

Naveney, Lower Yare and Lothingland Drainage Board

Benacre & Kessingland Flood Management Project

March 2023

About the project

The Benacre & Kessingland flood risk management project was instigated to explore ways to create new flood defences to protect the A12 which provides connections to the coastal towns of Great Yarmouth & Lowestoft from Ipswich and London, and to provide a sustainable flood risk solution for the people and businesses of Kessingland village and the Lothingland Valley.

With coastal flood risks and the increasing challenges of coastal erosion on our dynamic coast, the existing Environment Agency Pumping Station is at serious risk of inundation, threatening homes, businesses, farmland, and key infrastructure. The project will develop nature-based solutions, utilising freshwater capture and storage for habitat enhancement and agriculture, whilst ensuring that coastal access for walkers and coastal users is maintained.

The aim of the project is to provide a solution to significantly reduce all forms of flooding (surface water, river and tidal) by constructing new flood defence embankments and pumping stations set further up the Lothingland valley to mitigate the potential for flooding from:

- structural collapse of the outfall defences at Benacre **Pumping Station**
- erosion outflanking the pumping station to the north
- erosion outflanking the pumping station to the south
- wave overtopping from failure of the barrier beach to the south

The Outline Business Case for the Benacre and Kessingland flood risk management project was finally approved by the Environment Agency in December 2021, with funding secured from Central Government, Suffolk County Council and the Regional Flood and Coast Committee.

Construction of the scheme will involve several new assets as detailed below:

- Construction of a new embankment across the Lothingland Valley to manage tidal flooding of the A12, incorporating a new pumping station to manage river levels so reducing flood risk to property upstream
- Construction of a new embankment just to the south of Kessingland around the Parkdean Holiday Park, including construction of a small pumping station to manage surface water flooding
- Decommissioning and demolition of the existing **Environment Agency pumping station**



Scheme benefits

- 35 residential properties and 46 commercial properties will be at reduced flood risk
- Creation of approx. 82ha of new intertidal habitat
- 52km of river enhanced
- Flood protection to the A12
- Valuable freshwater resources protected from inundation by sea water
- 600ha of farmland in the floodplain will be better protected from flood risk
- Valuable fresh water abstraction within the valley protected from inundation from sea water

CONTACT

FOLLOW US



@WaterManagementAlliance

Colin Beaumont, Project Engineer, Water Management Alliance



What have we been doing?

Once approval was received, consultants Stantec were appointed to progress the detailed design, which is now well underway and due for completion early summer 2023.

Below is the current design drawing showing the location of the new defences. New embankments (shown in green) will be further inland across the Lothingland Valley and at the southern end of Kessingland, around the Parkdean Holiday Park, including their required new pumping stations. The area between the existing Benacre Pumping Station and the new embankment across the Lothingland Valley will become an intertidal habitat. The proposed new alignment of the River Hundred channel is also shown (dark blue).

Contractors Balfour Beatty have been appointed to undertake the Early Contractor Involvement, this includes;



initial discussions with suppliers of suitable material for building the embankments, suppliers of pumps for the new pumping stations, commencing investigation of local road improvements and passing bays, analysing the structure of the temporary haul routes across the valley following recent issue of the ground investigation report (GI) by Stantec.

The Natural England assent is underway.

Water vole mitigation commenced during February, which is a significant step towards the essential Natural England assent. This includes coppicing works and ditch works throughout the valley inland of the new Lothingland Embankment.

The Benacre Estates have appointed ABP Mer to undertake coastal modelling to provide advice on the intertidal habitat creation and breach design.

An application to UK Power Networks has been submitted for a new power supply and the diversion of the current overhead supply, as it currently runs across what will become the Intertidal area.

Further licences and consents required before construction work can begin, are well underway.

Current programme key dates

Full Design completion: July 2023 Enabling works (Habitat Mitigation): Commenced February 2023 Construction Start: Late Summer / Autumn 2023 Construction Completion: Autumn 2026

Upcoming work

Suffolk

County Council

Once all licences and consents are in we will instruct Balfour Beatty to start work on road improvements and passing bays from the A12 to site, a site compound set up and haulage roads across the valley for construction traffic.

BENACRE

ESTATE







