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Isle of Man

Manx Marine Conservation and Fisheries Management

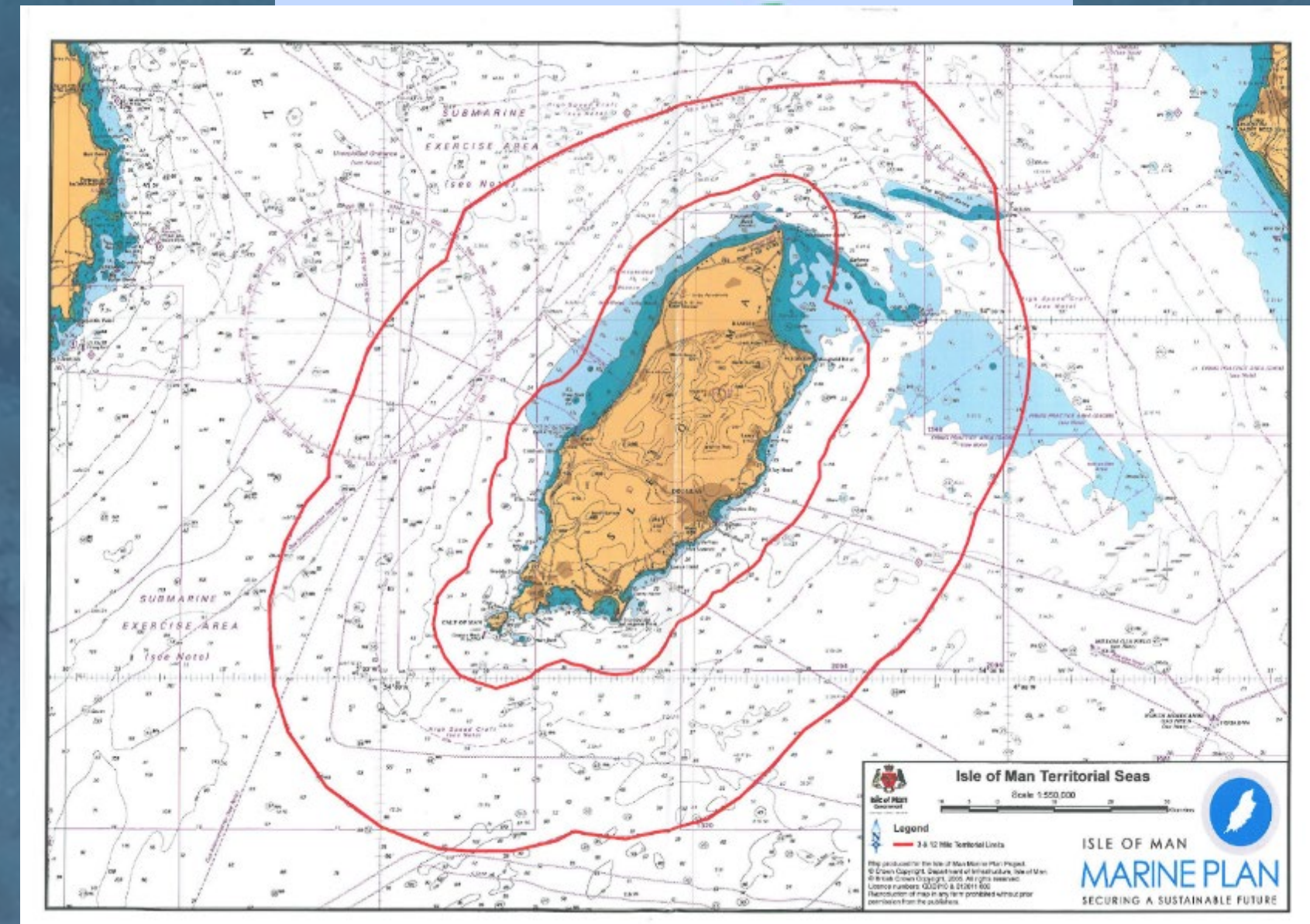
Dr. Peter Duncan

Department of Environment, Food and Agriculture

Isle of Man Government

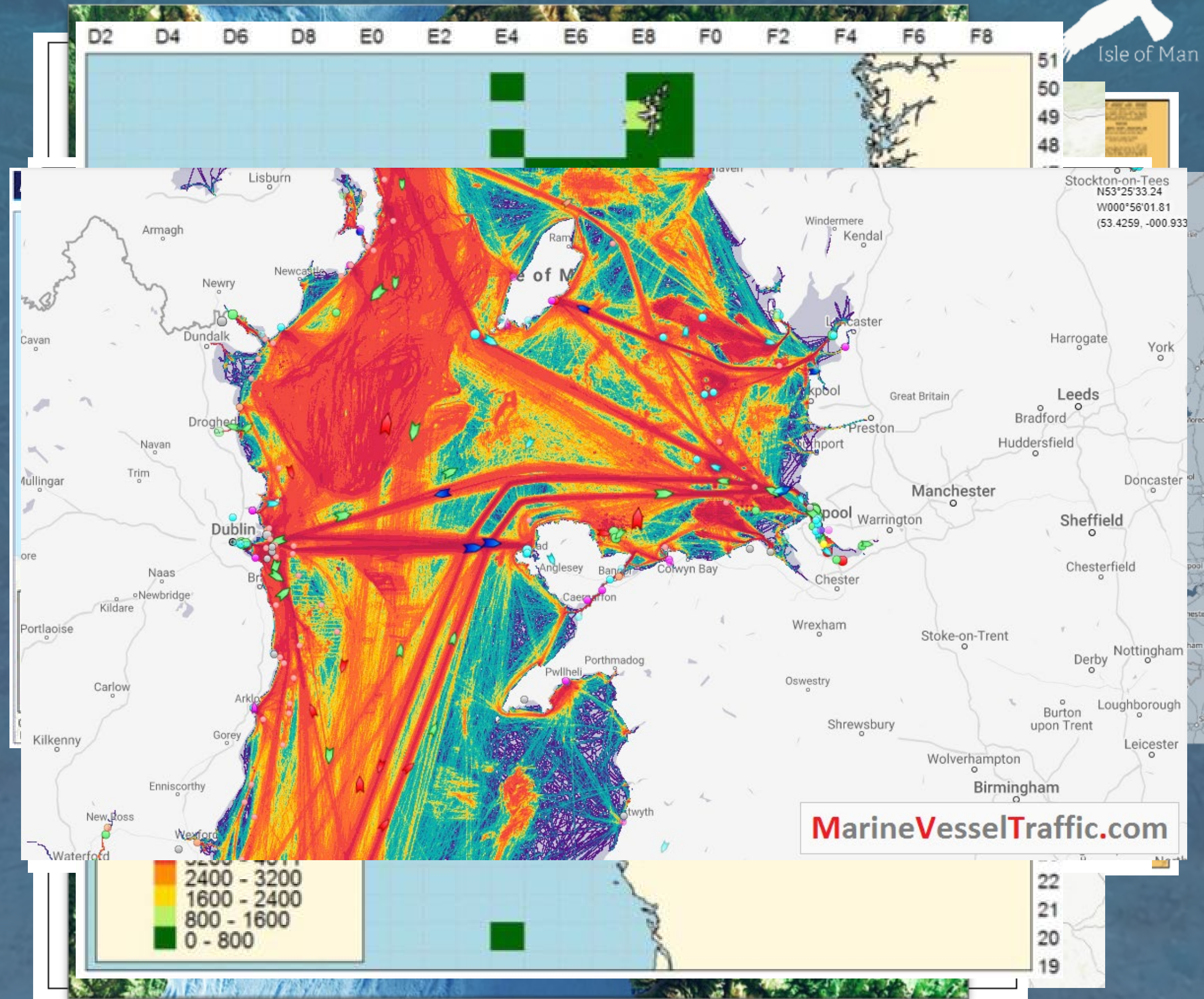
Isle of Man Territorial Sea

- **Crown Dependency**
 - not UK, never EU.
 - UK conservation drivers don't apply – eg. **EU Directives**.
 - But Fisheries Management principles do apply e.g. **CFP, UK**.
- Land area = **572 km²**, sea area = **3970 km²**
- Territorial sea to 12 M (22 km).
 - Marine environment management supported by **domestic legislation**.
 - Wildlife Act 1990, Fisheries Act 2012, Water Pollution Act 1993 etc.
- Unusually no Marine Plan or Spatial Plan... *yet*.
- MMEA (Manx Marine Environmental Assessment) for reference.



Isle of Man Territorial Sea

- Busy Marine Area
 - Infrastructure
 - Vessel traffic
 - Cables and energy; windfarms
 - Domestic infrastructure (disposal)
 - Fishing activity
- Physical
 - Bathymetry
 - Varied benthic habitats
- **Marine data and knowledge** supported by Government, NGOs, PEML (Liverpool University) and Bangor University (2007-present)
- IoM Government has a lot of marine issues to regulate and balance – challenging!



Marine Conservation Overview



Drivers:

General acknowledgement of 'national' responsibility for conservation: marine ecosystem services, tourism, commercial benefits e.g. fisheries etc.

Statutory Responsibilities

- Wildlife Act 1990
- Fisheries Act 2012

International multilateral conservation agreements (extended via the UK)

- OSPAR
- UN Convention on Biological Diversity (CBD)
- Bern (European Wildlife and Natural Habitats)
- Bonn (migratory species)
- Ramsar
- CITES

Biosphere Status

- Requirement for core (highly-protected) area designations

Statutory Designations and other protections

Area-based conservation is fundamental, although species-specific protections also exist.

Marine Nature Reserves (Wildlife Act 1990)

- Marine up to Highest Astronomical Tide (HAT).
- Currently 10, all inshore (within 3M)
- 430/3970 km² ~ **11%**.
- CBD 2020 objective (now **30 x 30**.....).

National Nature Reserves (Wildlife Act 1990)

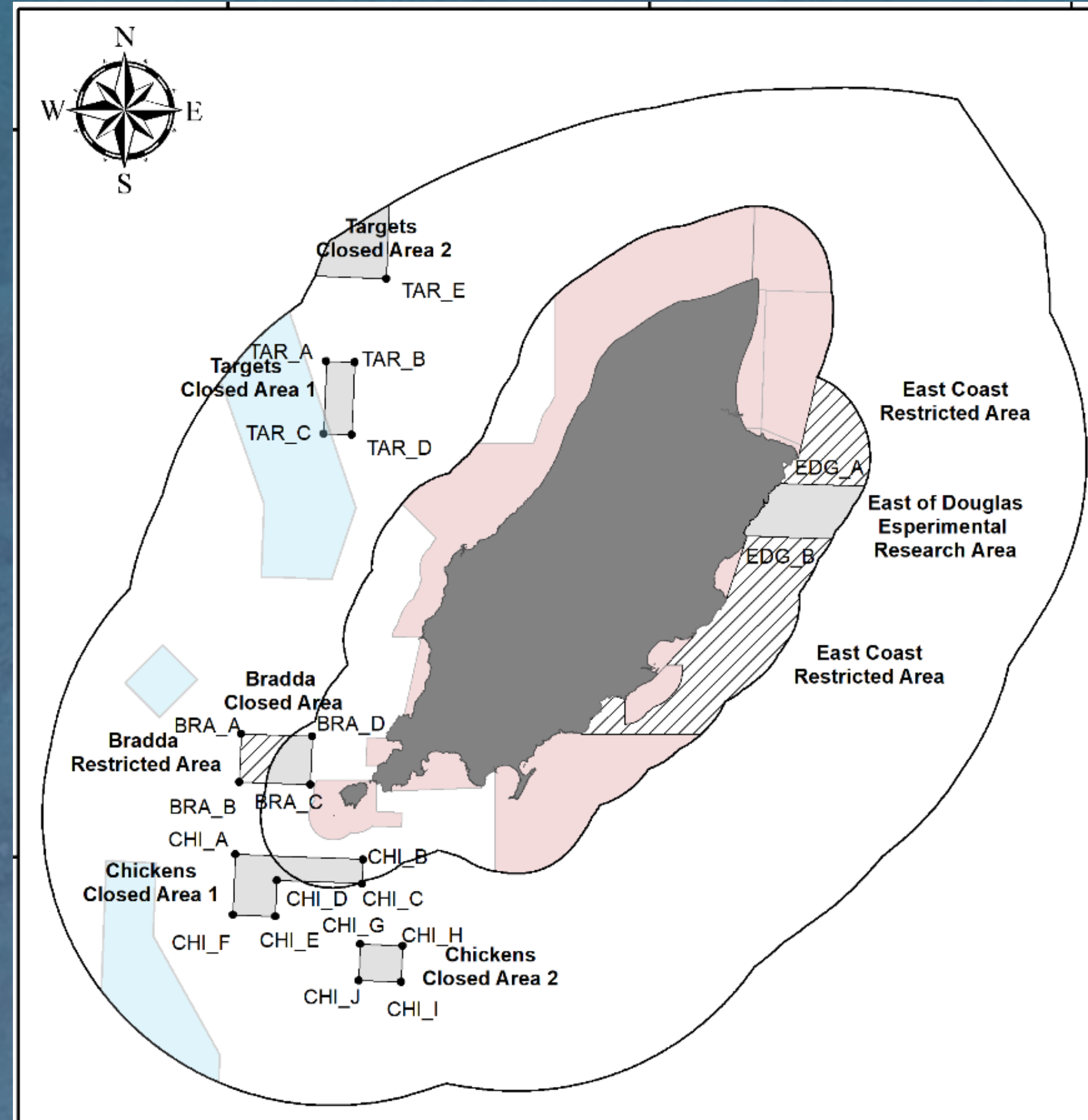
- Terrestrial, but coastal to HAT.

ASSIs (Wildlife Act 1990)

- Terrestrial, but coastal to LAT.

Fishery Areas (Fisheries Act 2012)

- Restrict fishing activities on annual or longer term basis.
- Controlled via licence condition.



Habitat highlights (+MNR)

Broad –scale benthic habitat survey 2008 (EUNIS)

Horse mussel reefs: high biodiversity (Little Ness, Point of Ayre)

- Other infaunal *Modiolus* populations

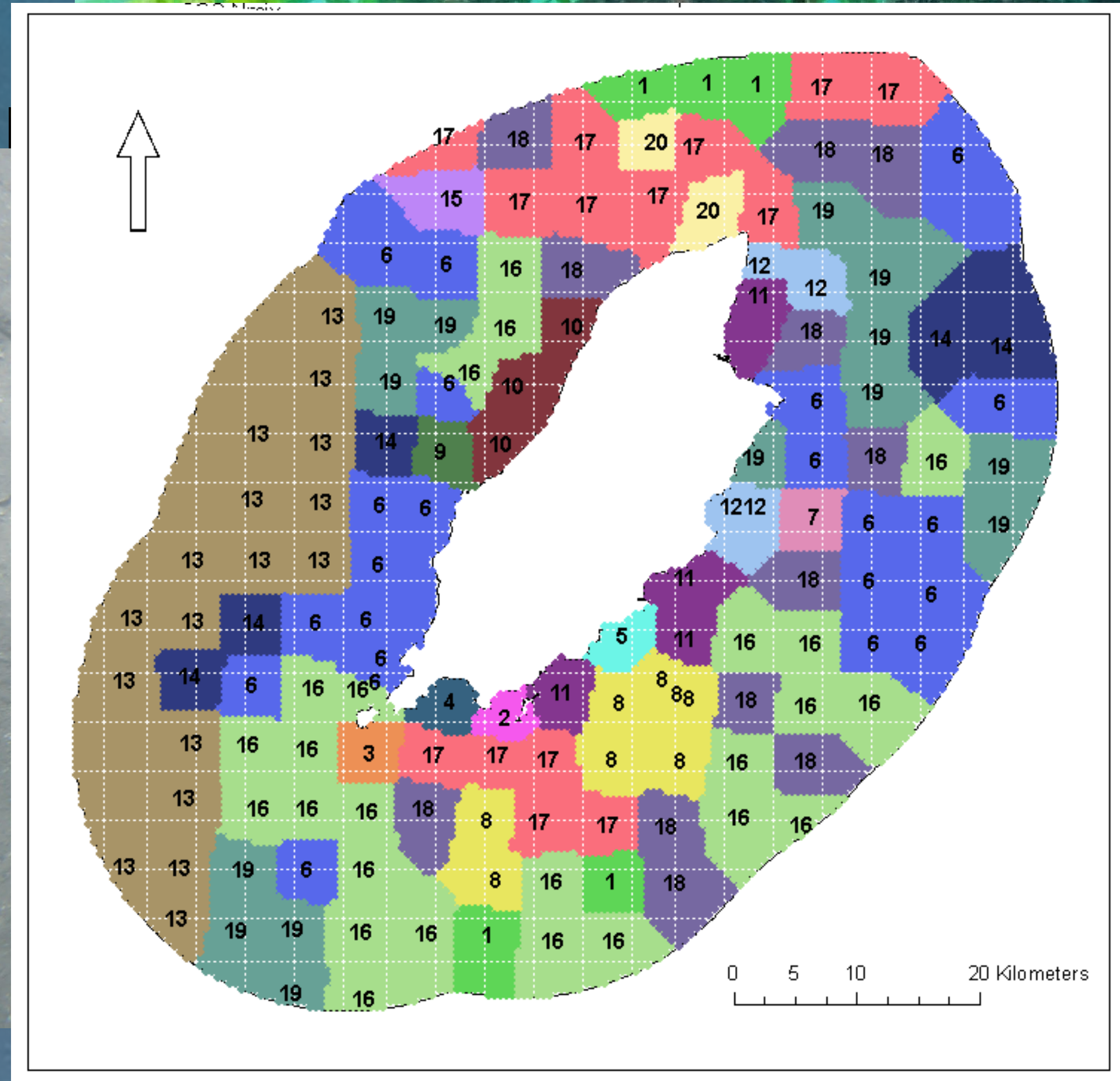
Eel grass beds (*Baie ny Carrickey*, Laxey, Ramsey, Langness, Bulgham)

- ~196 Ha

Maerl (extensive)

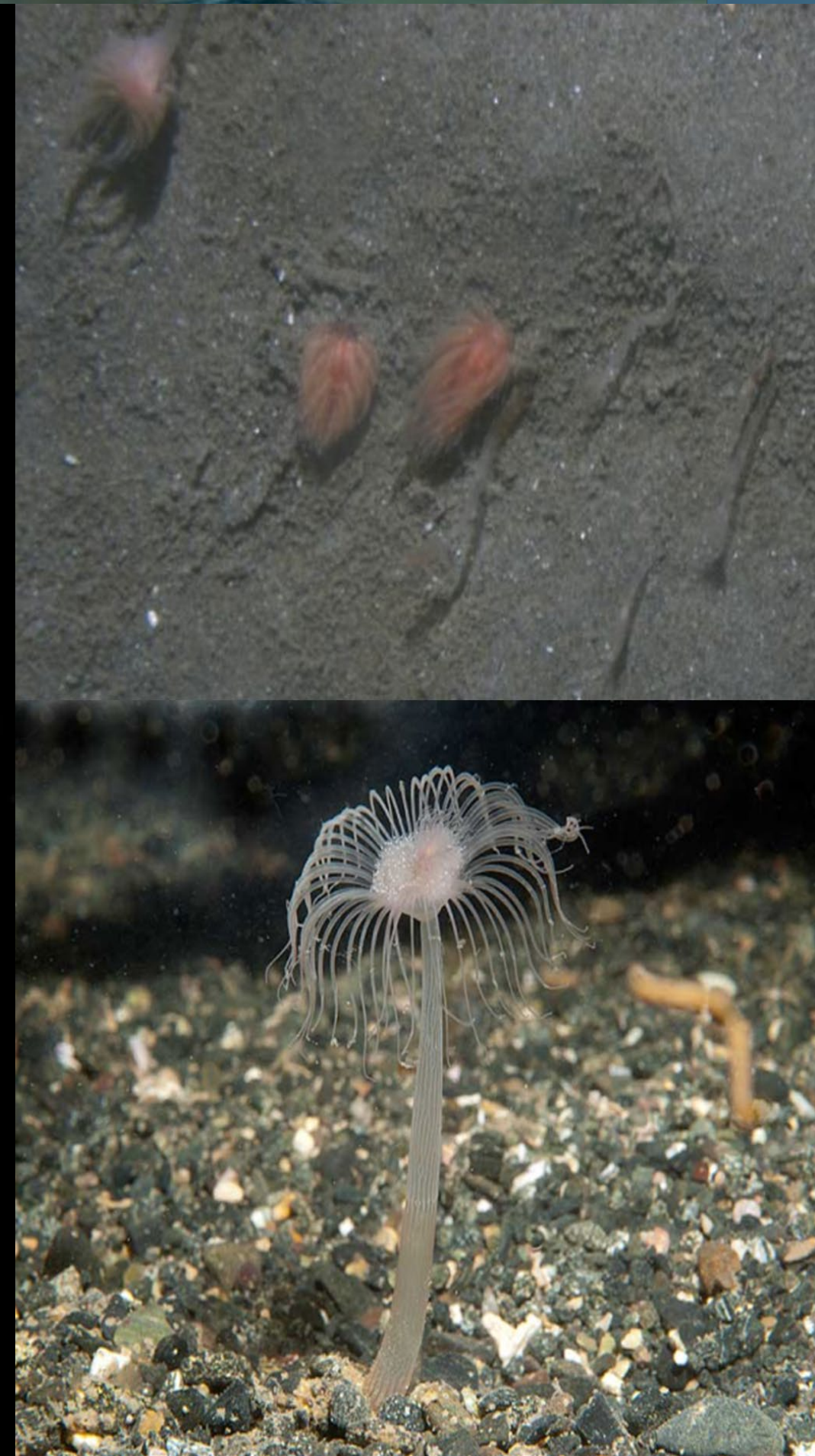
Kelp forest (*BNC*, Lax, Ram, Langness, Calf WB, PE, Niarbyl)

Sub-littoral muds: *Nephrops*, seapens, Northern krill etc.



Species Highlights

- **Risso's dolphin** – large seasonal population: feeding and nursery (Little Ness, Langness, Calf, BNC, Douglas)
- **Bottlenose dolphin** (Cardigan Bay)
- **Common dolphins** (increasing?)
- **Basking shark** (Niarbyl, West, BNC, Calf, Langness)
- **Inshore herring + associated spp.** (minke whale, blue fin tuna, tope, thresher shark, porpoise)
- **Grey seals** (400+)
- **Seabirds**, coastal birds (Sugarloaf, Calf of Man, Derbyhaven +)
- **Occasionals** - sunfish, swordfish, humpback, long-finned pilot whale, Cuvier's beaked whale, thresher shark
- **Iceland/black clam** (Little Ness, Langness, PE, Niarbyl, Lax, Ramsey)
- **Flame shells** (Port Erin, Calf and Wart Bank)
- **Beaumont's nudibranch** (Douglas Bay+Langness)(rare species)
- ...and the Hydroid it feeds on.



Manx Fisheries: Overview

- Main Species

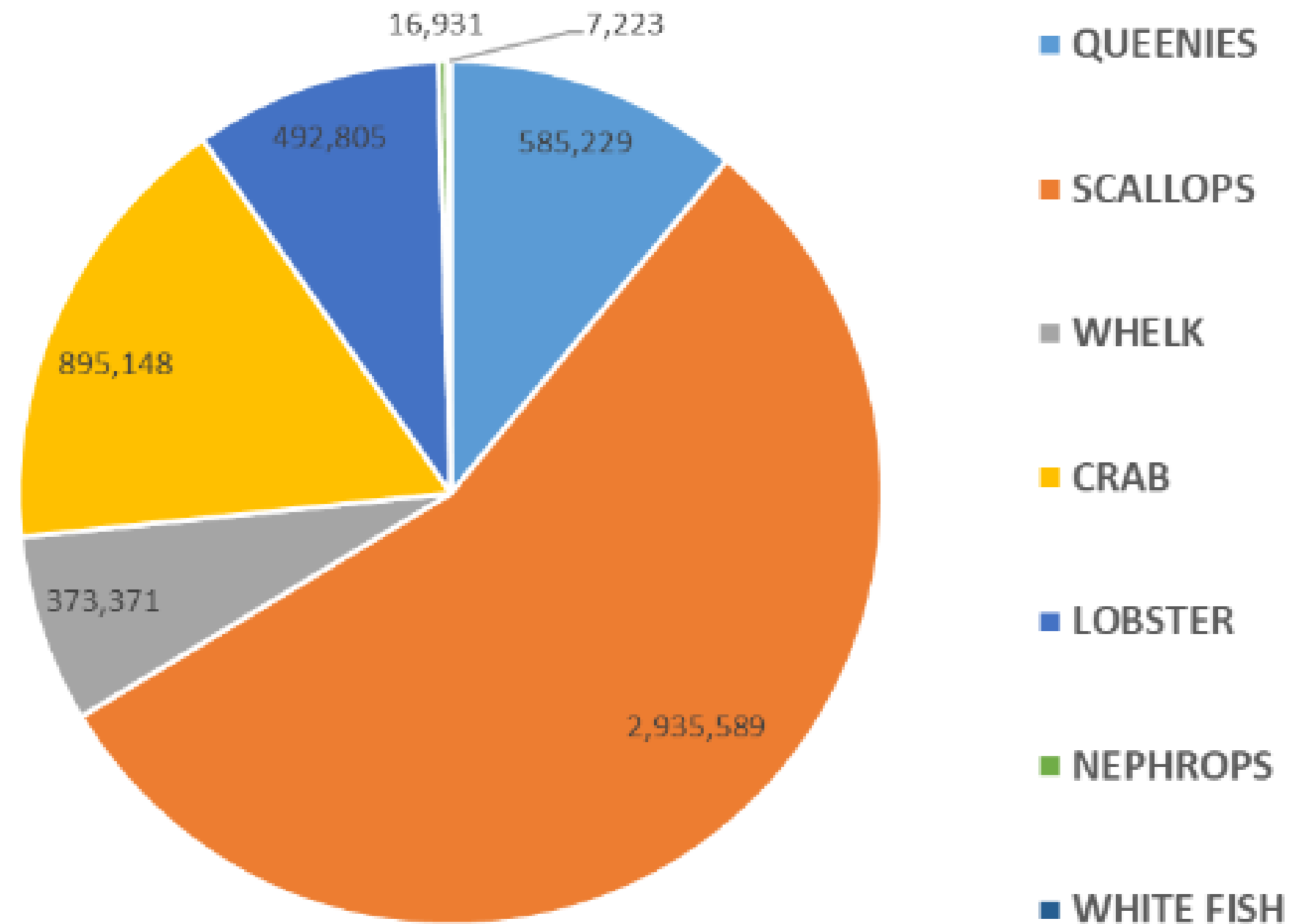


- Mostly non-quota (typically poorly managed)
- Two (3?) main fisheries are towed gears: dredge and trawl.
 - (*Nephrops* UK boats)



- Four are static, pebbased.

Manx Landing, First Sale Value (£) (2024)



Manx Fisheries Overview

Q: How do we manage the interaction between conservation and fisheries?

A: **Look for the mutual benefits/commonalities**

Poorly or unmanaged fisheries benefit no-one.

Gone from the most dredged 'square' in British Isles, with relatively open access, to

...the best managed scallop fisheries, with lower & restricted vessel access (from **200+** to **~60 since 2010**), comprehensive surveys and data, widespread use of closed area management and highest stock levels on record.



Achieving Sustainable Fisheries

How?

- **Conservation**

- Demonstrate benefits
- Involve industry
 - First MNR had FMZ included – very beneficial.
- Current MNR network evolved from fishery closed areas.

Manx Marine Pro

Developed over 30 years
enable research, fisherie
management, habitat an
biodiversity conservation

- Port Erin 1989
- Douglas 2008
- Laxey and Niarbyl 200
- Ramsey MNR 2011
- Baie ny Carrickey 201
- Conservation Zones 2016



Achieving Sustainable Fisheries

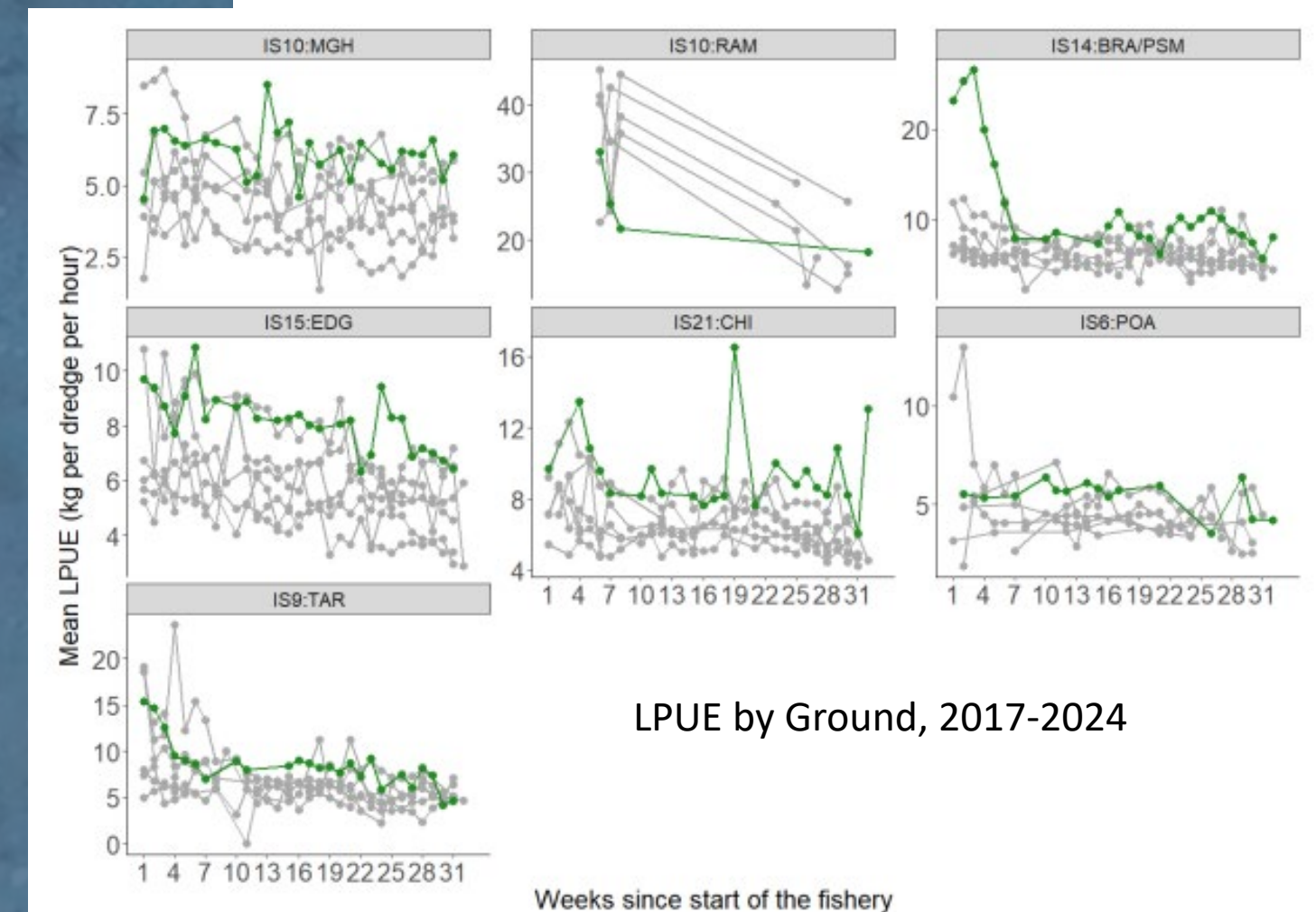
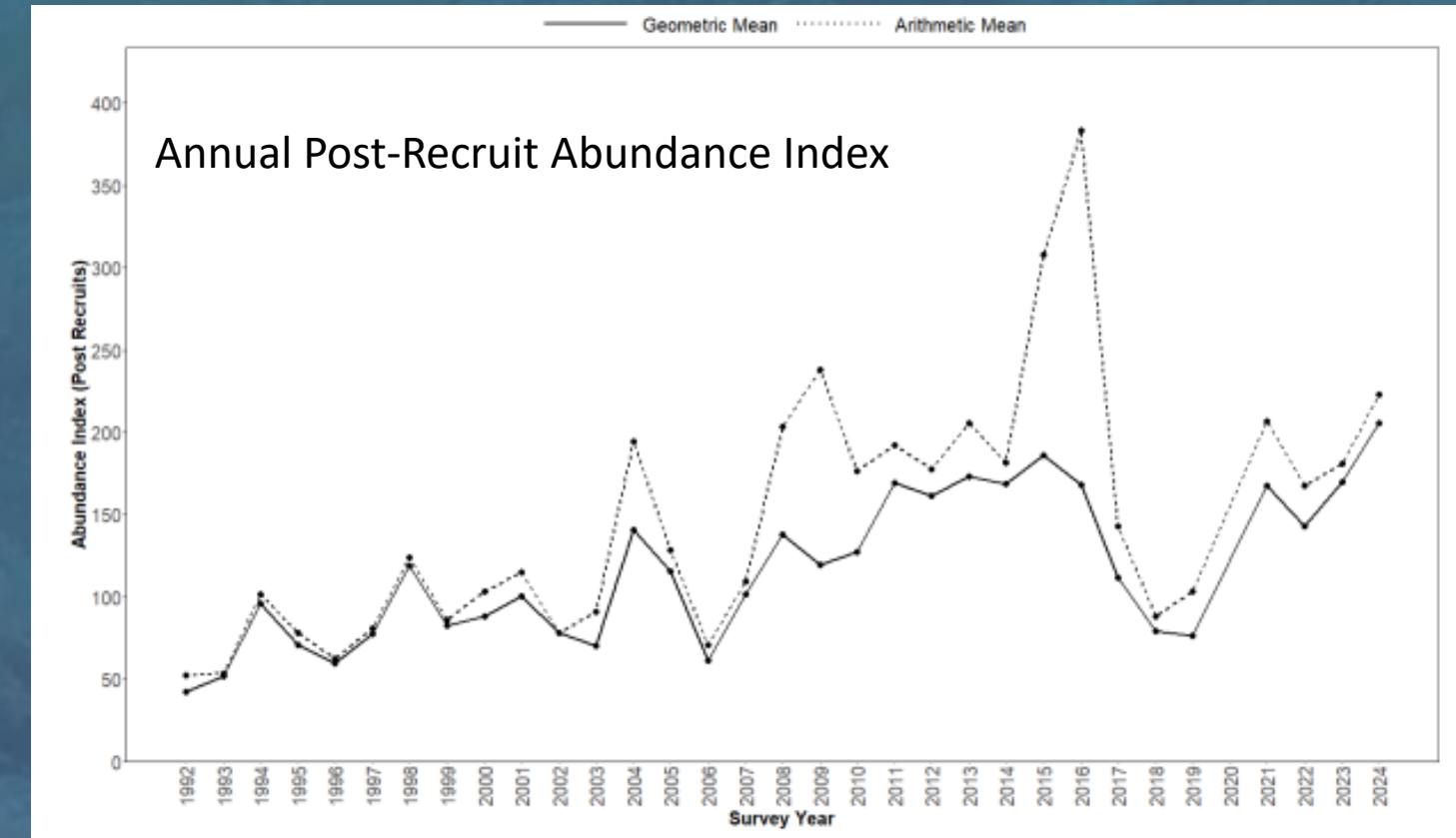
How?

- **Data**

- Resources
- Good data (back to 1992)
- Science capacity (Liverpool and Bangor Universities)
- Annual stock surveys (since **1992**)
- Application of data e.g. individual ground management
- Persistence
- Involve industry – industry survey since **2019**

- **Co-Management**

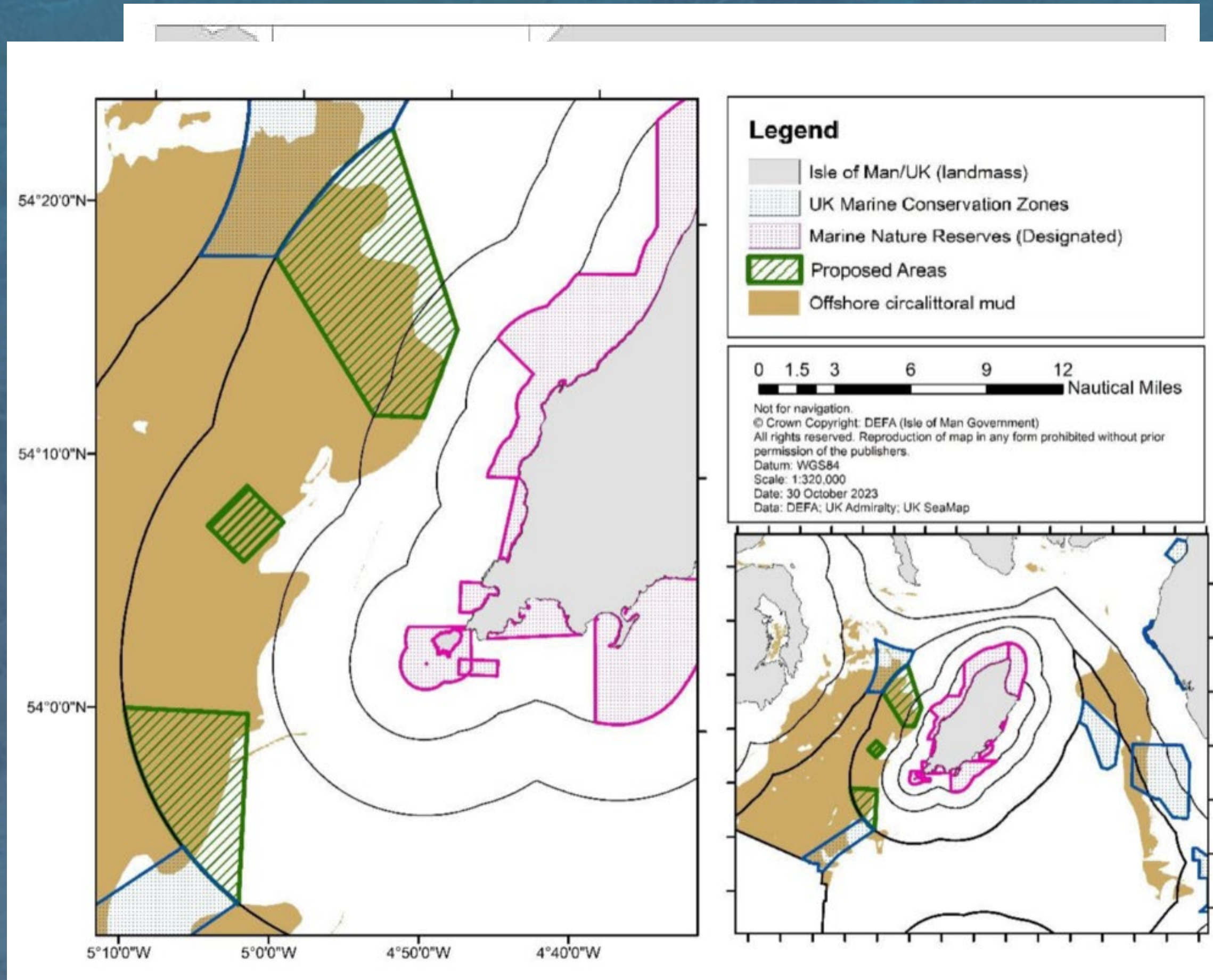
- Scallop Management Board
- *‘moving beyond stakeholder ‘engagement’ to genuine ‘participation’, underpinned by mutually trusted evidence, is the key to unlocking sustainable approaches to fisheries management.’*



LPUE by Ground, 2017-2024

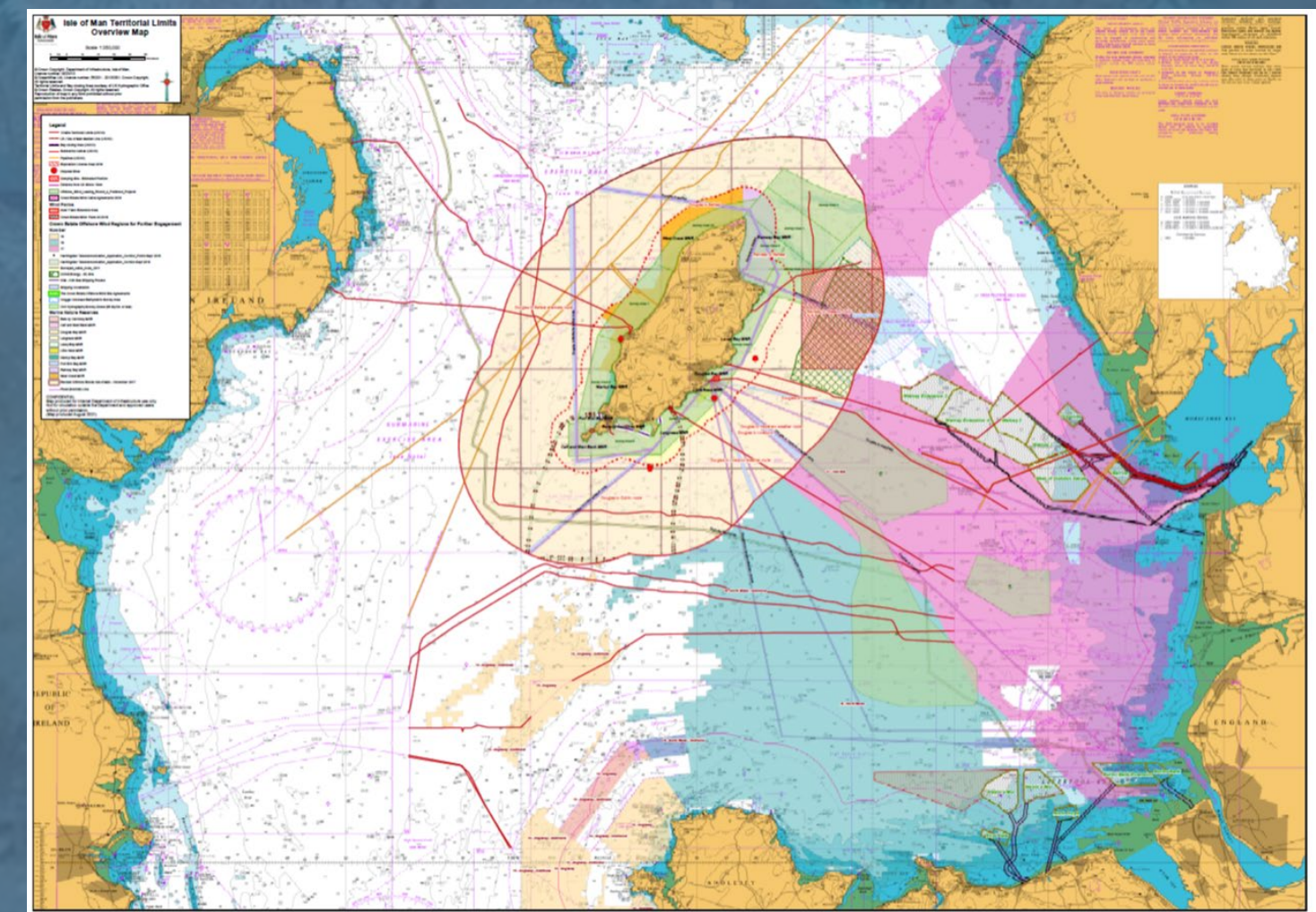
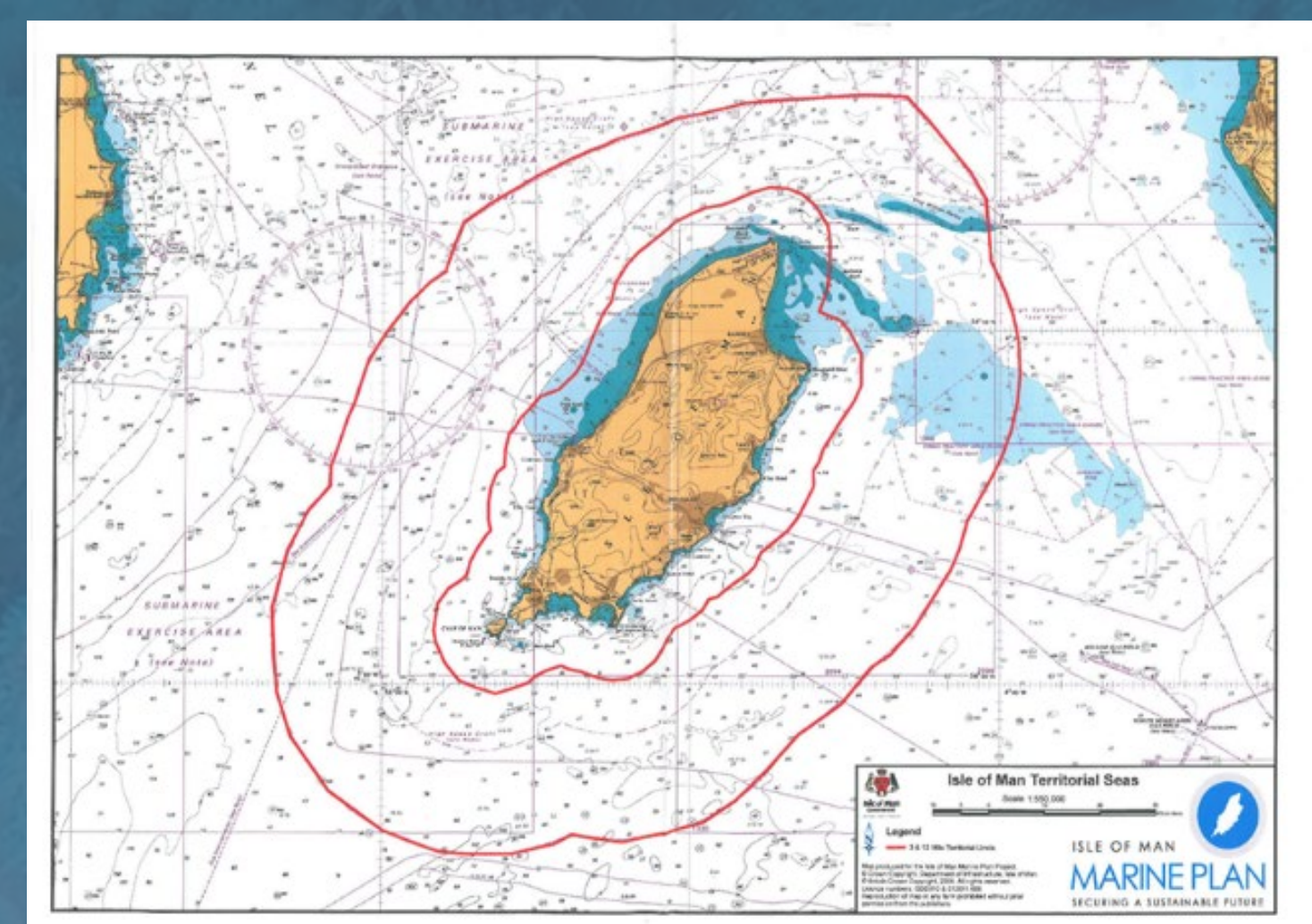
Marine Conservation and Fishery Similarities

- Presence
- Data
- Management
- (Sustainable Exploitation)
- Conservation
- Treat fishery species more like any other conservation-value species, and part of the ecosystem, not in isolation.
- More similarities than differences.



Future?

- Protect what we have (*from various threats, e.g. – climate change, marine infrastructure projects, fisheries, terrestrial activities, INNS*)
- Finding space for everything! Inclusion of conservation, fisheries etc. in future **Marine Spatial Planning** processes.
- Increase data and understanding: strong evidence base for policy and legislation.
- Apply proven management principles to our other fisheries.
- Improve engagement and communication of marine environment, especially Ecosystem Services.
 - Net Zero targets and Blue Carbon.
- International Issues, e.g. climate change, biodiversity crisis, CBD (30 x 30).
- **Local and regional cooperation is essential.**





Thank you!

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