

Flood risk assessment data



Location of site: 375389 / 442293 (shown as easting and northing coordinates)

Document created on: 25 March 2025

This information was previously known as a product 4.

Customer reference number: 9MNP43FF71B

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
- 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

When using the surface water map on the [check your long term flood risk service](#) the following considerations apply:

- surface water extents are suitable for use in planning
- surface water climate change scenarios may help to inform risk assessments, but the available data fall short of what is required to assess planned development
- surface water depth information should not be used for planning purposes

To find out about other factors that might affect the flood risk of this location, you should also check:

- [reservoir flood risk](#)
- groundwater flood risk - you could use the [British Geological Survey groundwater flooding data](#), [groundwater: current status and flood risk](#) and the guide on [mining and groundwater constraints for development](#) - further information may be available from the lead local flood authority (LLFA)
- your local planning authority's SFRA, which includes future flood risk

Your Lead Local Flood Authority is Lancashire County.

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

About the models used

Model name: Mearley Brook 2018

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

Date: 1 December 2017

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 3.

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

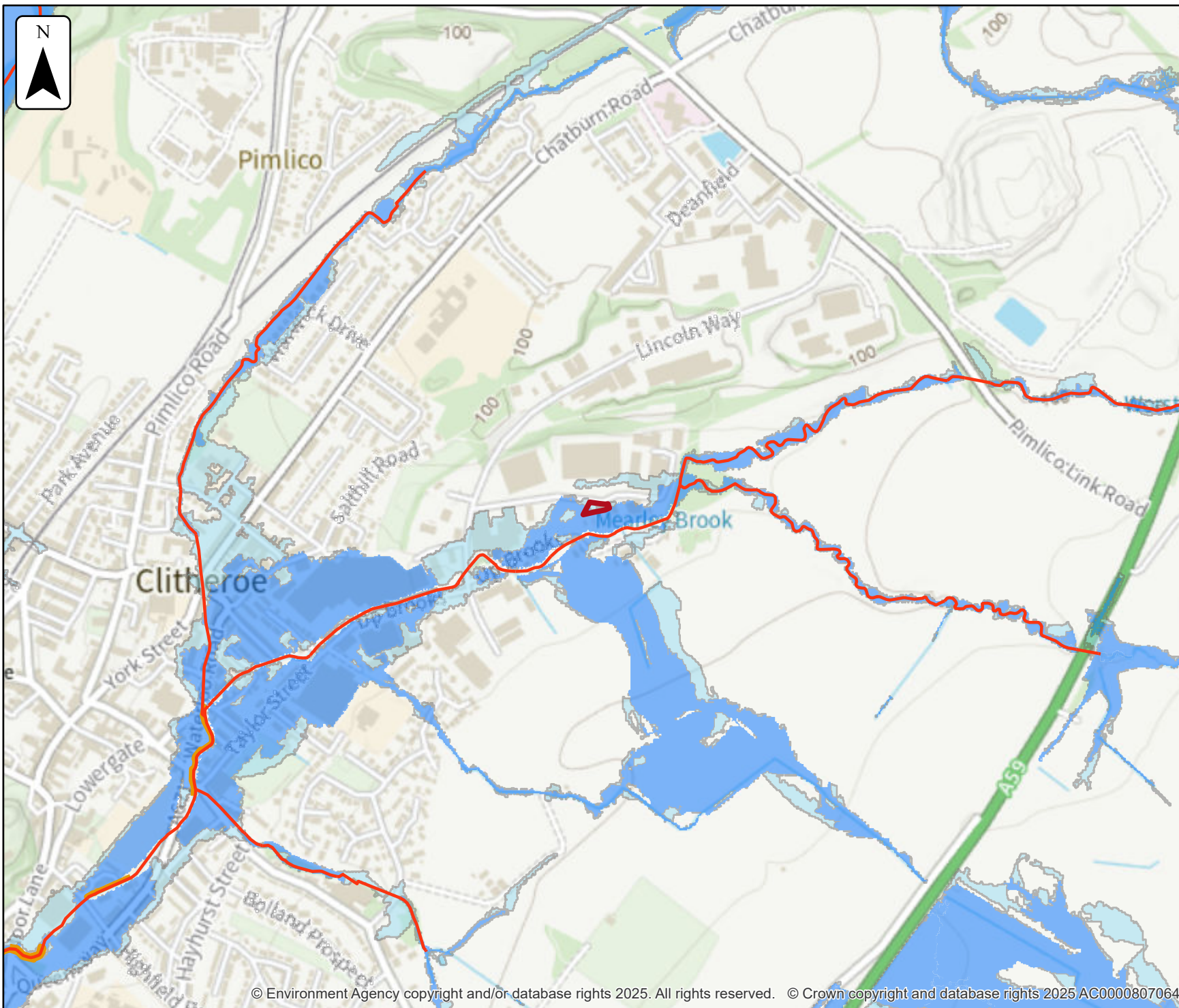
- 0.5% or greater probability of occurring in any year for flooding from the sea
- 1% or greater probability of occurring in any year for fluvial (river) flooding

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



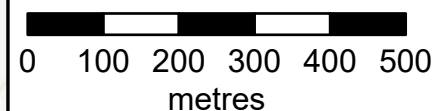
Flood map for planning

Location (easting/northing)
375389/442293

Scale
1:10,000

Created
25 Mar 2025

-  Selected area
-  Main river
-  Flood defence
-  Water storage area
- Flood Zones 2 and 3
Rivers and Sea
-  Flood Zone 3
-  Flood Zone 2



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



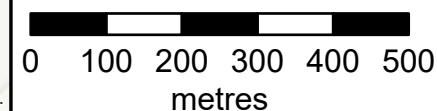
Past floods

Location (easting/northing)
375389/442293

Scale
1:10,000

Created
25 Mar 2025

-  Selected area
-  Main river
- Date of flood event
 -  August, 2016
 -  December, 2015
 -  July, 2007
 -  September, 1999
 -  February, 1999



Data on past flood events

Start date	End date	Source of flood	Cause of flood	Affects location
22 August 2016	23 August 2016	main river	channel capacity exceeded (no raised defences)	No
26 December 2015	27 December 2015	unknown	unknown	No
3 July 2007	4 July 2007	ordinary watercourse	obstruction/blockage - culvert	No
29 September 1999	30 September 1999	main river	channel capacity exceeded (no raised defences)	No
19 February 1999	20 February 1999	main river	other	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



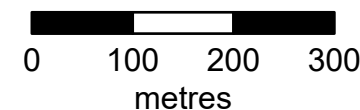
Flood defences

Location (easting/northing)
375389/442293

Scale
1:7,500

Created
25 Mar 2025

-  Selected area
-  Main river
-  Flood defence



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	536674	Flood Gate		Good	77.10	77.10	77.10
2	148786	Wall	10	Fair	78.25	79.30	78.25
3	150181	Engineered High Ground	10	Fair	78.10	79.90	78.10

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
- modelled node point map(s) showing the points used to get the data to model the scenarios and table(s) providing details of the flood risk for different return periods
- 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

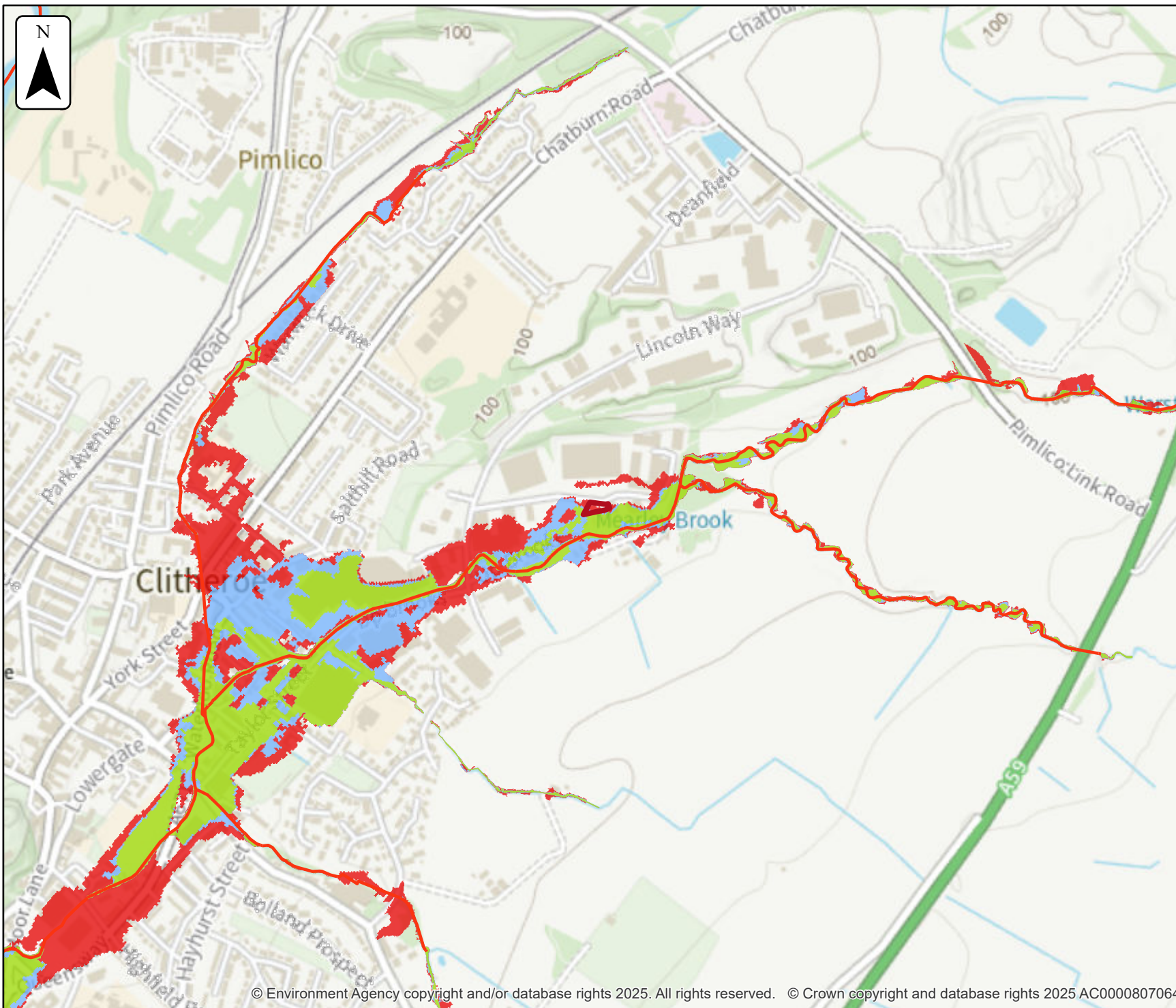
The climate change data included in the models may not include the latest [flood risk assessment climate change allowances](#). Where the new allowances are not available you will need to consider this data and factor in the new allowances to demonstrate the development will be safe from flooding.

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



Defences removed modelled fluvial extent

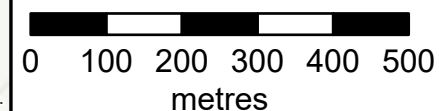
Location (easting/northing)
375389/442293

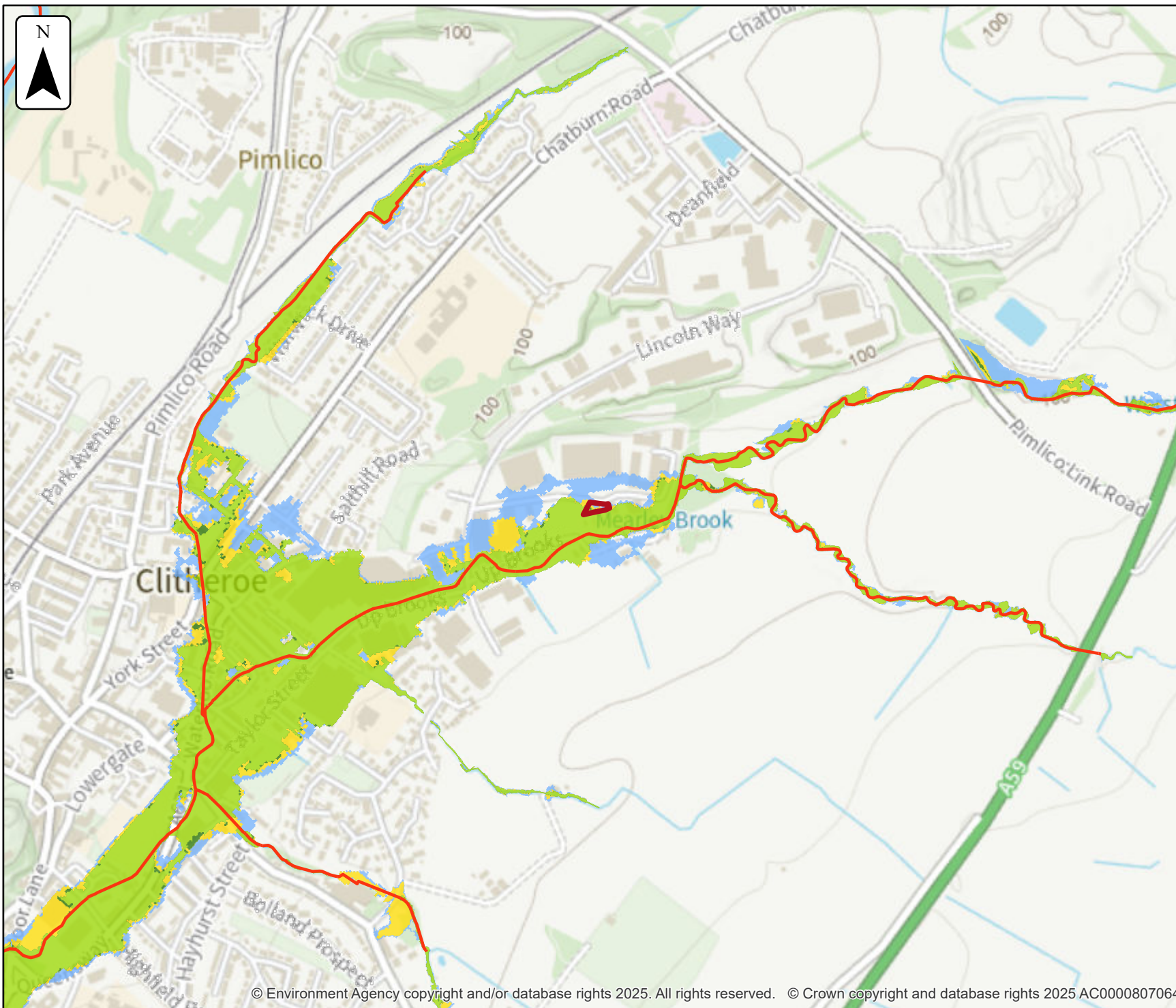
Scale Created
1:10,000 25 Mar 2025

Model name
Mearley Brook 2018

-  Selected area
-  Main river
- Modelled flood extent
 -  5% AEP
 -  1% AEP
 -  0.1% AEP

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





Defended climate change modelled fluvial extent

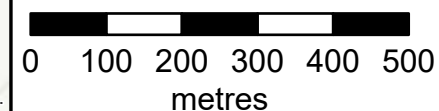
Location (easting/northing)
375389/442293

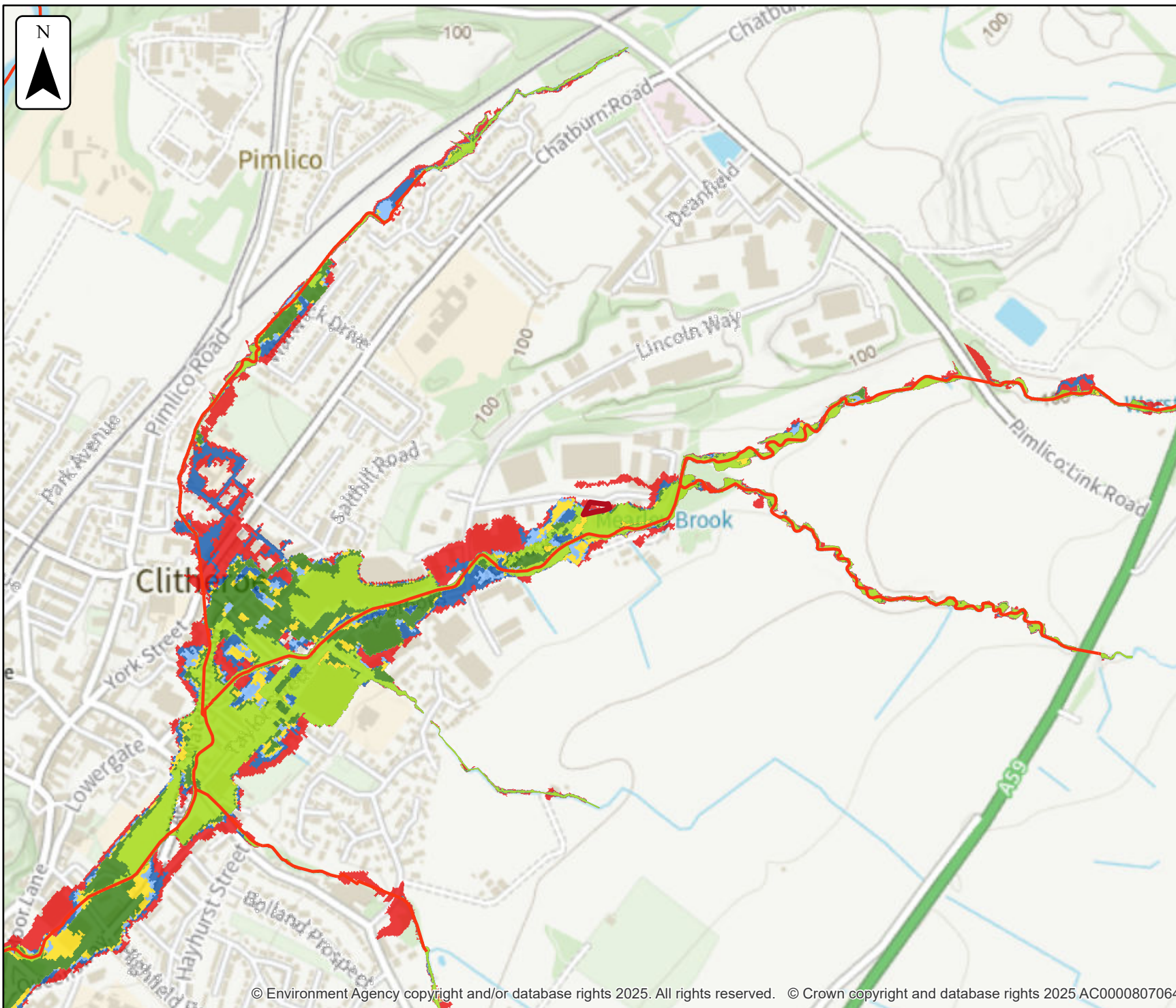
Scale Created
1:10,000 25 Mar 2025

Model name
Mearley Brook 2018

-  Selected area
-  Main river
- Modelled flood extent
 -  1% AEP (+30%)
 -  1% AEP (+35%)
 -  1% AEP (+70%)
 -  0.1% AEP (+30%)

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





Defended modelled fluvial extent

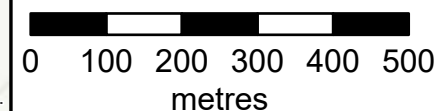
Location (easting/northing)
375389/442293

Scale Created
1:10,000 25 Mar 2025

Model name
Mearley Brook 2018

- Selected area
- Main river
- Modelled flood extent
- 5% AEP
 - 2% AEP
 - 1.33% AEP
 - 1% AEP
 - 0.5% AEP
 - 0.1% AEP

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





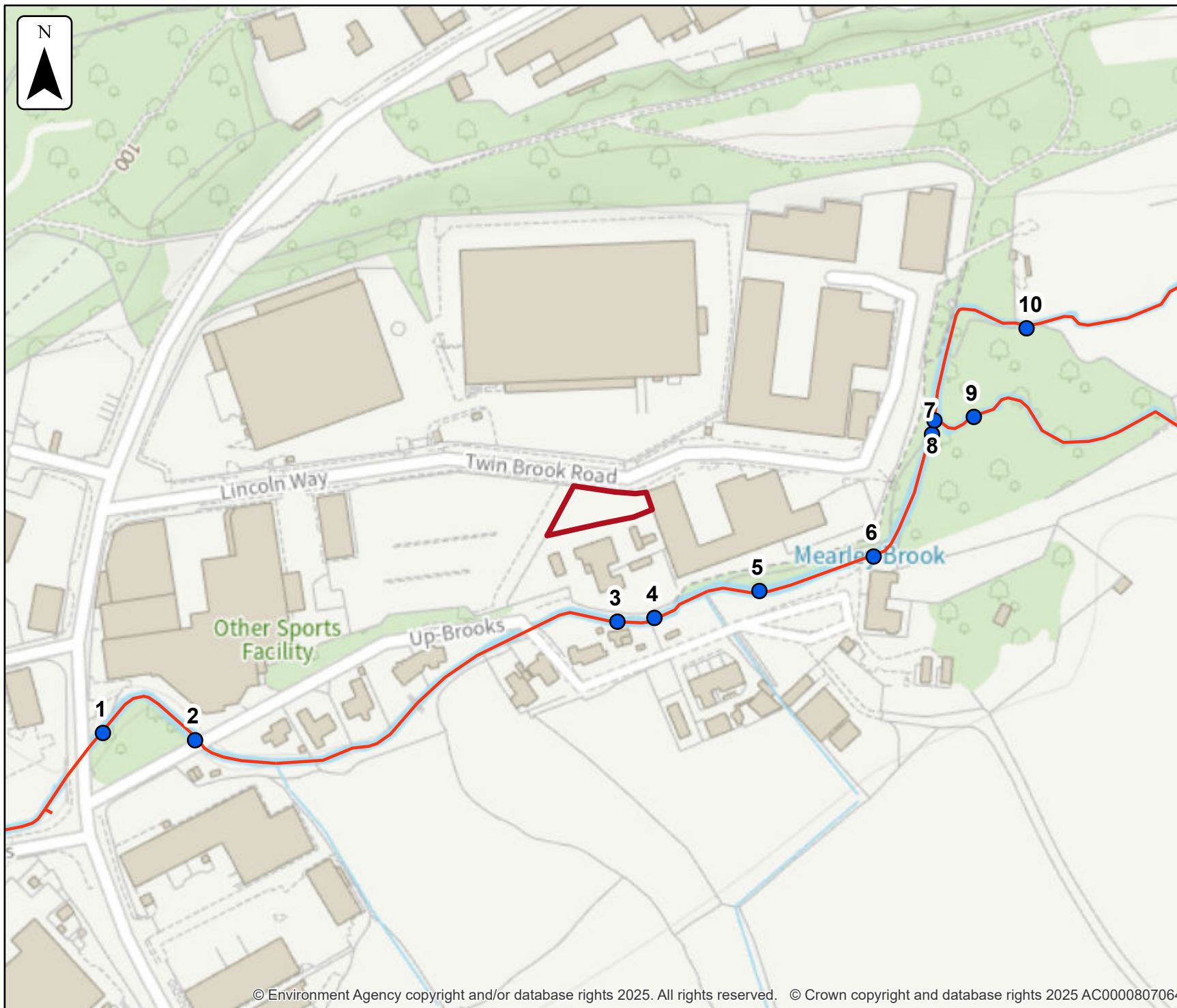
Defences removed modelled fluvial node locations

Location (easting/northing)
375389/442293

Scale Created
1:2,500 25 Mar 2025

Model name
Mearley Brook 2018

-  Selected area
-  Modelled location
-  Main river



Modelled node locations data

Defences removed

Label	Modelled location ID	Easting	Northing	5% AEP	1% AEP	0.1% AEP	5% AEP	1% AEP	0.1% AEP
				Level	Level	Level	Flow	Flow	Flow
1	982335	375149	442184	79.40	79.73	80.45	14.38	20.49	32.22
2	982230	375193	442180	79.99	80.22	80.72	14.18	20.02	23.40
3	982323	375398	442238	82.37	82.75	82.94	14.15	19.51	28.68
4	982222	375416	442240	82.57	82.96	83.33	13.84	17.99	23.68
5	982288	375467	442253	83.08	83.35	83.64	13.48	18.76	32.49
6	982324	375522	442269	83.73	83.91	84.27	12.69	16.89	25.97
7	982268	375550	442329	84.67	84.73	84.94	13.76	19.82	35.85
8	982458	375552	442335	84.67	84.73	84.94	8.89	12.95	23.52
9	982394	375571	442337	84.70	84.78	85.01	4.89	6.91	12.35
10	982391	375596	442380	85.26	85.39	85.66	8.89	12.98	24.50

Data in this table comes from the Mearley Brook 2018 model.

Level values are shown in mAOD, and flow values are shown in cubic metres per second.

Any blank cells show where a particular scenario has not been modelled for this location.



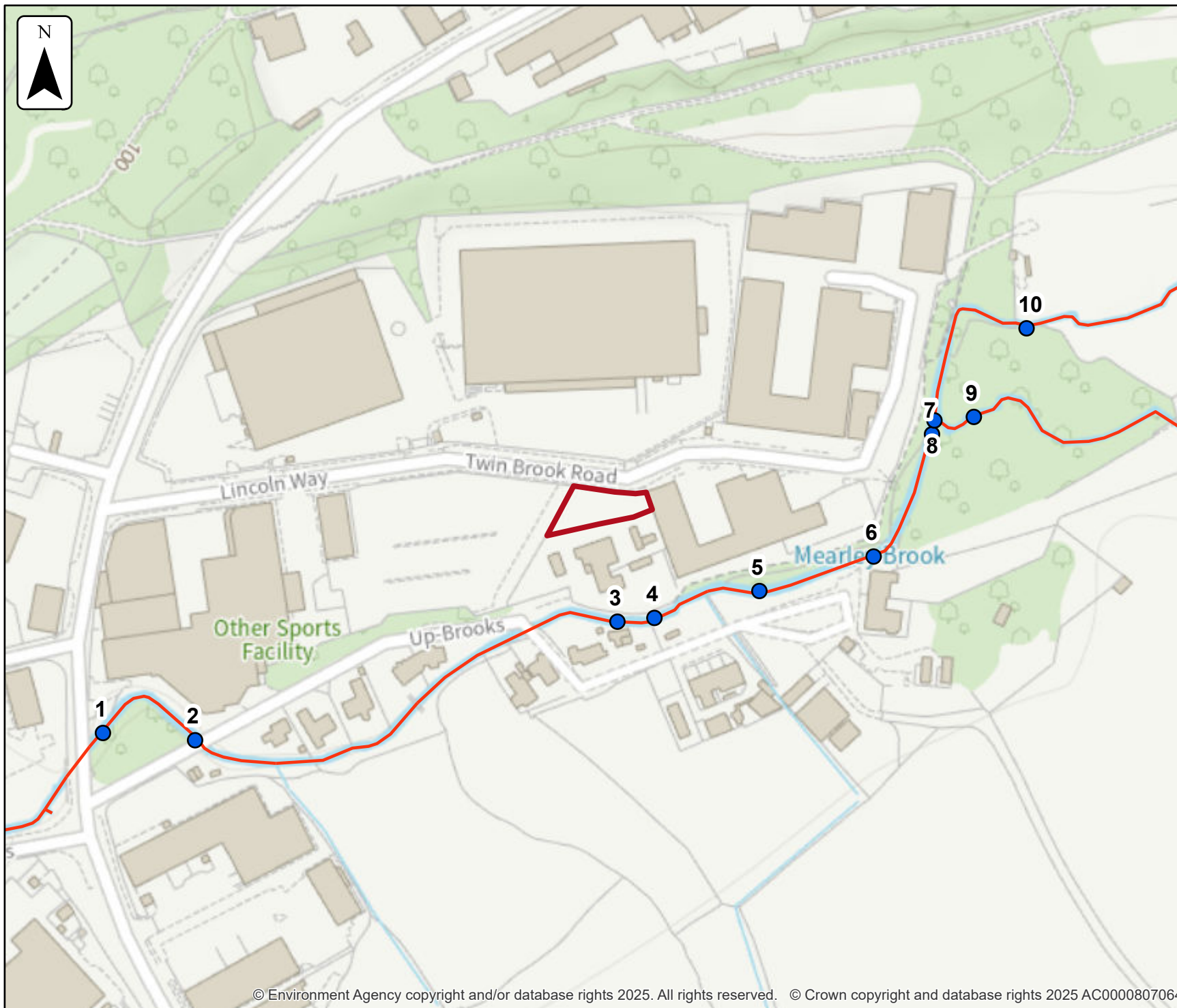
Defended climate change modelled fluvial node locations

Location (easting/northing)
375389/442293

Scale Created
1:2,500 25 Mar 2025

Model name
Mearley Brook 2018

-  Selected area
-  Modelled location
-  Main river



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Modelled node locations data

Defended climate change

Label	Modelled location ID	Easting	Northing	1% AEP (+30%)	1% AEP (+35%)	1% AEP (+70%)	0.1% AEP (+30%)
				Level	Level	Level	Level
1	982335	375149	442184	80.02	80.06	80.31	80.61
2	982230	375193	442180	80.40	80.43	80.64	80.85
3	982323	375398	442238	82.86	82.86	82.92	82.99
4	982222	375416	442240	83.12	83.14	83.26	83.47
5	982288	375467	442253	83.48	83.49	83.59	83.76
6	982324	375522	442269	84.05	84.07	84.20	84.42
7	982268	375550	442329	84.82	84.82	84.90	85.04
8	982458	375552	442335	84.82	84.82	84.90	85.04
9	982394	375571	442337	84.87	84.88	84.96	85.11
10	982391	375596	442380	85.49	85.50	85.60	85.78

Data in this table comes from the Mearley Brook 2018 model.

Level values are shown in mAOD, and flow values are shown in cubic metres per second.

Any blank cells show where a particular scenario has not been modelled for this location.

Defended climate change

Label	Modelled location ID	Easting	Northing	1% AEP (+30%)	1% AEP (+35%)	1% AEP (+70%)	0.1% AEP (+30%)
				Flow	Flow	Flow	Flow
1	982335	375149	442184	27.26	27.23	30.35	35.77
2	982230	375193	442180	23.39	23.39	23.42	23.43
3	982323	375398	442238	23.08	23.50	26.89	32.86
4	982222	375416	442240	20.09	20.34	22.48	27.01
5	982288	375467	442253	23.67	24.29	29.55	39.48
6	982324	375522	442269	20.41	20.82	24.20	30.34
7	982268	375550	442329	25.50	26.24	32.38	44.64
8	982458	375552	442335	16.74	17.15	21.15	29.07
9	982394	375571	442337	8.84	9.12	11.25	15.59
10	982391	375596	442380	16.99	17.43	21.79	31.39

Data in this table comes from the Mearley Brook 2018 model.

Level values are shown in mAOD, and flow values are shown in cubic metres per second.

Any blank cells show where a particular scenario has not been modelled for this location.



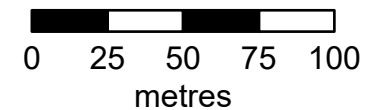
Defended modelled fluvial node locations

Location (easting/northing)
375389/442293

Scale Created
1:2,500 25 Mar 2025

Model name
Mearley Brook 2018

-  Selected area
-  Modelled location
-  Main river



Modelled node locations data

Defended

Label	Modelled location ID	Easting	Northing	50% AEP	20% AEP	10% AEP	5% AEP	4% AEP	3.33% AEP	2% AEP	1.33% AEP	1% AEP	0.5% AEP	0.1% AEP
				Level	Level	Level	Level	Level	Level	Level	Level	Level	Level	Level
1	982335	375149	442184	78.92	79.11	79.26	79.40	79.44	79.48	79.60	79.67	79.73	79.94	80.45
2	982230	375193	442180	79.70	79.75	79.87	79.99	80.02	80.04	80.12	80.18	80.22	80.34	80.72
3	982323	375398	442238	81.74	81.96	82.17	82.37	82.41	82.46	82.60	82.70	82.75	82.83	82.94
4	982222	375416	442240	81.97	82.19	82.40	82.57	82.62	82.66	82.80	82.90	82.96	83.08	83.33
5	982288	375467	442253	82.73	82.89	82.97	83.08	83.12	83.15	83.24	83.31	83.35	83.44	83.64
6	982324	375522	442269	83.40	83.55	83.65	83.73	83.75	83.77	83.84	83.88	83.91	84.0	84.27
7	982268	375550	442329	84.35	84.53	84.63	84.67	84.68	84.69	84.71	84.72	84.73	84.78	84.94
8	982458	375552	442335	84.35	84.53	84.63	84.67	84.68	84.69	84.71	84.72	84.73	84.78	84.94
9	982394	375571	442337	84.42	84.57	84.66	84.70	84.72	84.72	84.75	84.77	84.78	84.84	85.01
10	982391	375596	442380	85.05	85.17	85.22	85.26	85.28	85.29	85.33	85.36	85.39	85.47	85.66

Data in this table comes from the Mearley Brook 2018 model.

Level values are shown in mAOD, and flow values are shown in cubic metres per second.

Any blank cells show where a particular scenario has not been modelled for this location.

Defended

Label	Modelled location ID	Easting	Northing	50% AEP	20% AEP	10% AEP	5% AEP	4% AEP	3.33% AEP	2% AEP	1.33% AEP	1% AEP	0.5% AEP	0.1% AEP
				Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow
1	982335	375149	442184	7.57	10.09	12.18	14.38	15.04	15.70	17.69	19.20	20.49	27.31	32.22
2	982230	375193	442180	7.47	9.95	12.02	14.18	14.83	15.48	17.45	18.91	20.02	23.35	23.41
3	982323	375398	442238	7.47	9.95	12.0	14.15	14.80	15.43	17.20	18.53	19.51	22.70	28.68
4	982222	375416	442240	7.47	9.90	11.80	13.84	14.40	14.92	16.40	17.34	17.99	19.80	23.68
5	982288	375467	442253	7.36	9.73	11.54	13.48	14.07	14.63	16.35	17.67	18.76	22.23	32.50
6	982324	375522	442269	7.36	9.62	11.08	12.69	13.18	13.63	14.99	16.05	16.89	19.37	25.97
7	982268	375550	442329	7.36	9.80	11.74	13.76	14.40	15.03	17.04	18.57	19.82	23.68	35.85
8	982458	375552	442335	4.68	6.28	7.56	8.89	9.32	9.75	11.08	12.13	12.95	15.50	23.52
9	982394	375571	442337	2.68	3.53	4.20	4.89	5.11	5.32	5.99	6.49	6.91	8.16	12.35
10	982391	375596	442380	4.69	6.35	7.56	8.89	9.32	9.74	11.06	12.13	12.98	15.51	24.50

Data in this table comes from the Mearley Brook 2018 model.

Level values are shown in mAOD, and flow values are shown in cubic metres per second.

Any blank cells show where a particular scenario has not been modelled for this location.



Defended modelled fluvial extent and height

Location (easting/northing)
375389/442293

Scale Created
1:500 25 Mar 2025

Model name
Mearley Brook 2018

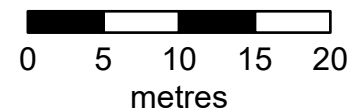
-  Selected area
-  Main river

Modelled 2D grid

Water level in mAOD

-  0 - 82.0
-  82.0 - 82.375
-  82.375 - 82.75
-  82.75 - 83.125
-  83.125 - 83.5
-  83.5 - 83.875
-  83.875 - 84.25
-  84.25 - 84.625
-  84.625 - 85.0

This map shows the
0.1% AEP height data



Sample point data

Defended

Label	Easting	Northing	50% AEP	20% AEP	10% AEP	5% AEP	4% AEP	3.33% AEP	2% AEP	1.33% AEP	1% AEP	0.5% AEP	0.1% AEP
			Depth	Depth	Depth	Depth	Depth	Depth	Depth	Depth	Depth	Depth	Depth
1	375358	442274	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.03	0.04	0.08	0.20
2	375367	442274	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.16
3	375376	442274	NoData	NoData	NoData	NoData	NoData	NoData	0.01	0.01	0.03	0.07	0.20
4	375358	442283	NoData	NoData	NoData	0.14	0.15	0.15	0.17	0.19	0.20	0.26	0.39
5	375367	442283	NoData	NoData	NoData	0.05	0.05	0.06	0.07	0.09	0.11	0.17	0.32
6	375376	442283	NoData	NoData	NoData	0.01	0.01	0.02	0.03	0.05	0.07	0.15	0.31
7	375385	442283	NoData	NoData	NoData	0.02	0.03	0.03	0.04	0.06	0.09	0.20	0.39
8	375394	442283	NoData	NoData	NoData	0.01	0.01	0.01	0.02	0.03	0.05	0.15	0.39
9	375403	442283	NoData	NoData	NoData	NoData	NoData	NoData	0.00	0.02	0.04	0.14	0.38
10	375412	442283	NoData	NoData	NoData	0.03	0.03	0.04	0.06	0.08	0.11	0.22	0.48
11	375367	442292	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.00	0.03	0.16
12	375376	442292	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.07

Label	Easting	Northing	50% AEP	20% AEP	10% AEP	5% AEP	4% AEP	3.33% AEP	2% AEP	1.33% AEP	1% AEP	0.5% AEP	0.1% AEP
			Depth	Depth	Depth	Depth	Depth	Depth	Depth	Depth	Depth	Depth	Depth
13	375385	442292	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.07
14	375394	442292	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.10
15	375403	442292	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
16	375412	442292	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.12
17	375421	442292	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.16
18	375367	442301	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.01
19	375376	442301	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
20	375385	442301	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
21	375394	442301	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
22	375403	442301	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
23	375412	442301	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
24	375421	442301	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData

Label	Easting	Northing	50% AEP	20% AEP	10% AEP	5% AEP	4% AEP	3.33% AEP	2% AEP	1.33% AEP	1% AEP	0.5% AEP	0.1% AEP
			Depth	Depth	Depth	Depth	Depth	Depth	Depth	Depth	Depth	Depth	Depth
25	375376	442310	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
26	375385	442310	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
27	375394	442310	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
28	375403	442310	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
29	375412	442310	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
Max value in selected area:			NoData	NoData	NoData	0.05	0.06	0.06	0.08	0.09	0.11	0.21	0.41

Data in this table comes from the Mearley Brook 2018 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.

'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	4% AEP	3.33% AEP	2% AEP	1.33% AEP	1% AEP	0.5% AEP	0.1% AEP
			Height	Height	Height	Height	Height	Height	Height	Height	Height	Height	Height
1	375358	442274	NoData	NoData	NoData	NoData	NoData	NoData	NoData	82.71	82.73	82.77	82.88
2	375367	442274	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	83.03
3	375376	442274	NoData	NoData	NoData	NoData	NoData	NoData	82.80	82.81	82.83	82.88	83.01
4	375358	442283	NoData	NoData	NoData	82.68	82.69	82.69	82.71	82.73	82.74	82.80	82.93
5	375367	442283	NoData	NoData	NoData	82.70	82.70	82.71	82.72	82.74	82.76	82.83	82.98
6	375376	442283	NoData	NoData	NoData	82.77	82.78	82.78	82.80	82.81	82.84	82.91	83.08
7	375385	442283	NoData	NoData	NoData	82.84	82.84	82.84	82.86	82.87	82.90	83.01	83.21
8	375394	442283	NoData	NoData	NoData	82.93	82.94	82.94	82.95	82.97	82.99	83.09	83.33
9	375403	442283	NoData	NoData	NoData	NoData	NoData	NoData	82.97	82.99	83.03	83.13	83.37
10	375412	442283	NoData	NoData	NoData	82.96	82.96	82.97	82.99	83.01	83.04	83.15	83.41
11	375367	442292	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	82.77	82.82	82.95
12	375376	442292	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	83.08

Label	Easting	Northing	50% AEP	20% AEP	10% AEP	5% AEP	4% AEP	3.33% AEP	2% AEP	1.33% AEP	1% AEP	0.5% AEP	0.1% AEP
			Height	Height	Height	Height	Height	Height	Height	Height	Height	Height	Height
13	375385	442292	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	83.25
14	375394	442292	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	83.33
15	375403	442292	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
16	375412	442292	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	83.42
17	375421	442292	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	83.43
18	375367	442301	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	83.04
19	375376	442301	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
20	375385	442301	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
21	375394	442301	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
22	375403	442301	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
23	375412	442301	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
24	375421	442301	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData

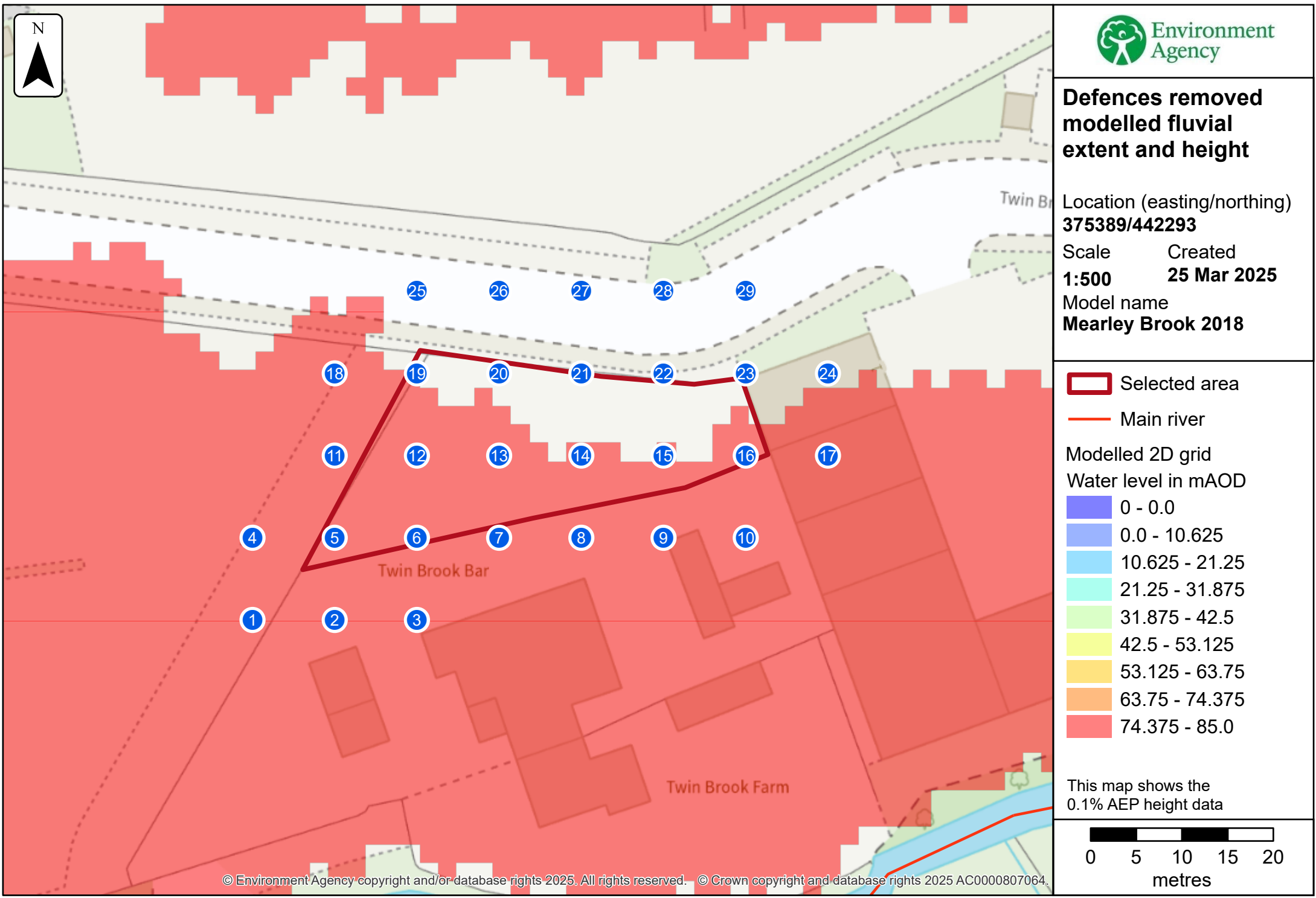
Label	Easting	Northing	50% AEP	20% AEP	10% AEP	5% AEP	4% AEP	3.33% AEP	2% AEP	1.33% AEP	1% AEP	0.5% AEP	0.1% AEP
			Height	Height	Height	Height	Height	Height	Height	Height	Height	Height	Height
25	375376	442310	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
26	375385	442310	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
27	375394	442310	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
28	375403	442310	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
29	375412	442310	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
Max value in selected area:			NoData	NoData	NoData	82.91	82.92	82.92	82.92	82.94	82.98	83.13	83.43

Data in this table comes from the Mearley Brook 2018 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.

'Max value in selected area' is the deepest depth or highest height at any location within your drawn boundary.



Sample point data

Defences removed

Label	Easting	Northing	5% AEP	1% AEP	0.1% AEP	5% AEP	1% AEP	0.1% AEP
			Depth	Depth	Depth	Height	Height	Height
1	375358	442274	NoData	0.06	0.22	NoData	82.72	82.88
2	375367	442274	NoData	NoData	0.21	NoData	NoData	83.03
3	375376	442274	0.00	0.04	0.22	82.74	82.83	83.01
4	375358	442283	0.14	0.20	0.38	82.68	82.74	82.93
5	375367	442283	0.02	0.08	0.30	82.71	82.77	82.99
6	375376	442283	0.01	0.07	0.30	82.78	82.84	83.07
7	375385	442283	0.02	0.09	0.39	82.85	82.91	83.21
8	375394	442283	0.01	0.05	0.39	82.93	82.99	83.32
9	375403	442283	NoData	0.04	0.38	NoData	83.03	83.38
10	375412	442283	0.01	0.07	0.44	82.96	83.04	83.41
11	375367	442292	NoData	NoData	0.14	NoData	NoData	82.96
12	375376	442292	NoData	NoData	0.08	NoData	NoData	83.07

Label	Easting	Northing	5% AEP	1% AEP	0.1% AEP	5% AEP	1% AEP	0.1% AEP
			Depth	Depth	Depth	Height	Height	Height
13	375385	442292	NoData	NoData	0.08	NoData	NoData	83.27
14	375394	442292	NoData	NoData	0.09	NoData	NoData	83.33
15	375403	442292	NoData	NoData	0.03	NoData	NoData	83.36
16	375412	442292	NoData	NoData	0.12	NoData	NoData	83.42
17	375421	442292	NoData	NoData	0.17	NoData	NoData	83.43
18	375367	442301	NoData	NoData	0.01	NoData	NoData	83.03
19	375376	442301	NoData	NoData	0.00	NoData	NoData	83.11
20	375385	442301	NoData	NoData	NoData	NoData	NoData	NoData
21	375394	442301	NoData	NoData	NoData	NoData	NoData	NoData
22	375403	442301	NoData	NoData	NoData	NoData	NoData	NoData
23	375412	442301	NoData	NoData	NoData	NoData	NoData	NoData
24	375421	442301	NoData	NoData	NoData	NoData	NoData	NoData

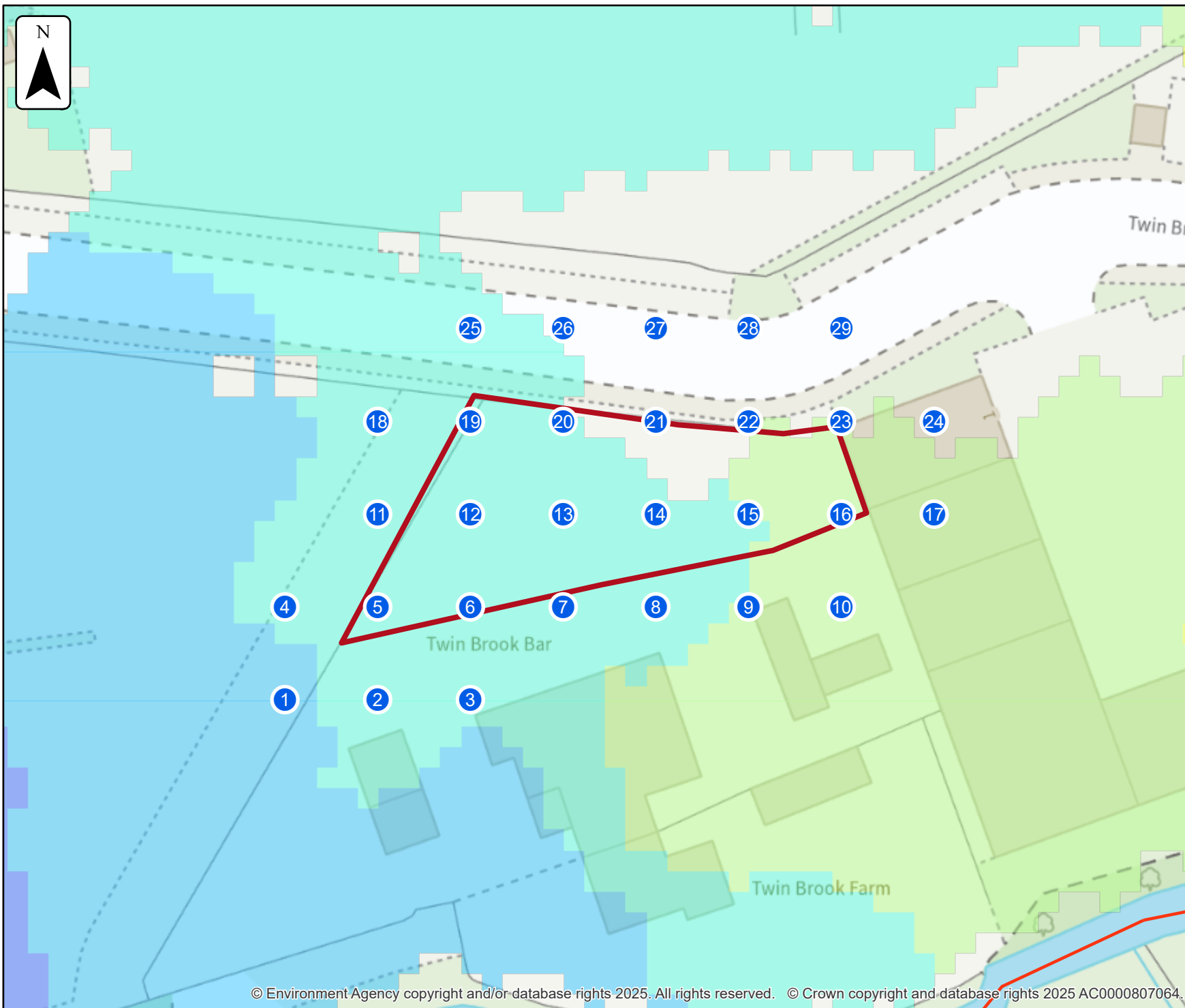
Label	Easting	Northing	5% AEP	1% AEP	0.1% AEP	5% AEP	1% AEP	0.1% AEP
			Depth	Depth	Depth	Height	Height	Height
25	375376	442310	NoData	NoData	NoData	NoData	NoData	NoData
26	375385	442310	NoData	NoData	NoData	NoData	NoData	NoData
27	375394	442310	NoData	NoData	NoData	NoData	NoData	NoData
28	375403	442310	NoData	NoData	NoData	NoData	NoData	NoData
29	375412	442310	NoData	NoData	NoData	NoData	NoData	NoData
Max value in selected area:			0.06	0.12	0.38	82.91	82.98	83.42

Data in this table comes from the Mearley Brook 2018 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.

'Max value in selected area' is the deepest depth or highest height at any location within your drawn boundary.



Defended climate change modelled fluvial extent and height

Location (easting/northing)
375389/442293

Scale Created
1:500 25 Mar 2025

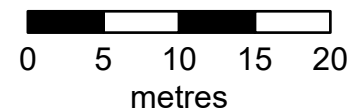
Model name
Mearley Brook 2018

- Selected area
- Main river

Modelled 2D grid
Water level in mAOD

- 0 - 82.0
- 82.0 - 82.5
- 82.5 - 83.0
- 83.0 - 83.5
- 83.5 - 84.0
- 84.0 - 84.5
- 84.5 - 85.0
- 85.0 - 85.5
- 85.5 - 86.0

This map shows the
0.1% AEP +30% height data



Sample point data

Defended climate change

Label	Easting	Northing	1% AEP (+30%)	1% AEP (+35%)	1% AEP (+70%)	0.1% AEP (+30%)
			Depth	Depth	Depth	Depth
1	375358	442274	0.11	0.12	0.16	0.26
2	375367	442274	NoData	NoData	0.13	0.21
3	375376	442274	0.10	0.11	0.17	0.26
4	375358	442283	0.29	0.29	0.36	0.47
5	375367	442283	0.20	0.21	0.29	0.40
6	375376	442283	0.18	0.20	0.28	0.39
7	375385	442283	0.24	0.25	0.34	0.48
8	375394	442283	0.19	0.21	0.33	0.51
9	375403	442283	0.18	0.20	0.32	0.51
10	375412	442283	0.27	0.29	0.42	0.63
11	375367	442292	0.04	0.05	0.12	0.23
12	375376	442292	NoData	0.01	0.05	0.14

Label	Easting	Northing	1% AEP (+30%)	1% AEP (+35%)	1% AEP (+70%)	0.1% AEP (+30%)
			Depth	Depth	Depth	Depth
13	375385	442292	NoData	NoData	0.03	0.15
14	375394	442292	NoData	NoData	0.05	0.22
15	375403	442292	NoData	NoData	NoData	0.12
16	375412	442292	NoData	NoData	NoData	0.27
17	375421	442292	NoData	NoData	0.09	0.31
18	375367	442301	NoData	NoData	0.01	0.03
19	375376	442301	NoData	NoData	NoData	0.02
20	375385	442301	NoData	NoData	NoData	0.01
21	375394	442301	NoData	NoData	NoData	NoData
22	375403	442301	NoData	NoData	NoData	NoData
23	375412	442301	NoData	NoData	NoData	0.07
24	375421	442301	NoData	NoData	NoData	NoData

Label	Easting	Northing	1% AEP (+30%)	1% AEP (+35%)	1% AEP (+70%)	0.1% AEP (+30%)
			Depth	Depth	Depth	Depth
25	375376	442310	NoData	NoData	NoData	0.00
26	375385	442310	NoData	NoData	NoData	NoData
27	375394	442310	NoData	NoData	NoData	NoData
28	375403	442310	NoData	NoData	NoData	NoData
29	375412	442310	NoData	NoData	NoData	NoData
Max value in selected area:			0.24	0.26	0.36	0.50

Data in this table comes from the Mearley Brook 2018 model. Height values are shown in mAOD, and depth values are shown in metres.

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'Max value in selected area' is the deepest depth or highest height at any location within your drawn boundary.

Defended climate change

Label	Easting	Northing	1% AEP (+30%)	1% AEP (+35%)	1% AEP (+70%)	0.1% AEP (+30%)
			Height	Height	Height	Height
1	375358	442274	82.80	82.80	82.85	82.95
2	375367	442274	NoData	NoData	83.00	83.09
3	375376	442274	82.91	82.92	82.98	83.06
4	375358	442283	82.83	82.83	82.90	83.01
5	375367	442283	82.86	82.87	82.94	83.05
6	375376	442283	82.95	82.96	83.04	83.15
7	375385	442283	83.05	83.06	83.16	83.29
8	375394	442283	83.13	83.15	83.27	83.45
9	375403	442283	83.18	83.19	83.31	83.51
10	375412	442283	83.20	83.22	83.35	83.55
11	375367	442292	82.84	82.85	82.92	83.03
12	375376	442292	NoData	83.01	83.07	83.16

Label	Easting	Northing	1% AEP (+30%)	1% AEP (+35%)	1% AEP (+70%)	0.1% AEP (+30%)
			Height	Height	Height	Height
13	375385	442292	NoData	NoData	83.21	83.33
14	375394	442292	NoData	NoData	83.27	83.45
15	375403	442292	NoData	NoData	NoData	83.50
16	375412	442292	NoData	NoData	NoData	83.57
17	375421	442292	NoData	NoData	83.36	83.57
18	375367	442301	NoData	NoData	83.04	83.06
19	375376	442301	NoData	NoData	NoData	83.20
20	375385	442301	NoData	NoData	NoData	83.38
21	375394	442301	NoData	NoData	NoData	NoData
22	375403	442301	NoData	NoData	NoData	NoData
23	375412	442301	NoData	NoData	NoData	83.57
24	375421	442301	NoData	NoData	NoData	NoData

Label	Easting	Northing	1% AEP (+30%)	1% AEP (+35%)	1% AEP (+70%)	0.1% AEP (+30%)
			Height	Height	Height	Height
25	375376	442310	NoData	NoData	NoData	83.25
26	375385	442310	NoData	NoData	NoData	NoData
27	375394	442310	NoData	NoData	NoData	NoData
28	375403	442310	NoData	NoData	NoData	NoData
29	375412	442310	NoData	NoData	NoData	NoData
Max value in selected area:			83.20	83.23	83.36	83.57

Data in this table comes from the Mearley Brook 2018 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.

'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 Lancashire County.

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.cmbinc@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