FLOOD RISK ASSESSMENT FOR
GREGGS, 52 MARKET PLACE, WHITEHAVEN, CA28 7JB

Image 001: Existing shopfront

Image 002: existing rear elevation

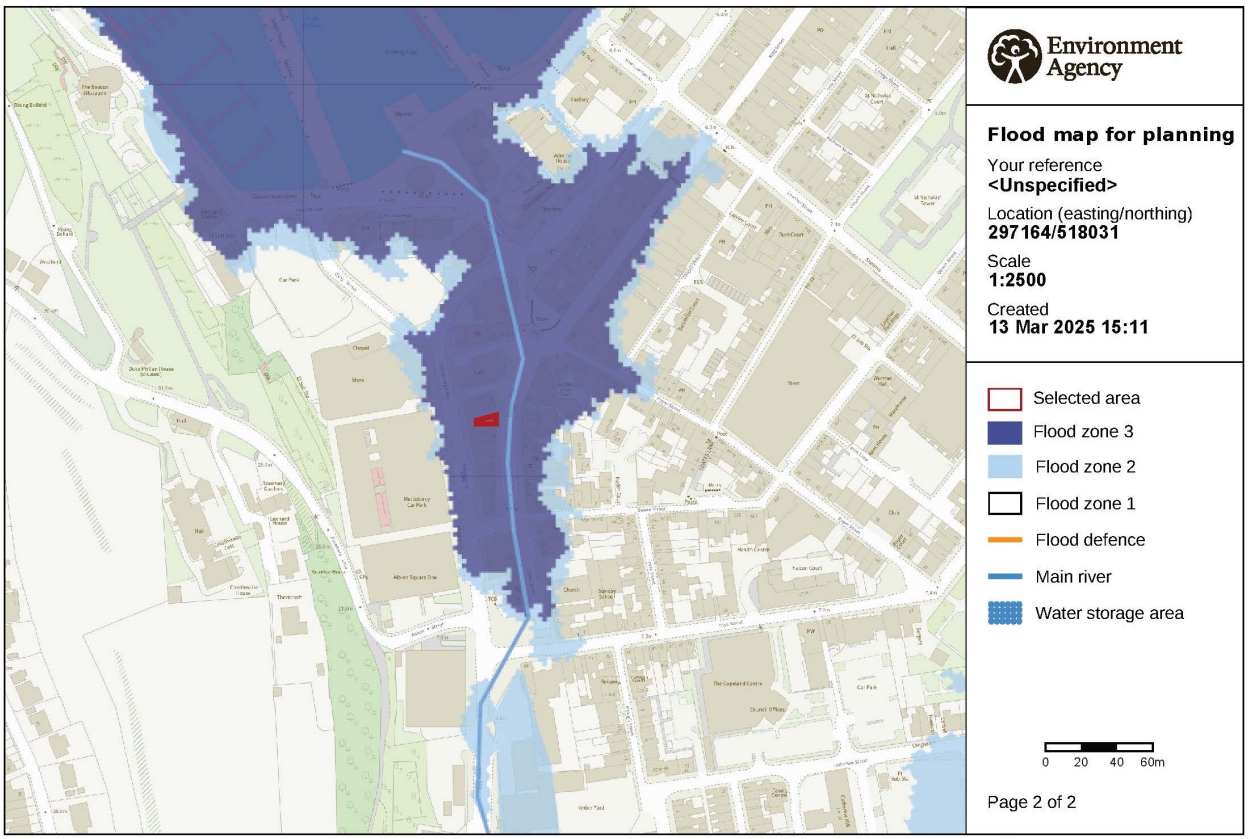


Image 003: Environment Flood Risk Map

We have checked on the Environment Agency Flood Map Website [see above map] which shows our shop is located Flood Zone 3, an area with a high probably of flooding.

Our proposed works include the replacement of the existing timber shopfront with a new like for like hardwood timber shopfront and replacement signage to the front and rear elevations. The shop already trades as a Greggs retail bakery and our proposals do not increase the risk of flooding to this property or elsewhere.

See Appendix A for report from the Environment Agency.

Greggs plc
20 March 2025

Flood risk assessment data

Location of site: 297165 / 518030 (shown as easting and northing coordinates)
Document created on: 13 March 2025
This information was previously known as a product 4.
Customer reference number: FG9PR35FPY1C

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)
- past floods
- flood defences and attributes
- information to help you assess if there is a reduced flood risk from rivers and the sea because of defences
- 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

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

Or you can contact your Lead Local Flood Authority for further information.

Your Lead Local Flood Authority is Cumberland.

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

About the models used

Model name: Whitehaven_Tidal 2012
Scenario(s): Defended tidal, defences removed tidal, defended climate change tidal, defences removed climate change tidal
Date: 1 July 2013

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 occuring 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 3.

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

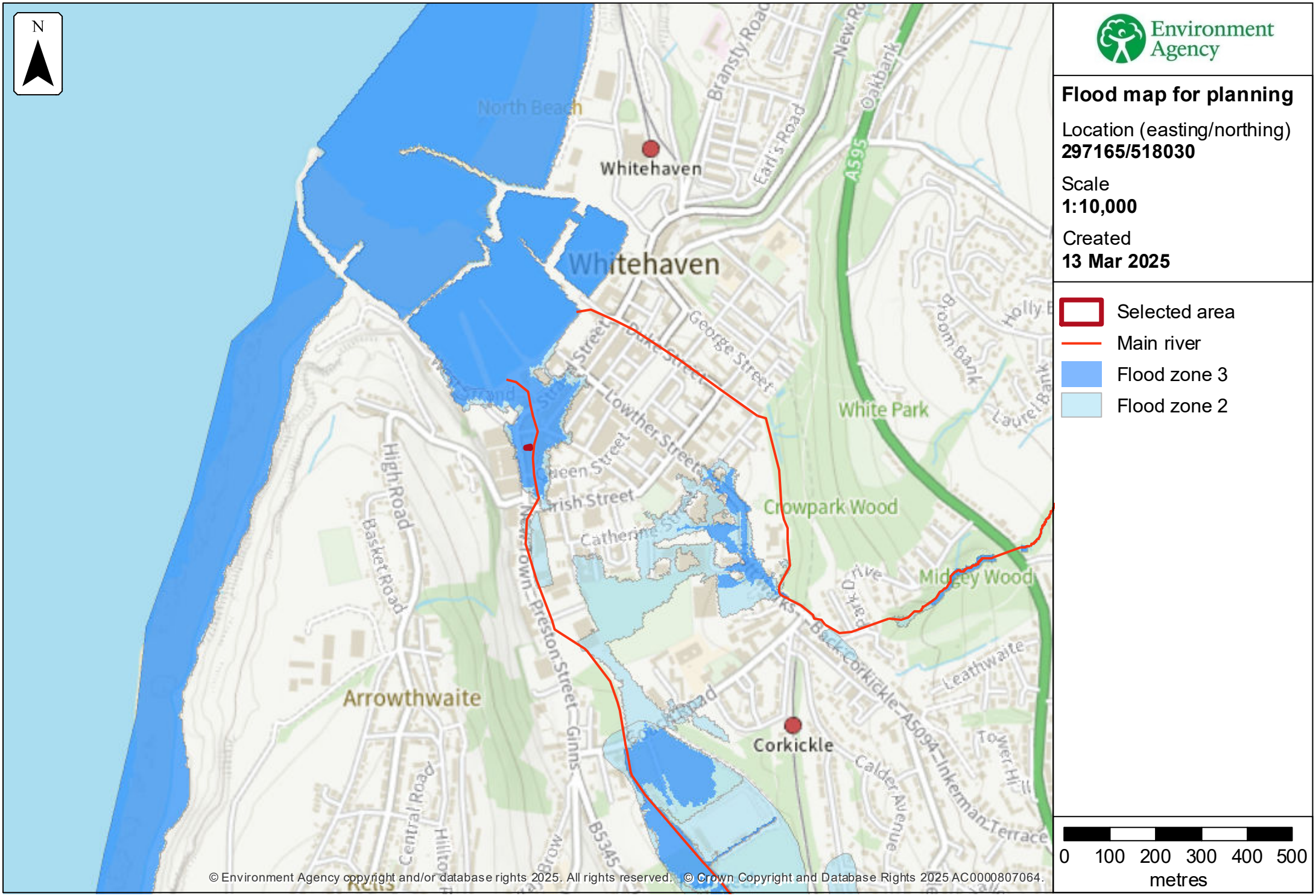
Flood zone 2 shows the area at risk of flooding for an undefended flood event with:

- 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

The flood zones are not currently being updated. The last update was in November 2023. Some of the flood zones may have changed, however all source data is included in the models below.


N
Environment Agency
Flood map for planning
Location (easting/northing)
297165/518030
Scale
1:10,000
Created
13 Mar 2025
Selected area
Main river
Flood zone 3
Flood zone 2
Whitehaven
North Beach
Bransty Road
Earl's Road
A595
Oakbank
George Street
Lowther Street
White Park
Crowpark Wood
Midgey Wood
High Road
Basket Road
Arrowthwaite
Corkickle
Leathwaite
Tower Hill
Calder Avenue
Inkerman Terrace
Central Road
B5345
0 100 200 300 400 500
metres
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Past floods

Past flood events included in this document

The recorded flood outlines included in this document are for areas of land local to your site location that have been flooded by any of these sources:

- ephemeral water
- main rivers
- ordinary watercourses
- the sea
- unknown

Data limitations

The outlines do not include flooding from:

- drainage where rainfall has led to surface water ponding or overland runoff
- artificial, water-bearing sewer, water supply and wastewater treatment pipelines

Changes to flood defences

The defences (also known as assets) that were in place may also have changed. For example, assets may have been built more recently than the last recorded flood outline.

What the recorded flood outlines dataset is

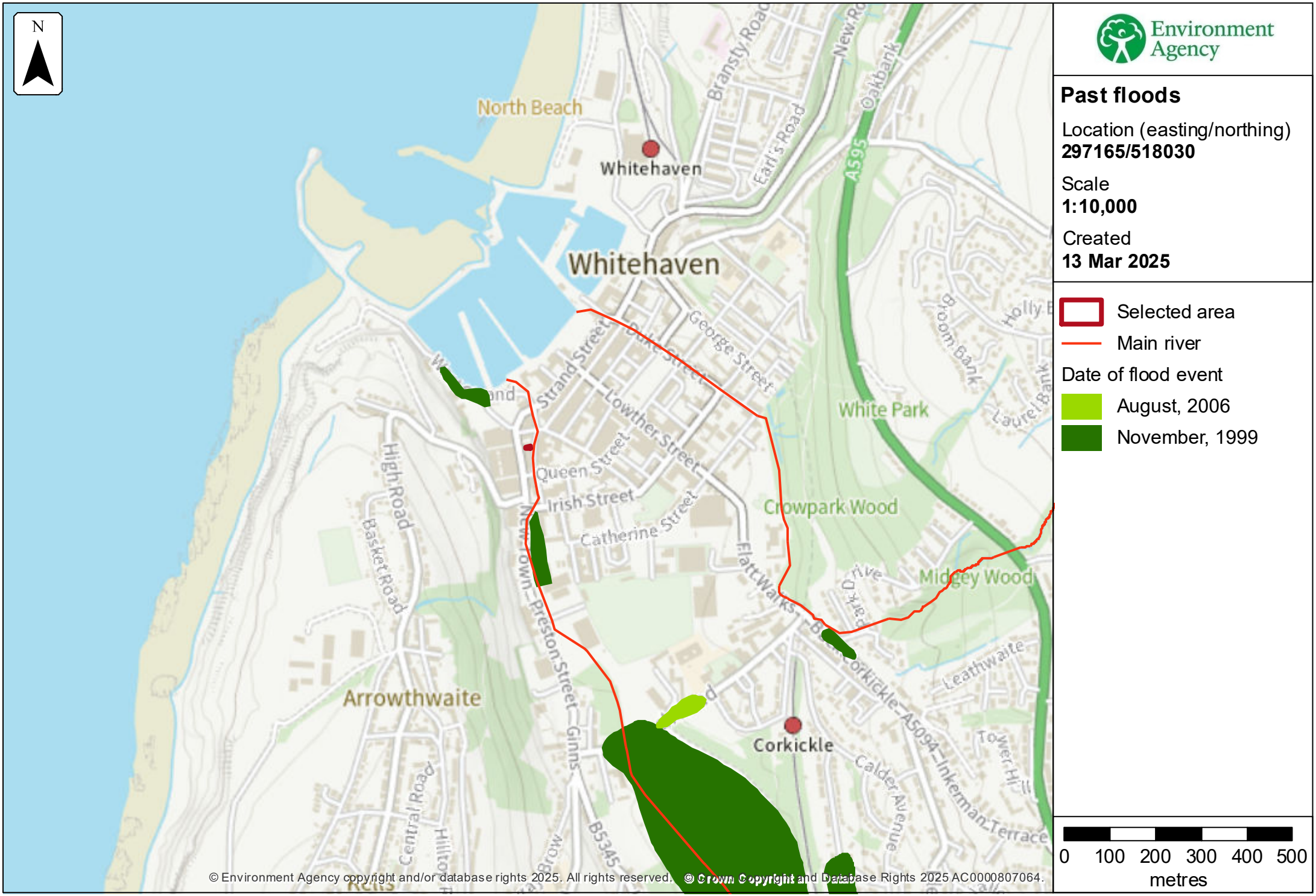
The recorded flood outlines are a geographical information system (GIS) data layer that show our verified records of areas that have flooded in the past from:

- rivers
- the sea
- groundwater
- surface water

Download the complete recorded flood outlines dataset, which includes data quality flags for outlines recorded after April 2020. This indicates the confidence we have in an outline.

Get flood information from other organisations

Contact Cumberland Lead Local Flood Authority (LLFA) and your drainage board to get information about past flooding caused by surface water or drainage systems.


N
North Beach
Whitehaven
Whitehaven
Bransty Road
New Road
Earl's Road
A595
Oakbank
George Street
Strand Street
Duke Street
Lowther Street
Queen Street
Irish Street
Catherine Street
Flatt Walks
Newtown
Preston Street
Ginns
High Road
Basket Road
Arrowthwaite
White Park
Broom Bank
Laurel Bank
Crowpark Wood
Midgey Wood
Leathwaite
Corkickle
Corkickle - A5094 - Inkerman Terrace
Calder Avenue
Tower Hill
Central Road
B5345
Environment Agency
Past floods
Location (easting/northing)
297165/518030
Scale
1:10,000
Created
13 Mar 2025
Selected area
Main river
Date of flood event
August, 2006
November, 1999
0 100 200 300 400 500
metres
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Data on past flood events

Start date	End date	Source of flood	Cause of flood	Affects location
11 August 2006	11 August 2006	main river	unknown	No
5 November 1999	5 November 1999	main river	channel capacity exceeded (no raised defences)	No

Flood defences and attributes

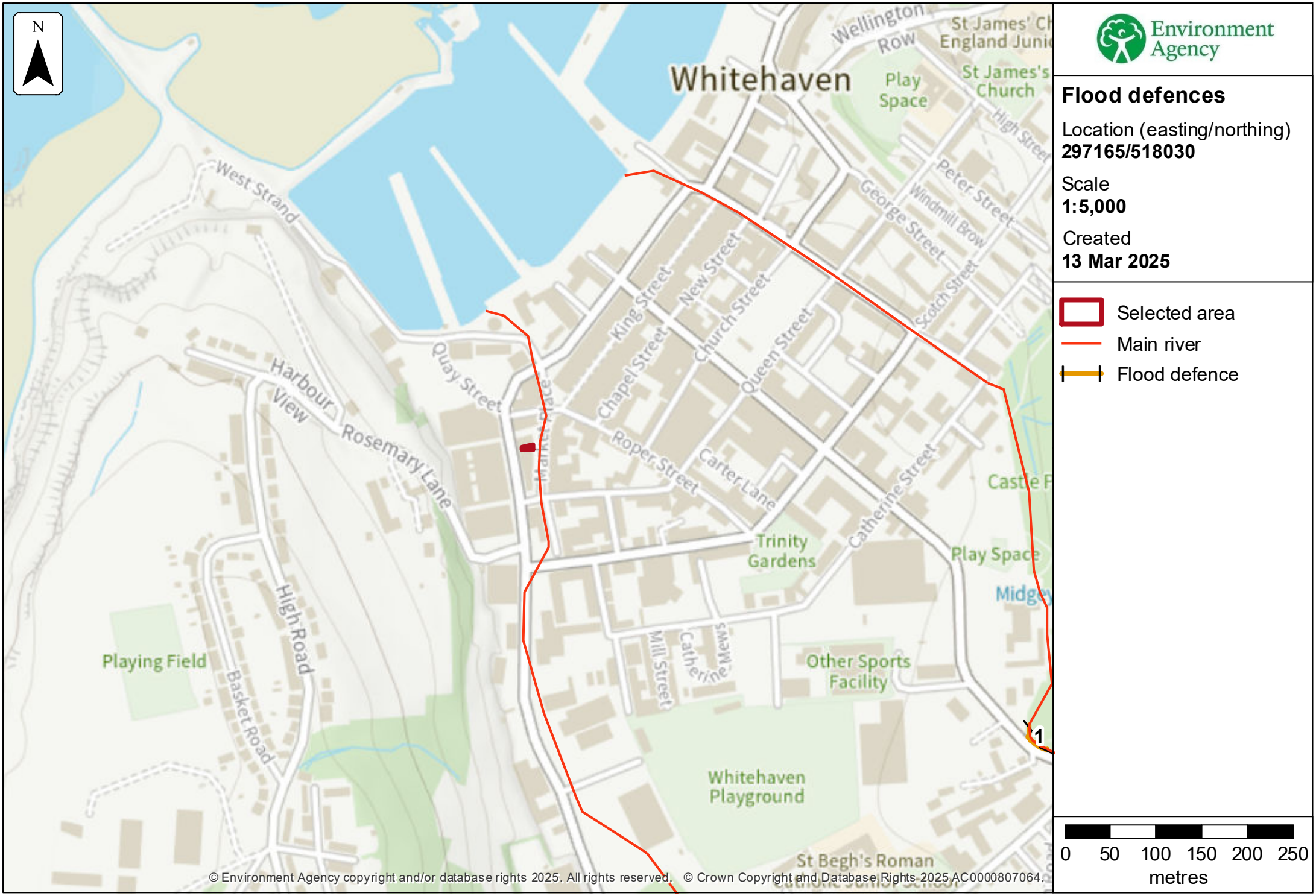
The flood defences map shows the location of the flood defences present.

The flood defences data table shows the type of defences, their condition and the standard of protection. It shows the height above sea level of the top of the flood defence (crest level). The height is In mAOD which is the metres above the mean sea level at Newlyn, Cornwall.

It's important to remember that flood defence data may not be updated on a regular basis. The information here is based on the best available data.

Use this information:

- to help you assess if there is a reduced flood risk for this location because of defences
- with any information in the modelled data section to find out the impact of defences on flood risk



Environment Agency

Flood defences

Location (easting/northing)
297165/518030

Scale
1:5,000

Created
13 Mar 2025

- Selected area
- Main river
- Flood defence

0 50 100 150 200 250
metres

Flood defences data

Label	Asset ID	Asset Type	Standard of protection (years)	Current condition	Downstream actual crest level (mAOD)	Upstream actual crest level (mAOD)	Effective crest level (mAOD)
1	94578	Wall	20	Fair	17.58	18.54	17.58

Any blank cells show where a particular value has not been recorded for an asset.

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

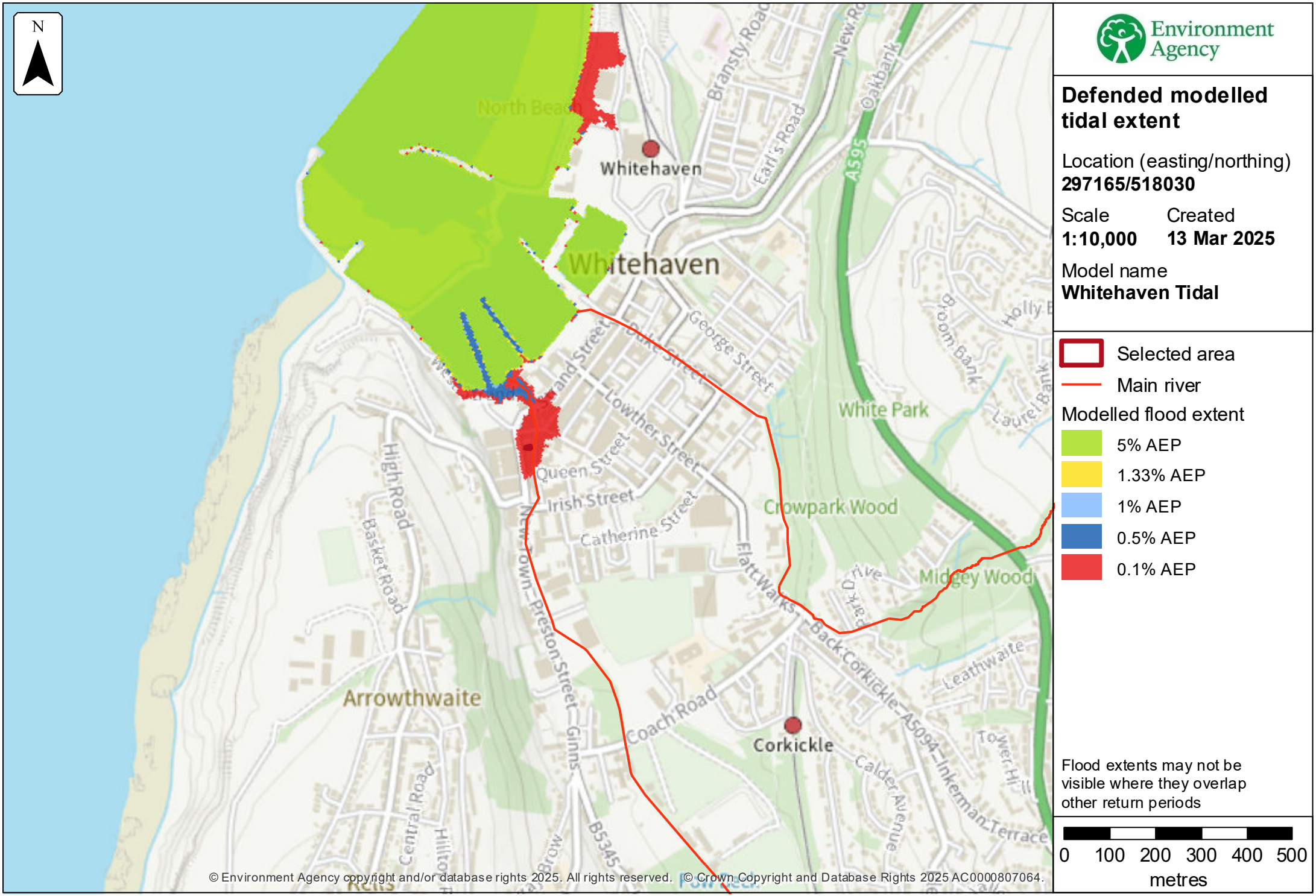
The climate change data included in the models may not include the latest flood risk assessment climate change allowances. Where the new allowances are not available you will need to consider this data and factor in the new allowances to demonstrate the development will be safe from flooding.

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


N
Environment Agency
Defended modelled tidal extent
Location (easting/northing)
297165/518030
Scale
1:10,000
Created
13 Mar 2025
Model name
Whitehaven Tidal
Selected area
Main river
Modelled flood extent
5% AEP
1.33% AEP
1% AEP
0.5% AEP
0.1% AEP
Flood extents may not be visible where they overlap other return periods
0 100 200 300 400 500
metres
Whitehaven
Arrowthwaite
Corkickle
White Park
Crowpark Wood
Midgey Wood
George Street
Queen Street
Irish Street
Catherine Street
Lowther Street
High Road
Basket Road
Coach Road
Leathwaite
A595
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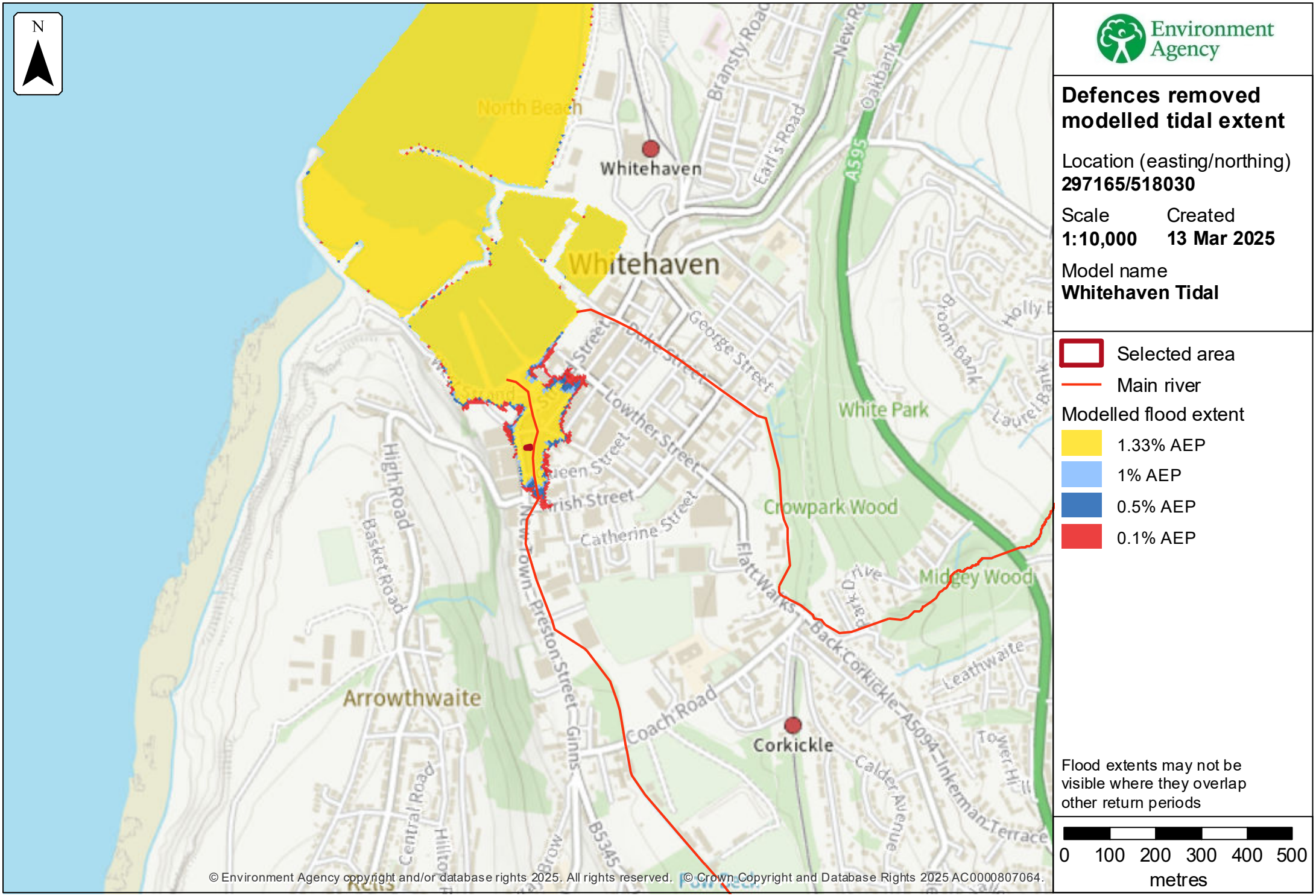


Environment Agency

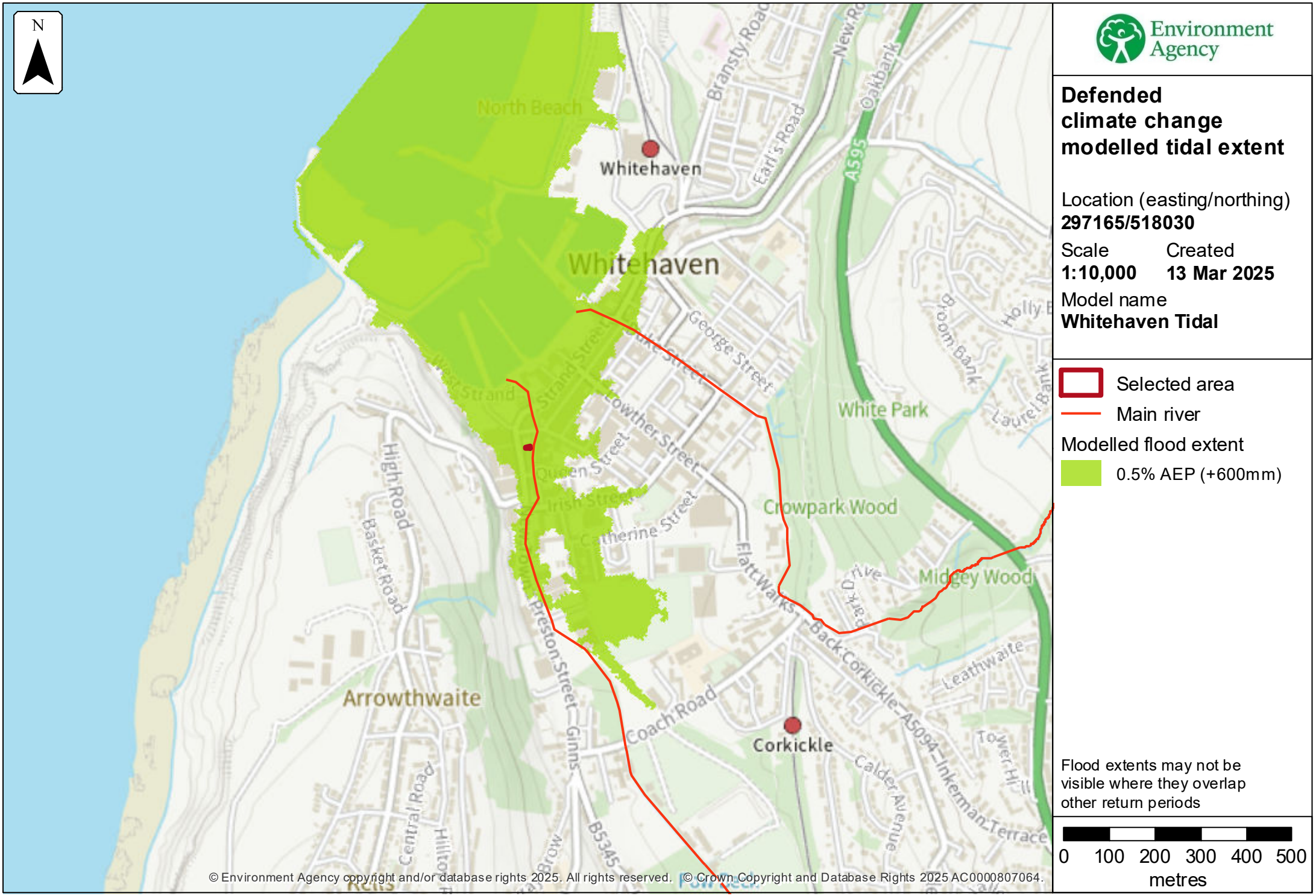
Defences removed modelled tidal extent

Location (easting/northing)
297165/518030

Scale
1:10,000

Created
13 Mar 2025

Model name
Whitehaven Tidal


N
North Beach
Whitehaven
Whitehaven
Bransty Road
Earl's Road
A595
Oakbank
George Street
Strand Street
West Strand
Lowther Street
Queen Street
Irish Street
Catherine Street
High Road
Basket Road
Preston Street
Flatt Walks
White Park
Broom Bank
Laurel Bank
Crowpark Wood
Midgey Wood
Back Corkickle
A5094
Inkerman Terrace
Leathwaite
Arrowthwaite
Coach Road
Corkickle
Ginns
Central Road
B5345
Calder Avenue
Tower Hill
Environment Agency
Defended climate change modelled tidal extent
Location (easting/northing)
297165/518030
Scale
1:10,000
Created
13 Mar 2025
Model name
Whitehaven Tidal
Selected area
Main river
Modelled flood extent
0.5% AEP (+600mm)
Flood extents may not be visible where they overlap other return periods
0 100 200 300 400 500
metres
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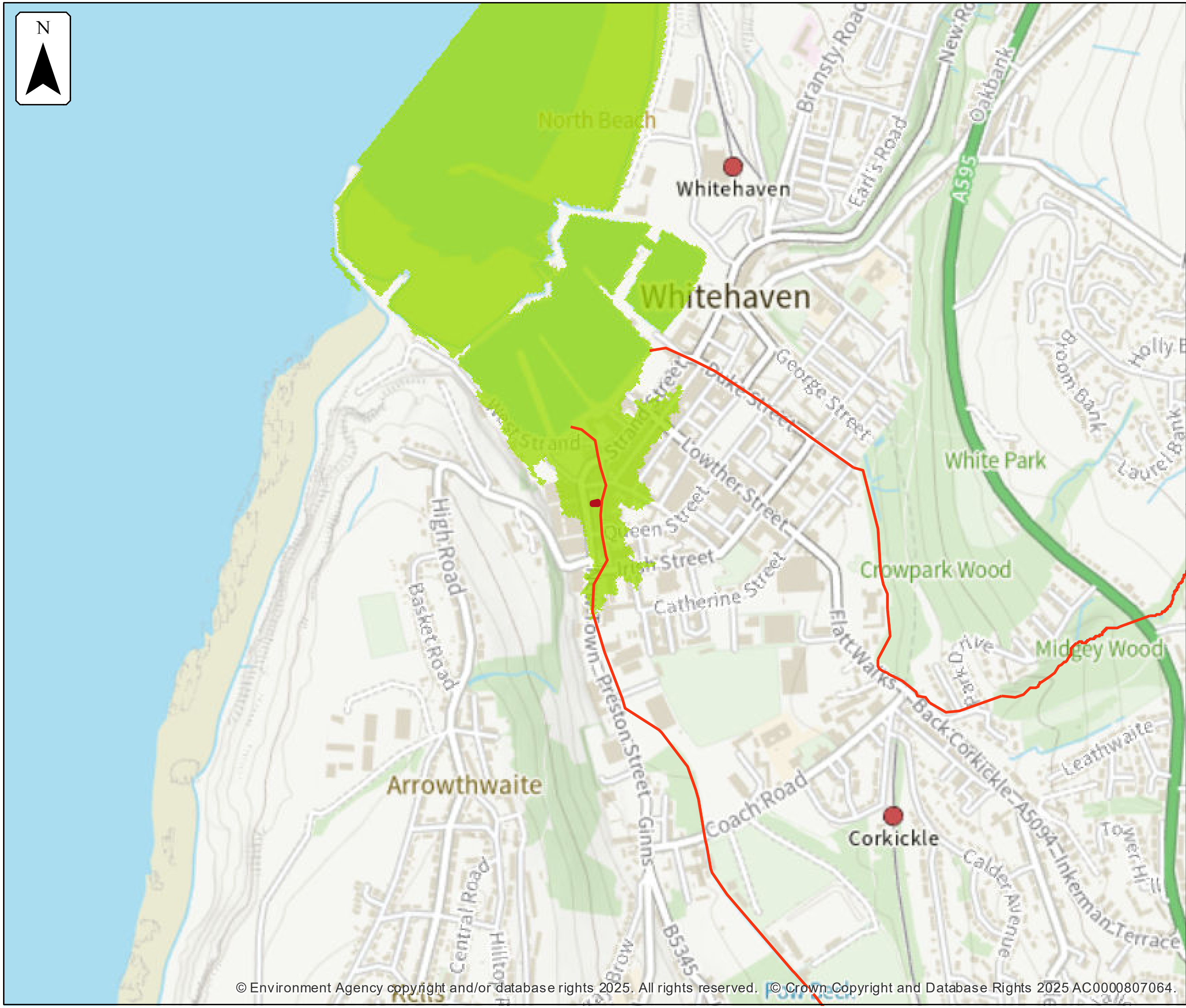


Environment Agency

Defences removed climate change modelled tidal extent

Location (easting/northing)
297165/518030

Scale **1:10,000**

Created **13 Mar 2025**

Model name
Whitehaven Tidal

Selected area

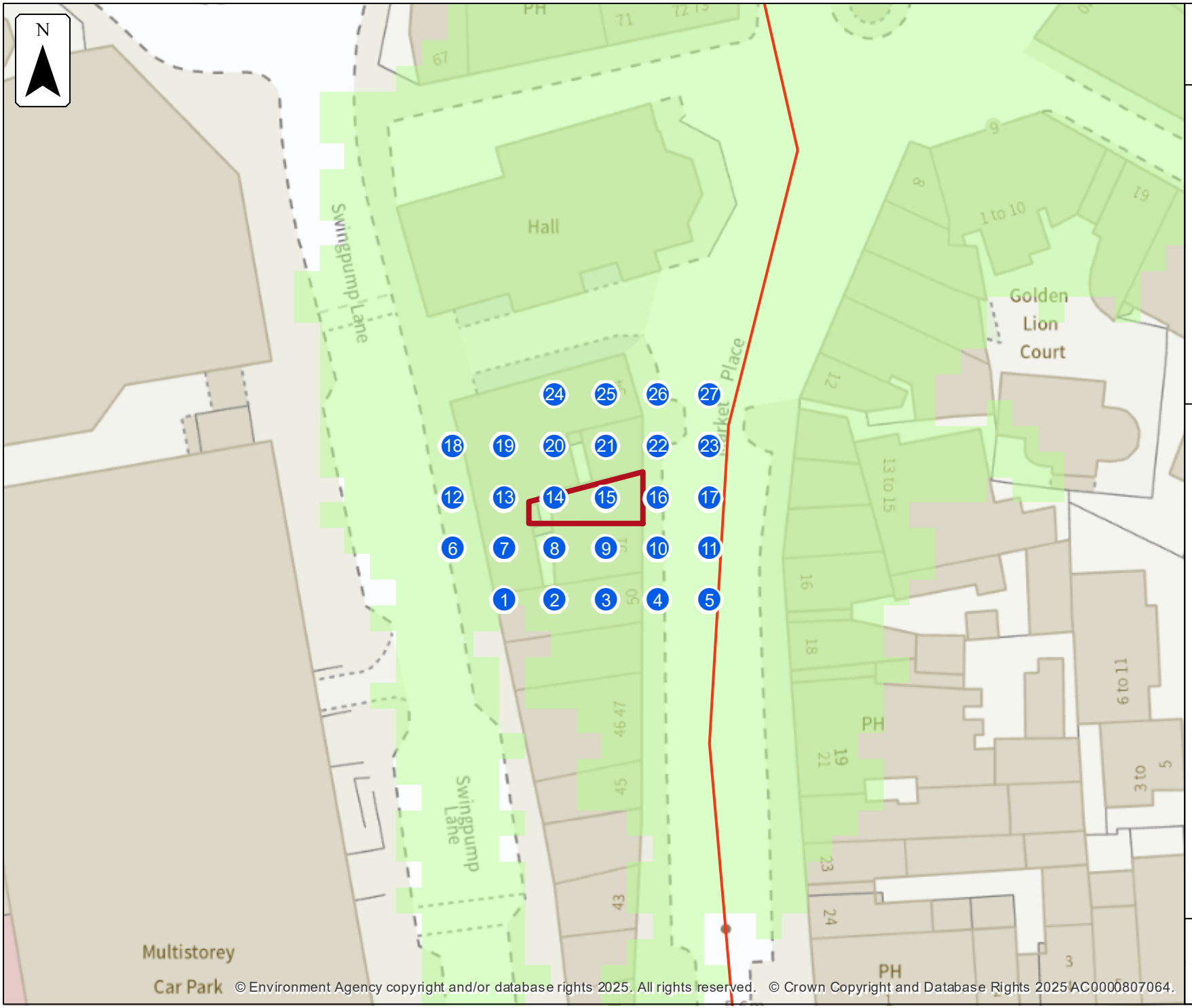
Main river

Modelled flood extent

0.5% AEP (+600mm)

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

0 100 200 300 400 500
metres



Environment Agency

Defended modelled tidal extent and height

Location (easting/northing)
297165/518030

Scale
1:500

Created
13 Mar 2025

Model name
Whitehaven Tidal

Selected area

Main river

Modelled 2D grid

Water level in mAOD

- 0 - 5.0
- 5.0 - 5.125
- 5.125 - 5.25
- 5.25 - 5.375
- 5.375 - 5.5
- 5.5 - 5.625
- 5.625 - 5.75
- 5.75 - 5.875
- 5.875 - 6.0

This map shows the 0.1% AEP height data

0 5 10 15 20
metres

Sample point data

Defended

Label	Easting	Northing	50% AEP	20% AEP	10% AEP	5% AEP	3.33% AEP	1.33% AEP	1% AEP	0.5% AEP	0.1% AEP
			Depth	Depth	Depth	Depth	Depth	Depth	Depth	Depth	Depth
1	297156	518021	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.04
2	297161	518021	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.10
3	297166	518021	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.19
4	297171	518021	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.26
5	297176	518021	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.29
6	297151	518026	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.08
7	297156	518026	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.07
8	297161	518026	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.17
9	297166	518026	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.25
10	297171	518026	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.33
11	297176	518026	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.33
12	297151	518031	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.11
13	297156	518031	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.09
14	297161	518031	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.15
15	297166	518031	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.21
16	297171	518031	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.37

Label	Easting	Northing	50% AEP	20% AEP	10% AEP	5% AEP	3.33% AEP	1.33% AEP	1% AEP	0.5% AEP	0.1% AEP
			Depth	Depth	Depth	Depth	Depth	Depth	Depth	Depth	Depth
17	297176	518031	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.33
18	297151	518036	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.09
19	297156	518036	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.16
20	297161	518036	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.21
21	297166	518036	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.27
22	297171	518036	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.34
23	297176	518036	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.36
24	297161	518041	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.31
25	297166	518041	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.33
26	297171	518041	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.37
27	297176	518041	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.37
Max value in selected area:			Could not determine	Could not determine	Could not determine	Could not determine	Could not determine	Could not determine	Could not determine	Could not determine	0.31

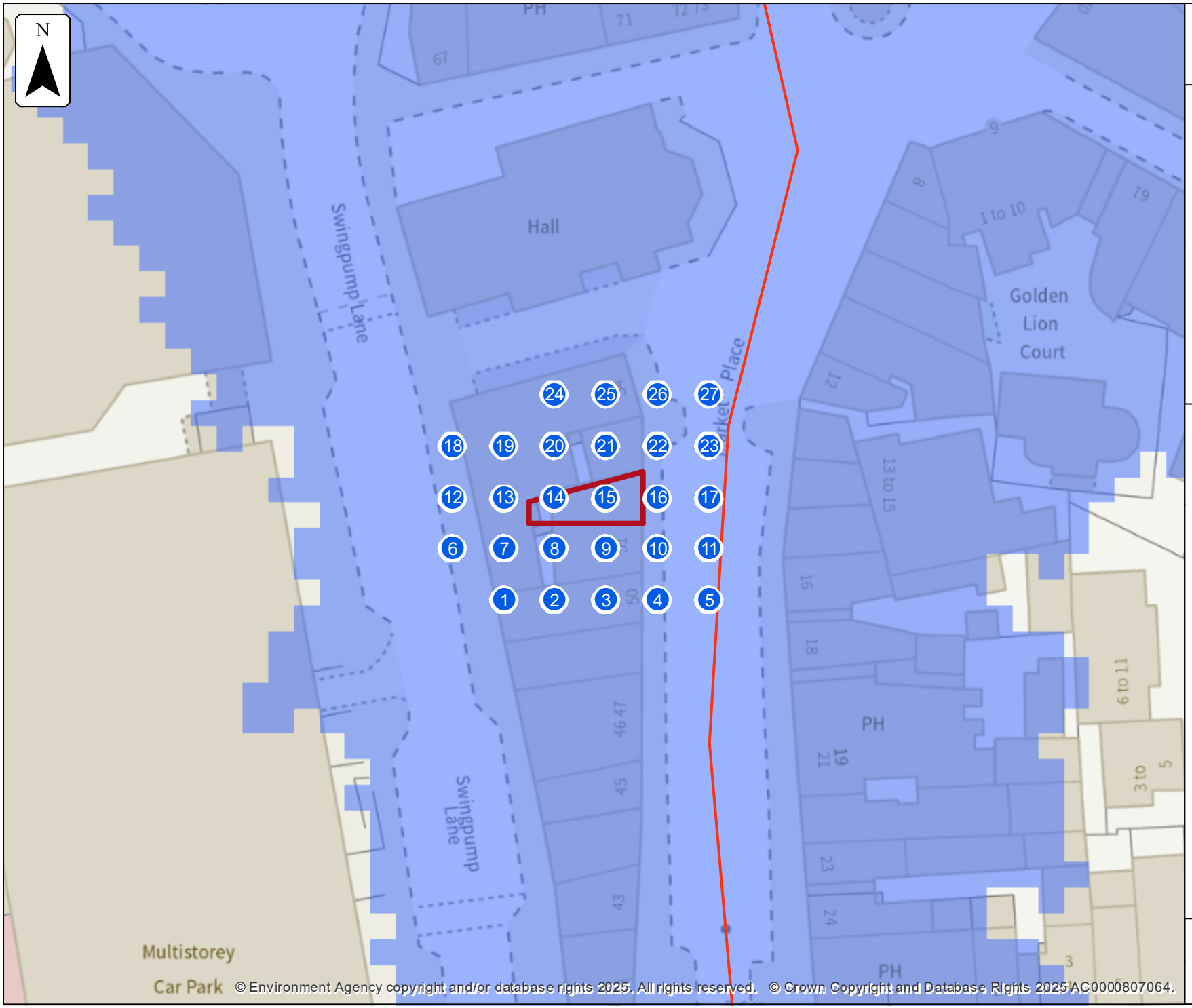
Data in this table comes from the Whitehaven Tidal 2012 model.
Height values are shown in mAOD, and depth values are shown in metres.
Any blank cells show where a particular scenario has not been modelled for this location.
Cells which contain text 'NoData' for a scenario show that return period has been modelled but there is no flood risk for that return period for that location.
If no height or depth data is available for a scenario, no table will be shown.
'Max value in selected area' is the deepest depth or highest height at any location within your drawn boundary.

Defended

Label	Easting	Northing	50% AEP	20% AEP	10% AEP	5% AEP	3.33% AEP	1.33% AEP	1% AEP	0.5% AEP	0.1% AEP
			Height	Height	Height	Height	Height	Height	Height	Height	Height
1	297156	518021	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	5.50
2	297161	518021	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	5.50
3	297166	518021	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	5.50
4	297171	518021	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	5.50
5	297176	518021	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	5.50
6	297151	518026	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	5.50
7	297156	518026	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	5.50
8	297161	518026	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	5.50
9	297166	518026	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	5.50
10	297171	518026	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	5.50
11	297176	518026	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	5.50
12	297151	518031	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	5.50
13	297156	518031	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	5.50
14	297161	518031	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	5.50
15	297166	518031	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	5.50
16	297171	518031	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	5.50
17	297176	518031	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	5.50
18	297151	518036	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	5.50

Label	Easting	Northing	50% AEP	20% AEP	10% AEP	5% AEP	3.33% AEP	1.33% AEP	1% AEP	0.5% AEP	0.1% AEP
			Height	Height	Height	Height	Height	Height	Height	Height	Height
19	297156	518036	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	5.50
20	297161	518036	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	5.50
21	297166	518036	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	5.50
22	297171	518036	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	5.50
23	297176	518036	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	5.50
24	297161	518041	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	5.50
25	297166	518041	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	5.50
26	297171	518041	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	5.50
27	297176	518041	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	5.50
Max value in selected area:			Could not determine	Could not determine	Could not determine	Could not determine	Could not determine	Could not determine	Could not determine	Could not determine	5.50

Data in this table comes from the Whitehaven Tidal 2012 model.
Height values are shown in mAOD, and depth values are shown in metres.
Any blank cells show where a particular scenario has not been modelled for this location.
Cells which contain text 'NoData' for a scenario show that return period has been modelled but there is no flood risk for that return period for that location.
If no height or depth data is available for a scenario, no table will be shown.
'Max value in selected area' is the deepest depth or highest height at any location within your drawn boundary.



Environment Agency

Defences removed modelled tidal extent and height

Location (easting/northing)
297165/518030

Scale
1:500

Created
13 Mar 2025

Model name
Whitehaven Tidal

Selected area

Main river

Modelled 2D grid

Water level in mAOD

- 0 - 6.0
- 6.0 - 6.125
- 6.125 - 6.25
- 6.25 - 6.375
- 6.375 - 6.5
- 6.5 - 6.625
- 6.625 - 6.75
- 6.75 - 6.875
- 6.875 - 7.0

This map shows the 0.1% AEP height data

0 5 10 15 20
metres

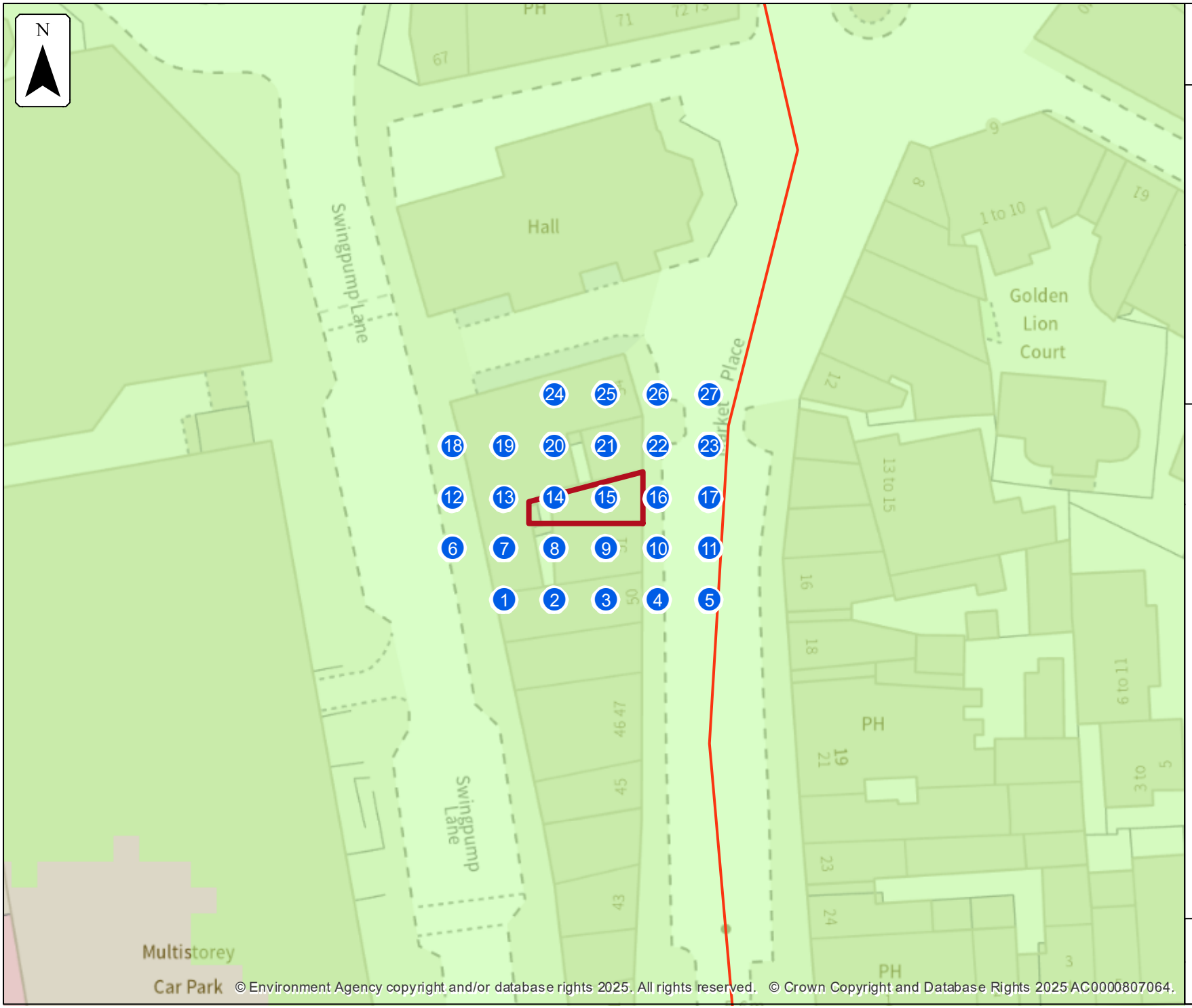
Sample point data

Defences removed

Label	Easting	Northing	3.33% AEP	1.33% AEP	1% AEP	0.5% AEP	0.1% AEP	3.33% AEP	1.33% AEP	1% AEP	0.5% AEP	0.1% AEP
			Depth	Depth	Depth	Depth	Depth	Height	Height	Height	Height	Height
1	297156	518021	0.09	0.24	0.29	0.39	0.62	5.54	5.70	5.74	5.84	6.08
2	297161	518021	0.15	0.30	0.35	0.45	0.68	5.54	5.70	5.74	5.84	6.08
3	297166	518021	0.23	0.39	0.43	0.54	0.77	5.54	5.70	5.74	5.84	6.08
4	297171	518021	0.30	0.46	0.51	0.61	0.84	5.54	5.70	5.74	5.84	6.08
5	297176	518021	0.33	0.49	0.54	0.64	0.87	5.54	5.70	5.74	5.84	6.08
6	297151	518026	0.12	0.28	0.33	0.43	0.66	5.54	5.70	5.74	5.84	6.08
7	297156	518026	0.11	0.26	0.31	0.41	0.65	5.54	5.70	5.74	5.84	6.08
8	297161	518026	0.21	0.37	0.42	0.52	0.75	5.54	5.70	5.74	5.84	6.08
9	297166	518026	0.30	0.45	0.50	0.60	0.83	5.54	5.70	5.74	5.84	6.08
10	297171	518026	0.37	0.53	0.58	0.68	0.91	5.54	5.70	5.74	5.84	6.08
11	297176	518026	0.37	0.53	0.57	0.67	0.91	5.54	5.70	5.74	5.84	6.08
12	297151	518031	0.15	0.30	0.35	0.45	0.69	5.54	5.70	5.74	5.84	6.08
13	297156	518031	0.13	0.29	0.34	0.44	0.67	5.54	5.70	5.74	5.84	6.08
14	297161	518031	0.20	0.35	0.40	0.50	0.73	5.54	5.70	5.74	5.84	6.08
15	297166	518031	0.25	0.40	0.45	0.55	0.79	5.54	5.70	5.74	5.84	6.08
16	297171	518031	0.41	0.56	0.61	0.71	0.95	5.54	5.70	5.74	5.84	6.08

Label	Easting	Northing	3.33% AEP	1.33% AEP	1% AEP	0.5% AEP	0.1% AEP	3.33% AEP	1.33% AEP	1% AEP	0.5% AEP	0.1% AEP
			Depth	Depth	Depth	Depth	Depth	Height	Height	Height	Height	Height
17	297176	518031	0.37	0.53	0.58	0.68	0.91	5.54	5.69	5.74	5.84	6.08
18	297151	518036	0.13	0.29	0.34	0.44	0.67	5.54	5.69	5.74	5.84	6.08
19	297156	518036	0.20	0.35	0.40	0.50	0.74	5.54	5.69	5.74	5.84	6.08
20	297161	518036	0.26	0.41	0.46	0.56	0.79	5.54	5.69	5.74	5.84	6.08
21	297166	518036	0.32	0.47	0.52	0.62	0.85	5.54	5.69	5.74	5.84	6.08
22	297171	518036	0.38	0.54	0.59	0.69	0.92	5.54	5.69	5.74	5.84	6.08
23	297176	518036	0.40	0.56	0.61	0.71	0.94	5.54	5.69	5.74	5.84	6.08
24	297161	518041	0.35	0.51	0.55	0.66	0.89	5.54	5.69	5.74	5.84	6.08
25	297166	518041	0.38	0.53	0.58	0.68	0.91	5.54	5.69	5.74	5.84	6.08
26	297171	518041	0.41	0.56	0.61	0.71	0.94	5.54	5.69	5.74	5.84	6.08
27	297176	518041	0.42	0.57	0.62	0.72	0.95	5.54	5.69	5.74	5.84	6.08
Max value in selected area:			0.35	0.51	0.56	0.66	0.89	5.54	5.70	5.74	5.84	6.08

Data in this table comes from the Whitehaven Tidal 2012 model.
Height values are shown in mAOD, and depth values are shown in metres.
Any blank cells show where a particular scenario has not been modelled for this location.
Cells which contain text 'NoData' for a scenario show that return period has been modelled but there is no flood risk for that return period for that location.
If no height or depth data is available for a scenario, no table will be shown.
'Max value in selected area' is the deepest depth or highest height at any location within your drawn boundary.



Environment Agency

Defended climate change modelled tidal extent and height

Location (easting/northing)
297165/518030

Scale
1:500

Created
13 Mar 2025

Model name
Whitehaven Tidal

Selected area

Main river

Modelled 2D grid
Water level in mAOD

- 0 - 7.0
- 7.0 - 7.125
- 7.125 - 7.25
- 7.25 - 7.375
- 7.375 - 7.5
- 7.5 - 7.625
- 7.625 - 7.75
- 7.75 - 7.875
- 7.875 - 8.0

This map shows the 0.5% AEP +600mm height data

0 5 10 15 20
metres

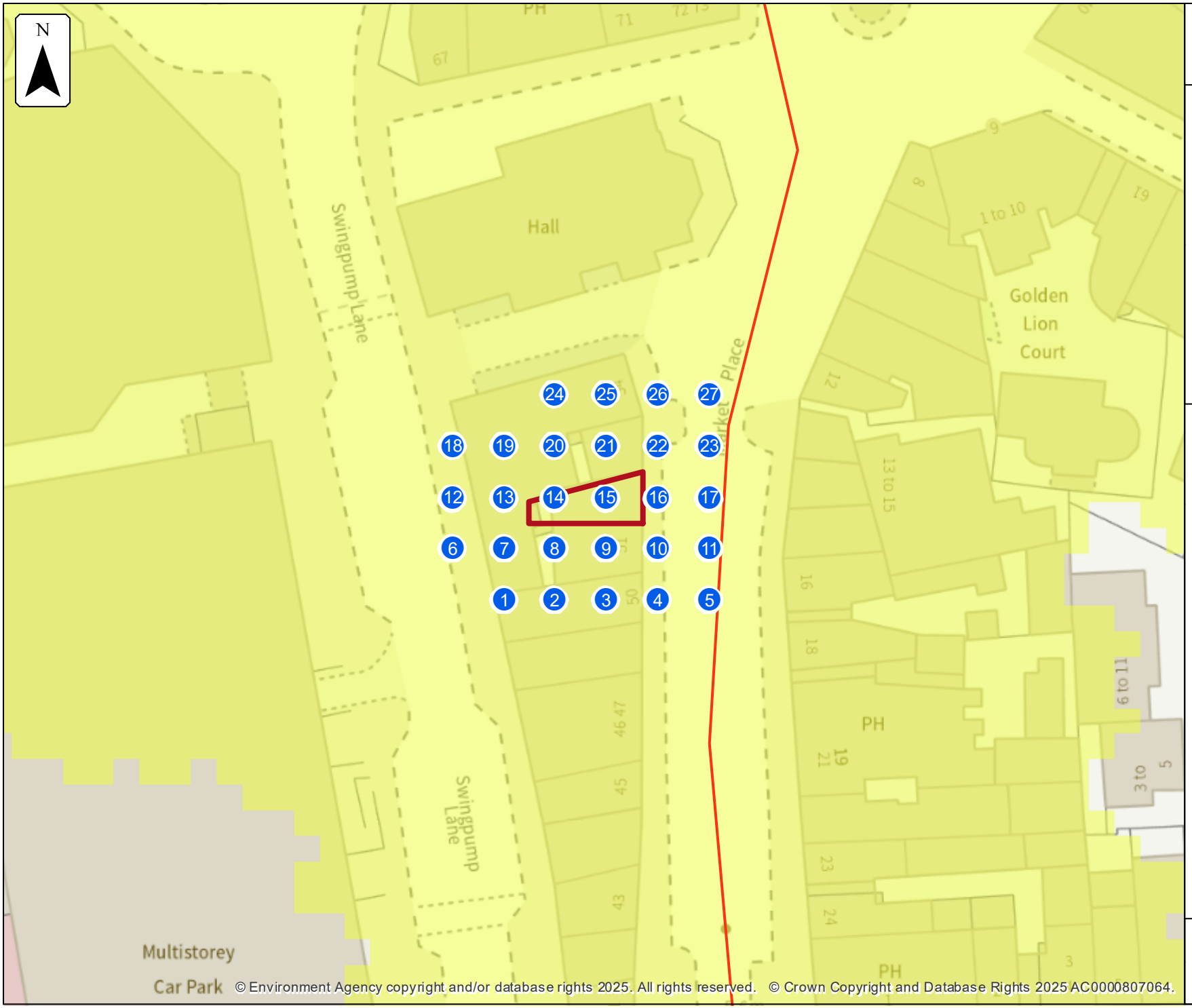
Sample point data

Defended climate change

Label	Easting	Northing	0.5% AEP (+600mm)	0.5% AEP (+600mm)
			Depth	Height
1	297156	518021	1.94	7.39
2	297161	518021	2.00	7.39
3	297166	518021	2.08	7.39
4	297171	518021	2.15	7.39
5	297176	518021	2.18	7.39
6	297151	518026	1.97	7.39
7	297156	518026	1.96	7.39
8	297161	518026	2.06	7.39
9	297166	518026	2.14	7.39
10	297171	518026	2.22	7.39
11	297176	518026	2.22	7.39
12	297151	518031	2.00	7.39
13	297156	518031	1.98	7.39
14	297161	518031	2.05	7.39
15	297166	518031	2.10	7.39
16	297171	518031	2.26	7.39

Label	Easting	Northing	0.5% AEP (+600mm)	0.5% AEP (+600mm)
			Depth	Height
17	297176	518031	2.22	7.39
18	297151	518036	1.98	7.39
19	297156	518036	2.05	7.39
20	297161	518036	2.11	7.39
21	297166	518036	2.17	7.39
22	297171	518036	2.23	7.39
23	297176	518036	2.25	7.39
24	297161	518041	2.20	7.39
25	297166	518041	2.23	7.39
26	297171	518041	2.26	7.39
27	297176	518041	2.27	7.39
Max value in selected area:			2.20	7.39

Data in this table comes from the Whitehaven Tidal 2012 model.
Height values are shown in mAOD, and depth values are shown in metres.
Any blank cells show where a particular scenario has not been modelled for this location.
Cells which contain text 'NoData' for a scenario show that return period has been modelled but there is no flood risk for that return period for that location.
If no height or depth data is available for a scenario, no table will be shown.
'Max value in selected area' is the deepest depth or highest height at any location within your drawn boundary.



Environment Agency

Defences removed climate change modelled tidal extent and height

Location (easting/northing)
297165/518030

Scale
1:500

Created
13 Mar 2025

Model name
Whitehaven Tidal

Selected area

Main river

Modelled 2D grid
Water level in mAOD

- 0 - 6.0
- 6.0 - 6.125
- 6.125 - 6.25
- 6.25 - 6.375
- 6.375 - 6.5
- 6.5 - 6.625
- 6.625 - 6.75
- 6.75 - 6.875
- 6.875 - 7.0

This map shows the 0.5% AEP +600mm height data

0 5 10 15 20
metres

Sample point data

Defences removed climate change

Label	Easting	Northing	0.5% AEP (+600mm)	0.5% AEP (+600mm)
			Depth	Height
1	297156	518021	1.06	6.51
2	297161	518021	1.12	6.51
3	297166	518021	1.20	6.51
4	297171	518021	1.27	6.51
5	297176	518021	1.31	6.51
6	297151	518026	1.09	6.51
7	297156	518026	1.08	6.51
8	297161	518026	1.19	6.51
9	297166	518026	1.27	6.51
10	297171	518026	1.34	6.51
11	297176	518026	1.34	6.51
12	297151	518031	1.12	6.51
13	297156	518031	1.10	6.51
14	297161	518031	1.17	6.51
15	297166	518031	1.22	6.51
16	297171	518031	1.38	6.51

Label	Easting	Northing	0.5% AEP (+600mm)	0.5% AEP (+600mm)
			Depth	Height
17	297176	518031	1.34	6.51
18	297151	518036	1.11	6.51
19	297156	518036	1.17	6.51
20	297161	518036	1.23	6.51
21	297166	518036	1.29	6.51
22	297171	518036	1.36	6.51
23	297176	518036	1.37	6.51
24	297161	518041	1.32	6.51
25	297166	518041	1.35	6.51
26	297171	518041	1.38	6.51
27	297176	518041	1.39	6.51
Max value in selected area:			1.32	6.51

Data in this table comes from the Whitehaven Tidal 2012 model.
Height values are shown in mAOD, and depth values are shown in metres.
Any blank cells show where a particular scenario has not been modelled for this location.
Cells which contain text 'NoData' for a scenario show that return period has been modelled but there is no flood risk for that return period for that location.
If no height or depth data is available for a scenario, no table will be shown.
'Max value in selected area' is the deepest depth or highest height at any location within your drawn boundary.

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

Your Lead Local Flood Authority is Cumberland.

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 for:

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