

# Cardiff

## Existing defences and probability of flooding

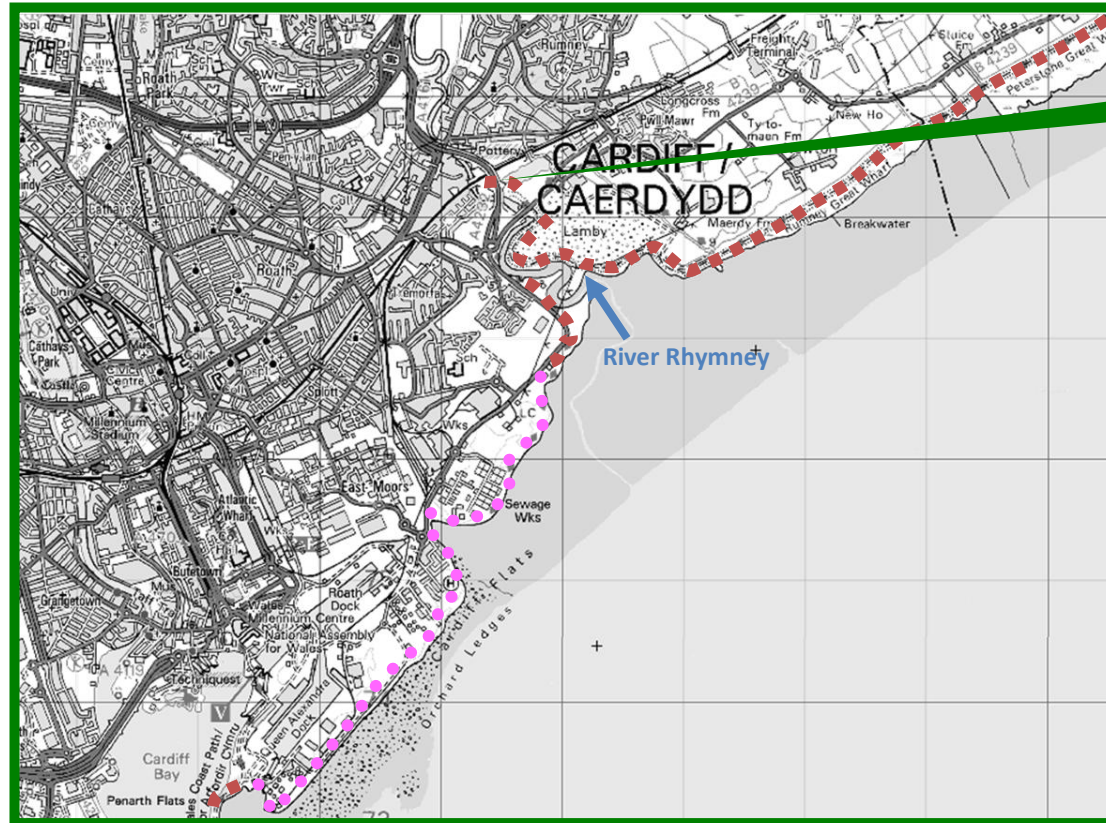
Around 10,000 properties in Cardiff currently benefit from the existing tidal defences.

Important protected infrastructure includes power transmission lines, the railway, industrial buildings and the docks.

Around the steelworks and docks there is high ground with stone facing that forms the tidal defence. These defences and the Cardiff Bay Barrage are owned by Cardiff Council. There is a 1 in 200 chance in any year that tidal flooding will occur along this section of coast.

There are embankments and sheet piles along the River Rhymney. These defences protect most properties from tidal flooding so that the risk is a 1 in 200 chance in any year. There are short sections requiring attention where the chance of local tidal flooding in any year may be greater than 1 in 200.

Although some of the existing defences have been built up informally over the years, they will need to be maintained and improved as required.



## Sea level rise note

The UKCP09 medium emissions scenario projects about 0.1m of sea level rise by 2030, about 0.3m by 2060, and about 0.7m 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 what is projected by the UKCP09 medium emissions scenario.

## Key



Existing defences referred to in text



High ground, likely to be raised in the future

## What can be done?

We aim to work with Cardiff Council and local businesses to improve defences to keep pace with climate change to ensure the risk of flooding remains at a 1 in 200 chance or better.

We propose improving the weaker section of the embankment near the railway bridge in the next 5-10 years. This will bring the defences in the area to a consistent level.

## How these proposals were reached

There is a strong economic case for improving defences if flood risks increase.