

Sandwich Town Tidal Defences

Sandwich, Kent

Environment Agency

BIG Challenge 2015 submission category: Large scale permanent

Project overview

Sandwich Tidal Defence scheme is a £21.7 million flood defence project improving over 14km of estuary tidal defences embankments stretching over both urban and rural land uses.

What were the biodiversity conditions on site, prior to the enhancement?

The previous use of the area that was improved was intensive arable farmland.

Were there any specific conditions that led to you carrying out this work?

No conditions requiring habitat creation, a planning condition required a habitat management plan to be in place.

What were the biodiversity measures taken?

14.5ha of new wetland habitat have been created at Sandwich as the result of winning clay material for the new flood embankments. The clay 'win' areas were designed to maximise habitat for an assemblage of wading birds, which will benefit the adjacent SPA designations.



Photo: Win Zone 1, new bird islands, year 1

The new ponds incorporate bird islands, used for breeding and roosting waders. A new area of wet grassland has been created for wader feeding and planted reed bed areas used for reed warbler and water vole habitat.

The mosaic of habitat types will be managed for 5 years to make sure the habitats establish as expected.

Consultation with Natural England, the Wildlife Trust and the Sandwich bird observatory were key to make sure we got the construction elements right, even down to the types of

seed mix we planted on the embankments to maximise invertebrate biomass.

How would you best describe the project?

An enhancement.

Further information

The new habitats were built using the same plant used to build the adjacent flood defences.

Site supervision made sure that the new islands and land forms had the correct variation in them to maximise the biodiversity value.

After the 1 year of works the scheme was proven to be working well. So well in fact we had the first ever recorded successful breeding of Avocets in East Kent. It is hoped that this success will be improved on in 2015 as a further new pond and wet grassland habitat is established.

Lessons learnt, the scheme didn't have the benefit of baseline water level information, habitats could have been better designed with this information to hand, luckily the available water resources on site have proved to be as predicted.

What was your personal motivation for carrying out the enhancement?

To provide an example of integrating low cost environmental enhancements into an infrastructure project to maximise long term environmental outcome.



Photo: New ditch habitats, planted with marginal vegetation to provide cover for water voles



Photo: First breeding Avocets in East Kent, on newly created wetland