Coastal resilience in the face of sea-level rise


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To understand shoreline management planning today and the challenges faced in a changing climate, our team held three workshops, one national (London) and two regional (Havant and York) in June/July 2019. 75 people attended from 45 organisations, with representatives from Wales, and all English regions. Invitees included coastal managers, engineers, coastal process scientists, heritage experts, environmentalists, planners, academics, councillors, government representatives and consultants. The national workshop focussed on coastal experts who operate at national or strategic levels. The regional workshops included those who work at local or regional levels, dealing with day-to-day coastal issues. This is a summary of the meetings. Further analysis will be presented at our final workshop on 7th November 2019 in London.

In the national meeting we asked:

What is your personal biggest challenge in delivering the SMPs now and in the future? If you could change one thing in the SMP process, what would that be?

The responses to this generated four themes/questions that were asked in the regional workshops:

1. Is there sufficient flexibility in central government finance to maintain and increase resilience in flood risk management and shoreline change?

Generally it was thought there was insufficient funding available from central government. More importantly, many participants wanted a more flexible system that encompasses more than building defences to protect homes or to create habitat, over longer timescales and in a more coordinated way. Partnership Funding was welcomed, but wider sources of funding need to be considered. Funding is needed for engagement.

“No, too focused on households -> equity issue to those in rural areas. Lack of support for the economy. Change Partnership Funding formula”. (Consultant)

“Yes and no. It is on the government radar but reliant on ongoing flood events to keep it in the front of their minds. However, existing funding regimes focuses on properties only. Natural capital will need to play a bigger part on unlocking central government funding”. (Scientist, Non Departmental Public Body)

“Scrap discounting and allow the full value of properties at risk over 100 years to be included in the cost-benefit for coastal erosion schemes” (Unknown)

“Not sufficient funding for public domain and coastal infrastructure. All costs on the coast are an order of magnitude greater than they are inland. Allow additional funds to highways / rail / utilities” (Engineer, Non Departmental Public Body)

2. Is there sufficient communication and engagement with communities and businesses in the shoreline planning process?

There was a strong answer of ‘No’, in terms of when SMPs were produced, ongoing communications and when specific issues or plans arise. Innovative issues engaging a wider and diverse stakeholders, including members of the public are needed.

“Shift the resource from 90% production / 10% engagement to 10% / 90%” (Scientist, Non Departmental Public Body)

“Not enough at the moment unless there is a specific issue”. (Unknown)

“Funding is key. More funding = better education and communication” (Unknown)
No. Resource limited – local authorities won’t deliver difficult to communicate issues (e.g. hold the line the managed realignment) when [the] future is certain” (Unknown)

3. Is there sufficient consistency in the way shoreline management and SMPs were created and how they are being enacted?
Although this was an issue nationally, this was less of an issue locally or regionally.

“I do think there is consistency in the SMPs I work with. However how they are being enacted appears to vary widely depending on your location. One way to improve this would be to make SMPs statutory however this would also create issues as well” (Environmental / heritage scientist, Non-Government Organisation)

“Consistency is not great but sufficient” (Scientist, Non Departmental Public Body)

4. Do you think Shoreline Management Plans should be made statutory?
This divided opinion. Certainly all were supportive in what SMP should do, but there was a fear that making them statutory without guaranteed finance or regular updates could lead to major difficulties. If they were made statutory, they would need a complete rethink so that detailed commitments were clear.

“Statutory in respect of interface with the planning system” (Unknown, Non Departmental Public Body)

“No, because they are about DEFRA priorities. Remit of coastal decision making encompasses so much more, i.e. planning, growth, business, heritage, infrastructure, tourism, recreation, development, economics” (Scientist, Coastal Partnership)

“Potentially they are an ever changing document like the coastline” (Planner, Local Authority)

“Making SMPs statutory would put LGAs in a pressured state to find funding in managing changes in the shoreline, and this might not be the ideal case” (Scientist, unclassified organisation)

Common topics appearing in discussion groups within and between each workshop:

1. We need to be more focused on the natural environment
The natural environment is not considered widely enough in shoreline management. Funding is limited, constrained and can only be used in certain things. We are under valuing the environment as a form of protection.

“Environmental assets are also incredibly important and should not always be second to built assets” (Environmental / heritage scientist, Non-Government Organisation)

Farmers are coming to terms with that – defences obsolescence problem – but they’re taking a long time to get there (Environmental / heritage scientist, Non-Government Organisation)

“[We] can’t connect environment to people – can’t implement environmental protection if no gain for people in their houses – even though on paper, you can – no appreciation for natural capital” (Unknown, Non Departmental Public Body)

“Managed realignment gets money. However, ‘if we just let it [i.e. the natural process of managed realignment] happen, we don’t get funding. We don’t need a big evolved project [to deliver retreat], but that’s what you get money for” (Environmental / heritage scientist, Non-Government Organisation)

2. Planners need to be more integrated in the shoreline management system
Planners need help to understand the shoreline management processes and SMPs/CCMAs. This need is particularly acute in areas where there is intense development and infrastructure immediately adjacent to the coast, or where there is pressure for housing development. Different local authorities have varying relationships to their planning teams.
“We [the planning team] rely on our coastal teams for advice. We are not specialist. We are under pressure to provide houses for central government (for context, there are quotas), and we have to consider whether to build on greenfield or brownfield sites. It’s a no win situation. We are stuck. We have to balance out as much as possible. We have to rely on coast engineers as much as possible to tell us”. (Planner, Local Authority)

Our planners are just downstairs. If we have a problem, we go down to see them. (Unknown, Local Authority)

3. There needs to be more continuous engagement and education with the public and local councillors
This came up repeatedly in all groups and all workshops. There is a danger of the issue becoming politicised as there is a lack of understanding of why change is needed. We should be promoting informed debate and decisions.

“This is the biggest problem. Lack of knowledge in the informed public”. (Academic external to project)

“[SMPs] needs more visibility and accessibility”. (Unknown, Non Departmental Public Body)

4. More generally, we need to keep politics out of shoreline management planning
Politics, particularly at local levels disrupts the shoreline management process. Controversial decisions in shoreline planning, policy change and response to extreme events should not be avoided in order to buy votes, as it stores up problems in the long-term.

“Cameron says, 'This will be fixed whatever the cost,' ….You spend a lot of funds for engagement campaigns for difficult to deliver projects”, then “politics wipes it away”. (Engineer, Non Departmental Public Body)

“Funny things influence business cases, like politicians standing on coasts” (Unknown, Non Departmental Public Body)

“Decouple politics and planning on the coast…Organisations [and shoreline management] should not be driven by something that happens on a short-term cycle” (Scientist, Coastal Partnership)

“One of the key influencers are not making the evidence base” (Regional Flood and Coastal Committee member)

“[SMPs and engagement need to be] Evidence based. Detachment from political re-election” (Unknown).

“Local political buy-in is essential now!” (Unknown)

5. There were similar but also different issues in the northern and southern workshops
Some of the main differences noticed were the result of the variation in the morphology and topography, meaning that erosion and flooding were less problematic with respect to the population centres in the north compared with the south. There appeared to be less housing pressure on the coast in the north. Engineers working with planners indicated that they were more aware of shoreline management, but this was often because of individual relationships. Politics, in particular local politics getting in the way of management and decision making was very similar between regions. Partnership Funding tended to be more favoured in the north. Nationally, our meeting in London tended to echo the views more heard in the south, where more complex coastlines need to be managed.

6. Adding in climate change and sea-level rise was near impossible to envisage
Overall, there are significant challenges in managing the coast today from social, political, financial and physical viewpoints, with insufficient emphasis on natural capital. These pressures are anticipated to get worse with sea-level rise. On the one hand, rural communities may suffer the most as they are far less likely to get grant in aid, but this may not differ much from the funding received today. Large cities will be protected, but it is the communities in between that are most likely to see the most change, in terms of funding formula and whether they will get funds for protection. The effect of sea-level rise on agriculture and food security was for some, a point of concern.