

# Quedgeley, Rea and Hempsted

## Existing defences and probability of flooding

In this area, flooding can occur from high river flows or high tides, or a combination of the two. At present, flood risk is higher from high river flows but this could change as sea levels rise.

The existing defences protect industrial areas as well as residential properties.

Properties in Quedgeley are protected by high ground which includes the Gloucester and Sharpness Canal.

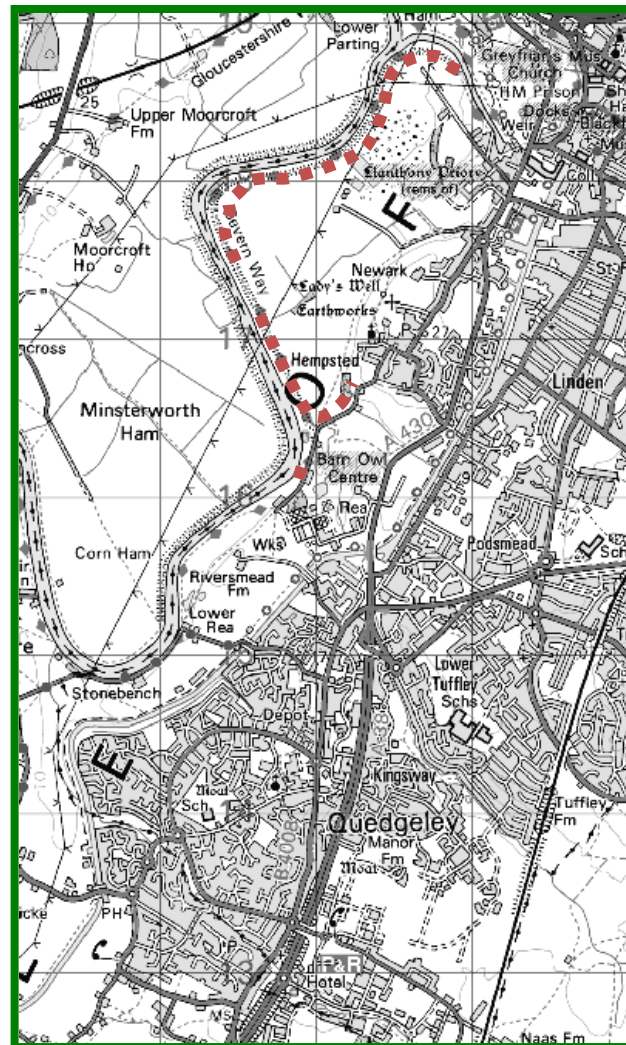
Most properties in this area have a risk of flooding from the River Severn of a 1 in 200 chance or less in any year. Around a dozen riverside properties have a 1 in 100 chance of flooding in any year.

A sea level rise of 0.1m would mean the embankments would need to be raised to sustain the current level of protection to properties.

## 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.



## What can be done?

The EA intends to continue to maintain the defences (as funds allow) and to sustain the current level of protection by raising the defences in response to climate change (as funds allow).

Please see the Supporting Information for further explanation of EA maintenance and funding.

## How these options were reached


The high number of properties in this area, as well as industry and infrastructure, means there are high economic benefits for ensuring the continued integrity of the defences.

## Ongoing local discussions

Although we expect to collectively review the Strategy every ten years, we encourage communities to come to us to in between reviews with any local concerns relating to flooding or flood risk.

We are currently looking at options to raise the inland embankment at the Rea to alleviate fluvial flooding.

## Key

 Existing defences referred to in text