Coastal Futures Conference 2024

An inclusive future for our seas

Coastal Futures Conference 2024

24th & 25th January, 2024 | London & online

www.coastal-futures.net

Ocean & Coastal Futures

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Coastal Futures Conference 2024

An inclusive future for our seas

Session Two

Capitalising on Values

How will knowledge of 'values' make a difference to our prospects?

Chair

Hugo Tagholm, Oceana UK

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Q&A

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Session Two

Capitalising on Values

Professor Graham Underwood, Chair, UK Blue Carbon Evidence Partnership

How evidence of natural and social capital values will support the protection of blue carbon habitats

University of Essex

Coastal Futures, 24/25 January 2024

How evidence of natural and social capital values will support the protection of blue carbon habitats.

Graham J. C. Underwood.
NERC Knowledge Exchange Fellow
Chair UK Blue Carbon Evidence Partnership

UKRI Natural Environment Research Council

University of Essex

U.K. Blue Carbon habitats

Salt marsh, Seagrass,

Mangroves [coastal B.C., IPCC]

- Mudflats
- Oyster and mussel beds
- Kelp beds and reefs,
- Sublittoral sediments (inshore and offshore)

Ecosystem Services

- Carbon sequestration
- Sediment stabilisation
- Coastal protection
- Nutrient recycling and clean water
- Fish and bird habitat and nursery provision

Blue Carbon : All biologically-driven carbon fluxes and storage in marine systems that are amenable to management

University of Essex

UK Blue Carbon Evidence Partnership

- Established in 2022 after UN Climate Change Conference COP26 (Glasgow) in Oct-Nov. 2021

Department for Environment Food & Rural Affairs

Department for Energy Security & Net Zero

Department of Agriculture, Environment and Rural Affairs

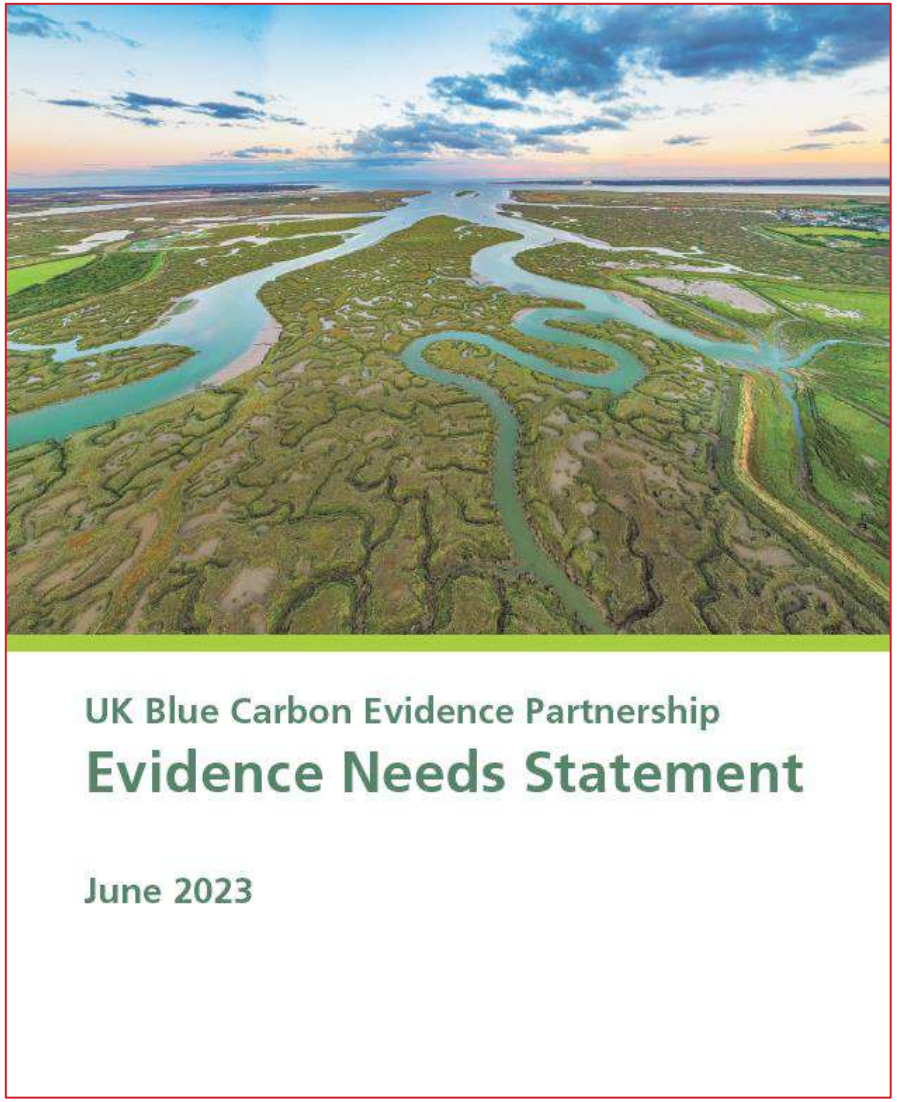
Llywodraeth Cymru Welsh Government

Scottish Government Riaghaltas na h-Alba

- purpose of the UKBCEP is to facilitate co-ordination and collaboration across UK administrations
- The UKBCEP supports partners to work together to coordinate and progress the evidence base for **blue carbon habitats** across the whole of the U.K.

Evidence Needs Statement: June 8th 2023

- Work across the administrations during 2022-23 to agree a single “evidence needs statement” (ENS)
- The ENS provides a roadmap for progressing research and information gathering, by administrations and with partners
- Provide benefits of co-ordination, and clarity to stakeholders.



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Five objectives of the ENS

Working towards the potential inclusion of saltmarsh and seagrass in the UK Greenhouse Gas Inventory

Encouraging and enabling investment in blue carbon habitats

Reducing the impacts of human and environmental pressures, including climate change risks, on blue carbon habitats

Managing coastal and marine habitats on a seascape scale, with consideration of land and marine connectivity

Achieving climate change mitigation, adaptation and biodiversity benefits from blue carbon habitats as nature-based solutions

University of Essex

Five interconnected themes of the ENS

Within each theme, the ENS sets out a range of more specific areas where evidence gaps need to be addressed

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3. Carbon Stock, Accumulation, Burial and Emissions Data

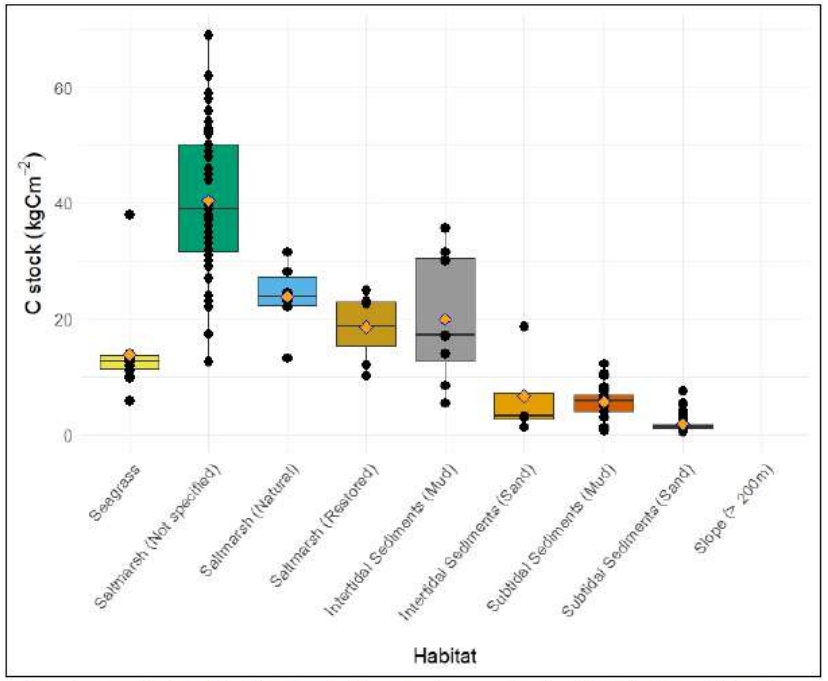
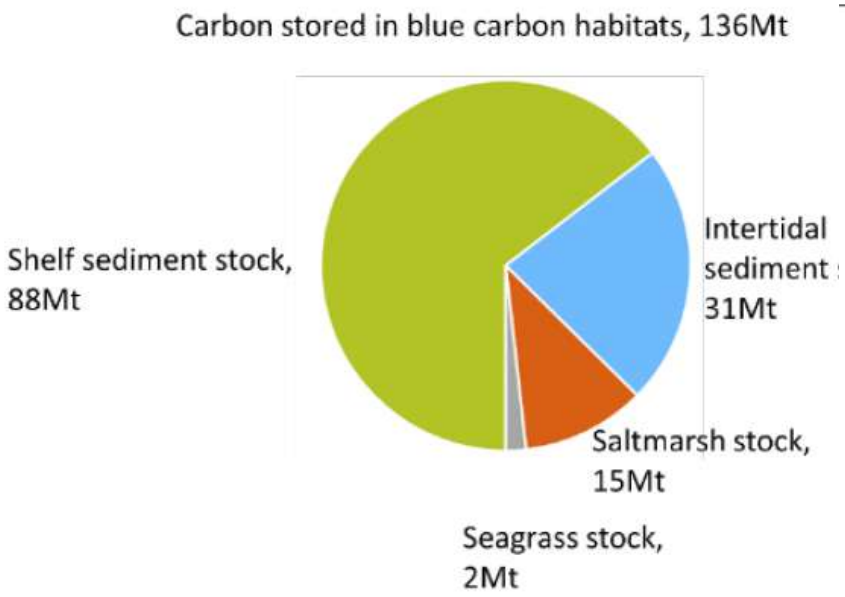
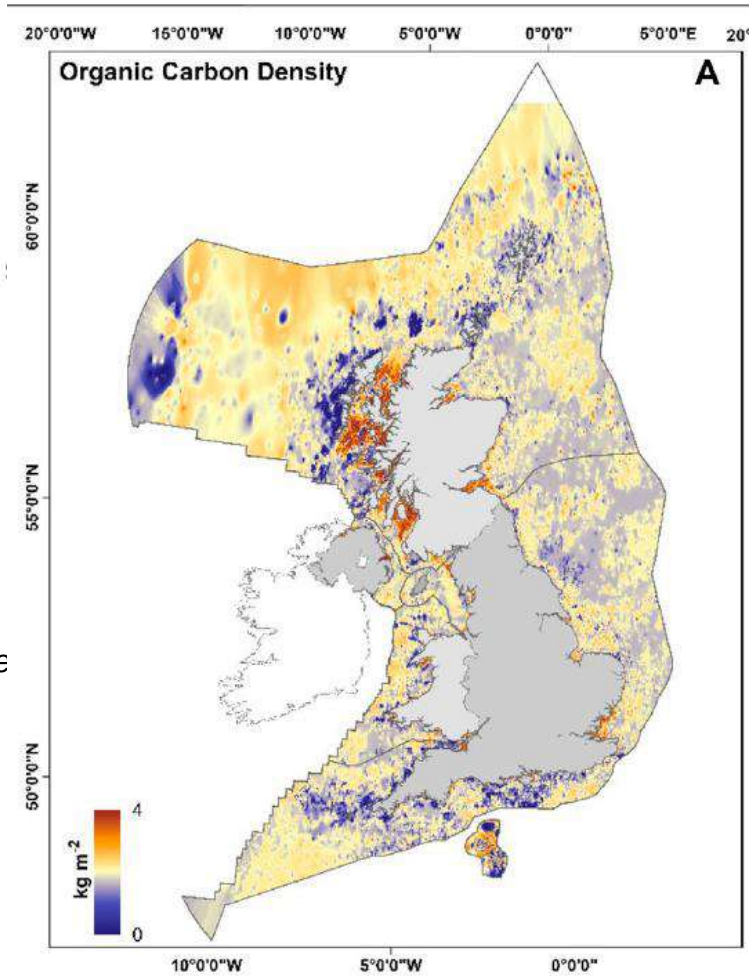


Figure 1: Box plots showing the data distribution of sediment carbon stock values (C stock; kg C m^{-2}) for the SoS waters, to 1m depth, including the minimum, the maximum, the median, and the first and third quartiles of the data. The orange diamond shows the mean value. Gaps indicate a lack of available data for that habitat.



Millions tonnes Particulate Organic Carbon, *Secr. State Waters.*

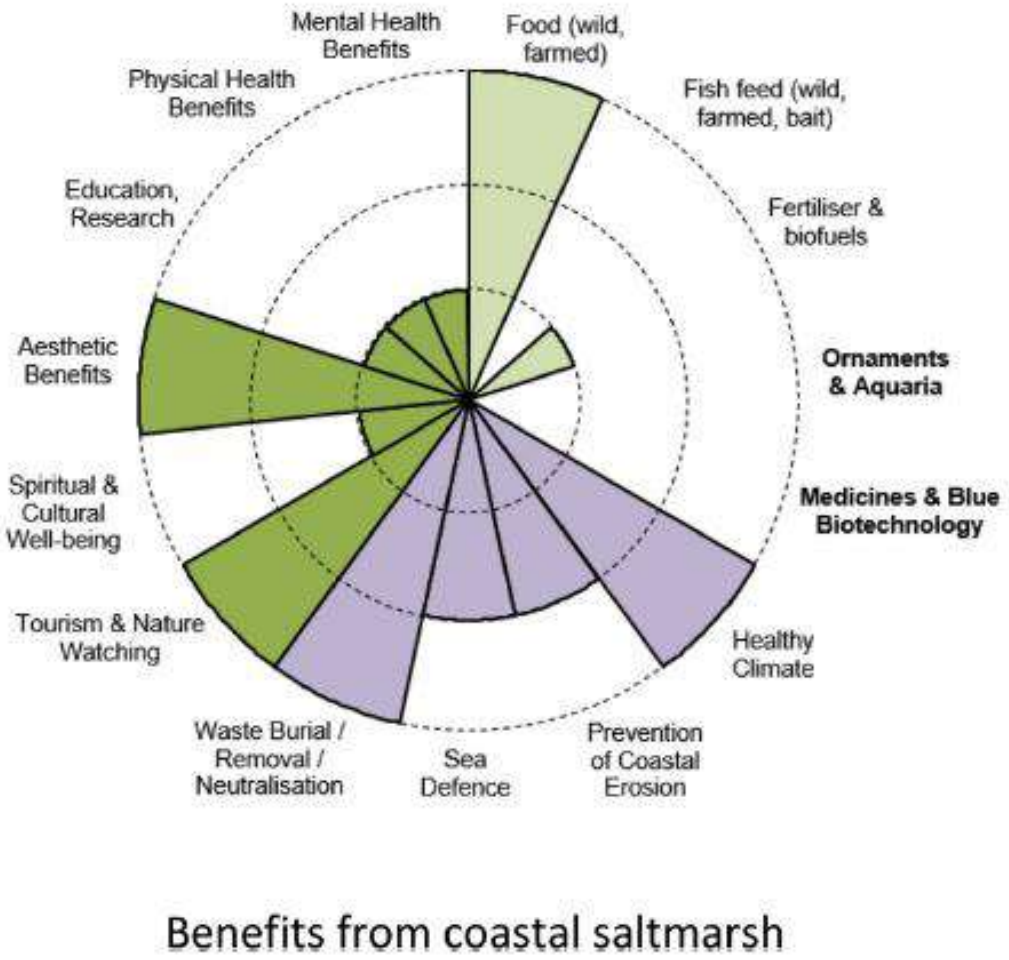


Parker *et al.* (2020) Blue carbon stocks and accumulation analysis **for Secretary of State (SoS) region**. 42.

Legge *et al.* 2020, *Frontiers in Marine Science* **7**, 143

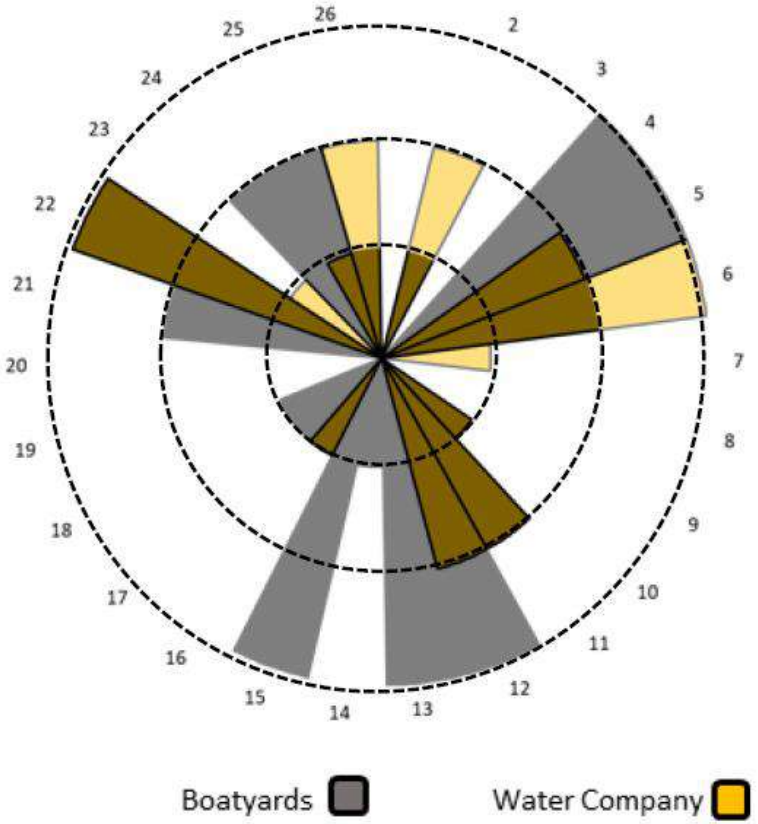
Smeaton *et al.* 2022, *Front. Earth Sci* doi: 10.3389/feart.2021.593324

5. Socio-Economic Benefits and Costs



Benefits from coastal saltmarsh

McKinley et al. *Estuarine, Coastal and Shelf Science* 243 (2020) 106840



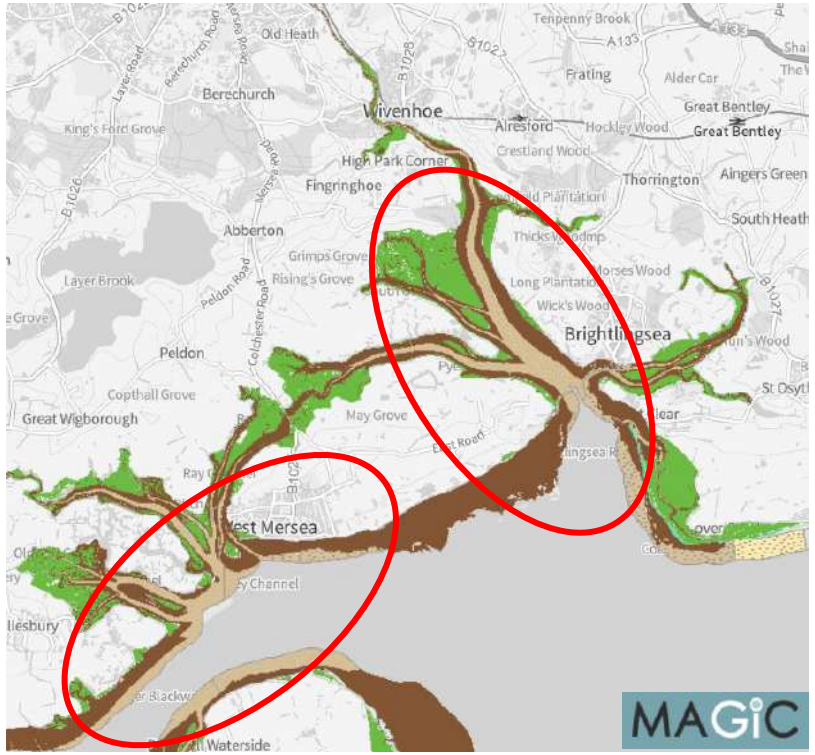
1. Primary production
2. Nutrient cycling
3. Species habitats
4. Seascape
5. Hazard regulation
6. Waste breakdown
7. Carbon sequestration

11. Reduce coastal erosion
12. Sea defence
13. Tourism & nature watching
14. Cultural well-being
15. Aesthetic benefits

21. Dredged materials
22. Water quality & quantity
23. Geology & archaeology
24. Place to live
25. Place to work
26. Biodiversity

Burdon, in *Suffolk Marine Pioneer: Lessons & recommendations….* (2020) [Defra programme, Deben Estuary, Suffolk]

5. Socio-Economic Benefits and Costs

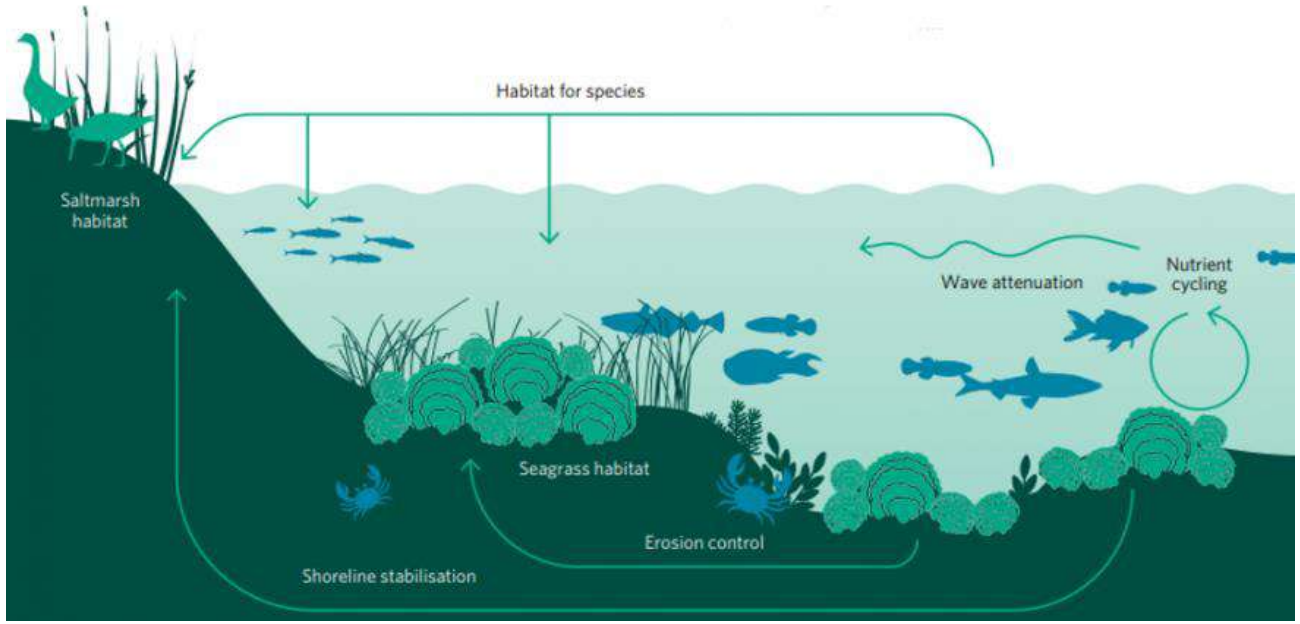


Colne and Blackwater Estuaries in Essex, England.
largest extant *Ostrea edulis* beds.
Designated MCZ in 2013
Fisheries for both native and rock oysters

- Cultural value and civic identify
- Tourism value
- Commercial value

Supporting services for Oyster fisheries:
clean water, food availability, sedimentation and invasive species control, provided by a *healthy seascapes*

Managing coastal and marine habitats on a seascape scale, with consideration of land and marine connectivity



Seascape: *The physical mosaic of interacting habitats occupying the coastal marine environment in time and space.*

Structural connectivity:

Functional connectivity:

Blue Marine – UKCEH report "*The evidence and vision for UK seascape scale restoration*", [publication pending, Dr Angus Garbutt].

Linked to ZSL Symposium - *Ecological connectivity across temperate coastal habitats* November 2022 [publication pending, Prof Jo Preston]

SOLENT SEASCAPE PROJECT

Transforming the Thames

ENDANGERED LANDSCAPES & SEASCAPES PROGRAMME

ReMeMaRe

Partnership working

- https://www.ukbluecarbonforum.com/ *Ensuring the ocean is at the heart of addressing the climate crisis.*
- ENS Launch workshop with UKBCF and SBCF (London, October 18th 2023)
- ENS - focussed science session at MASTS Glasgow meeting (SBCF / BCF / MASTS/ UKBCEF) 06 December 2023
- Shared membership of UKBCEP working groups

Achieving climate change mitigation, adaptation and biodiversity benefits from blue carbon habitats as nature-based solutions

UKBCEP, website coming soon.

UK BLUE CARBON FORUM

SCOTTISH BLUE CARBON FORUM

Thank you

UKRI Natural Environment Research Council

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Session Two

Capitalising on Values

Mike Nelson, Environment Agency

Catchment to Coast - Exploring natural capital approaches across the land-sea interface

Catchment to Coast: Exploring Natural Capital Approaches across the Land-Sea Interface

Mike Nelson
Environment Agency | NCEA

NCEA Natural Capital and Ecosystem Assessment

Environment Agency

Environment Agency;

Ben Green, Erin Lawes, Hannah Westoby, Jo Bayes, Keith McGruer, Lucy Stainthorpe, Mike Best, Mike Jones, Milly Piggott, Molly Weiland, Nina Reader, Rob Hilman, Roger Proudfoot, Sam Camp, Sam Rose, Sam Simpson, Sue Burton, Sarah Peaty

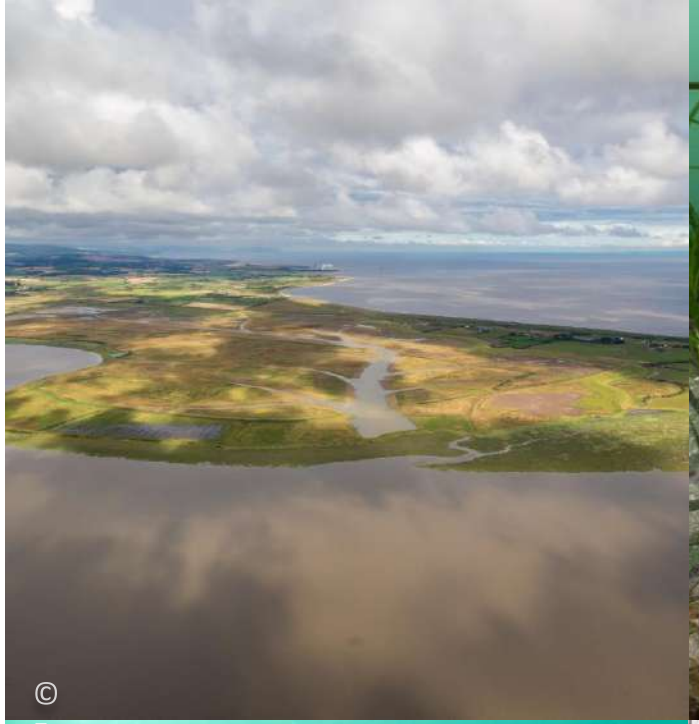
Department for Environment Food & Rural Affairs

NATURAL ENGLAND

Marine Management Organisation

Cefas

JNCC Joint Nature Conservation Committee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Shannon Moran / Ocean Image Bank


Hannah Westoby/ EA


Eve Leegwater /


Mike Best /

NCEA Natural Capital and Ecosystem Assessment

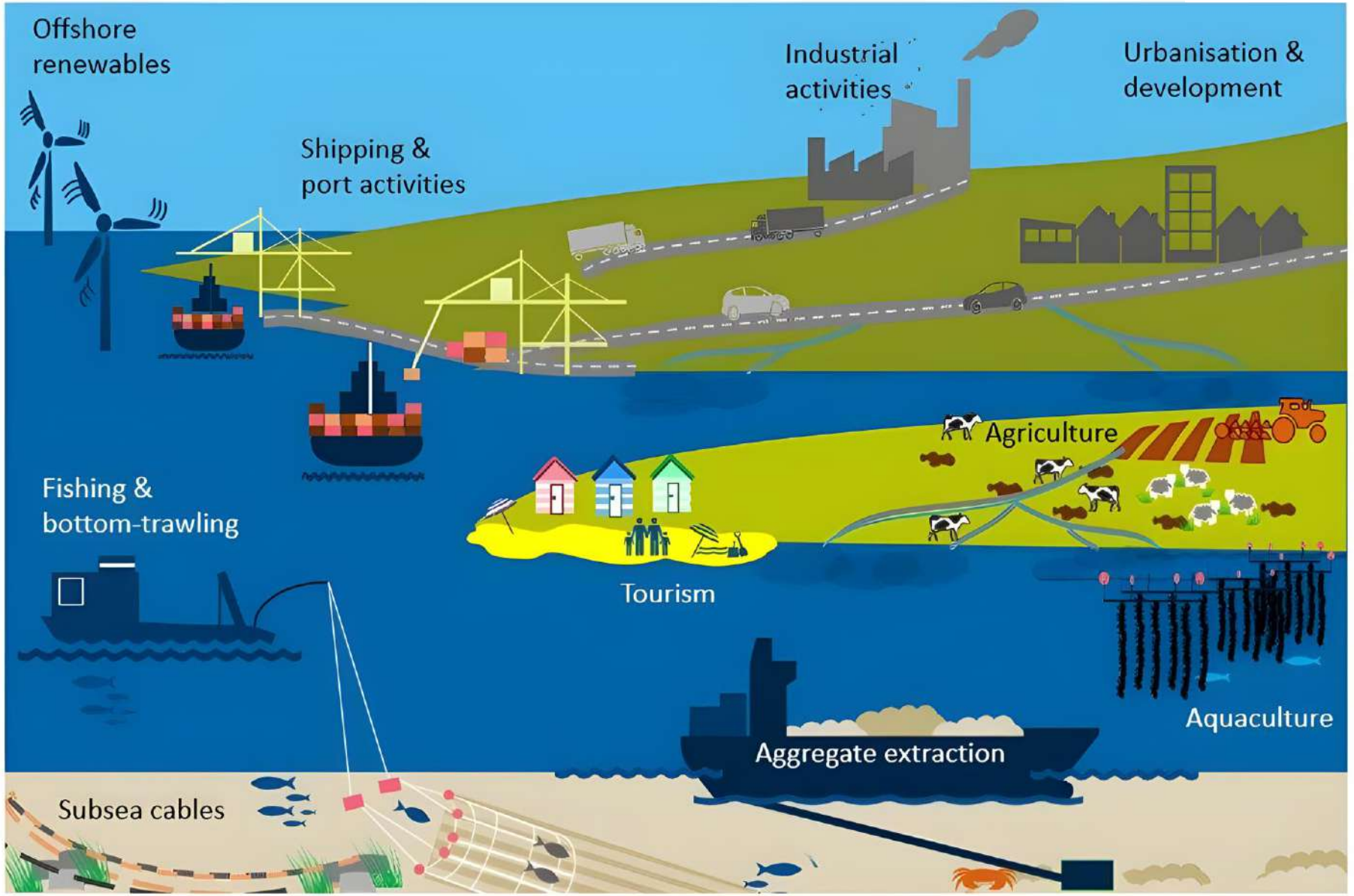
Environment Agency

PROVISIONING SERVICES
These include tangible goods that are provided by nature and used or consumed by people. Relevant examples include:

REGULATING SERVICES
These regulate and maintain environmental processes that are essential for the overall functioning of ecosystems, which have direct and indirect benefits for people. Relevant examples include:

CULTURAL SERVICES
These include the non-material benefits that benefit people's wellbeing. They enhance our lives and contribute to a sense of place and community. Relevant examples include:

Jo Bayes, Lydia Burgess Gamble, Chris Cooper



Environment Agency, Chief Scientist's Group. (2023).State of the environment: the coastal and marine environment.

What is the NCEA Programme?

Natural Capital and Ecosystem Assessment (NCEA) is a Defra science innovation and transformation programme, spanning land and water environments

Aims to provide **evidence and tools** to allow us to understand the true value of our natural assets and enable better management, decision-making and policy implementation that achieves more **positive outcomes for nature**

NCEA | Natural Capital and Ecosystem Assessment

Environment Agency

Monitoring

Evidence Gathering

Application

Icons; Ehtisham Abid @ Flaticon.com

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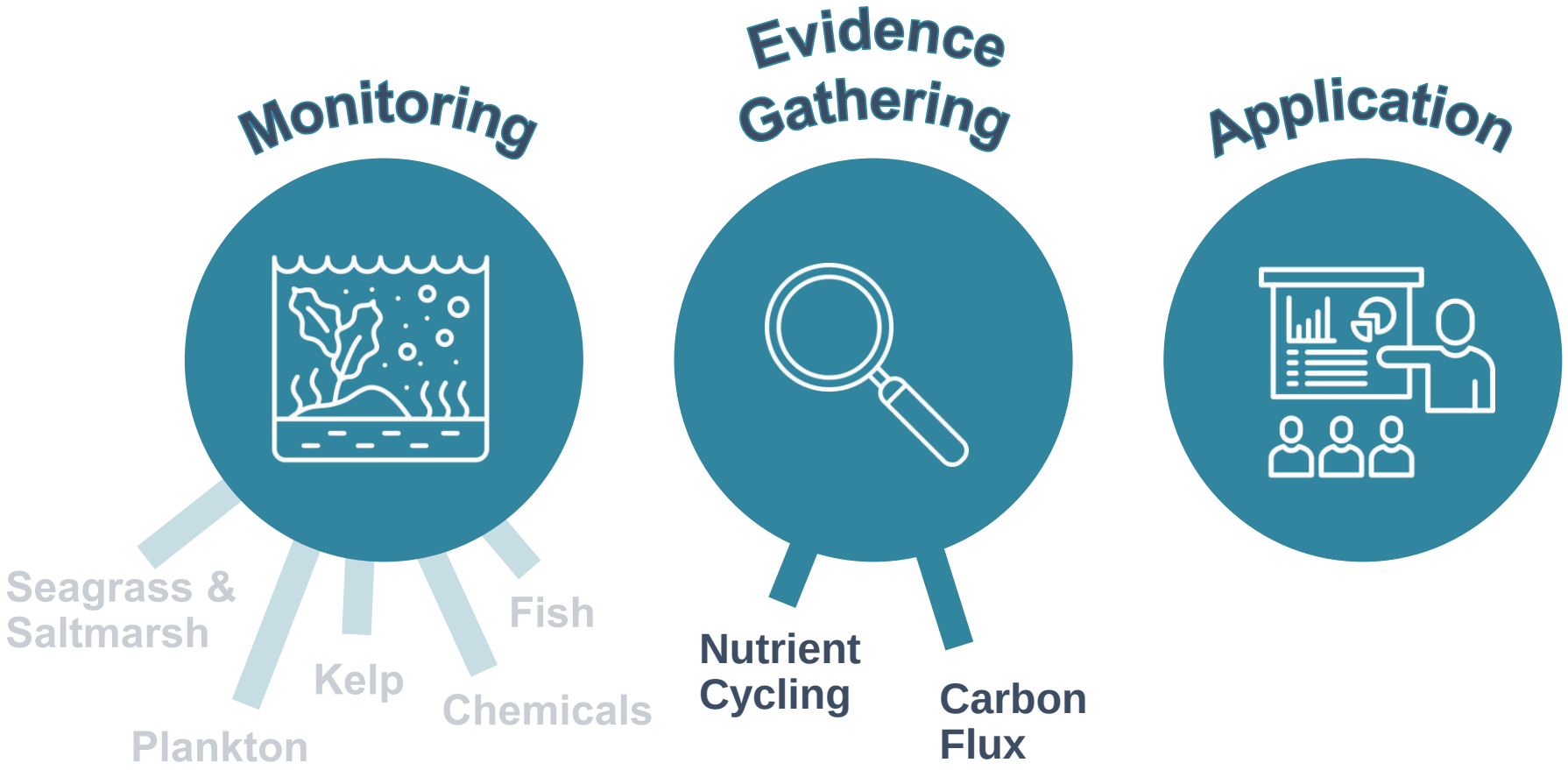
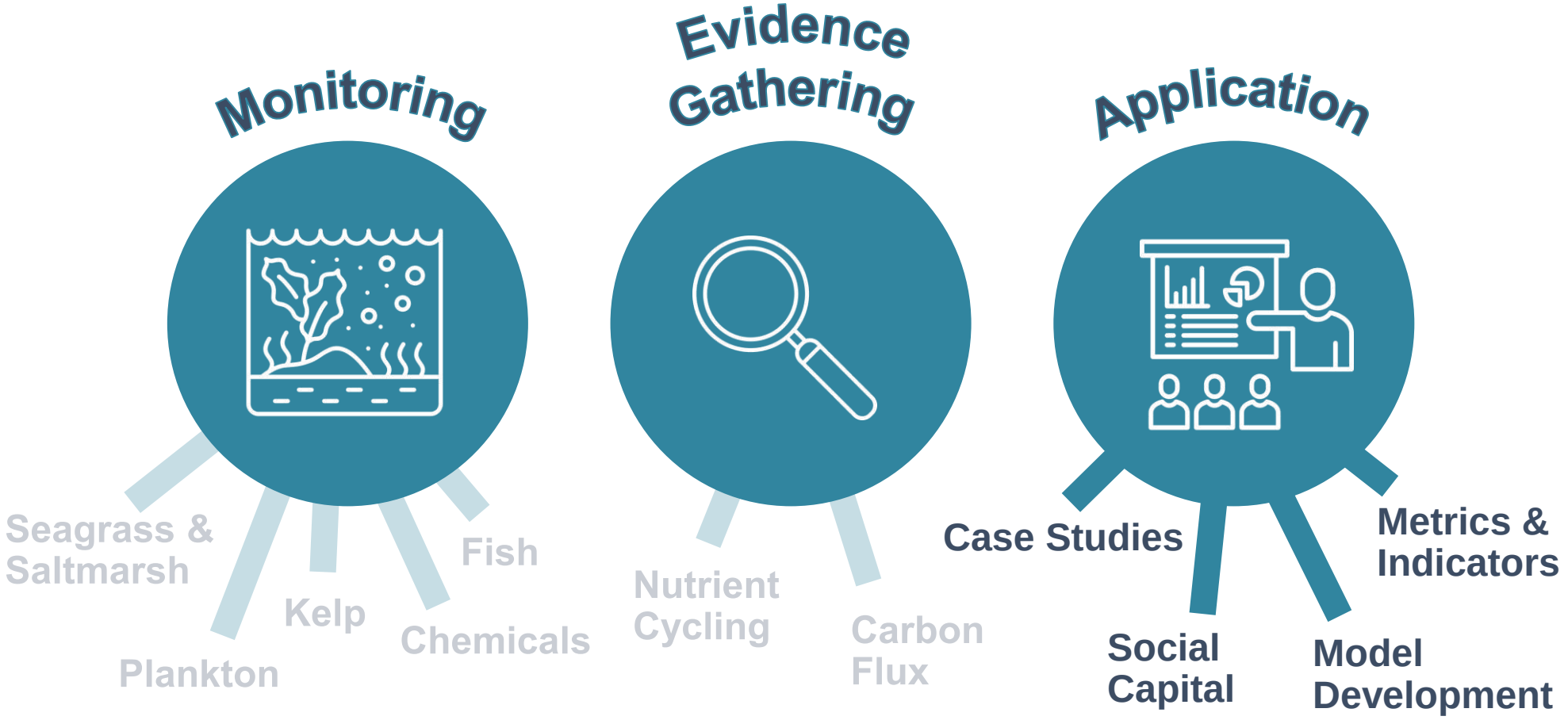
NCEA Natural Capital and Ecosystem Assessment

Environment Agency



Icons; Ehtisham Abid @ Flaticon.com



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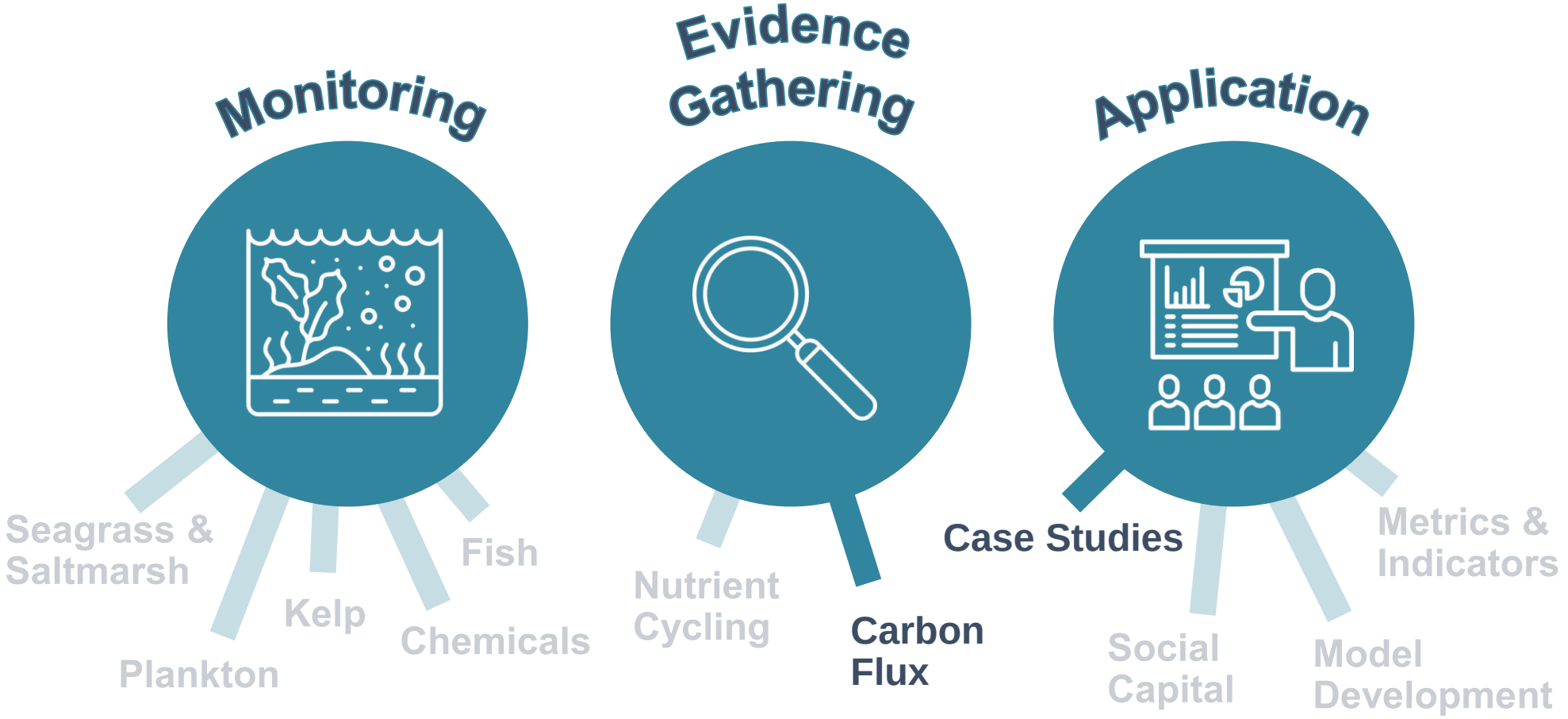
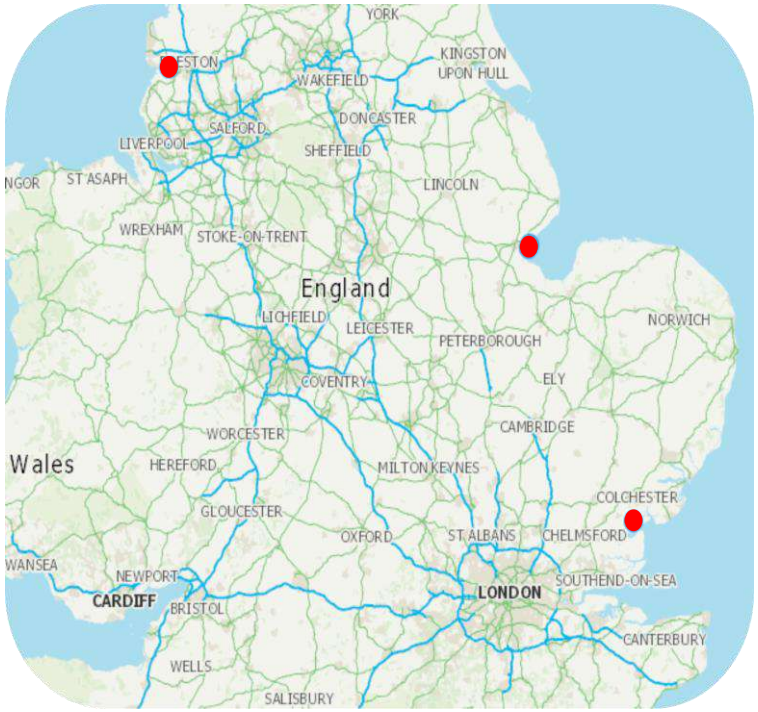
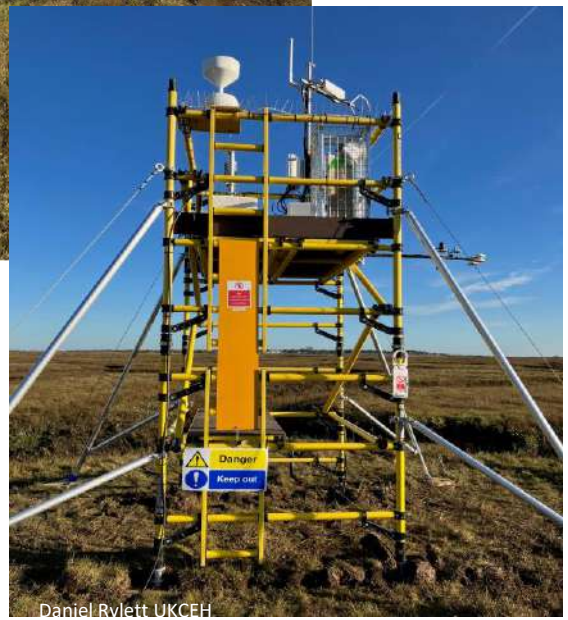


Icons; Ehtisham Abid @ Flaticon.com

Evidence Gathering: Saltmarsh Carbon Flux

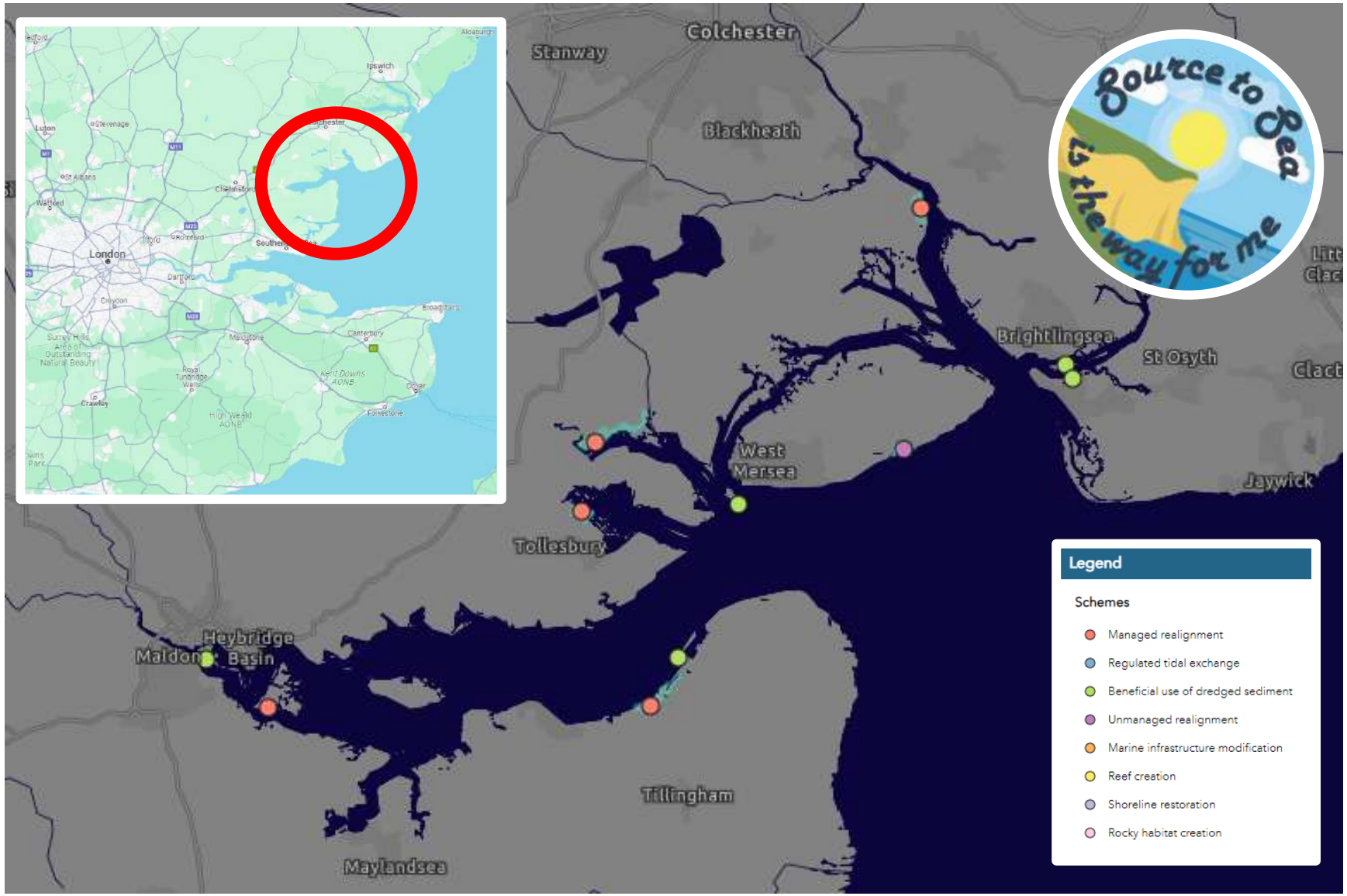



Jeff Kew RSPB



Daniel Rylett UKCEH

Application: Source to Sea Case Study



Source: OMREG - View the OMReg Map - ABPmer

Application – Mobilising Social Capital

East Marine Ecosystems
Reporting Annual Change in the
East Region & Building Social Capital

EAST Region Marine Ecosystems (EASTME)

Reporting Annual Change at a Regional Scale & Building Social Capital

Call for Practitioners

The EAST Marine Ecosystems (EASTME) is a new project designed to test the idea of annual reporting on the marine environment in the East Region based on the South-West Marine Ecosystems Model (SWME). The East Region is based on the MMO planning region which extends from Flamborough Head to the south Suffolk Border. Fuller briefings, including links to YouTube videos on the EASTME Pilot and SWME Model are available on the Southwest Marine Ecosystem website; the EASTME briefing video is also available on the EASTME YouTube channel

Our intention is to create or work with existing communities of practice covering thirteen thematic topics suitable for the East Region. If you are working on and have an interest in any of these thematic topics, we'd like to hear from you. There will be meetings for all these communities of practice before the

contact Bob Earll at bob@bobearll.co.uk to participate.

NCEA | Natural Capital and Ecosystem Assessment

SUMMARY

Environment Agency

NCEA | Natural Capital and Ecosystem Assessment

Environment Agency

Thanks for listening!

mike.nelson@environment-agency.gov.uk

Estuaries & Coasts Planning Team

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Session Two

Capitalising on Values

Ellen McHarg, Cefas

Valuing the King Charles III England Coast Path through benefit transfer

Valuing the King Charles III England Coast Path through benefit transfer

Ellen McHarg I Environmental Economist

Centre for Environment Fisheries & Aquaculture Science

Cefas

NCEA
Natural Capital and Ecosystem Assessment

Background

- Marine and coastal cultural ecosystem services (CES) provide valuable benefits to society:
  - Frequently omitted from policy and decision making due to their often intangible nature
- Environmental Improvement Plan 2023:
  - Goal 10: ‘Enhancing beauty, heritage and engagement with the natural environment’

Background: mNCEA

- Marine Natural Capital and Ecosystem Assessment (mNCEA) Programme:
  - Robust evidence base
  - Bringing together ecological, societal and economic information
- Building on Cefas mNCEA foundation projects:

Scoping Review of CES Literature
Literature review exploring conceptual and methodological complexities of CES and their inclusion in national accounts and decision making

Revealed Preferences - Travel Cost Pilot Study
Economic case study investigating the recreational value of walking on the North Norfolk coast path

Stated Preferences - Choice Experiment
Economic case study investigating the heritage value of the North Norfolk crab and lobster fishery

Benefit Transfer
Value of Coastal Walking on the England Coast Path
Benefit transfer function using 4 case study sites

Approach: Benefit Transfer

NCEA
Natural Capital and Ecosystem Assessment

Cefas

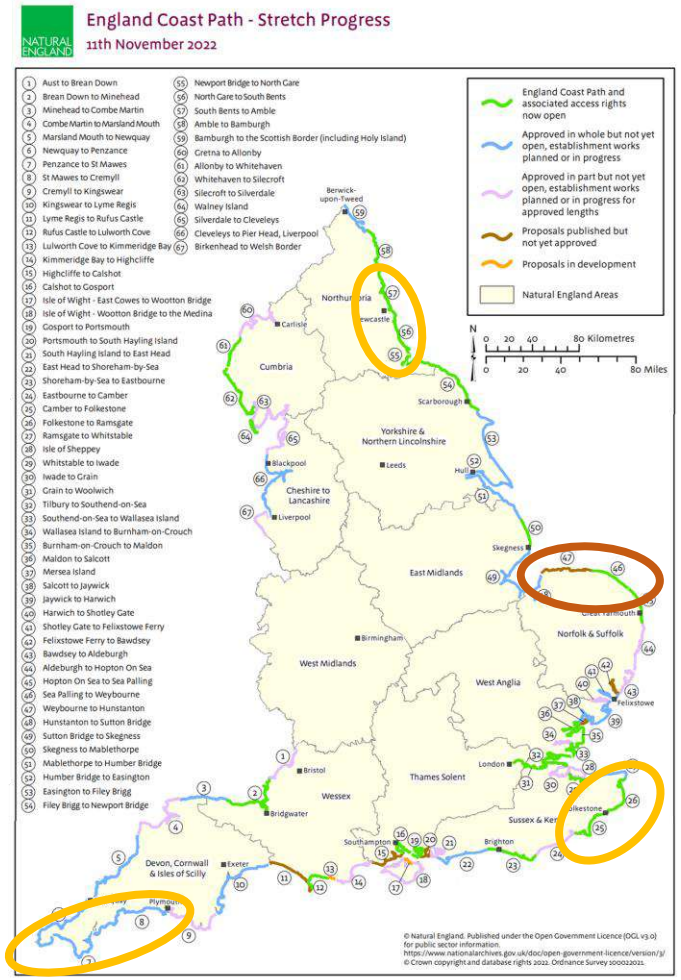
This work applies primary **travel cost** data from four study sites to **value similar completed stretches of the England Coast Path (ECP)**, using **benefit transfer** methods

Benefits:

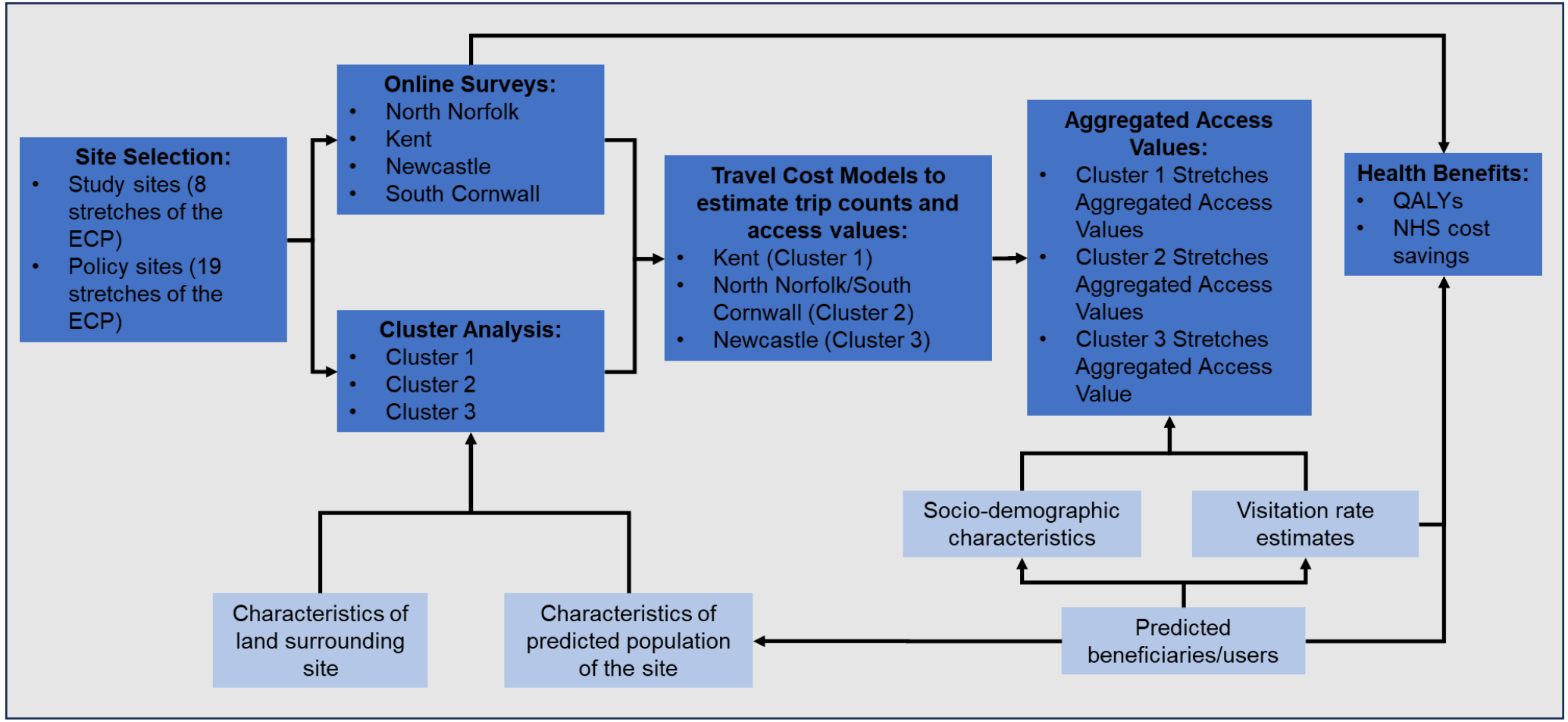
- Values are at the heart of the natural capital concept
- BT is more cost effective than primary valuation surveys
- Facilitates inclusion of ECP benefits in decision making at both local and national scales

Challenges:

- Spatially disparate and heterogenous in both site characteristics and characteristics of users
- Incomplete data – limited to 27/67 stretches (8 study stretches and 19 policy stretches)



Overview of Methods



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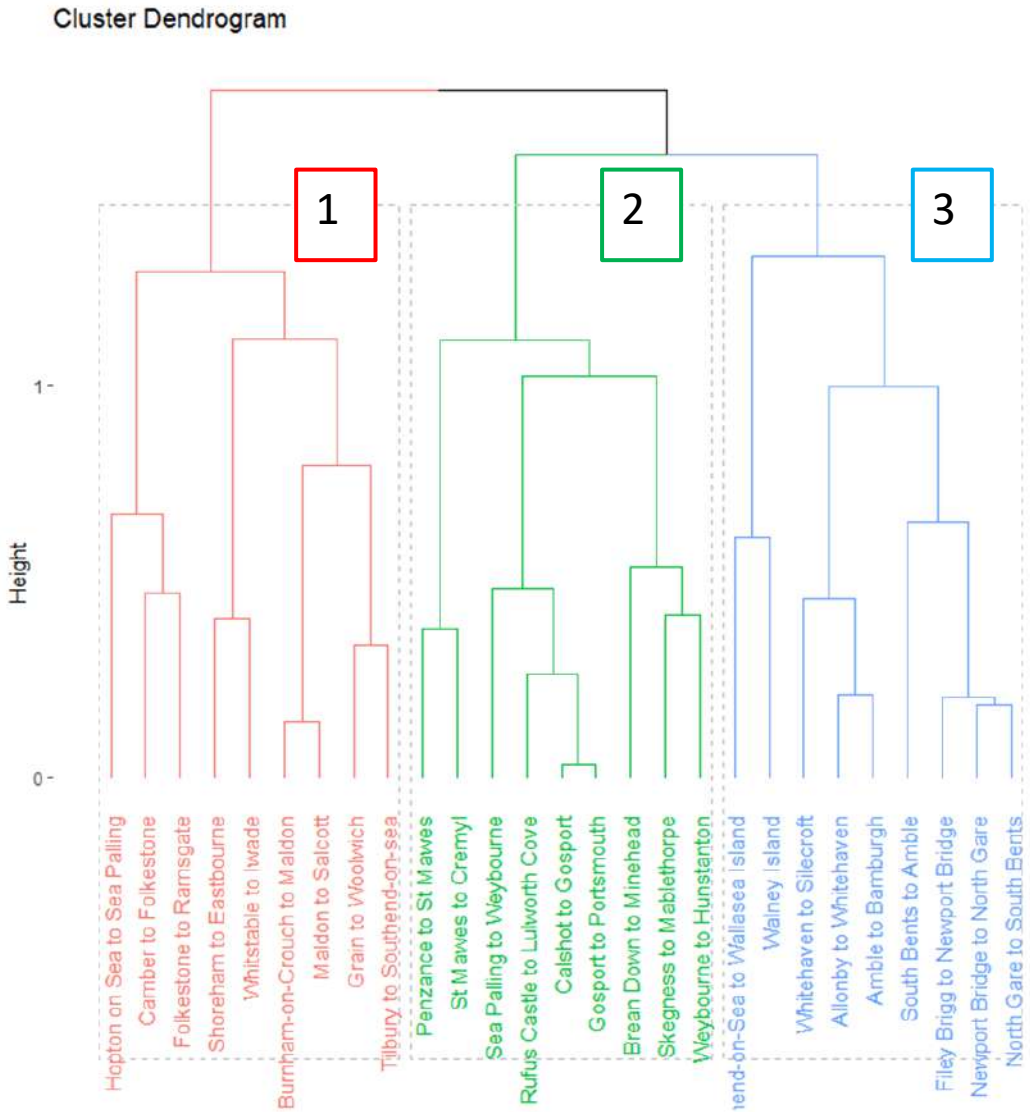
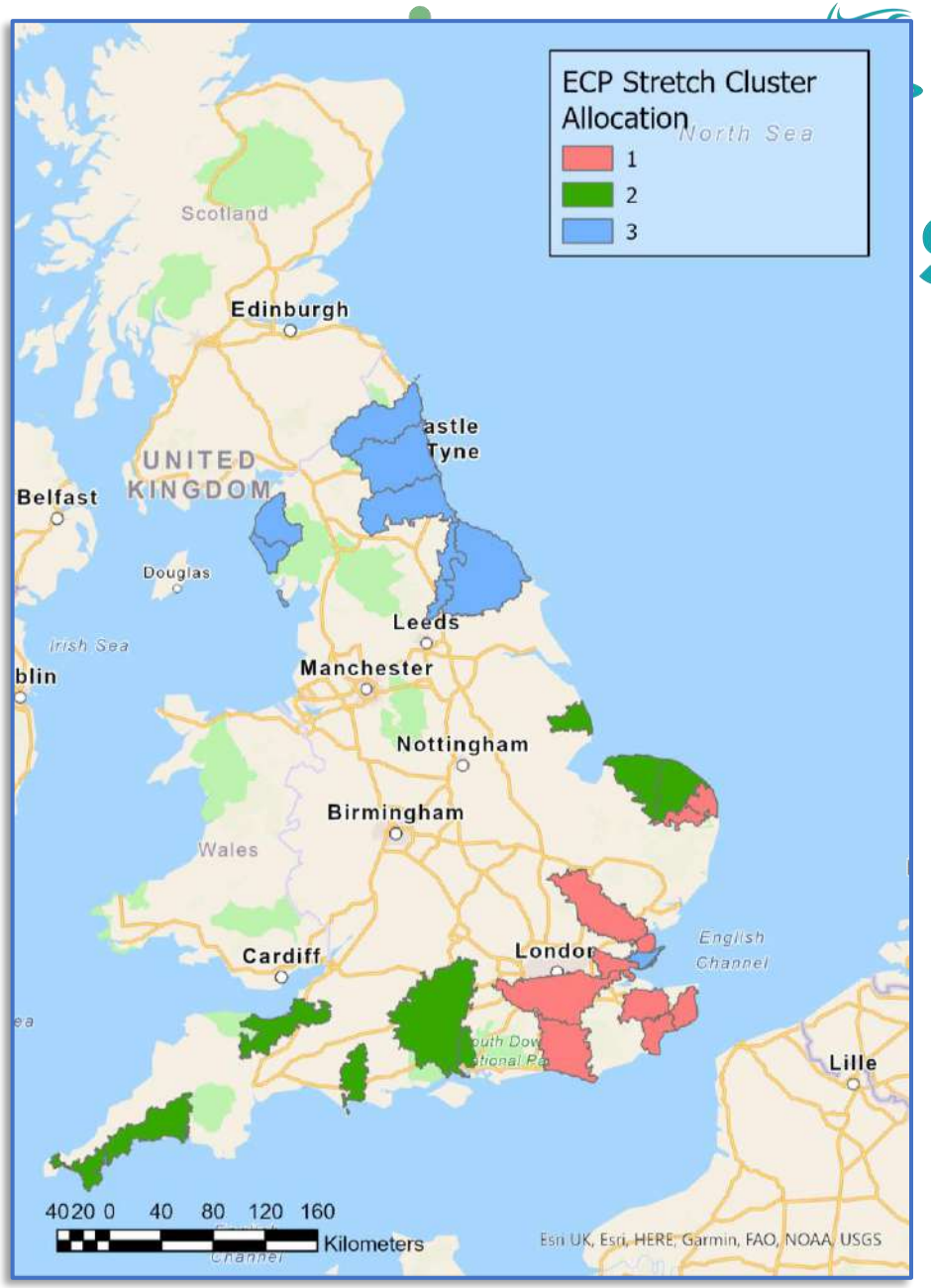
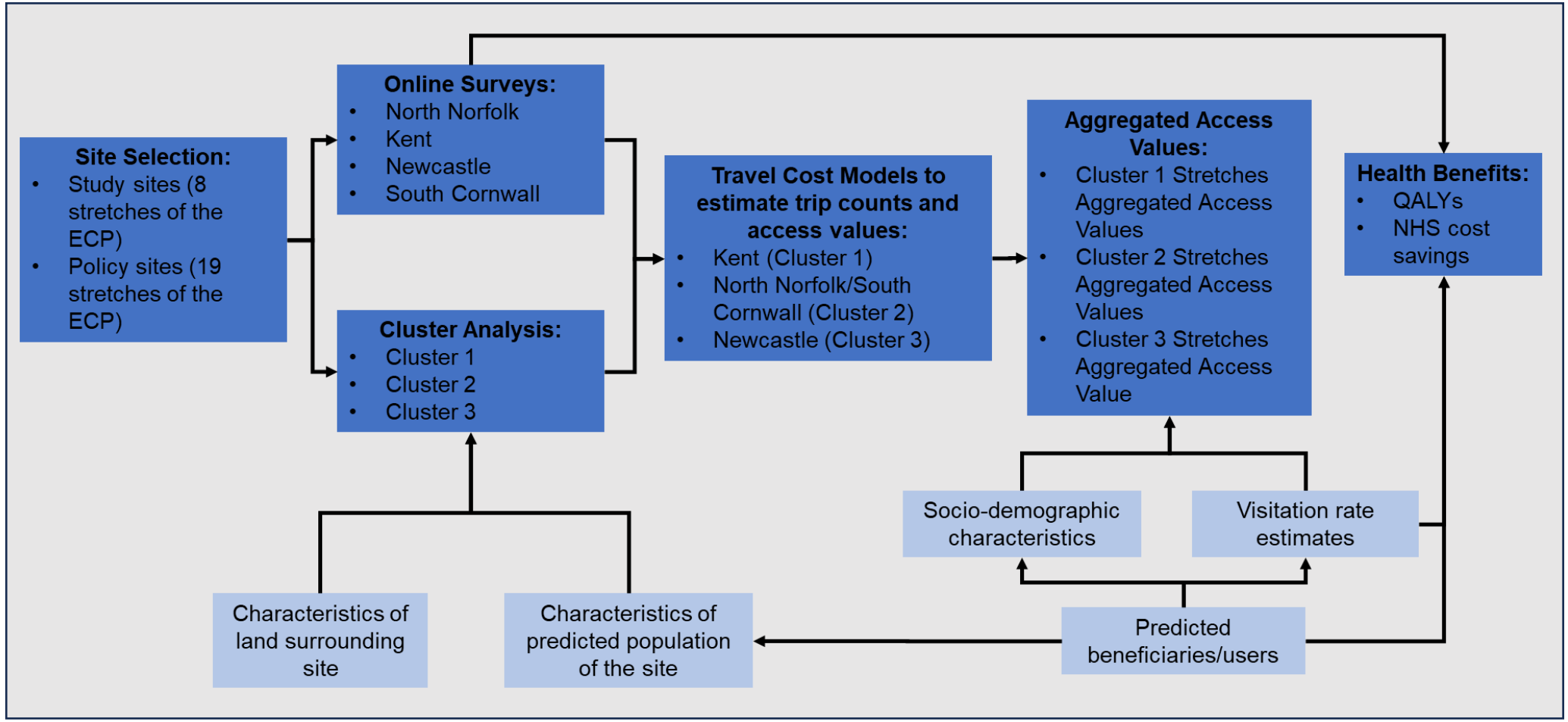


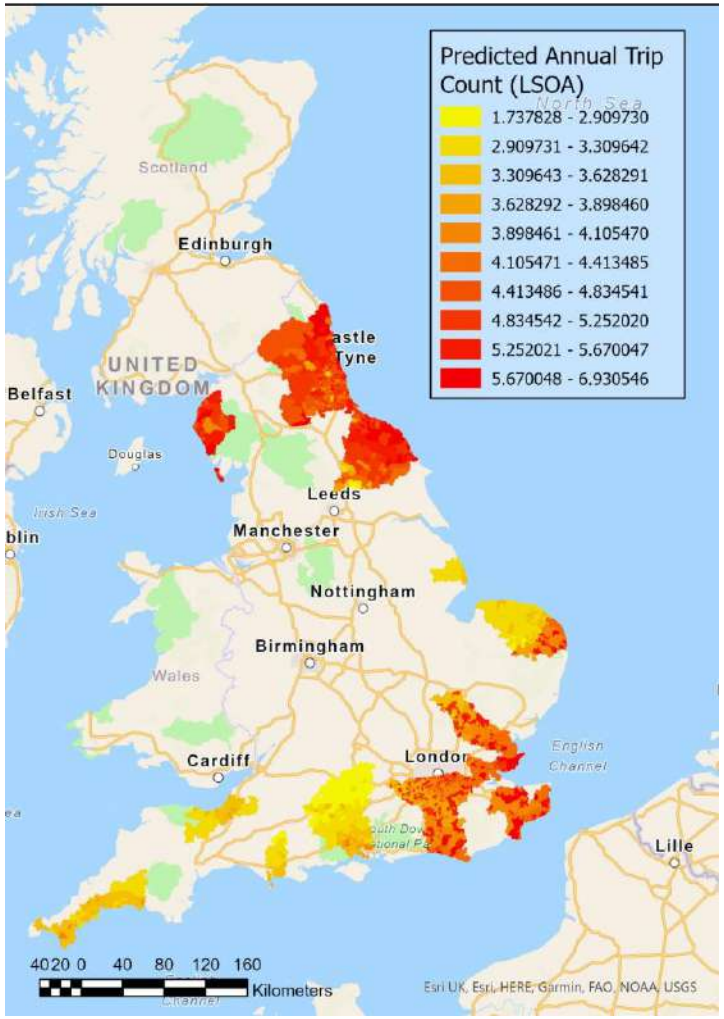


Overview of Methods



Results

Predicted trip count for average individual in each LSOA area



Multiplied by value estimates (per visit) and aggregated based on national visitation rates

Estimates of visitation rates for coastal walking

	People and Nature Survey	Ocean Literacy Survey
% visited coast in past 12 months	23.7%	50%
% of coastal visitors whose main activity was walking	17.7%	29.5%

Aggregated for each stretch

	Predicted Total Annual Trips	Aggregate Annual Access Value
Allonby to Whitehaven	111,644	£6,067,420
Amble to Bamburgh	50,554	£2,747,427
Filey Brigg to Newport Bridge	538,737	£29,278,169
Newport Bridge to North Gare	9,568	£519,979
North Gare to South Bents	791,663	£43,023,647
South Bents to Amble	962,047	£52,283,329
Southend to Wallasea Island	69,019	£3,750,893
Walney Island	10,732	£583,239
Whitehaven to Silecroft	17,439	£947,746

Conclusions

- Importance of incorporating **natural capital** and **cultural ecosystem services** into decision making

- Valuing coastal walking across the ECP helps **to justify implementation and maintenance costs**

- Understanding determinants of ECP benefits requires **more data** on **condition** and **characterisation of habitats** and features

- Benefit Transfer offers a **cost-effective method for national scale valuation** of **heterogeneous goods**

Thank you for listening

To find out more, contact:
ellen.mcharg@cefas.gov.uk

Centre for Environment Fisheries & Aquaculture Science

Cefas

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Session Two

Capitalising on Values

Elizabeth Beall, Managing Director, Finance Earth

A roadmap towards establishing high-integrity marine natural capital markets

finance earth

Enabling investment into conservation, climate and communities.

POLLINATION

Crown Estate Scotland
Oighreachd a' Chrùin Alba

Esmée Fairbairn FOUNDATION

THE CROWN ESTATE

BLUE MARINE FOUNDATION

Coast Futures Conference

London, 24th January 2024

A Roadmap Towards High-Integrity Marine Natural Capital Markets

Elizabeth Beall, Managing Director

W106 Vox Studios, 1-45 Durham Street
London SE11 5JH

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THE CHALLENGE

CLIMATE REGULATION

The world's oceans have absorbed 20-30% of total anthropogenic CO_2 emissions since the 1980s and have taken up over 90% of excess heat since 1970

ECONOMIC IMPORTANCE

Coastal areas, estuaries, and offshore waters contribute an estimated £47 billion to the UK economy and support over 500,000 jobs

HABITAT LOSS

90% of MPAs in the UK are still bottom-trawled and dredged

44% of UK seagrass beds lost in the last century

96% of Sussex kelp has disappeared since the 1980s

LACK OF INVESTMENT

Government and philanthropic funding alone are insufficient to bridge the £56 billion funding gap needed for UK nature restoration

The state of marine natural capital markets

High-integrity marine natural capital markets could play a key role in unlocking investment. However, critical barriers remain for the development of these markets.

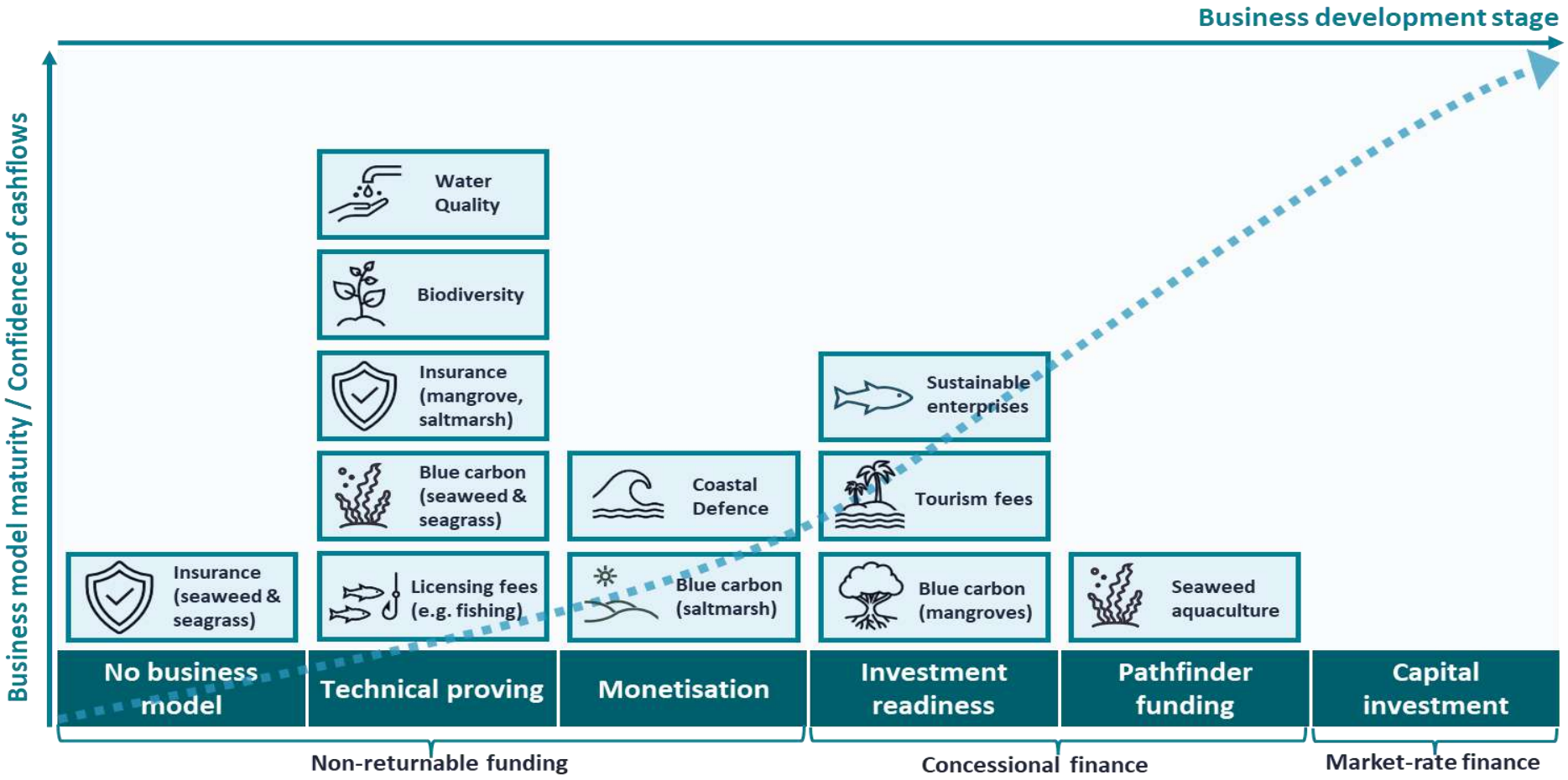
Opportunities

- Inclusive, transparent markets that capture the value of ecosystems
- Investment to protect, restore and sustainably use marine natural capital
- Measurable community benefits & a just transition
- UK leadership in shaping markets worldwide

Barriers

- Lack of consensus and joined-up approach
- Pressures from competing uses
- Insufficient protection for marine ecosystems
- Risks around greenwashing
- Lack of mature markets and investible projects

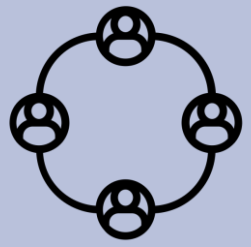
Maturity of marine natural capital markets



What do we mean by high-integrity markets?

High integrity markets…

People

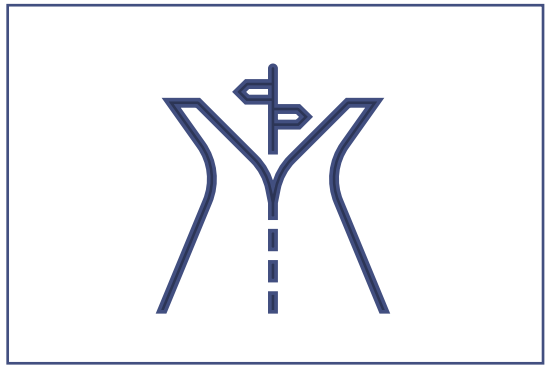


- ✓ Incentivise development of projects through a fair price;
- ✓ Provide measurable financial and non-financial benefits for coastal communities and stewards of marine natural capital;
- ✓ Are transparent and enable a wide range of stakeholders, active in different sectors, to engage and participate.

Planet

- ✓ Are based on robust and up-to-date scientific analysis;
- ✓ Are structured in a way that considers the unique attributes and challenges of the marine environment; and
- ✓ Are integrated with terrestrial natural capital markets to ensure continuity and synergies across ecosystems.

A roadmap for all stakeholders



Broad consultation to identify barriers and recommendations (100+ stakeholders)

Follow-up engagement to identify key actions and stakeholders for delivery

Development of shared roadmap towards high-integrity markets

The shared roadmap aims to guide establishment of high-integrity markets that properly capture the value of marine natural capital and support inclusive, long-term investment

Recommendations: Capturing values

Key recommendation	Suggested actions and leads
Accelerate processes to **achieve consensus around codes** and invest resources into code development  	• Convene a **cross-stakeholder group** including research partners, project developers and corporates/investors to identify priority codes • Investors and corporates to set out **key data needs** for investing

Address the **evidence gaps identified by the UK Blue Carbon Evidence Partnership (BCEP)** 	• BCEP & devolved/UK governments to **lead call for evidence** from academics and practitioners, as an **audit of existing data**
	  • Must include data from NGOs and citizen science
	  • **Aim for actionable data** (not "perfect data") to unlock investment

Recommendations: Capitalising on values

Key recommendation	Suggested actions and leads
Commit long-term public and private investment into **pilot project development** 	• NGOs/project developers to facilitate **'communication of needs'/ roundtable** between project developers and investors • Public sector funders to provide **long-term investment** to break short-term funding cycles • Involve local communities and include **measurement of community outcomes** to draw in more impact investment
Establish a **sellers' alliance** and develop a **project portal/hub for buyers and sellers**   	• **Working group of project developers** to **audit UK projects** and identify projects that can meet investor criteria • Early-stage investors may be granted right of first refusal • Government to provide **guarantees/first loss capital** for investible projects

High-integrity marine natural capital markets in the UK can be achieved over the short-term through support and ***coordinated action from government, private sector enterprises, financial institutions, civil society, and academia****. Collaboration across sectors will be needed to shape a supportive ecosystem which facilitates access to capital at scale, realigns investment into activities enhancing the marine environment, draws on the best available scientific evidence, fosters innovation, and enables holistic decision-making through a natural capital lens across seascapes.*

Roadmap for High Level Marine Natural Capital Markets – Launch Spring 2024

finance earth

Enabling investment into conservation, climate and communities.

For more information, contact:

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Managing Director– Finance Earth
Elizabeth@Finance.Earth

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Session Two

Capitalising on Values

Leonie Robinson, Marine Management Organisation

Decision-making for a thriving marine environment - are we doing this, and if not, why not?

NCEA | Natural Capital and Ecosystem Assessment

Marine Management Organisation

Decision-making for a **thriving** marine environment - are we doing this, and if not, why not?

Dr Leonie Robinson, Marine Management Organisation

Image credit: NE Flickr

Setting out some context….

What do we mean by a thriving marine environment?

This is an environment where benefits for humans and nature can be realised now and for future generations. Sectors and communities are doing well, but not at the cost of the sustainability of nature itself.

Is our marine environment and those who depend on it around the UK currently thriving? Do we have concerns for the future? What can we do about this?

Focus of this work: Is the decision-making that is happening all around us, fully informed by an understanding of how the decisions we make affect nature and those who are benefitting from it?

Mapping out the landscape of decisions…

Working with decision makers and advisors from across the marine system in England, we have been mapping out decisions that can affect our marine environment, dependent sectors and communities….

- >200 decisions included, 82 fully mapped out so far
- 25 decision makers in those covered, complex system shown
- Decisions from: conservation, fisheries management, marine licensing, pollution and environmental management, marine planning, coastal erosion & flooding risk management, water quality management….

Decision making for England's marine environment

Marine Management Organisation

NCEA Natural Capital and Ecosystem Assessment

Fisheries

Advisors

N/A

Consultation

A monthly catch limit consultation is publicly available on the GOV.UK website.

Stakeholder Engagement

The non-sector fleet has the opportunity to engage with a publicly available monthly catch limit consultation. The Inshore Quota Managers at the MMO engage with non-sector fishers regarding catch limits via the Regional Fisheries Groups. Fishers can contact the Inshore Quota Managers at any time to discuss catch limits and their quota needs.

Decision maker

Marine Management Organisation (MMO)

Evidence summary

Management decisions are based on evidence such as landings data (historical, current, and forecasted), total available quota within the respective non-sector pool, and information gained from fishers (e.g. regarding the local abundance of a stock). According to Section 25 of the Fisheries Act, the MMO has a responsibility to consider environmental, social, and economic factors when setting catch limits.

Decision

Setting catch limits for the English non-sector pools

How is Natural Capital considered in decision making?

Sustainability of Natural Capital Assets
Partially considered

Sustainability of Ecosystem Services
Partially considered

Value of Ecosystem Services supplied from area affected
Partially considered

Social impacts
(e.g. on wellbeing, livelihoods, community cohesion)
Partially considered

Economic impacts
(e.g. on sectors - viability, potential for growth, operational constraints)
Fully considered

What have we learnt so far (82 decisions)….

% of decisions where X is…..	Fully considered	Partially considered	Not considered	Unknown
Sustainability of natural capital assets	1%	**73%**	24%	1%
Sustainability of ecosystem services	0	**52%**	46%	1%
Value of ecosystem services supplied from area affected	0	30%	**61%**	9%
Social impact of decision	0	**56%**	44%	0%
Economic impact of decision	1%	**57%**	41%	0

What have we learnt so far (82 decisions)….

The level of consideration of social, economic and environmental impacts varies between areas of decision making (e.g. fisheries, conservation, licensing….).

Some areas cover economic impacts well, but social or environmental impacts poorly and *vice versa*…. often with a focus on what regulation stipulates must be considered.

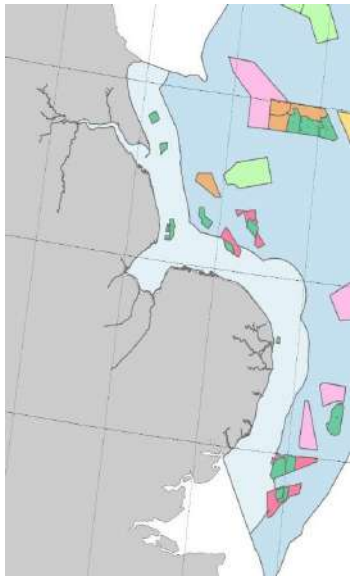
% of decisions where X is…..	Fully considered	Partially considered	Not considered	Unknown
Sustainability of natural capital assets	1%	**73%**	24%	1%
Sustainability of ecosystem services	0	**52%**	46%	1%
Value of ecosystem services supplied from area affected	0	30%	**61%**	9%
Social impact of decision	0	**56%**	44%	0%
Economic impact of decision	1%	**57%**	41%	0

By mapping out what is considered and how, we have been able to identify gaps and priorities for improvement.

Importantly, doing the work with decision makers has opened a space for reflection– **what can we do better, differently**?

Exploring new ways of informing decisions

- Natural capital approach (NCA) to development of a fisheries management plan
- NCA to sustainability appraisal in marine plans
- Exploring social, economic and wider environmental impacts in fishing quota allocations



- Developing a tool to understand the cumulative effects of marine licenses on habitat loss (impacts for nature & humans)
- How can social values and economic benefits from nature be considered in conservation management decisions?

Thank you for listening

We will look forward to coming back to tell you about some of the improvements in decision-making that have happened in years to come…..

Acknowledgements:

The MMO Evidence and Evaluation team, in particular: Megan Stafford, Emma Martin, Alice Walpole, Verity Nye, Laura Seddon and Rachel Day

All the decision makers and advisors who have taken the time to engage with us and been open to discussing how decisions are being made and what might be possible in terms of change……

Questions: leonie.robinson@marinemanagement.org.uk

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Session Two
Capitalising on Values

Erika Hughes, Diverse Marine Values

Performing the Coast, from North to South: Theatre, Arts-Based Research, and Coastal & Marine Management in England and Scotland

Performing the Coast, from North to South:

Theatre, Arts-Based Research, and Coastal & Marine Management in England and Scotland,

Dr Erika Hughes, Reader in Performance &
Interim Head, School of Film, Media and Communication
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Diverse Marine Values

SMMR
Sustainable Management
of UK Marine Resources

Diverse Marine Values

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RESEARCH ARTICLE

Forum Theatre as a mechanism to explore representation of local people's values in environmental governance: A case of study from Chiapas, Mexico

Silvia Olvera-Hernández[1] | M. Azahara Mesa-Jurado[2] | Paula Novo[1,3] | Julia Martin-Ortega[1] | Aylwyn Walsh[4] | George Holmes[1] | Alice Borchi[4]

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Handling Editor: Patricia Balvanera

Abstract

1. Nature degradation, poverty and social discrimination are some of the consequences of unfair decision-making over environmental resources within rural communities in the Global South. Barriers to achieving fair environmental decisions are entrenched power differences and the lack of representation of the diversity of local values in environmental decision-making.
2. Using intersectionality and value pluralism as a conceptual base, this is the first paper to examine the potential of Forum Theatre, a performance arts-based method, to discuss 'solutions' regarding power differences and values towards nature in environmental decision-making.
3. We implemented Forum Theatre in two rural villages in Chiapas, Mexico, framed around conflicts and power differences in eco-tourism development.
4. Participants felt empathy with the Forum Theatre characters and dissatisfaction over the conflicts, and this motivated them to engage and participate in collective reflections on their own personal experiences with power differences in environmental decision-making.
5. From these reflections, participants performed diverse 'solutions' to the conflicts, bringing to the fore plural interconnected and dynamic values towards nature in these narratives. Despite this, Forum Theatre does not look to 'solve'

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2023, VOL. 28, NO. 2, 311–329
https://doi.org/10.1080/13569783.2022.2083951

Routledge
Taylor & Francis Group

Check for updates

Valuing trans-disciplinarity: Forum Theatre in Tabasco and Chiapas, Mexico

Aylwyn Walsh[a], Silvia Olvera-Hernandez[b], M. Azahara Mesa-Jurado[c], Alice Borchi[a], Paula Novo[b,d], Julia Martin-Ortega[b] and George Holmes[b]

[a]School of Performance and Cultural Industries, University of Leeds, Leeds, UK; [b]School of Earth and Environment, Sustainability Research Institute, University of Leeds, Leeds, UK; [c]Departamento de Ciencias de la Sustentabilidad, El Colegio de la Frontera Sur Unidad, Villahermosa, Mexico; [d]Scotland's Rural College, Edinburgh, UK

ABSTRACT
This article intervenes in the persistent hierarchy of epistemological worth that produces scientific knowledge as meaningful, and knowledge from arts or humanities as marginal, or illustrative. The specific trans-disciplinary project we discuss brings together environmental social sciences with performance-based Forum Theatre methods to explore 'value' as understood in communities in Tabasco and Chiapas, Mexico in relation to Payment for Ecosystem Services. Trans-disciplinary collaborations that seek to incorporate 'novel' methods to engage participants differently might better reflect the dynamic, emergent, and often shifting nature of beliefs, attitudes and values.

KEYWORDS
Forum Theatre; environmental education; participation; transdisciplinarity; Mexico

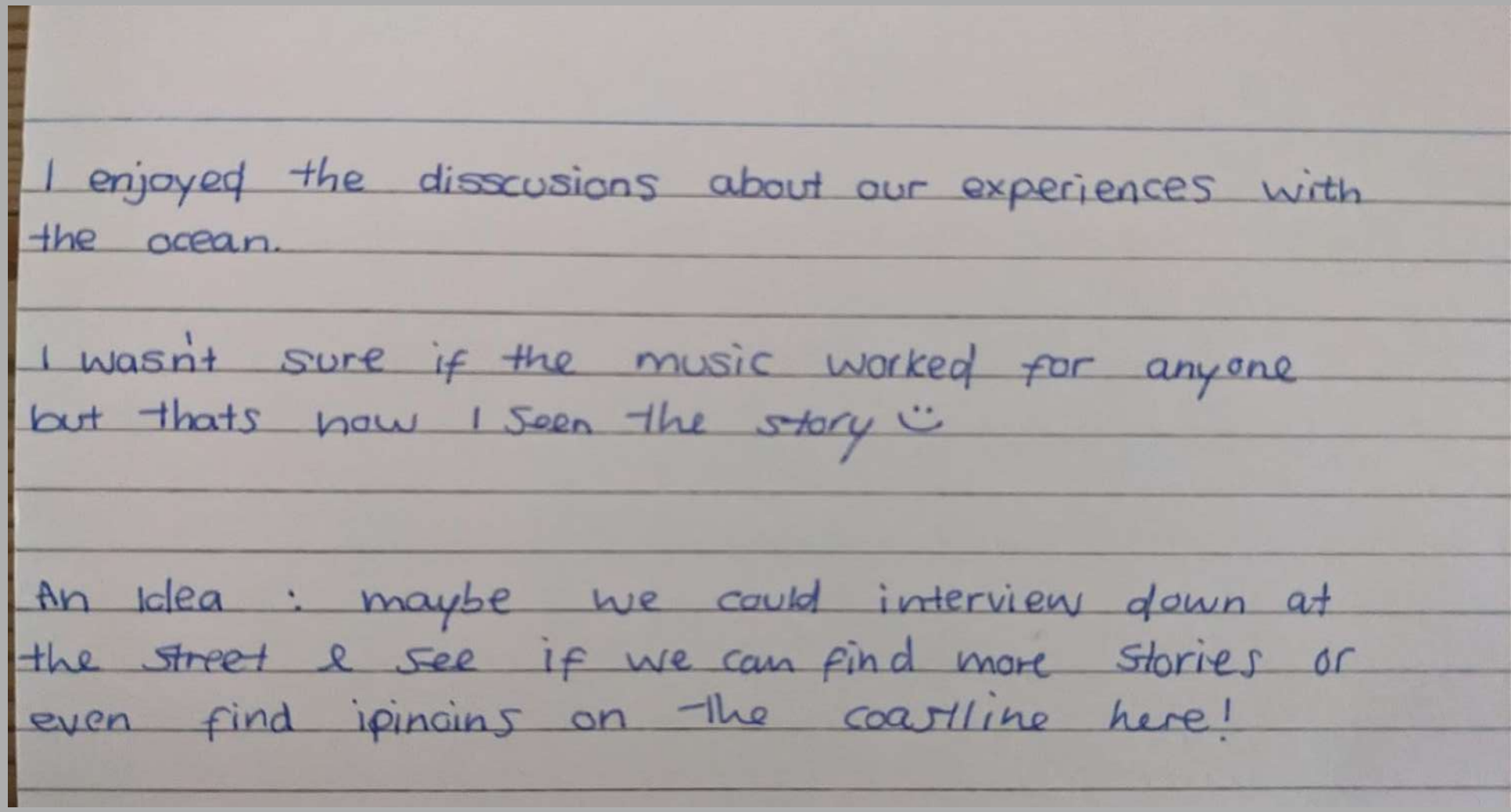
Towards knowledge based on dialogue, conflict, and rehearsal

Theatre and performance are often used as a tool in struggle and popular education (Giardina and Denzin 2011; Madison 2010). Beyond compelling research on effectiveness of arts interventions, we need transparent accounts of how such collaborations are forged. Dwight Conquergood reminds that there is a dominance of 'empirical observation and critical analysis from a distanced perspective: "knowing that", and "knowing about"'

Improvisation rehearsal, ***Ripple Effect***

Shetland *arts*

Reflection of a 15 year old participant, *Ripple Effect*


I enjoyed the disscusions about our experiences with the ocean.

I wasn't sure if the music worked for anyone but thats how I seen the story ☺

An idea : maybe we could interview down at the street & see if we can find more stories or even find opinoins on the coastline here!

Shetland *arts*

Ripple Effect
performance,
April 2023

Shetland *arts*

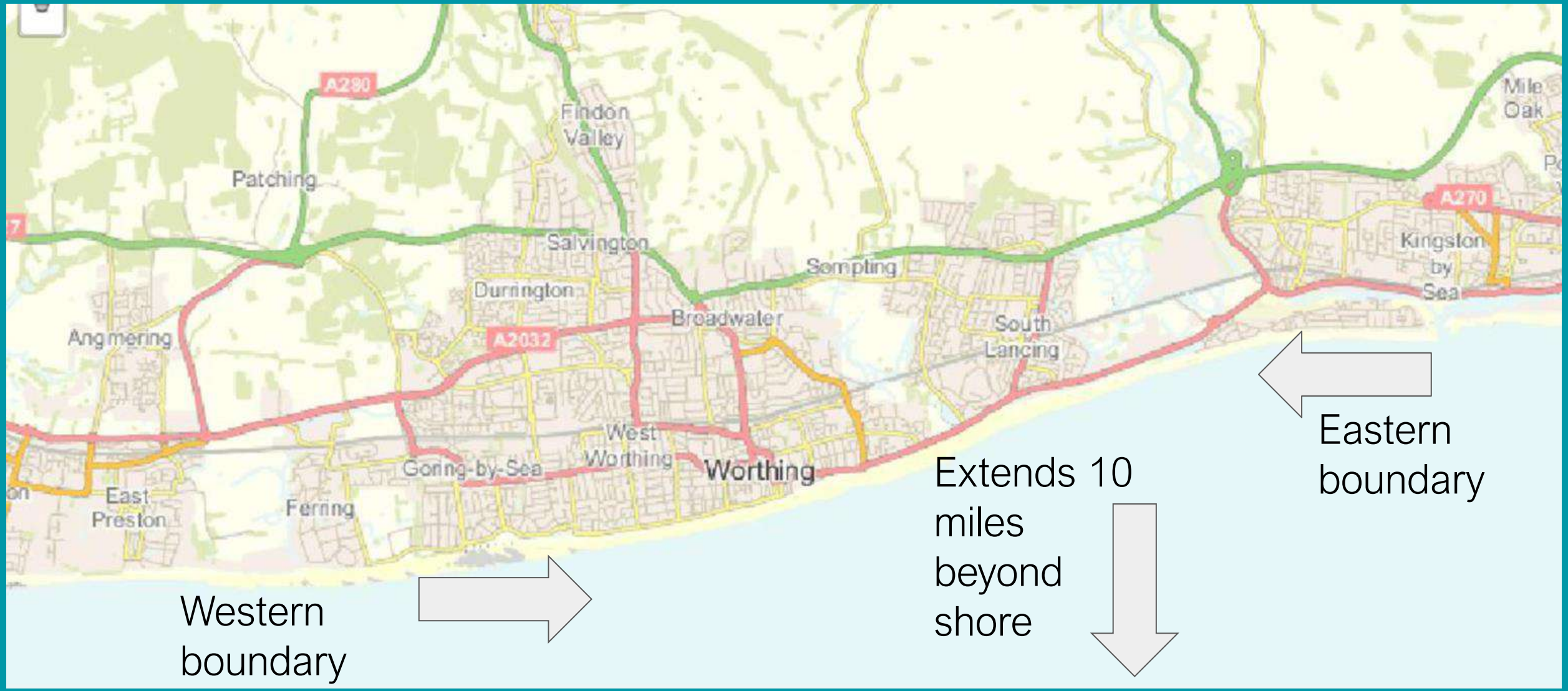
New Marine Conservation Zone: Community Consultation

Worthing, 28 February 2023

ADUR & WORTHING COUNCILS

NATURAL ENGLAND

Proposed conservation zone



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Forum Theatre Workshop, Feb 2023


1) 18 month structured development phase
2) Expert- and evidence-led
3) Key stakeholder input
over the next 10 years
2) Managing Land for Water
3) Accessible Landscape for All
National Parks UK
JOHN
GEORGE
CHRISTINE
ANDREW
THE ROYAL SOCIETY

Royal Society, London, September 2023

Additional Resources

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Diverse Marine Values

Session Two Panel Debate

Capitalising on Values

How will knowledge of 'values' make a difference to our prospects?

Chair: Hugo Tagholm, Oceana UK

Professor Graham Underwood, Chair, Blue Carbon Evidence Partnership
Mike Nelson, Environment Agency
Ellen McHarg, Cefas
Elizabeth Beall, Managing Director, Finance Earth
Leonie Robinson, Marine Management Organisation
Erika Hughes, Diverse Marine Values

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15:00 – 16:00

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