



# Landowners & Fisheries Group

Tidal surge event at Aldeburgh in 1953 this could happen again at any time...





# Alde & Ore River Walls

- 42kms of Walls protecting 4281 acres of land which would be lost in the event of a breach
- 14kms of walls are below the recommended 3m OD (recommended height to withstand a 1 in 20yr surge event)
- River Wall Angle
- Minor Damage and stitch in time maintenance



# Bringing the flood defences up to standard

- Wall height – firstly the areas of the walls identified by the crest level survey must be brought up to the 3m OD height
- Example of wall at high tide – sea/river level rises above marshland on most high tides



# Bringing the flood defences up to standard

- River Wall Angle – the optimum is about 25 degrees. Less is Best. Turf reinforcement with good grass cover can DOUBLE the time the wall can withstand overtopping (CIRIA 116 design manual).
- Stitch in Time Maintenance
  - There are some areas of the walls that have suffered from gradual degradation of their structure. The River Defence Committee of the Alde & Ore Association are monitoring the walls on a continuous basis.
  - Until the main works to update the walls are able to be done these small works need to be carried out as and when required.
  - Currently a procedure of permission is required to enable works to be carried out. We would seek to see a reduction in bureaucracy to allow works to be carried out more freely.

# Using Geotextiles to improve walls

Bringing the walls up to a modern standard to withstand a major event with overtopping being accepted at certain points

This is a project in Alabama, post Katrina upgrade. Here the levee (river wall) has been re-profiled to a slacker slope and the gang is laying out turf reinforcement which was anchored in place.

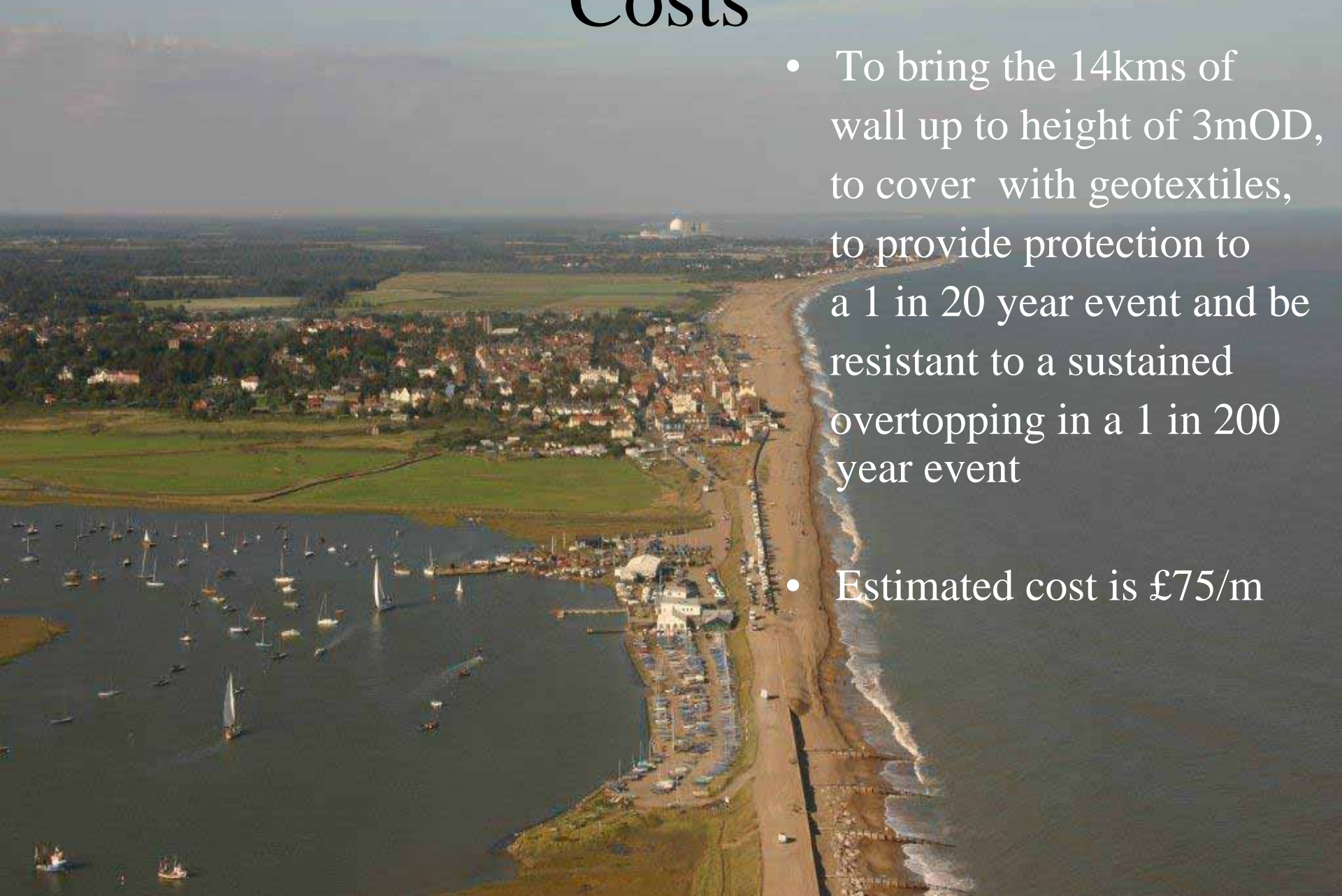
Image 2 shows it 12 months on, fully grassed up with a massive resistance to sustained over topping as a result.






# Costs

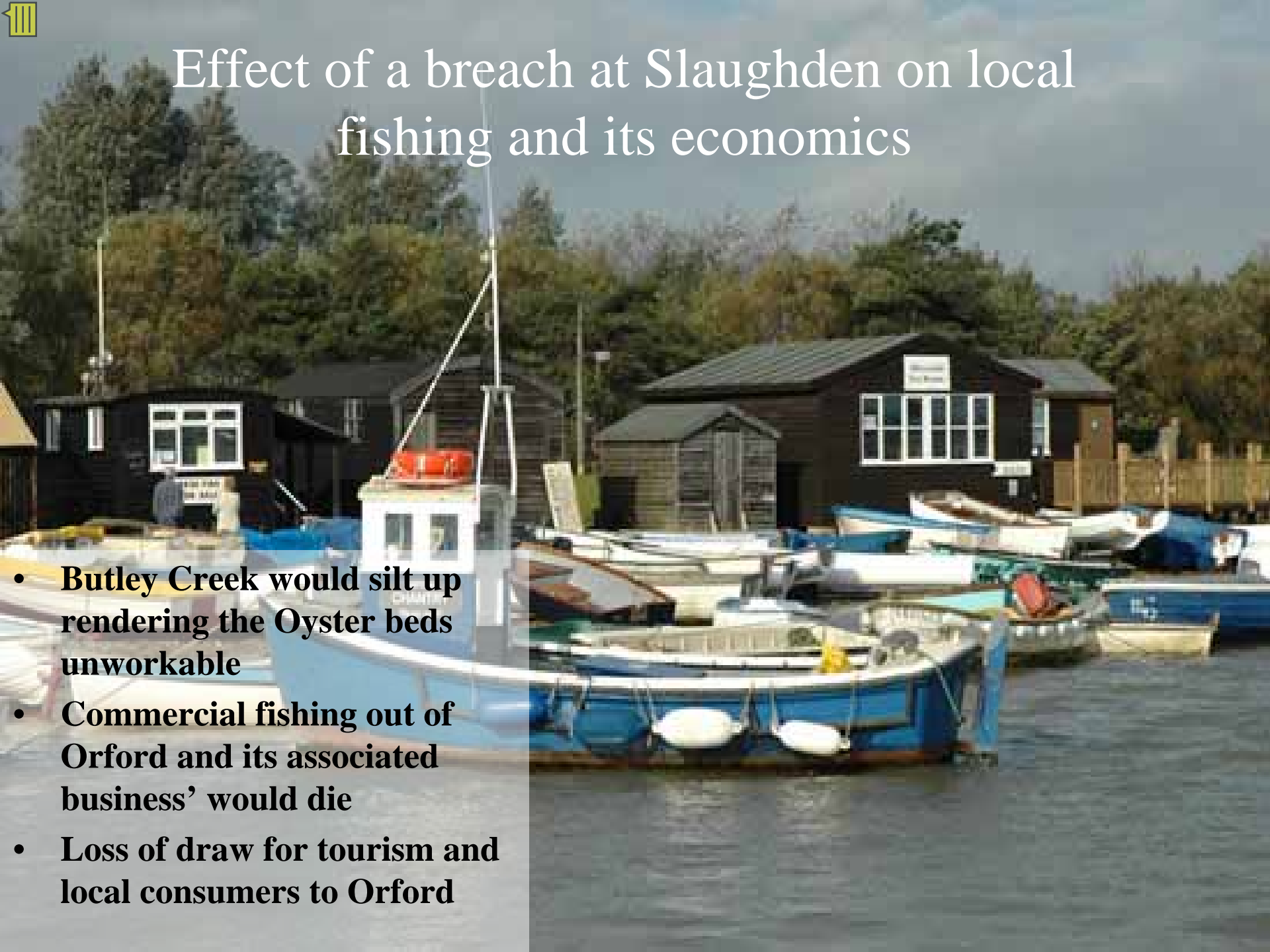
- To bring the 14kms of wall up to height of 3mOD, to cover with geotextiles, to provide protection to a 1 in 20 year event and be resistant to a sustained overtopping in a 1 in 200 year event
- Estimated cost is £75/m





# Effect of a breach at Slaughden on local fishing and its economics

- **Butley Creek would silt up rendering the Oyster beds unworkable**
- **Commercial fishing out of Orford and its associated business' would die**
- **Loss of draw for tourism and local consumers to Orford**





# National and local loss of production in the event of flood defences failing

- Food Supply is intrinsically linked to fresh water supply
- The consequences of Flood defences failing are:-

Area of grass marsh lost	2562 acres	Value £5.2 Million
Area of arable marsh lost	1606 acres	Value £6.5 Million
Area of light land lost	633 acres	Value £3.5 Million
<b>Value of Land Lost</b>		<b>£15.2 Million</b>
- 79% of light land would no longer be able to grow high value vegetables equating to 10,094 acres (15.8 Sq Miles) a reduction in land value of **£25.3 Million**
- Value of total loss of agricultural output £10.9 Million
- Disposable Direct Income lost annually £ 3.3 Million
- Indirect Income lost to the local economy £ 4.0 Million



# Funding



- How do we fund ongoing maintenance of our flood defences?
    - Environment Agency
    - Flood Defence Committee
    - SCDC
    - SCC
    - IDB rates
    - Private fund raising initiatives
    - Sizewell Power Station
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# Other Ongoing Work

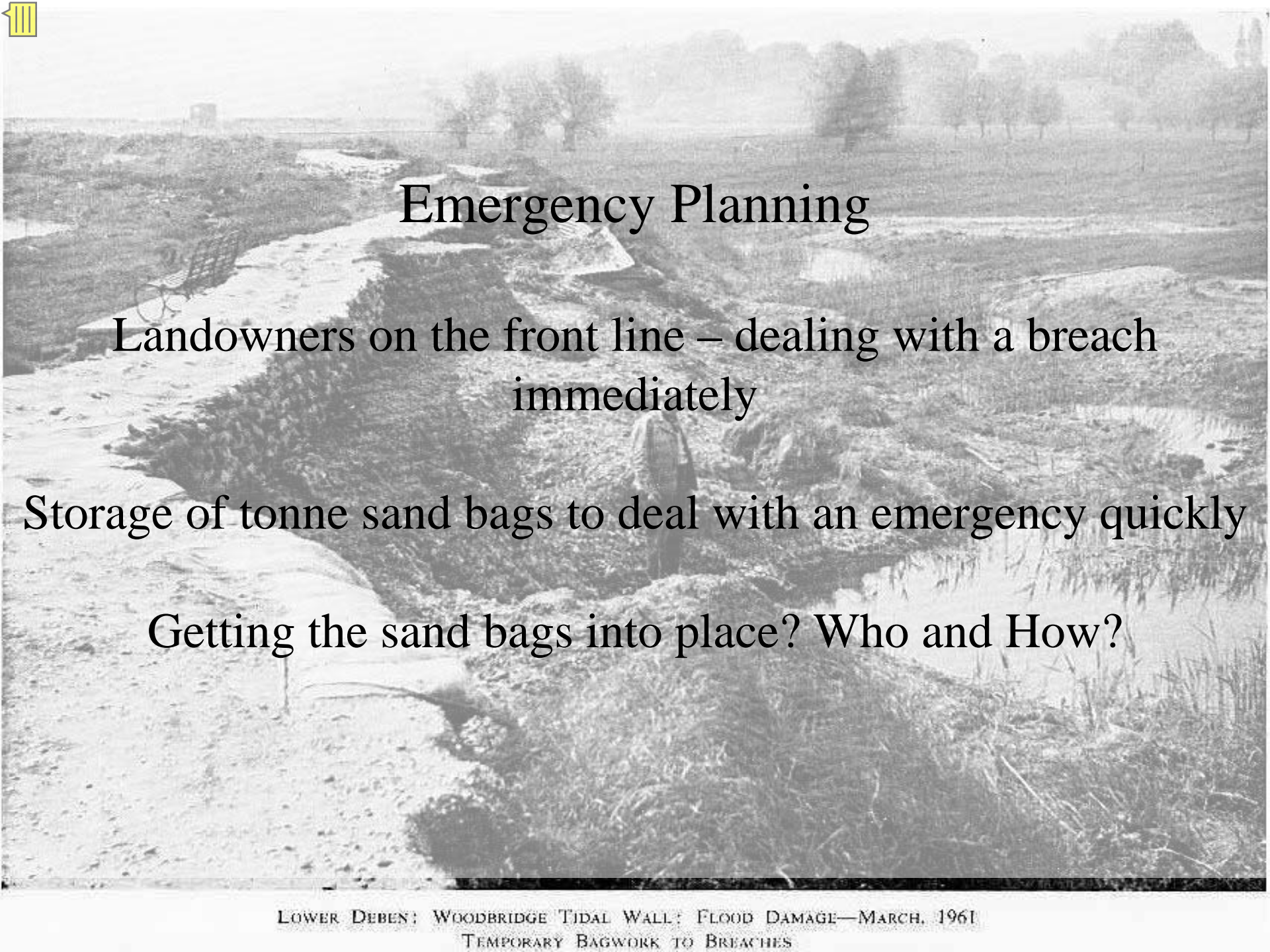
## Wildlife and Habitat Audit of the Hinterland of the Alde and Ore estuaries

- Winter & Summer survey of all birds
- Survey of mammals & reptiles
- Survey showing key habitats & plant species
- Agri-schemes

*Haematopus ostralegus*

Oystercatcher

© Nature Picture Co



# Emergency Planning

Landowners on the front line – dealing with a breach immediately

Storage of tonne sand bags to deal with an emergency quickly

Getting the sand bags into place? Who and How?