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“ *The potential effects of climate change and of human modifications of the landscape on flood risk are critically important if human society is to continue to thrive in flood-prone areas.* ”

### Research

Iris, Steve and Adam investigate how natural processes and human actions modify the landscape. The landscape responds to global and more local, direct controls. The focus is to understand and effectively manage this dynamic landscape to ensure a continued benefit from all it has to offer.

### Reasons to Engage

The future potential effects of climate change or human actions on the landscape are often ill-understood. This understanding has to be improved to raise awareness of the possible environmental threats, mitigate the risks, and aid drafting more effective and efficient policies.

### Public Engagement Project

Interactive Landscape Box project.

### Target Group

Individuals involved in or affected by environmental river/coast management: public, government, private sector, risk management and conservation organisations.

### Project Objectives

- Provide a straightforward tool for simulating future effects of climate change or human actions on the dynamic coast/river landscape

## Planning and Process

Iris, Steve and Adam constructed an augmented reality dynamic landscape sandbox. This is a technology that superimposes a computer-generated image on a user's view of the real world, thus providing a composite view. This resource is used to illustrate the impacts humans may have on the landscape and assist those who manage it to ensure continuity of benefits from the landscape (e.g. agricultural and commercial use, recreation and education).

This portable resource provided a visual, tactile, three-dimensional demonstration of geographical concepts. It also allowed discussions around how changes to the landscape directly affect it.

The box was presented to local politicians, environment conservation agency specialists and engineers at a meeting at the Suffolk Coastal District Council and to the wider public at an interactive event at the Cambridge Science Festival 2017.

The audience was effectively shown how multiple processes shape landscapes over 10s to 100s of years. These activities also led to in-depth discussions amongst the audience on how this knowledge in fact affected or questioned their views on how this landscape change and any human intervention in it should be managed.

*“ The project has clearly changed the thinking of our audience around the value and dynamics of the natural habitats. ”*

### Key Advice

“Work together with the support and academic related staff around you – there is great enthusiasm and skill to draw on! Link up with the audience and potential users of the engagement material earlier to develop the design that works for them right from the outset of the project.”



Interactive Landscape Box presentation

### Outcomes

#### For Iris, Steve and Adam

- Conveyed results of their scientific research effectively to the general public
- Enhanced significantly their

contacts with the users of their research and raised their professional profile

- Helped collect ideas on further developing and improving their resource
- Opened their research to policy support by feeding directly into a series of research projects that address the use of scientific insights into coastal landform change for effective decision making in coastal management

#### For target group

- Was provided with a useful resource for visual representation of changes to the landscape due to climate change
- Learnt about the value of the local natural environment
- Triggered discussions focused around specific scientific, politically sensitive and controversial issues
- Was given potential coastal flood risk management options on how to act in the case of emergency