



2: Valuing and Enabling Restoration

Chair - David Tudor,
Director,
Ocean and Coastal Futures



Ocean
and Coastal
Futures



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ESTATE

Orders of magnitude variation in denitrification rates across intact English saltmarsh habitats: The importance of vegetation zones and coastal location

Mike Perring (UKCEH)
&
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ReMeMaRe 2025
Scarborough Spa
July 9th and 10th

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Acknowledgements

Report Reviewers: Louise Denning (NE); Sue Burton (EA); Rebecca Boys (Defra); Martin Blackwell (Rothamsted) & Emily Stuchiner (University Colorado Boulder). Landowners and land managers who gave permission for sampling. Takara Simpson-Jenkins, Abigail Cousins, Amber Osborne Ferguson, Ewan Hoburn and Alexander Lowther-Harris for field/lab assistance.

Funders



Support from Ben Green and Lucy Stainthorpe



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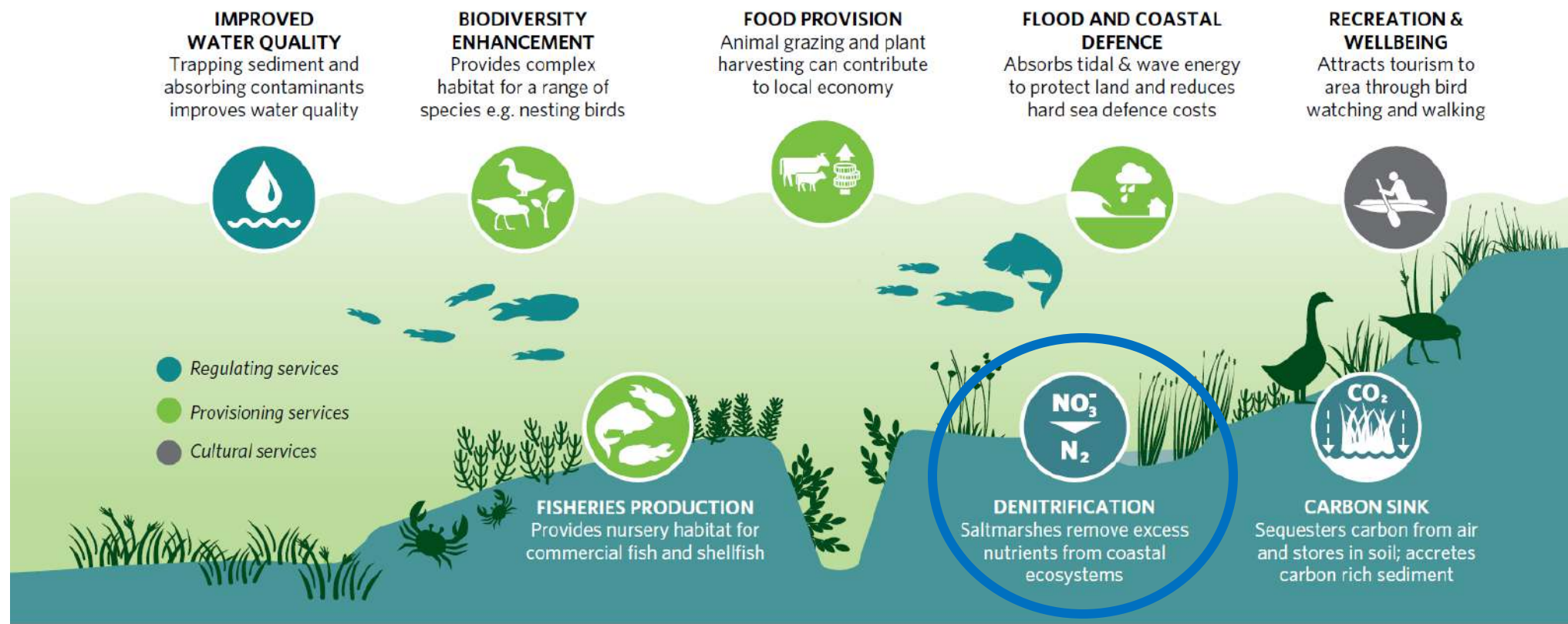
Nutrient pollution: A threat to biodiversity and water quality



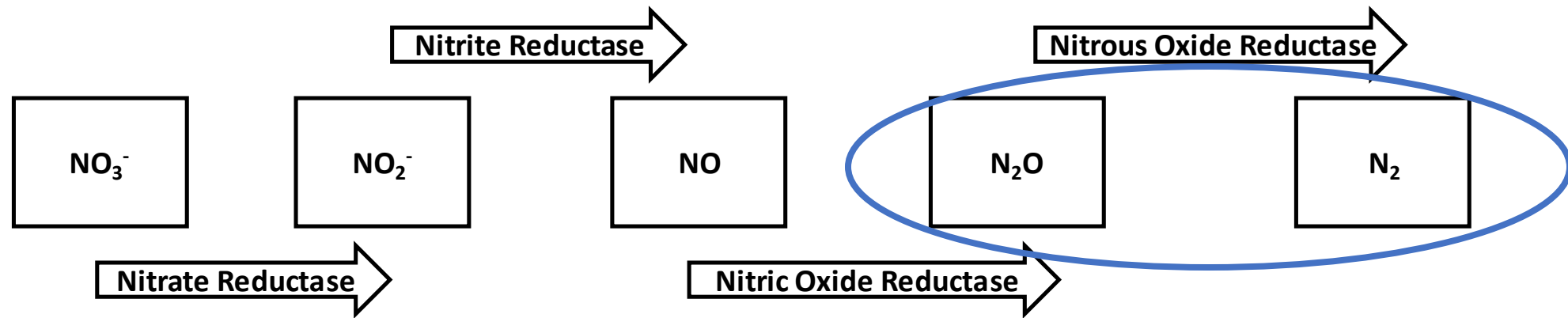
Photo credit: Sue Burton, Environment Agency

- Nutrient pollution can threaten biodiversity
- Affects water quality, ultimately leading to hypoxia and marine dead zones

Part of the solution? Denitrification in saltmarsh systems



What is denitrification?



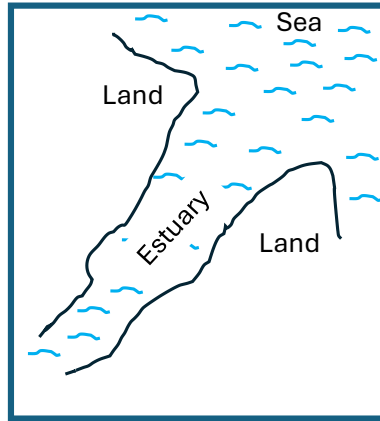
After Choudhary et al. 2022

3 Key Measures of Denitrification

- **Complete Denitrification:** N released as N_2 : “Environmentally Benign”
- **Total Denitrification:** N released as N_2 and N_2O : Water Quality Improvement but N_2O component could contribute to Climate Change
- **Denitrification Ratio:** $(\text{Complete Denitrification}) / (\text{Total Denitrification})$
Values $\rightarrow 1$: Total N released Environmentally Benign
Values $\rightarrow 0$: Contributes to Water Quality Improvement but could exacerbate Climate Change

Providing benchmarks in the English context

6 x Estuaries



Pioneer/Low



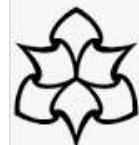
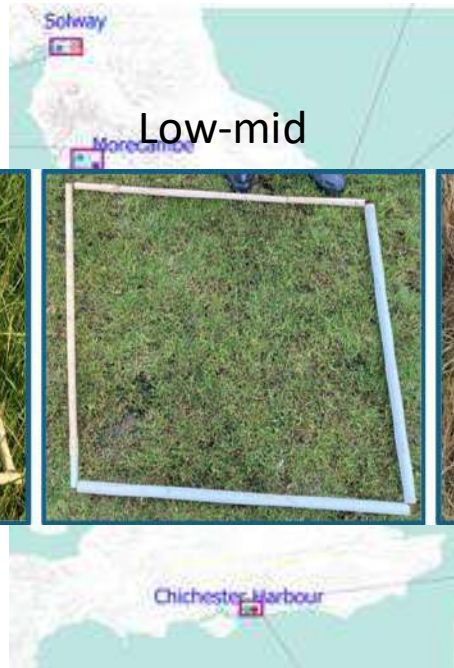
Low-mid



High

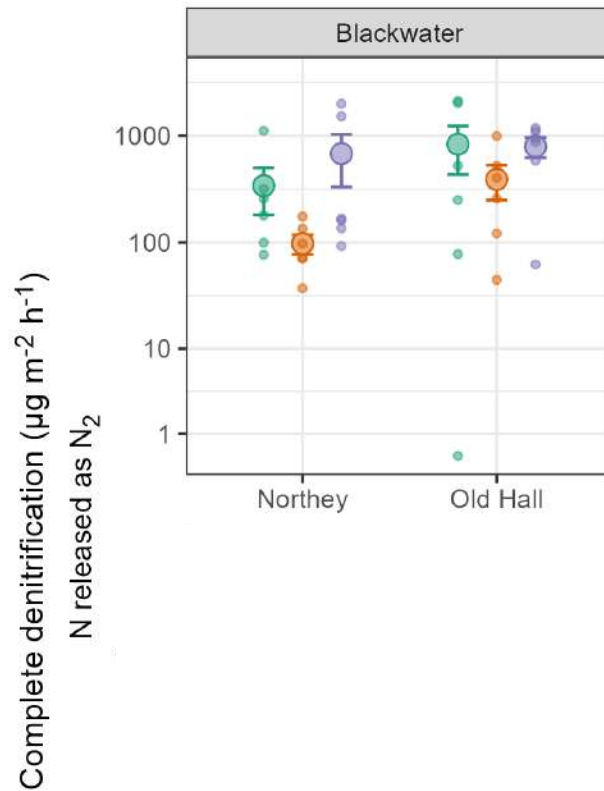


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Manchester
Metropolitan
University

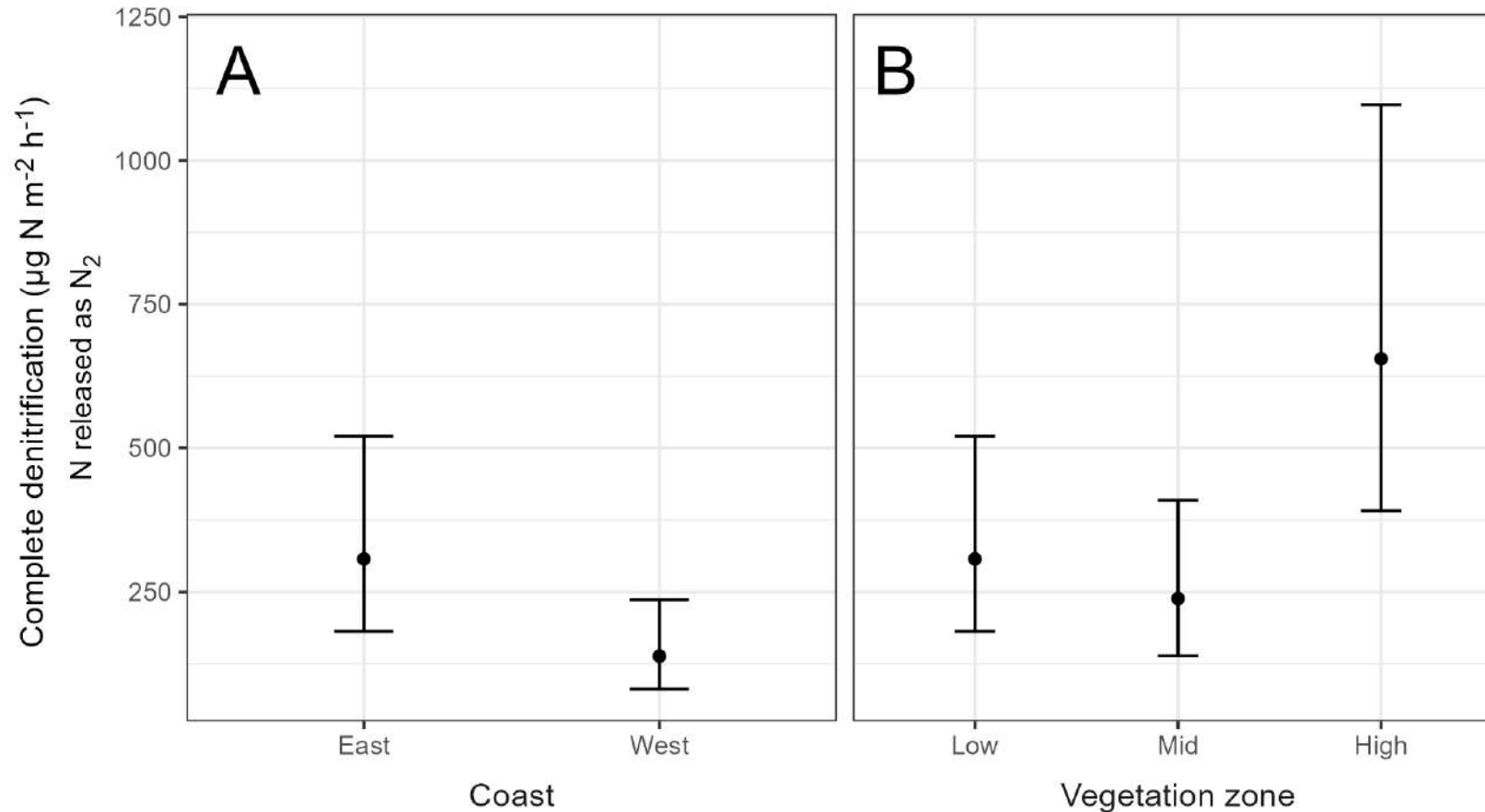
Complete Denitrification: NO_3 to N_2



- Orders of magnitude variation
- 43 – 1037 $\mu\text{g N m}^{-2} \text{h}^{-1}$
- South and east coast saltmarshes:
441 $\mu\text{g N m}^{-2} \text{h}^{-1}$
- Northwest coast saltmarshes:
188 $\mu\text{g N m}^{-2} \text{h}^{-1}$



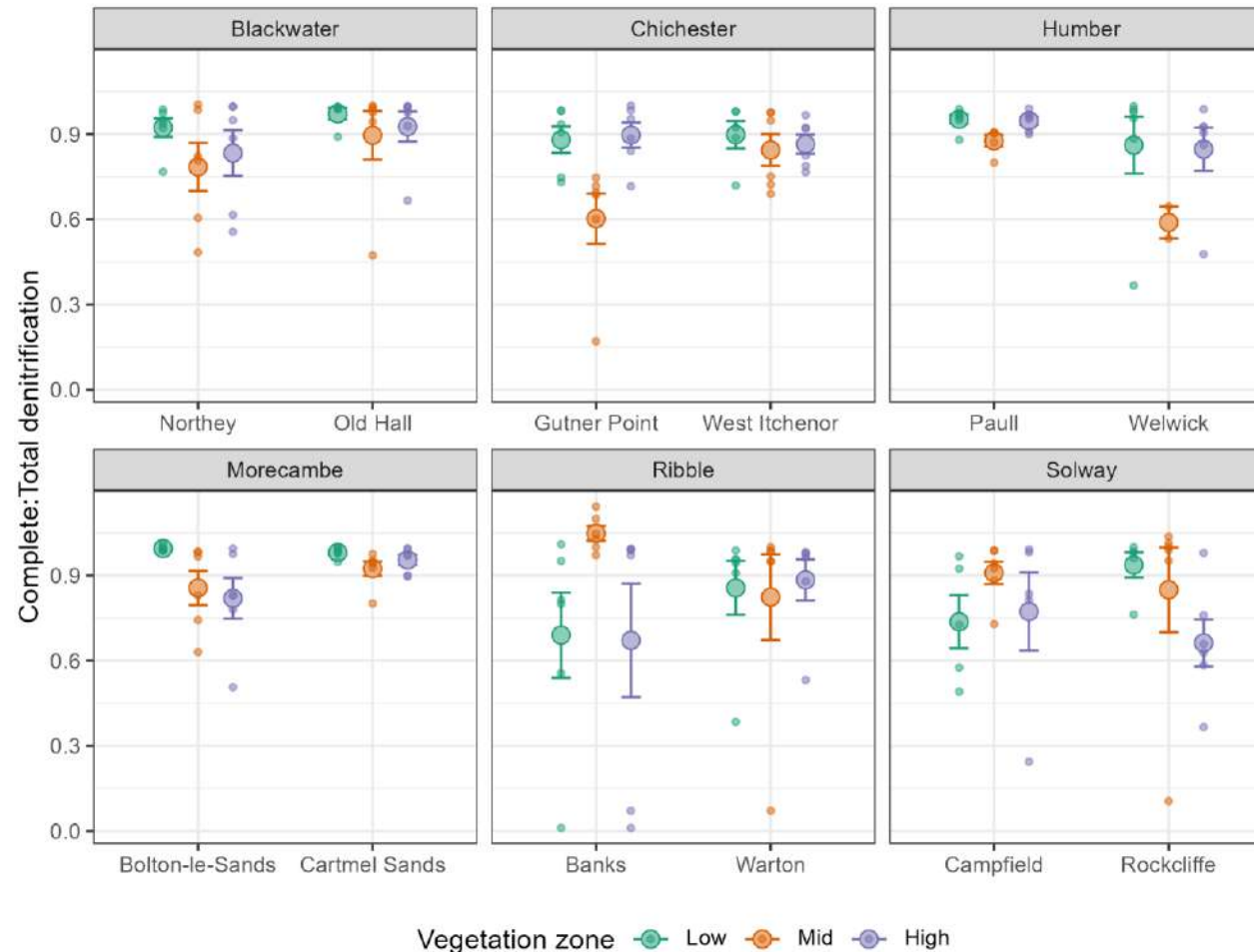
Complete Denitrification: NO_3 to N_2



- **Model predictions**
- **West coast saltmarsh:**
Denitrify at 45% the rate of the south and east coast marshes ($p = 0.056$)
- **High saltmarsh:**
Denitrify at 140 % the rate of pioneer/low ("Low") or low-mid ("Mid") marshes



Denitrification Ratio: Complete / Total



- **Most denitrification goes to completion**
- **Average ratio: 0.86**
- **Coast and/or vegetation zone unable to explain variation**
- **Sizeable number of cores show release of N_2O – sometimes substantial**

Future Prospects: Scaling Results – Understanding Drivers

- Scaling these results requires, at minimum, an understanding of seasonal variation (and, preferably, among year variation).
- These results are benchmarks from ‘intact’ saltmarshes. Investigations in restoring saltmarshes, and how they denitrify, and whether this changes over their development trajectory, required.
- Understanding (potential) drivers of saltmarsh denitrification may help with scaling.
- Investigating whether and how the saltmarsh denitrification process changes under exposure to additional nutrients is required – especially given literature evidence that additional nitrate can lead to a greater proportion of N₂O emissions within total N released.
- Data can inform policy developments around e.g. Water Environment Regulations & Saltmarsh Code



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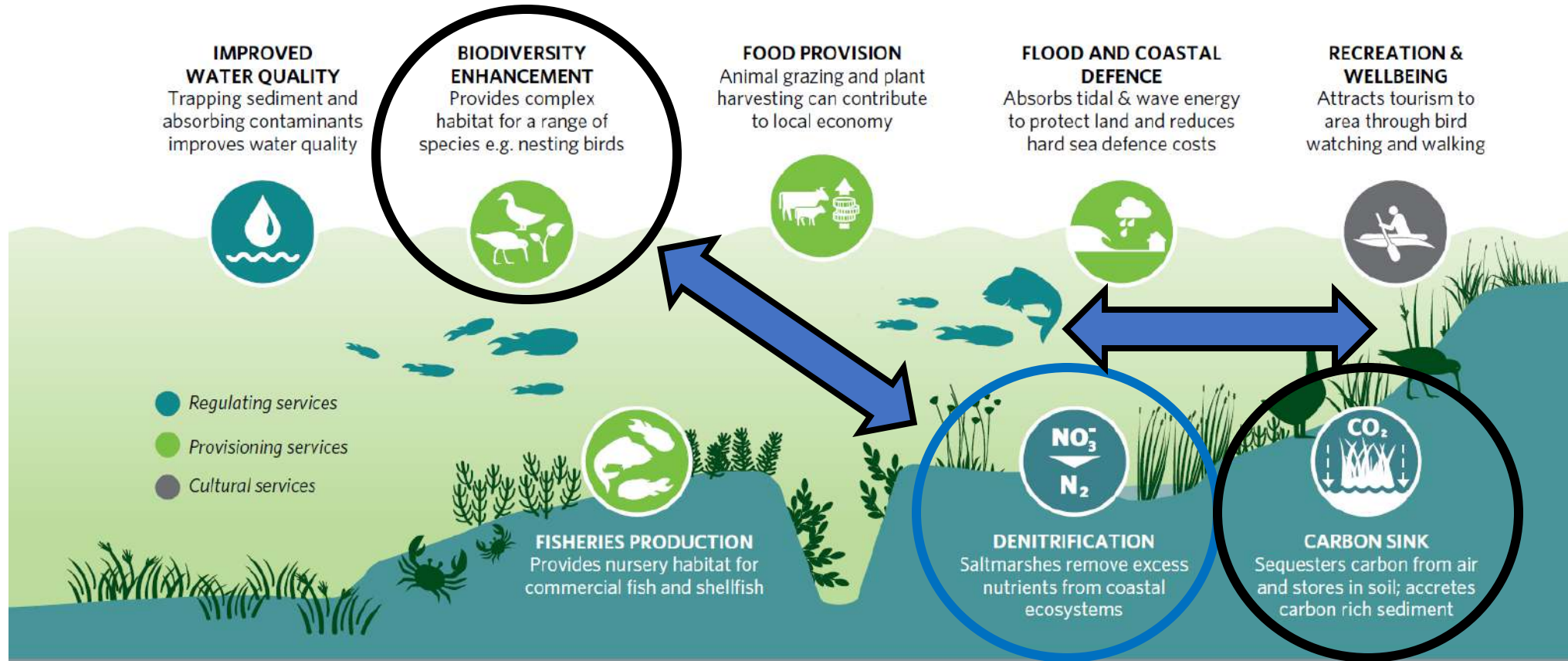


Natural Capital
and Ecosystem
Assessment



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A Thought to End On...



Thank You For Listening



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Sea the Value ReMeMaRe Conference 8th July 2025

www.seathevalue.org



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Our Vision

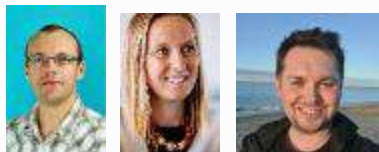
- To determine novel and policy relevant pluralistic values for marine biodiversity
- and apply these values to co-develop green investment options,
- leading to a transformative shift in our understanding and utilisation of the economics of biodiversity.

The Team



Ian Dickie
Rob Tinch
Mark Collar

Environmental and ecological
economics
Marine ecology
Human geography
Governance
Finance
Impact
Communications
Extensive research users /
interested parties



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Anbleyth-Evans

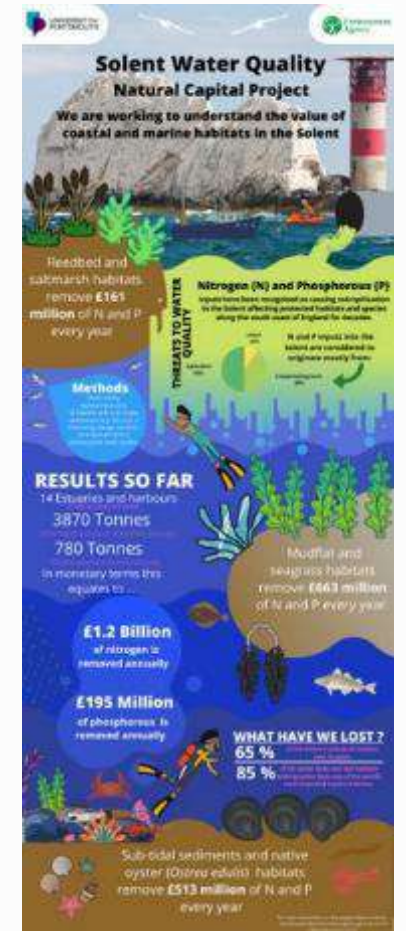


Programme Steering Group:
Academic, Government and ALB,
NGO, Industry and commerce

Carbon sequestration and storage (CCS)

A close-up photograph of a rocky shore at low tide. The ground is covered with numerous small, dark, rounded objects, likely sea urchins or similar marine life, interspersed with patches of brown seaweed and wet, grey rocks.

-





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Interdisciplinary Excellence

WP 4 Co- development and capacity building	WP1 Linking biodiversity, ES & Nat. Capital
Task 4.1 Stakeholder co-ordination	
Task 4.2 UK Wide Training	WP2 Determining pluralistic values
Task 4.3 Capacity building	
WP 4.4 Impact	WP3 Connecting values to decision making



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1. Natural Science





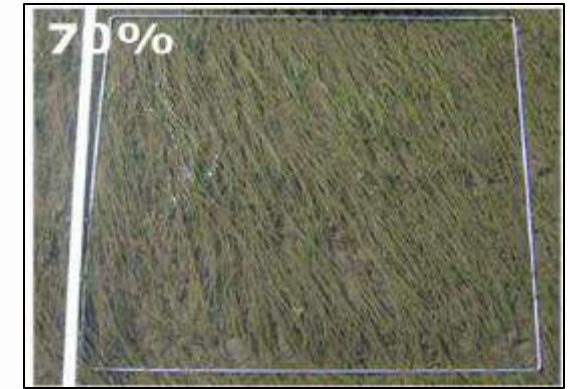
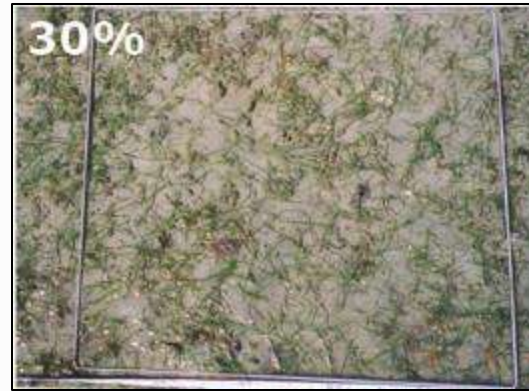
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1. Natural Science

1a. Field Work

Habitat images

Map of sites





Bioremediation of nitrogen: Denitrification rates (compared across habitats) sites combined.

CG: Pacific oysters

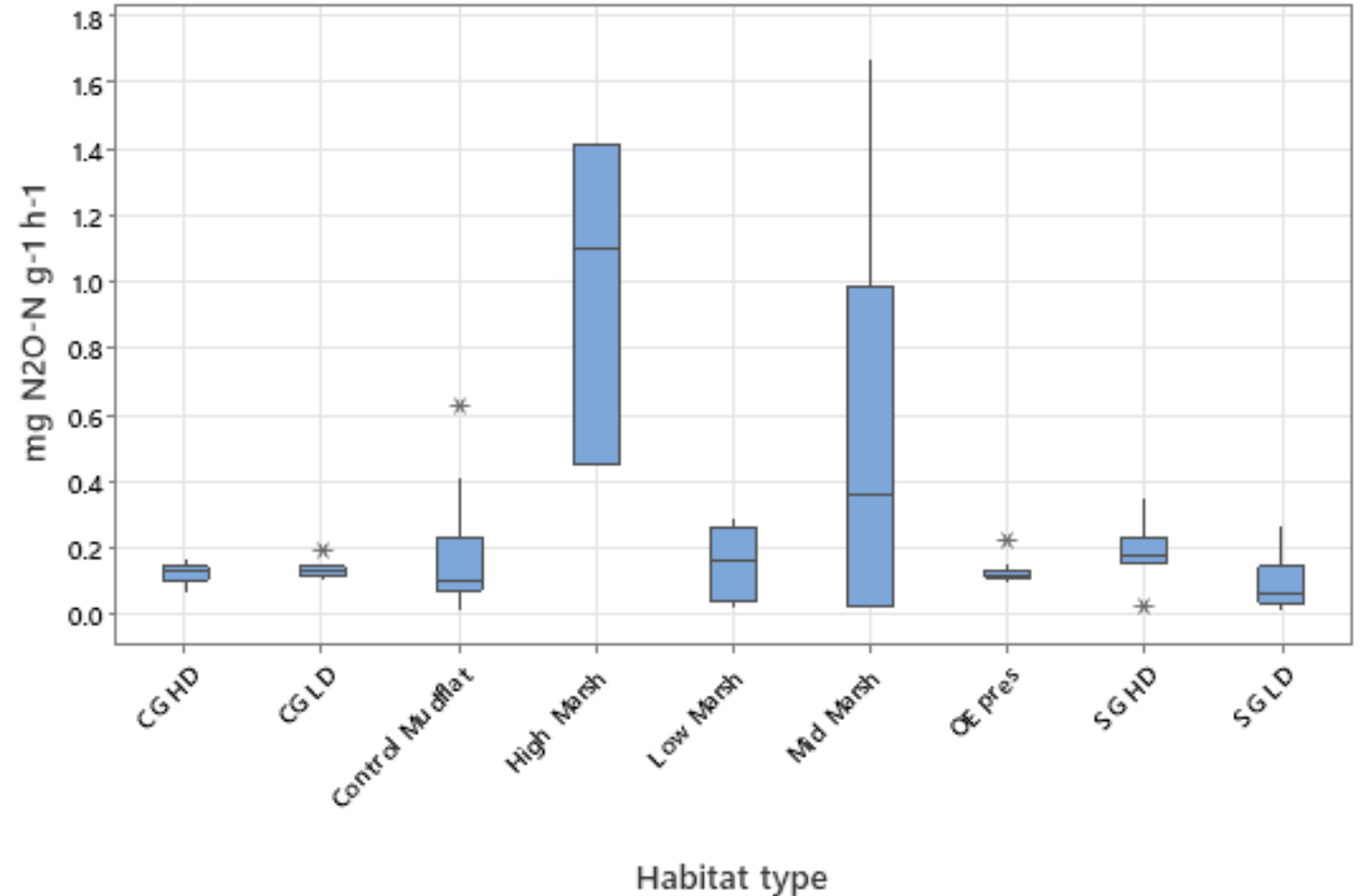
LD/HD: low and high density oysters and seagrass plants

Control mudflat: combination of samples from bare mud
next to each habitat

Marsh: saltmarsh at different tidal heights

OE pres: native oysters present plus pacific oysters

SG: seagrass





Organic content (amount of carbon in sediment) (compared across habitats) sites combined

CG: Pacific oysters

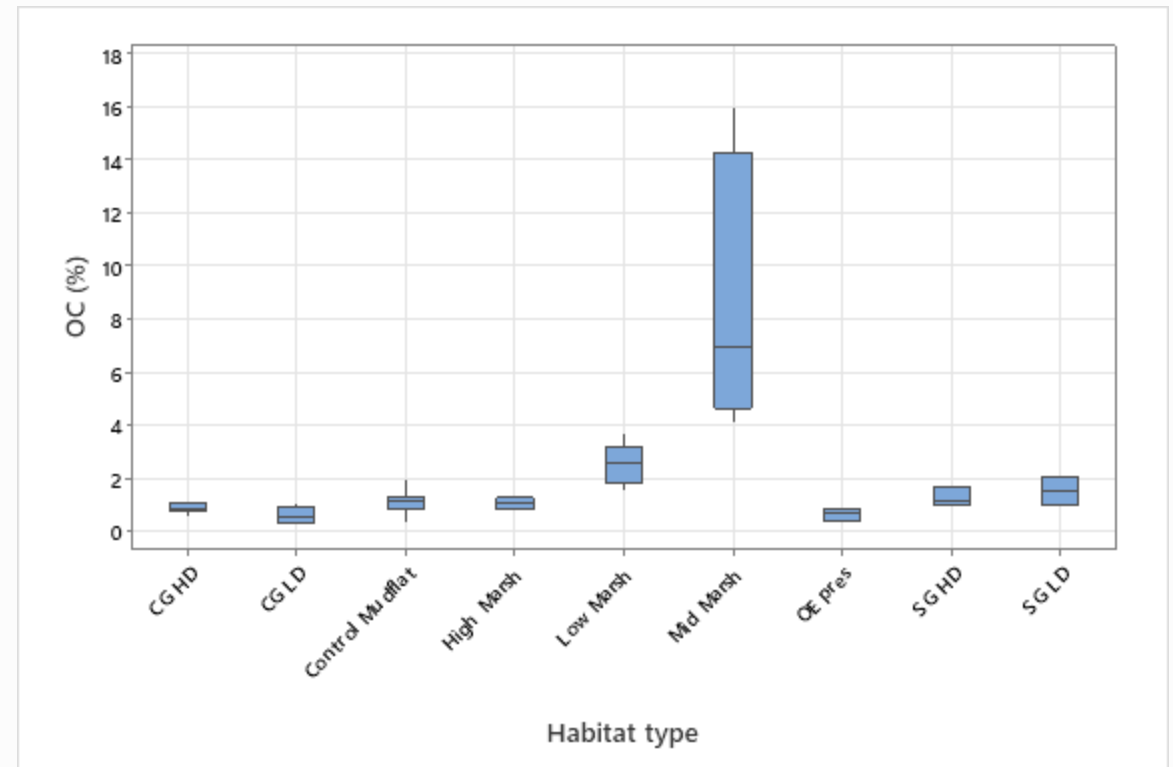
LD/HD: low and high density oysters and seagrass plants

Control mudflat: combination of samples from bare mud next to each habitat

Marsh: saltmarsh at different tidal heights

OE pres: native oysters present plus pacific oysters

SG: seagrass



Risk Register: Asset maps combined with activity maps



Supported by existing
national tools
developed by Defra
ALBs

Cromarty Firth Risk Assessment

Activity map



Subtidal sediment condition from exposure to activity (based on exposure x sensitivity)

Likely Condition	Abrasion	Penetration	Extraction	Physical change seabed	Physical change: sediment	Smothering & siltation rate: Heavy	Smothering & siltation: light	Change in suspended solids
Maintenance dredging	Degraded	Poor	Poor			Poor	Poor	Fair
Port and harbour structures: Maintenance	Degraded	Poor					Poor	Fair
Vessel moorings	Poor	Very poor		Very poor				
Dredge and spoil disposal	Degraded			Poor	Poor	Poor	Poor	Fair

Risk Assessment overview

Little evidence for activities across site: dredge disposal, moorings, shoreline infrastructure and operations

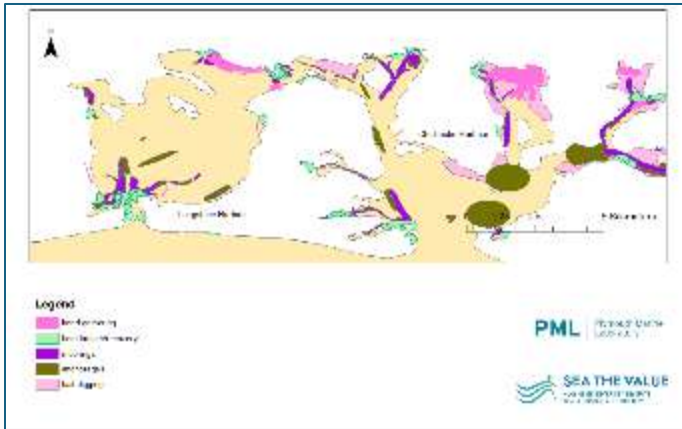
Saltmarsh, seagrass and mussel beds are the most sensitive habitats to physical disturbance from these activities but exposure and hence risk is low. Ecosystem services are likely to be largely unaffected.

Areas of **sublittoral sediment** are likely to be in poor/very poor condition from mooring and dredging and dredge disposal (using combined exposure and habitat sensitivity to estimate condition as shown in table).

Associated ecosystem services: carbon storage, nutrient remediation capacity within the extraction and disposal footprint are likely to be reduced but with low overall impact (based on small extent within the Firth)

Solent Risk Assessment

Activity map



Mudflat condition estimated from exposure + sensitivity (resistance and recovery) is better- compared to estimate based on habitat resistance (to pressure). Resistance more realistic assessment for chronic exposure.

Habitat Risk	Abrasion	Penetration	Extraction	Removal of topsoil	Removal of seabed	Physical change seabed
Harvesting	Fair	Fair	Poor	Fair	Fair	
Powerboat	Fair	Fair				
Sailing with	Fair	Fair				
Vessel anchoring	Fair	Fair				
Vessel mooring	Fair	Fair				Very poor

Habitat Risk	Abrasion	Penetration	Extraction	Removal of topsoil	Removal of seabed	Physical change seabed
Harvesting	Fair	Poor	Very poor	Poor	Poor	
Powerboat	Fair	Poor				
Sailing with	Fair	Poor				
Vessel anchoring	Fair	Poor				

Risk Assessment overview

Activities widespread throughout site: hand gathering (bait/shellfish) anchoring, mooring and boat launch/recovery sites. Associated physical disturbance pressures (abrasion, penetration, extraction are cumulative- see condition table)

Saltmarsh, seagrass and oyster beds are most sensitive habitats to physical disturbance, but activity exposure (and risk) is lower compared to less sensitive **mudflat**.

Mudflats:

- Exposed to cumulative pressures across large extents
- MarLIN MarESA sensitivity is low but based on high recovery-
- Resistance* to pressures is low and mudflat likely to be degraded or in poor condition from chronic pressures -> an important facet of sensitivity to consider.
- Restoration of mudflat to more sensitive seagrass and oyster habitats would be impeded unless activities are managed
- Associated ecosystem services including carbon storage, nutrient remediation capacity are likely to be reduced

Why use Participatory Approaches in Restoration?



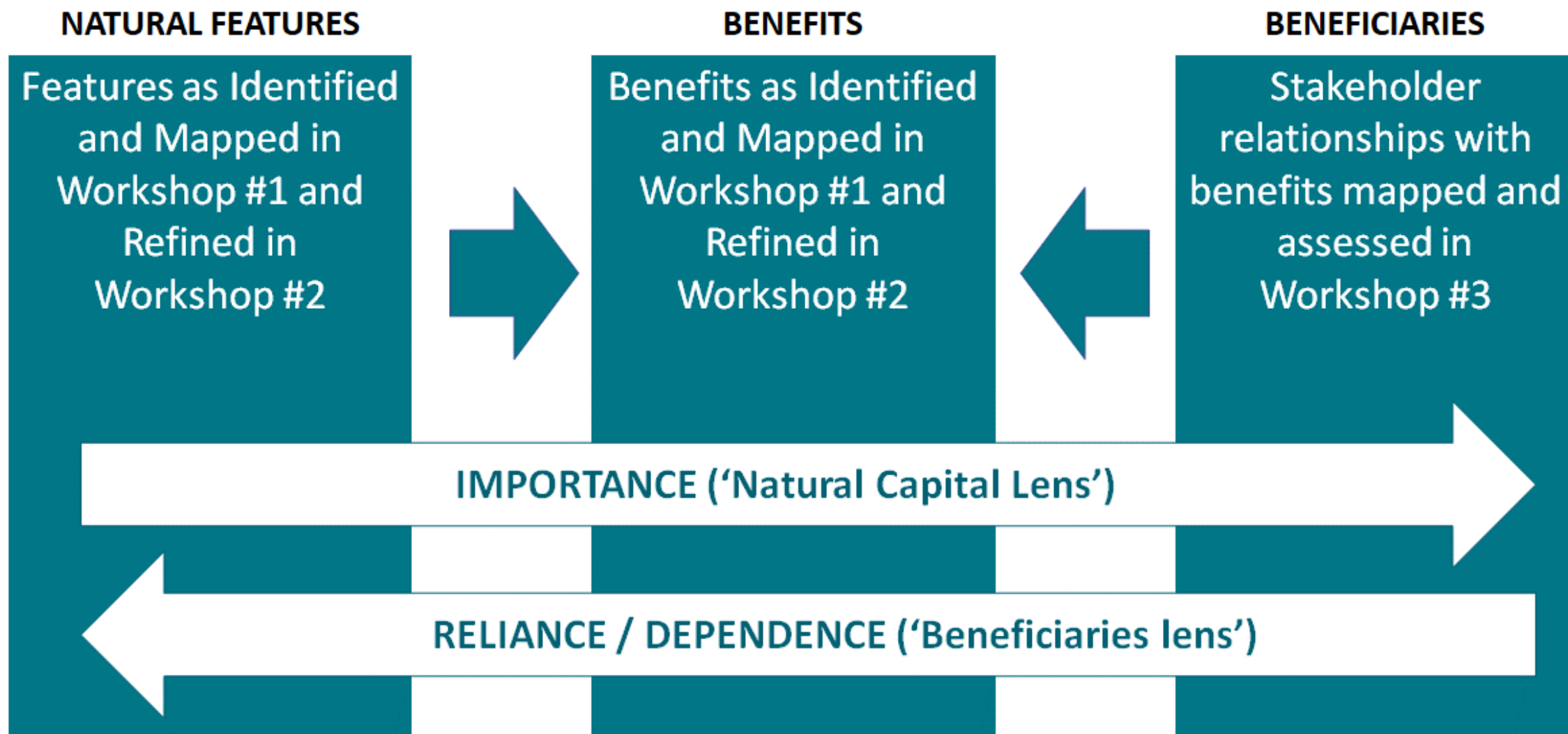
- **Driven by stakeholders** at all stages of the process.
- Creates a shared **common language**.
- **Captures local knowledge** and generates digital data.
- Generates **outputs for coastal communities**.
- **Improves understanding** of the links between natural features and benefits.
- **Supports organisations** to assess their own reliance on natural capital features.
- **Identifies shared reliance** on natural capital features and their benefits.



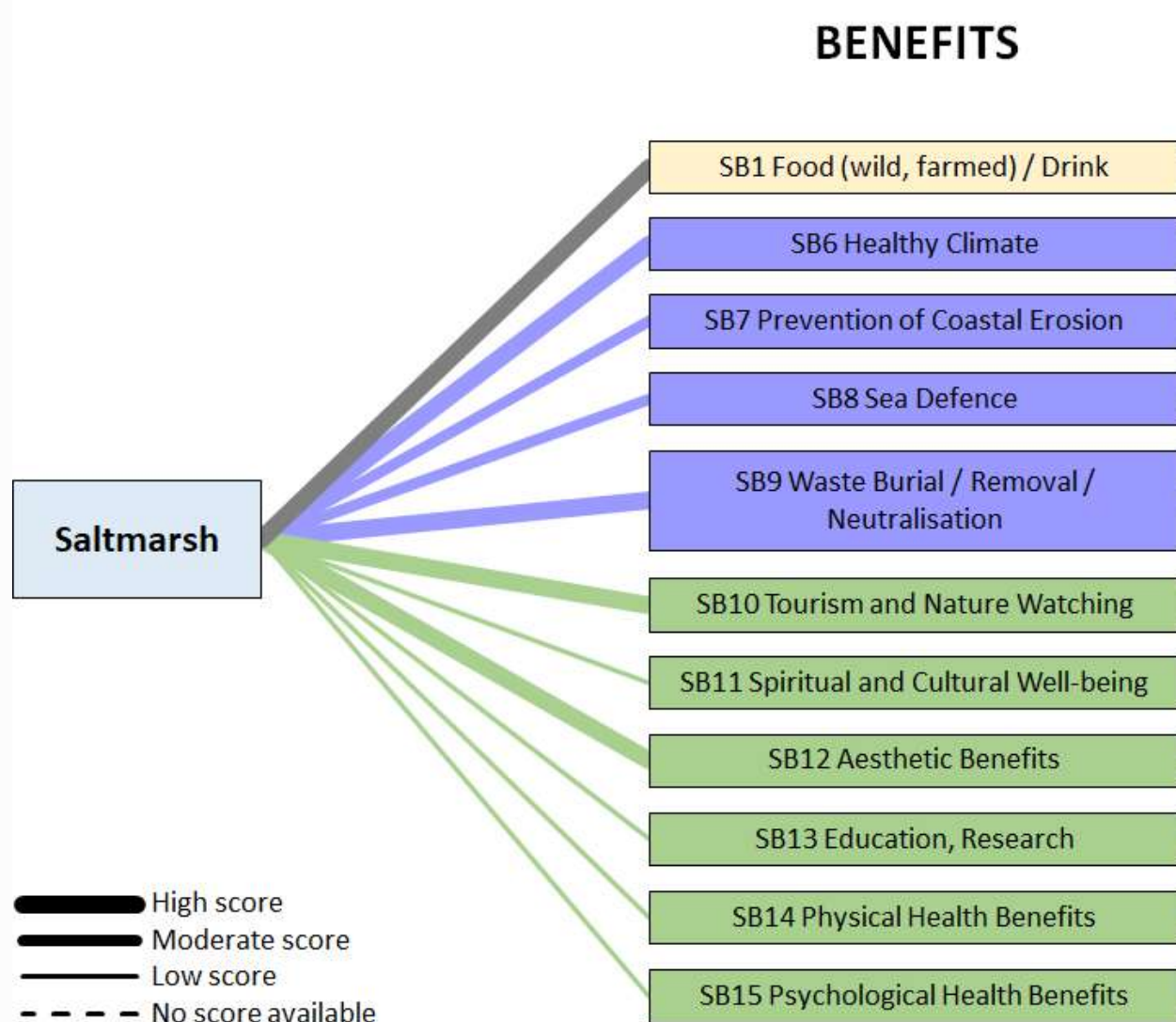
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2a. Participatory Mapping Outputs



Logic chain structure to be populated during the participatory mapping workshop series



Natural capital logic chain focussing on saltmarsh restoration in the Cromarty Firth.

Sector	Non-Governmental Organisations
Cromarty Firth	<p>RSPB - Cromarty</p> <p>The radar chart for RSPB - Cromarty displays 15 Sustainable Benefits (SB1-SB15) arranged in a circle. The chart is divided into two main color-coded groups: green (SB11-SB15) and blue (SB1-SB10). The segments are of varying lengths, indicating different levels of impact or priority for each benefit. SB1 (Food) and SB6 (Healthy climate) are the longest segments in the blue group, while SB15 (Psychological health) is the longest in the green group.</p>
Solent	<p>RSPB - Solent</p> <p>The radar chart for RSPB - Solent displays the same 15 Sustainable Benefits (SB1-SB15) as the Cromarty chart. It uses the same color-coding: green (SB11-SB15) and blue (SB1-SB10). Additionally, there is a small yellow segment at the top, between SB15 and SB1. The lengths of the segments vary, with SB1 (Food) and SB6 (Healthy climate) being the most prominent in the blue group, and SB15 (Psychological health) being the most prominent in the green group.</p>

Burdon et al., submitted. *Participatory mapping to support coastal communities to ‘Sea the Value’ of marine restoration initiatives.* Submitted to People and Nature.

2b. The economics of coastal restoration – Solent case study

Values in monetary terms arising from restoration actions in saltmarsh and seagrass habitats in the Solent

Ecosystem service	Valuation approach	Unit	Central estimate	Range in values	Driver in variation
Biodiversity	Stated preference survey	£ million, PV 60	170	20 – 1,120	Habitat match, Beneficiary households, timing of benefits
Carbon regulation	Marginal abatement costs		50	10 – 150	Carbon sequestration rate, timing of benefits, permanence uncertainty
Restoration cost	Market prices		(130)	(110 – 240)	Capital expenditure, Management of pressures/drivers of degradation

Carbon regulation valuation:

- Multiple of saltmarsh and seagrass restoration zone (hectares) and rate of carbon sequestration (tCO₂e/hectare/year)
- Non-traded carbon values (DESNZ, 2023) represent costs needed to meet UK Government's emissions reduction targets.
- A process for adjusting the value of carbon offsets (Groom & Venmans, 2022) to reflect uncertainty of permanence reduces benefit values significantly.

Biodiversity:

- Saltmarsh and seagrass restoration zone (hectares) assumed to improve species abundance (biodiversity proxy) from “low” to “moderate”.
- Uses annual household WTP (£/hh/yr) for these improvements, transferred from stated preference study with Discrete Choice Experiment component (eftec et al., 2024).
- Scaling preferences across English or local area (e.g., Hampshire) population (“who’s benefits?”) generates wide value range, alongside timing of benefit (i.e., when species re-appear).

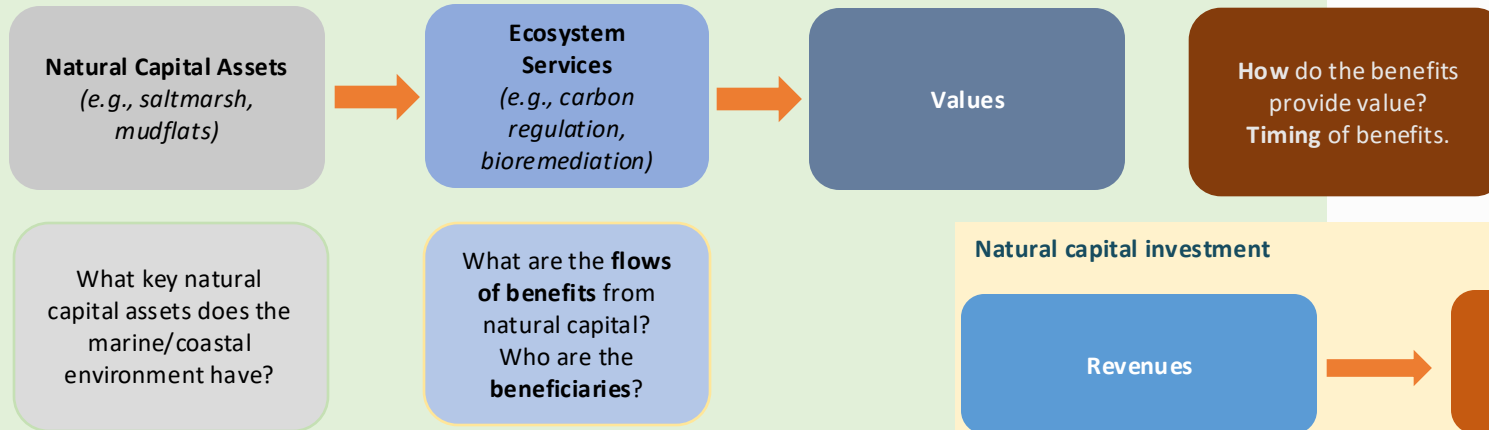


3. Linking the science of coastal restoration with economic and social impact

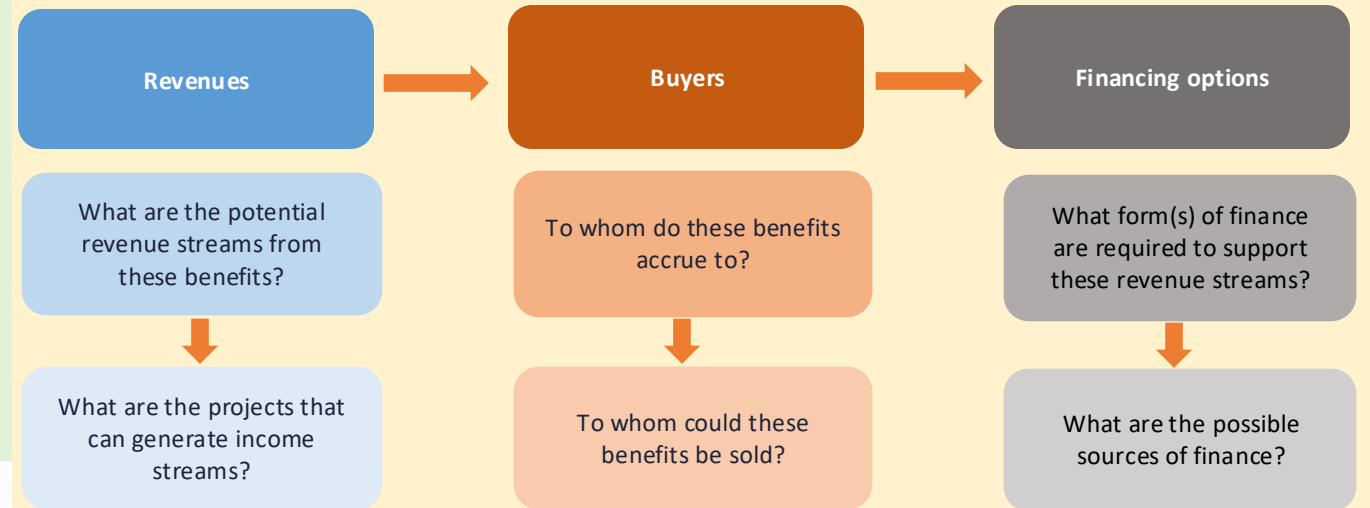
Work package 1: Habitat maps and baseline condition support natural capital asset register. Combined with condition-linked ecosystem services (ES) delivery, these data support the valuation of existing habitat and possible ES delivery under restoration scenarios.

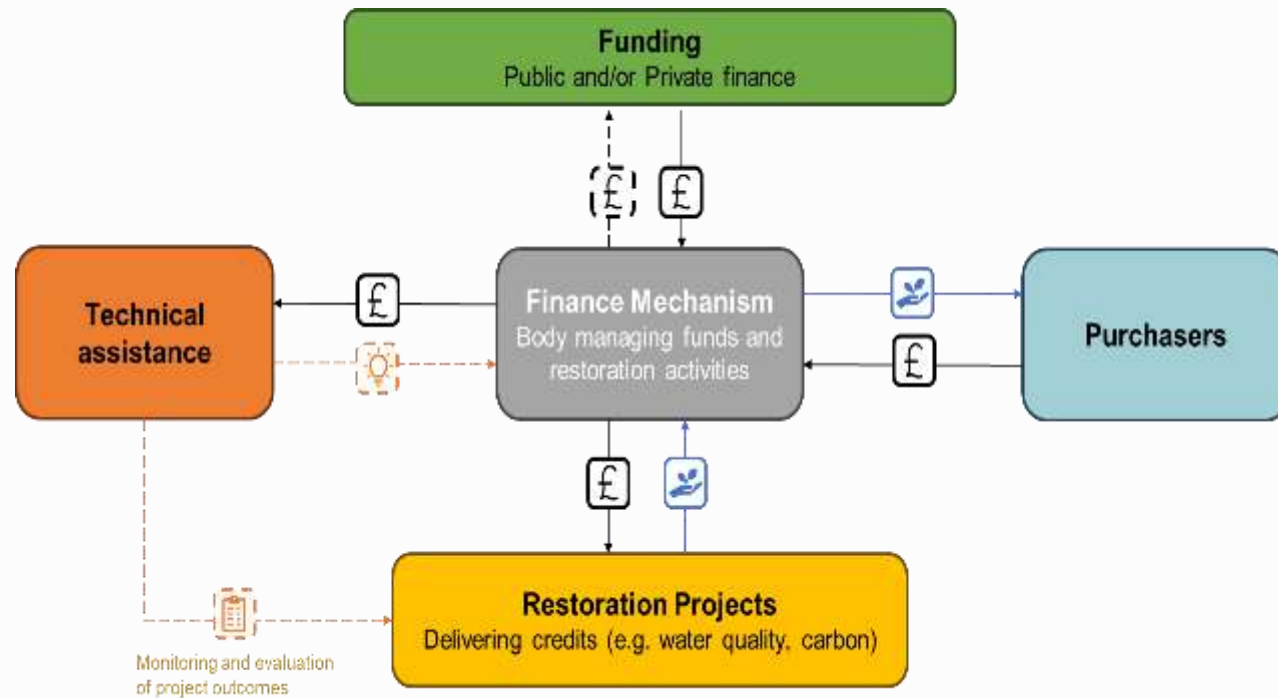
Work package 2.1: Participatory mapping identifies social preferences for natural capital benefits and highlights trade-offs between stakeholders.

Natural capital approach to marine and coastal restoration



Natural capital investment





- Nature market credits generate revenues to repay investment in marine ecosystem restoration...
- ...but project and policy uncertainty reduces the value of credits, increasing investment risk.
- There are possible solutions:
 - Shorter lifetime credits.
 - Bundling/stacking.
- Combining environmental, social, and economic data therefore shapes better **investment options** for marine restoration:
 - identifying parties that can fulfil the necessary roles in financing marine and coastal restoration
 - estimating market size; and
 - the design of financing contracts



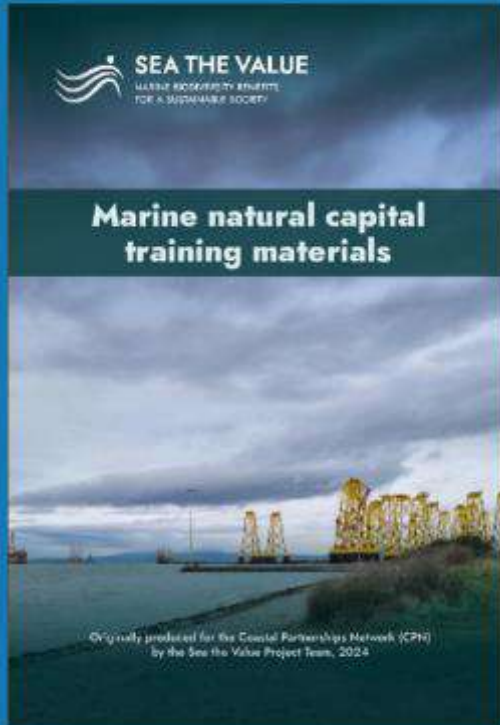
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4. Co development and capacity building

Additional highlights

- Co-funding from Blue Marine to undertake the co-benefits and finance mechanisms review
- Interdisciplinary in person meetings
- Scaling and Economics workshops
- Programme Steering Group
- Endorsed as a UN Ocean Decade Project
- Presentations, posters and publications



**Training materials are
available to download.**

Scan to visit our
webpage

Comments from attendees:

'I found it extremely interesting and useful to attend.'

'Very useful, really thought provoking'

'Absolutely brilliant session, really interesting and I can see how this would fit in clearly with our work.'

Governance of Restoration: How Diffusion, Devolution, and Discretion Can Affect Restoration Outcomes

Gina Yannitell Reinhardt
University of Essex

*ReWRITE: Rewilding and Restoration of
Intertidal Sediment Ecosystems for Carbon
Sequestration, Climate Adaptation and
Biodiversity Support*

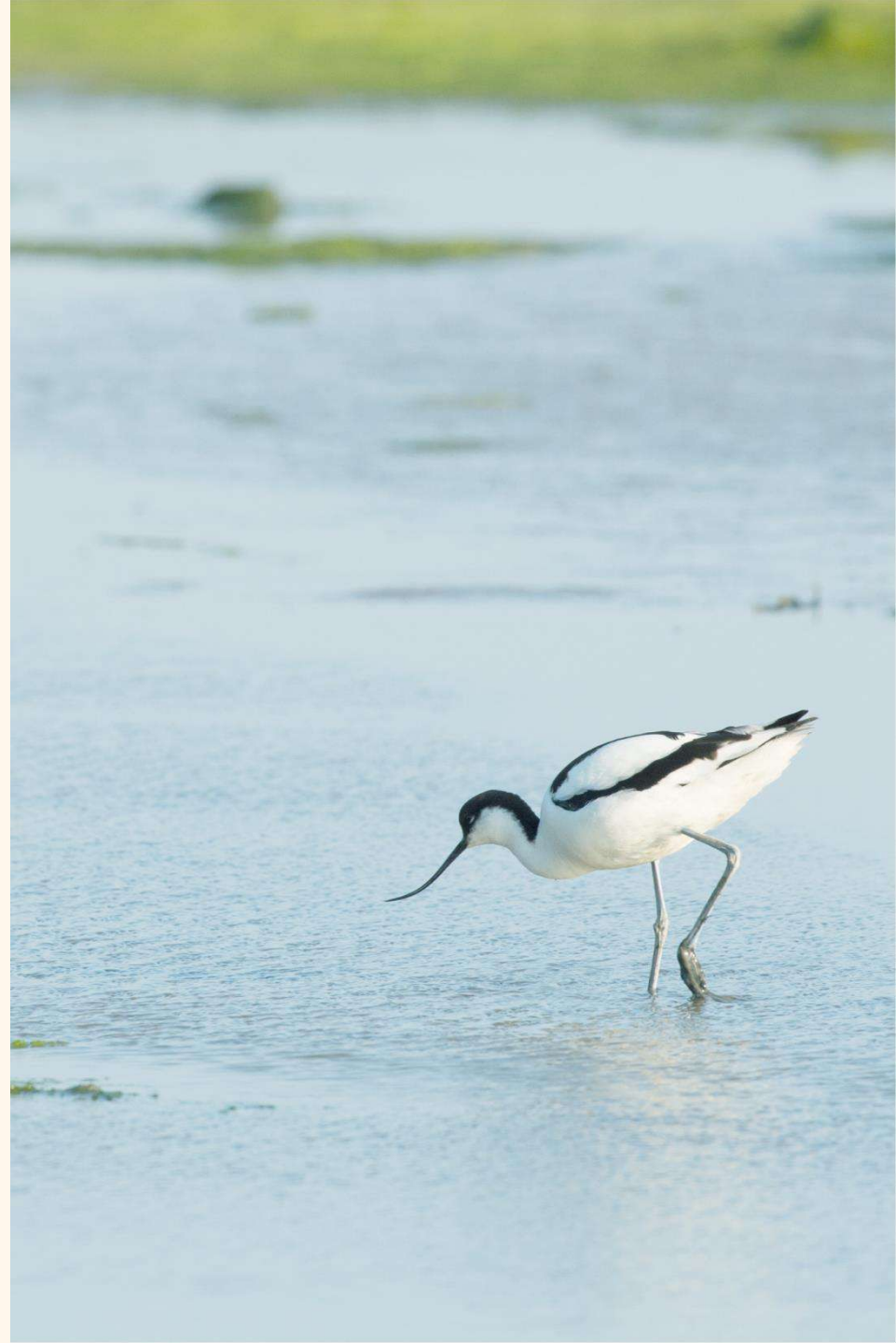
Governing Restoration

gina.reinhardt@essex.ac.uk
<https://rewriteproject.eu/>

- 1 What is Governance?
- 2 Mapping Governance
- 3 Research Questions
- 4 Three Ds: Devolution, Diffusion, Discretion
- 5 Way Forward

What is *governance*?

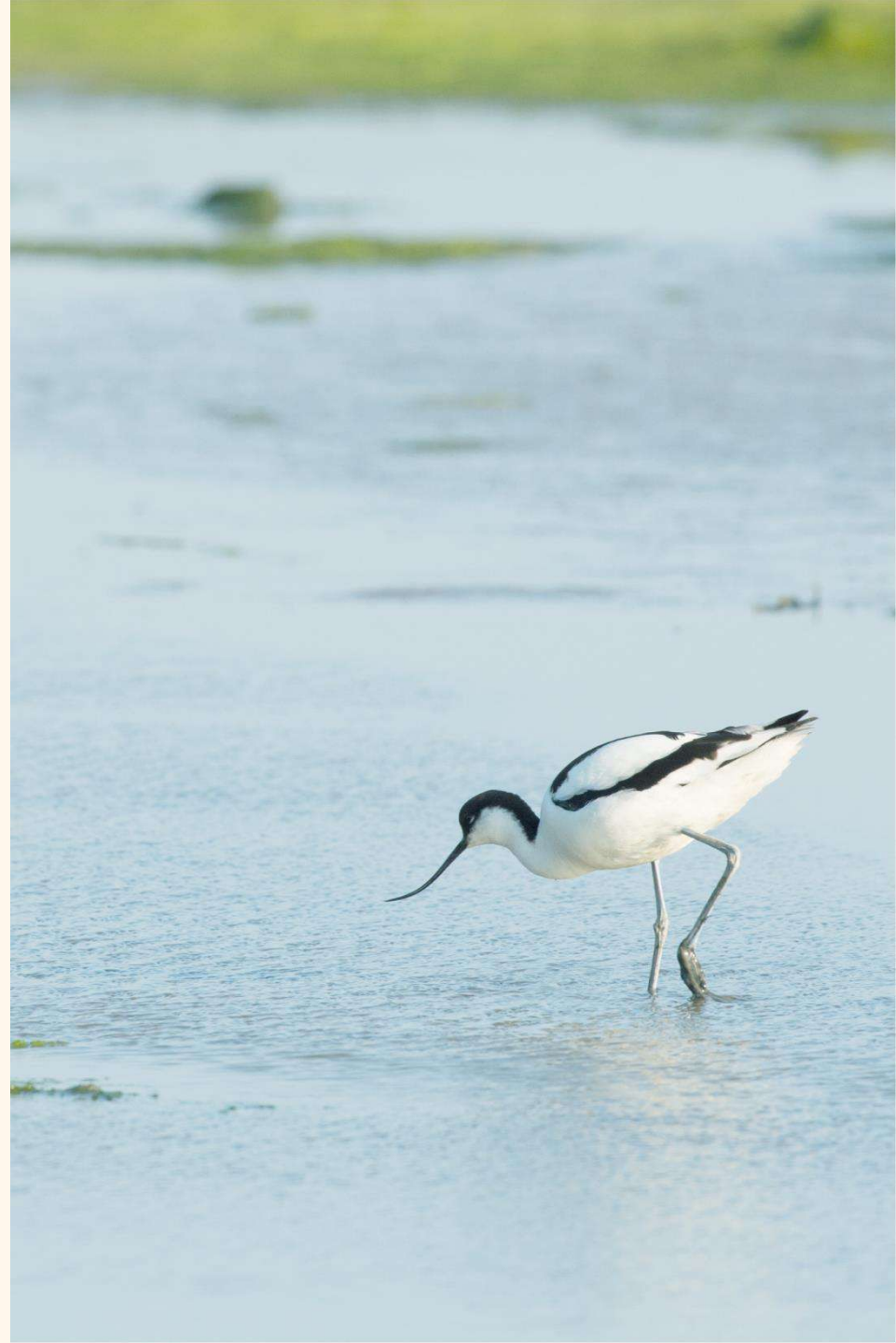
Governance is the system that operates and controls a particular issue, and by which people and organisations are held to account.



What is *governance*?

Governance is the system that operates and controls a particular issue, and by which people and organisations are held to account.

- People
- Organisations
- Rules
- Regulations
- Policies
- Norms
- Ethics
- Risk management
- Monitoring and evaluation

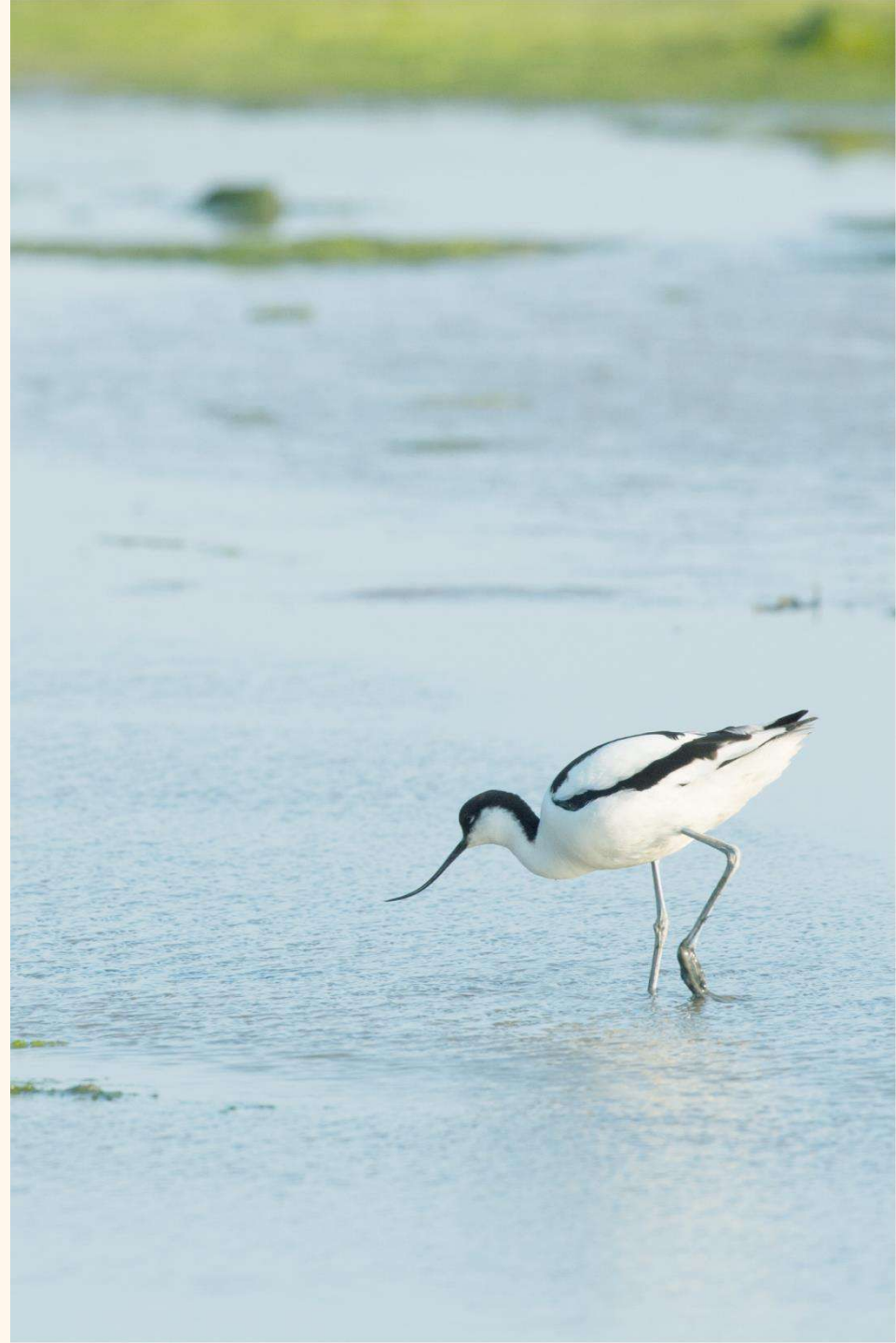


Anything can be governed!

We care about the governance of re-wilding in each of 10 demonstrator sites across Europe and North America.

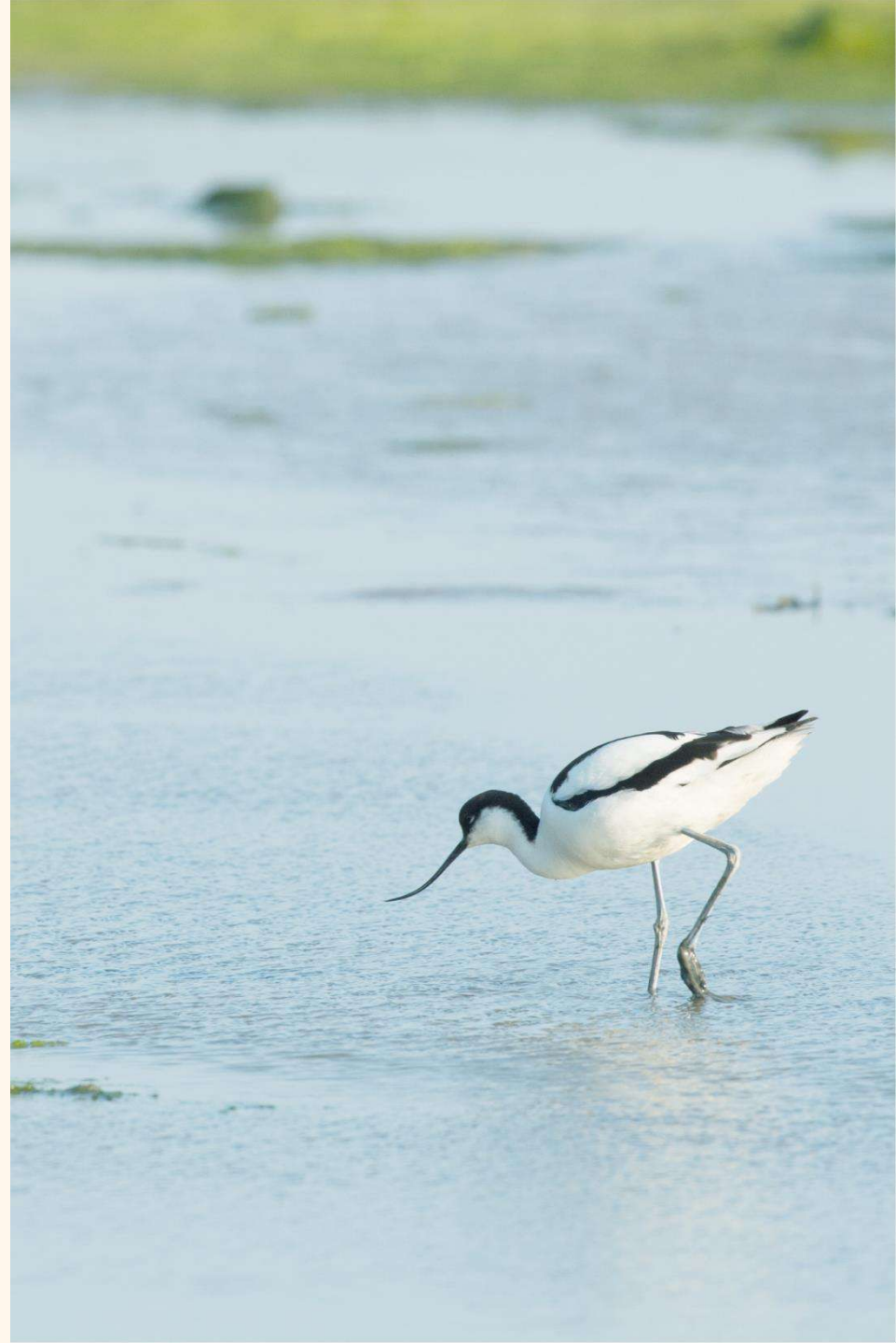
gina.reinhardt@essex.ac.uk

<https://rewriteproject.eu/>



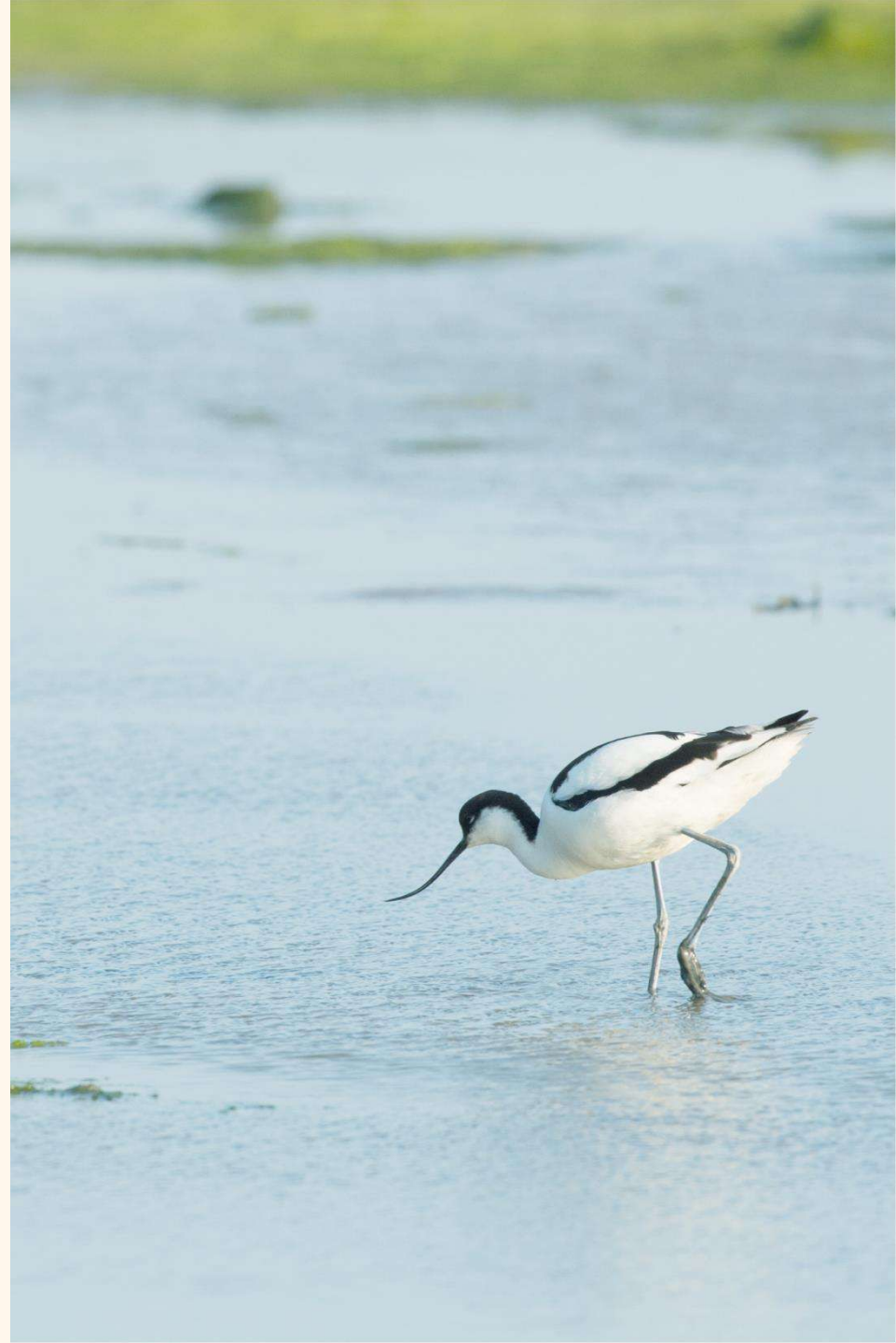


Aims



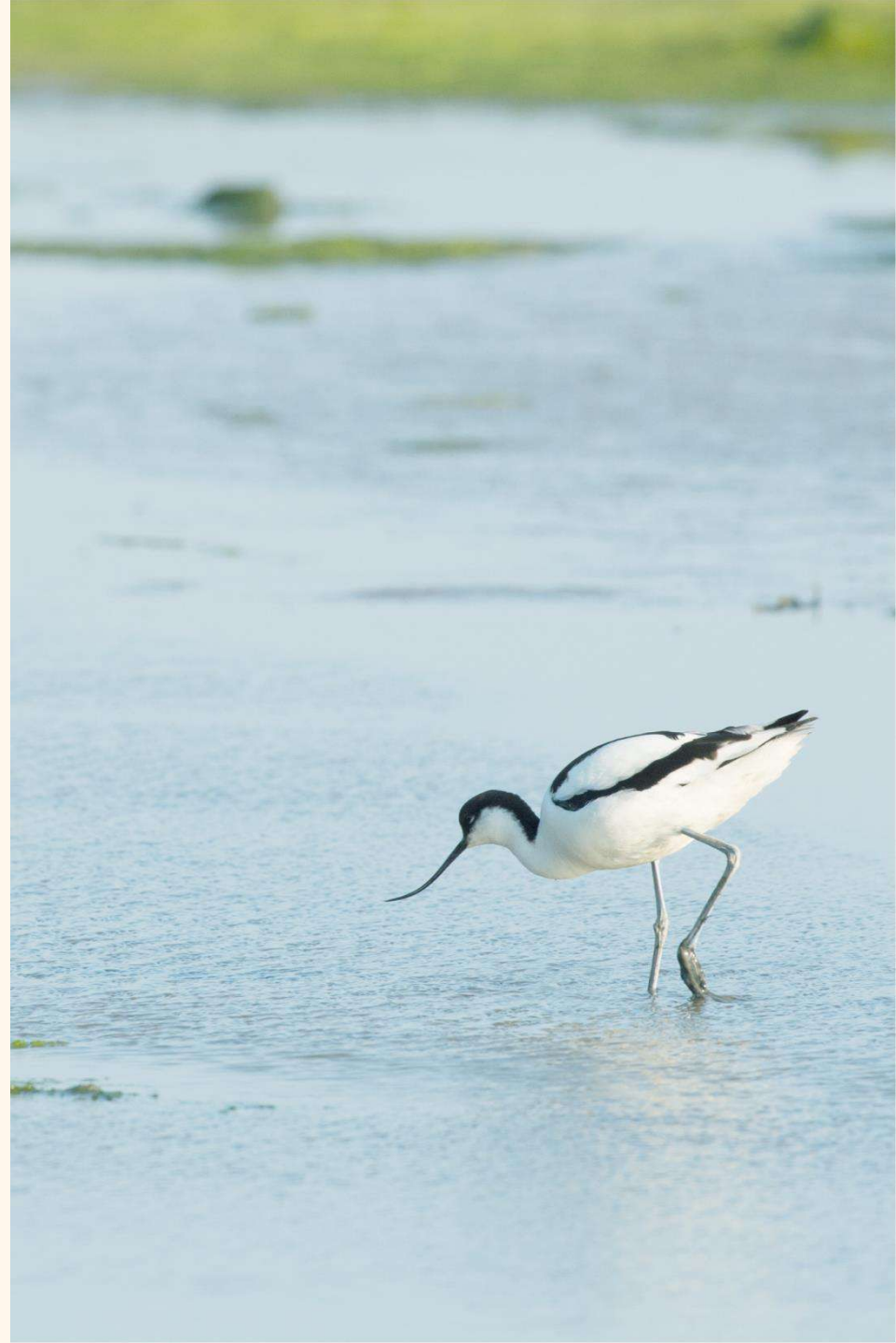
Aims

1. Map the re-wilding governance structures of our demonstrator sites (DMs) and how they differ across DMs.



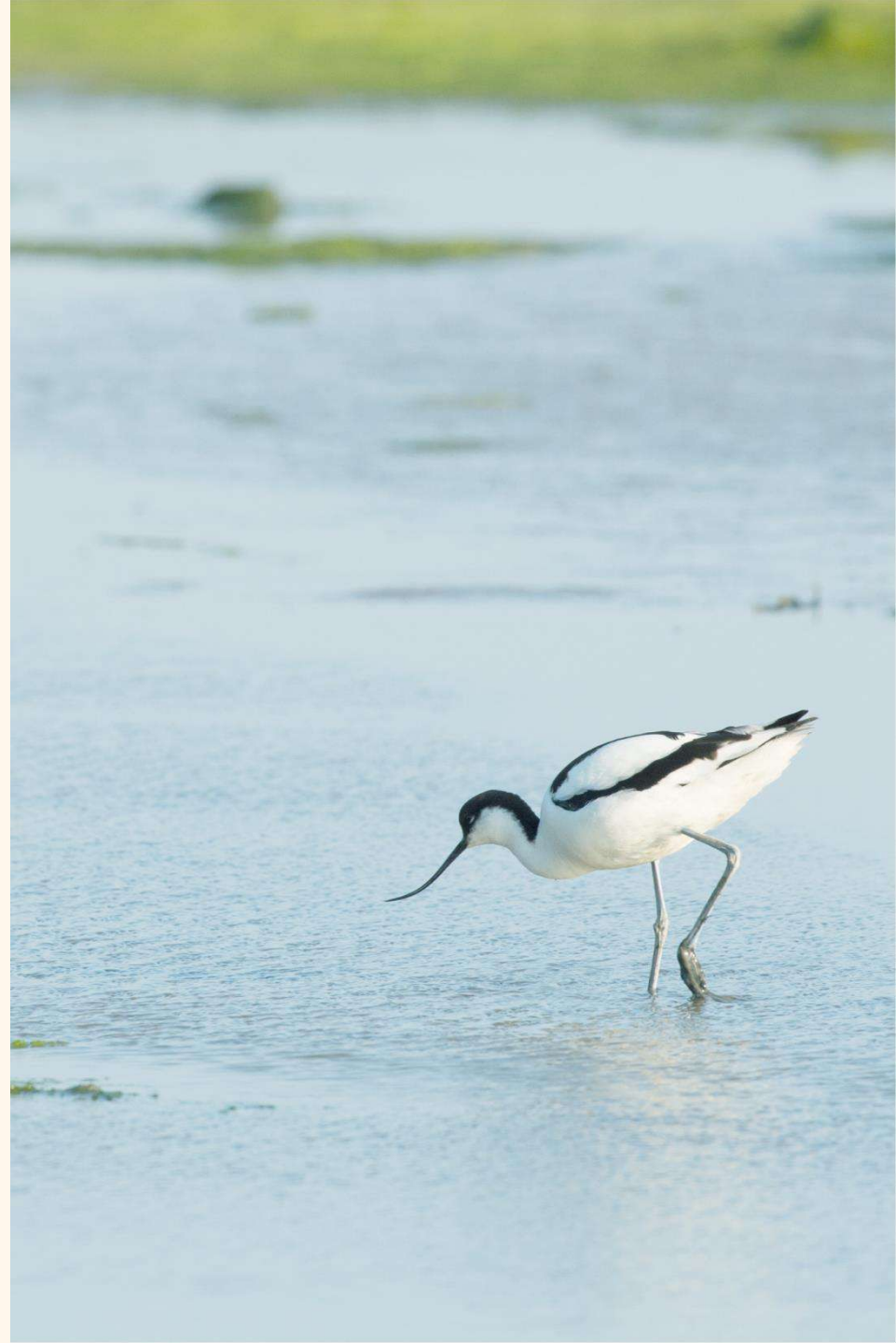
Aims

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2. Evaluate the extent to which governance structures are related to outcomes for estuaries in terms of **coastal flooding, nature / habitat compensation and restoration.**



Aims

1. Map the re-wilding governance structures of our demonstrator sites (DMs) and how they differ across DMs.
2. Evaluate the extent to which governance structures are related to outcomes for estuaries in terms of **coastal flooding, nature / habitat compensation and restoration.**
3. Develop recommendations/advice regarding any opportunities to navigate or alleviate governance pressures related to restoring and rewilding intertidal soft sediments.





REWRITE

Mapping the governance framework for each case (DM)

- Corpus
 - policy and legal documents
 - grey and academic literature
 - interviews with national, regional, local experts



REWRITE

Mapping the governance framework for each case (DM)

- Corpus
 - policy and legal documents
 - grey and academic literature
 - interviews with national, regional, local experts
- Issue areas
 - coastal flooding
 - nature/habitat compensation
 - restoration



REWRITE

Mapping the governance structure for each case (DM)

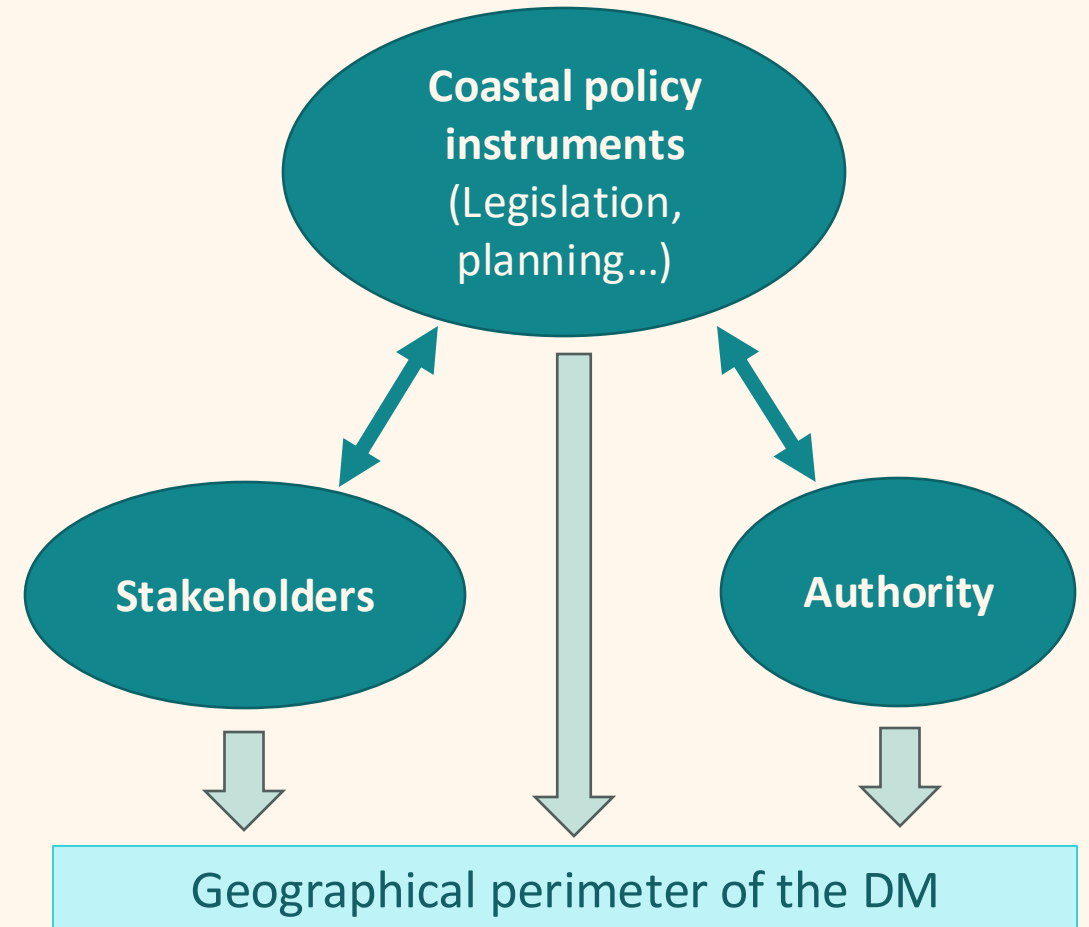
- Corpus
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 - interviews with national, regional, local experts
- Issue areas
 - coastal flooding
 - nature/habitat compensation
 - restoration
- Map for each case
 - Key agencies (and sub-agency units) involved at varying administrative levels for each issue area



REWRITE

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Research questions – 3D Framework

How do governance structures correlate with restoration outcomes?



Research questions – 3D Framework

How do governance structures correlate with restoration outcomes?

Devolution - At what administrative levels are decisions made?



Research questions – 3D Framework

How do governance structures correlate with restoration outcomes?

Devolution - At what administrative levels are decisions made?

Diffusion - Who can change outcomes and how much overlap of function exists?



Research questions – 3D Framework

How do governance structures correlate with restoration outcomes?

Devolution - At what administrative levels are decisions made?

Diffusion - Who can change outcomes and how much overlap of function exists?

Discretion – How much flexibility exists in their decision making?

What is an acceptable rubric?

A *rubric* is a definition of how to measure, assess, or code a particular attribute that we want to assess.

A rubric does not have to involve quantitative information, but it does have to have categories – ideally 3-5.

Categories must be **clearly defined**.

Categories must be **mutually exclusive**.

Categories must be **jointly exhaustive**.



The 3D Framework: Devolution



Devolution

What: *Administrative level at which decisions are made regarding the issue areas we care about.*

Why: Higher administrative levels are often unaware of local power inequities and histories. Lower levels can offer more opportunities for direct engagement and trust building, as well as avenues for outcomes to differ from one locality to another.





Devolution – Where is the power?

Conceptual definition:

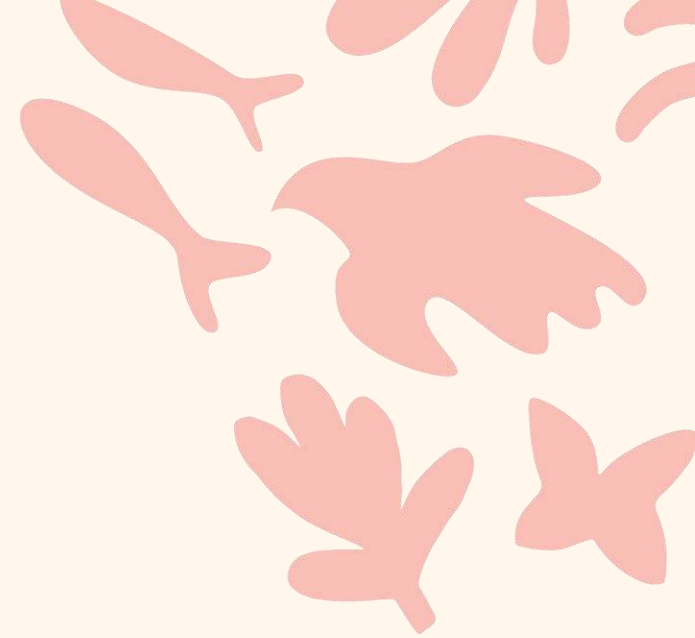
Administrative level at which decisions are made.

Research Question(s):

At what level is the ***critical*** decision regarding a change of use?

Operational definitions:

- **Devolution₁**: the lowest level where the critical decision is made.
- **Devolution₂**: the highest level at which a veto can be given.



Devolution Rubric

Level	Measure Devolution ₁ - positive
1	The decision is made at the lowest possible administrative level. (local level)
2	The decision is made in between the local and national levels. (provincial/regional level)
3	The decision is made at the highest possible administrative level. (national/supernational level)

Devolution Rubric

Level	Measure Devolution ₁ - positive	Measure Devolution ₂ - negative
1	The decision is made at the lowest possible administrative level. (local level)	A decision made at the local level cannot be vetoed by any higher-level body.
2	The decision is made in between the local and national levels. (provincial/regional level)	A final veto decision is held at a regional level and cannot be vetoed by any higher level.
3	The decision is made at the highest possible administrative level. (national/supernational level)	A national/supernational entity can veto a decision.

Devolution – Example

Decision regarding change of use from unused land to farmland

	UK	France	Netherlands
Devolution	2	6	3
Diffusion			
Discretion			

Example

Decision regarding change of use from unused land to farmland

	UK	France	Netherlands
Devolution	2	6	3
Diffusion			
Discretion			

Assessment:

- In the UK, we expect decisions may vary from one location to another; stakeholders have local access to influence decision makers
- In France, we expect decisions about all localities to conform to traceable national/international standards
- In the Netherlands, we expect decisions about change of use to be contextually variable, within a defined range of potential decisions

The 3D Framework : Diffusion



Diffusion

What: *Number of decision makers.*

Why: A single decision maker is easier to identify and hold to account; multiple decision makers can affect efficiency and spread accountability confusingly.





Diffusion – How many have the power?

Conceptual definition:

Number of decision makers involved.

Research Question(s):

How many people/organizations contribute to the critical decision?

Operational definitions:

- **Diffusion₁**: the number of people/organizations involved in making the decision (positive).
- **Diffusion₂**: the number of people/organizations able to veto or overturn the decision (negative).



Diffusion

Level	Diffusion ₁ - positive
1	One person makes the decision.
2	The decision is made in collaboration with multiple people who sit in exactly one organization.
3	The decision is made in collaboration with multiple people who sit in more than one organization.

Diffusion

Level	Diffusion ₁ - positive	Diffusion ₂ - negative
1	One person makes the decision.	Veto power rests with exactly one person.
2	The decision is made in collaboration with multiple people who sit in exactly one organization.	Veto power rests with one organization, in which multiple people could influence the decision.
3	The decision is made in collaboration with multiple people who sit in more than one organization.	Veto power rests with multiple people who sit in more than one organization.

Example

Decision regarding change of use from unused land to farmland

	UK	France	Netherlands
Devolution	2	6	3
Diffusion	5	6	3
Discretion			

Assessment:

- In the UK and France, we expect it to be difficult to discern who is responsible for decisions
- In the Netherlands, decision makers can be identified, though it may be possible for some decision makers to attribute responsibility to others, with no means of verifying those claims

The 3D Framework : Discretion





Discretion

What: *Amount of flexibility a decision maker has.*

Why: More flexible policies leave space to adapt to changing circumstances; more circumscribed policies eliminate personal responsibility and reduce effects of personal bias.



Discretion – How free is the power?

Conceptual definition:

Amount of flexibility held by decision maker

Research Question(s):

To what extent can a decision maker insert their own preferences, interests, or bias into a decision?

Operational definitions:

- **Discretion₁**: amount of flexibility or freedom the critical decision maker has.
- **Dicretion₂**: amount of flexibility or freedom the ultimate veto player has.





Discretion

Level	Discretion ₁ - positive
1	The decision maker has highly circumscribed paths to enact decisions.
2	The decision maker has non-exclusive descriptions of deciding factors.
3	The decision maker has no restrictions on how/when decisions can be made.

Discretion

Level	Discretion ₁ - positive	Discretion ₂ - negative
1	The decision maker has highly circumscribed paths to enact decisions.	The ultimate veto power has clear directives on when veto is possible.
2	The decision maker has non-exclusive descriptions of deciding factors.	The ultimate power has a non-exclusive list of acceptable occasions when veto may be exercised.
3	The decision maker has no restrictions on how/when decisions can be made.	The ultimate power can exercise the veto under any circumstances.

Example

Decision regarding change of use from unused land to farmland

	UK	France	Netherlands
Devolution	2	6	3
Diffusion	5	6	3
Discretion	6	2	3

Assessment:

- In the UK, we would expect change of use decisions to vary greatly from one decision maker to another, and one location to another
- In France, we expect change of use decisions to be standardised and traceable to policy directives
- In the Netherlands, we expect change of use decisions to be guided by policy and informed by contextual differences

The Way Forward

- Policies have been collected
- Beginning with English-language documents
- Identify exactly which policies we want to score according to our rubrics.
- Solidify and validate rubrics.
- Code collected documents according to chosen rubrics.
- Test inter-rater reliability, revise rubrics if necessary.
- Score governance across our sites.



Strategic
Infrastructure

How the Great Grid Upgrade can energise marine restoration

Dr Ben Green
Marine Restoration & Enhancement
Manager - ReMeMaRe 2025

nationalgrid

▶ The
Great Grid
Upgrade ◀



Our structure

nationalgrid

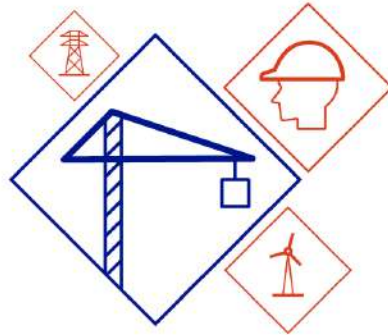
In the UK

National Grid Electricity Transmission



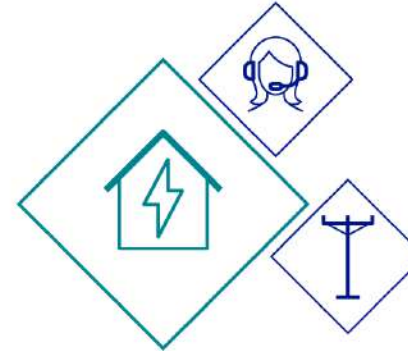
Owns and manages the high voltage electricity transmission system in England and Wales.

National Grid Strategic Infrastructure



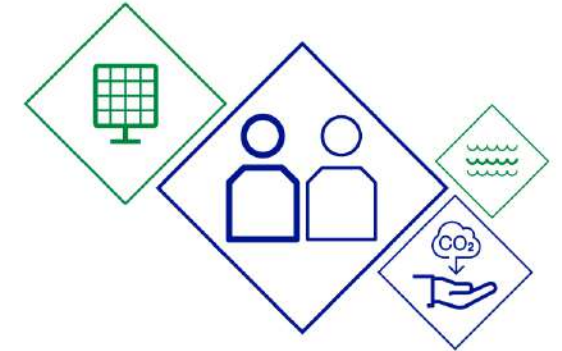
Delivers major strategic UK electricity transmission projects, focused on connecting more clean, low-carbon power to England and Wales.

National Grid Electricity Distribution



Owns and operates the electricity distribution networks for the Midlands, the South West of England and South Wales.

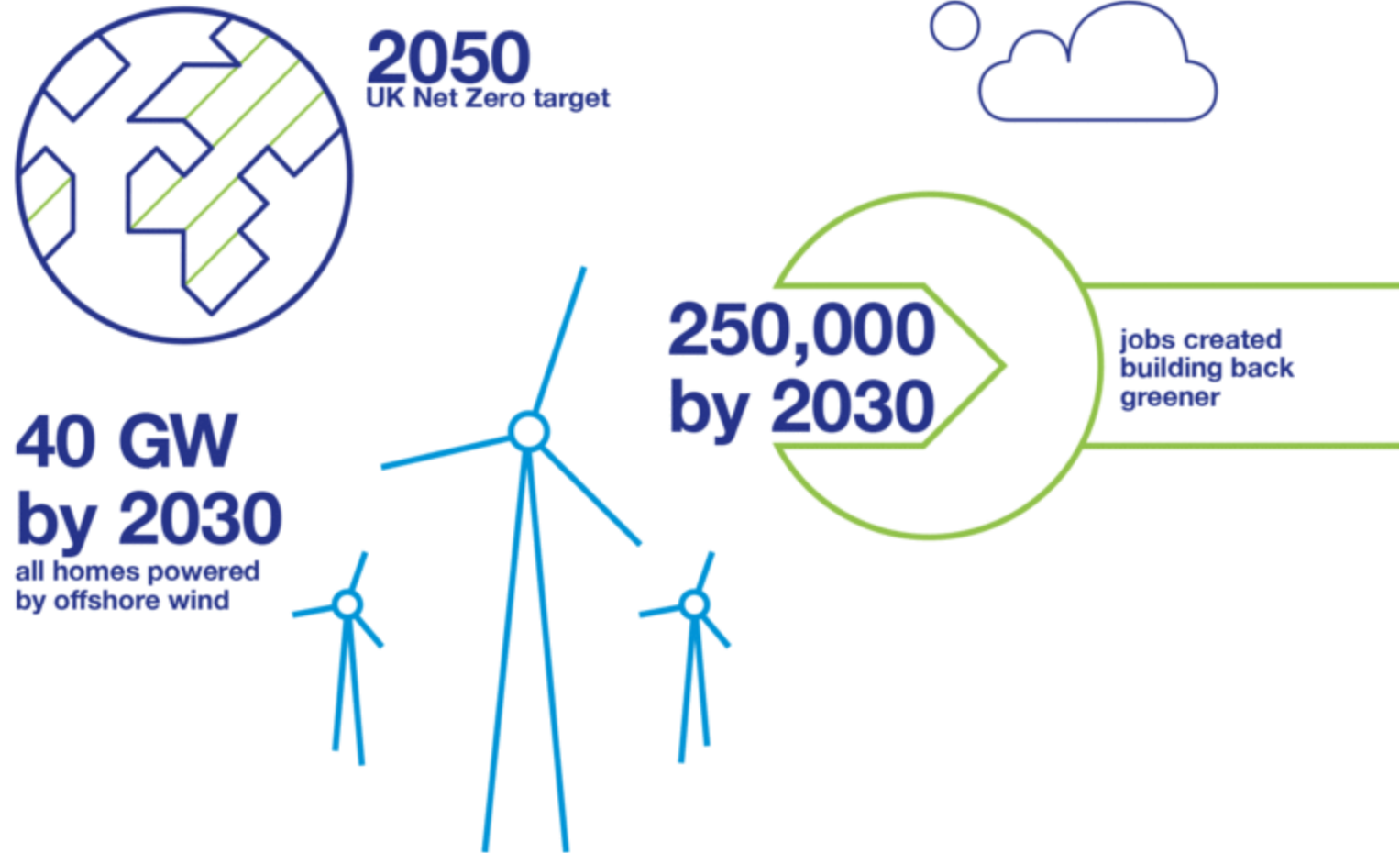
National Grid Ventures



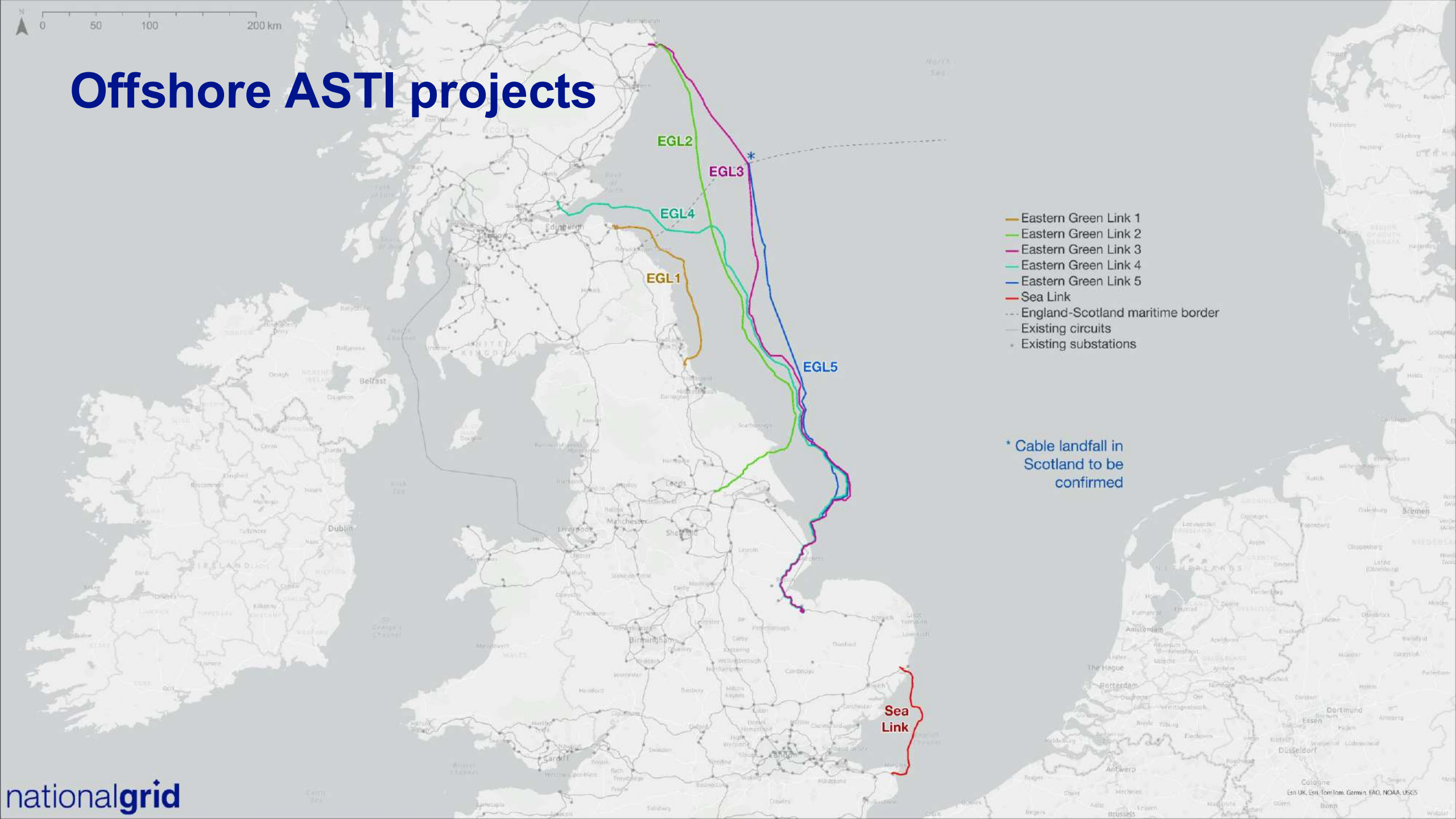
Operates and invests in large scale energy projects, technologies and partnerships to help accelerate the transition to clean energy. Ventures runs separately from National Grid's core regulated operations.

The Great Grid Upgrade

- The Great Grid Upgrade comprises **17 major infrastructure** (ASTI) projects that will both scale up the grid and update our existing networks.
- It will enable us to carry more clean, secure energy from where it's generated – like out in the North Sea by wind turbines – to where it's needed.



Offshore ASTI projects



What are our aims?



To improve the marine environment in the areas where we are developing our projects



To develop the knowledge, skills and infrastructure to deliver strategic marine restoration outcomes in future



To work in partnership with key stakeholders to deliver marine restoration and enhancement benefits



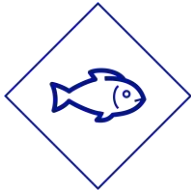
To inspire, educate and attract future generations into this exciting and critical sector



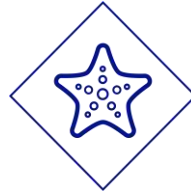
Building a pioneering marine restoration action plan



Stakeholders



Project Approaches



Action Plan



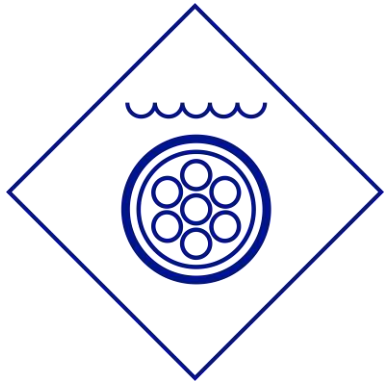
Delivery



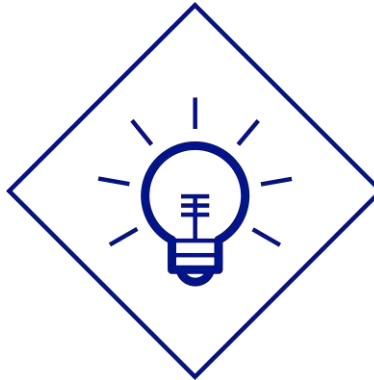
Funding

Restoration funding pathways

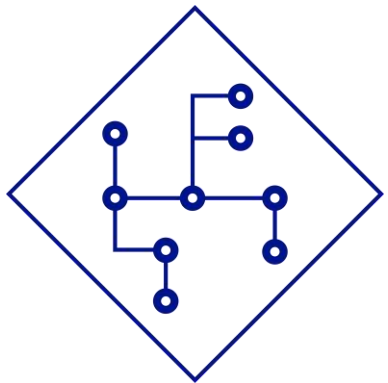
There are four potential routes for funding voluntary marine restoration to 2031.



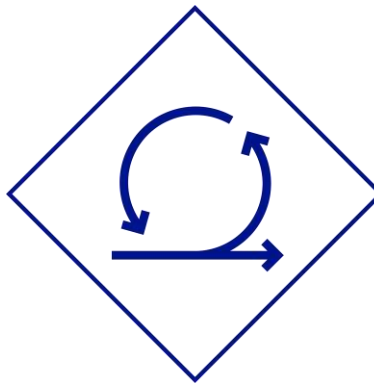
Apply for **uncommitted Sustainability Innovation or Social Value Funding** from ASTI projects with consents granted (EGL 1, EGL 2) through a competitive bid submission.



Ofgem Innovation Funding is available for research-focused projects in T3 (Network Innovation Allowance, NIA and the Strategic Innovation Fund, SIF) with academia.

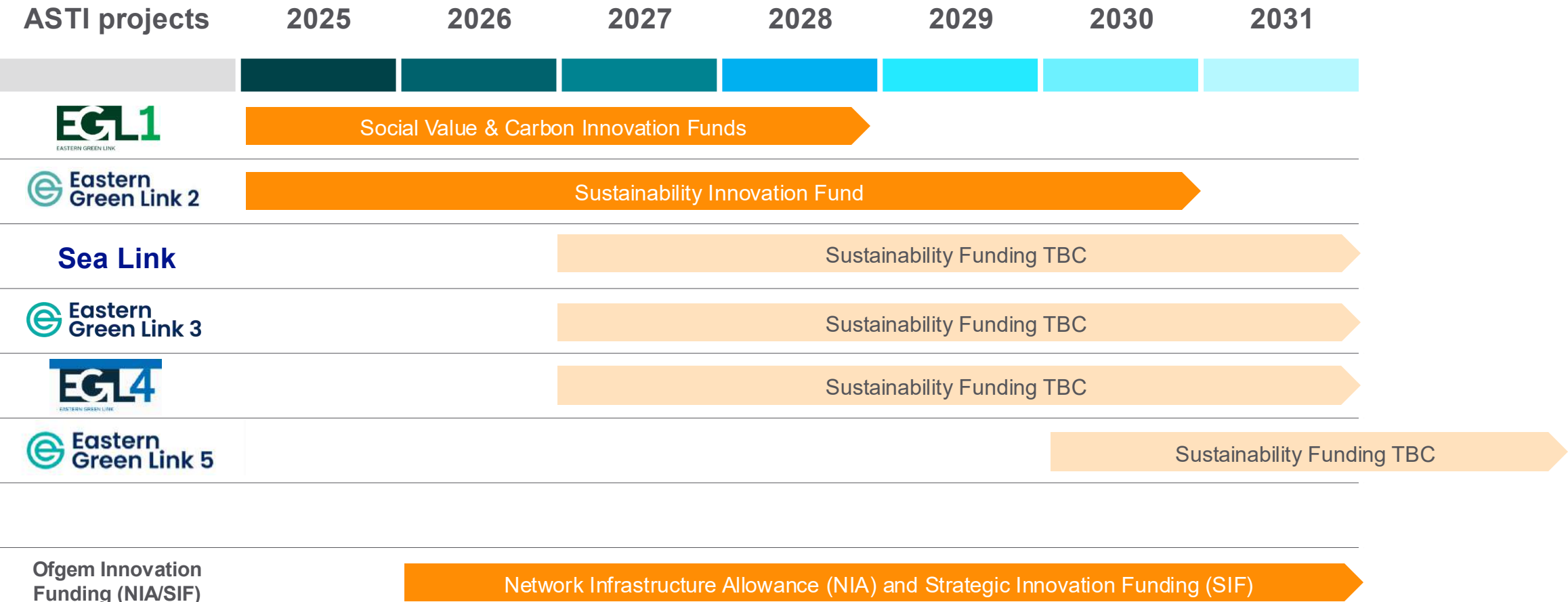


Ringfence Sustainability Funding for ASTI projects awaiting consent at project assessment stage, with Ofgem agreement (EGL3, EGL4, Sea Link, future projects).



Funding for marine restoration through a RIIO-T3 **Net Zero Reopener**, if Ofgem agree if it is a suitable approach. Alternatively look to plan for RIIO-T4.

Potential Funding Windows



Marine restoration project approaches

There are six categories of project we could fund through the delivery pathways:



1) Continuation of funding for existing projects



2) New active restoration projects



3) New enhancement projects



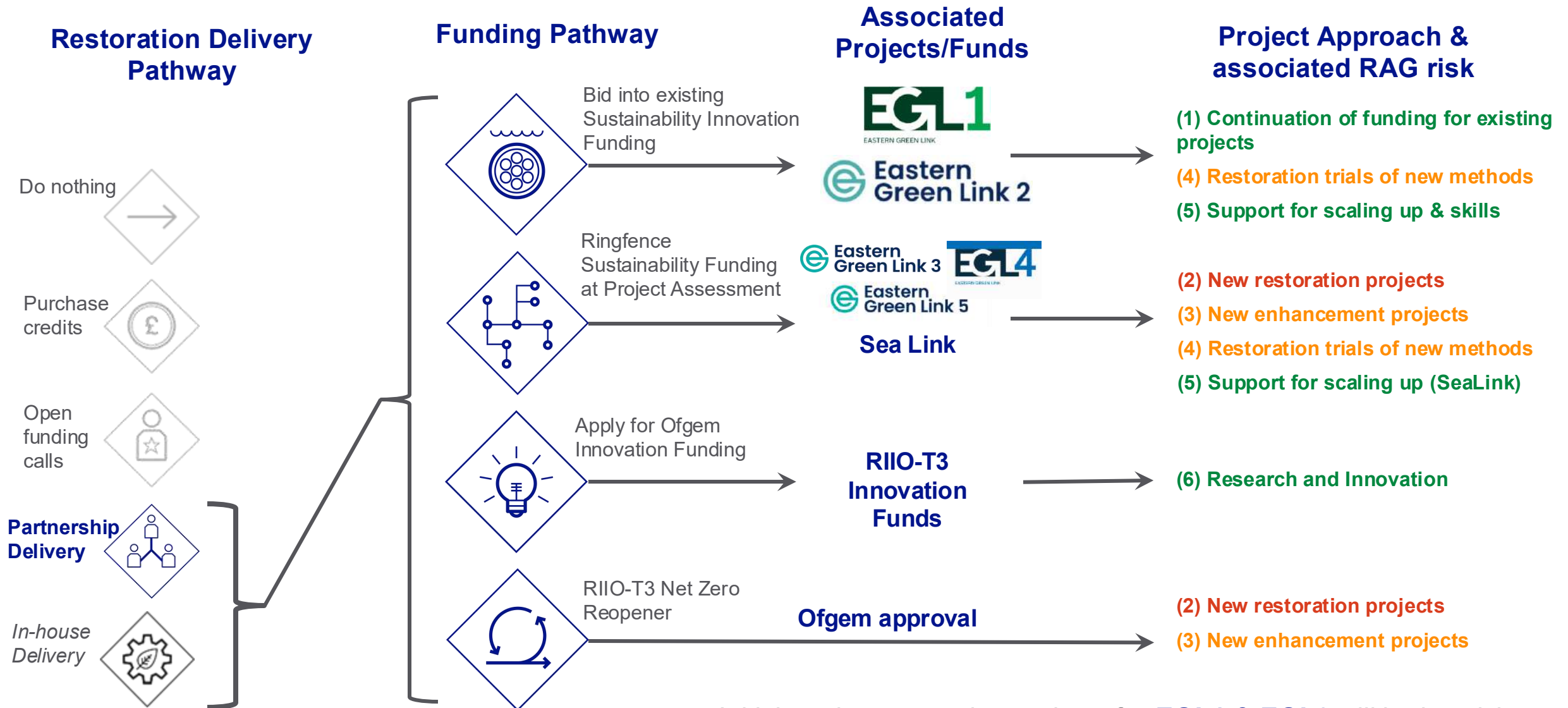
4) Restoration trials of new methods



5) Support for scaling up & skills



6) Research & innovation



- Initial marine restoration projects for **EGL1 & EGL2** will be low risk and small scale.
- They will build expertise and infrastructure to support more ambitious future projects.

Next steps

- **Summer 2025:** Submit applications for marine restoration projects from EGL1 and EGL2 SIF funds.
- **Autumn 2025:** Identify projects ringfence funding for Sea Link, starting ~mid-2026
- **December 2025:** NIA Innovation Funding opens for bid submissions.
- **Early 2026:** Engage with Ofgem to ringfence EGL3 & EGL4 sustainability funding for marine restoration.



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