



The Moors at Arne, Coastal Management Project



Frequently asked questions

October 2017

What are we doing?

To enable the Environment Agency and partners to continue to protect properties in the Poole Harbour area from increased flood risk due to climate change, the Environment Agency will deliver this project to mitigate for losses associated with all flood risk management activities in the Poole Harbour area. The partners are working together to explore how The Moors at Arne can be converted to inter-tidal habitat. Important freshwater habitat adjacent to Arne Road will be better protected as part of the scheme.

The Environment Agency is working with the RSPB and Natural England to explore how to adapt approximately 150ha of The Moors at Arne into a diverse wetland habitat.

With sea level rise, important habitat for wildlife along the coast will be lost over the next 30 years. This "coastal squeeze", where rising waters press against fixed sea defences, means that we need to create new places for coastal wildlife if it is to be guaranteed a safe home.

The partnership of the three organisations will aim to maximise the benefits for local people, recreational users and wildlife.

This project offers potential to make this site more resilient for sea level rise in the future and to manage the changes as naturally as possible.

This will create a valuable protected place for birds and other wetland species to rest and feed. It is likely to include building a new tidal embankment closer to the Arne Road and creating gaps in the existing wall to allow the land to become tidal. Lagoon areas may also be constructed within the site to create a variety of habitats that will support numerous animal and plant species.

What affect will this have on the existing drainage at Ridge?

The present flood risk with the existing tide bank configuration is known and published as the flood maps and surface water maps by the Environment Agency the GOV.UK website. Any proposal developed by the project will have to demonstrate no adverse impact through a combination of its basic design and / or parallel control measures before it can be given approval. The necessary surveys, modelling and flood risk assessment are commencing, but no conclusions have been reached in advance and we are happy to share the process and the findings as they emerge.

We intend to model the current local catchment thoroughly in order to design a scheme that delivers no adverse flood risk impacts from the project. Further to this we have given undertakings to assess the surface water, drainage and groundwater phenomena currently affecting the Ridge residents in the hope that working together with other risk management authorities we can offer some element of improvement based on a shared understanding.



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What affect will this have on the River Frome flooding?

The Frome will continue to respond upstream of Ridge Wharf in exactly the same way as it does at present. As the tidal inlets to the project site are expected to be adjacent to the open harbour we do not believe there will be any measurable impacts on the way the River Frome behaves, but we will carry out modelling in order to be able to reassure interested parties.

The River Frome is subject to a tidal influence as far as the A351 road near Stoborough. There are raised banks adjacent to the river for the majority of this length down to Poole Harbour. These tidal banks can be overtopped or outflanked by the river in flood in response to heavy or prolonged rainfall in its catchment area. They can also be overtopped by the tide coming in and combining with river flows. On occasions the flood water which has gone over the banks has to wait for river/tidal levels to drop before they can exit via a series of tidal sluices.

Will it affect the sewage pumping station on Barnhill road?

This pumping station at the lower end of Barnhill Road, operated by Wessex Water sits outside of the mapped floodplain for the River Frome. Any existing pressures on the sewer network from local surface water and groundwater would not be made worse by the Moors at Arne project and we would provide modelling and analysis to demonstrate no adverse impacts before proceeding with the works.

Will there be public access to the site?

The land is owned by the RSPB. They are currently considering public access but have no firm plans for the site as there is a need to see how the scheme develops. Any access would be managed sympathetically with consideration given to the public and local residents.

Will it smell?

We will take into consideration in the development of the project, the concern among the community that there should not be any increase in odour as a result of developing the site. On similar sites elsewhere existing vegetation has been kept short and hedgerows and trees removed prior to breaching. This reduces the short term risks of odour from rotting vegetation. The site is already located next to the estuary and the anoxic odour associated with sediment is generally only emitted when disturbed. Significant disturbance of the sediment is unlikely as we are not planning widespread access within the new intertidal area.

What will happen to the existing conservation interests?

There is a great opportunity for wildlife as a result of this project. It will create new habitats, enhancing the area for the plants and animals that live there as well as supporting species that are declining elsewhere.



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As part of developing the project, we will carry out surveys and assessments of the impact of inundation of the marshes with salt water and seek to mitigate within the existing boundary of the site. We are proposing a new ditch network behind the new embankments that will support the existing population of protected species, for example, water voles that prefer freshwater habitats. The existing Special Protection Area (SPA) will be retained and enhanced by the provision of lagoons which will support wading birds.

What will be the impact on the existing agricultural land?

Overall the impact on existing agricultural use is neutral. The land is currently poor grade agricultural land (grade 4 and 5) and is grazed only to meet the nature conservation objectives of the site paid for under agri-environment. The project would mean significant changes to the floodplain land that would also require changes to the way it is managed. Land will be wetter and more suitable for low input grazing, perhaps with traditional breeds. We anticipate that the land would still be eligible for agri-environment scheme agreements.

Will there be an increase in mosquitoes in the area?

Careful design and management of intertidal habitat sites can be done so that the risks are not increased. We are still in the early stages of the project but advice from Public Health England on other similar sites indicates that this sort of habitat creation can be done without increased risk.

Will it affect Navigation along the River Frome?

We will be using computer models of water flow to assess the impact of the project on many things, including its effect on navigation. The modelling will look at different numbers and locations for the breaches in the tide banks to check their impact on navigation and this will help us choose the final option.

For an option to be approved it will be subject to checks required by European Legislation to make sure that it does not unduly impact the River Frome channel and adjacent areas of Poole Harbour. This considers public and business amenity and areas designated for their ecological value.

Will the river silt up?

The modelling work, described above, will include an assessment of changes to water levels and flows near the site and in the River Frome channel. This assessment will be used to understand what changes, if any, are likely. The construction works are likely to result in a very short term increase in suspended sediment, resulting from the disturbance of material. However, we anticipate that some areas of the new intertidal area may attract sediment, as the hydrodynamics of the harbour work to bring the relatively low lying intertidal area up to a level more consistent with the existing foreshore. N.B. much of the project area is currently lower than the mudflats on the seaward side of the existing tide banks, generally by between one quarter and half a metre.



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October 2017

How do we know our modelling work will be accurate?

Modelling like this has been used on numerous projects around the country. It has successfully shown the impact of the scheme and predicted the outcomes. It is common for monitoring to be put in place after the works are completed to confirm that the study area has changed as predicted. Our consultants, CH2M and ABPmer have worked separately and together on at least 20 different projects with similar objectives to this project.

The software being used is internationally recognised, specialist software that is tested, maintained and subject to independent checks. CH2M and ABPmer work to internationally recognised management systems for quality. The data used in the model build is validated and checked throughout the process, including using local level data and past flooding records. The Environment Agency also use internal specialists to check on the modelling work to make sure that the model has been built correctly and that the levels of accuracy achieved are appropriate.

Will it affect my house insurance premiums?

The proposal should have no impact on insurance cover as the present risk from rivers and the sea is outside of the developed area of Ridge, and we are seeking to sustain that position. However it is our practice in situations requiring clarification of flood risk status of a particular location, influenced by changes in our mapping of flood risk or the infrastructure in place, to provide a letter of evidence for householders to share with their insurance company, if requested.

Will there be an increase in traffic as a result of the project?

The Moors are part of the RSPB Arne Nature Reserve. The RSPB are reviewing their visitor management strategy and are exploring ways of encouraging more sustainable access to the peninsula e.g. by foot, bike and public transport.

Until we understand how this scheme develops and what the offer might be it is not possible to predict if the project will result in increased traffic to the reserve, however we will take the issue into consideration in any site planning.

Ground investigations will begin on site in the next few weeks, you may notice some fenced off areas and people with surveying equipment. If you have any questions, don't hesitate to get in touch: By phone: 07748 622518 or email: TheMoorsAtArne@environment-agency.gov.uk



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How are you engaging with stakeholders and local communities?

We are committed to sharing information and listening to feedback throughout this project. We had our first public exhibition on 3rd October 2017 and we will continue throughout the project to share our proposals with the local community and other agencies and organisations in order to seek feedback.

The project has a webpage: <https://www.gov.uk/government/publications/the-moors-at-arne-reducing-flood-risk-and-creating-habitat> where people can access the latest information on the project, and a dedicated email address TheMoorsatArne@environment-agency.gov.uk, please contact us at any time with questions, queries and suggestions.

In due course, we will be applying for planning permission for the project which will have its own statutory consultation procedure.

