

# Coastal Habitat Restoration and Creation in North West England 2025: Workshop Outcomes

## Workshop 1

**Question 1: Please give some examples of good practice, and habitat creation and restoration data sets that would be useful to collate on a NW data hub?**

Examples of best practice	Examples of data sets
Green shores Project (East Scotland) · propagation and planting of Bolboschoerus <a href="#">The Eden Estuary Salt Marshes – Vertically Integrated Projects</a>	Environment Agency <a href="#">Protect our world - Environment Agency</a>
Collecting metadata to understand quality of data · form of data validation	Magic Maps <a href="#">MAGIC</a>
Dutch and German offshore wind projects insist on open-access data coming out of their projects	Marine Planning Portal
Standards for data validation	North West England Water Situation Report
An open monitoring, verification and reporting framework	NBN Atlas <a href="#">NBN Atlas - UK's largest collection of biodiversity information</a>
Dornach Firth Native Oyster Restoration · DEEP Project with Glenmorangie Distillery <a href="#">Dornoch Environmental Enhancement Project (DEEP) – Native Oyster Network</a>	Cumbria Biodiversity Data Centre
Seawilding – Seagrass <a href="#">Nature Heroes - Seawilding   NatureScot</a>	Project Data (Input and Output)
Solway Firth Partnership	Natural Resources Wales Water Quality Archive
Agricultural good practice: · Water management	British Geological Survey (BGS) Ground Water Data

<ul style="list-style-type: none"> <li>· Nutrient management</li> <li>· Soil/land management</li> <li>· In-land features + habitat creation</li> </ul>	
<p>St Andrews Links Trust Dune Enhancement Project</p> <p><a href="#">St Andrews Links : The Home of Golf</a></p>	United Utilities Water Quality Data
<p>Wyre Rivers Trust</p> <ul style="list-style-type: none"> <li>· Stanah Saltmarsh Restoration</li> <li>· Our Future Coast</li> </ul> <p><a href="#">Our Sites   The Flood Hub</a></p>	UK Centre for Ecology and Hydrology (UKCEH)
Wyre Council Beach Management Project	LRERC Biological Data Sets <a href="#">LRERC Datasets - My LERC</a>
Restoration Forth - Seagrass	Scotland National Marine Plan Interactive (NMPi)
<p>ELMs</p> <ul style="list-style-type: none"> <li>· Landscape Recovery</li> <li>· Case Studies New CSHT + SFI actions</li> </ul>	Fylde Bird Club
Dynamic Dunescapes	IFCA Regional Data
National Trust	CEFAS Fisheries Data
RSPB Reserves	Wyre Council - Wyre Rivers Trust BioBlitz Data
Cumbria Wildlife Trust (CWT)	MARLIN - Marine Biological Association
Solway Coast National Landscape	Natural England
<p>Solway Coast Marine Project (SCAMP)</p> <ul style="list-style-type: none"> <li>· North Solway</li> </ul>	Local Wildlife Trust - Site Specific Data Sets
<p>Stakeholders explore marine plans</p> <ul style="list-style-type: none"> <li>· different data sets</li> </ul>	Surfers Against Sewage - Pollution Data (United Utilities?)
LINC Project	<p>Firth of Forth data</p> <ul style="list-style-type: none"> <li>· Oysters</li> <li>· Seagrass</li> <li>· Restoration forth</li> </ul>
<p>Make niche datasets for your specific work widely available</p> <ul style="list-style-type: none"> <li>· put out data</li> </ul>	Cumbria Biodiversity Data Centre

Meta-discovery	Tullie House
MEDIN	ArcGIS Hub <a href="#">ArcGIS Hub</a>
Keep storage central	Environment Agency/Natural England
Making data usable/accessible	North West Inshore Fisheries Conservation Authority (fisheries)
Nature North	Solway Firth Partnership
Make protocols at local level · doesn't exist yet but would be ideal · smaller projects can come together, create a national picture	Highly Protected Marine Areas (HPMA) Data Collection
Solway Firth Partnership · CLEARCoasts Habitat Restoration	Joint Nature Conservation Committee (JNCC)
Nolteii Network	World Wide Fund for Nature (WWF)
Wildlife Trusts	Marine Stewardship Council
ESRI open data site · Massive discounts for charities · Cloud base	Seasearch
Our Future Coast	Designated Sites View · View SSSI Condition Assessments
Scottish Marine Environmental Enhancement Fund (SMEEF)	WeBS Data (Wetland Bird Survey)
Best practice for setting up restoration projects	Local Nature Groups
Life ReMEDIES - Seagrass restoration good practice guide 2024	Local Anglers/Fishermen Groups
Multi-asset survey approach - Vessels, quads, drones, gadgets	Universities · Lancaster · Liverpool · Solent · Exeter
ReMeMaRe Restoration Handbooks	Offshore Wind farms (Robin Rigg/Barrow)
ReMeMaRe – led by EA Website	Cumberland Council Local Nature

· Be part of the ReMeMaRe partnership group – over 35 external organisations in group	Recovery Strategy
ReMeMaRe – we have a sharepoint site with lots of info on -> accessible if you are part of the ReMeMaRe partnership group	Cumbria Intelligence Observatory
Restoration Project platform – led by EA through ReMeMaRe (not completed yet)	Zoological Society London (ZSL) · Kelp Forests
Biodiversity Action Plan – Mersey + Dee	Cumbria Wildlife Trust/ Yorkshire Wildlife Trust + RSPB - bird records
Semi Coastal Woodland – Wyre Rivers Trust	Cumbria Bird Club
Our Dee Estuary Projects	Forestry Commission Data Map · Breeding wader data
Solway Firth Partnership Biosecurity Action Plan	Borderlands · Funding Scheme
Hesketh Outmarsh Managed Realignment	Solway Coast National Landscape Sand Dune Restoration
Sefton Landscape Partnership · Nature Conservation Strategy	Marine Plans e.g. existing MMO plans
West Cumbria Flimby NFM <a href="#">Flimby flood alleviation – West Cumbria Catchment Partnership</a>	Protected Sites/Species
Walney Seagrass (Cumbria Wildlife Trust)	Sites for: · aggregation · agriculture · dredging
Arnside and Silverdale National Landscape · Engagement?	ReMeMaRe
Hesketh Outmarsh, Ribble Estuary	Solway Firth Partnership Website
Morecambe Bay	Marine Conservation Society
North Walney NNR · Invasive species removal	Councils

<ul style="list-style-type: none"> <li>· Natterjack toad habitat creation</li> <li>· Cattle to keep grazing scrub</li> <li>· Scrub removal to expose bare land</li> </ul>	
<p>Fylde Sand Dunes project</p> <ul style="list-style-type: none"> <li>· Bringing together coastal defence, nature conservation and community engagement</li> </ul>	<p>SCAMPP</p> <ul style="list-style-type: none"> <li>· Scottish based but that side affects this side of course</li> </ul>
<p>Hesketh Outmarsh East – collaborative approach</p>	<p>Seagrass Restoration Project</p> <ul style="list-style-type: none"> <li>· suitability mapping in Cumbria</li> </ul>
<p>Alkborough flats (Humber Estuary)</p> <ul style="list-style-type: none"> <li>· Long-term monitoring</li> <li>· Evolution of restoration sites</li> </ul>	<p>North West Wildlife Trusts</p>
<p>The Flood Hub</p> <ul style="list-style-type: none"> <li>· Regional coordinated approach</li> </ul>	<p>Storm Discharge + Timed Discharge Valve (TDV)/Discharge Hours: Available by request from United Utilities</p>
<p>Freshfield dune heath restoration</p> <p><a href="#">Freshfield Dune Heath   The Wildlife Trust for Lancashire Manchester and North Merseyside</a></p>	<p>Marine Data Exchange (MDE) (OWEC)</p>
<p>Ask Lancaster Environment Centre (LEC) at Lancaster Uni</p>	<p>Project Evaluation Reports</p> <ul style="list-style-type: none"> <li>· Lots of them, all scattered + stored down rabbit holes (e.g. dynamic dunescapes)</li> </ul>
<p><a href="http://www.lancaster.gov.uk/OFC">www.lancaster.gov.uk/OFC</a></p>	<p>EMODnet</p>
<p>Data capture app suites that upload directly onto front facing data interfaces</p>	<p>River heights in weirs – decades of data from EA</p>
<p>Gems in the dunes – Sefton Coast</p> <p><a href="#">Gems in the Dunes – Our Species   Amphibian and Reptile Conservation</a></p>	<p>Weather data from met office</p>
<p>Marshside RSPB Saltmarsh</p>	<p>Marlan</p> <p><a href="#">CoastSense - 4D nearshore survey data - Marlan</a></p>
<p>Natterjack reintroduction on Wirral – red rocks</p>	<p>North West Coastal Monitoring Forum</p>
<p>Merseyside gateway environmental trust</p> <ul style="list-style-type: none"> <li>· Saltmarsh restoration</li> </ul>	<p>NBN Atlas</p>

Hesketh Outmarsh · Managed realignment · RSPB	Species – presence/absence · Catch data · Marlin · Shoresearch · Biological Records Centre
ReMeMaRe · Habitat restoration guides	Control Of Major Accidents Hazards Site Reports
	Nuclear Site Permits
	National seagrass habitat data layer – gov.uk (Natural England)
	Intertidal Shellfish Stock Data
	Estuarine Small Fish Survey Data
	Shoreline Management Plans (SMP) explorer (EA 2024)
	Coastal Data Explorer – Rivers Trust (2023)
	Catchment Data Explorer (EA 2023)
	Local Nature Recovery Strategy (LNRS) data viewer (Defra 2023)
	Nafra 2 by Environment Agency (National Flood Risk Assessment) · Tidal Flood Risk Data
	MMO activity data sets · Data on activities to identify potential pressures + restoration potential
	NBN gateway – species data
	Local Nature Recovery Strategy · Cumbria and Lancashire ones to be launched summer 2025
	Fisheries catch data
	Subtidal/intertidal side scan survey data
	Native Oyster reefs · Native oysters historic locations MMO 2020 · Historical oyster habitat and fisheries in

	<p>English coastal water (EA 2022)</p> <ul style="list-style-type: none"> <li>· Native oyster bed potential map (EA 2020)</li> </ul>
	<p>Environment Agency funded restoration projects are recorded in detail so should be available going back &gt; 10 years</p>
	<p>Seagrass</p> <ul style="list-style-type: none"> <li>· National seagrass layer England (NE 2022)</li> <li>· Seagrass historic locations (MMO 2020)</li> <li>· Seagrass potential map (EA 2020)</li> </ul>
	<p>Intertidal/subtidal grab sample data</p>
	<p>Drone shellfish bed mapping</p>
	<p>Saltmarsh</p> <ul style="list-style-type: none"> <li>· Saltmarsh change (EA 2022)</li> <li>· Saltmarsh extent and zonation (EA 2022)</li> <li>· Saltmarsh potential maps (MMO 2020)</li> <li>· Preferred saltmarsh locations (not available as of yet)</li> </ul>
	<p>Cell Eleven Regional Monitoring CERM</p> <ul style="list-style-type: none"> <li>· Sefton</li> </ul>
	<p>Rivers Trust Story Map – Coastal</p>
	<p>Rivers Trust Data</p>
	<p>SMP explorer includes NCFRAZ + FCERM</p>
	<p>EA Ecology + Fish Data Explorer</p>
	<p>National Riverflow archive - UK Centre for Hydrology and Ecology</p>
	<p>NBN Gateway</p>
	<p>GB non-native species secretariat</p>
	<p>Proudman Institute</p>
	<p>British Trust for Ornithology (BTO)</p>
	<p>Mario Hist Aerial Photo</p>
	<p>Turning Tides Data</p>
	<p>EA Saltmarsh Zonation + Extent Data</p>

	UK Soil Observatory
	Cumbria Biological Data Set
	UK Hydrographic Office
	National Oceanographic Centre - NOC
	The Crown Estate (TCE) – Open Data
	Main River Map EA .gov
	Forestry Commission Map Browser
	Functionally Linked Land Data
	National Library of Scotland Historic Maps
	EA Hydrology Data Explorer
	Marine Biological Association (MBA) Plymouth
	Cheshire Records Centre
	Marlin – Marine life info
	Designated sites view
	CABA Catchment Based Approach management plans
	CABI Invasives – Centre for Agricultural and Bioscience International <a href="http://CABI.org">Home - CABI.org</a>
	Bird Club Data
	Mersey Biobank
	Lancaster LEARN – Lancs Ecological Record Network
	Medin – Marine Environmental Data International Network
	Land Registry
	Dredged Sediment Resource Database - ABPMer
	Historic England · Aerial photo explorer · RAF photographs pre WWII · Good to see extent of habitats pre WWII and compare to up-to-date mapping



	<p>Dynamic Dunescapes</p> <ul style="list-style-type: none"> <li>· Collected a lot of data using citizen science (had an app). Project now over but their reports and data is around.</li> <li>· Created a sand dune management handbook – available online</li> </ul>
	<p>Bluecoast project</p> <ul style="list-style-type: none"> <li>· Field measurements</li> <li>· Collected on saltmarsh in Morecambe bay</li> <li>· Hydrodynamic and sediment data on intertidal flats and in the channel</li> </ul>
	<p>Open-access</p> <p>Remote sensing data from 1980</p> <p>Potentially useful to derive historical changes of intertidal bed elevation and habitat mapping</p>
	<p>NEMO – 500 model data</p> <p>(wave – tide – storm surge)</p> <p>From river to estuaries and the coastal seas around the whole UK</p>
	<p>Cheshire Wildlife Trust – Blue Carbon report, Dee estuary</p>
	<p>Centre for Environment Fisheries and Aquaculture Science (CEFAS)</p>
	<p>Ports</p>
	<p>University Data</p>
	<p>Hello Coast</p>
	<p>Windfarms</p>
	<p>National Network of monitoring programmes</p>
	<p>Regional Data Bank</p> <ul style="list-style-type: none"> <li>· LERN</li> <li>· Mersey Biobank</li> </ul>
	<p>Citizen Science data</p> <ul style="list-style-type: none"> <li>· iNaturalist</li> </ul>

	<ul style="list-style-type: none"> <li>· Merlin</li> </ul>
	<p>National Data Banks</p> <ul style="list-style-type: none"> <li>· ARC</li> <li>· BSBI</li> <li>· Butterfly monitoring scheme</li> <li>· WeBS</li> </ul>
	EA geo store
	<p>CiTIZAN</p> <ul style="list-style-type: none"> <li>· Coastal intertidal zone archaeological network (MOLA)</li> </ul> <p><a href="#"><u>CITIZAN - Coastal and Intertidal Zone Archaeological Network</u></a></p>
	<p>Local Environmental Record Centres</p> <p>e.g. Cumbria Biodiversity Centre</p>
	<p>EDINA</p> <p><a href="#"><u>Digimap</u></a></p>
	Cell II Regional Monitoring Programme (CERMS)
	<p>ARG</p> <ul style="list-style-type: none"> <li>· Amphibian and reptile data for sefton coast</li> </ul> <p><a href="#"><u>North Merseyside Amphibian and Reptile Group</u></a></p>
	<p>Sefton Council</p> <ul style="list-style-type: none"> <li>· Coastal change</li> <li>· Hydrological data for sefton coast</li> <li>2007 NVC data for sefton council</li> </ul>
	<p>OMREG (ABPmer)</p> <p><a href="#"><u>OMReg Habitat Creation Scheme Database - ABPmer</u></a></p>
	EA + MMO Habitat Potential Data Layers
	<p>SMP Explorer NaFRA 2</p> <ul style="list-style-type: none"> <li>· Coastal erosion risk map</li> </ul>
	Coastal data restoration hub (Rivers Trust)

	NFM hub (rivers trust)
<p style="text-align: center;">Slow the Flow – United Utilities</p> <p style="text-align: center;">Attempting to Prevent Rapid Rise in Storm Conditions</p> <p style="text-align: center;">Lancaster University involved to monitor intervention success</p> <p style="text-align: center;">Data:</p> <ul style="list-style-type: none"> <li>· Flow monitoring</li> <li>· Rainfall monitoring</li> </ul>	
<p style="text-align: center;">Restoration Handbooks -ZSL / University of Portsmouth</p> <ul style="list-style-type: none"> <li>· Seagrass</li> <li>· Saltmarsh</li> <li>· Oysters</li> <li>· Seascape</li> </ul>	
<p style="text-align: center;"><b>Bad Practice</b></p> <ul style="list-style-type: none"> <li>· Local surveyors not sharing data</li> </ul> <p style="text-align: center;">Need lessons learned from bad practice more widely showed</p>	