
1 Summary

In November 2019 Horsey Island became Devon Wildlife Trust's 57th nature reserve.

Located in the heart of the North Devon UNESCO Biosphere Reserve, Horsey Island is a stunning area of intertidal wetland habitats extending to over 80 hectares. Horsey borders the tidal reaches of the River Caen which flows through Braunton and out into the Taw Estuary.

Devon Wildlife Trust purchased Horsey Island with a significant breach in the outer banks which occurred in 2017. The whole reserve is tidal and is flooded twice a day, every day.

Since Horsey has been reconnected to daily tides, wildlife has flourished, and rare salt marsh habitats have regenerated. Saltmarshes and shifting sands and muds support thousands of wintering waterbirds which have few places left on the estuary which aren't regularly disturbed.

DWT has closely monitored the eroding inner faces of the outer banks as their condition has declined rapidly during 2020.

DWT began a lengthy process of securing permits and permissions to repair a 65-metre section of the outer bank bordering the Taw estuary in March, and eventually secured planning permission on the 7th October. However, during the seven months it took to secure the permissions, the length of banks requiring repair has doubled with far longer sections at risk of further breaches.

We have taken professional advice on the methods available to repair the eroding sections. Due to the rate of erosion of banks which are not designed to withstand sea water on both sides, the cost of repair is estimated to exceed £2.5 million. This almost certainly outweighs the benefits that would result from such repair and is far beyond the means of the funding available.

DWT has therefore needed to make the difficult choice not to intervene to repair banks at very high cost, which we are informed is likely to only provide a temporary solution. The result of taking minimal intervention will be that further breaches in the outer banks are likely and cannot be ruled out for this winter 2020/21. We will actively explore using other techniques such as fixing green material to the banks to control and slow rates of erosion.

DWT is receiving expert advice on the likely implications of a further breach in the outer bank and how to minimise any associated negative impacts.

2 Position Statement

2.1 Horsey Island

When DWT purchased Horsey Island in December 2019, we took on a dynamic site with amazing wildlife opportunities, but also a range of challenges. The banks were already breached and no longer provided any defence against the tide.

We have closely monitored the state of repair of the outer banks and in March 2020, DWT allocated £20,000 to repair a 65m section of bank which was showing signs of serious damage. However, following inspection by coastal defence engineers, we have been informed repairs are now required over the majority of the outer banks, and the estimated cost has increased to at least £2.5 million. Costs are so high because of the poor and rapidly deteriorating condition of both the inner and outer faces of the outer banks.

We have taken professional advice from coastal flood risk engineers and concluded that there are currently no sustainable or affordable solutions to prevent further breaches to the outer banks which were not constructed to withstand sea water on both sides. Any repair costs at this stage will be prohibitively expensive and unlikely to withstand future impacts of climate change with rising sea levels and more frequent storms.

2.2 Implications of Bank Breaches

It is highly likely that a further breach of the outer bank will occur this winter. It is very difficult to predict the exact location where this will occur; the banks bordering the Taw are the most vulnerable.

If further breaches occur there will be no increased risk of flooding to Braunton or overtopping of the Great Bank.

However, a channel may form as water flows into the reserve from the Taw Estuary which may cause difficulties for public accessing the shoreline in that area.

2.3 Our Position

DWT has carefully considered the costs and benefits associated with the repair of the outer banks of Horseley Island. The cost of repair is prohibitive and almost certainly outweighs benefits that would accrue.

DWT is unable to justify investing over £2.5 million of limited charitable funds repairing banks at Horseley Island. The repairs would not reinstate the sea defence and would be unlikely to survive beyond the medium term.

We have explored various options for funding the complete restoration of the outer banks including repairing the existing breach. Statutory bodies have made it clear that they have no interest in repairing the outer banks as they are not an official sea defence. Other possibilities have been discounted following the assessment of the state of the banks and the cost of repair. There are also considerable difficulties in securing the quantity of materials needed to undertake the works.

We are therefore pausing our plans to reinforce a short section of the outer banks and seeking further advice on the most appropriate future course of action.

As a result of our changing climate, sea levels are predicted to rise more than 50cm in the next century and storm events will become ever more frequent. We do not believe we should invest in a cycle of construct, fail and reconstruct.

Reinforcing banks acts *against* natural processes and is likely to have negative biodiversity impacts in the long term. Future breaches will create a wilder site, less prone to human disturbance, and be a haven for wintering water birds and potentially nesting waders.

We understand how our decision will cause concern from the local community and landowners who know, love and work in this landscape. We will work closely with everyone to find long term solutions which enable people and wildlife to thrive in this changing landscape.

We recognise that some areas of the site with public access have huge emotional resonance for community members, and it is hard to put a cost on memories and lifelong associations. DWT

provides a wide range of opportunities to help people access and enjoy wildlife rich places, but only if doing so does not compromise our mission, or our good stewardship of charitable resources.

DWT takes our role as a responsible landowner very seriously and understand there will be considerable pressure for the charity to repair the banks. However, this needs to be balanced against our charitable purpose and in recognition that any other landowner would be faced with the same tough choices and likely to reach the same difficult conclusion.

We wish to work with neighbouring landowners and farmers over the coming years to prepare for and adapt to rising sea levels. Unplanned breaches of sea defences pose the greatest risk to livelihoods. There are a range of options available which work with the grain of nature, take pressure off sea defences, and allow tides to ebb and flow in carefully controlled ways.

3. Our Approach

We will:

- Work closely with all local landowners, communities and statutory bodies in a spirit of open and honest communication and be available to answer questions or address concerns which will arise;
- Continue to secure best available evidence and expert opinion about how to maximize benefits for people and wildlife at Horseley and minimise negative impacts which may occur;
- DWT will continue to closely monitor the erosion of the banks and seek expert opinion regarding the future impacts of further breaches.
- Work alongside owners of assets in the vicinity which feel they may be affected by our decision;
- Work with partners to raise awareness of alternative approaches to coastal management which work with the grain of nature and provide long term adaptations/solutions to sea level rise;
- Work with and support natural processes but do so over time with support from local communities.