

April 2023

Embankment Road Coastal Defence Scheme Frequently Asked Questions

What is the project area?

The project area covers 1.7km along Embankment Road, from Bembridge Sailing Club in the east to St Helens sluice gates in the west.

The Environment Agency is also working on schemes in Shanklin, Ventnor, Cowes and East Cowes, and between Sandown and Yaverland.

Embankment Road is connected with Sandown and Yaverland in terms of flood risk, as seawater would be able to flow between the two locations via Brading Marshes and the Eastern Yar valley if there were no defences in place. The risk of this happening will increase with sea level rise as a result of climate change. The Environment Agency will therefore be taking a coordinated approach to ensure coastal flood risk is managed on a catchment scale.

Why do we need the scheme?

The scheme aims to reduce the risks of flooding from high tides, waves and winter storms to the area on the landward side of Embankment Road (Brading Marshes). This low-lying area is home to particular habitats and species that are considered to be of international importance and are therefore designated as the following:

- Solent & Southampton Water Special Protection Area (SPA)
- Solent & Southampton Water Ramsar site
- Solent & Isle of Wight Lagoons Special Area of Conservation (SAC)
- Brading Marshes to St Helen's Ledges Site of Special Scientific Interest (SSSI)

Embankment Road forms a barrier between the sea and the protected habitats in Brading Marshes. The seaward face of the embankment and the margins of Bembridge Harbour are strengthened by some localised protection works such as concrete and masonry seawalls, and sections of timber and rock. As part of our initial investigation work, the Environment Agency have assessed the condition of these structures. Some areas are in good condition and will provide sufficient protection for many years to come. Other areas are in very poor condition and require improvement. If the Environment Agency do nothing, these structures will continue to deteriorate and there is a risk that the embankment could breach allowing sea water to flow into Brading Marshes. This would damage the designated sites listed above. One of the objectives of the Isle of Wight Shoreline Management Plan 2 is to maintain the habitat within Brading Marshes, in accordance with the Habitat Regulations (European designated freshwater habitat) and part of the work will be to consider how to secure a sustainable future for Brading Marshes beyond any initial refurbishment works that may be required.

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What is the impact of climate change?

Although a limited amount of seawater can be tolerated by the habitats and species within the Brading Marshes, predicted sea level rise will not only cause the amount of seawater spilling over Embankment Road to increase, but also the frequency with which this overtopping will occur. The embankment is more likely to fail under this scenario, which would impact upon the road network, utilities, and would likely cause irreversible damage to the protected habitats in Brading Marshes. Without any action, the Environment Agency estimates that the embankment would fail within the next 30 years. As much of the land behind the embankment is low lying, this would also result in an increase in flood risk to properties. Within the next 100 years, sea flooding from Embankment Road could put a significant number of properties at risk in Sandown, as increasing volumes of sea water would flow through the low lying Eastern Yar valley.

More information on climate change can be found [here](#).

Who is responsible for the existing flood risk management infrastructure?

The Environment Agency own, maintain and operate the Bembridge sluices at the western end of the project area. The Brading Marshes Water Level Management Plan (WLMP) was developed by the Environment Agency, in conjunction with Natural England and the Royal Society for the Protection of Birds (RSPB), and recommends particular water levels are maintained within the Marshes that balance the needs of agriculture, flood risk management and environmental conservation. The Environment Agency operate the sluices to control water levels in accordance with the WLMP.

The existing structures along the seaward face of Embankment Road, which help to reduce the risk of erosion, are all in private ownership with a number of different landowners along the 1.7km project area.

Why is the Environment Agency progressing a scheme here, what stage is it at and how will it be funded?

The Environment Agency don't own or maintain Embankment Road, and it does not have a legal obligation to undertake any works to reduce the risk of flooding or coastal erosion. The Environment Agency do, however, have a duty to further the conservation and enhancement of SSSIs, which could be damaged by flooding from the sea if we do nothing.

The Environment Agency have therefore secured an allocation of central government Flood and Coastal Erosion Risk Management Grant in Aid funding, which it manages on behalf of Defra. The Environment Agency must further demonstrate that the project is value for money before it can spend the funds that have been allocated to it. The Environment Agency do this by submitting a series of business cases, in line with the HM Treasury five case model, to our internal assurance group for approval. To date, the Environment Agency have submitted a high level 'Strategic Outline Case' which makes the case for change and sets out possible ways forward. The Environment Agency received approval of its 'Strategic Outline Case' in December 2021 and will now begin the next stage of project planning, which will result in the production of an 'Outline Business Case' commencing spring 2022..

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The availability of government Grant in Aid funding is not guaranteed and is dependent on continued justification of costs and the prioritisation of available funds across a national programme of projects. Funding from other organisations or individuals to supplement government funding could be required. It is also possible that no scheme goes ahead if the costs cannot be justified.

Are you going to be working with others on this project?

The Environment Agency will be working closely with partners, stakeholders and the wider community throughout the delivery of the scheme.

The Environment Agency have formed a team made up of industry experts from the Environment Agency, Isle of Wight Council, JBA Consulting and VolkerStevin.

The views of the local community will be key in ensuring the successful delivery of this project. If you would like to contact the delivery team with any specific question not covered here or would just like to be kept informed throughout the scheme's development, please [email us](#).

What will the environmental impact of the scheme be?

The Environment Agency is committed to protecting and enhancing the environment through all it does. The Environment Agency's ambition for how it plans to create better places for people, wildlife and the environment is set out in our 5 year plan: EA2025 creating a better place, found [here](#).

The Environment Agency's target for the Isle of Wight priority schemes is to achieve 20% biodiversity net gain. This means that development must leave biodiversity in a measurably better state than before. 20% is a higher standard than usual and reflects the Island's biosphere designation and the growing desire to deliver schemes that enhance the environment as well as performing a coastal defence role.

This scheme to preserve the embankment along Embankment Road is also designed to protect freshwater environmental habitats, as outlined above in these FAQs.

What are you building? What will it look like?

The options for repairing the embankment are still being developed. The Environment Agency do not yet know for certain what the works will look like, or the type of machinery required. Once further information is known, the Environment Agency will consult with residents, businesses and other key organisations, such as infrastructure providers, who may be affected to understand concerns and share what plans will be put in place to minimise disruption.

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How can local businesses get involved?

The Environment Agency's procurement mission statement is to achieve best value, best practice and the most sustainable outcome. The government has set a target of 33% of central government buying to go to small businesses by 2022. The Environment Agency is committed to supporting this target and look to ensure a fair and equal opportunity for all to bid for its contracts. The Environment Agency also encourages its larger suppliers to consider small and medium sized enterprises (SMEs) in their sub-contracting opportunities.

Under our Next Generation Supplier Arrangement for the delivery of Capital schemes, the Environment Agency have appointed Jeremy Benn Associates Ltd (JBA) and VolkerStevin Ltd (VS) to help deliver its flood and coastal defence programme in the South East of England. VS will be the appointed contractor until the end of the current framework in 2027, when the arrangement will be reviewed. Currently, the Environment Agency is still developing options and don't yet know what any construction works will entail. Once options progress, the Environment Agency will provide more detail on how SMEs can get involved.

How can I find out more?

Throughout this project there will be numerous opportunities for you to feed into its development. The Environment Agency will continue to update you and provide ongoing opportunities to seek your input and opinions.

The Environment Agency would encourage all interested parties in the area and neighbouring communities to sign up to updates by registering your interest at IOW_FDschemes@environment-agency.gov.uk. The Environment Agency would also encourage you to support any family members, friends or neighbours who cannot access online information, by sharing our updates with them.