
Integrating Flood & Coastal Erosion Risk Management and Well-being in Wales

Workshop Highlights

Organisers: Meghan Alexander, Emma McKinley & Rhoda Ballinger
Cardiff University, UK

Location: Water Research Institute, Cardiff University

Date: Wednesday 10th July 2019



CoastWEB - Valuing the contribution that coasts make to human health and well-being, with a focus on the alleviation of natural hazards and extreme events

1. Introduction

In light of rising sea levels and climate change projections, difficult decisions need to be made about how best to manage our coastlines - balancing the need for sustainable Flood and Coastal Erosion Risk Management (FCERM) and the preservation of well-being in coastal communities. In Wales this is further reinforced by the *Well-being of Future Generations (Wales) Act 2015* and the commitment to 7 national Well-Being Goals. However, while there are a wide range of opportunities for embedding well-being into FCERM policy and practice, the aspirations underpinning this recent legislation also pose a number of barriers and challenges that must be overcome.

To discuss this issue in further depth, researchers from Cardiff University convened a workshop on Wednesday 10th July 2019 with key policymakers and practitioners, including representatives from Welsh Government, Natural Resources Wales, the Flood & Coastal Erosion Committee, National Trust, Wales Coastal Monitoring Centre, Network Rail, local authorities, the Severn Estuary Partnership, consultancies and academics. The workshop sought to address several key questions:

- I. What are the current strengths & weaknesses in FCERM?
- II. What opportunities & challenges are faced in trying to align FCERM activities with the Welsh Well-Being Goals?
- III. What are the potential barriers to governance change, where required?
- IV. What recommendations should be prioritised moving forwards?

The workshop was carried out as part of the CoastWEB project, funded through the Valuing Nature Programme¹. CoastWEB examines the contribution that coastal habitats make to human health and well-being in Wales, with a particular focus on the alleviation of coastal hazards and extreme events (<https://www.pml.ac.uk/CoastWeb/Home>). As part of this project, Cardiff University researchers (Dr Meghan Alexander, Dr Emma McKinley and Dr Rhoda Ballinger) have evaluated current FCERM governance in Wales, drawing from in-depth policy and legal analysis, and over forty interviews with a diverse range of stakeholders operating at national and local scales. The workshop provided an additional means of data collection and validation of existing findings to help inform recommendations for policy and practice. The results of this governance research will be collated and published in a final report in the coming months.

¹ The Valuing Nature Programme is a 5 year (2014-2019) £6.5m initiative funded by the Natural Environment Research Council, Economic and Social Research Council, Arts & Humanities Research Council, the Biotechnology and Biological Sciences Research Council and Defra.

2. Strengths & weaknesses in current FCERM governance

As an opening workshop exercise, we asked participants to share their views on the strengths and weaknesses of current FCERM in Wales. The results of this exercise are summarised in the table below. We also used online polling to ask participants what they felt might be the current problems or challenges in FCERM. These results formed a word cloud, as illustrated in Figure 1.

Table 1: Participant views on the current strengths and weaknesses in Welsh FCERM

Strengths	Weaknesses
<ul style="list-style-type: none"> ▪ Wellbeing of Future Generations (Wales) Act 2015 is world leading, provides a clear understanding of roles and responsibilities, is comprehensive and something to potentially hold decision-makers to account; ▪ Schedule 3 of Flood and Water Management Act 2010 and implementation of SABs for SuDS; ▪ NRW are getting things done; ▪ Growing interest in nature-based solutions and delivering catchment-based approaches; ▪ Wales is small, making it easier to bring decision-makers together; ▪ Good working relationships; ▪ Ecosystem services and catchment-based approaches advocated; ▪ Data and evidence improvements; ▪ Examples of success for multi-beneficial schemes (e.g. Rhyl); ▪ Political willingness. 	<ul style="list-style-type: none"> ▪ Public perceptions regard hard engineering to be more effective than 'soft' nature-based approaches of coastal defence; ▪ There is a need to involve communities much sooner in the decision-making; ▪ Addressing defences/assets that are in private ownership and often conflicting priorities and planning cycles; ▪ Uncertainty around climate change makes it difficult to act; ▪ FCERM governance is reactive rather than proactive, more urgent action is needed for climate change adaptation, starting today; ▪ Difficulties in assessing the effectiveness of nature-based approaches compared to traditional defences (e.g. different timelines to measure success); ▪ Some stakeholders appear resistant to change; ▪ Lack of long-term funding; ▪ Government prioritises other concerns e.g. education and public health; ▪ Engaging non-coastal LAs to be involved in catchment-based approaches; ▪ Cross-border coordination (related to SMPs); ▪ Loss of expertise within local authorities; ▪ Rigid legislation (namely Highways Act)



Figure 1: Word cloud created via online polling in response to the question “What are the problems with FCERM in Wales?”

3. Opportunities & challenges for aligning FCERM with the Well-Being agenda in Wales

Using an online polling interface, we asked participants to reflect on the 7 national Well-being Goals in Wales (see Annex) - including *prosperity, resilience, health, equality, cohesive communities, culture and language, and global responsibility* – and posed two key questions:

- I. To what extent do FCERM objectives ‘fit’ with the well-being goals?
- II. To what extent are well-being goals currently addressed by FCERM?

Participants were asked to assess these questions within a matrix format and place a ‘pin’ within the matrix accordingly, as explained in Figure 2. A total of 7 matrices were produced for each of the national well-being goals (Figure 3).

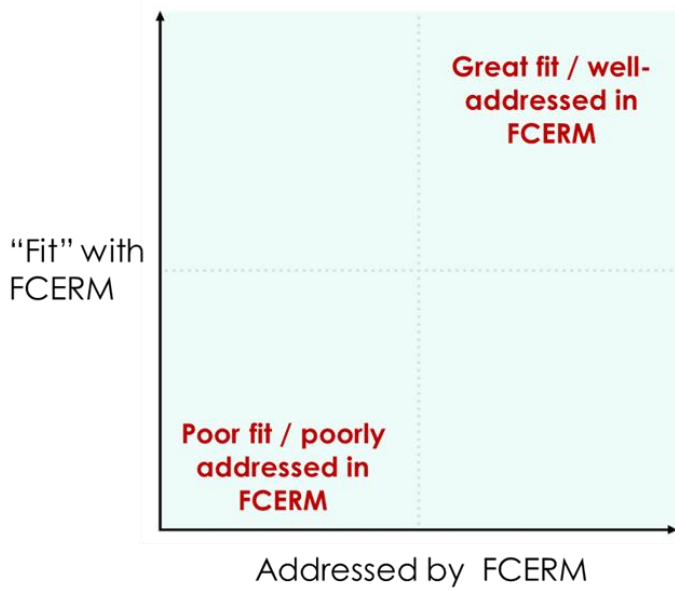


Figure 2: Matrix created via online polling to assess theoretical 'fit' between FCERM and well-being goals (vertical axis) and extent to which these are currently addressed/delivered in practice (horizontal axis).

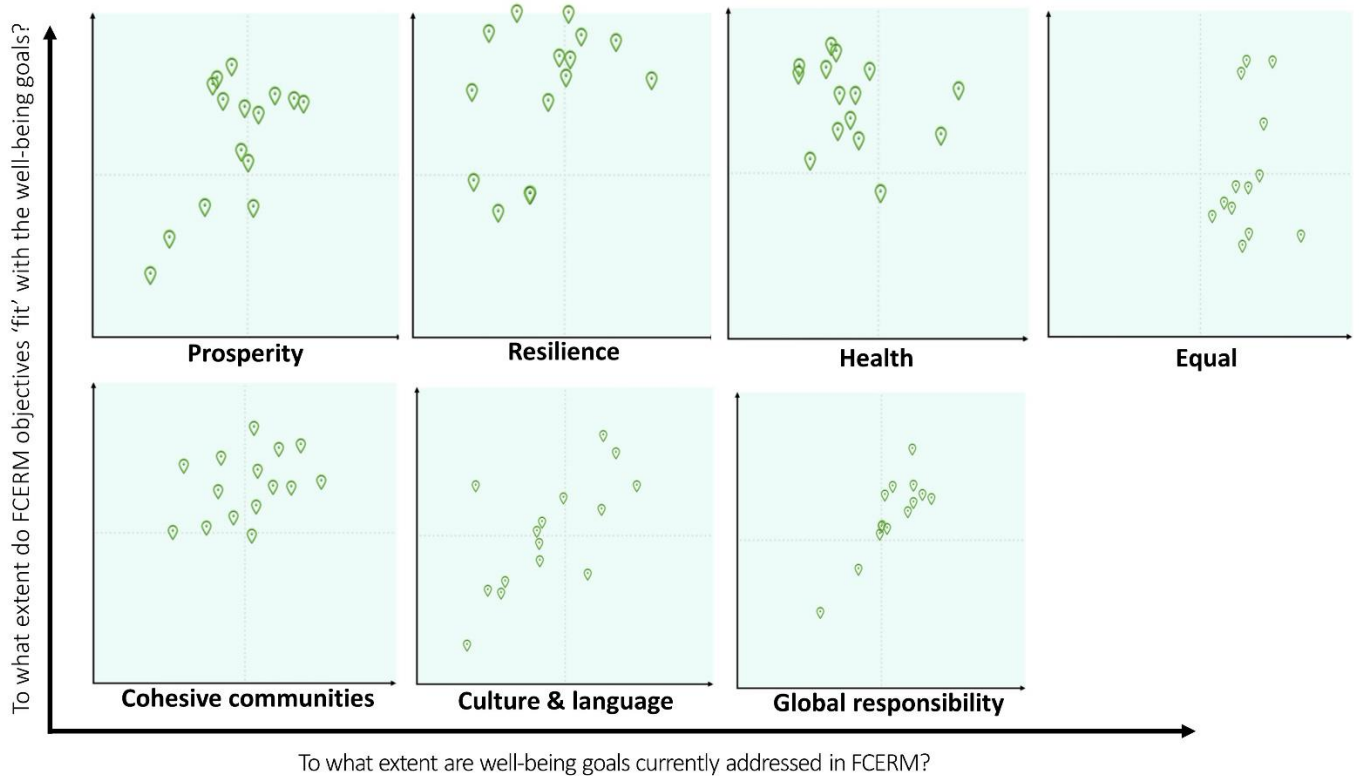


Figure 3: Results from online polling to assess 'fit' and delivery of well-being goals within current FCERM in Wales

The resulting matrices were synthesised into a bar chart by simply counting how many 'pins' were placed in each quadrant (Figure 4). Certain well-being goals are perceived to be well-

aligned to FCERM objectives and currently well-addressed; these include global responsibility, cohesive communities and resilience. Conversely, the poorest 'fit' and least well-addressed well-being goal pertains to culture and language. Interestingly, Health is regarded to be a good fit yet poorly delivered in practice, while Equality represents the well-being goal that is best addressed through FCERM, with many participants commenting that the Community at Risk Register provides a fairer means of prioritising investment than the Partnership Funding model employed in England.

Figure 5 focuses on participants' perceptions on the delivery of the well-being goals in practice. While this figure provides a binary view only, it is useful to see what well-being goals particularly stood out for this group of stakeholders. For instance, equality and global responsibility appear to be successfully delivered through FCERM, while health remains a key area for improvement, with some participants commenting on recent research carried out by Public Health England that demonstrates the significant and long-lasting health impacts of flooding. Similarly, the culture and language well-being goal was also seen to be poorly addressed. This sparked a debate about whether all well-being goals need to be *equally* achieved in FCERM activities, providing that each goal is *considered* in decision-making. While recreation activities can be clearly delivered through certain FCERM schemes, the group commented that other aspects may prove more challenging and potentially beyond the FCERM remit particularly given resource constraints. Simultaneously it was suggested that activities supporting language and cultural heritage could provide additional means of building societal resilience and cohesive communities, which is arguably underestimated and overlooked at this point in time. Surprisingly, the Resilience goal also sparked considerable discussion and was classified as 'poorly addressed' by 60% of participants. Reflecting on the wording used in the *Well-being of Future Generations (Wales) Act 2015*, participants discussed the challenges of delivering social, economic and ecological resilience in equal measure, the ambiguity around the term 'resilience' and the challenges of building resilience at the community scale.

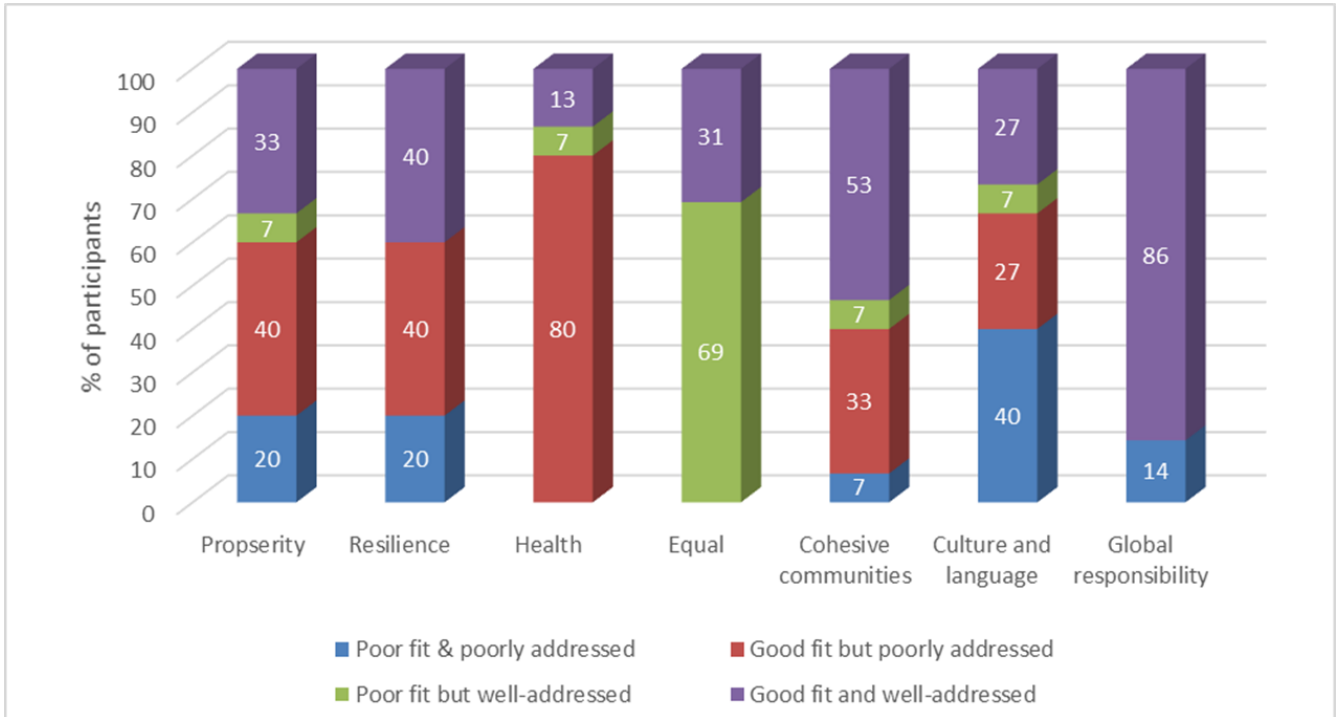


Figure 4: Results of matrices across each Well-being Goal

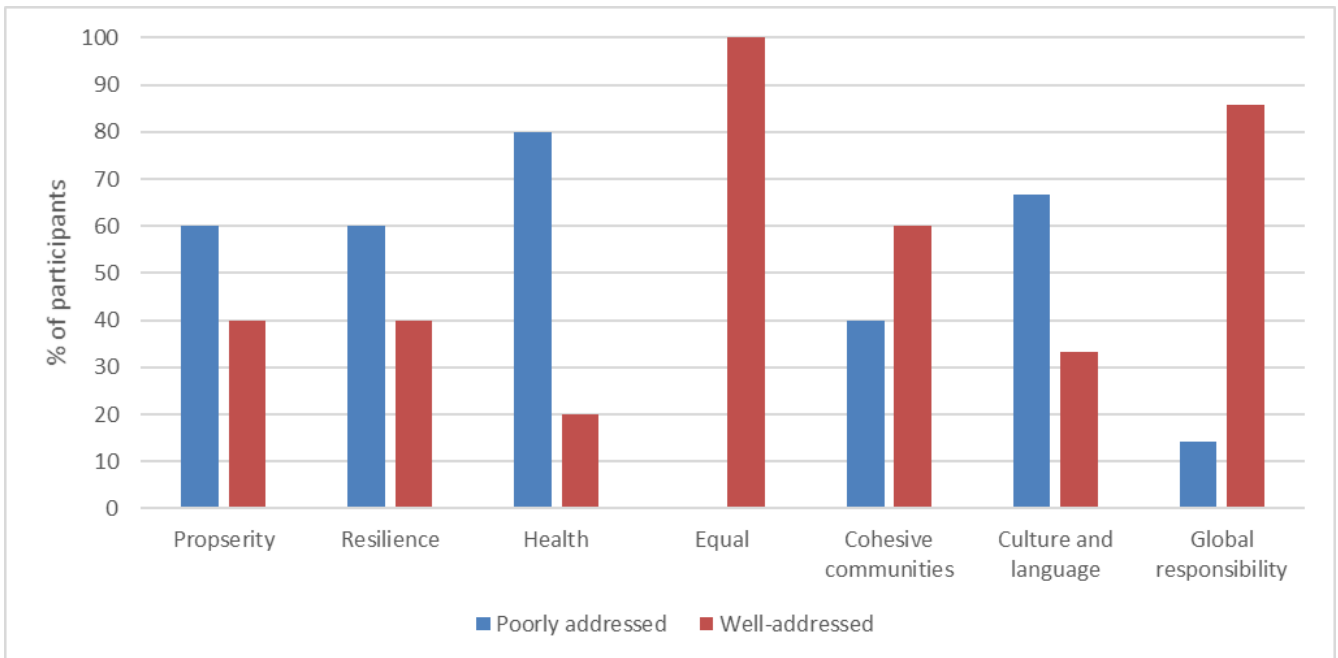


Figure 5: Views on the current delivery of the Well-being Goals in practice

4. Recommendations for policy and practice

For the final exercise, participants were divided into three groups and asked to think about ‘solutions’ to previous problems/challenges identified from earlier discussions. To facilitate this exercise, each group was assigned two of six themes and asked to produce a short-list of recommendations for policy and/or practice. The themes related to the Five Ways of Working (as outlined in the *Well-being of Future Generations (Wales) Act 2015*) – including integration, collaboration, involvement, prevention and long-term thinking. A further category was also added for ‘funding and resources’. The resulting recommendation lists were placed around the room and each participant was given 3 stickers and asked to select their top 3 priorities. The results of this voting exercise are summarised in Table 2. These recommendations are grouped thematically (Table 3). In particular, the top recommendations related to improvements to public engagement as well as funding and resources.

Table 2: Recommendations identified and prioritised by workshop participants

Recommendation	Votes
Better communication and awareness raising across all actors (WG, NRW, LAs, PSBs etc.)	7
Develop ‘funding partnerships’ to develop plans with multiple benefits (across government, third sector, private – not community input)	6
Establish relationship with community before telling the news (funding implication: this has to happen first)	4
Incentivising private sector investment in FCERM (including utility and infrastructure)	3
Longer-term commitment on revenue and capital funding supported by a long-term ‘wish-list’	3
Ensure future monitoring collects evidence to feed into long-term planning	3
Look for social capital already in the community	2
Raising the profile of FCERM within PSBs	2
Time and continuity of trust to overcome short-term set-backs	2
Tougher stance on planning – flood maps and climate change predictions need to be clear	2
Promoting FCERM and “more than FCERM” – multi-beneficial	1
Develop simplified regional plans to stimulate new and innovative ideas (joint business cases, multiple benefits, catchment approaches)	1
Other recommendations	
<ul style="list-style-type: none"> ▪ If things go wrong, 3rd party facilitation and learn from past mistakes ▪ Reintroducing education and awareness raising as a role for the RMAs (and wider) – including flood awareness and climate change awareness ▪ Resources for collaboration ▪ Integrating planning horizons within Wales ▪ Improve dialogue/engagement with future generations commissioner ▪ RMAs to engage with strategic funding programmes 	

Table 3: Recommendations identified by workshop participants – organised by theme

Key themes	Recommendations
Public engagement	<ul style="list-style-type: none">▪ Better communication and awareness raising across all actors (WG, NRW, LAs, PSBs etc.)▪ Establish relationship with community before telling the news (funding implication: this has to happen first)▪ Look for social capital already in the community▪ Time and continuity of trust to overcome short-term set-backs▪ If things go wrong, 3rd party facilitation and learn from past mistakes▪ Reintroducing education and awareness raising as a role for the RMAs (and wider) – including flood awareness and climate change awareness
Funding & resources	<ul style="list-style-type: none">▪ Develop 'funding partnerships' to develop plans with multiple benefits (across government, third sector, private – not community input)▪ Incentivising private sector investment in FCERM (including utility and infrastructure)▪ Longer-term commitment on revenue and capital funding supported by a long-term 'wish-list'▪ Resources for collaboration▪ RMAs to engage with strategic funding programmes
Embedding FCERM and the Well-being agenda	<ul style="list-style-type: none">▪ Raising the profile of FCERM within PSBs▪ Promoting FCERM and "more than FCERM" – multi-beneficial▪ Improve dialogue/engagement with future generations commissioner
Monitoring and evidence	<ul style="list-style-type: none">▪ Ensure future monitoring collects evidence to feed into long-term planning
Planning	<ul style="list-style-type: none">▪ Tougher stance on planning – flood maps and climate change predictions need to be clear▪ Develop simplified regional plans to stimulate new and innovative ideas (joint business cases, multiple benefits, catchment approaches)▪ Integrating planning horizons within Wales

5. Next steps

A final report of the research findings will be published in the coming months, alongside a corresponding policy brief.

For further information please contact Dr Meghan Alexander.

Please note that Meghan has recently moved from Cardiff University to the University of East Anglia and can be reached at M.Alexander@uea.ac.uk.

ANNEX

Table A.1: Well-being goals in Wales (as defined in the *Well-being of Future Generations (Wales) Act 2015*)

Well-being goal	Description
1. A prosperous Wales	An innovative, productive and low carbon society which recognises the limits of the global environment and therefore uses resources efficiently and proportionately (including acting on climate change); and which develops a skilled and well-educated population in an economy which generates wealth and provides employment opportunities, allowing people to take advantage of the wealth generated through securing decent work.
2. A resilient Wales	A nation which maintains and enhances a biodiverse natural environment with healthy functioning ecosystems that support social, economic and ecological resilience and the capacity to adapt to change (for example climate change).
3. A healthier Wales	A society in which people's physical and mental well-being is maximised and in which choices and behaviours that benefit future health are understood.
4. A more equal Wales	A society that enables people to fulfil their potential no matter what their background or circumstances (including their socio-economic background and circumstances).
5. A Wales of cohesive communities	Attractive, viable, safe and well-connected communities.
6. 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.
7. A globally responsible Wales	A nation which, when doing anything to improve the economic, social, environmental and cultural well-being of Wales, takes account of whether doing such a thing may make a positive contribution to global well-being.