

Wallasea Wetland Creation Project

Update

In 2006 Defra completed the construction of the wetland creation project on the North shore of Wallasea Island on the Crouch Estuary in mid-Essex. Construction started in May of 2005 after extensive public consultation to establish the views of local people and their aspirations for the design. Now that the site has been breached and the new habitats created, independent monitoring will investigate its impacts on the local countryside and estuaries. Monitoring will determine the rate at which wildlife colonises the new habitat, and will extend over five years until 2011. Results will be posted on the website at www.abpmer.net/wallasea. The website includes live web cam images updated every two hours.

Following a competitive tender process, the RSPB has been invited to take on the role of site managers at Wallasea Island.

Background

In 1997 the House of Lords, after receiving an opinion from the EU Court of Justice, decreed that an area of marine wetlands, mudflats and saltmarsh of international importance for birds that was left out of a Special Protection Area (SPA) to allow for port development at Sheerness and Felixstowe, should be replaced. The replacement involved "Managed Realignment", a process of creating new counter walls some distance behind an existing sea wall which is then breached, to allow the tide back onto its old flood plain.

A team of specialists from different organisations provided the information to help choose a suitable site. In 2004, after three years of study and consulting with the public and local interest groups, Wallasea was chosen as the most preferred site. (For more information on this visit the Defra web site www.defra.gov.uk and put Wallasea in the search box.).

Why Wallasea Island?

Defra needed a site on an estuary that was big enough to attract the large number of birds that had been using the wetlands that had been destroyed. It also sought a site that, when breached, would not cause damage to the functioning of the surrounding estuary or adversely affect those who use it.

continued overleaf

Defra working with:

Natural England, Environment Agency, Harwich Haven Authority, RSPB, Lancaster Earthmoving, Westminster Dredging, ABPmer, Faber Maunsell, Wallasea Farms and John Hesp Associates.



ENVIRONMENT
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At Wallasea Island the existing sea walls on the north shore were in very poor condition. Without intervention there was a high risk that the walls would fail resulting in flooding the island and causing damage to the estuary. The best way to protect Wallasea from flooding and ensure the creation of new habitat was by a properly designed realignment scheme. Defra's design complied with the Environment Agency's Flood Risk Management Strategy for the Crouch. The site also had comparatively little public or conservation interest and the existing landowner, Wallasea Farms Ltd, was concerned about the poor condition of the sea defences on the North shore, and therefore welcomed and supported the project.

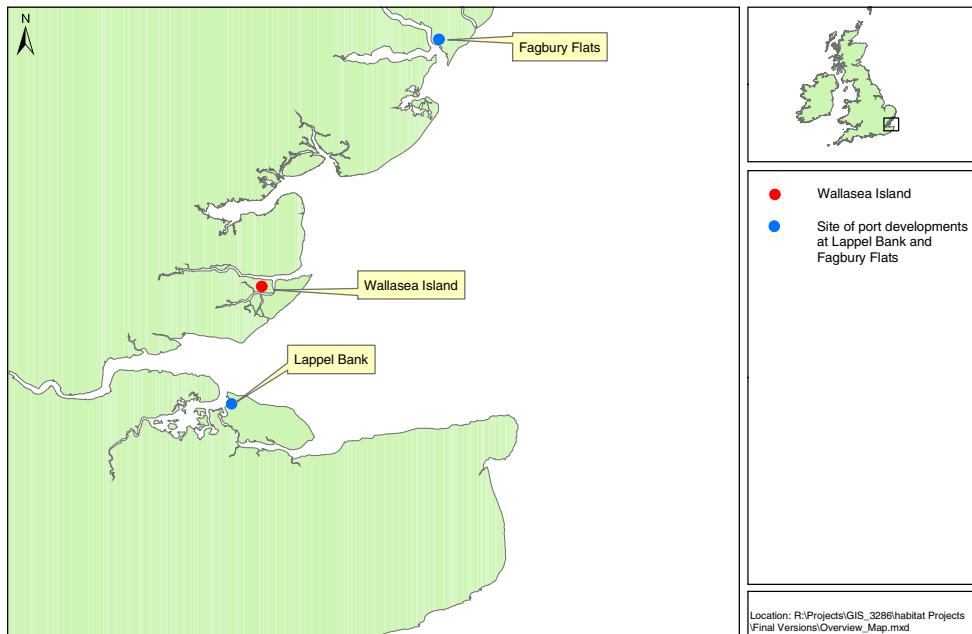


THE WESTERN HALF OF THE SITE. The car park and ramp can be seen half way along.



THE EASTERN HALF OF THE SITE. The web cam mast can be seen at the bottom of the photo.

Where is the site?



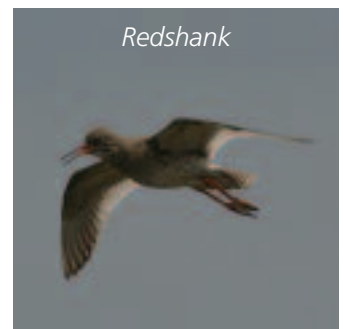
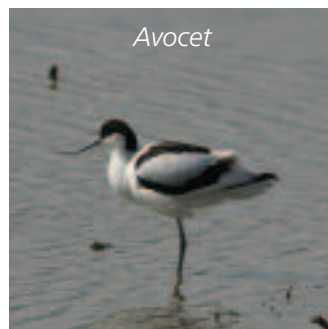
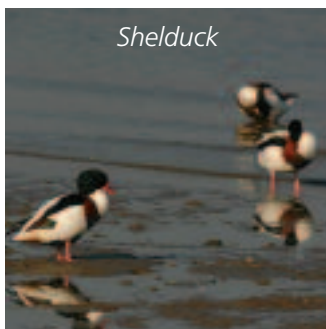
The site lies mid-way between the two areas of mudflat and saltmarsh that had been lost to port development in Suffolk and Kent.

Wallasea Island is only 3km to the village of Canewdon and the new wetland is a further 2km along the only road on the island. A small car park by the wetland has a ramp up onto the new sea wall with a 4km footpath on the top.

What can I see if I visit?

There are six breaches in the old sea wall to allow the tide on and off the area twice a day. Seven islands on the wetland allow birds to nest and roost. It will take until 2009 for saltmarsh plants and insects to colonise the new habitat, but many birds are using the wetland already.

What can I do and not do if I visit?



BIRDS THAT USE THE WETLAND (photographs by Chris Gibson, Natural England)

The main purpose for building the site was to replace a habitat for birds that was destroyed by development. Activities that disturb birds such as shooting or bait digging or power boats are prohibited. The wetland has also been designed with a variety of other functions. Tidal lagoons have been created that are ideal for fish fry; there are new grasslands for reptiles, insects and wild flowers; freshwater areas for water vole and dragonflies and a new footpath on the top of the new sea wall allows for walking alongside the wetland to take in the views. Quiet recreation such as fishing, picnics or having a swim can be enjoyed at the very far North-Eastern corner, where an artificial beach has been built (but it is a long walk!). The ramp by the car park allows for wheelchair access. Please note there are no facilities on-site for visitors, but as you first come onto the Island the Creeksea Ferry Inn is on your left and can be contacted on 01702 258722.

How was it built?

Construction work started in May 2005 and was completed in three phases. Phase one involved moving thousands of tonnes of material on site to build the new sea walls and to create the lagoons. During phase two 700 thousand tonnes of pollutant free mud from Harwich was imported by ship to raise land levels to build the new saltmarsh. The final phase, in 2006, involved landscaping, island and beach construction and the breaching of the old sea wall to allow the



AERIAL PHOTO OF THE OLD SEA WALL
BEING BREACHED



MUD BEING PUMPED ASHORE TO RAISE
LAND LEVELS

water in to form the wetland. During the construction the existing animals that had been using the area had to be captured and moved and new habitats built for them. Prior to all of this work, the landowners, Wallasea Farms Ltd, had already built the new Western sea wall to protect their land from flooding.

What has happened since?

The site has been monitored by independent consultants since 2006 and the monitoring will continue until 2011. Monitoring covers birds, invertebrates, plants, fish and people and includes tidal currents, tidal heights and sea bed movements both inside and outside the site in the adjacent estuaries. For full results and more detail visit the web site www.abpmer.net/wallasea.

The monitoring confirms that the site is behaving in the way the computer models used in the design process had predicted, with very little change in the Crouch estuary. Current speeds through the breaches are around 1m per second (2mph), and mud is accreting inside the site. Most importantly, wildlife is already using the new habitat. In the winter of 2006 as many as 4300 birds from 38 different species have been counted on the new wetland in a single day.



MONITORING BY BOAT



SURVEYING FISH POPULATIONS WITHIN THE LAGOON AREAS Source: Environment Agency

Millions of fish fry are using the saltwater lagoons including bass, flounder and herring. Otter footprints have been seen at two locations with the occasional seal fishing at high tide. The largest numbers of birds are Brent Goose, Shelduck, Teal, Mallard, Ringed and Golden Plover, Lapwing, Dunlin and Redshank with rarer species such as Little Stint, Ruff, Black Tailed Godwit, Kingfisher and Slavonian Grebe.



MONITORING GROUND LEVELS ON THE RECHARGE AREA – PART OF A DETAILED 5-YEAR ENVIRONMENTAL MONITORING PROGRAMME

Who manages the wetland?

The future management of the site was put to a competitive tender and won by the RSPB. The management will continue until 2011 after which time it is hoped that the site will "look after itself". Management includes making sure that the monitoring results are available to all, preventing disturbance to wildlife, vegetation cutting for bird nesting, freshwater drainage, picking up man-made rubbish and health and safety of visitors. In total there are over 4km of new footpaths, 92 hectares of mudflats and lagoons, 23 hectares of saltmarsh, 6 hectares of brackish marsh, 6 hectares of grasslands, 7 islands and 6 breaches to look after.

Chris Tyas, Essex Area Manager of the RSPB, who has over 25 years of practical experience of managing such sites, will be the contact and can be reached by phone on 01621 862621, by post at 1 Old Hall Lane, Tolleshunt D'Arcy, Maldon, Essex CM9 8TP, or by email at chris.tyas@rspb.org.uk.



CHRIS TYAS

For most queries and more information visit the web site at www.abpmer.net/wallasea. Chris would welcome your views, opinions and comments on the site.

John Hesp Associates Wallasea Farms Ltd



Harwich Haven
Authority



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for uncoated paper and 75% recycled fibre for coated paper.

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