

Coastal management – managed retreat

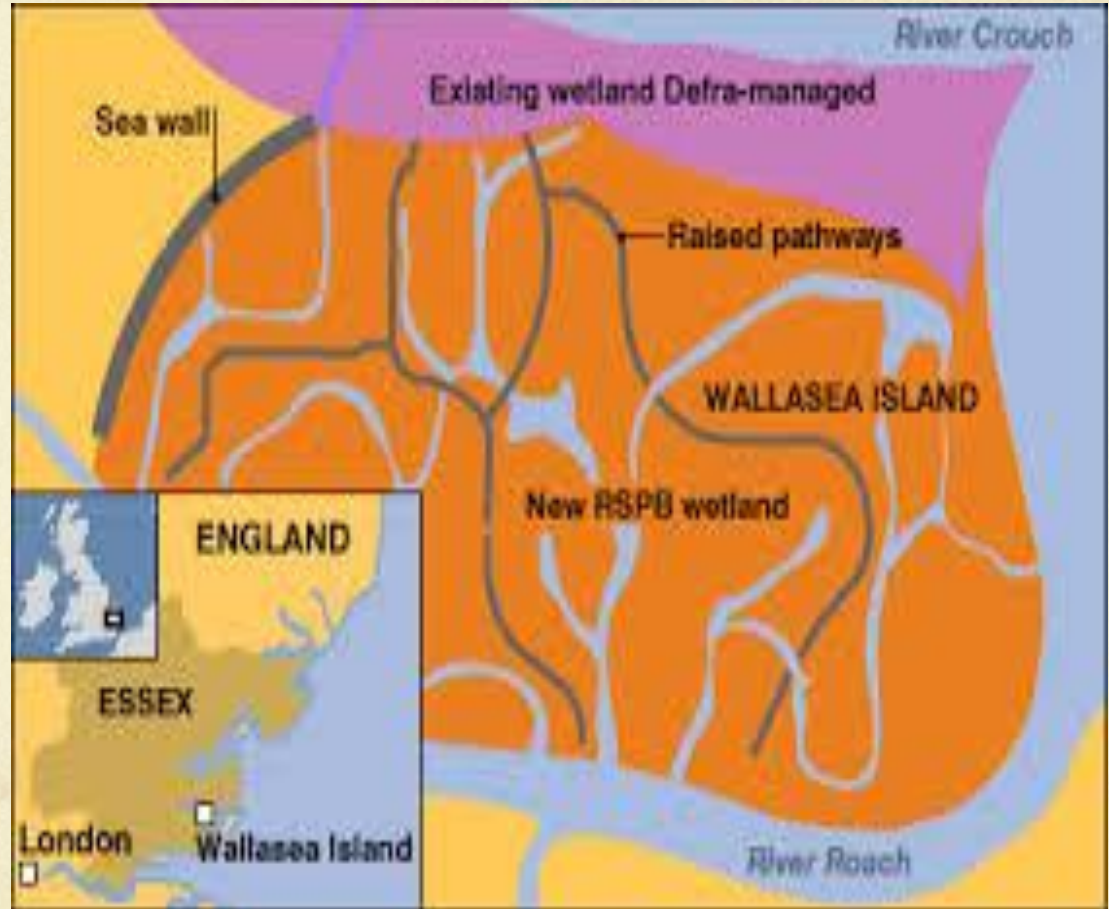


LO: understand the process of managed retreat.

Wallasea Island Case Study

Location

The island of Wallasea is situated on the south east coast of England, in the county of Essex, between the Crouch and Roach estuaries. It was protected beforehand by a sea wall, however this would need to be replaced due to damage.



Background Information

The area used to be a salt marsh as it was prone to flooding and was near the two estuaries so it was likely to flood due to those as well. The land that was protected behind the sea wall; consisted mainly of farm land, used for crop development and for keeping cattle.



What did they do at Wallasea?

As the land behind was not worth very much property wise, though it could have drastically affected employment and occupations for those involved in the agricultural industries, the council employed a method of coastal management which was managed retreat. They therefore had to remove the old sea wall and then decided that they would not build a new one in its place.



What is managed retreat?

Managed retreat is the process by which the sea is left to take its natural course without any human intervention to stop this from occurring. All defences against coastal erosion have to be removed and all the land situated near to the coast has to be accounted for, with the likelihood that it will eventually be flooded and possibly become a salt marsh



Why was Managed retreat seen as a good option?

- The **land behind the sea wall** was **not worth too much** to compensate for and it would cost more to keep protecting the coastal areas.
- It **created 115 acres of salt marshes** that would **benefit the environment** and wildlife in the area immensely
- It **meant that they saved money** that **would have otherwise been** uselessly spent on replacing the current sea defences ie. a **new sea wall** that would have cost around **£1,000,000 per kilometre**. However this method meant that the minimal amount was spent to protect the coast without overtly destroying the habitats.
- The **salt marshes that were created** would **act as a natural barrier to future flooding** and also to more coastal erosion as any destructive waves that enter the area, have to go through the salt marsh before reaching the actual coasts and the cliff faces.



What were the effects of pursuing the course of managed retreat?

- The **farmers** and agriculturalists in the area, would have **lost land, money** from their harvests and cattle, as well as possibly their employment.
- Any **existing wildlife** that was there, **could have been killed or its habitat would have been destroyed** by the coastal erosion.
- If any **buildings** were **in the area** at all, they could have been **destroyed**.
- It could have potentially put **any buildings** in the land **further from the coast, in a dangerous situation** as there are no barriers, other than the salt marshes, to protect these buildings if the rate of coastal erosion continues as it currently is.