Awre

Existing defences and probability of flooding

The embankment on Awre peninsula provides a standard of protection against tidal inundation of around a 1 in 5 to 1 in 10 year chance in any year to the land behind.

Even with some maintenance more frequent overtopping can be expected, reducing the effectiveness of the defence within 20 years. Significant storm events could shorten the life of the defence.

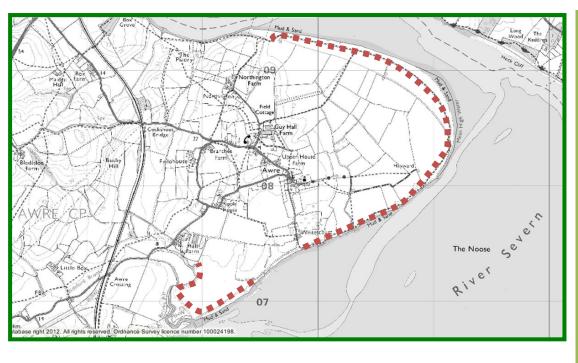
The defence adjacent to Brims Pill provides a similar standard of protection against tidal flooding but is set back from the estuary on higher ground so it is likely to have a longer lifespan.

The properties and infrastructure on the Awre peninsula are on high ground behind the defences and have a 1 in 200 year chance or less of flooding in any one year. The access road to a small number of properties at Whitescourt has a slightly higher risk of flooding.

Sea level rise note

The UKCP09 medium emissions scenario projects approximate sea level rises of 0.1m by 2030, 0.3m by 2060, and 0.7m by 2110 and an approximate increase in fluvial flow of 25% by 2110.

Currently sea level is rising at about 2 to 2.5mm a year. If this rate were to continue then sea level rise would be less than the amount projected by the UKCP09 medium emissions scenario.



Key

Existing defences referred to in text

How these options were reached

The costs of maintaining the defences are higher than the economic benefits of the resulting reduction in flooding to land.

Ongoing local discussions

We have contacted the landowners affected by this decision and have informed them of our intention to stop maintaining the defences. We are currently working with them to explore the options available to them to manage the flooding of their land, including the opportunity to continue the maintenance work.

What can be done now and in the future?

There is no economic justification for the Environment Agency to continue to use public funding to undertake maintenance work on the defences. We have had to make the decision to stop carrying out works in this area.

There are a number of options that can be considered for ongoing management of tidal flood risk at Awre.

Those options may include:

- Working in partnership between public authorities, landowners and community to maintain the defences.
- Landowners taking on responsibility for the maintenance of the defences (subject to the appropriate consents or permissions being obtained). Raising the defences above the existing height may impact on the protected environment of the estuary adjacent to Awre and formal consents would be needed.
- Doing nothing and allowing the standard of protection to reduce as condition of existing defences deteriorates.
- Landowners, community and the EA exploring a voluntary managed realignment scheme to provide an improved standard of protection for property access, if required, and allow some land to be used for habitat creation.
- Adapting farming activities to become more resilient to flooding.

The 2011 version of the Severn Estuary Flood Risk Management Strategy proposed managed realignment for this location. This is no longer the proposal, although it is an option which landowners may wish to consider going forward.