

Arlingham

Existing defences and probability of flooding

At Arlingham the earth embankments currently provide protection so that properties and agricultural land have a 1 in 200 chance or less of tidal flooding in any year.

The defences are in good condition and will not require major investment in the foreseeable future.

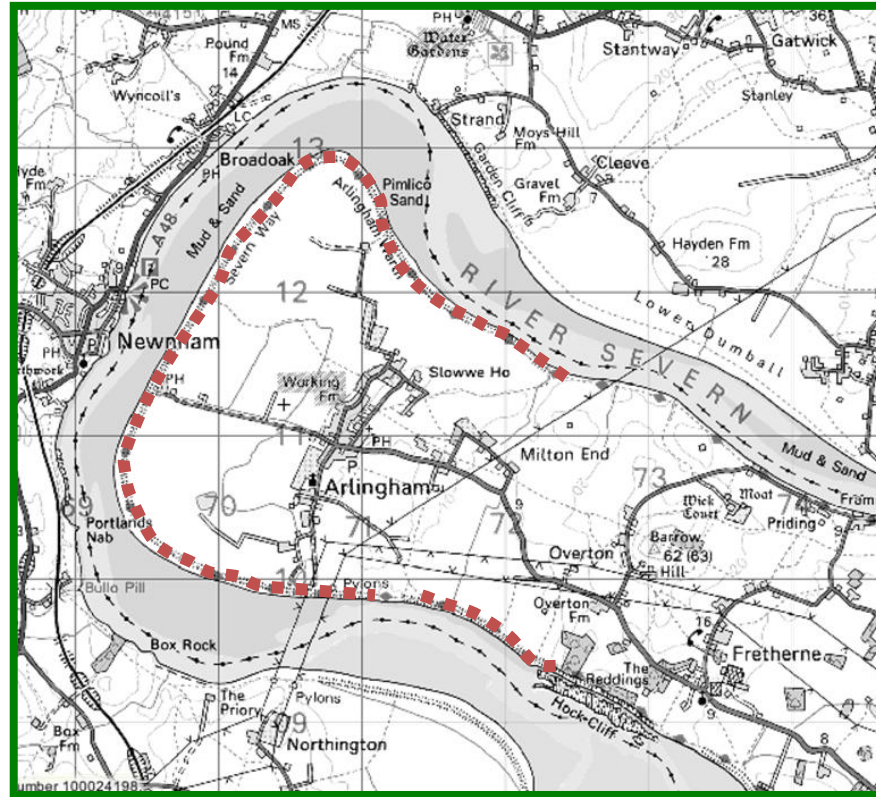
A sea level rise of 0.3m would result in a 1 in 50 chance in any year of agricultural land flooding, though the risk of property flooding would be a 1 in 100 chance in any year.

A sea level rise of 0.7m would mean a 1 in 5 chance of overtopping of defences in any year likely to affect both land and property.

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

What can be done?

The EA intends to continue maintenance of the existing defences well into the medium to long term future (as funds allow). With routine maintenance, the existing flood defences that protect Arlingham are currently forecast to remain functional until at least 2060.

The EA carrying out maintenance on the defences depends on the annual availability of public funding. Please see the Supporting Information for further explanation of EA maintenance and funding.

How these options were reached

The defences are currently in good condition so are likely to require minimal maintenance in the short term.

The long length of the defences and relatively low number of properties benefiting from them means that, under the existing funding policy, raising the height of the defences to keep pace with climate change is unlikely to be funded wholly by public funds.

What could be done in the future?

If a point is reached when the EA is unable to continue to maintain the entire length of defence and/or a tipping point is reached in terms of increased flood frequency there are a number of options that can be considered.

Those options may include:

- Working in partnership between public authorities, landowners and community to maintain and/or improve the existing defence.
- Landowners taking on responsibility for the maintenance and/or improvements of the defences (subject to the appropriate consents or permissions being obtained).
- Doing nothing and allowing the standard of protection to reduce as condition of existing defences deteriorate
- Landowners, community and the EA exploring a voluntary managed realignment scheme to construct new defences, provide an improved standard of protection for property and allow some land to be used for habitat creation.
- Adapting properties, property access and land use to become more resilient to flooding

Ongoing local discussions

The EA, landowners, community and other organisations will seek to explore further what could be achieved by working in partnership to maximise maintenance with the funding that is available each year.