

# Flood risk assessment data



**Location of site:** 330757 / 434869 (shown as easting and northing coordinates)  
**Document created on:** 9 November 2023  
**This information was previously known as a product 4.**  
**Customer reference number:** GA6XT83GJ8T9

Map showing the location that flood risk assessment data has been requested for.



## How to use this information

You can use this information as part of a flood risk assessment for a planning application. To do this, you should include it in the appendix of your flood risk assessment.

**We recommend that you work with a flood risk consultant to get your flood risk assessment.**

## Included in this document

In this document you'll find:

- how to find information about surface water and other sources of flooding
- information on the models used
- definitions for the terminology used throughout
- flood map for planning (rivers and the sea)
- historic flooding
- modelled data
- climate change modelled data
- information about strategic flood risk assessments
- information about this data
- information about flood risk activity permits
- help and advice

## Not included in this document

This document does not include a Flood Defence Breach Hazard Map.

If your location has a reduced flood risk from rivers and sea because of defences, you need to request a Flood Defence Breach Hazard Map and information about the level of flood protection offered at your location from the Cumbria and Lancashire Environment Agency team at [inforequests.cmlnc@environment-agency.gov.uk](mailto:inforequests.cmlnc@environment-agency.gov.uk). This information will only be available if modelling has been carried out for breach scenarios.

Include a site location map in your request.

## Information that's unavailable

This document **does not** contain:

- flood defences and attributes

We aren't able to display flood defence locations and attributes as there are no formal flood defences in the area of interest.

## Surface water and other sources of flooding

Use the [long term flood risk service](#) to find out about the risk of flooding from:

- surface water
- ordinary watercourses
- reservoirs

For information about sewer flooding, contact the relevant water company for the area.

## About the models used

Model name: Blackpool\_Tidal 2014

Scenario(s): Defended tidal, defences removed tidal, defended climate change tidal, defences removed climate change tidal

Date: 30 July 2014

This model contains the most relevant data for your area of interest.

## Terminology used

### Annual exceedance probability (AEP)

This refers to the probability of a flood event occurring in any year. The probability is expressed as a percentage. For example, a large flood which is calculated to have a 1% chance of occurring in any one year, is described as 1% AEP.

### Metres above ordnance datum (mAOD)

All flood levels are given in metres above ordnance datum which is defined as the mean sea level at Newlyn, Cornwall.

## **Flood map for planning (rivers and the sea)**

Your selected location is in flood zone 2.

Flood zone 3 shows the area at risk of flooding for an undefended flood event with a:

- 0.5% or greater probability of occurring in any year for flooding from the sea
- 1% or greater probability of occurring in any year for fluvial (river) flooding

Flood zone 2 shows the area at risk of flooding for an undefended flood event with:

- between a 0.1% and 0.5% probability of occurring in any year for flooding from the sea
- between a 0.1% and 1% probability of occurring in any year for fluvial (river) flooding

It's important to remember that the flood zones on this map:

- refer to the land at risk of flooding and do not refer to individual properties
- refer to the probability of river and sea flooding, ignoring the presence of defences
- do not take into account potential impacts of climate change

This data is updated on a quarterly basis as better data becomes available.








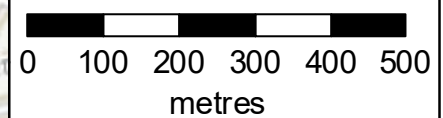
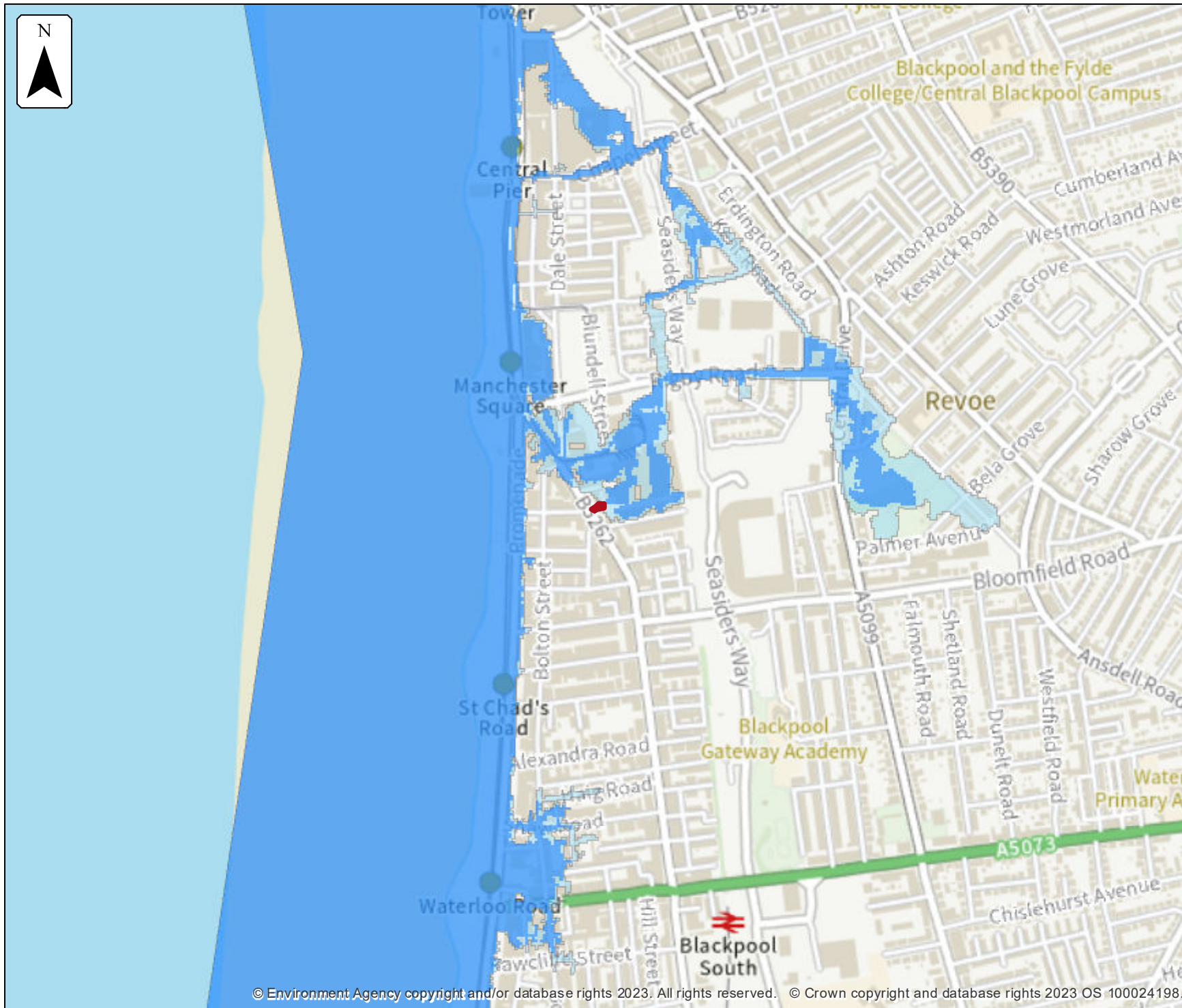
### Flood map for planning

Location (easting/northing)  
**330757/434869**

Scale  
**1:10,000**

Created  
**9 Nov 2023**

-  Selected area
-  Flood zone 3
-  Flood zone 2



## Historic flooding

This map is an indicative outline of areas that have previously flooded. Remember that:

- our records are incomplete, so the information here is based on the best available data
- it is possible not all properties within this area will have flooded
- other flooding may have occurred that we do not have records for
- flooding can come from a range of different sources - we can only supply flood risk data relating to flooding from rivers or the sea

You can also contact your Lead Local Flood Authority or Internal Drainage Board to see if they have other relevant local flood information. Please note that some areas do not have an Internal Drainage Board.

[Download recorded flood outlines in GIS format](#)





### Historic flood map


Location (easting/northing)  
**330757/434869**

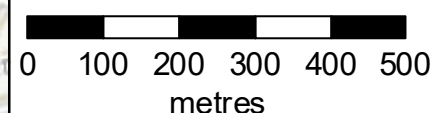
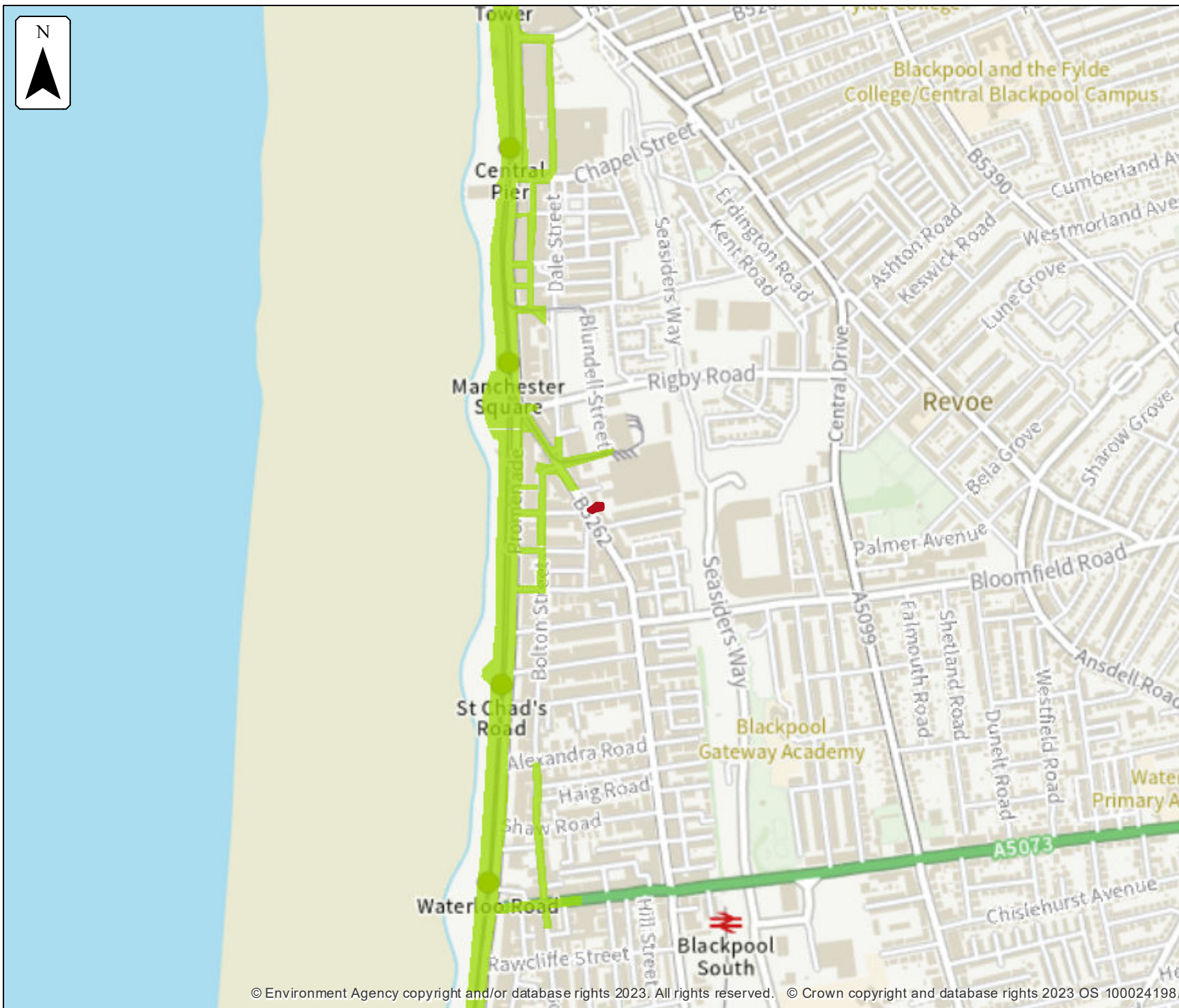
Scale  
**1:10,000**

Created  
**9 Nov 2023**

 Selected area

 Main river

Date of flood event  
 February, 2002



## Historic flood event data

Start date	End date	Source of flood	Cause of flood	Affects location
1 February 2002	2 February 2002	other	overtopping of defences	No

## Modelled data

This section provides details of different scenarios we have modelled and includes the following (where available):

- outline maps showing the area at risk from flooding in different modelled scenarios
- map(s) showing the approximate water levels for the return period with the largest flood extent for a scenario and table(s) of sample points providing details of the flood risk for different return periods

## Climate change

The climate change data included in the models may not include the latest [flood risk assessment climate change allowances](#). Where the new allowances are not available you will need to consider this data and factor in the new allowances to demonstrate the development will be safe from flooding.

The Environment Agency will incorporate the new allowances into future modelling studies. For now, it's your responsibility to demonstrate that new developments will be safe in flood risk terms for their lifetime.

## Modelled scenarios

The following scenarios are included:

- Defended modelled tidal: risk of flooding from the sea where there are flood defences
- Defences removed modelled tidal: risk of flooding from the sea where flood defences have been removed
- Defended climate change modelled tidal: risk of flooding from the sea where there are flood defences, including estimated impact of climate change
- Defences removed climate change modelled tidal: risk of flooding from the sea where flood defences have been removed, including estimated impact of climate change





### Defended modelled tidal extent

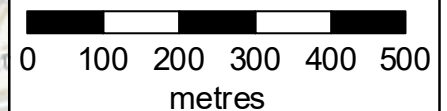
Location (easting/northing)  
**330757/434869**

Scale Created  
**1:10,000 9 Nov 2023**

Model name  
**Blackpool Tidal 2014**

- Selected area
- Modelled flood extent
  - 1.33% AEP
  - 1% AEP
  - 0.5% AEP
  - 0.1% AEP

Flood extents may not be visible where they overlap other return periods












### Defended climate change modelled tidal extent

Location (easting/northing)  
**330757/434869**

Scale Created  
**1:10,000 9 Nov 2023**

Model name  
**Blackpool Tidal 2014**

-  Selected area
-  Main river
- Modelled flood extent
  -  0.5% AEP (+370mm)
  -  0.5% AEP (+670mm)
  -  0.5% AEP (+970mm)

Flood extents may not be visible where they overlap other return periods





### Defences removed modelled tidal extent

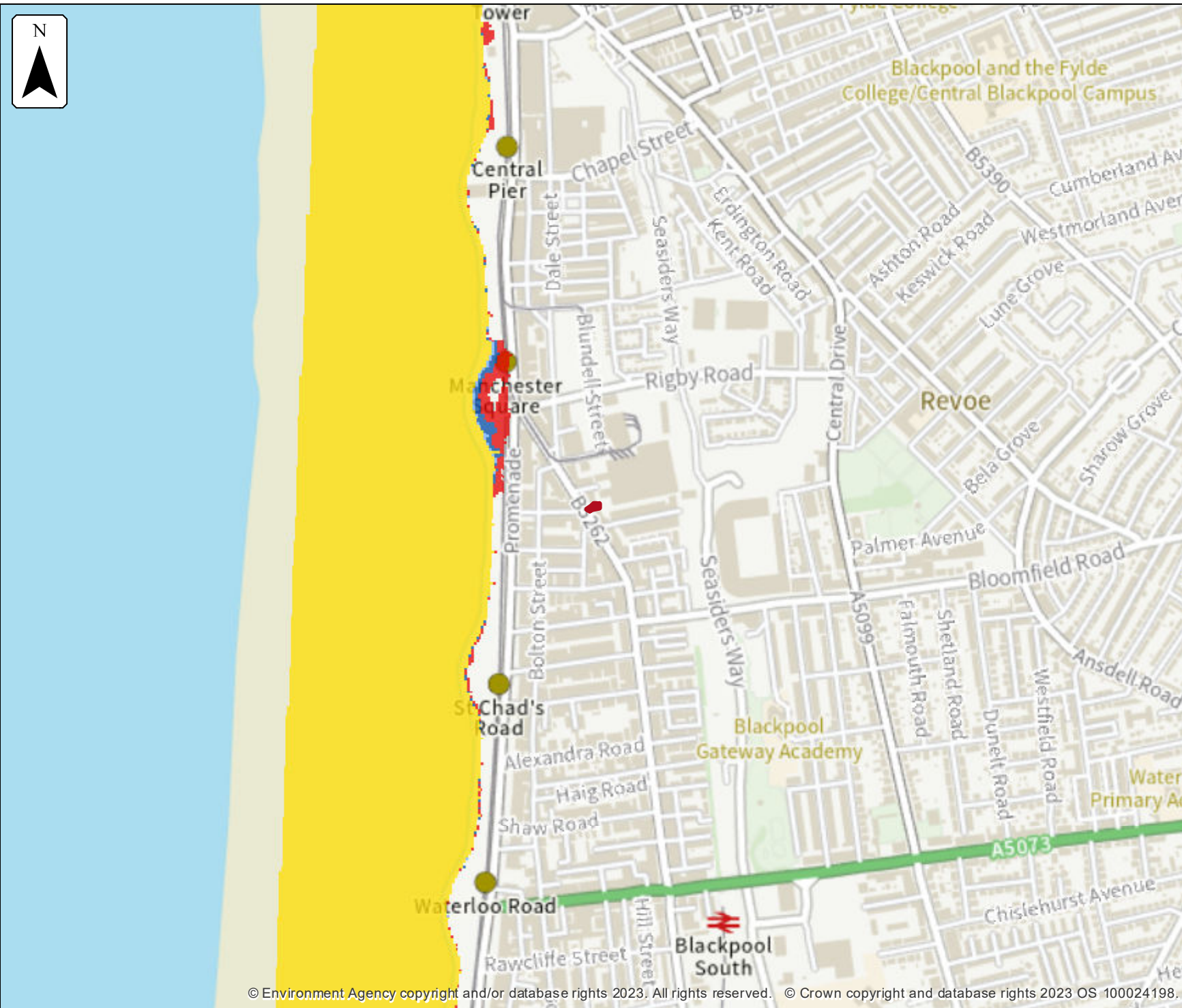
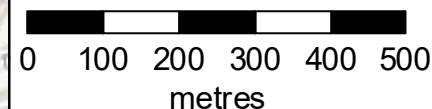
Location (easting/northing)  
**330757/434869**

Scale Created  
**1:10,000 9 Nov 2023**

Model name  
**Blackpool Tidal 2014**

- Selected area
- Modelled flood extent**
- 1.33% AEP
- 1% AEP
- 0.5% AEP
- 0.1% AEP

Flood extents may not be visible where they overlap other return periods












### Defences removed climate change modelled tidal extent

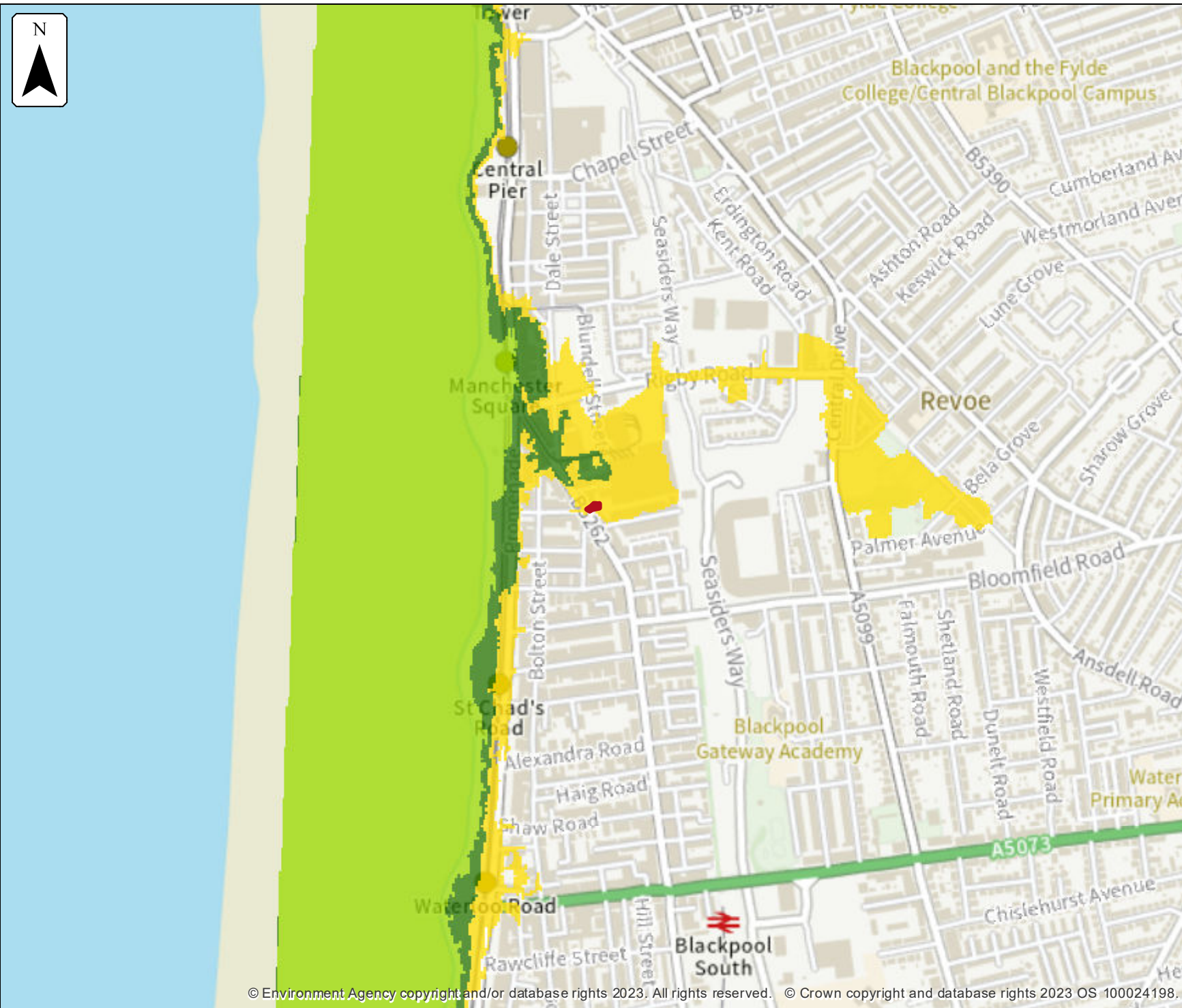
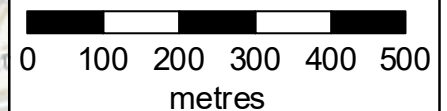
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Flood extents may not be visible where they overlap other return periods






Tidal Flood Levels Map:  
Lytham Road, Blackpool

Location (easting/northing)  
330760, 434870

Model Name  
Blackpool Tidal 2014

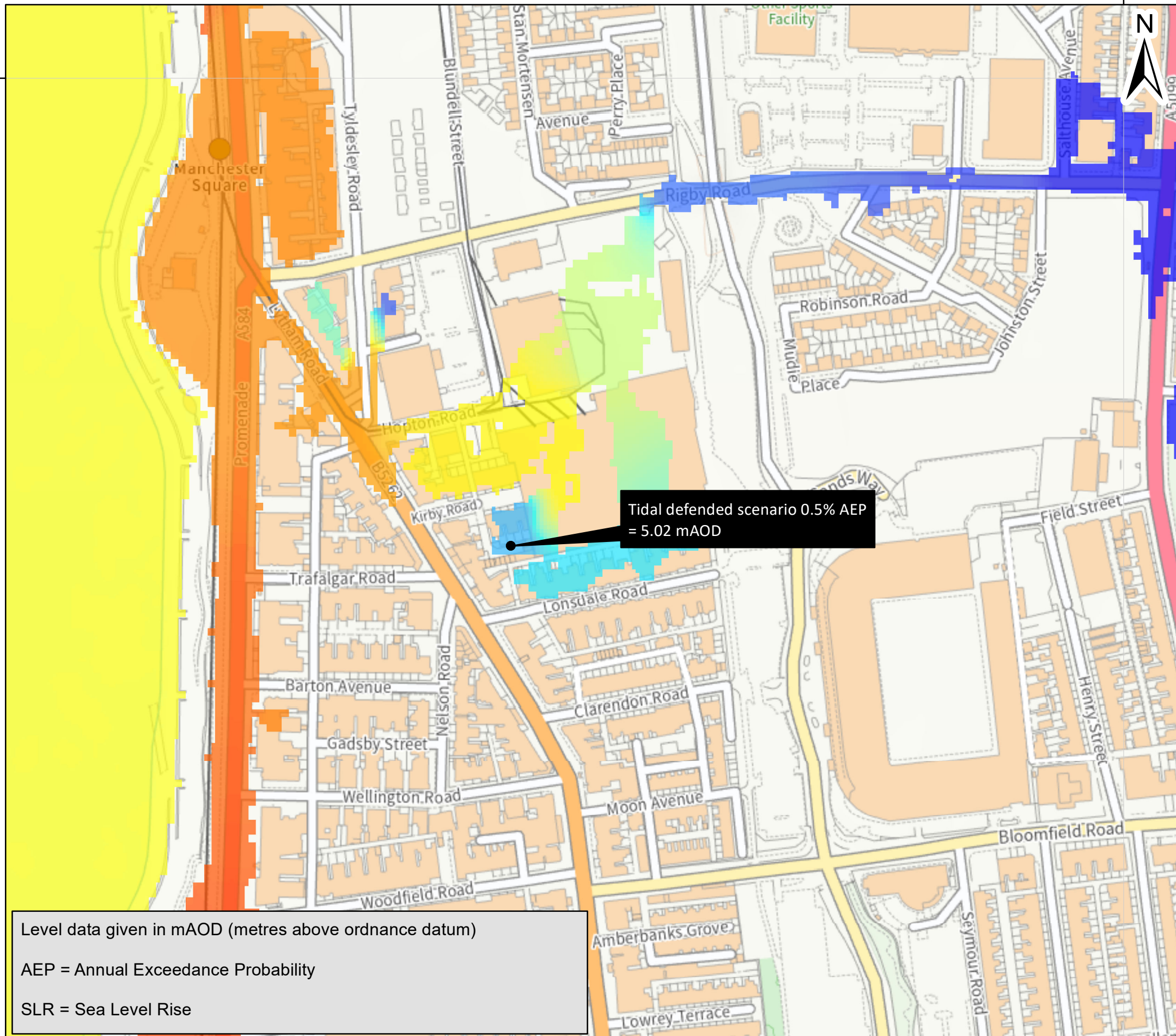
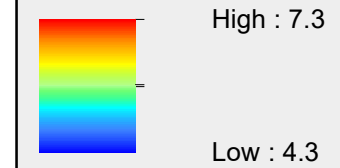
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**Key**

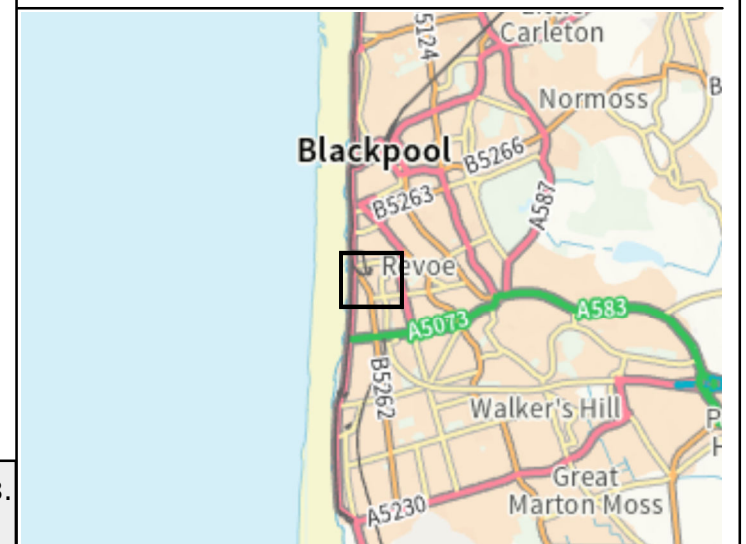
 Main River

**Tidal defended scenario 0.5% AEP**

mAOD



Level data given in mAOD (metres above ordnance datum)  
AEP = Annual Exceedance Probability  
SLR = Sea Level Rise






Tidal Flood Levels Map:  
Lytham Road, Blackpool

Location (easting/northing)  
330760, 434870

Model Name  
Blackpool Tidal 2014

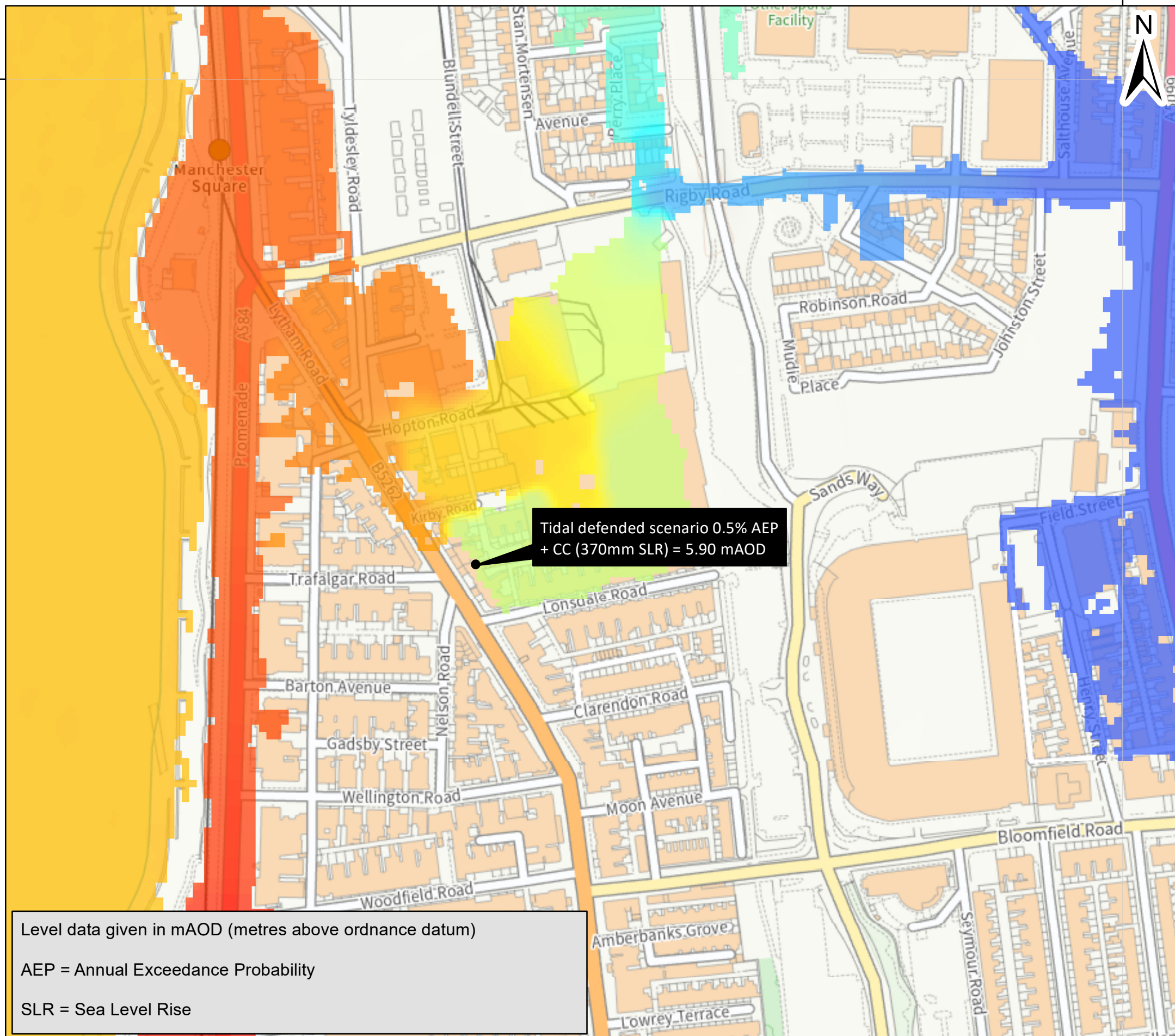
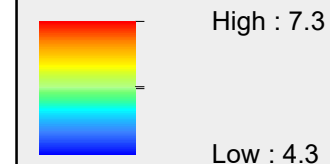
Created: 13/11/2023

**Key**

 Main River

**Tidal defended scenario 0.5% AEP + CC (370mm SLR)**

mAOD





Tidal Flood Levels Map:  
Lytham Road, Blackpool

Location (easting/northing)  
330760, 434870

Model Name  
Blackpool Tidal 2014

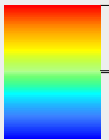
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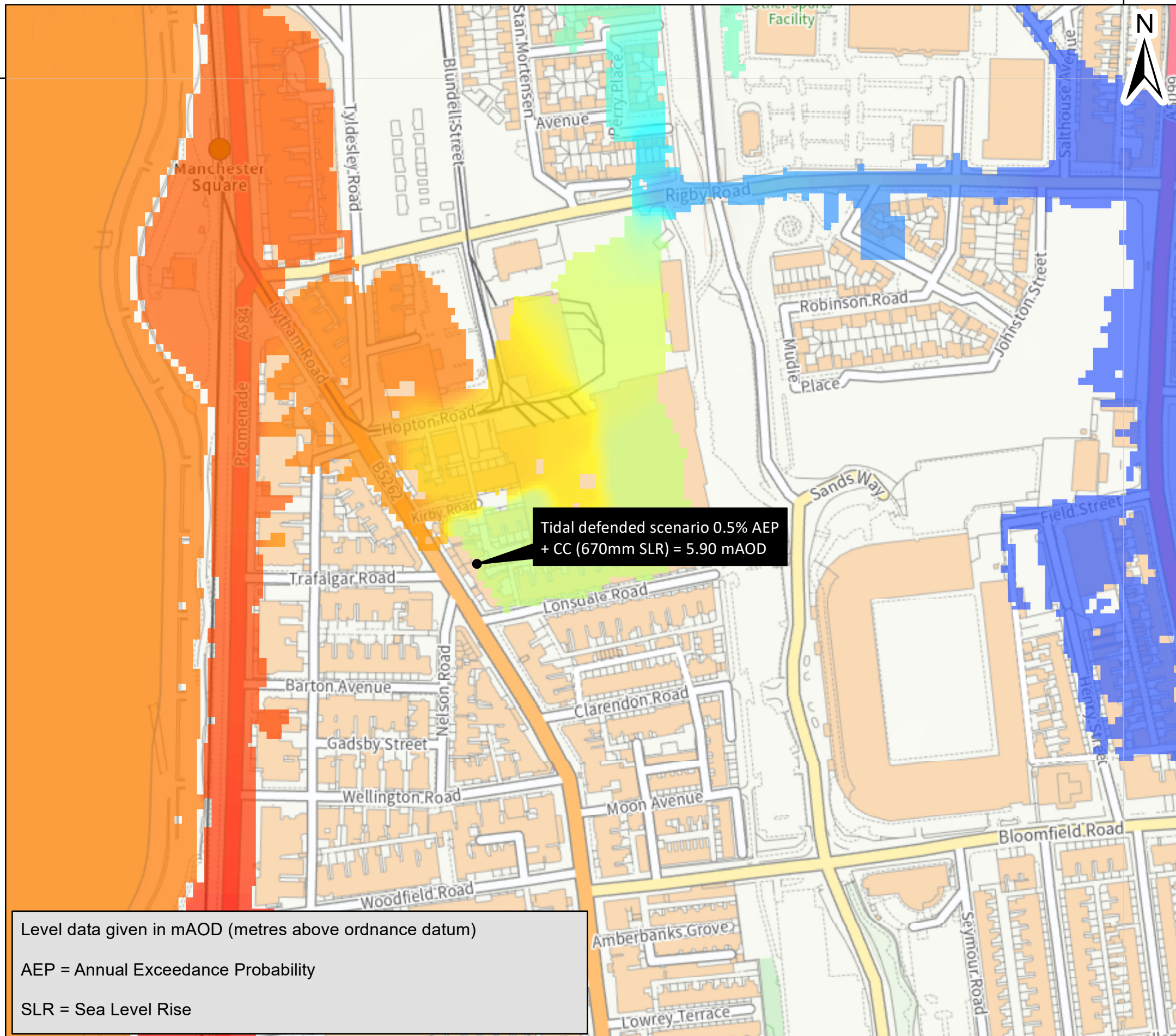
**Key**

 Main River

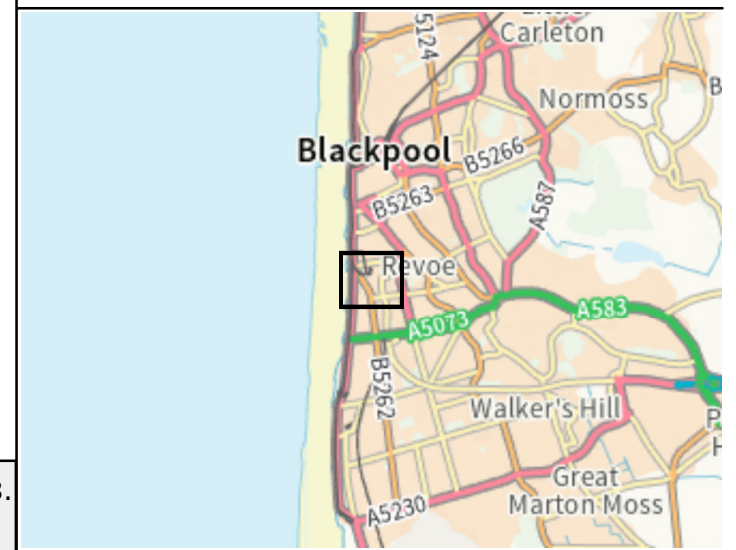
**Tidal defended scenario 0.5% AEP + CC (670mm SLR)**

mAOD

 High : 7.3  
Low : 4.3



Level data given in mAOD (metres above ordnance datum)  
AEP = Annual Exceedance Probability  
SLR = Sea Level Rise





Tidal Flood Levels Map:  
Lytham Road, Blackpool

Location (easting/northing)  
330760, 434870

Model Name  
Blackpool Tidal 2014

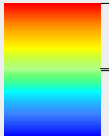
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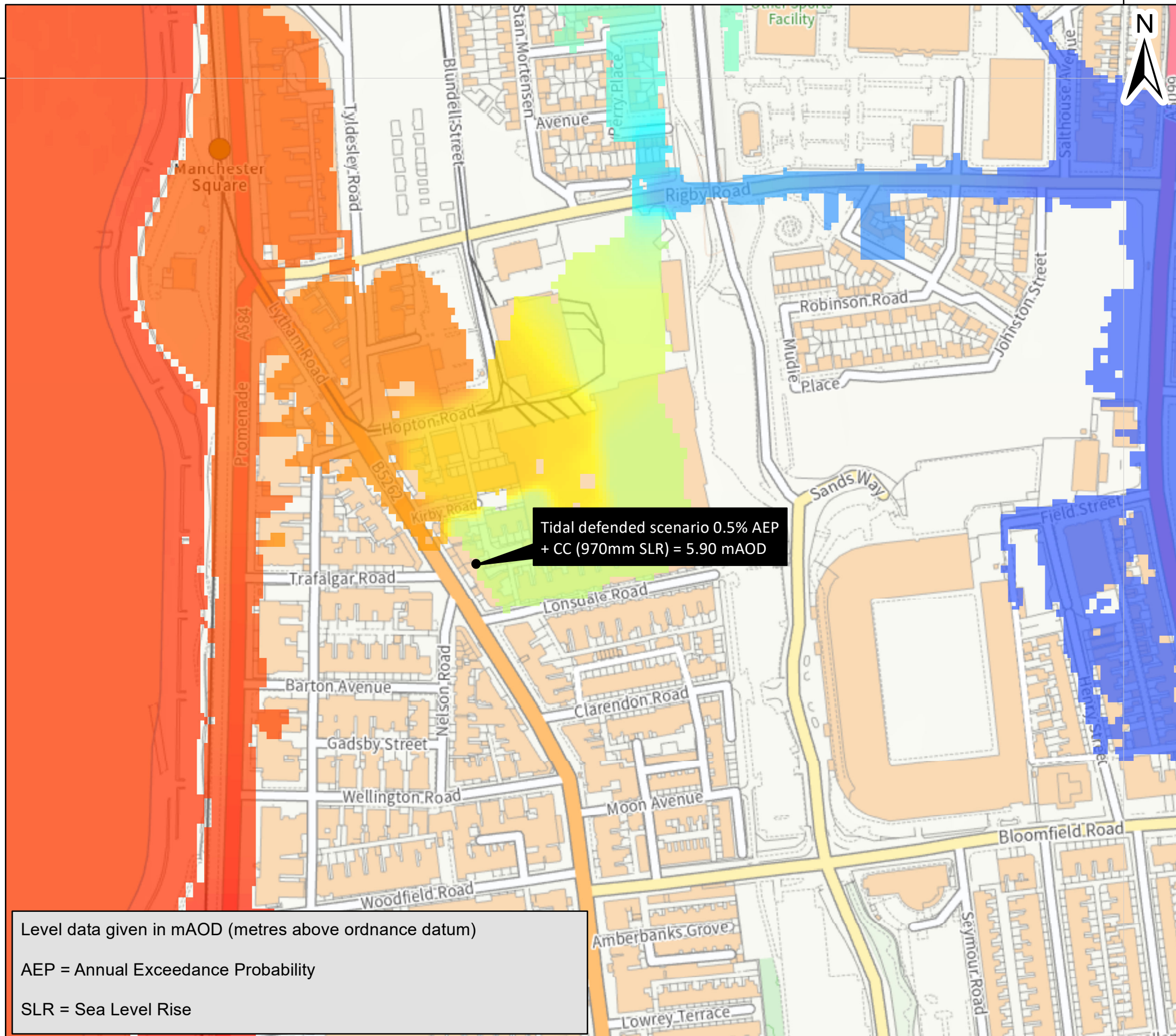
**Key**

 Main River

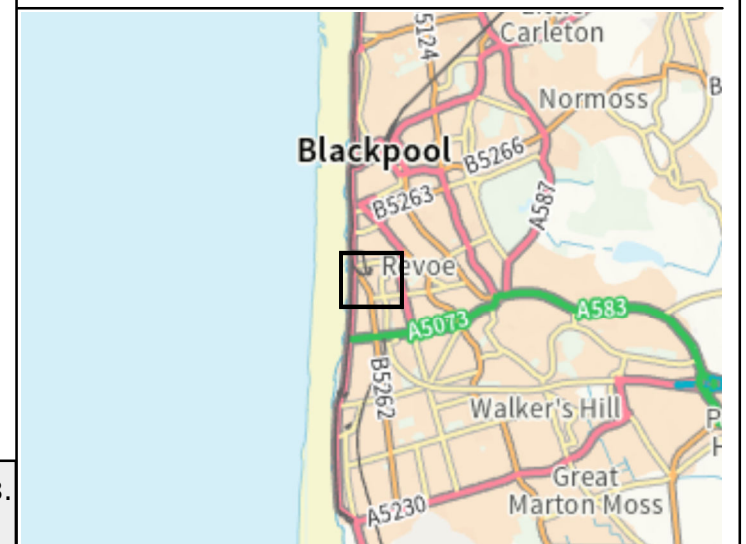
**Tidal defended scenario 0.5% AEP + CC (970mm SLR)**

mAOD

 High : 7.3  
Low : 4.3



Level data given in mAOD (metres above ordnance datum)  
AEP = Annual Exceedance Probability  
SLR = Sea Level Rise






Tidal Flood Levels Map:  
Lytham Road, Blackpool

Location (easting/northing)  
330760, 434870

Model Name  
Blackpool Tidal 2014

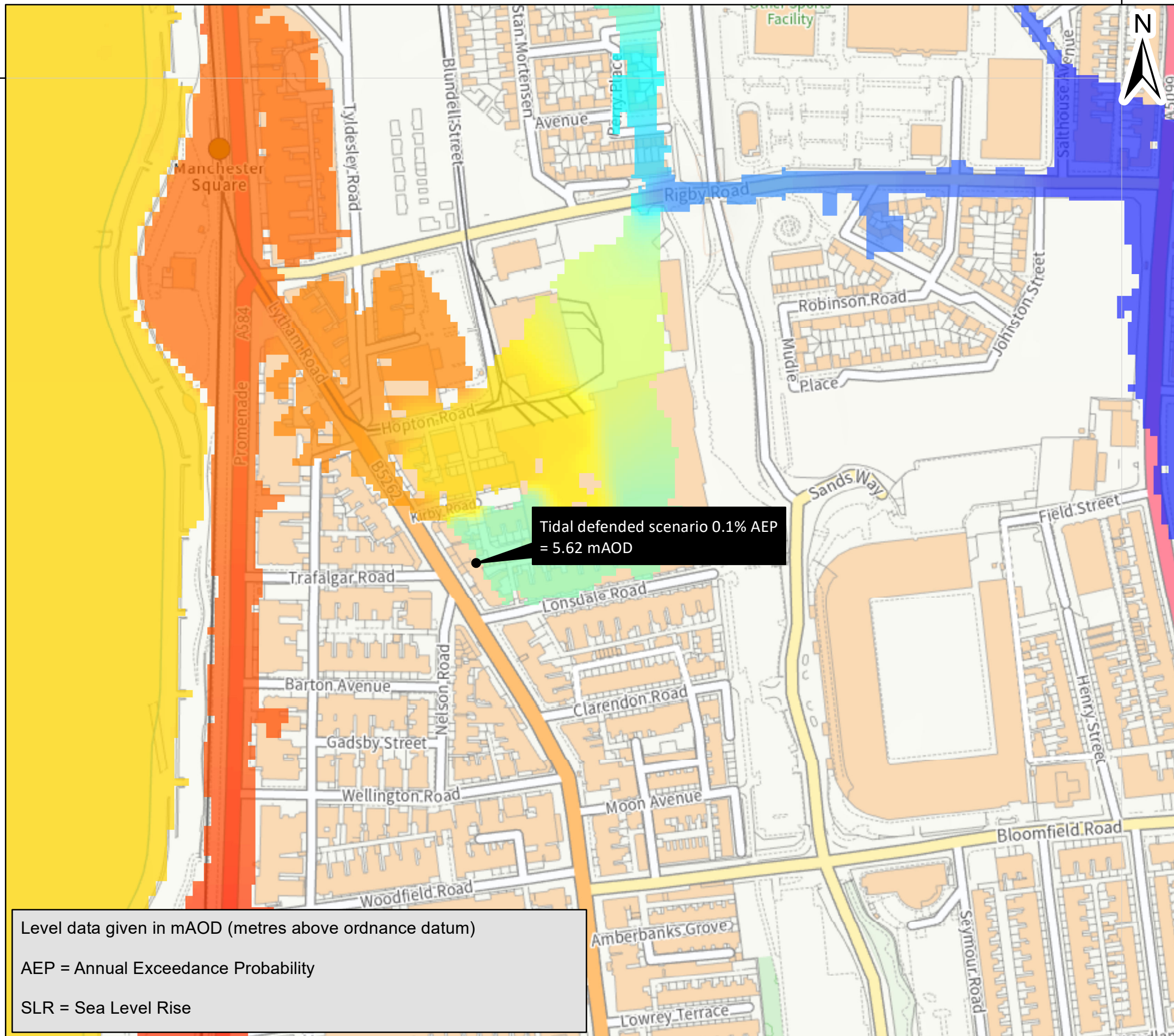
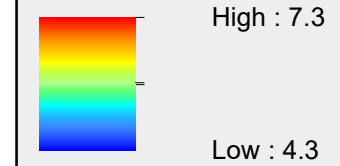
Created: 13/11/2023

Key

 Main River

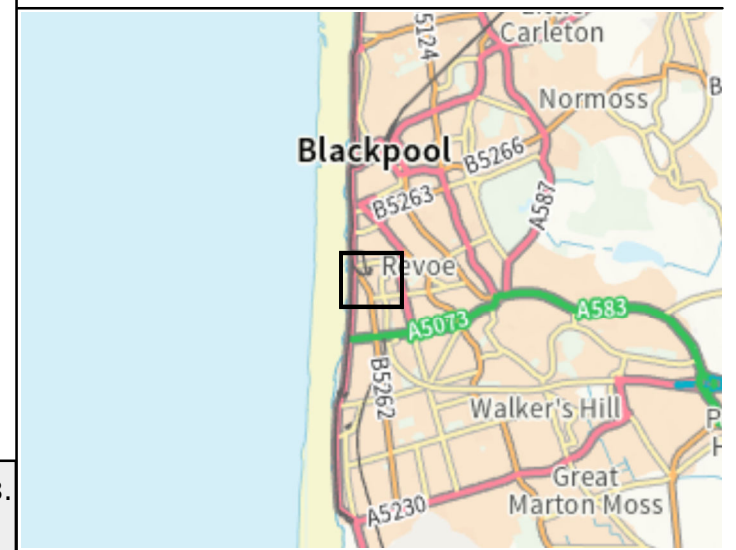
**Tidal defended scenario 0.1% AEP**

mAOD



Level data given in mAOD (metres above ordnance datum)  
AEP = Annual Exceedance Probability  
SLR = Sea Level Rise

Tidal defended scenario 0.1% AEP  
= 5.62 mAOD





Tidal Flood Levels Map:  
Lytham Road, Blackpool

Location (easting/northing)  
330760, 434870

Model Name  
Blackpool Tidal 2014

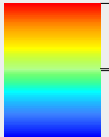
Created: 13/11/2023

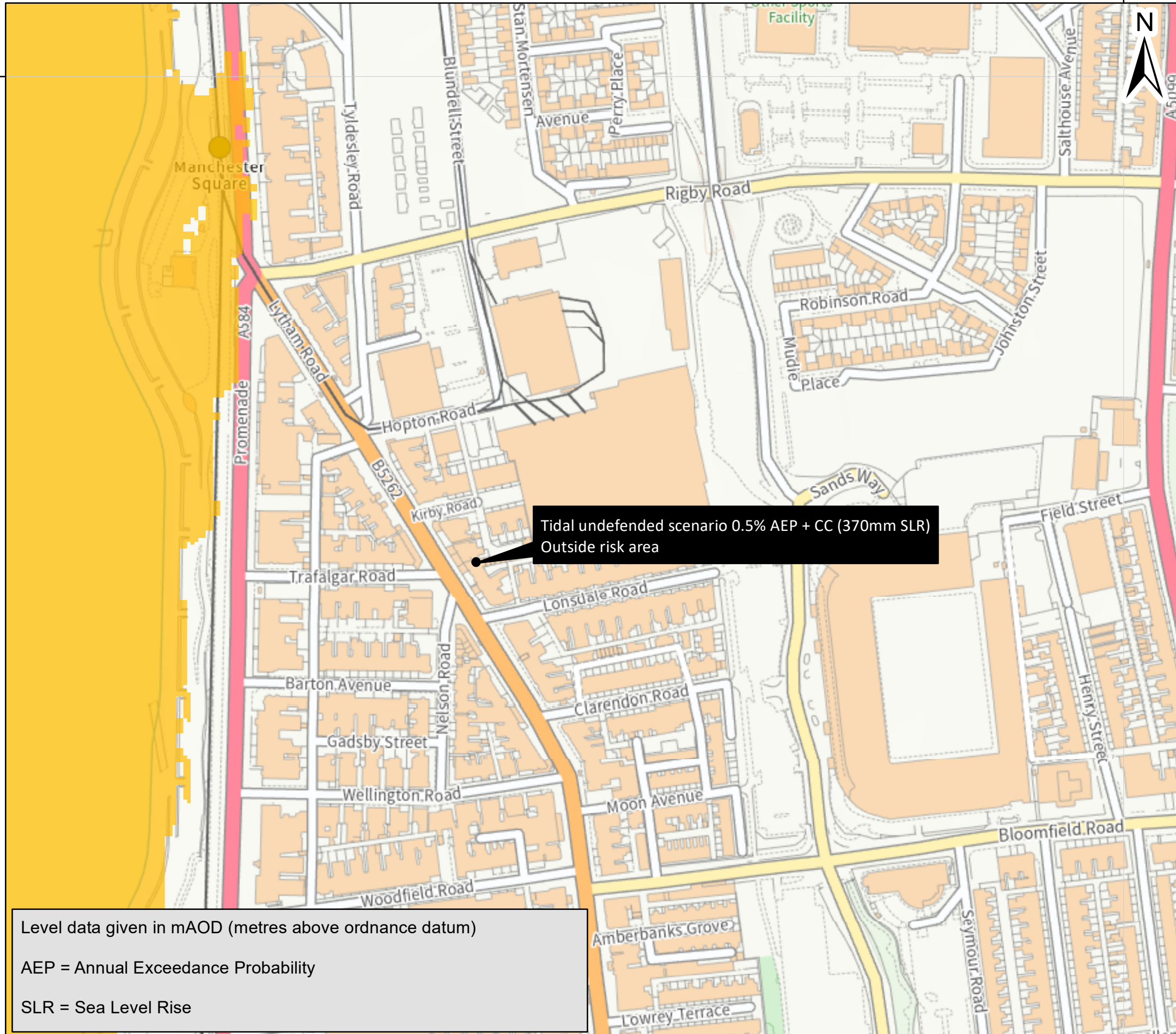
**Key**

 Main River

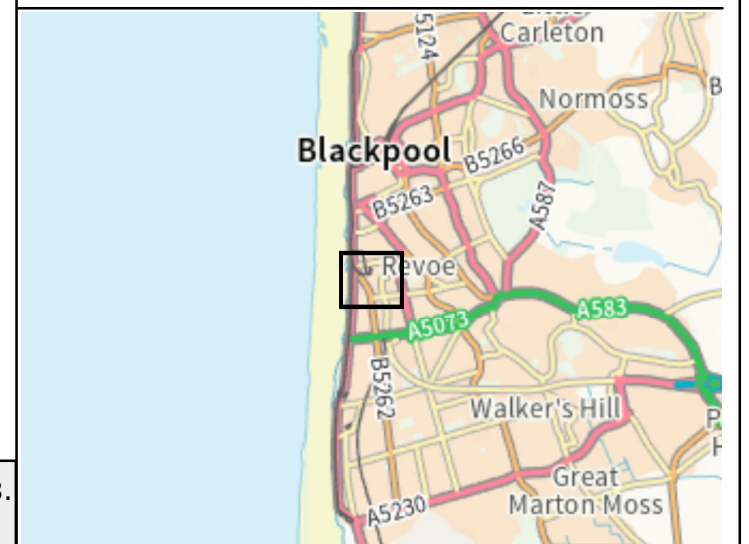
**Tidal undefended scenario 0.5% AEP + CC (370mm SLR)**

**mAOD**

 High : 7.3  
Low : 4.3



Level data given in mAOD (metres above ordnance datum)  
AEP = Annual Exceedance Probability  
SLR = Sea Level Rise





Tidal Flood Levels Map:  
Lytham Road, Blackpool

Location (easting/northing)  
330760, 434870

Model Name  
Blackpool Tidal 2014

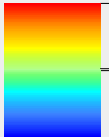
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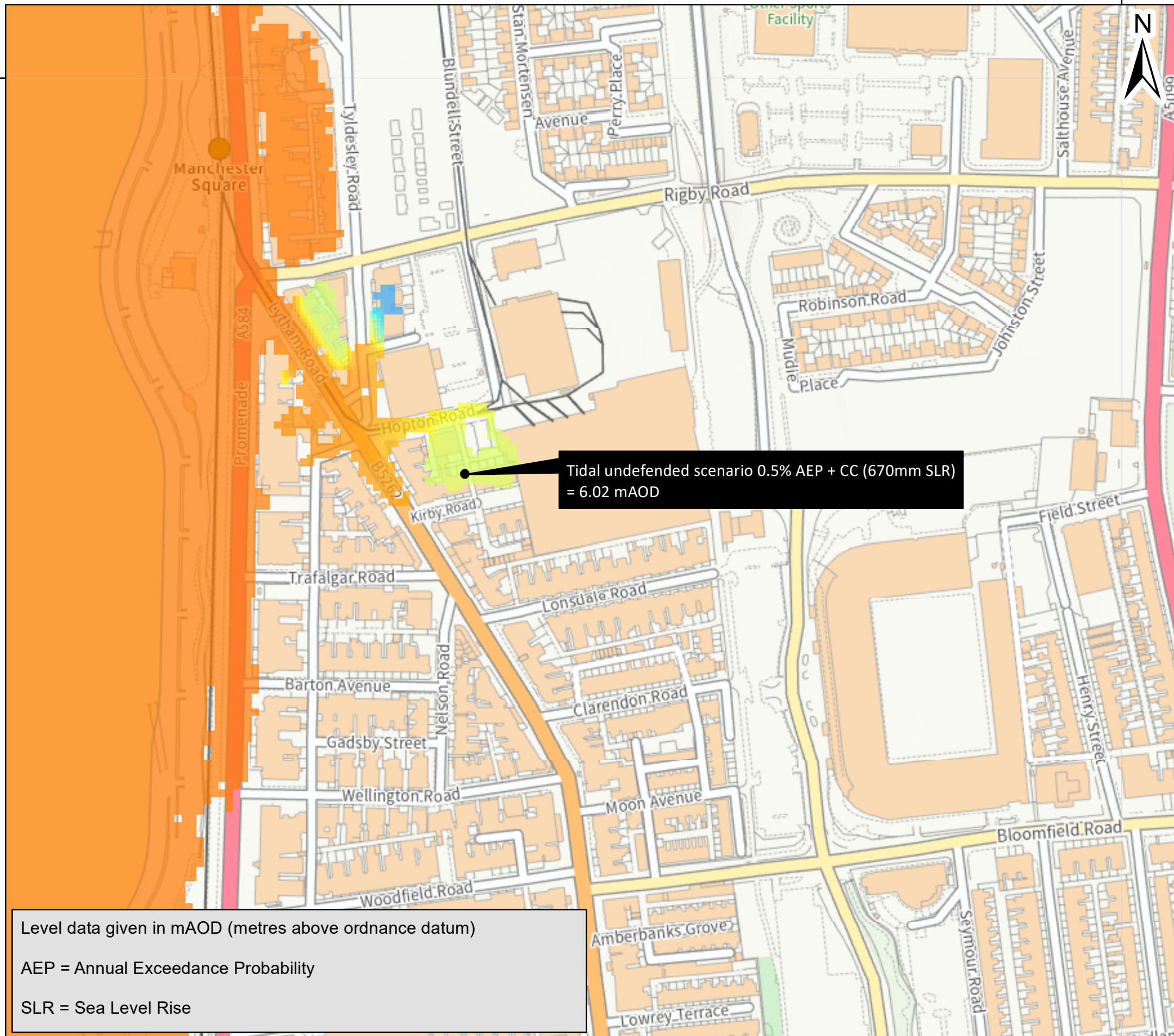
**Key**

 Main River

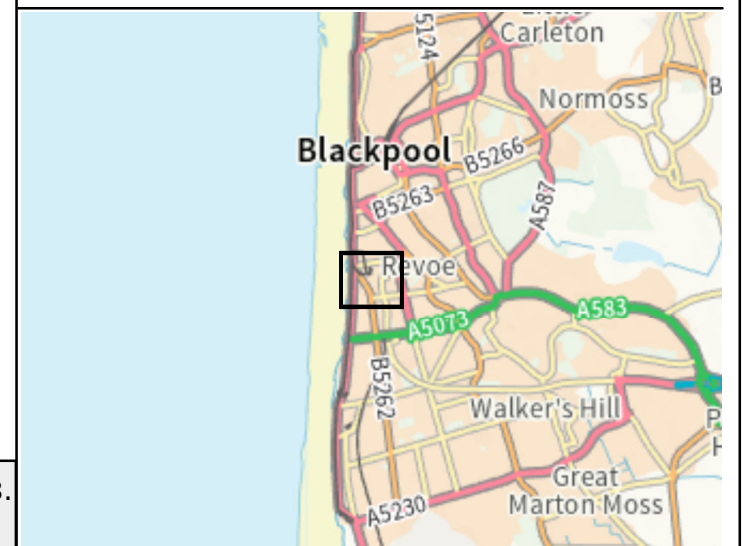
**Tidal undefended scenario 0.5% AEP + CC (670mm SLR)**

**mAOD**

 High : 7.3  
Low : 4.3



Level data given in mAOD (metres above ordnance datum)  
AEP = Annual Exceedance Probability  
SLR = Sea Level Rise





Tidal Flood Levels Map:  
Lytham Road, Blackpool

Location (easting/northing)  
330760, 434870

Model Name  
Blackpool Tidal 2014

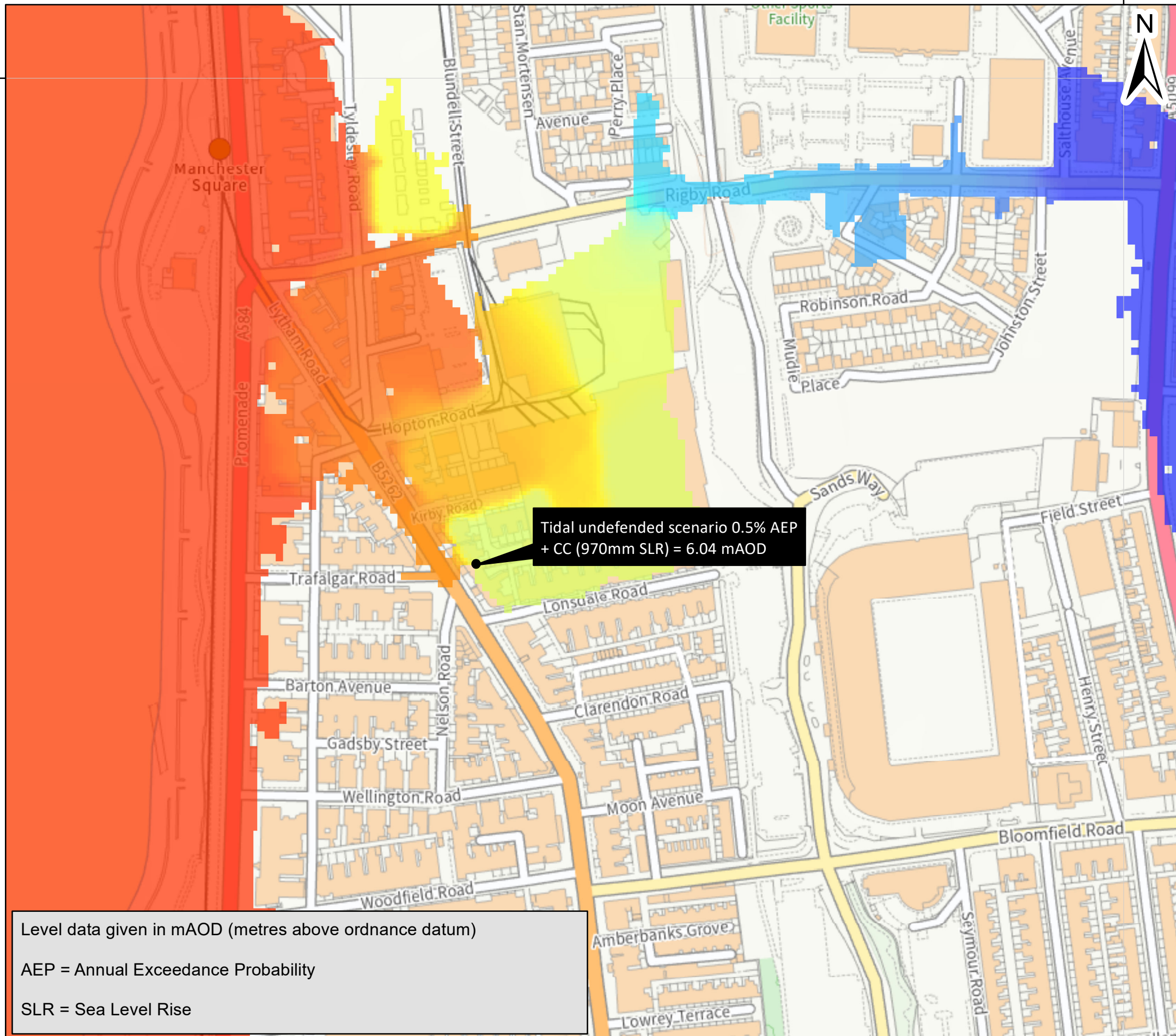
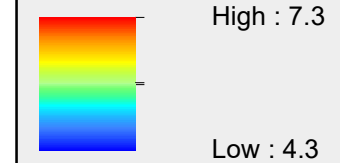
Created: 13/11/2023

**Key**

 Main River

**Tidal undefended scenario 0.5% AEP + CC (970mm SLR)**

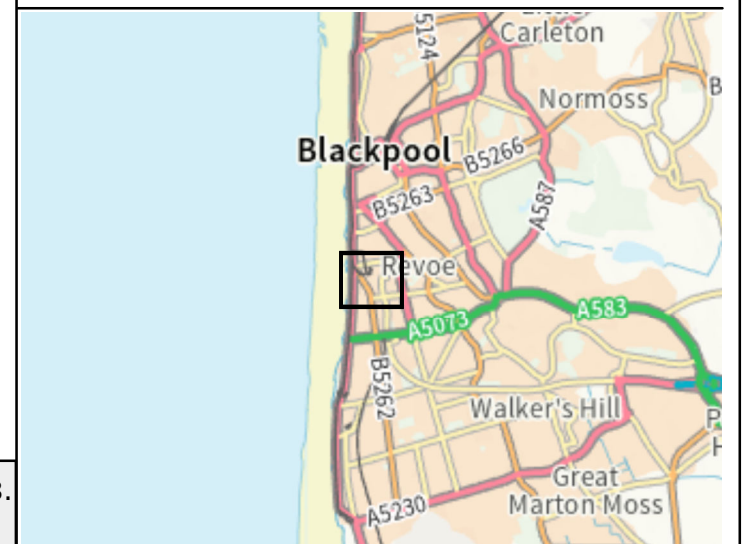
mAOD



Level data given in mAOD (metres above ordnance datum)

AEP = Annual Exceedance Probability

SLR = Sea Level Rise



## Strategic flood risk assessments

We recommend that you check the relevant local authority's strategic flood risk assessment (SFRA) as part of your work to prepare a site specific flood risk assessment.

This should give you information about:

- the potential impacts of climate change in this catchment
- areas defined as functional floodplain
- flooding from other sources, such as surface water, ground water and reservoirs

## About this data

This data has been generated by strategic scale flood models and is not intended for use at the individual property scale. If you're intending to use this data as part of a flood risk assessment, please include an appropriate modelling tolerance as part of your assessment. The Environment Agency regularly updates its modelling. We recommend that you check the data provided is the most recent, before submitting your flood risk assessment.

## Flood risk activity permits

Under the Environmental Permitting (England and Wales) Regulations 2016 some developments may require an environmental permit for flood risk activities from the Environment Agency. This includes any permanent or temporary works that are in, over, under, or nearby a designated main river or flood defence structure.

[Find out more about flood risk activity permits](#)

## Help and advice

Contact the Cumbria and Lancashire Environment Agency team at [inforequests.cmblnc@environment-agency.gov.uk](mailto:inforequests.cmblnc@environment-agency.gov.uk) for:

- [more information about getting a product 5, 6, 7 or 8](#)
- general help and advice about the site you're requesting data for