

An underwater photograph showing a dense field of green seagrass with many small, silvery fish swimming above it. The water is clear and blue-green.

**seagrass
network
cymru**



rhwydwaith
**morwellt
cymru**

Seagrass and Carbon

Carl Gough - Project Manager

carl@seagrassnetwork.cymru / Tel. 07872 30 34 39

The Seagrass Network Cymru (SNC)

A connected community working for seagrass recovery



Bangor University



British Sub Aqua Club

Dale Seagrass
Stakeholder
Group

Dale Seagrass Stakeholder Group



Port of Milford Haven



The Green Blue (RYA/British Marine
Environmental Programme)



Gwynedd Council Pen Llyn a'r Sarnau
Special Area of Conservation



Isle of Anglesey County Council



Keep Wales Tidy



Swansea University



World Wildlife Fund- WWF



Marine Conservation Society



National Trust



Natural Resources Wales



The Crown Estate



Severn Estuary Partnership



North Wales Wildlife Trust



Pembrokeshire Coastal Forum



Pembrokeshire Marine SAC Relevant
Authorities Group



Project Seagrass

NSAP 'at a glance'

The change we seek	The functions	Work Area	Overarching Aim (s)
<p>To halt the loss of Welsh Seagrass by 2030</p> <p>To double the current extent of seagrass in Wales by 2050</p>	BETTER MONITORING	PRIORITY 1 Mapping and knowledge	To establish a baseline regarding the status of Welsh Seagrass in support of evidence-based decisions and action.
	CATCHMENT TO COAST APPROACH	PRIORITY 2 Coalition building across land and sea	To develop partnerships, and improve awareness among terrestrial and river catchment stakeholders, creating the enabling conditions for improved water quality.
	PASSIVE RESTORATION	PRIORITY 3 Halting loss (protection)	To establish clearer understanding of the water quality thresholds needed for healthy seagrass growth.
			To reduce the degradation of seagrass beds from physical disturbance.
	ACTIVE RESTORATION	PRIORITY 4 Reversing loss (enhancement)	To improve the success, efficacy and scale of active seagrass enhancement and restoration
	WIDER SUPPORT & ENGAGEMENT	CROSS CUTTING THEME A: Community & Stakeholder Engagement	To enhance understanding and involvement in seagrass conservation, fostering a community committed to protecting and restoring these vital habitats.
			To explore the potential of community focussed approaches to reduce localised pressures and provide a blueprint for national implementation.
	PROJECT MANAGEMENT	CROSS CUTTING THEME B: Co-ordination	To develop dedicated capacity and structures to support delivery of NSAP and facilitate wider coordination, network development, stakeholder engagement, stronger governance, coordination and clear reporting
FINANCES (SHORT AND LONG TERM)	CROSS CUTTING THEME C: Funding mechanisms	To grow the investment potential of seagrass restoration, overcoming the 'charisma gap' to secure sustainable funding streams for the longer-term future of seagrass restoration.	
		To explore, promote and secure additional funding and investment opportunities through the network members to secure short-medium term funding to deliver NSAP	

Background – Seagrass & Carbon

- Developing Carbon Code – June 2023
- 35 x faster than rainforest / 40 x more efficient than land forest soils
- 92% loss in UK
- no seagrass restoration projects have been fully verified for carbon offsets, and no UK-specific code yet exists.
- Described as:
“Developmental, but high potential stage”



The challenges regarding Carbon

RECOMMENDATIONS

BUILDING KNOWLEDGE

Data gaps
Fill existing data gaps, both internationally & within the UK, on seagrass extent, restoration, carbon flux etc.

Prioritisation
Use seagrass mapping and site context information to prioritise restoration actions

Address barriers
Address policy & regulatory barriers to create an environment for enabling seagrass restoration

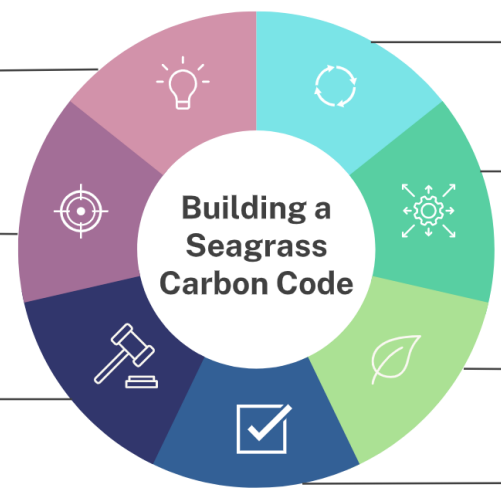
CODE DEVELOPMENT

Compatibility
Ensure code compatibility with existing financial, regulatory & governance structures

Translation
Translate key components from evidence-based codes to seagrass habitats

Beyond carbon
Include criteria beyond carbon to benefit biodiversity, ecosystem health and people

Verification
Verify that credit purchasers are committed to reducing & avoiding emissions



- Current restoration costs
- No UK specific Carbon code
- Data gaps
 - Net C sequestration rates (and GHG flux)
 - Mapping
- Regulatory complexity
- Scale

Figure 1: To develop and adopt an implementable, feasible and rigorous seagrass carbon code within the UK, we make seven key recommendations that build upon the existing body of work.



Blue Carbon within NSAP?

- Direct and Indirect
 - Passive restoration – retaining what is already sequestered
 - Active restoration – developing increased capacity/potential
- Strong association with CCT-C
 - Investment routes
 - Recognition that scale matters
- Working Group








Overarching Aims	Ref	Objectives	Desired Outcomes
Grow the investment potential of seagrass restoration, overcoming the 'charisma gap' to secure sustainable funding streams for the longer-term future of seagrass restoration.	7.1	Collaboratively explore mechanisms to drive investment into seagrass conservation, restoration and management.	Seagrass has a clear 'offer' to potential investors, supporting increased diversification of funding and investment sources.
	7.2	Develop seascape scale project as a lever to secure investment	A pioneering sea-scape scale project in Wales begins to attract greater interest and investment from a broader range of investors, supporting roll out of more restoration projects
To explore, promote and secure additional funding and investment opportunities through the network members to secure short-medium term funding to deliver NSAP	7.3	Promote and position seagrass to establish understanding and create opportunities for investment, sponsorship and funding of NSAP activities.	Improved levels understanding regarding the investment potential of seagrass generates a growing interest and some viable leads among investors.
	7.4	Monitor and explore additional funding opportunities to support short term roll out of NSAP	Improved governance of SNC and clearer understanding of roles and accountability supports a clear strategic approach to secure additional funding that supports improved capacity and ability to deliver NSAP

Progress so far

- **Structure and Governance**
- **Mapping**
 - Protocol – 7 guiding principles established to be progressed over the next 12 months)
 - NRW site suitability layers
- **Future investment options:**
 - Live consultancy to clarify short to long term investment options. (More than Carbon)
- **Community engagement**

 
A connected community for seagrass recovery

GUIDING PRINCIPLES for Seagrass Mapping & Monitoring in Wales

 Collaboration & co-Design <p>Mapping and monitoring should be shaped through open collaboration, ensuring all contributors (statutory bodies, researchers, practitioners, and communities) can input meaningfully.</p>	 Common language, definitions & taxonomies <p>Use consistent terminology, definitions (for example, meadow types), symbology, colour palettes, and taxonomies to ensure clarity and reduce misinterpretation.</p>
 Build on existing work <p>Approaches must draw on and integrate existing data, methods, standard operating procedures, and evidence to avoid duplication and strengthen continuity.</p>	 Transparency & full metadata <p>All datasets must include clear, transparent metadata including methods, resolution, date, confidence, and limitations, to ensure responsible interpretation and long-term value.</p>
 Clear, comparable core metrics <p>A shared set of minimum metrics should be used across all mapping and monitoring activities, enabling consistency, comparability, and aggregation into national reporting.</p>	 Accessible, findable & usable Data <p>Data should be stored in an accessible, searchable, and user-friendly systems that support long-term discoverability, clear data flows, and alignment with national and international standards.</p>
 Inclusivity & relevance to communities <p>Approaches should remain accessible to different users and career stages, and recognise the role of local communities as contributors, knowledge holders, and beneficiaries.</p>	

Going forward

- Priority 3 – Halt the loss
 - the primary importance of saving what we still have
 - Ensuring optimal conditions to improve active restoration success
- Close working and support of Saltmarsh Network
 - Strong evidence that saltmarsh and seagrass frequently co-occur
 - Functional aspects of the same connected coastal ecosystem
- CCT – C: Progressing future investment options for seagrass recovery.
 - seascape development?:
 - The value of connectivity – ecologically, functionally and financially
 - Saltmarsh Network
 - Connecting Conwy
 - Atlantic Coast Programme