

Flood risk assessment data

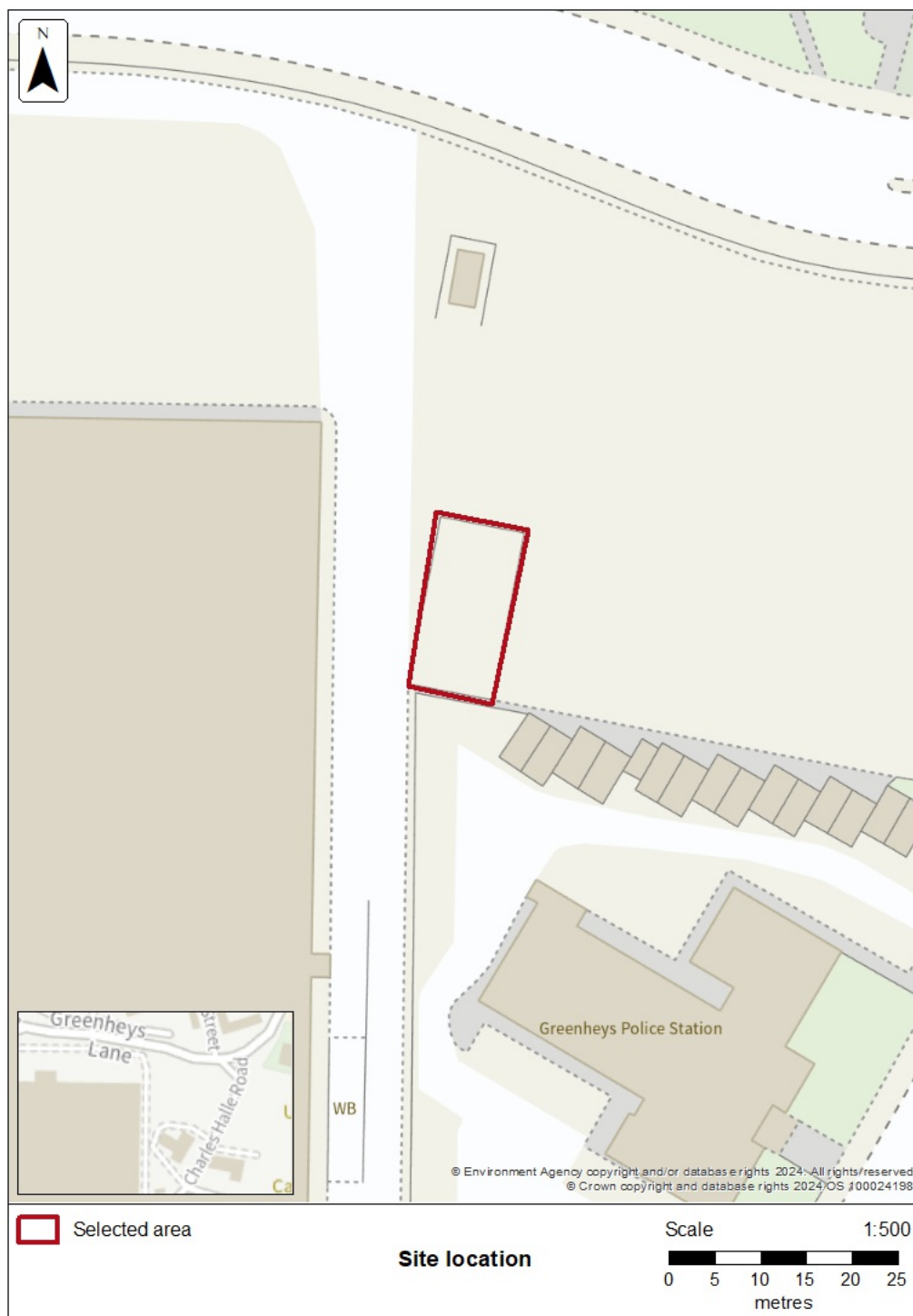
Location of site: 384042 / 396135 (shown as easting and northing coordinates)

Document created on: 21 March 2024

This information was previously known as a product 4.

Customer reference number: M7WK262899VN

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)
- 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

Information that's unavailable

This document **does not** contain:

- historic flooding
- flood defences and attributes

We do not have historic flooding data for this location.

Please note that:

- 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 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.

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: Corn Brook 2017

Scenario(s): No defences exist fluvial, no defences exist climate change fluvial

Date: 31 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

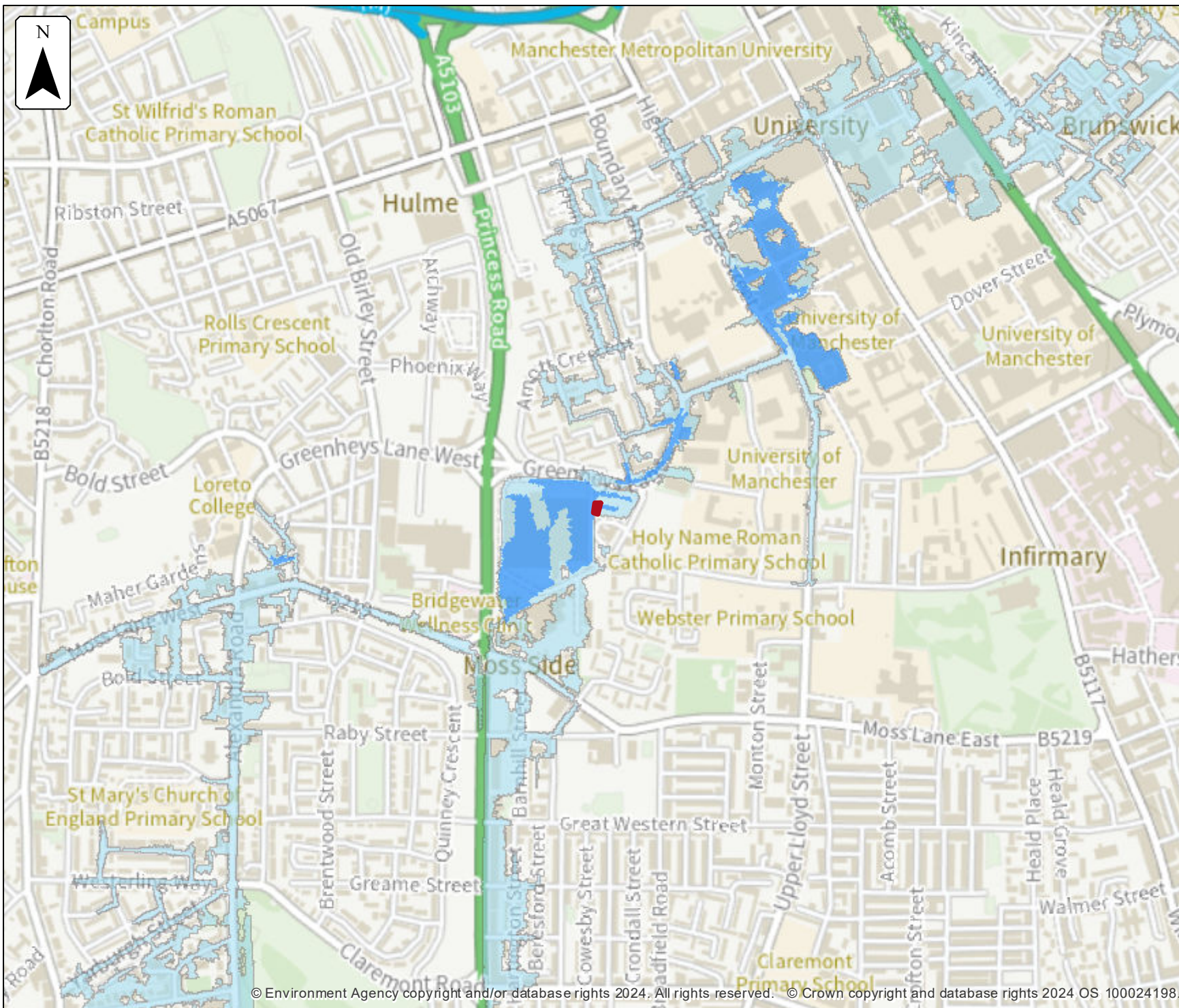
Flood zone 2 shows the area at risk of flooding for an undefended flood event with:

- 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

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.



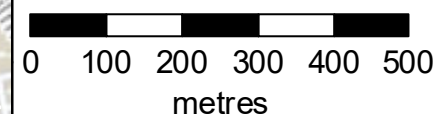
Flood map for planning

Location (easting/northing)
384042/396135

Scale
1:10,000

Created
21 Mar 2024

-  Selected area
-  Flood zone 3
-  Flood zone 2



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

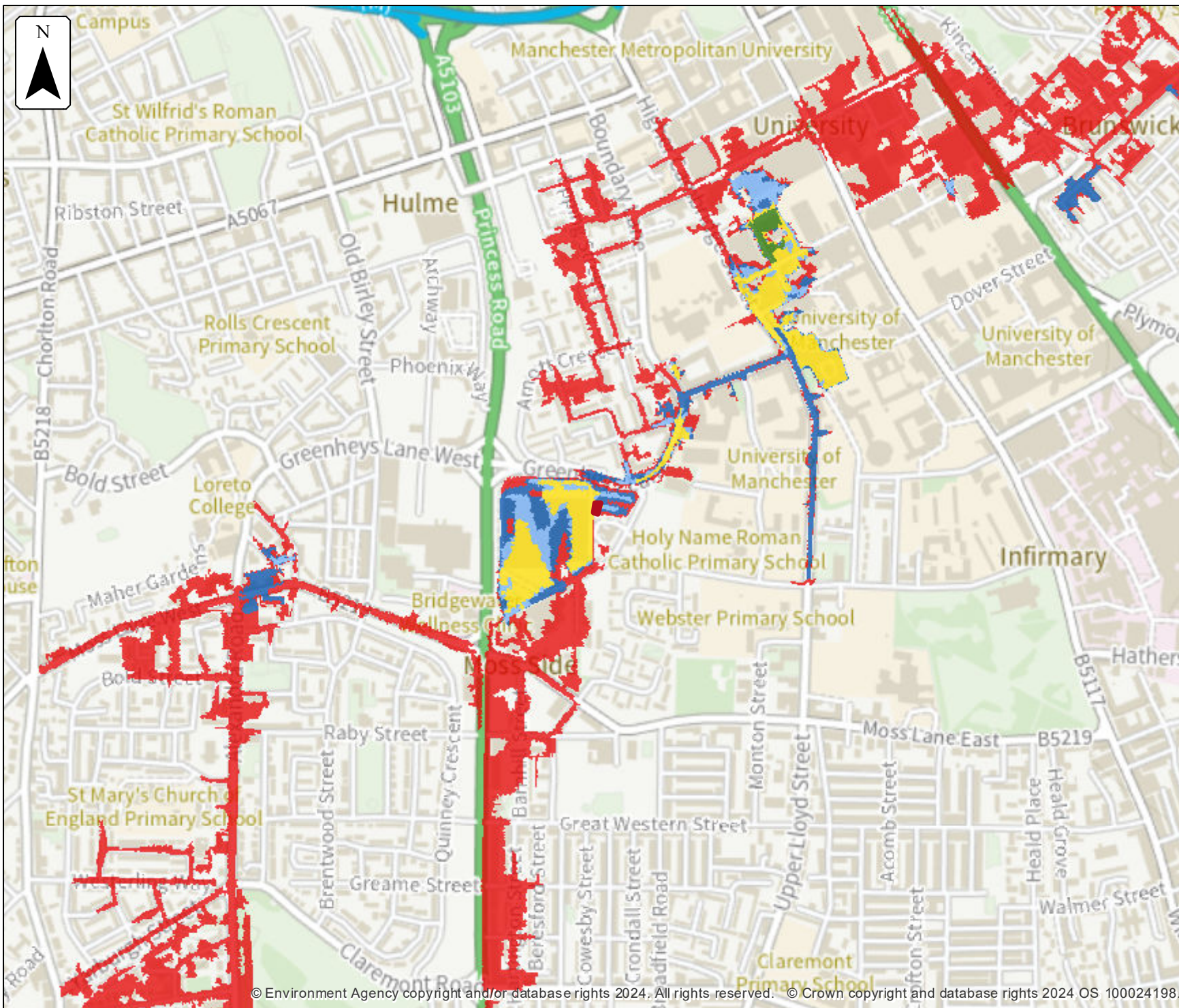
The climate change data included in the models may not include the latest [flood risk assessment climate change allowances](#). Where the new allowances are not available you will need to consider this data and factor in the new allowances to demonstrate the development will be safe from flooding.

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:

- No defences exist modelled fluvial: risk of flooding from rivers where there are no flood defences
- No defences exist climate change modelled fluvial: risk of flooding from rivers where there are no flood defences, including estimated impact of climate change



No defences exist modelled fluvial extent

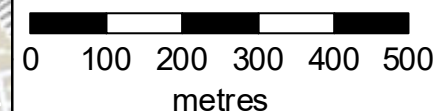
Location (easting/northing)
384042/396135

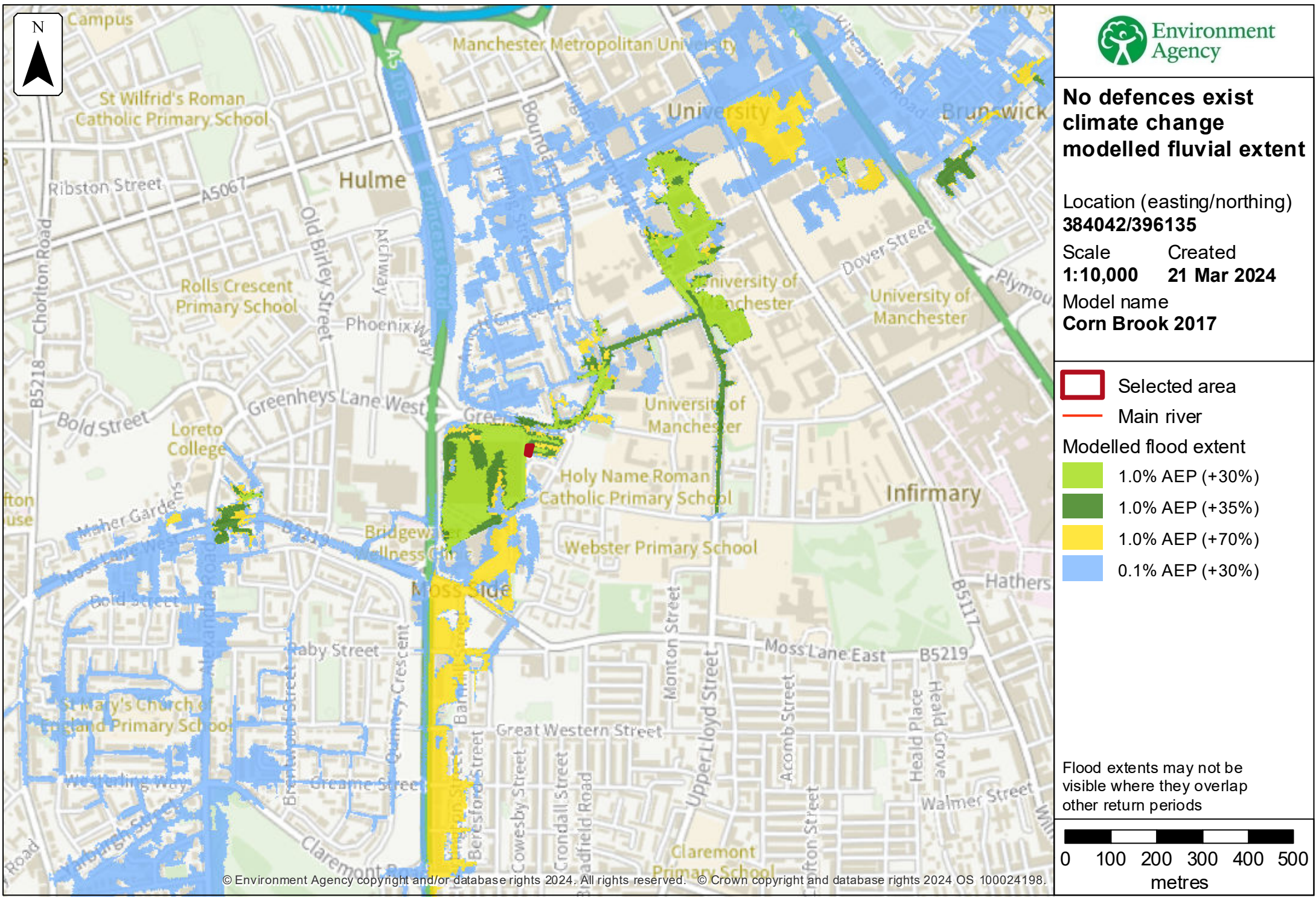
Scale Created
1:10,000 21 Mar 2024

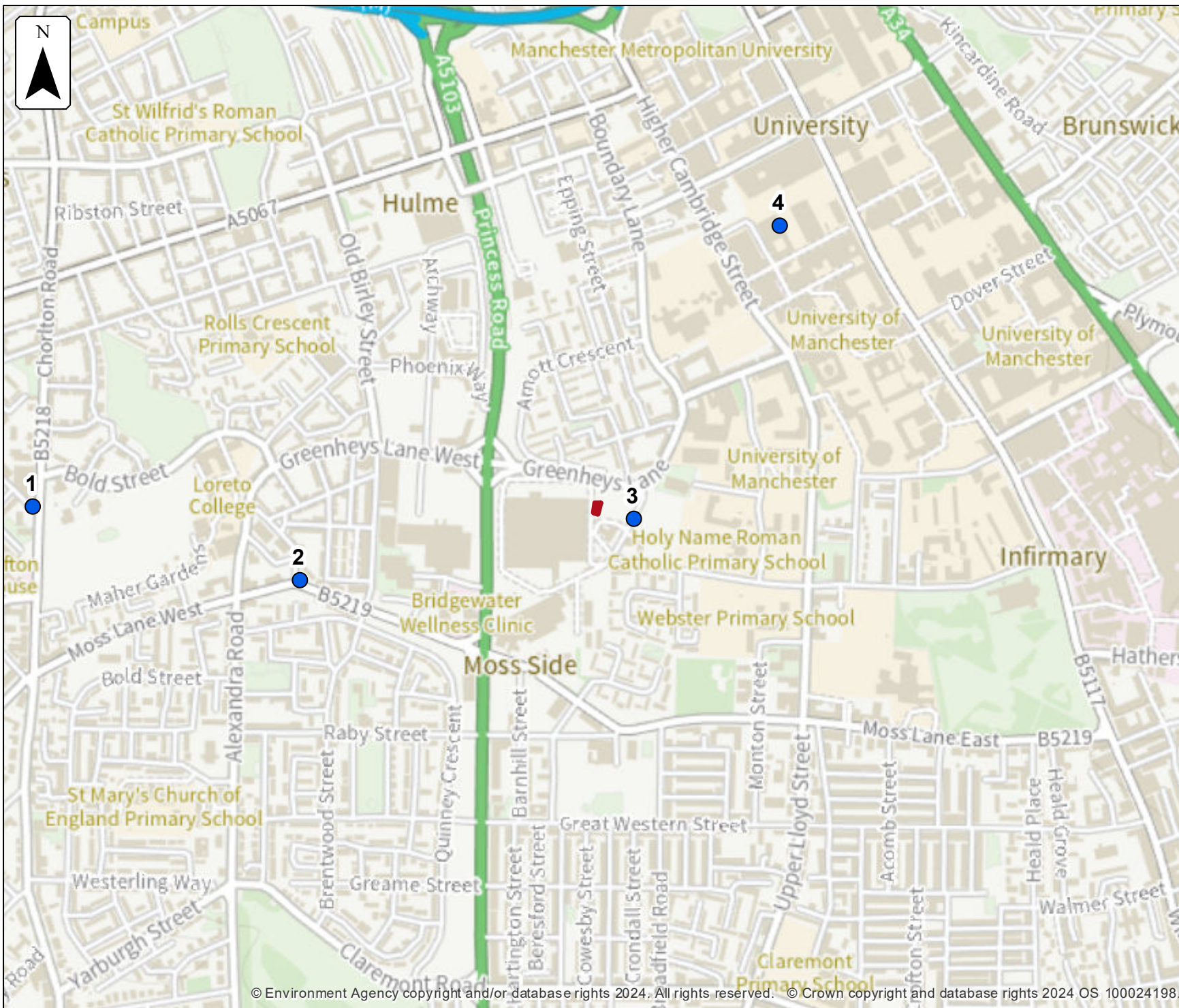
Model name
Corn Brook 2017

- Selected area
- Modelled flood extent
- 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







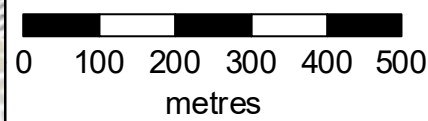
No defences exist
modelled fluvial
node locations

Location (easting/northing)
384042/396135

Scale Created
1:10,000 21 Mar 2024

Model name
Corn Brook 2017

-  Selected area
-  Modelled location



Modelled node locations data

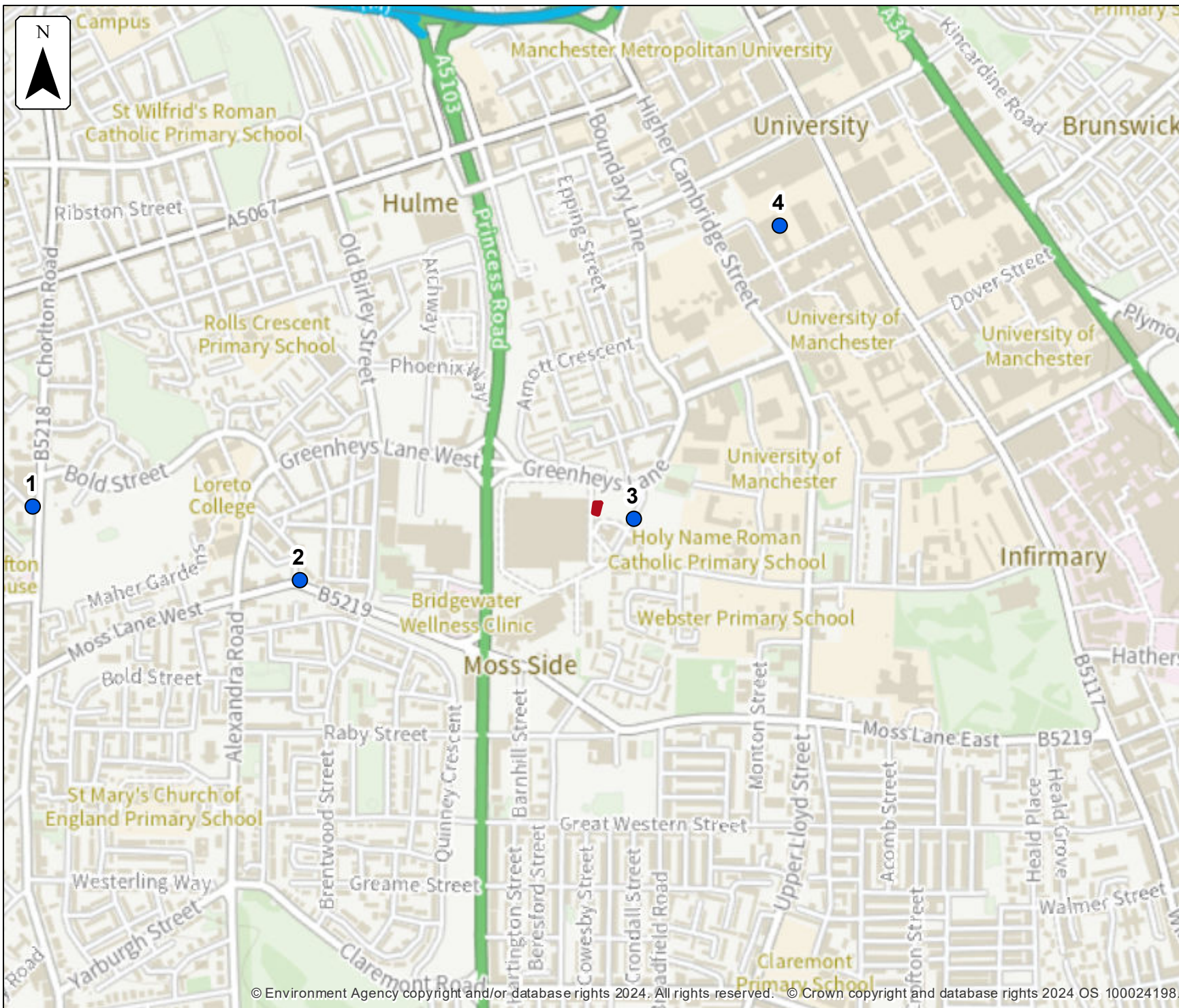
No defences exist

Label	Modelled location ID	Easting	Northing	5% AEP		2% AEP		1.33% AEP		1% AEP		0.5% AEP		0.1% AEP	
				Level	Flow	Level	Flow	Level	Flow	Level	Flow	Level	Flow	Level	Flow
1	952451	382950	396136	29.55	0.53	29.95	1.13	30.07	1.46	30.16	1.72	30.47	2.47	31.73	5.10
2	952452	383467	395993	30.90	0.49	31.93	1.03	32.43	1.32	32.58	1.57	32.84	2.24	33.28	4.60
3	952465	384116	396112	32.44	0.39	32.77	0.81	33.26	1.03	33.47	1.21	33.83	1.70	34.34	3.47
4	952467	384400	396681	35.44	0.57	36.89	1.20	37.13	1.56	37.27	1.84	37.41	2.65	37.66	5.49

Data in this table comes from the Corn Brook 2017 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.



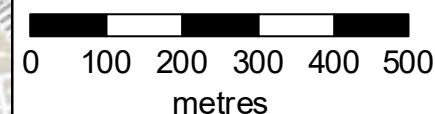
**No defences exist
climate change
modelled fluvial
node locations**

Location (easting/northing)
384042/396135

Scale Created
1:10,000 21 Mar 2024

Model name
Corn Brook 2017

-  Selected area
-  Modelled location



Modelled node locations data

No defences exist climate change

Label	Modelled location ID	Easting	Northing	1.0% AEP (+30%)		1.0% AEP (+35%)		1.0% AEP (+70%)		0.1% AEP (+30%)	
				Level	Flow	Level	Flow	Level	Flow	Level	Flow
1	952451	382950	396136	30.34	2.24	30.39	2.33	30.82	2.93	31.99	6.63
2	952452	383467	395993	32.78	2.03	32.81	2.11	32.99	2.66	33.39	5.98
3	952465	384116	396112	33.75	1.57	33.79	1.63	34.02	2.05	34.46	4.51
4	952467	384400	396681	37.38	2.40	37.39	2.49	37.47	3.13	37.77	7.13

Data in this table comes from the Corn Brook 2017 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.



**No defences exist
modelled fluvial
extent and height**

Location (easting/northing)
384042/396135

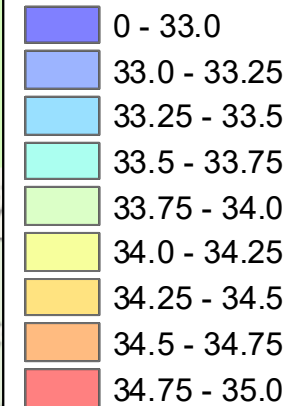
Scale Created
1:500 21 Mar 2024

Model name
Corn Brook 2017

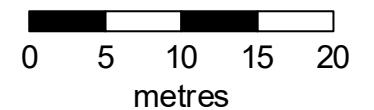
 Selected area

 Main river

Modelled 2D grid
Water level in mAOD



This map shows the
0.1% AEP height data



Sample point data

No defences exist

Label	Easting	Northing	5% AEP		2% AEP		1.33% AEP		1% AEP		0.5% AEP		0.1% AEP	
			Depth	Height	Depth	Height	Depth	Height	Depth	Height	Depth	Height	Depth	Height
1	384035	396118			NoData	NoData	0.17	33.49	0.22	33.54	0.25	33.62	0.46	33.77
2	384041	396118			NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
3	384047	396118			NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
4	384029	396124			NoData	NoData	0.19	33.49	0.24	33.54	0.30	33.62	0.48	33.78
5	384035	396124			NoData	NoData	0.12	33.49	0.17	33.54	0.25	33.62	0.40	33.78
6	384041	396124			NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
7	384047	396124			NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
8	384053	396124			NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.13	33.79
9	384029	396130			NoData	NoData	0.18	33.49	0.23	33.54	0.31	33.62	0.47	33.78
10	384035	396130			NoData	NoData	0.15	33.49	0.20	33.54	0.28	33.62	0.44	33.78
11	384041	396130			NoData	NoData	NoData	NoData	0.11	33.54	0.19	33.62	0.36	33.79
12	384047	396130			NoData	NoData	NoData	NoData	NoData	NoData	0.14	33.62	0.31	33.79
13	384053	396130			NoData	NoData	NoData	NoData	NoData	NoData	0.16	33.62	0.29	33.79
14	384029	396136			NoData	NoData	0.21	33.49	0.25	33.54	0.33	33.62	0.50	33.79
15	384035	396136			NoData	NoData	0.19	33.49	0.24	33.54	0.29	33.62	0.49	33.79
16	384041	396136			NoData	NoData	0.13	33.49	0.18	33.54	0.26	33.62	0.43	33.79

Label	Easting	Northing	5% AEP		2% AEP		1.33% AEP		1% AEP		0.5% AEP		0.1% AEP	
			Depth	Height	Depth	Height	Depth	Height	Depth	Height	Depth	Height	Depth	Height
17	384047	396136			NoData	NoData	NoData	NoData	0.16	33.54	0.24	33.62	0.39	33.79
18	384053	396136			NoData	NoData	0.10	33.49	0.15	33.54	0.23	33.62	0.37	33.79
19	384029	396142			NoData	NoData	0.19	33.49	0.23	33.54	0.32	33.62	0.48	33.79
20	384035	396142			NoData	NoData	0.18	33.49	0.23	33.54	0.31	33.62	0.48	33.79
21	384041	396142			NoData	NoData	0.12	33.49	0.17	33.54	0.25	33.62	0.43	33.79
22	384047	396142			NoData	NoData	NoData	NoData	0.13	33.54	0.21	33.62	0.37	33.79
23	384053	396142			NoData	NoData	NoData	NoData	NoData	NoData	0.13	33.62	0.37	33.79
24	384035	396148			NoData	NoData	0.18	33.49	0.20	33.54	0.28	33.62	0.47	33.79
25	384041	396148			NoData	NoData	NoData	NoData	0.11	33.54	0.19	33.62	0.36	33.79
26	384047	396148			NoData	NoData	NoData	NoData	NoData	NoData	0.10	33.62	0.33	33.79
27	384053	396148			NoData	NoData	NoData	NoData	NoData	NoData	0.13	33.62	0.29	33.79
28	384035	396154			NoData	NoData	0.16	33.49	0.20	33.54	0.28	33.62	0.45	33.79
29	384041	396154			NoData	NoData	NoData	NoData	0.12	33.54	0.20	33.62	0.37	33.79
30	384047	396154			NoData	NoData	NoData	NoData	NoData	NoData	0.14	33.62	0.31	33.79

Data in this table comes from the Corn Brook 2017 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.



**No defences exist
climate change
modelled fluvial
extent and height**

Location (easting/northing)
384042/396135

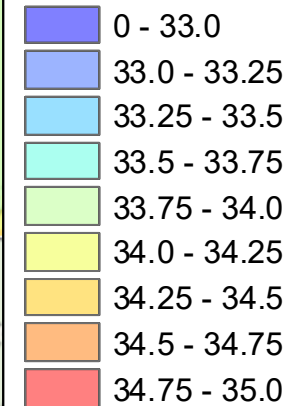
Scale Created
1:500 21 Mar 2024

Model name
Corn Brook 2017

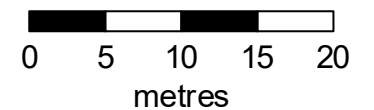
 Selected area

 Main river

Modelled 2D grid
Water level in mAOD



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



Sample point data

No defences exist climate change

Label	Easting	Northing	1% AEP (+30%)		1% AEP (+35%)		1% AEP (+70%)		0.1% AEP (+30%)	
			Depth	Height	Depth	Height	Depth	Height	Depth	Height
1	384035	396118	0.23	33.59	0.24	33.61	0.31	33.67	0.49	33.85
2	384041	396118	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
3	384047	396118	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
4	384029	396124	0.28	33.59	0.29	33.61	0.35	33.67	0.54	33.86
5	384035	396124	0.22	33.59	0.24	33.61	0.30	33.67	0.48	33.85
6	384041	396124	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
7	384047	396124	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
8	384053	396124	NoData	NoData	NoData	NoData	NoData	NoData	0.30	33.88
9	384029	396130	0.28	33.60	0.30	33.61	0.36	33.67	0.56	33.87
10	384035	396130	0.25	33.60	0.27	33.61	0.33	33.67	0.53	33.87
11	384041	396130	0.17	33.60	0.18	33.61	0.25	33.67	0.45	33.88
12	384047	396130	0.12	33.60	0.13	33.61	0.20	33.68	0.40	33.88
13	384053	396130	0.14	33.60	0.15	33.61	0.22	33.68	0.42	33.88
14	384029	396136	0.31	33.60	0.32	33.61	0.39	33.67	0.59	33.88
15	384035	396136	0.27	33.60	0.28	33.61	0.35	33.67	0.55	33.88
16	384041	396136	0.23	33.60	0.24	33.61	0.31	33.67	0.51	33.88

Label	Easting	Northing	1% AEP (+30%)		1% AEP (+35%)		1% AEP (+70%)		0.1% AEP (+30%)	
			Depth	Height	Depth	Height	Depth	Height	Depth	Height
17	384047	396136	0.21	33.60	0.23	33.61	0.29	33.68	0.47	33.88
18	384053	396136	0.21	33.60	0.22	33.61	0.29	33.68	0.49	33.88
19	384029	396142	0.29	33.60	0.30	33.61	0.37	33.68	0.58	33.88
20	384035	396142	0.29	33.60	0.30	33.61	0.37	33.68	0.57	33.88
21	384041	396142	0.23	33.60	0.24	33.61	0.32	33.67	0.51	33.88
22	384047	396142	0.18	33.60	0.19	33.61	0.26	33.67	0.46	33.88
23	384053	396142	0.11	33.60	0.12	33.61	0.19	33.68	0.46	33.88
24	384035	396148	0.26	33.60	0.27	33.61	0.34	33.68	0.54	33.88
25	384041	396148	0.17	33.60	0.18	33.61	0.25	33.68	0.45	33.88
26	384047	396148	NoData	NoData	NoData	NoData	0.16	33.68	0.36	33.88
27	384053	396148	0.10	33.60	0.12	33.61	0.18	33.68	0.38	33.88
28	384035	396154	0.26	33.60	0.27	33.61	0.34	33.68	0.54	33.88
29	384041	396154	0.18	33.60	0.19	33.61	0.26	33.68	0.46	33.88
30	384047	396154	0.11	33.60	0.13	33.61	0.19	33.68	0.39	33.88

Data in this table comes from the Corn Brook 2017 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.

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 Greater Manchester Merseyside and Cheshire Environment Agency team at inforequests.gmmc@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