



## Session 4 – Enabling Recovery Through Resilience

Cllr Mike Stanton  
Somerset Council

@SevernEstuary #SEPForum24

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# Incorporating the Severn Estuary in Local Nature Recovery Strategies

Severn Estuary Partnership  
Forum  
8<sup>th</sup> October 2024

# Context

# What is an LNRS?

- ‘New, England-wide system of **spatial strategies** that will **establish priorities** and **map proposals for specific actions** to drive nature’s recovery and provide wider environmental benefits’
- 48 Strategies across England, covering the whole country
  - Joined together, will map delivery of the national Nature Recovery Network
- Public Authorities **must take account of** any relevant local nature recovery strategy

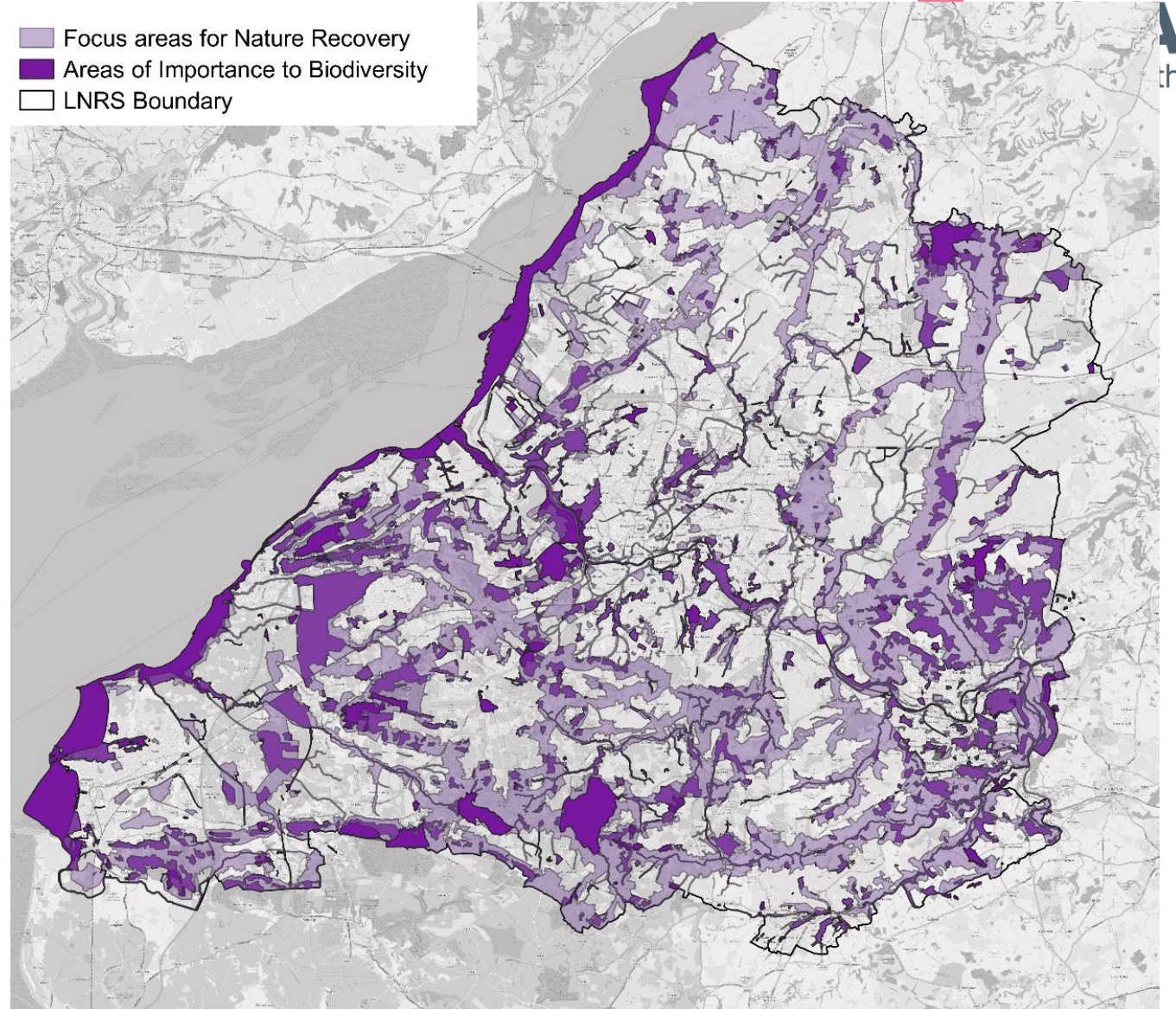
# Statement of Biodiversity Priorities

- **Priorities** are **outcomes** that are most important for nature recovery in WoE
  - E.g. ‘There is more and better managed inter-tidal and saltmarsh habitat along the Severn Estuary, supporting populations of wading birds and wildfowl’
- **Measures** are **actions** to achieve the priorities
  - E.g. ‘Restoration and creation of intertidal saltmarsh habitat and mudflats near the coast, using techniques such as managed realignment or regulated tidal exchange...’
- Each **Priority** may have several **Measures**



# Local Habitat Map

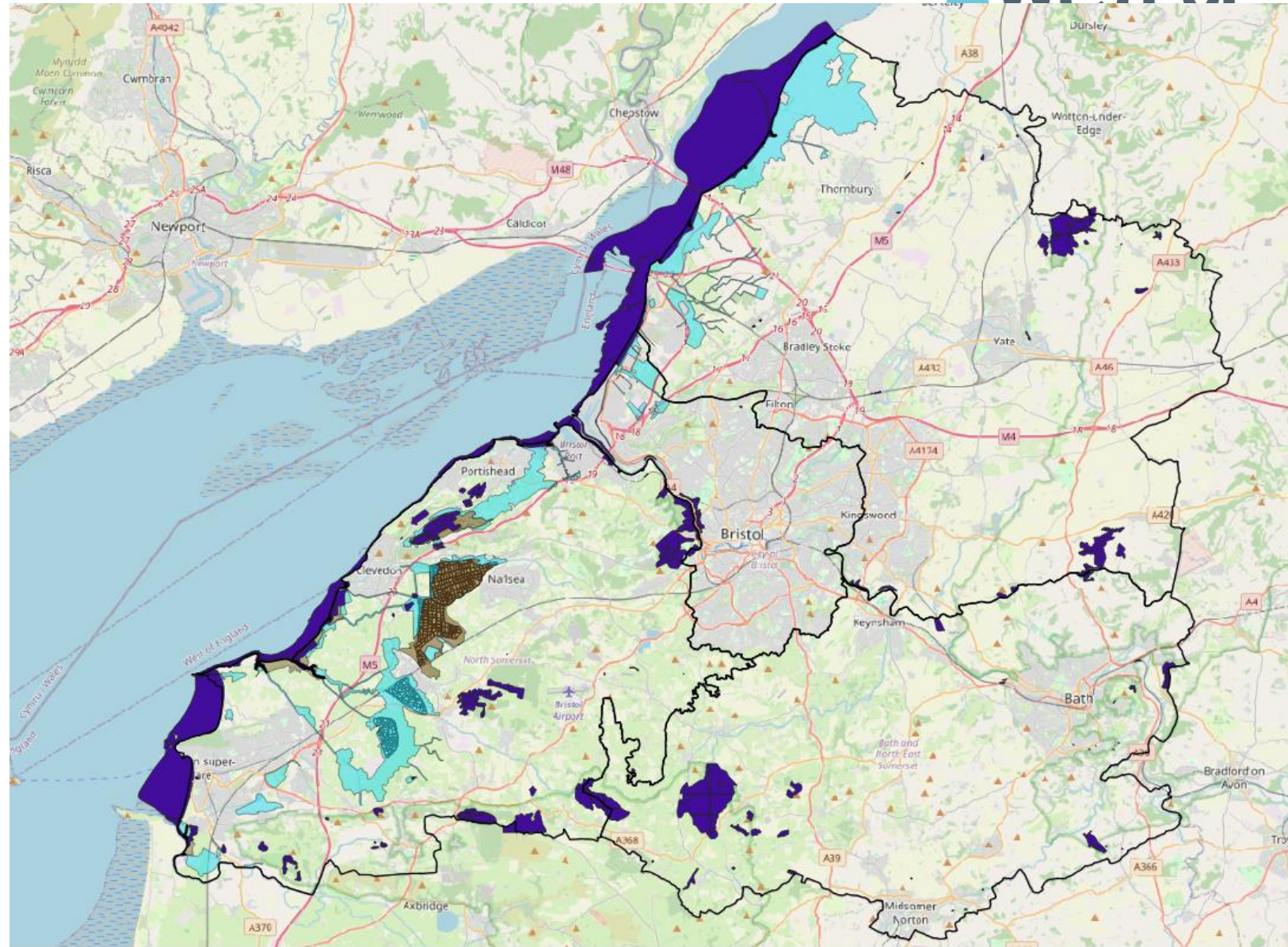
- Focus areas for Nature Recovery
- Areas of Importance to Biodiversity
- LNRS Boundary





# Mapped measures

WEST OF





# How will the LNRS be used?

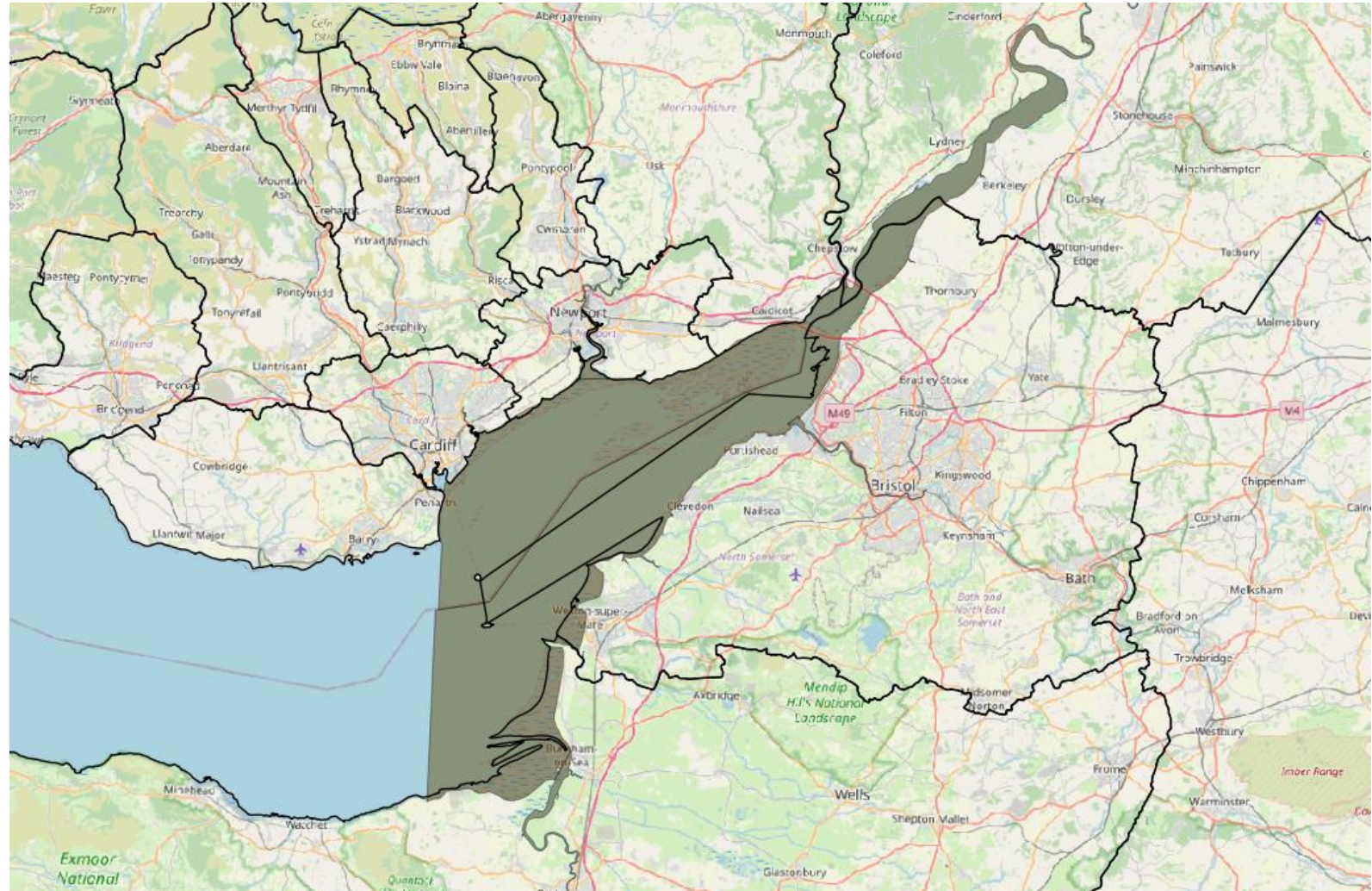




# LNRs and the Severn Estuary

# The Geography

- At least 3 relevant LNRS areas in England
- 4 relevant LNP areas in Wales





# What we do have

- Measures up to the low-tide line (excluding SSSIs)
  - E.g. regarding saltmarsh and mudflat habitats
- Measures across the terrestrial and freshwater environment that are relevant to the Estuary
  - E.g. removing barriers to eel passage





# And what we are missing...



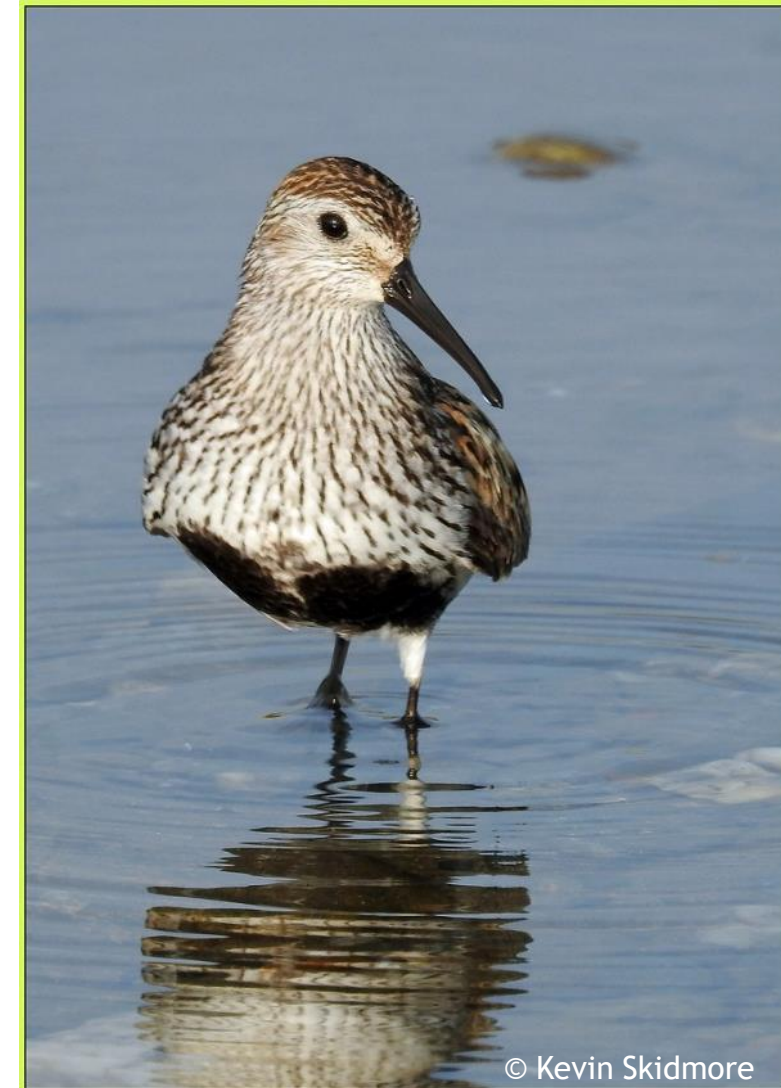


# The Opportunity...

- Statutory role of and Government support for LNRS
  - Planning and BNG
  - Role in directing other public and private funding streams
- Achieve **buy-in to SEP ambitions** from a larger number and range of stakeholders
- Opportunity to **translate ambitions of SEP to local priorities and measures**, and eventually on-the-ground action

# The Challenges...

- LNRs do not have to include the marine environment
  - Unlikely that the ‘statutory component’ of LNRs will include many marine elements at this stage
  - Although, some areas are doing voluntary marine extensions
- No clear mechanism for LNRs to influence marine environment
- Wales does not have LNRs...





# Next steps

# How to square the circle?

- ? Bring together a group to produce coordinated **voluntary marine extensions** to the three relevant LNRs, with similar products for Wales
- ? Produce a single ‘**LNR Extension**’ for the Severn Estuary that would be relevant to all areas
- ? Incorporate LNR priorities and measures into **existing strategies / action plans**



# Some questions to consider

- Is there appetite for producing voluntary marine extension(s) to the LNRs, including Wales?
- What would this look like for LNP Areas in Wales?
- What would this add in addition to existing strategies, action plans etc?

Thank you for  
listening





**Cyfoeth  
Naturiol**  
Cymru  
**Natural  
Resources**  
Wales

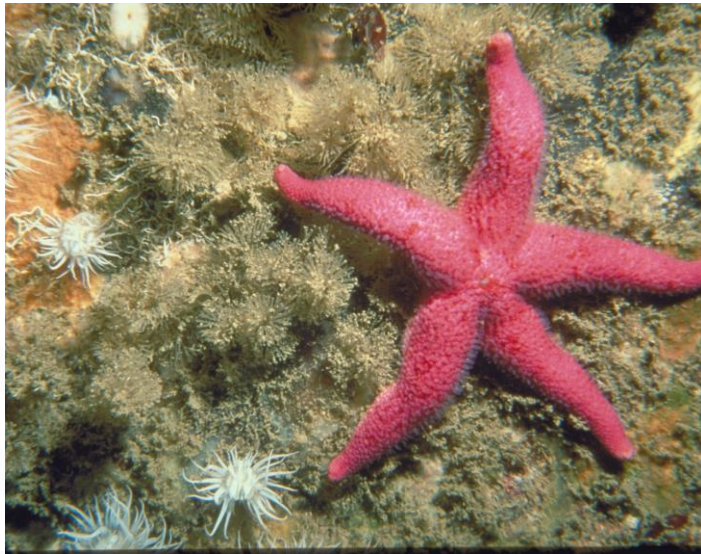


## Opportunities for building resilience in Wales

Dr Jenny Oates, Lead Specialist Advisor, Marine  
Ecosystems Policy, Natural Resources Wales

## What do we mean by ecosystem resilience?

“the capacity of ecosystems to deal with disturbances, either by resisting them, recovering from them, or adapting to them, whilst retaining their ability to deliver services and benefits now and in the future” (SoNaRR 2016)





# Legislation



**The Well-being of Future Generations Act 2015** aims to improve the social, economic, environmental and cultural well-being of Wales

**The Environment (Wales) Act 2016** formalised Welsh Government's commitment to the sustainable management of natural resources (SMNR):

***‘maintain and enhance the resilience of ecosystems and the benefits they provide and, in so doing –***

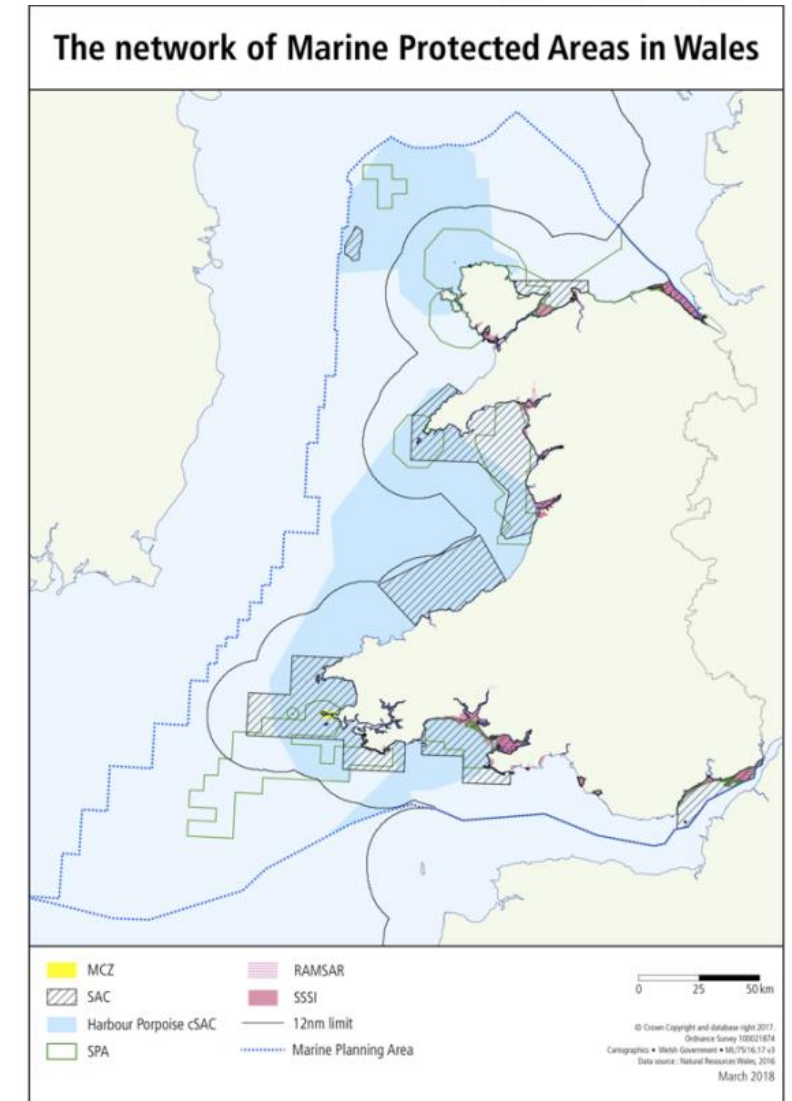
*(a) meet the needs of present generations of people without compromising the ability of future generations to meet their needs, and*

*(b) contribute to the achievement of the well-being goals in section 4 of the Well-being of Future Generations (Wales) Act 2015.’*

# Enhancing the resilience of marine ecosystems

Our position is that the coherence and condition of the MPA network is the “cornerstone” for marine ecosystem resilience in Wales:

- getting features across the network into favourable condition should be the priority focus of action



# Nature Networks

Programme funded by **Welsh Government** which aims to address the nature emergency in Wales through:

- increasing biodiversity
- improving the condition of protected sites
- enhancing the resilience and connectivity of our habitats and species

## 1) Direct to NRW to fund marine projects

- Improving Marine Conservation Advice
- Coastal Squeeze and MPAs
- Saltmarsh Restoration at Rhymney Great Wharf
- Investigations into the Declines of Benthic Habitats and Species





# Nature Networks



## 2) Available for external partners e.g.

- The Zoological Society of London – ‘Restoring Wild Oysters’
- The Royal Society for the Protection of Birds – ‘Biosecurity for Wales’
- The Marine Conservation Society – ‘Ocean Literacy’ project called Hiraeth yn y Môr
- Wildlife Trust of South and West Wales – Sentinels of the Sea
- SAC Officers: Partnership delivery of MPA improvements in Wales

# Improving Marine Conservation Advice project (IMCA)

The outputs of this project will be:

- A full set of condition assessments for 88 features of our Welsh only marine sites
- Feature level reports (e.g. seal report) and site level reports (e.g. Carmarthen Bay and Estuaries SAC)
- A full set of conservation advice packages including targeted conservation objectives for 12 sites
- We have applied for funding to do the same for cross-border sites starting in 2025



## IMCA outcomes

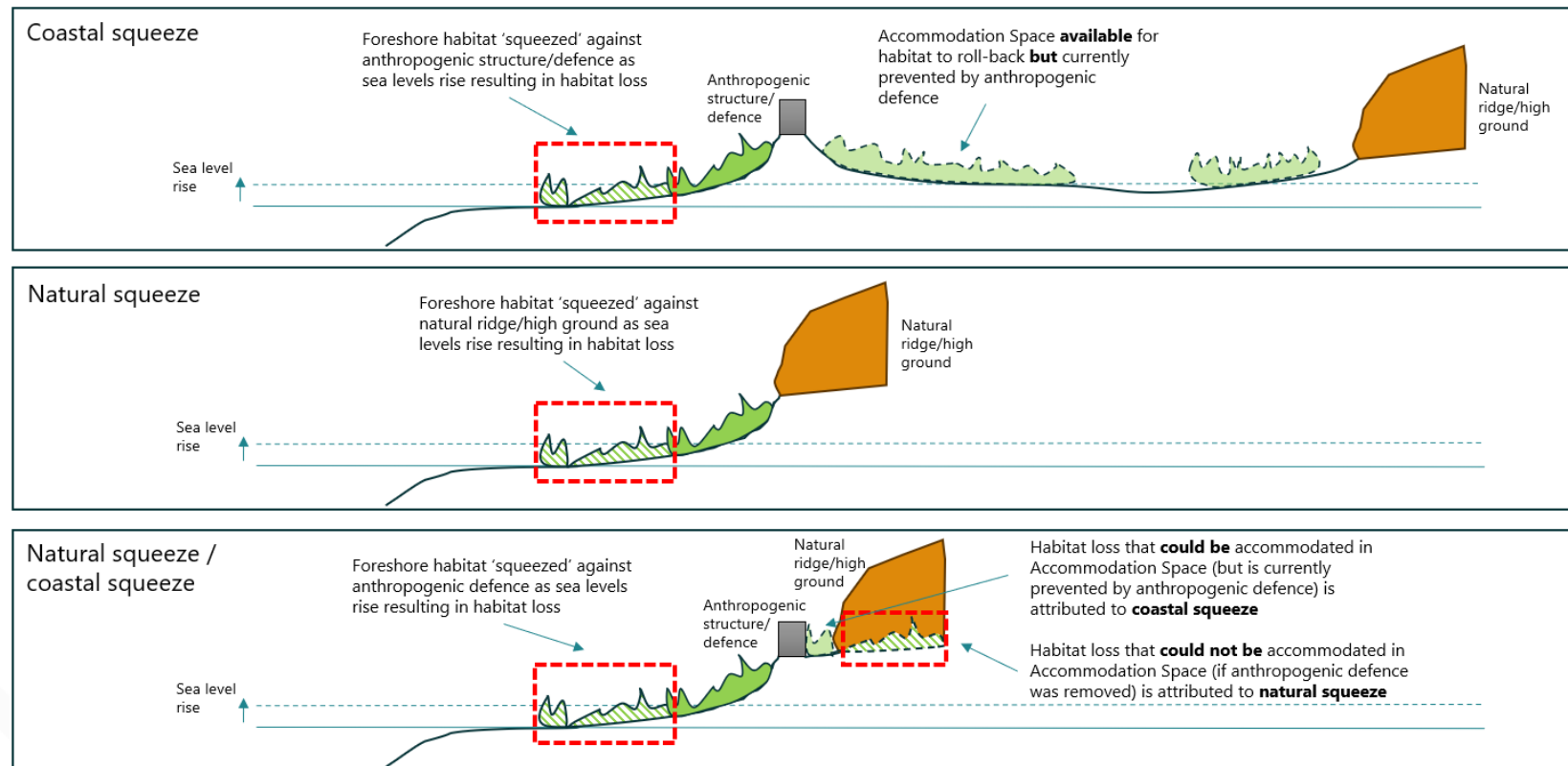
- Condition assessments will highlight which features are unfavourable and why
- This will allow prioritised management actions needed to bring features back into favourable condition
- Up to date knowledge of condition and more specific objectives will help to evaluate planning and licence applications





# Understanding the likely scale of deterioration of Marine Protected Area features due to coastal squeeze - Scope

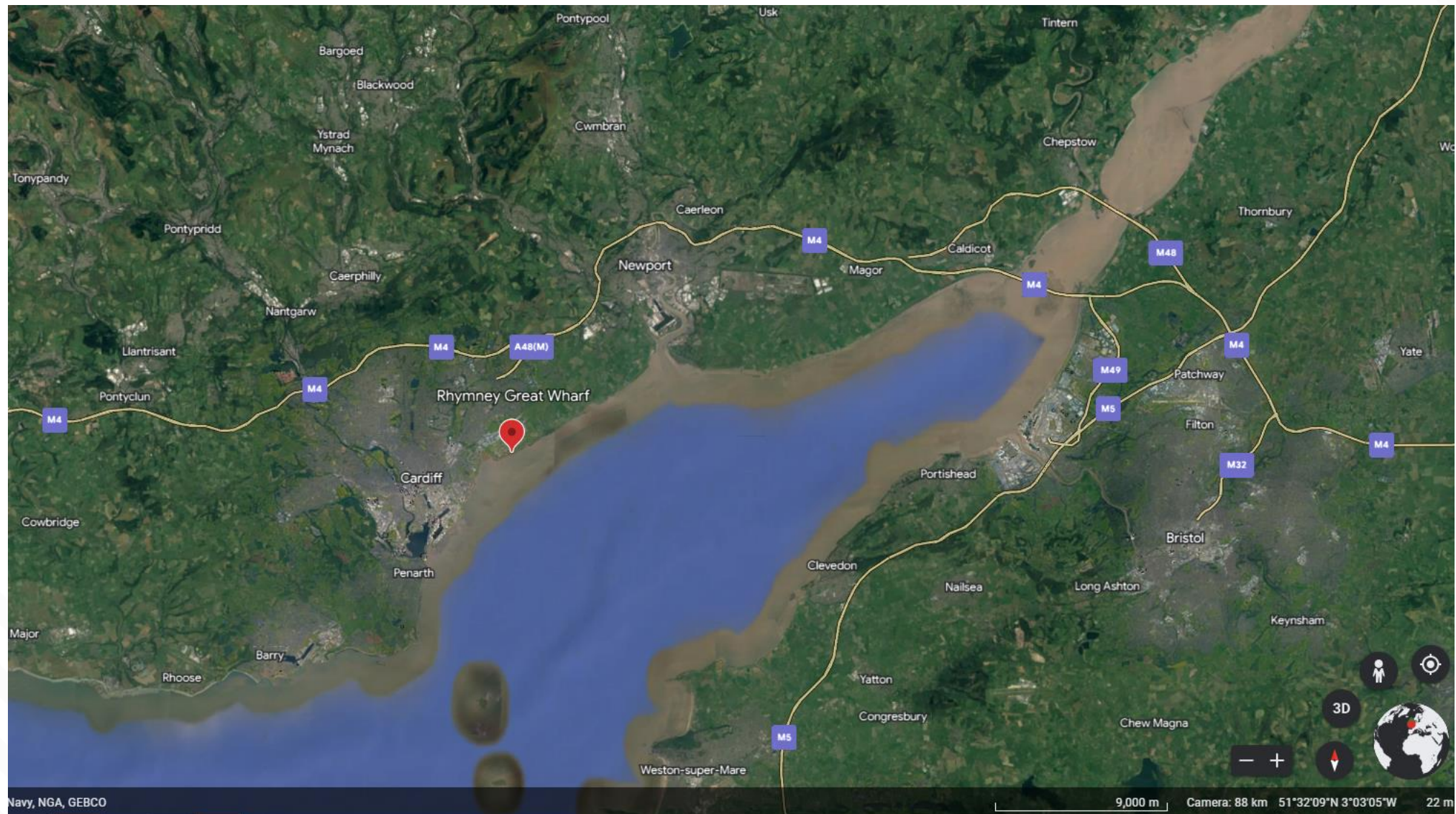
- Assesses the potential for coastal squeeze for the whole Welsh MPA Network up to 2155
- Also assesses the potential for natural squeeze.
- Looks at seven habitat groups: saltmarsh, mudflats and sandflats, intertidal reef, littoral coarse sediments, dunes, vegetated shingle, and coastal lagoons.







# Rhymney Great Wharf Polders Project

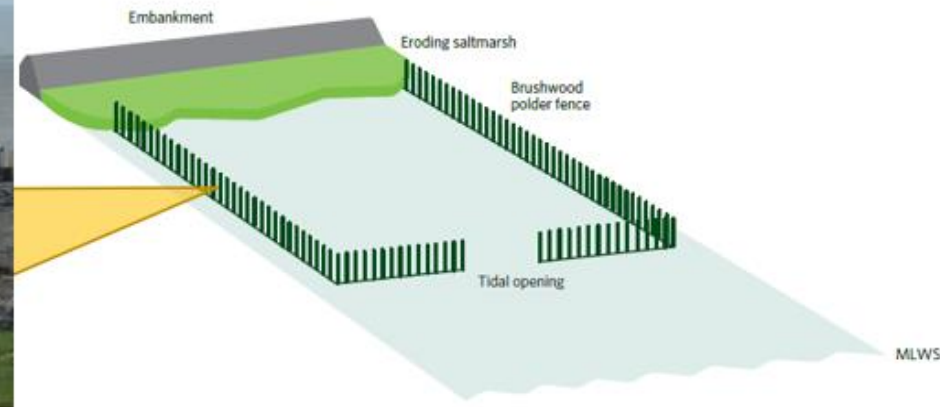
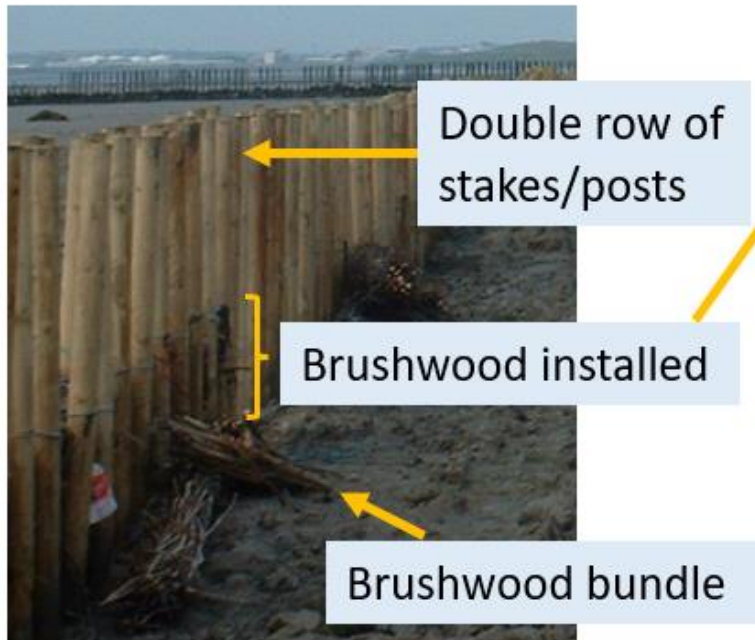




# What's a polder?

## Sedimentation polder :

Intertidal area, enclosed by rectangularly arranged brushwood groynes to facilitate enhanced sediment deposition.



**Figure 5.9:** Basic setup of a single sedimentation field (also referred to as sedimentation polder) consisting of brushwood groynes inserted in the mudflat to form an enclosure with a tidal inlet (adapted from Colenutt, 2001).

## Nature Networks polders project

### Objectives:

1. Protect the frontage of Rhymney Great Wharf from existing erosive pressures on mudflat and saltmarsh habitats by promoting sediment deposition in the first instance.
2. Create conditions that will support both mudflat and saltmarsh features to varying extents over time.
3. Have a refined sedimentation polder design
4. Support the flood risk management of the area





## Work so far

- 2023: ABPMer feasibility study (tricky environmental conditions in the Severn!)
- Summer 2024: Restoration of 3 old polders and construction of new polders to the west
- Chestnut fenceposts and willow brushwood
- Cost: £707,000
- Marine Licence conditions: commitment to undertake maintenance and monitoring





## Further research opportunities

- How well is the design working against predictions? Are the structures sound and/or could they be improved for other projects?
- How successful are the polders compared to other similar schemes in the UK and beyond?
- How are invertebrate communities affected in mud/saltmarsh areas?
- How are estuarine/migratory fish using the polders? Increased use as a fish nursery?
- How are birds using the polders area? Special Protection Area species, overwintering birds etc.













**Thanks for listening!**

**Jenny.oates@cyfoethnaturiolcymru.gov.uk**



# A more local lens for marine planning

Aspirations, issues and opportunities

**Tara Hooper**, Principal Specialist  
Natural England & Marine Management Organisation

October 2024



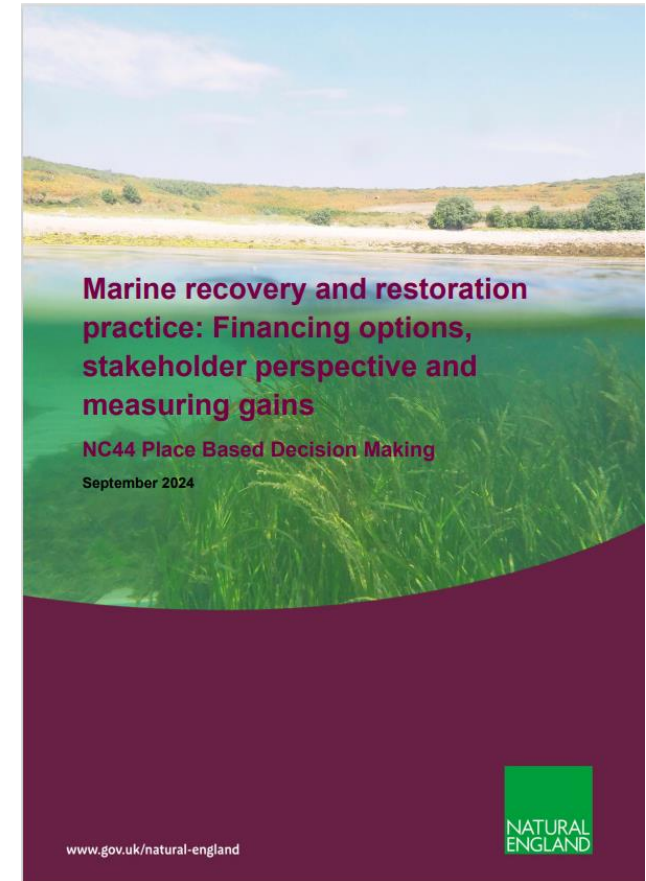


- This is a research project. It is not current, or future, policy.
- The MMO recognises the potential benefits of a more localised approach. This project is about scoping the art of the possible.
- It remains in a ‘pre-pilot’ phase.
- Future funding will also be key to what may be achievable.



# Background: Local marine recovery

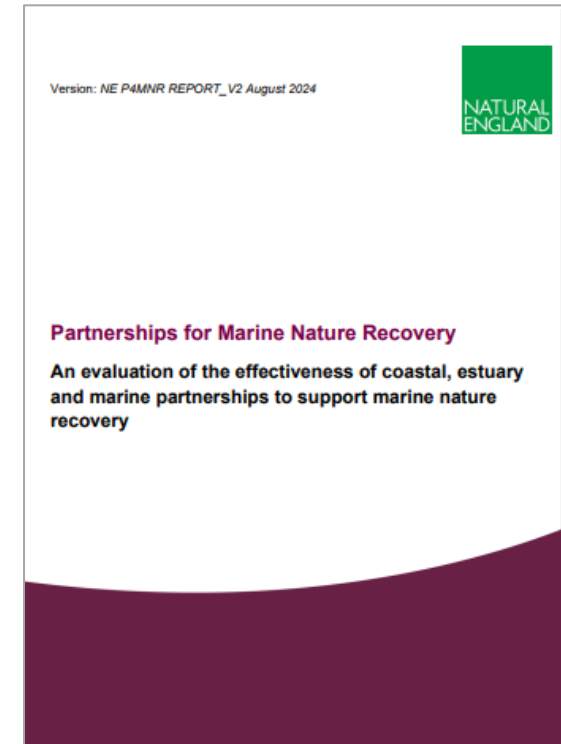
- **Aim:** to explore how funding for marine nature recovery is prioritised and allocated, and to understand the way in which recovery and restoration is delivered.
- Adopted a mixed-method approach integrating empirical qualitative research (surveys and in-depth interviews) with desk-based scoping and evidence reviews:
  - Part 1: Funding marine nature recovery and restoration
  - Part 2: Delivering restoration - Projects and perceptions
  - Part 3: Payments for recovery
  - Part 4: Using Natural Capital to measure losses and gains
- **Ten main recommendations, including:**
  - Improve public funding coordination and establish clear governance for public accountability
  - Recognize marine and terrestrial environments as integrated systems
  - Increase emphasis on payments for passive recovery
  - Reform licencing for marine nature recovery and restoration
  - Increase recognition of the role of collaborative partnerships in marine nature recovery
  - Standardise, expand and resource monitoring and evaluation



*(Available on NE Access to Evidence portal)*

# Background: Partnerships for Marine Nature Recovery

- Three decades of partnership working at the local level have evolved in over fifty locations and offer strong potential for Coastal Estuarine and Marine Partnerships (CEMPs) to facilitate Marine Nature Recovery (MNR) engagement.
- **The project considered:**
  - How might effective CEMP might be enabled to support the efficient delivery of MNR?
  - What is their role in supporting strategic planning for MNR and how it connects to coastal and upstream planning?
  - The wider value of CEMP in facilitating MNR & the economic case for supporting them
- **Key outputs/findings**
  - Characterisation of CEMP, their governance structures and engagement in MNR:
    - provide a place-based knowledge and networking hub, with ‘soft’ governance qualities that facilitate collaboration to identify opportunities and support delivery.
    - need more stable, core and long-term finance to maximise their efficiency
  - Additional insights from international and national research, including on green finance and social impact

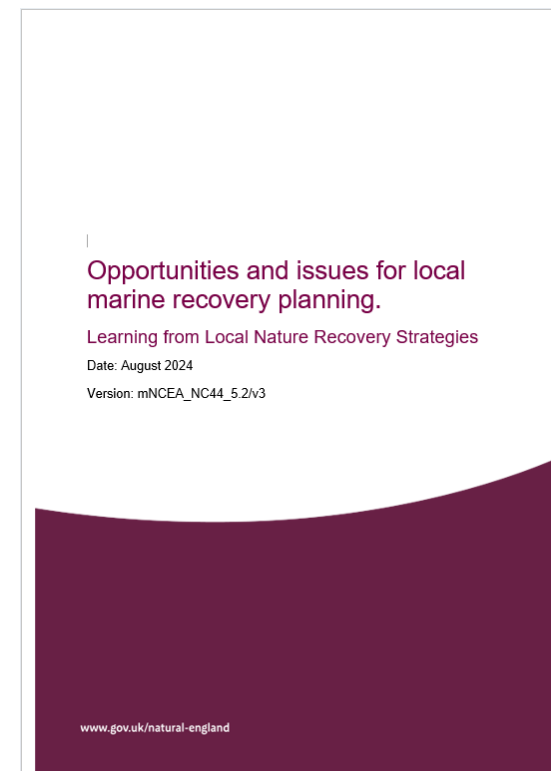


(Not yet published)

*“Our partnership is...held together by the personalities that are driving it...key people, lynchpins for funding, getting the right people doing things. We would like to find a way of building it back up into a core service...to do more than just the bare minimum...and be a little bit more forward thinking”*

# Background: Local marine recovery planning

- **Initial assessment** of opportunities and challenges for stakeholder-led marine nature recovery planning, with lessons from Local Nature Recovery Strategies (LNRS):
  - Survey on aspirations and needs for voluntary marine extensions to LNRS;
  - Interpretation of the LNRS process and guidance for marine areas;
  - Role of a nationally co-ordinated system of locally-led, strategic, spatial planning for marine nature recovery in supporting existing and emerging marine policies.
- **Key findings and recommendations**
  - Clear ambition to extend the approach into marine areas.
  - Marine areas have unique challenges, so need specific additional advice and data.
  - Clear opportunity in advance of the next LNRS iteration to develop a strategy and guidance that support integration with any future local marine recovery plans.
  - The refresh of the East Marine Plan should be used to consider the legislative and practical aspects of developing and integrating local marine recovery plans.
  - Additional dedicated funding should be sought to:
    - i. recognise and resource the wider ambition for local marine recovery plans,
    - ii. extend research on integration between terrestrial and marine nature recovery.

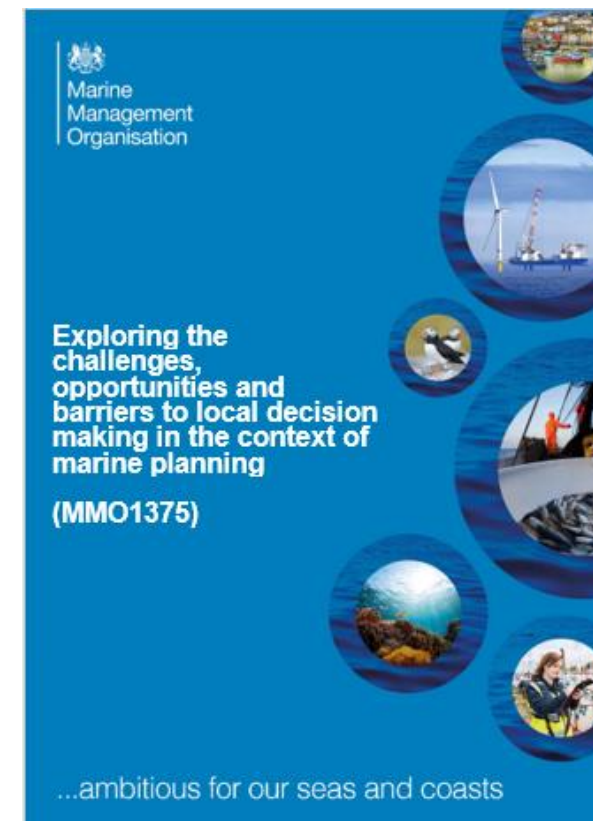


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# Background: Scoping more localised marine planning

- Local people play an important role in driving change to the environment
- What could more locally-focused, or 'nested' marine plans offer to society, the environment and the economy?
- What are the barriers, opportunities and challenges?
- **Short scoping study:**
  - Reviewed international, national and regional examples and best practice
  - Preliminary workshop with MMO marine planning and licensing staff, and a few external practitioners and academics
- **To consider in more detail**
  - What are the legal implications?
  - How would local plans integrate with other plans and planning?
  - How would we best work with use existing groups to deliver them?
- **What success needs:**
  - a significant pilot that will deliver over multiple years
  - a thorough evaluation of the pilot



*(Available on Gov.uk)*

# Pre-Pilot Phase: Objectives

**Aim:** to undertake a more detailed assessment of the practical options for localised, integrated marine planning.

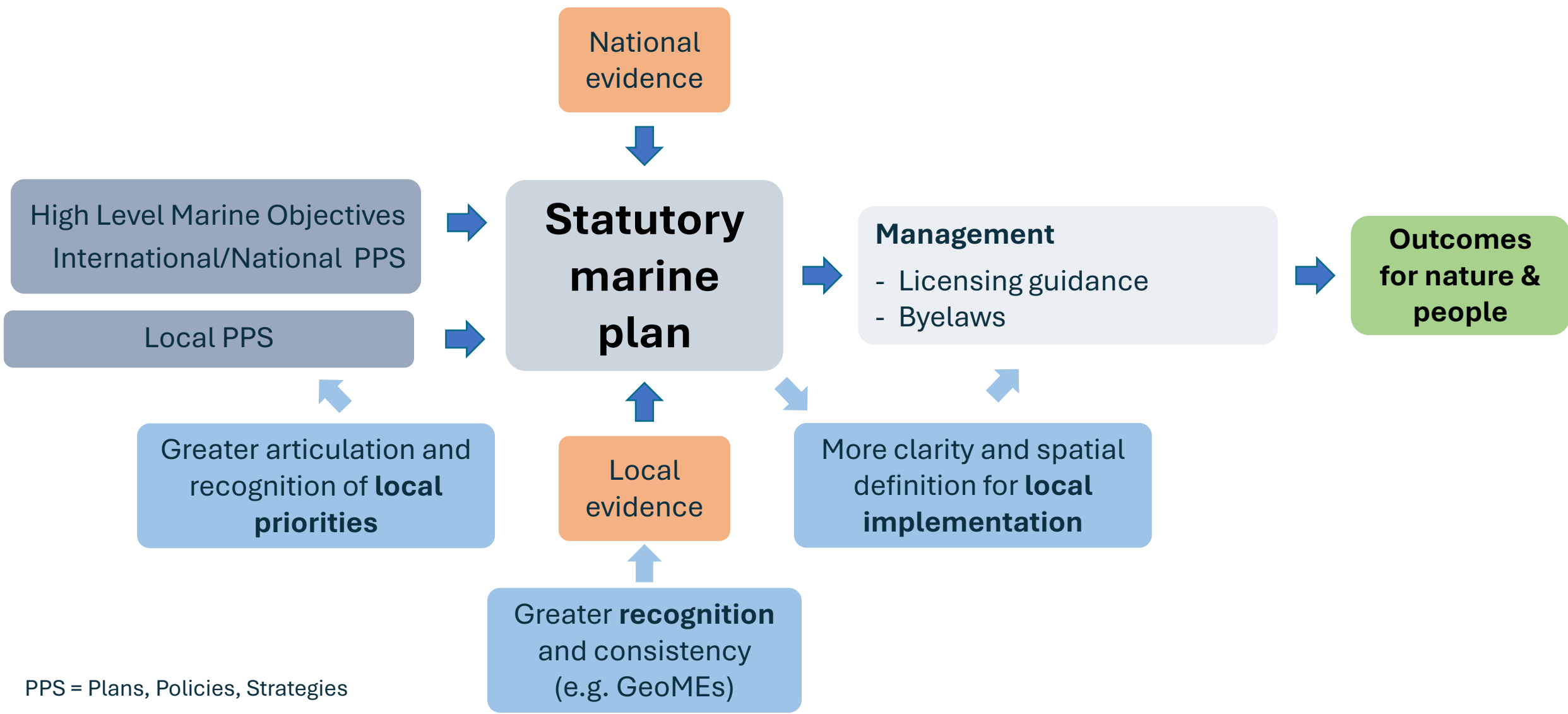
## **Objectives:**

- Determine appropriate legislative pathways for, and legal constraints on, local marine planning options.
- Consider in detail the issues and opportunities:
  - spatial boundaries, engagement, integration with other plans, cross-boundary issues, data, governance, decision making, and resourcing requirements.
- Increase the engagement of local and national stakeholders, including through case studies.
- Outline a process that can be rolled out for a full pilot phase.

## **Intended Outcomes:**

- Improved understanding of the opportunities and challenges of increasing local participation in marine planning.
- A comprehensive foundation is in place for a full pilot phase:
  - A detailed proposed process is available for further testing;
  - Likely resource requirements for implementation are better understood;
  - Stakeholders are prepared to participate, with appropriately managed expectations.

# Pre-Pilot Phase: Conceptual Framework





# Pre-Pilot Phase: Main project components

1. Establish an internal advisory group, cross-agency working group, and engage with key stakeholder networks.
2. Obtain a comprehensive legal opinion.
3. Co-design with local stakeholders a preliminary approach, through one or two case studies, which may include:
  - Stakeholder and decision mapping
  - Appropriate approaches and mechanisms for participation
  - Assessing data needs and availability
  - A Theory of Change and developmental evaluation.
4. Undertake a preliminary assessment of issues that could affect scaling of the case studies to a national level.
5. Using this learning, propose a framework for a nationally coherent local process.
6. Determine levels of resourcing for different options and develop an outline business case for a full pilot phase.





An underwater photograph of a seabed covered in small, dark pebbles. A large, light-colored starfish is visible on the left side of the frame. In the center foreground, there is a dark, spiky sea urchin. The water is a deep teal color, and the overall scene is dimly lit.

**Thank you**

**[tara.hooper@naturalengland.org.uk](mailto:tara.hooper@naturalengland.org.uk)**

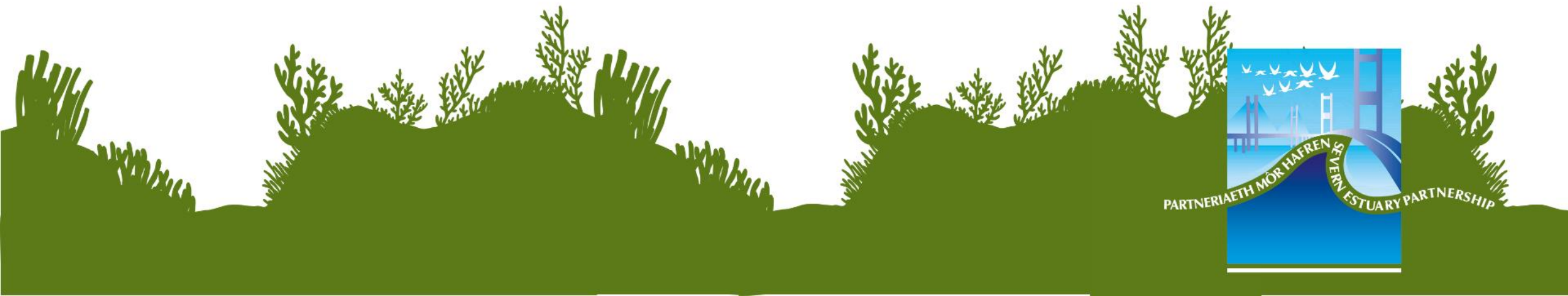
**[tara.hooper@marinemanagement.org.uk](mailto:tara.hooper@marinemanagement.org.uk)**



## Final Thoughts

Rhoda Ballinger  
Severn Estuary Partnership Chair

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# Thank you for attending!

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We invite you to join us for the drinks reception in the foyer.

