

Sharing the learning between UK home nations on coastal change

Practitioner knowledge sharing webinar

Host:

Cat Payne

Job title:

Senior Climate Resilience Manager

Date:

08 May 2025



Who is Verture?

- We're a sustainability charity based in Edinburgh and were formerly known as Sniffer
- Verture connects communities, practitioners, policy makers and researchers to share learning to help Scotland thrive despite the changing climate
- Best known for our programmes:
 - Adaptation Scotland
 - Flood Resilience Knowledge Exchange
 - Climate Ready Clyde
 - Climate Ready South East Scotland
 - Climate Ready Tayside
 - Highland Adapts

We use the
power of
collaboration to
grow
flourishing
futures for all
in a changing
climate



Housekeeping



These webinars provide a safe space for discussion and sharing learning

- This webinar is being recorded but **the discussion is Chatham House Rule**
- Mute your mic unless asking a question
- If you don't wish to appear on the recording, turn your camera off now
- Presentations & immediate points of clarification after each presenter will be recorded
- The extended discussion session will not be recorded or shared online
- **If you have a question that requires more time, or is sensitive and / or you would not like to be attributable – raise that during the extended discussion session at the end**



Welcome

- Verture is delighted to host this webinar on behalf of the Scottish Government
- Learning intentions:
 - Build connections between coastal practitioners across the UK home nations
 - Identify opportunities for collaboration
 - Provide space to learn from each other



Agenda

1300	Welcome & overview	Cat Payne (Verture)
1305	The Scottish Perspective	Dr Lorraine Gormley (Scottish Government)
1315	The English Perspective	Carl Green (Wyre Council) Katie Eckford (Sefton Council) Richard Jackson (East Riding of Yorkshire Council)
1330	The Welsh Perspective	Hannah Barrow (SCBCEG) Gwyn Nelson (WCMC)
1345	Perspective of working across UK home nations	Greg Guthrie (RHDHV)
1355	Extended Q&A	
1430	Close	Dr Lorraine Gormley



The Scottish Perspective



Coastal Change Adaptation

Thursday 8th May 2025

Lorraine Gormley
Scottish Government

Today's talk

The Scottish Perspective

1. High level overview of policy / delivery landscape in Scotland
2. Highlight something that is working well in the Scottish approach
3. Highlight a challenge where broader perspective / insight could be beneficial

1. Overview: Policy Landscape

There are **numerous high level policy areas** which are supported by our work.

SNAP3 was published in Sept 2024 and is the SG Adaptation Plan, part of the legal requirement in the Climate Change (Scotland) Act.

Scottish Government recommend Coastal Change Adaptation Plans be developed to inform **Local Development Plans** of risks associated with coastal erosion and erosion enhanced flooding.

CCAPs should align with policies within **NPF4**.

Acts, Bills & Commissions

- Coast Protection Act (1949)
- Climate Change (Scot) Act
- Flood Risk Management Act
- Natural Environment Bill
- Town & Country Planning (Scot) Act
- Transport (Scot) Act
- Infrastructure Commission etc

Strategies & Programmes

- Scottish Climate Change Adaptation Programme (SNAP3)
- Flood Risk Programme
- Scottish Biodiversity Strategy
- National Planning Framework
- Blue Economy Vision
- Natural Capital
- Scot Gov Data Strategy
- Transport Strategy etc

Plans & Schemes

- National Planning Framework 4
- Local Development Plans
- Coastal Change Adaptation Plans
- National Islands Plan
- National & Regional Marine Plans
- Climate Change Plan etc

Decisions & Actions

- Developments
- Investments
- Nature protection & restoration etc

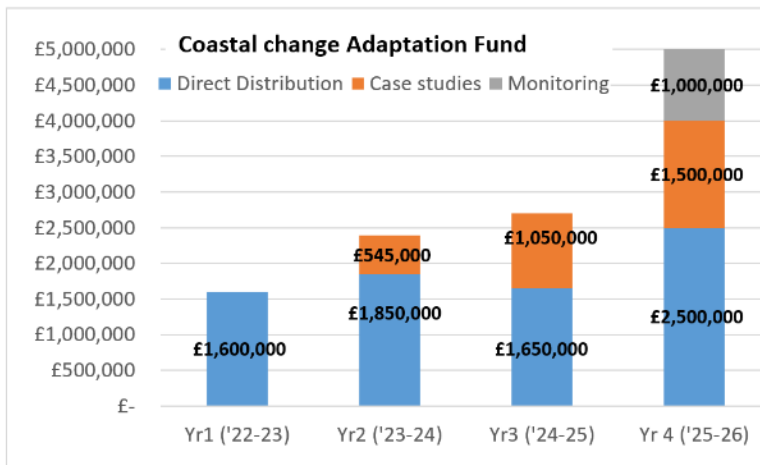


1. Overview: Coastal Change Adaptation Fund

CCA Fund £11.7 million over 4 years (2022-26) to LAs.

Capital funding non-ring fenced:

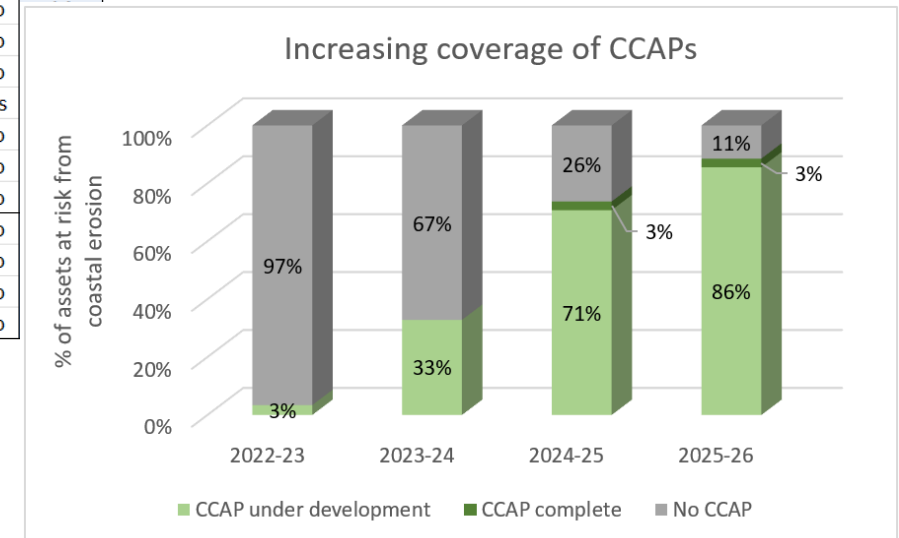
- £7.6m Direct Distribution
- £3.1m case study
- £1m LiDAR



2. What is working well in Scotland?

- Increasing uptake of Coastal Change Adaptation Plans
 - ✓ Within the initial four years of funding 50% of coastal LAs have initiated CCAPs, covering 86% of the assets identified at risk and a further 3% have completed a CCAP.
- Coastal Change Adaptation Plans recognise adaptation planning starts today (alignment with Shoreline Management Plan refresh).
- Better linkages with land use planners.

#	LA	MHWS (km)	MHWS (%)	Risk (Norm. %)	SMP	NCERA rank
1	Highland	5,929	26.1%	28.4%	No	1
2	Argyll and Bute	4,360	19.2%	11.3%	No	2
3	Fife	341	1.5%	10.4%	Yes	3
4	Orkney Islands	1,391	6.1%	8.8%	No	4
5	North Ayrshire	289	1.3%	7.1%	Yes	5
6	East Lothian	154	0.7%	5.0%	Yes	6
7	South Ayrshire	177	0.8%	4.4%	Yes	7
8	Moray	215	0.9%	3.4%	No	8
9	Shetland Islands	2,799	12.3%	3.2%	No	9
10	Dumfries and Galloway	1,189	5.2%	3.2%	Yes	10
11	Aberdeenshire	517	2.3%	3.0%	No	11
12	Falkirk	81	0.4%	2.7%	No	12
13	CnES	4,520	19.9%	2.5%	No	13
14	Dundee	19	0.1%	2.1%	No	
15	Aberdeen City	66	0.3%	1.4%	No	
16	Edinburgh	47	0.2%	1.3%	No	
17	Angus	147	0.6%	0.9%	Yes	
18	Scottish Borders	93	0.4%	0.3%	No	
19	Inverclyde	41	0.2%	0.3%	No	
20	Renfrewshire	66	0.3%	0.2%	No	
21	W. Lothian	9	0.0%	0.1%	No	
22	Perth & Kinross	113	0.5%	0.0%	No	
23	West Dunbartonshire	43	0.2%	0.0%	No	
24	Clackmannanshire	32	0.1%	0%	No	



3. What remains a challenge in Scotland?

Highlight a challenge where broader perspective / insight could be beneficial

Governance, awareness and ownership

- Coastal change adaptation (CCA) is still in infancy with modest resourcing.

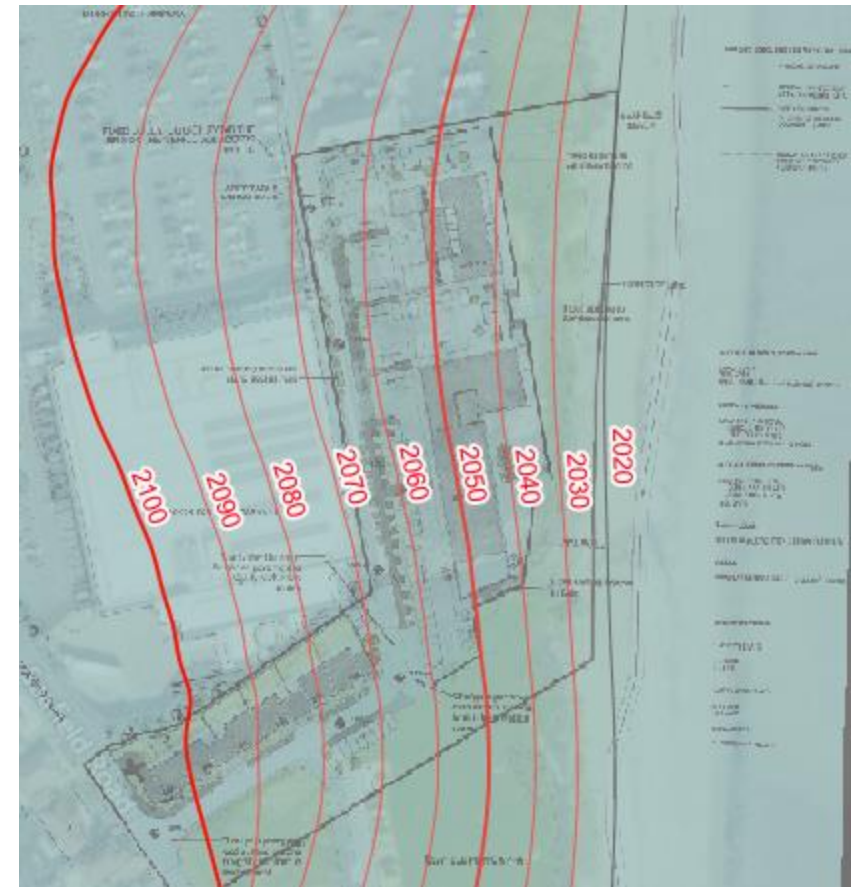
We're at the early (perhaps easier?) stage.

- Limited number of tough situations presenting and being forced upon us. We don't (yet) have areas at immediate risk.
- Engagement with LAs post Storm Babet indicates a need for quicker implementation of lessons learned.
- Planning applications still being received in at risk areas, and not objected to immediately (eg Blackdog and Kirkcaldy).
- Need for greater integration of CCA within FRM and vice versa.

Coordination incl. for monitoring.

- Early stages of coordination and setting up governance for coastal change monitoring.

Proposed development of brownfield site, Kirkcaldy. SMP2 policy NAI.





For further information please visit

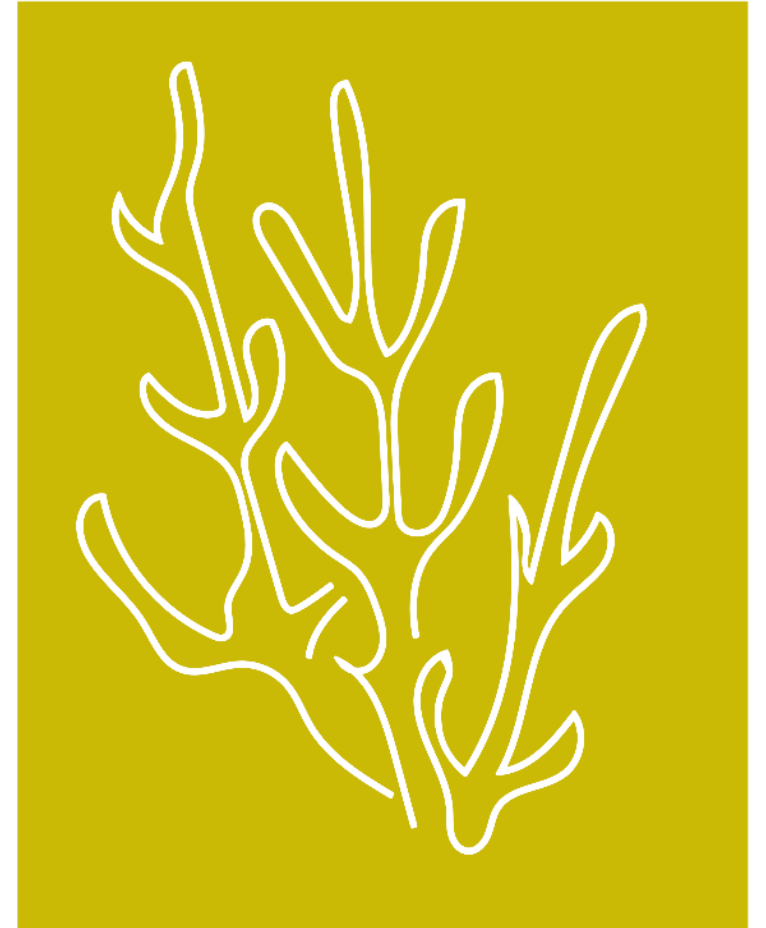
www.DynamicCoast.com

The English Perspective

Delivery of Shoreline Management Plans Using Adaptive Pathways

How does it work in practice?

Presented by Katie Eckford, North West SMP Coordinator



OUR FUTURE COAST

Project Overview

Our Future Coast

- Learning through doing
- Innovative engagement and co-design
- Nature-Based Solutions, informed by science and practice
- Future proofing planning with adaptive pathways
- Rooted in local context and community knowledge

This project is based in the north-west of England and is a partnership of 10 environmental NGO's and Local Councils operating across 18 case study sites.

We are exploring the adaptive pathway framework on 7 of the sites

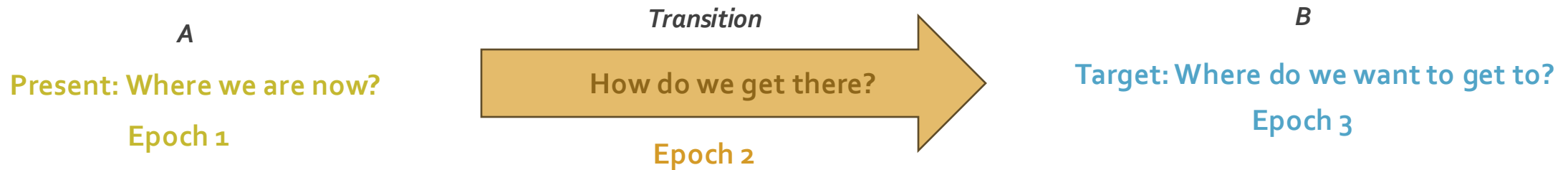


Working with nature to safeguard coastal communities

Current Guidance for Adaptive Pathways

SMPs Supplementary Guidance 2020 & Delivering Benefits Through Evidence Guidance 2018

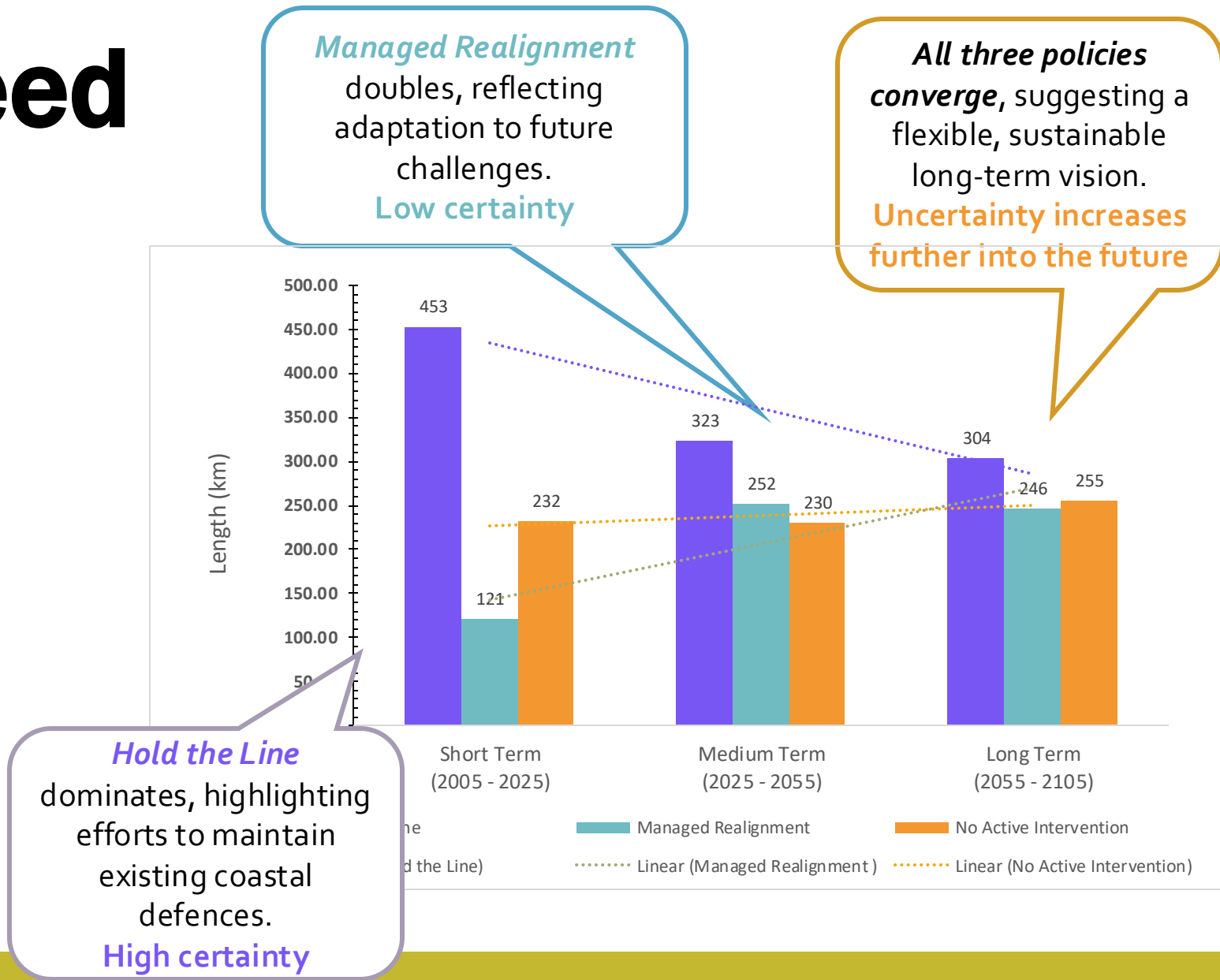
The supplementary guidance focuses on the introduction of **triggers** and shifts away from using epochs for management. While it briefly mentions adaptive pathways, it offers limited actionable guidance on how to develop and implement them.



Adaptive Pathways can be defined as:

Approaches designed and implemented to be flexible and robust, which can anticipate and effectively respond to uncertain future changes by combining low-regret, short-term actions with long-term options to adapt, if necessary.

Why do we need Adaptive Pathways to deliver the SMP in the North West ?

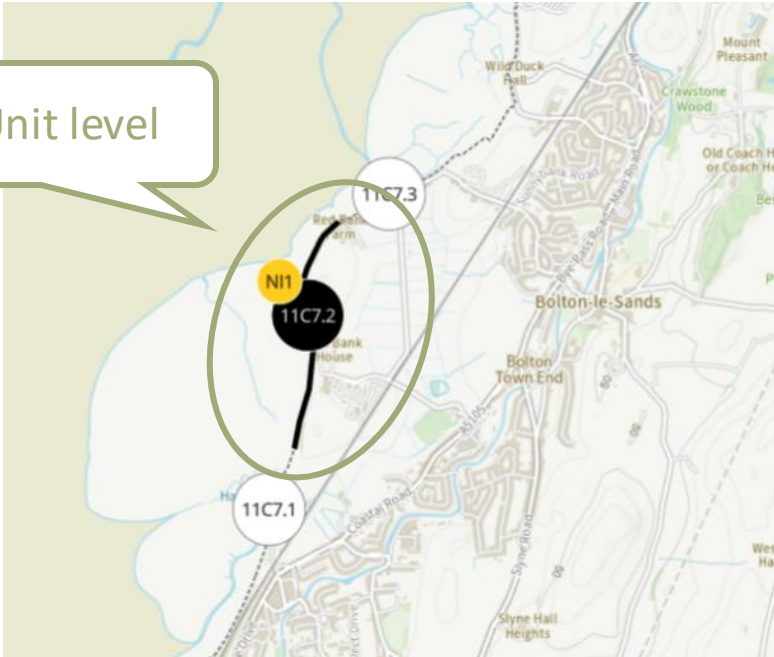


Learn through doing

How does it work in practice?

We are conducting workshops at several of our study sites with the support of facilitators, to test approaches for developing adaptation pathways.

Policy Unit level



Pre Workshop

- **Site Visit** to better understand the area of interest.
- **Baseline assessment** of SMP and geomorphological conditions.
- **Acknowledging long-term management goals** for a particular area.

Workshop

- **Exploring plausible futures**, discussing climate projections, sea level rise scenarios, to anticipate multiple pathways.
- **Defining decision thresholds**: Clear, measurable indicators are established that will trigger a management response or policy shift.
- **Pathway design**, laying out short-, medium-, and long-term actions tied to those triggers.

Post workshop

- Write up and reflect on lessons learnt
- Adapt approaches

Lessons Learnt so far

Practical

Language

Being clear with definitions, avoiding jargon.
Reflecting language back to communicate risk.

Props

Props not only enhance the workshop experience but also provide valuable tools for practitioners when briefing Senior Leadership Teams, Politicians, and Stakeholders.

Backcasting

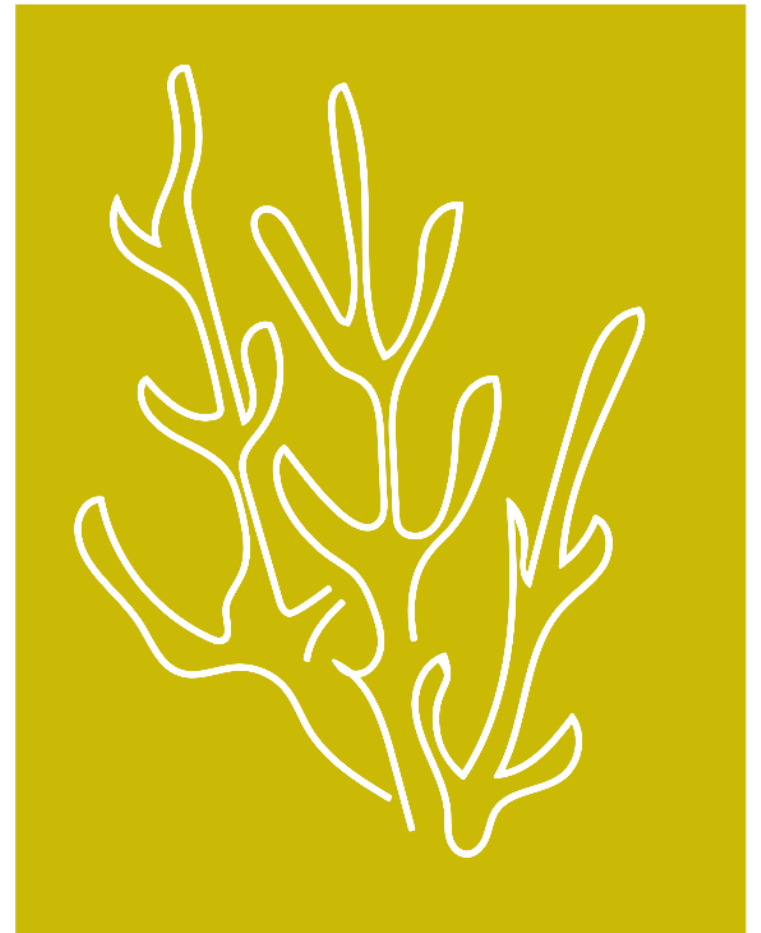
Start from the endpoint and work your way backward.

Rules

Established to foster a safe space for open discussion.

Consistent Facilitation

Initially required to do the research
Later valued by participants.



OUR FUTURE COAST

Lessons Learnt so far

Identified key gaps in understanding

Nature Based Solutions

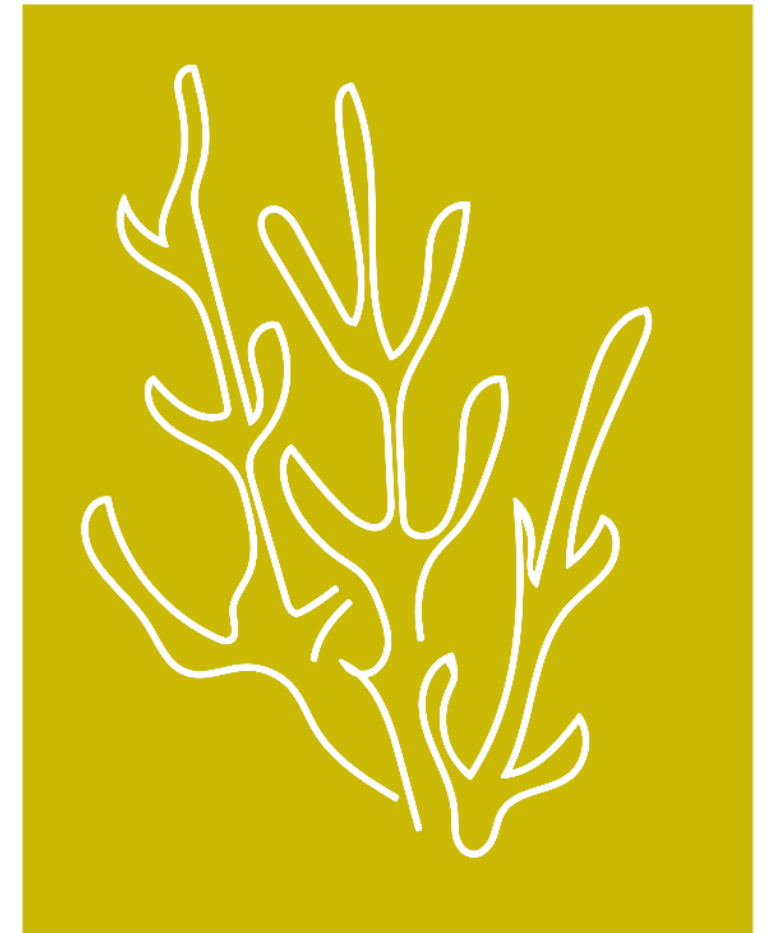
What, when and to what effect?

Adaptive Pathways

How do they help us manage uncertainty?

Flexibility

Our options appears very linear – is this really the case?



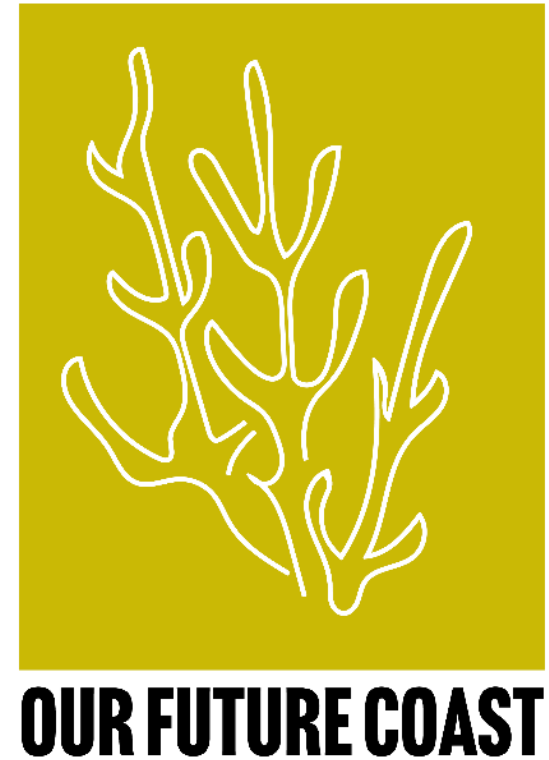
OUR FUTURE COAST

Next Steps

- Complete case studies
- Draft guidelines and gather feedback
- Dissemination

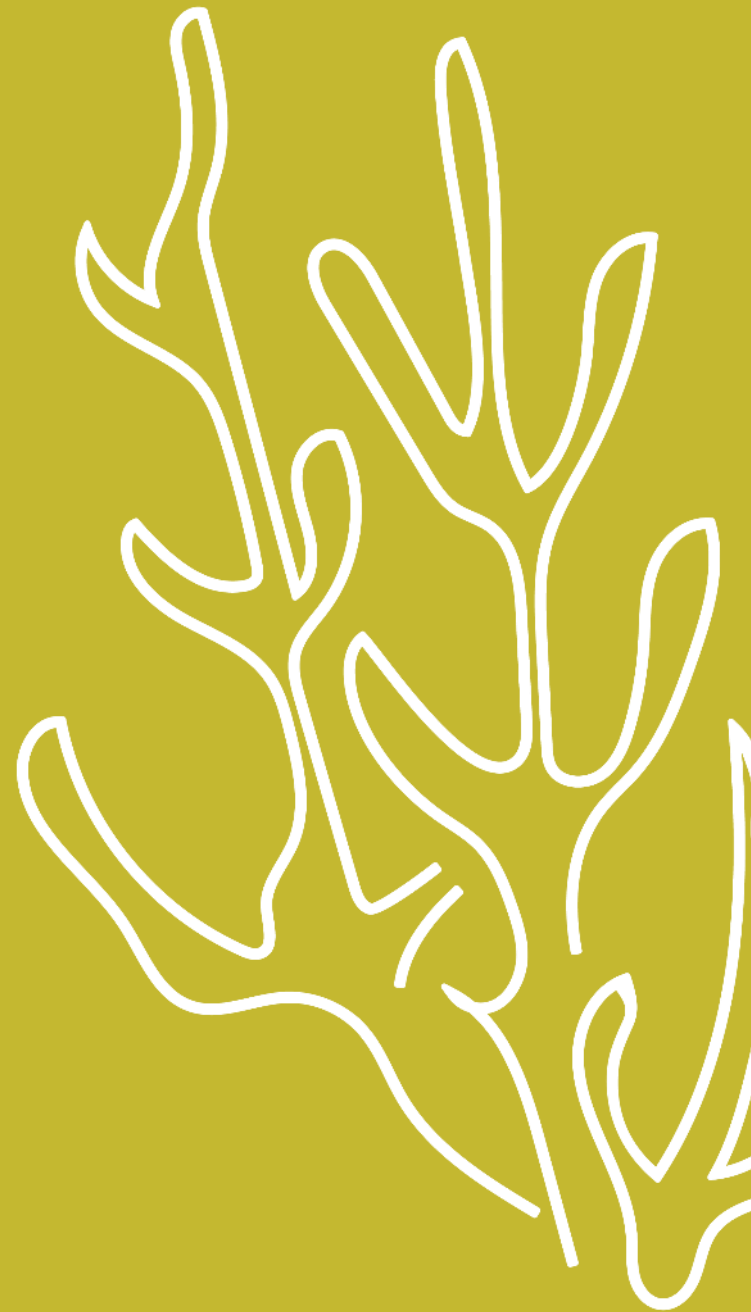
Key Areas to Investigate Further

- **Further investigate NBS for coastal defence.**
- **Co-create Pathways** outlining a sequence of potential interventions over time.
- **Understand how the grant-in-aid funding mechanism works** for NBS.
- **Develop adaptable plans** in case funding is unavailable.
- **Assess stakeholder reactions** to the adaptive pathways approach—whether they find it clear, flexible, and trustworthy, and how it influences their engagement, support, or investment in NBS over time.
- **Establish triggers for action** in NBS and embed a monitoring system into the regional framework to track when these triggers are reached.



THANK YOU

[Our Future Coast | The Flood Hub](#)





Coastal transition accelerator programme

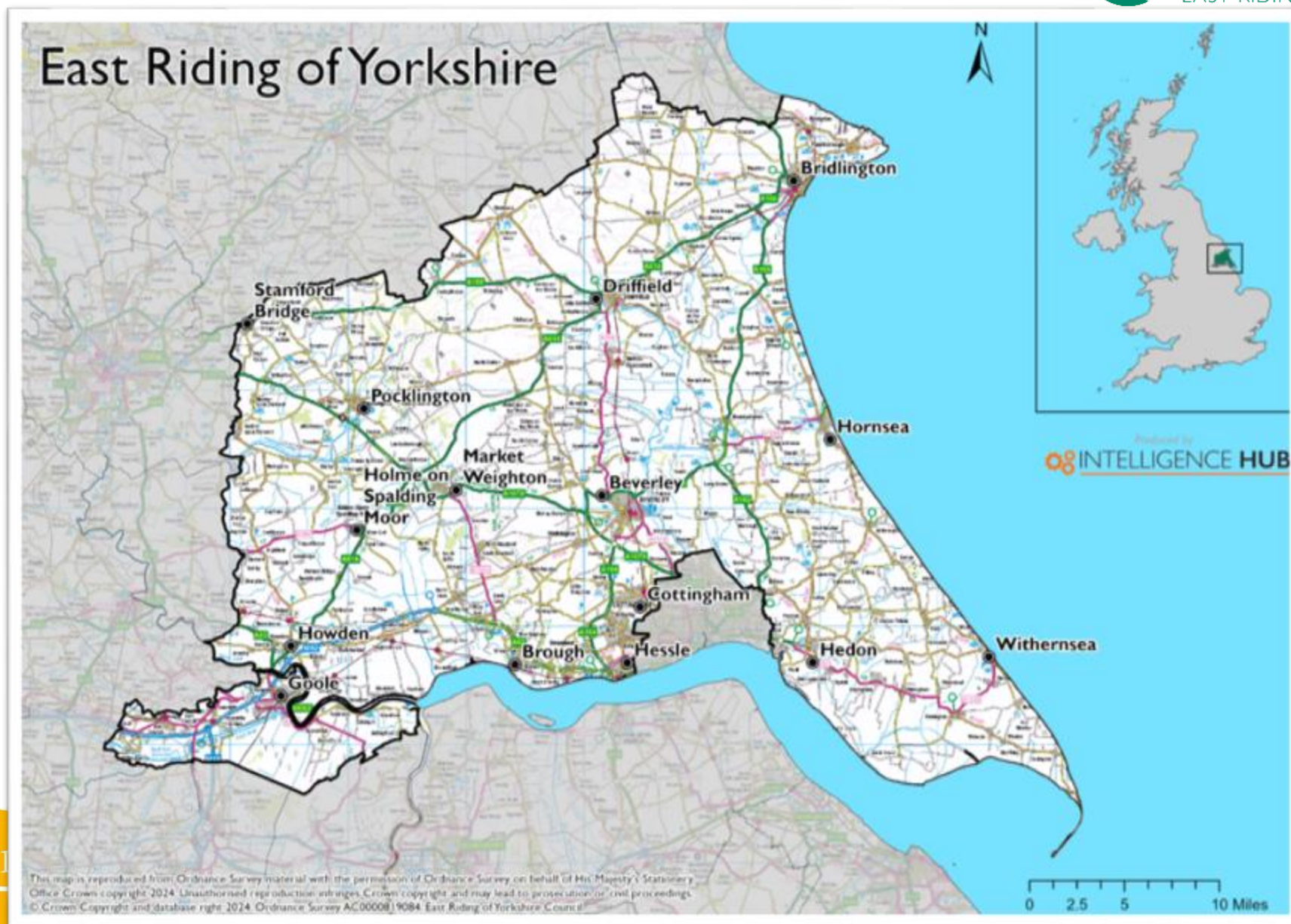
Part of the £200m
Flood and coastal innovation programmes

This project is funded by Defra as part of the £200 million Flood and Coastal Innovation Programmes which is managed by the Environment Agency.

Changing Coasts East Riding

Richard Jackson - Project Manager, East Riding of
Yorkshire Council





The English Landscape



National Policies

Coast Protection Act 1949
Flood & Water Management Act 2010
National Planning Policy Framework
Flood & Coastal Erosion Risk Management Strategy for England

Regional Policies

Flamborough
Head to
Gibraltar Point
Shoreline
Management
Plan

East Riding Coastal Transition Strategy

Local policies / strategies

East Riding
Local Plan

Local
Transport
Plan

Comms &
Engagement
Plan

Coastal
erosion
monitoring
programme

Impacts of Coastal Erosion



Current Action



Part of the Environment Agency's £200m Flood and Coastal Resilience Innovation Programme (FCRIP)



CTAP projects

Changing Coasts East Riding (£15m)

Coastwise (North Norfolk District Council)

Charmouth and Swanage, Dorset

Bude, Cornwall

Success / Challenge



- **Success:** Communities want to get involved and know their priorities. CTAP and FCRIP show an intent to invest in coastal communities in the long-term.
- **Challenge:** Coastal transition is a cross-Government issue, with multiple benefits for the economy, the environment and society. This is not reflected in current policy or funding mechanism in England.

The Welsh Perspective



CMAC : WCMC

Canolfan Monitro Arfordirol Cymru
Wales Coastal Monitoring Centre

**Sharing learning between UK home
nations on coastal change - Wales**
08/05/25

The Welsh Coastline

3.1 million people

(4.6% of the UK population)

2,700km long coastline

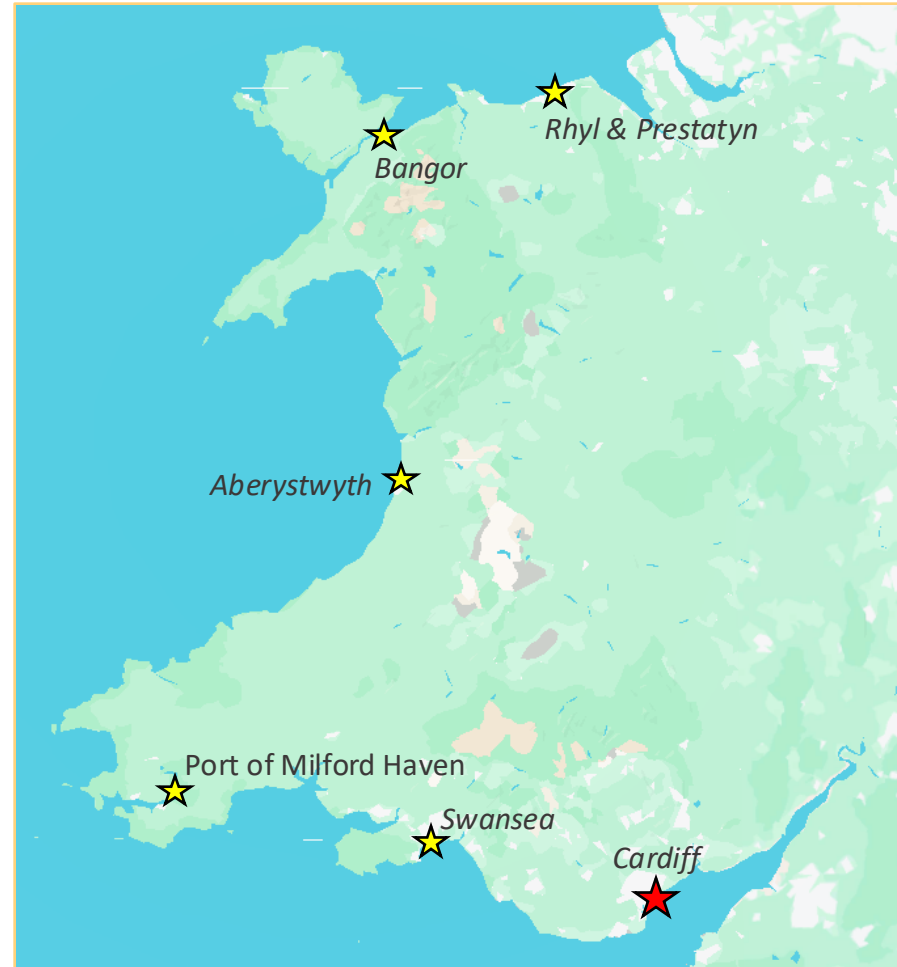
(15% of the coastline of GB)

60% of the population live or work on the coast

(approx. 1.9 million people)

Cardiff 6th most at-risk city in the world for Sea Level Rise
(Nestpick, 2050 Climate Change City Index)

90,808 properties at risk of coastal flooding
(NRW Annual Report 23-24)



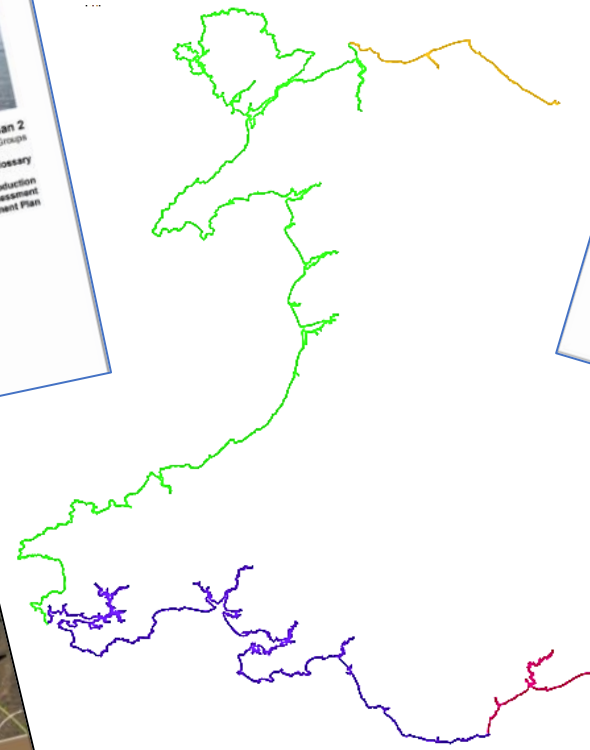
Shoreline Management Plans

Hold the line: Maintain or improve existing coastal defences to protect the land.

Advance the line: Build new defences further seaward.

Managed realignment: Allow the shoreline to move naturally but manage the process to reduce risks.

No active intervention: Do not intervene with natural coastal processes.





Fairbourne, Gwynedd



Colwyn Bay, Conwy

The FCERM Strategy for Wales

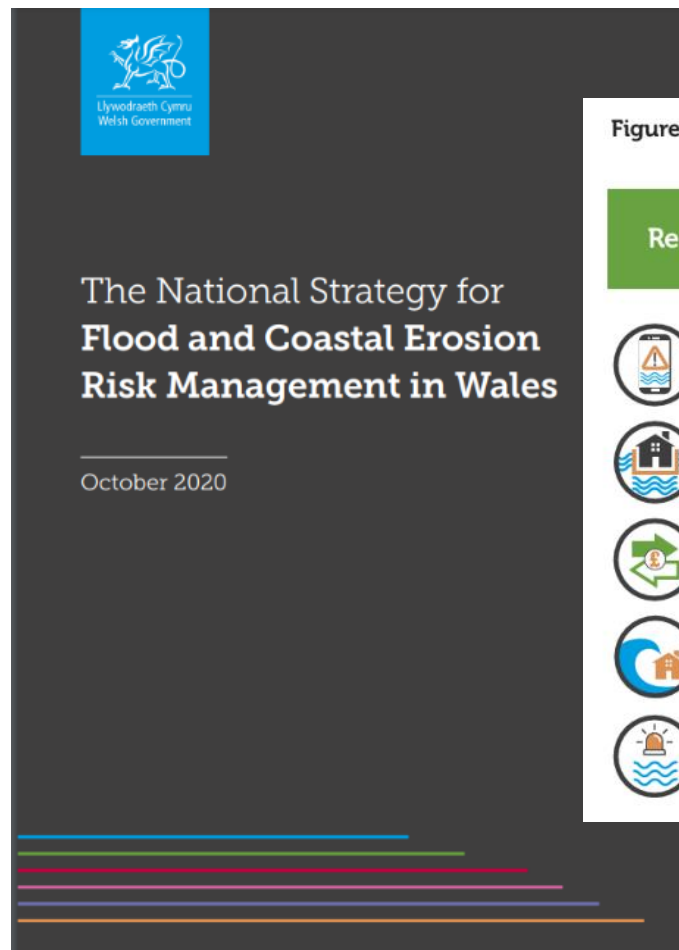


Figure 4: National Strategy Aim and Objectives





WCMC School Trip, Caswell Bay, Swansea



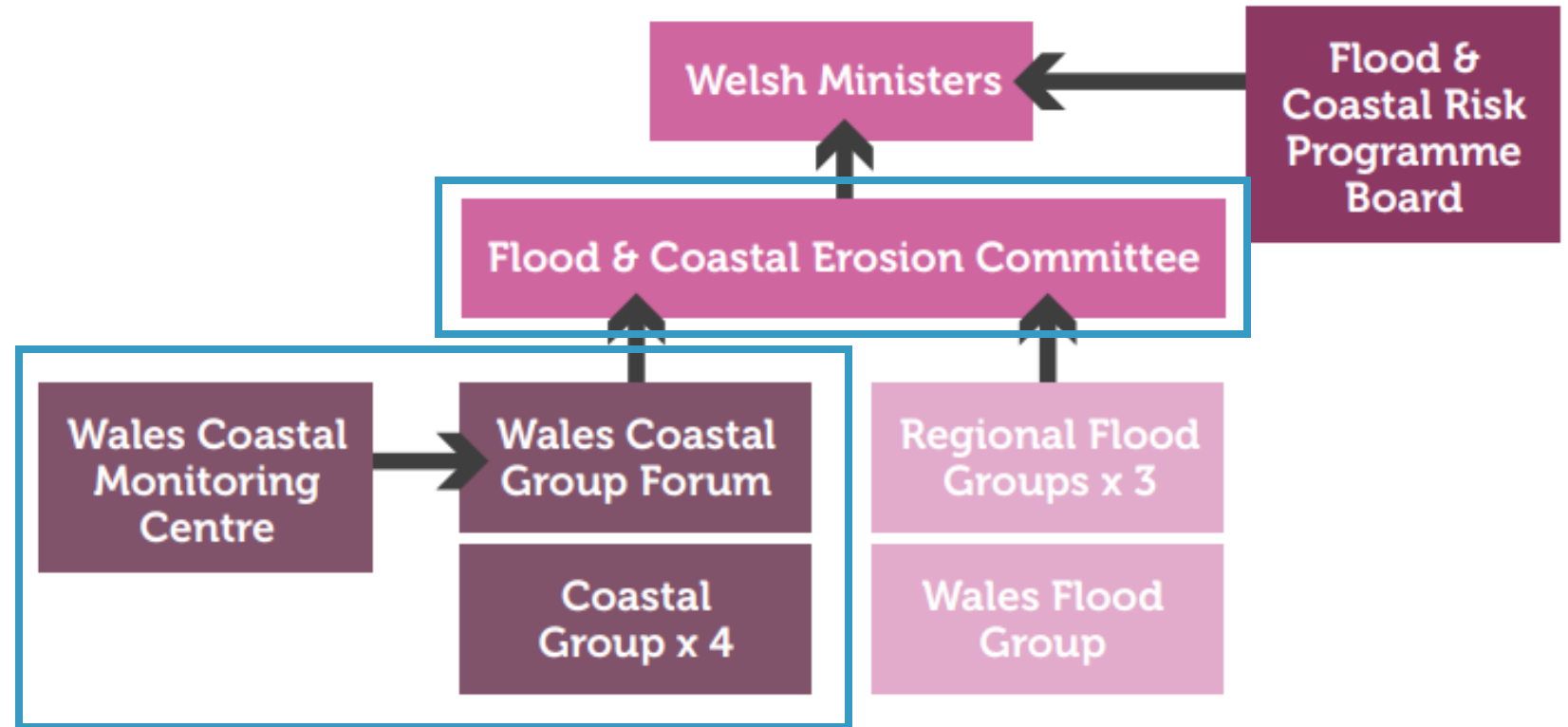
The Well-Being of Future Generations (Wales) Act 2015

A Prosperous Wales	Building resilience and reducing risk to people and places, help the economy and sustain long term employment. Construction of flood schemes creates jobs and safer places to work and invest.
A Resilient Wales	A key objective of this Strategy is to build resilience in our communities and deliver sustainable, safer places, helping mitigate the impacts from climate change. Schemes also provide an opportunity for wider benefits such as biodiversity enhancements improving ecosystem resilience.
A Healthier Wales	Sharing information on risk and what to do before, during and after a flood, together with the real reduction in risk to homes, helps to improve mental well-being. Schemes can help create more attractive and safe communities to live and work in and provide wider health benefits such as recreation and amenity improvements.
A More Equal Wales	Funding is prioritised based on level of risk on an all Wales basis thereby removing regional inequality. We also support initiatives to give those at highest flood risk access to affordable insurance.
A Wales of Cohesive Communities	Reducing flood and coastal erosion risk helps to create attractive and safe communities to live, work and travel through. Closer working with communities to discuss risk and collaborate on alleviation schemes also helps bring people together and take greater collective responsibility.
A Wales of vibrant culture and thriving Welsh language	A society that promotes and protects culture, heritage and the Welsh language, and which encourages people to participate in the arts, and sports and recreation.
A Globally Responsible Wales	Supporting sustainable approaches such as Natural Flood Management and hybrid schemes to help reduce flood and coastal erosion risk.

Groups, Committees, and the WCMC



WCMC Stakeholder Event, October 2024



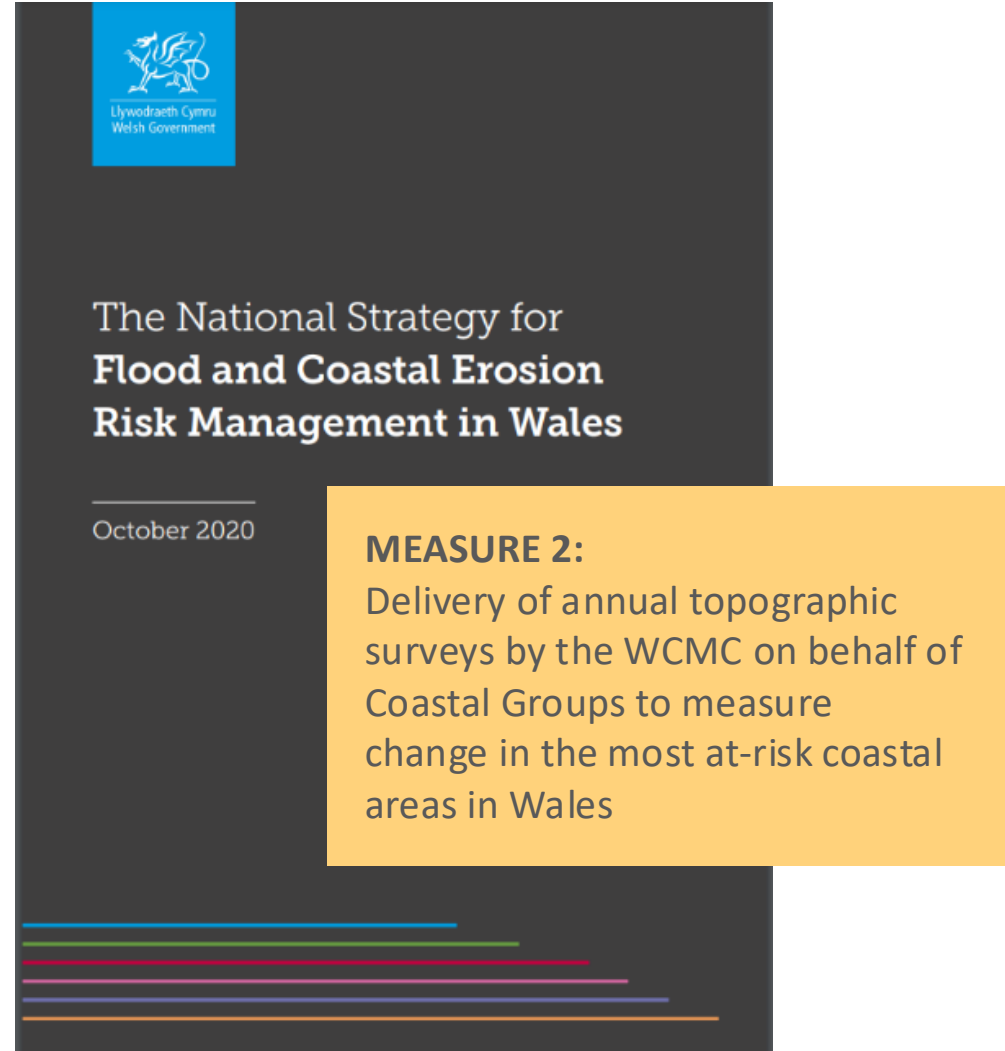
WCMC in the FCERM Strategy



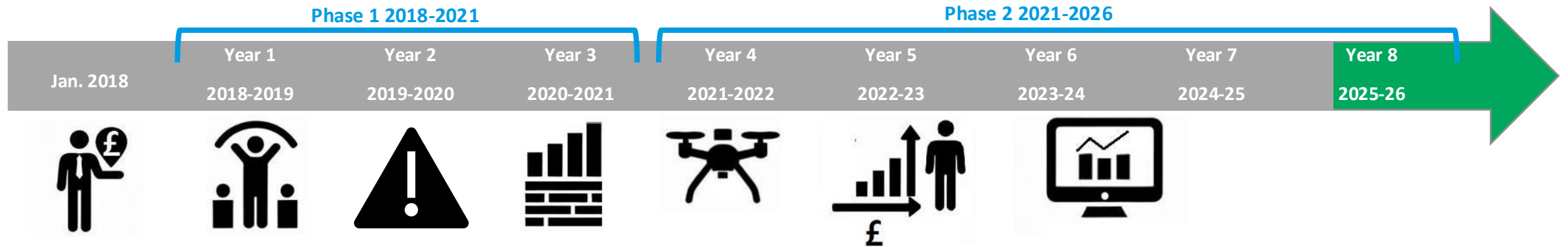
WCMC team members with topographic and baseline equipment



WCMC team member collecting topographic data



Timeline – Key Stages



Team



Gwyn Nelson
(Programme Manager)



William Russell
(Senior Coastal Process
Scientist)



Ben Ranson
(Coastal Process Scientist)



Alice Connolly
(Assistant Coastal Process
Scientist)



Hannah Richards
(SCBCEG Coastal Officer)

Past Placements





Coastsnap
Wales Coastal Path



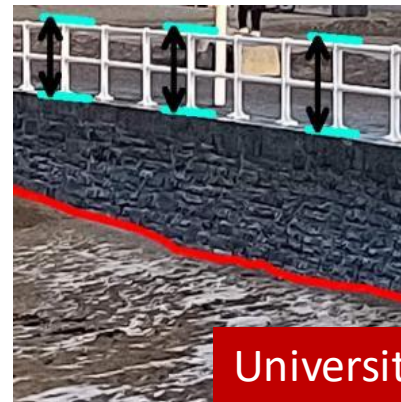
Local Authorities



Office for National Statistics

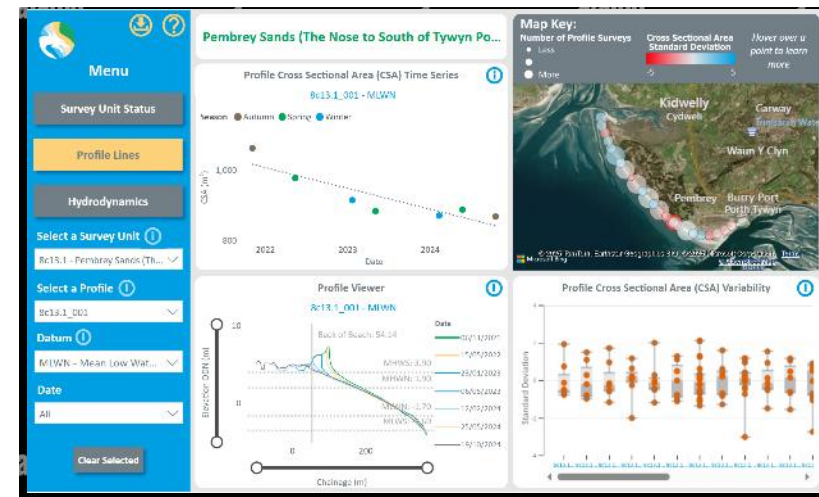
What Works Well? *Collaborations*

NNRCMP (England)



Universities/Research/Placements

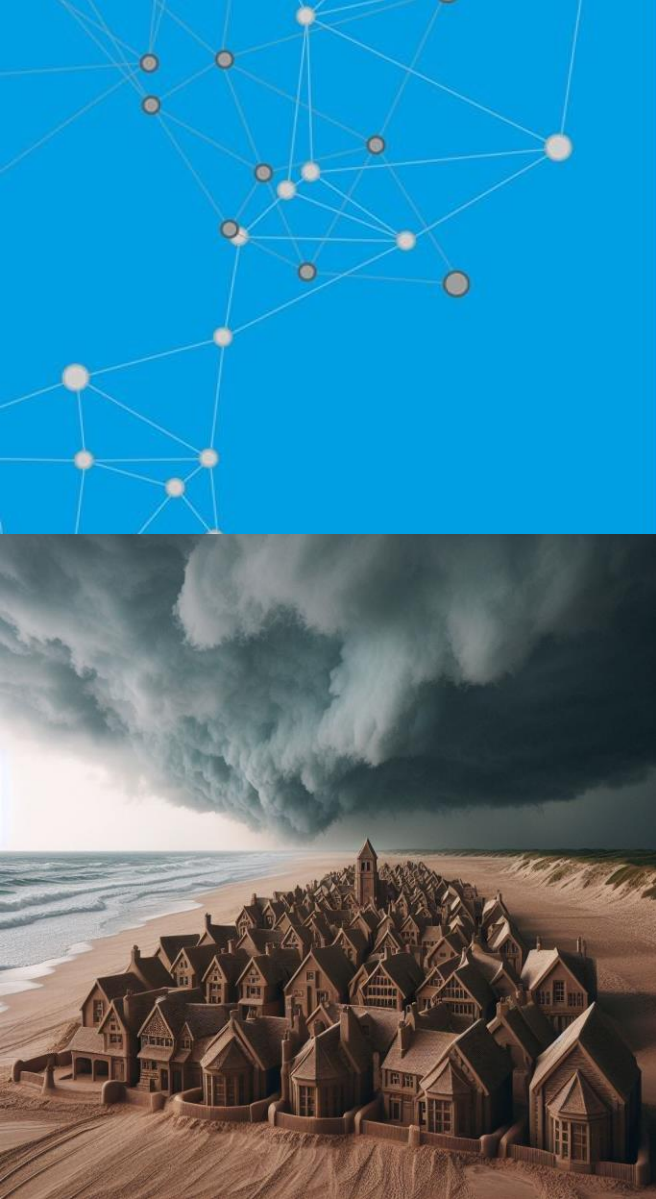
Primary School Programme



Challenges? *Education*

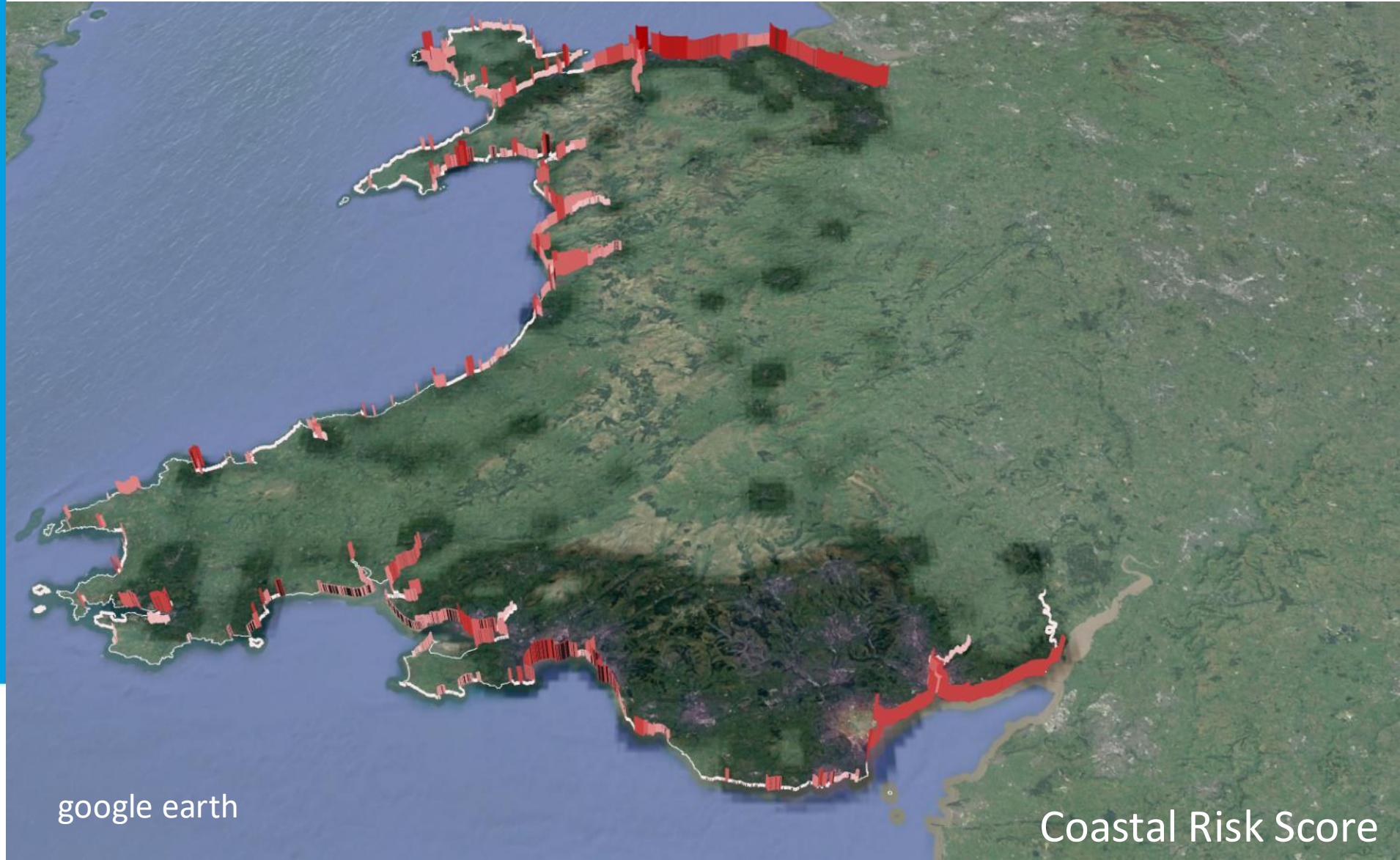
Why are we collecting coastal monitoring data?

- To learn about coastal processes and coastal evolution etc.



Thank you for your time

www.wcmc.wales



google earth



Perspective from working
across UK home nations

How I Learned to Stop Worrying and Love the Change!?

A reflection on sharing and learning and building our capacity for adaptation

Greg Guthrie
8 May 2025

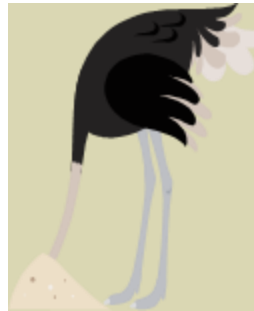
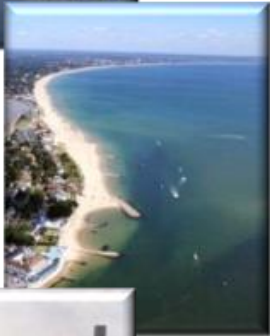
Sharing learning between UK home nations on coastal change. 8th May 2025



You might think that after 30 years (and 120mm of sea level rise?) we would know what we are doing!

But the coast is a tricky beast with so much

- Variation in form and behaviour
- The plethora of use and values:



The ostrich of time and uncertainty



Coastal Change Management– a problem that just keeps giving

Yesterday is not ours to recover, but tomorrow is ours to win or lose

Lyndon B Johnson



A growing urgency in thinking about the possible futures

A bit of a history lesson.

England and Wales – SMP1 1995 - 2000

Top down

- Looking forward (50 years) but very much “can we continue to defend”
- But also looking at coastal interaction.

England and Wales Everywhere is different: different drivers and aspirations, different timescales and opportunities. We cannot squeeze what needs to be done into a rigid process

- Looking back at how we got to the situation we are in now
- Opening up a totally different perspective

Not “can we defend”

But should we or how should we defend and how do we get to the situation where we no longer need to defend!

Moving away from risk management to considering sustainability.

J.D.Hansom et al 2004 - Shoreline Management Plans and Coastal Cells in Scotland

In this context, it seems appropriate that SMPs should ideally be viewed within the setting of CZMPs and that there should be a move towards the implementation not only of SMPs (where appropriate) but also of CZMPs.



A bit of a history lesson.

Scotland – CCAPs 2023

- Widen the scope of strategic planning beyond the hinterland (Place-based).

B

This in itself has been a major learning exercise.
But

- Who decides?
- Engineers can not do this alone and should not do the job of Planners
- to' communities, local ownership.
- elling new artificial structures (and indeed defences).
- strict timescales.

“adaptation cannot be solved through a single action, but is managed



That wretched ostrich

England and Wales – SMP Refresh 2020

Bottom up

the SMP

- Broader view of coastal interaction (societal, ecological and
- Implications of and barriers to adaptation, getting ready for change and working with communities, stakeholders and planners.
- Driven by where we need to be (target), based on triggers and intent.

No one likes change.

But change is happening

To a degree, change on the coast is also what is valued - Apart from when it materialises

Issue 1. to protect our churchyard

Issue 2. to allow natural development of our dune.

From the same stakeholder!

A lack of clarity of the desired outcomes can consequently present as much of a barrier to adaptation as uncertainty about the nature of future climate hazards. *UKCIP (2011) report on Managing Adaptation*


yesterdays', but therefore of nobody's tomorrows.
Coastal Regeneration, Coastal Communities Alliance 2010

Science and monitoring are essential -

but *"Science, by itself cannot supply us with an ethic. It can show us how to achieve a given end and it may show us that some ends cannot be achieved"*

Bertrand Russel 1950

We are still left with the problem of making choices.



Suffolk is a coast where you can see geology happening.
J.A. Steers

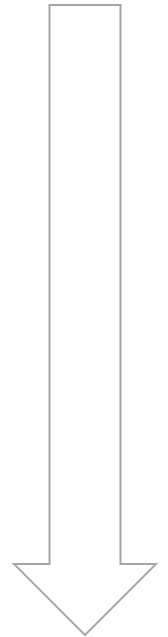
The best way I know of to win an argument is to start from being right!

Lord Hailsham 1960

Hmmm!



That wretched ostrich



A growing urgency in thinking about the possible futures



Royal HaskoningDHV

If we are to be honest in our endeavour to involve communities:

It takes time – not a nice linear process

Framing the discussion in the reality of change,
But be willing to be surprised

Building the understanding, with as much effort on what cannot be achieved (and why) as on what can be done.

Moving from and addressing the immediate to thinking about the future.

Recognising this is not win/win; there may/will be losers.

There is no right way to do this, only
successful outcomes from which we learn.



Thank you.

Thoughts and discussion please

PS. Can someone please get rid of that ostrich!

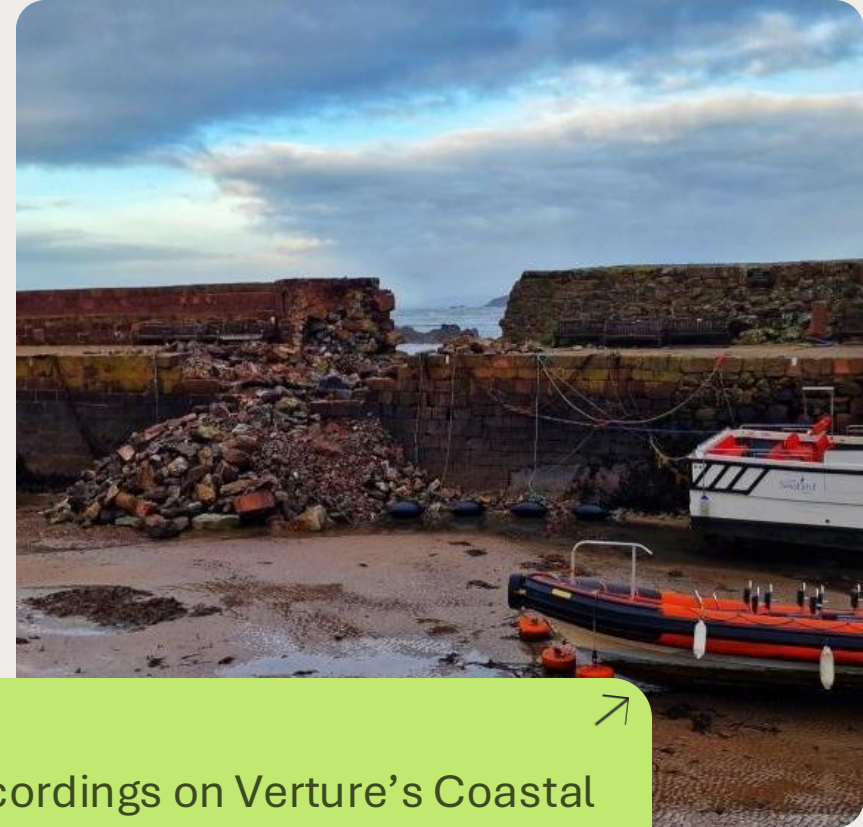




Open discussion

Coastal change webinars

- Verture has hosted a series of coastal change knowledge exchange webinars since 2022
- Working with SG, SEPA, NatureScot and Dynamic Coast to upskill those tasked with managing Scotland's coasts featuring:
 - Latest science, policy developments, case study results, funding calls, knowledge sharing from extreme events
- Collegiate, open, peer to peer learning
 - Time and safe space for discussion (not recorded)
- Previously focussed on coastal management practitioners, but audience getting broader
 - Latest sessions target elected members and planners



Watch recordings on Verture's Coastal Change Vimeo showcase

<https://vimeo.com/showcase/11140183>



Thank you

Cat Payne
cat@verture.org.uk

Registered Office:
Caledonian Exchange,
19a Canning Street, Edinburgh, EH3 8HE

info@verture.org.uk
verture.org.uk

Scottish Charity No SC022375
Company No SC149513

verture