Southeast Regional Coastal Monitoring Programme

Virtual Annual Review Meeting – Questions & Answer Transcript

All questions are anonymised. Direct Questions are in standard text. Answers from the presenter or project team are in blue italics, wider discussion points from attendees are in black italics. If you have any additional questions, please feel free to contact the presenters directly using the contact details provided.

Session 1

Are there plans to add the Futurecoast fly-by photography to the website? It could be useful resource to go with other mapped photo library images proposed.

We are investigating reasons why this data set might not have been included in the original translation exercise. If possible, we will make this data available.

Session 2

Recent Evolution of Sand Dunes in Poole Bay **Lia Bennett**

lia.bennett@bcpcouncil.gov.uk

Dunes are temporary stores of sediment and dynamically change. Trying to herd them into defences or habitats is bound to fail. Any comments?

Re dunes - In Poole Bay we're treating them as a potential to increase the standard of protection (beyond design) and improve the environment. So doesn't necessarily mean we have to be reliant on them. Will also reduce spend on wind-blown sand clearance operations. In reality they are also improving the beach performance and reducing the net longshore drift and therefore volumes for beach nourishment - so also a potential efficiency.

Did you have a look at whether the ebb deltas are changing and therefore forming a source of material, particularly for Sandbanks and Studland?

Much of the South West coast is characterised by sediment rich, high energy coastline, and sand dunes tend to be a dominant coastal landform and habitat type associated with many of our at-risk communities. Enhancing existing dunes and re-establishing relict areas through integrated beach and dune management planning therefore becomes central to long term sustainability objectives for many of our 137 coastal communities.

Coastal Resilience **Jon French**

j.french@ucl.ac.uk

In resilience framework have you also considered "maximise opportunities" ?

Interesting that all of the sub objectives are about minimising things. I wonder if we could reframe it to look at the positive benefits that resilience could bring too? The BCP sand dunes

talk was a great example of how coastal resilience can bring improvements. It's not all doom and gloom!

The lock in from our existing built environment means that whilst positive actions can contribute, enhancing resilience inevitably requires minimising a number of actions/activities. A lot of this depends on how things are phrased, of course, and it should be noted that many of the minimisation objectives (e.g. minimising loss) are actually accomplished through positive actions.

How does this model take into account social capital in terms of staff within LA and EA and pending loss of staff from LAs due to the impact of Covid 19 on LA's finances and long term ability to deliver an effective planning framework and coastal management function

Well, we did not quantify that in the work done so far. But it does illustrate the kind of wider coastal system perspective that is appropriate when thinking about resilience. We are certainly not just thinking about physical or purely ecological systems. Our Coastal Resilience Model can accommodate this kind of information, but it does need to be translated into data that are accessible and useable, of course!

Please could I ask what data was used to ascertain erosion hazard, and did this include coastal slope instability, or could this factor be added in a bespoke application? Thank you.

Erosion hazard was mainly based on the NCERM database to capture 50-100 yr shoreline trend. This is not always accurate and there is scope for improvement here. Slope instability is to some extent folded into to this trend. If it could be developed into a suitable data layer, then the model can certainly incorporate it.

A showcase of the Phantom 4 TRK Quadcopter **D. Amos**

dan.amos@adur-worthing.gov.uk

What is the max wind you have taken the Phantom out in?

Having just checked our flight log, 6knots in the max wind speed we've used it in since August.

Did you have to use any ground control using the Quad copter? If so how did you get around this in inaccessible areas?

Yes we used 6 ground control points per survey - for the Telscombe frontage these were all arranged along the top of the cliff and surveyed in using our Trimble GPS kit

Coastal Partners have both Ebee X (Fixed Wing) and a DJI Inspire 2 (Quadcopter). Whilst the Ebee can fly in slightly higher windspeed of 12-13 m/s, we use this for larger scale surveys, to cover more ground as Dan Amos mentioned, where possible as they require more landing space. For the areas that are a little more tricky, we look to deploy our Quadcopter that can operate in winds up to 10 m/s. Although our Quadcopter isnt RTK enabled, we use multiple Ground Control Points to ensure survey accuracy, and we are seeing some great results.

Intertidal habitat monitoring using Earth Observation data and Machine Learning techniques – TEMITH Project

S. White
shannon.white@port.ac.uk

How did you narrow down the vegetation indices to these three? Why so few validation data blocks? Did you differentiate plant comunities within the seagrass meadows and saltmarshes. Really interesting by the way.

The Deimos Space UK team member who carried out the modelling indicated the indices selected are very popular for vegetation monitoring and that there were few validation blocks due to the limited number of blocks for training. With respect to the modelling of seagrass and saltmarsh, there was no differentiation of type of seagrass or saltmarsh plant communities within each class. I will send this directly to Raymond as well.

New Insights on storm waves at Hayling Island – how CCO wave buoy data is changing our understanding of extreme shingle beach response

E. Last
emily.last@havant.gov.uk

The use of coastal monitoring data within a Beach Management Appraisal (BMA): A case study of Northern Sea Wall

B. McCready
Becky.McCready@canterbury.gov.uk