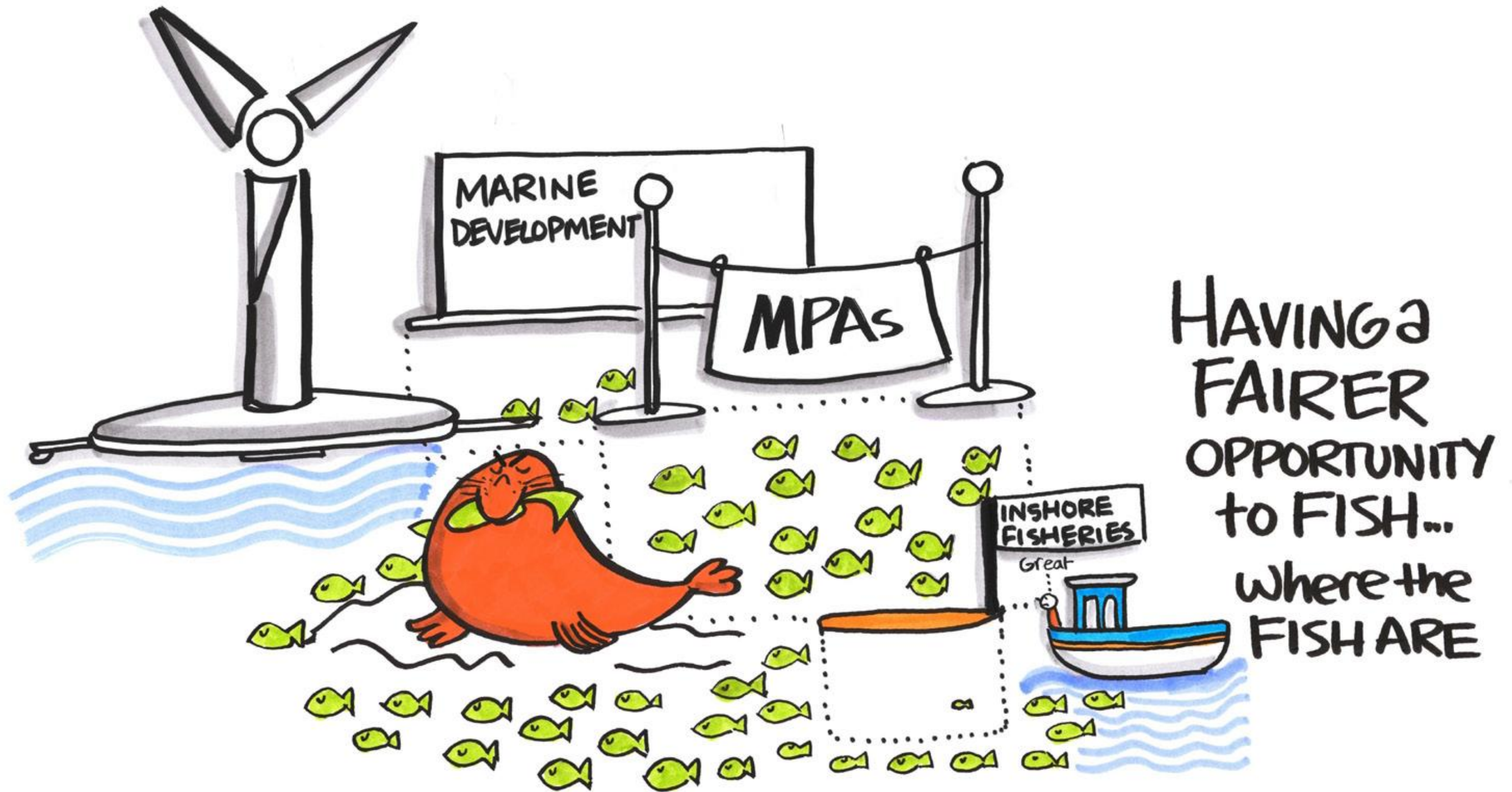
1. Improve understanding of the drivers of decline/ co-create a narrative to support the data
2. Drilling down into the regions: fishermen's organisations, IFCAs and MMO RFG team
3. Platform for under 10m skippers (not exclusively) to share their experiences of decline
4. Discuss **viable** options to mitigate the decline in the fleet (mixed groups: fishermen, eNGOs and regulators)
5. Shining a light on livelihood maintenance as a part of sustainable fisheries



Priority 1. Being heard

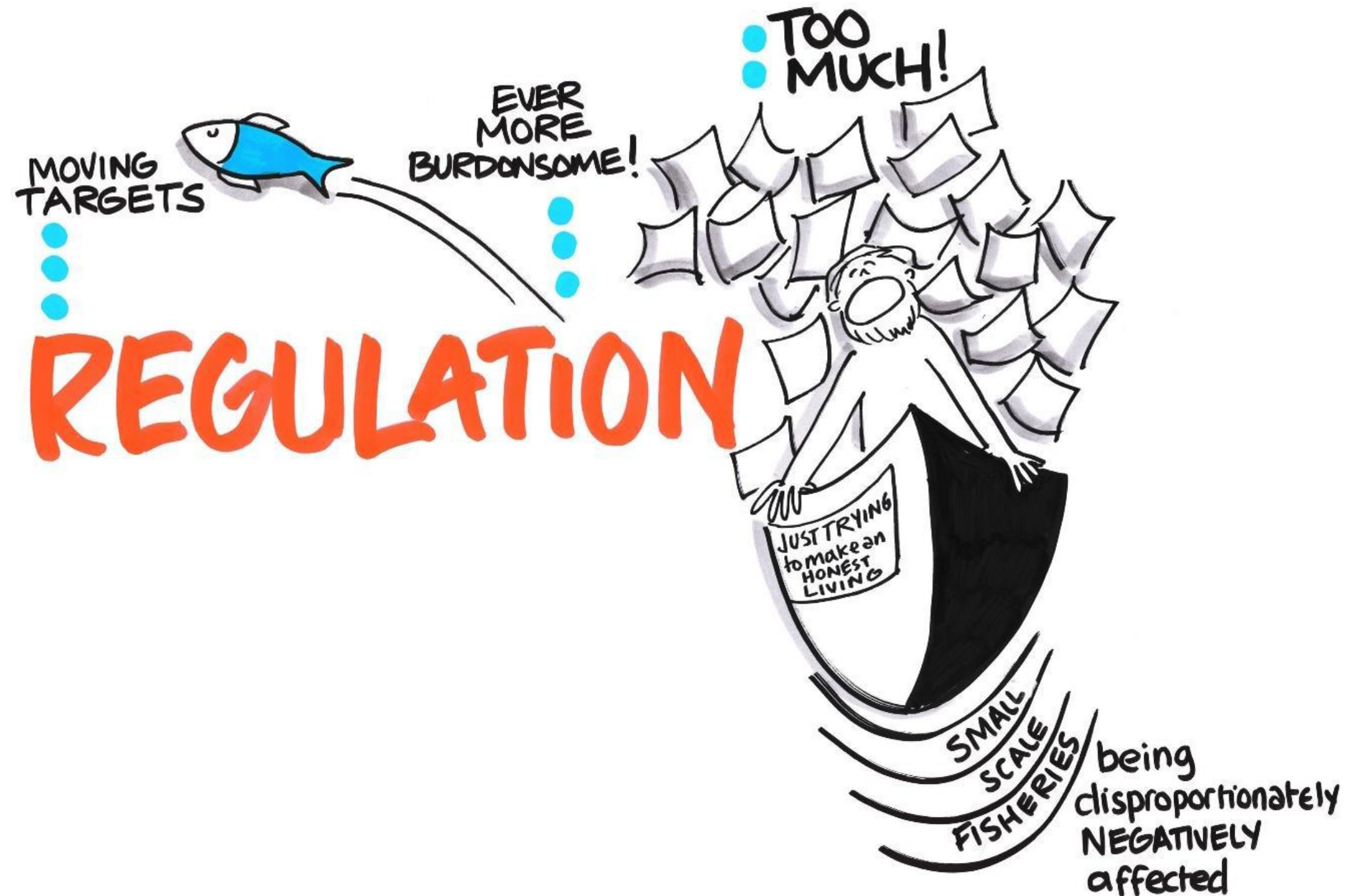
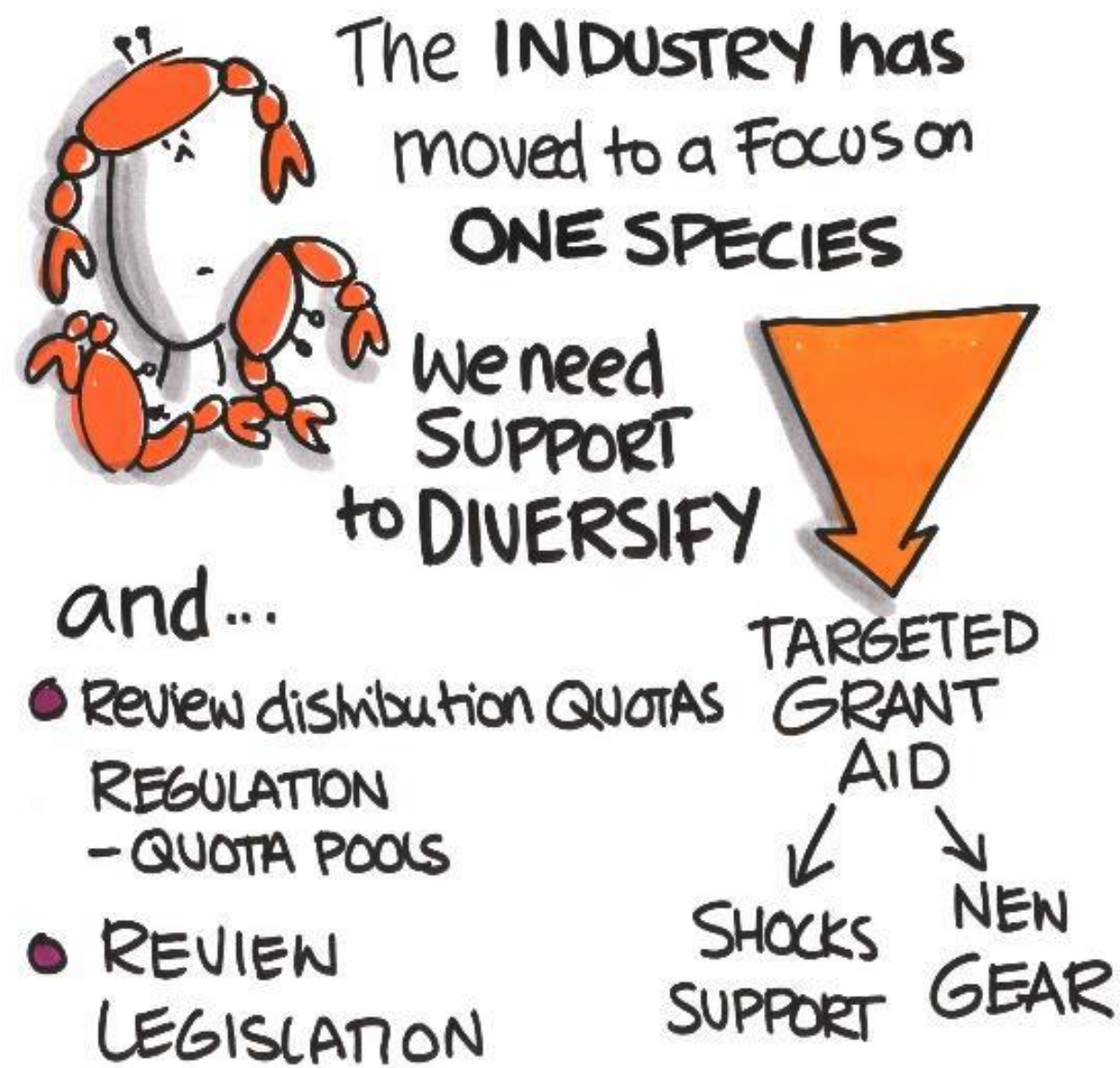


Priority 2: Effective regulation of all sea users



Priority 3 MCA – health and safety regulations that match reality of fishers

Priorities 4/5 Diversification and grants access



Priority 6 – Recruitment into fishing



Priority 7 – Greater recognition



Pride in the seas II – The English coast



How will future fishing be balanced with restoration efforts & space for renewable energy?

- **Value flows.** We can and do have well managed inshore fisheries, but the value of this management is lost without effective management across the range of the stocks we manage. Let this not be a race to the bottom.
 - Where do coastal fishers fit into restoration?
- **Consider social economic and environment impacts of decisions (or a lack thereof!).** Stimulating a greater focus on ‘stability of the fleet’ and fishers’ lives including in FMPs. Balanced sustainable fisheries management ‘protected stocks, respect to habitat, maintenance of livelihoods’ (MSC 2024).
- Our inshore fleet is particularly vulnerable, disparate, remote and poorly engaged. The planning and licensing system needs i) local resolution and capacity, ii) the ability to consider in combination effects and iii) iVMS needs to be introduced!



Next steps

- Parliamentary event in March
- Further coastal engagement in England over the summer, pride of the seas on tour!
- Mini-conference in Autumn 2025, Newcastle University, to identify further opportunities to collaborate with a much wider audience.

For further info. and resources

[Coastal fisheries cluster – NICRE](#)

National Innovation Centre for Rural Enterprise (NICRE)

Newcastle University





Coastal Futures Conference 2025

The Path to 2030

29 & 30 January 2025 | London & online

Q&A

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Coastal Futures Conference 2025

The Path to 2030

Session Five Future Fishing

Co-existence of fisheries and
offshore wind farms: opportunities,
challenges, and perspectives

Claire L. Szostek,
Plymouth Marine Laboratory

PML

Plymouth Marine
Laboratory

Research excellence supporting a sustainable ocean

Coexistence of fisheries and offshore wind farms: *Opportunities, challenges and perspectives*

Dr Claire Szostek, Dr Stephen Watson, Prof. Nicola Beaumont,
Dr Neda Trifonova, Prof. Beth Scott

Coastal Futures Conference, 30th January 2025



ECOWind

UKERC
UK Energy Research Centre

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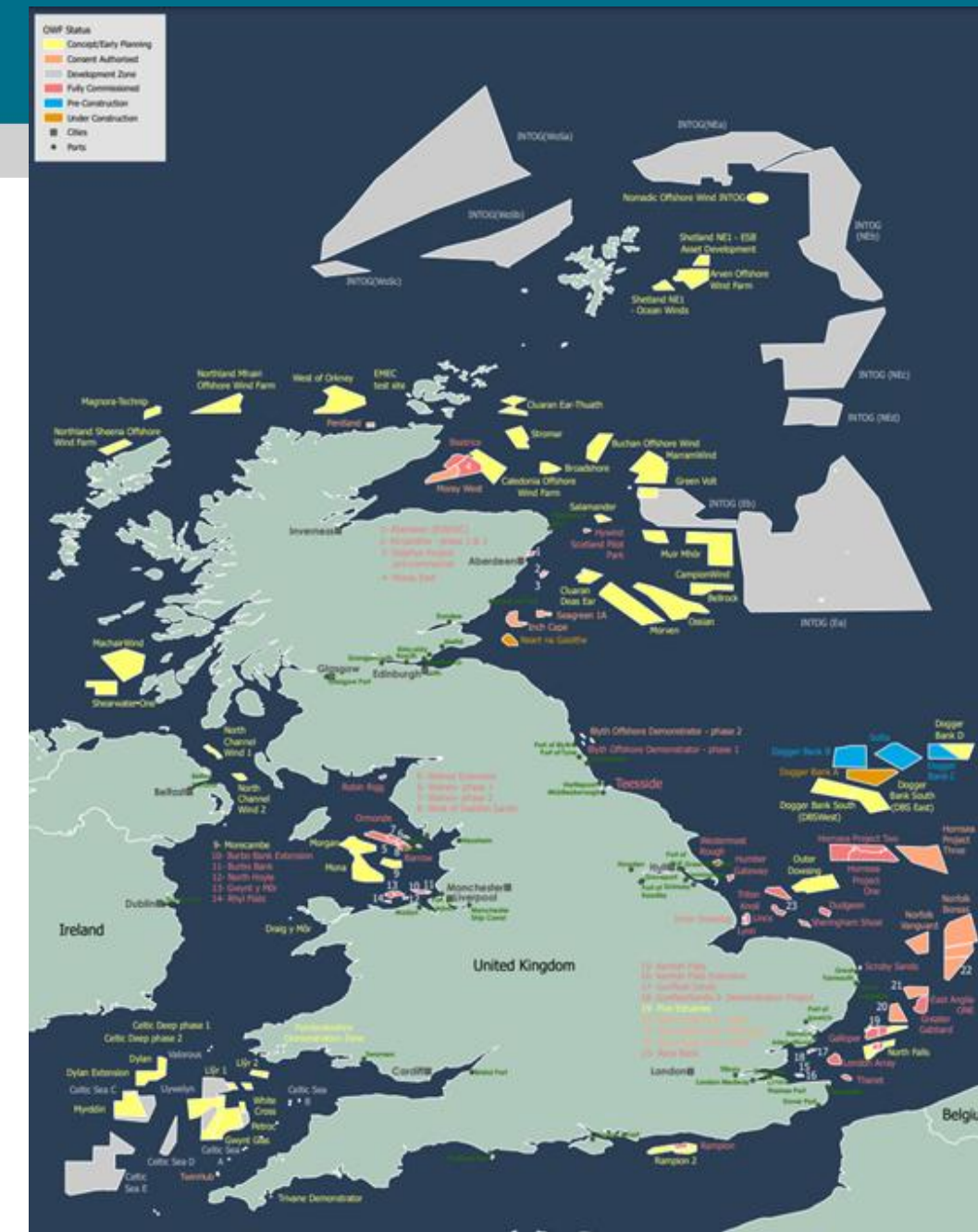
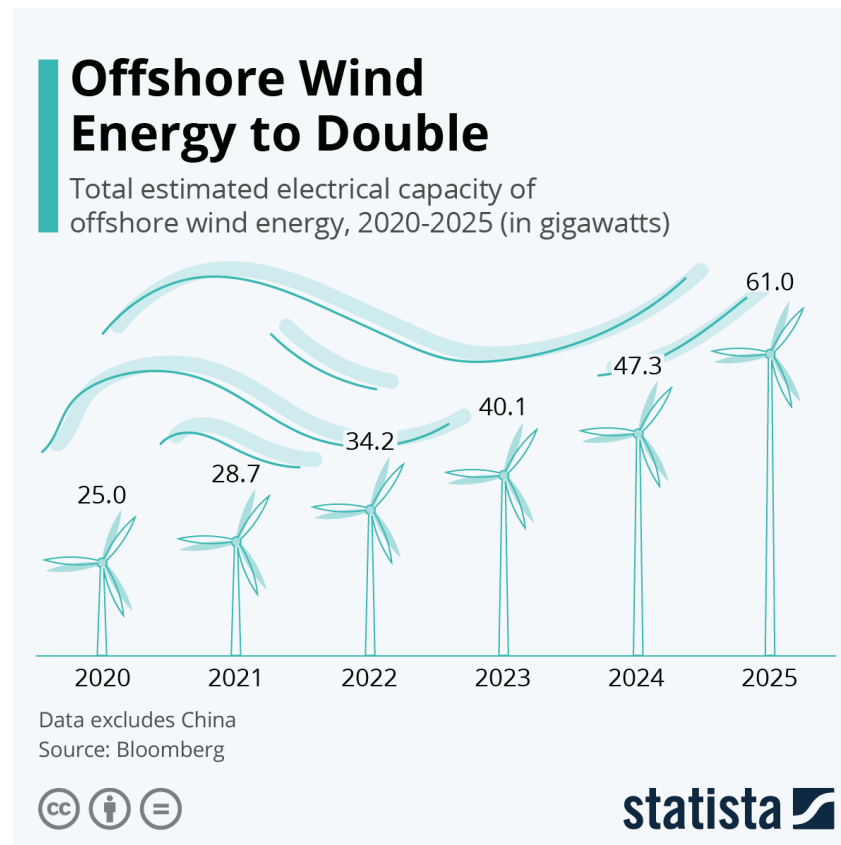
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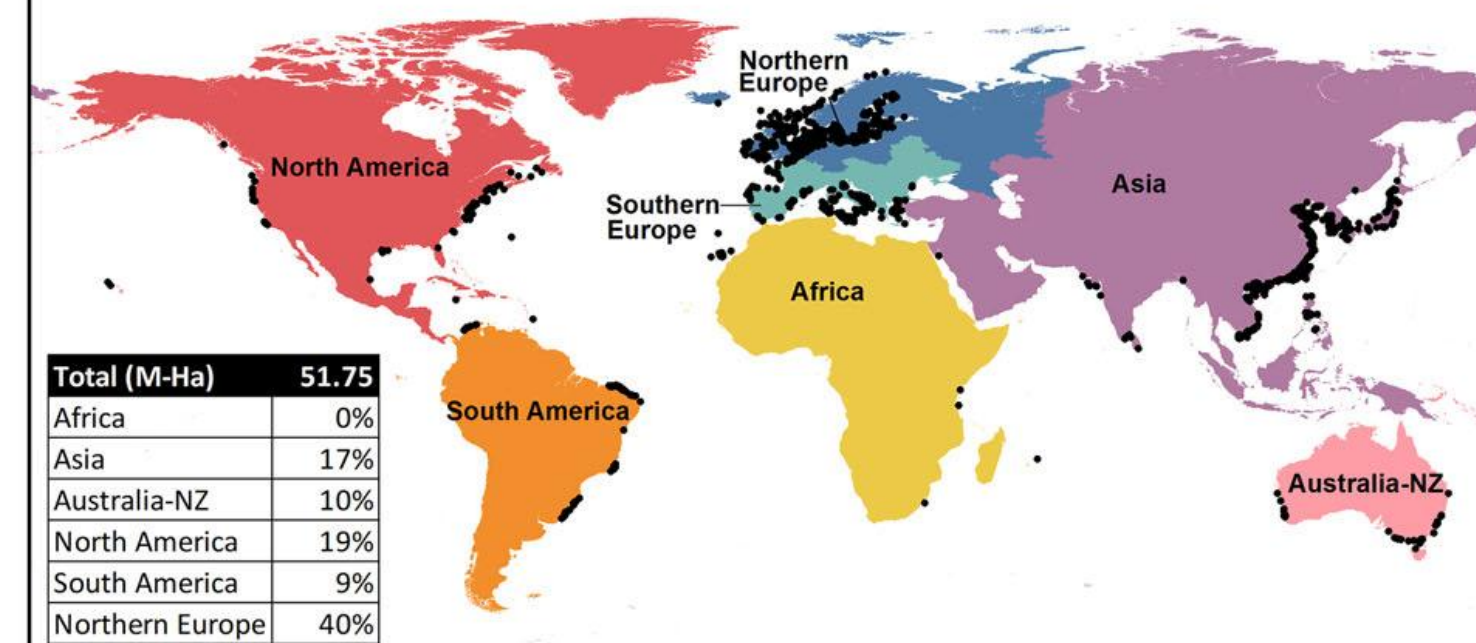


Rapid expansion of offshore wind energy

- Increase in UK, Europe and globally
- Conflicts with other marine users e.g.:
 - shipping
 - commercial fishing
 - aquaculture
 - aggregate extraction
 - marine conservation



<https://doi.org/10.1038/s43247-023-01116-6>



ORIES: Offshore Renewable Impacts on Ecosystem Services

Open access evidence tool

<https://ories.pml.space/>



A	B	C	D	E	F	
Type of literature ▾	Full reference ▾	Title ▾	Intervention - level 1 ▾	Population - level 1 ▾	Population - level 2 ▾	Population - level 3 ▾
Primary	Reubens, J.T., Braeckmeulen, F., Breyne, W., & Verbeke, W. (2019). The impact of offshore wind farms on fish communities: A meta-analysis.	Aggregation at wind farms	Presence of OWF	Species/population	Fish	Atlantic cod
Primary	Reubens, J.T., Braeckmeulen, F., Breyne, W., & Verbeke, W. (2019). The impact of offshore wind farms on fish communities: A meta-analysis.	Aggregation at wind farms	Presence of OWF	Species/population	Fish	Pouting (Trisopterus luscus)
Primary	Balotari-Chiebao, F., Brinkman, M., & van der Wal, R. (2018). Assessing space use by eel (<i>Anguilla anguilla</i>) in relation to offshore wind farms.	Assessing space use	Presence of OWF	Species/population	Birds	White-tailed eagle
Primary	Reilly, K., O'hagan, A.M., & McCarthy, D. (2017). Attitudes and perceptions towards offshore wind farms among Irish citizens.	Attitudes and perceptions	Presence of OWF	Human/social	Humans	Fishermen community
Primary	Ladenburg, J., (2010). Attitudes towards offshore wind farms in Germany: A comparison of different stakeholder groups.	Attitudes towards offshore wind farms	Presence of OWF	Human/social	Humans	Beach visitors
Primary	Ladenburg, J., (2008). Attitudes towards offshore wind farms in Denmark: A comparison of different stakeholder groups.	Attitudes towards offshore wind farms	Presence of OWF	Human/social	Humans	Danish citizens
Primary	Desholm, M. and Kahler, M. (2016). Avian collision risk assessment for offshore wind farms.	Avian collision risk assessment	Presence of OWF	Species/population	Birds	Common eider
Primary	Desholm, M. and Kahler, M. (2016). Avian collision risk assessment for offshore wind farms.	Avian collision risk assessment	Presence of OWF	Species/population	Birds	Common eider
Primary	Russell, D.J., Hastie, G.D., & van der Wal, R. (2017). Avoidance of wind farms by marine mammals: A meta-analysis.	Avoidance of wind farms	Construction of OWF	Species/population	Marine mammals	Harbour seal
Primary	Russell, D.J., Hastie, G.D., & van der Wal, R. (2017). Avoidance of wind farms by marine mammals: A meta-analysis.	Avoidance of wind farms	Construction of OWF	Species/population	Marine mammals	Harbour seal
Primary	Russell, D.J., Hastie, G.D., & van der Wal, R. (2017). Avoidance of wind farms by marine mammals: A meta-analysis.	Avoidance of wind farms	Presence of OWF	Species/population	Marine mammals	Harbour seal
Primary	Masden, E.A., Haydon, C., & Loeferer, S. (2018). Barriers to movement of Atlantic salmon (<i>Salmo salar</i>) in relation to offshore wind farms.	Barriers to movement	Presence of OWF	Species/population	Birds	Common eider
Primary	Bouma, S. and Lengkeek, H. (2017). Benthic communities in relation to offshore wind farms.	Benthic communities	Presence of OWF	Community/assemblage	Invertebrates	Invertebrates
Primary	Bouma, S. and Lengkeek, H. (2017). Benthic communities in relation to offshore wind farms.	Benthic communities	Presence of OWF	Community/assemblage	Invertebrates	Invertebrates
Primary	Bouma, S. and Lengkeek, H. (2017). Benthic communities in relation to offshore wind farms.	Benthic communities	Presence of OWF	Community/assemblage	Invertebrates	Invertebrates
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Primary	Bouma, S. and Lengkeek, H. (2017). Benthic communities in relation to offshore wind farms.	Benthic communities	Presence of OWF	Community/assemblage	Invertebrates	Invertebrates
Primary	Van Hal, R., Griffioen, A., & de Boer, W. (2017). Changes in fish composition in relation to offshore wind farms.	Changes in fish composition	Presence of OWF	Community/assemblage	Fish	Demersal fish
Primary	Van Hal, R., Griffioen, A., & de Boer, W. (2017). Changes in fish composition in relation to offshore wind farms.	Changes in fish composition	Presence of OWF	Community/assemblage	Fish	Demersal fish
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Primary	Van Hal, R., Griffioen, A., & de Boer, W. (2017). Changes in fish composition in relation to offshore wind farms.	Changes in fish composition	Presence of OWF	Community/assemblage	Fish	Demersal fish
Primary	Van Hal, R., Griffioen, A., & de Boer, W. (2017). Changes in fish composition in relation to offshore wind farms.	Changes in fish composition	Presence of OWF	Community/assemblage	Invertebrates	Demersal fish
Primary	Van Hal, R., Griffioen, A., & de Boer, W. (2017). Changes in fish composition in relation to offshore wind farms.	Changes in fish composition	Presence of OWF	Community/assemblage		Demersal fish

Cover page

Variables and Categories

Database

Grey literature sources

Search terms

G

H

I

J

K

L

Offshore Wind Farm Environmental Evidence Database

Select option to filter database:

If nothing is selected, all entries for that category will be returned by default. To view outcomes for the entire database, leave all options blank and click 'filter'.

Type of literature

PRIMARY

Development phase

OPERATION OF OWF

Subject or taxa

NOTHING SELECTED

Pressure

NOTHING SELECTED

Ecosystem Service

NOTHING SELECTED

FILTER

RESET

Filename for database download

edit-filename-here

DOWNLOAD

SUMMARY OF OUTCOMES

ECOSYSTEM SERVICES (DETAILED)

PLOTS

DATABASE

Total pieces of evidence:

By ecosystem service:

	Positive	Negative	Inconclusive	No impact	% Positive	% Negative	% Inconclusive	% No impact
Provisioning	7	4	0	9	35	20	0	45
Regulating	10	12	2	2	38.46	46.15	7.69	7.69
Cultural	28	41	14	26	25.69	37.61	12.84	23.85
Supporting	31	15	5	31	37.8	18.29	6.1	37.8

By pressure:

	Positive	Negative	Inconclusive	No impact	% Positive	% Negative	% Inconclusive	% No impact
Electromagnetic fields	0	4	1	8	0	30.77	7.69	61.54
Operational impact	76	65	18	56	35.35	30.23	8.37	26.05
Underwater noise	0	2	2	4	0	25	25	50
Vessel traffic	0	1	0	0	0	100	0	0

By subject:

	Positive	Negative	Inconclusive	No impact	% Positive	% Negative	% Inconclusive	% No impact
Air/sea interface	3	0	2	0	60	0	40	0
Algae	1	0	0	0	100	0	0	0
Bats	0	2	2	0	0	50	50	0
Birds	3	24	5	18	6	48	10	36
Fish	25	7	1	32	38.46	10.77	1.54	49.23
Humans	22	16	6	1	48.89	35.56	13.33	2.22
Invertebrates	15	16	2	10	34.88	37.21	4.65	23.26
Marine mammals	3	3	3	6	20	20	20	40

Fishing industry survey

- Poor understanding of socio-economic implications OWF/fishing
- Survey to gauge experiences/responses to present & future wind farms



Background:

The UK is the current global leader in offshore wind energy, and has commitment to increase capacity significantly by 2030, and beyond.

We currently have a poor understanding of the full socio-economic implications and conflicting pressure on marine space.

This survey aims to gather information from your experiences of the current impacts of offshore wind farms on the fishing industry, and views on what future impacts might be. All responses will be aggregated and no personal information will be published. Your response is valued and we appreciate your time in completing the survey.

Survey: Impacts of offshore wind farms on commercial fishing in the UK

Scan the QR code or type in the URL below to take part
www.smartsurvey.co.uk/s/337S0I/

PML | Plymouth Marine Laboratory | **UNIVERSITY OF ABERDEEN** | **UKERC** | **ECOWind**

Target audience

- Commercial fishermen, or recently retired, industry representatives
- Fishing in UK waters
- All gear types/target species

Respondents

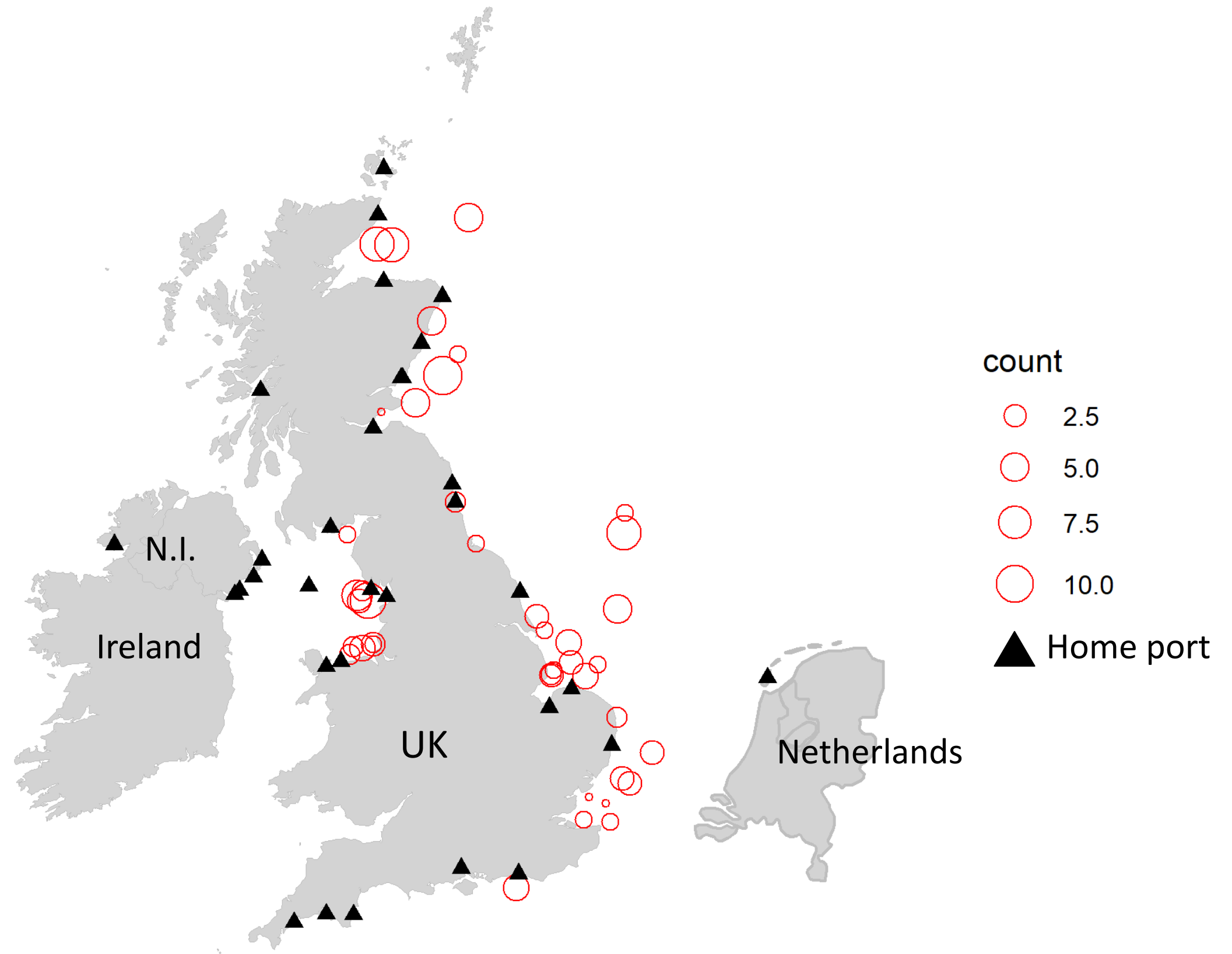
- Vessel length 5-50m
- 26 target species
- 11 gear types (mobile & static)
- UK, Ireland, Isle of Man, Netherlands



Preprint: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=5047823

Wind farms reported as impacting commercial fishing (operational or under construction)

*No correlation between date
operational, or capacity (MW), of
wind farm and number of votes*





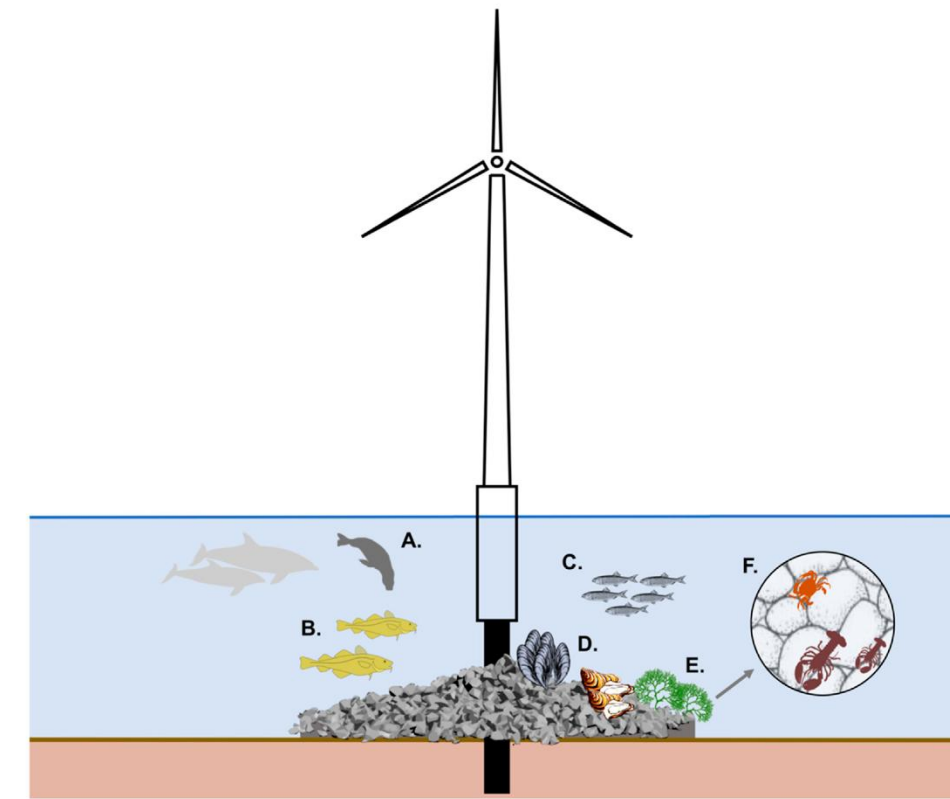
Source: Fishing News

Impacts and responses

- **Displacement** (35/52), leading to knock-on impacts, including:
 - **Spatial conflict** (32/52)
 - Impacts on **catches & profitability** (35/52)
 - Impacts on **safety** (39/52)
 - **Travel further** to fish (38/52)
- Varied experiences around **compensation** - inadequacies, inequity, lack of transparency, intimidation and lack of industry standard/framework
- All respondents expected to be impacted by future OW developments

Potential benefits to the fishing industry

- ✓ Short-term improvement in fishing
- ✓ Lobster fishing around turbines
- ✓ Rock armour and cable protection designed to encourage biodiversity
- ✓ Compensation
- ✓ Community benefit scheme (although not direct benefit to fishermen)
- ✓ Potential employment opportunities
- ✓ Supply of conspicuous pot buoys



Glarou et al. (2020) J. Mar. Sci. Eng., 8(5), 332

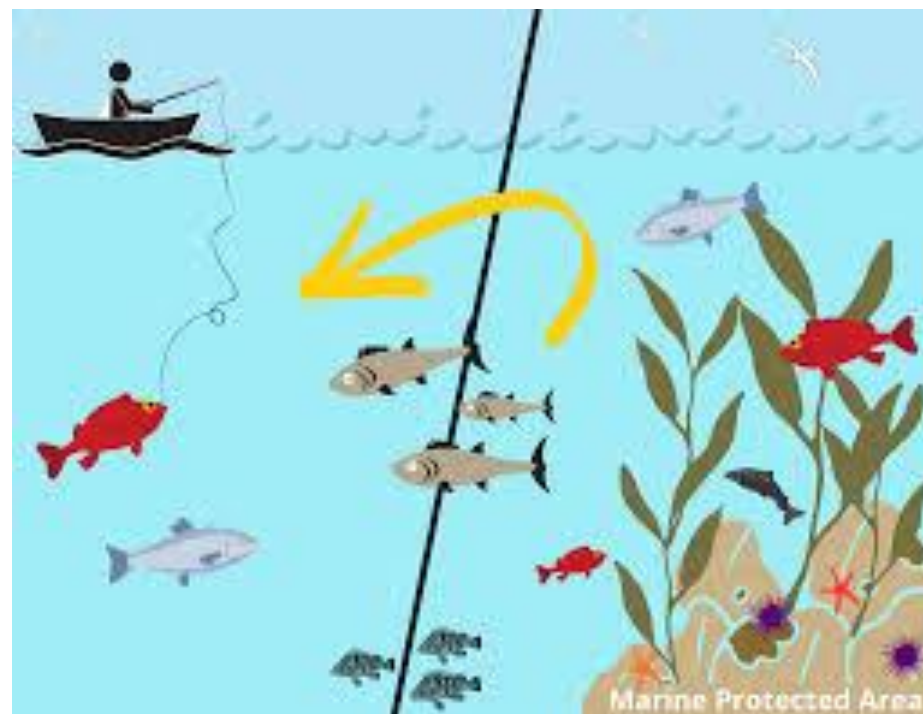


*Image credit:
www.westofmorecambe.com*

Potential ecological impacts cited

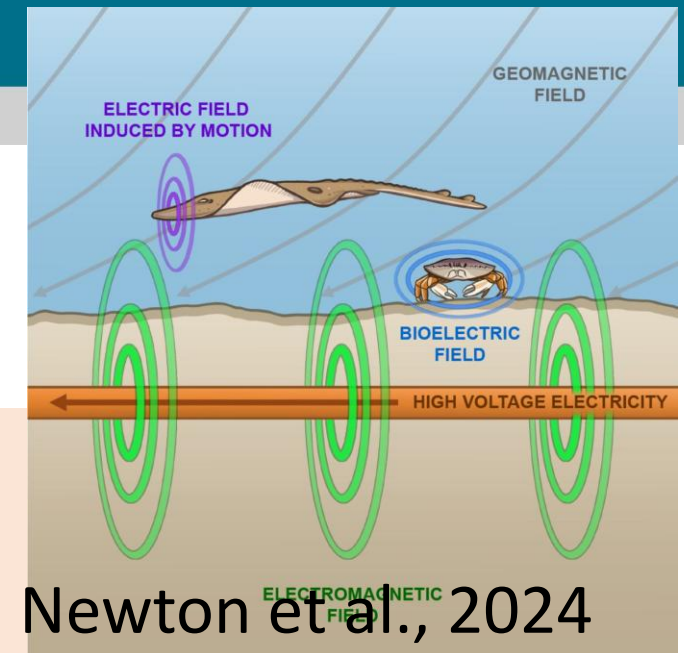
Positive

- MPA effects
- Possible spillover effects

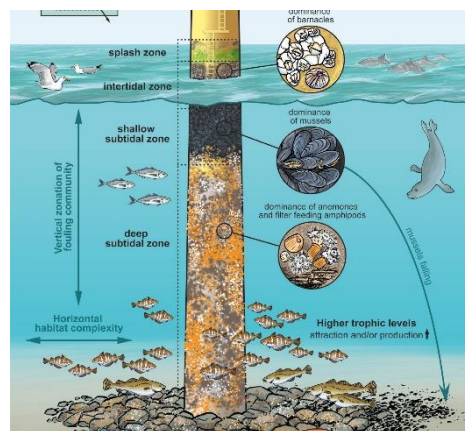
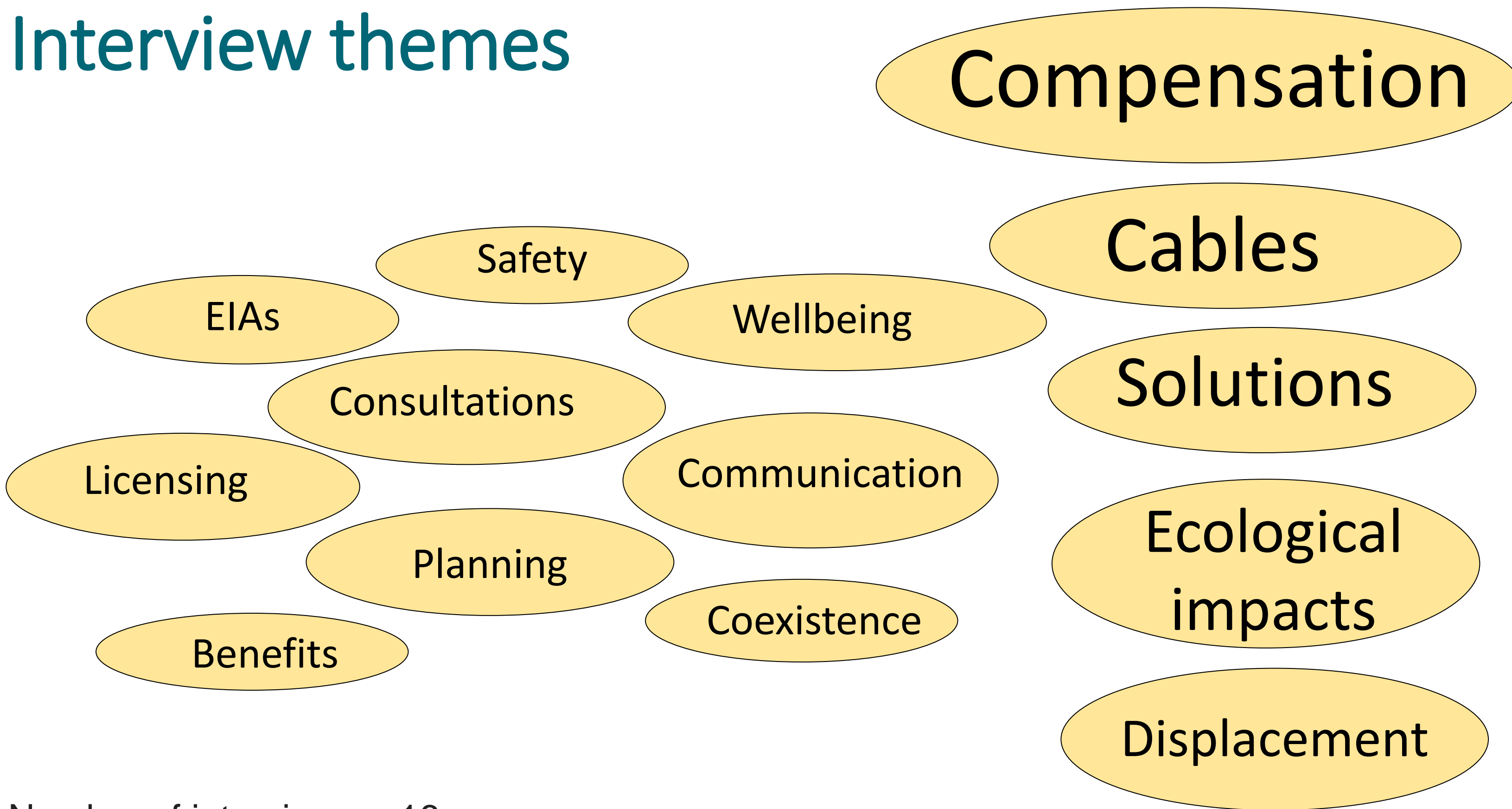


Negative

- Habitat disturbance
- Disruption during spawning periods
- Impacts of electromagnetic fields
- Pile-driving impacts
- Influence on larval transport
- Lack of species-specific data



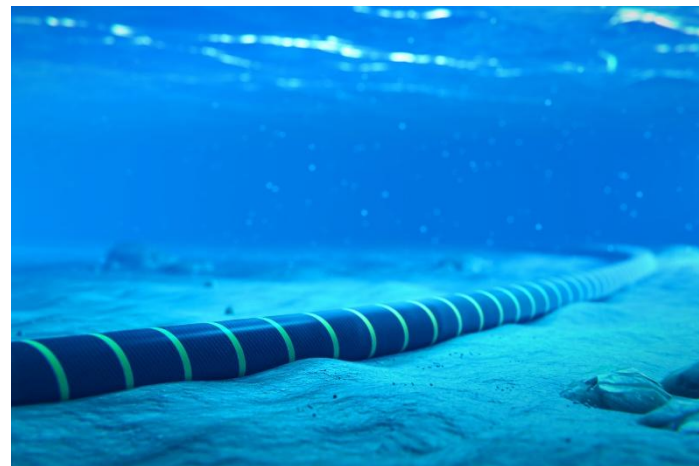
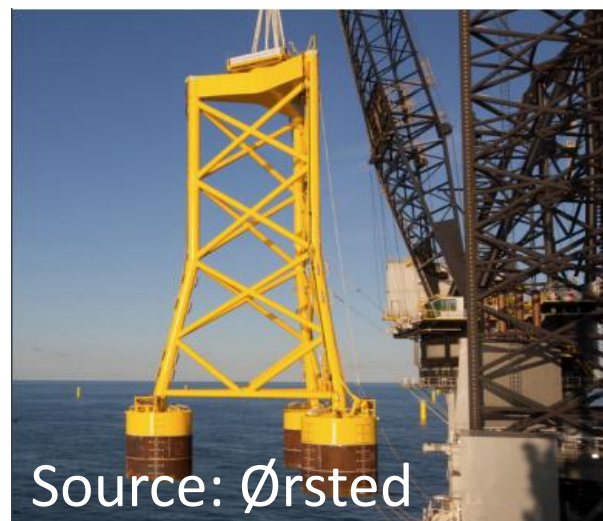
Interview themes



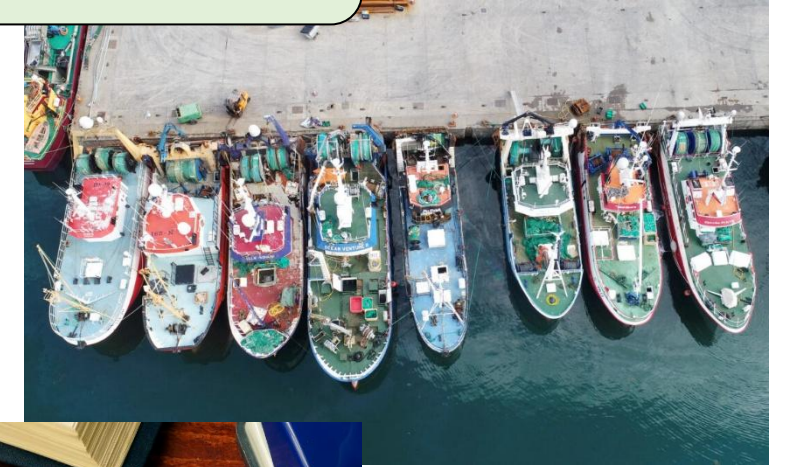
Number of interviews = 16

Solutions proposed by fishermen

Wind farm design

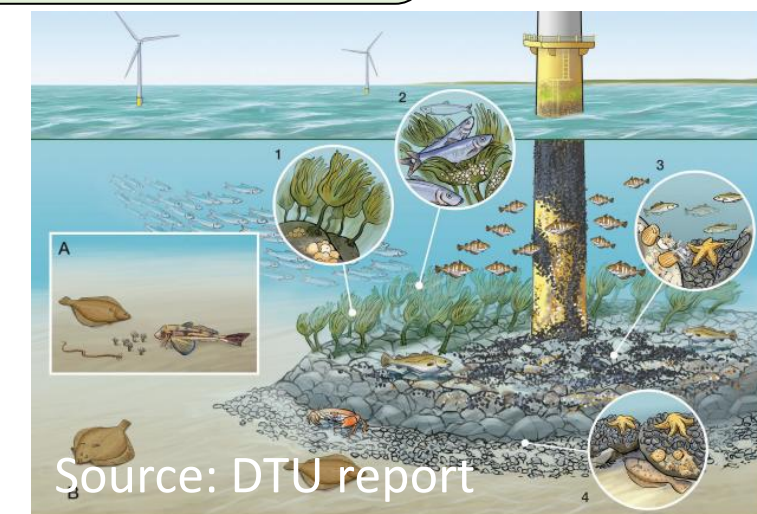


Financial



Ecological

Source: National Lobster Hatchery



Policy recommendations

1. Defined legal framework for interactions between OWF and fishing
2. Regional working groups
3. Co-design of turbine and cable layout
4. Statutory consultee status for fishermen
5. Regulation, enforcement and monitoring of cable burial depth
6. Regulation of Electro-magnetic fields
7. Economic and ecological assessments prior to leasing
8. Mechanism for reporting and resolution of safety issues
9. Regulation of speed limits for vessels passing fishing gear
10. Regulation for timing of pile-driving and seismic surveys

How can fisheries & OWF coexist?

- Impacts will increase
- Affects all fleet sectors and vessels
- Displacement ripple effects

- Overview of concerns
- Multiple trade-offs in marine space

- Guidelines translated to legal frameworks
- Increase collaborative working/solutions

pml.ac.uk/news/uk-fishing-community-shares-its-views-on-offshore/
fishingnews.co.uk/features/fishing-in-a-renewable-future/



FISHING IN A RENEWABLE FUTURE
8th January 2025

New analysis aims to gauge the impact of offshore wind on commercial fishing and find a way forward

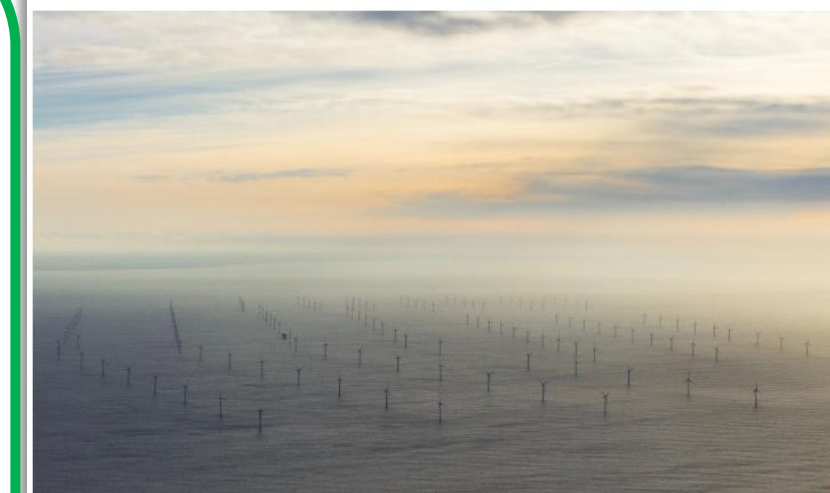
By Dr Claire Szostek, Senior Ecosystems Scientist

Low-carbon renewable energy sources from the first commercial offshore wind farm. The UK's Offshore Wind Strategy aims to provide 95% of electricity from wind farms having met half of that target by 2030.

UK fishing community shares its views on offshore wind

10 January 2024

Preliminary results from our survey on the impacts of offshore wind farms on commercial fishing in the UK. There is still time to share your views, with the survey closing on the 21st January.



@ClaireLSzostek

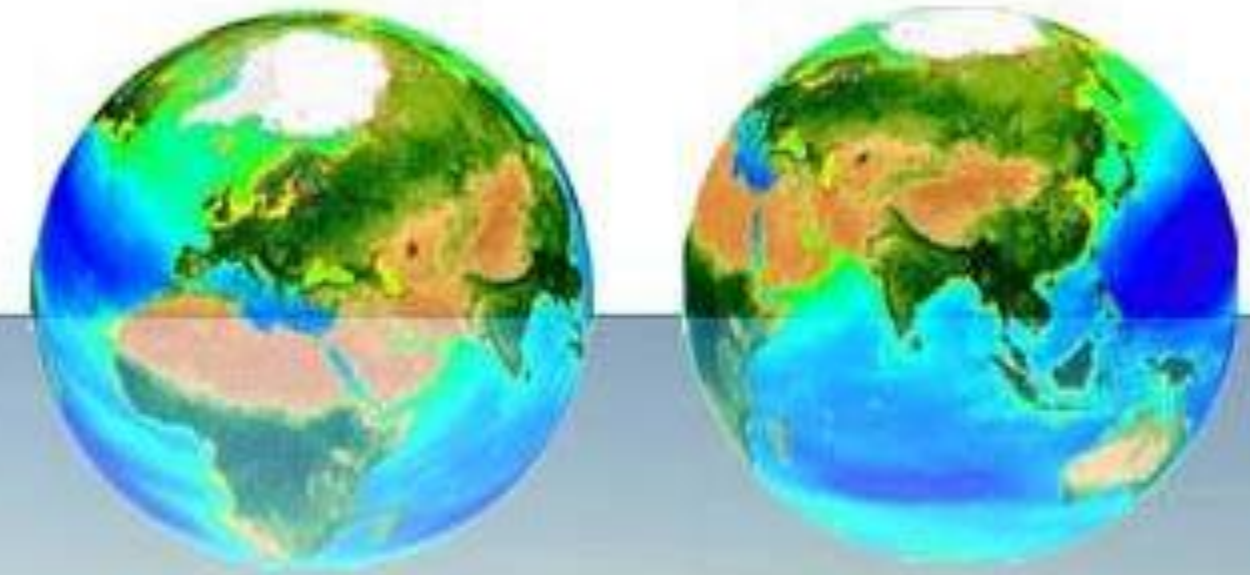


Claire Szostek



csz@pml.ac.uk

Thank you



Project contacts:
Claire Szostek csz@pml.ac.uk
Stephen Watson stw@pml.ac.uk



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Session Five Panel Debate

Futures Fishing

How will future fishing be balanced with restoration efforts
& space for renewable energy?

Chair: Daniel Owen, Fenners Chambers

Mike Cohen, CEO, National Federation of Fishermen's Organisations

Joe Richards, Blue Marine Foundation

Alistair Bally Philp, Scottish Creel Fishermen's Federation

Rob Clark, CEO, Association of Inshore Fisheries and Conservation
Authorities

Claire L. Szostek, Plymouth Marine Laboratory

Ashley Mullenger, Independent Small Scale Fisherman



Session Five Posters

Sunley Room

3. William Ross Hunter: Mapping seabed carbon storage and fishing pressure to support Northern Ireland's Blue Carbon Action Plan

10. Dan Cutler: Managing Fishing in England's Offshore Marine Protected Areas



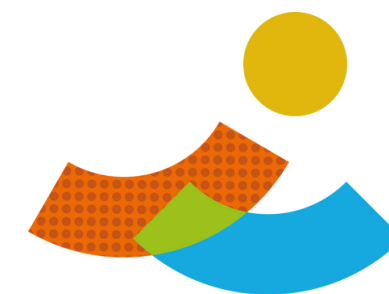
Session Six Posters

Sunley Room

- 8. Will Manning: Habitat Compensation and Restoration Programme (HCRP): 20 Years of Managed Realignments and Counting
- 20. Gemma Smith: The Interconnectedness of Marine Management Challenges and the Effectiveness of Social-Ecological System Management Practices



Refreshments 14:00 – 15:00



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2025**

Delivered by OCF

29 & 30 January 2025 | London & online

 www.coastal-futures.net

 Ocean and Coastal Futures

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