

Flood risk assessment data

Location of site: 379118 / 390347 (shown as easting and northing coordinates)

Document created on: 5 July 2024

This information was previously known as a product 4.

Customer reference number: FJ2WMWF6UCNE

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
- 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

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

About the models used

Model name: Altrincham 2009

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

Date: 20 November 2009

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

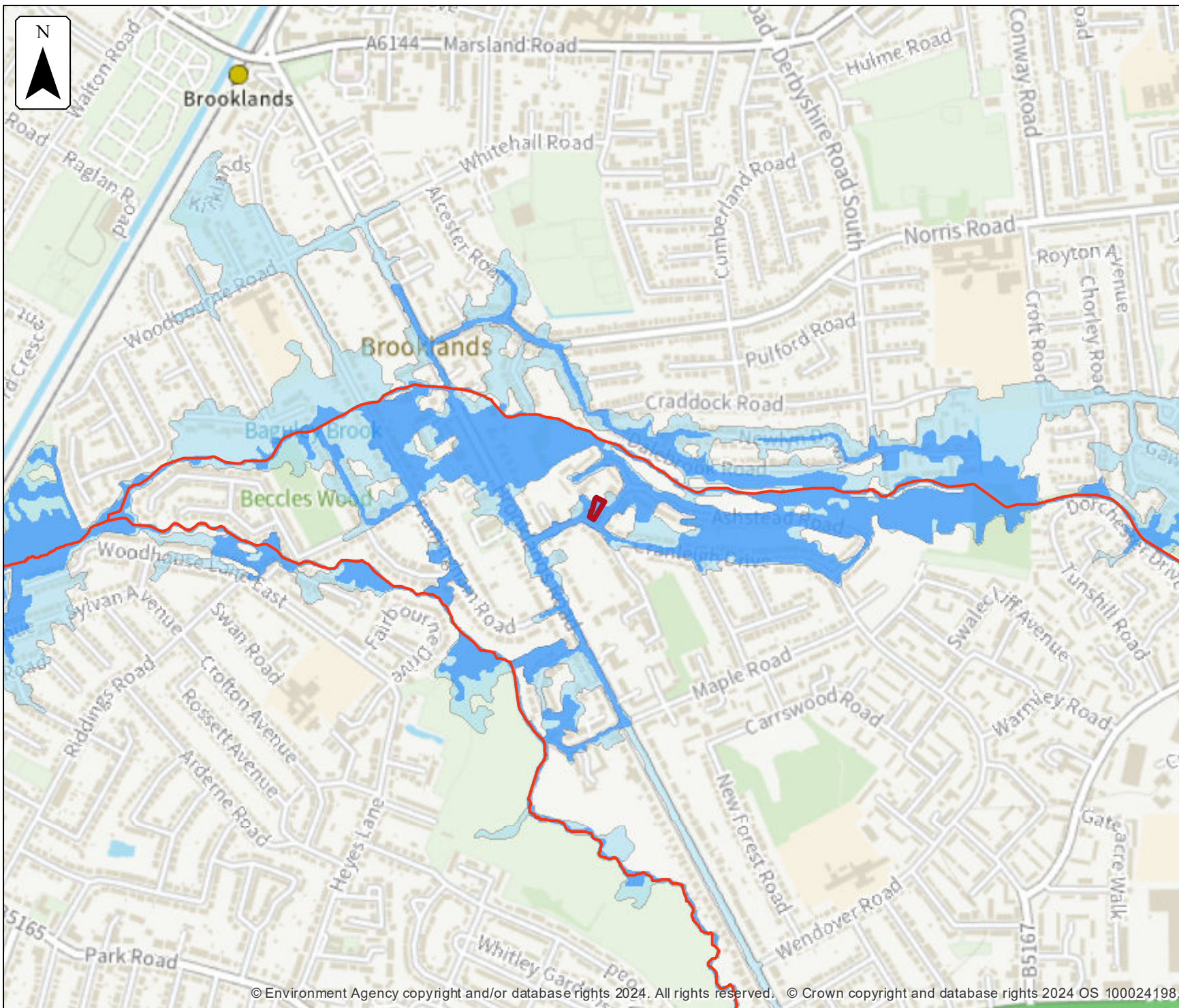
Flood zone 2 shows the area at risk of flooding for an undefended flood event with:

- 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.



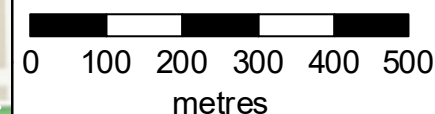
Flood map for planning

Location (easting/northing)
379118/390347

Scale
1:10,000

Created
5 Jul 2024

-  Selected area
-  Main river
-  Flood zone 3
-  Flood zone 2



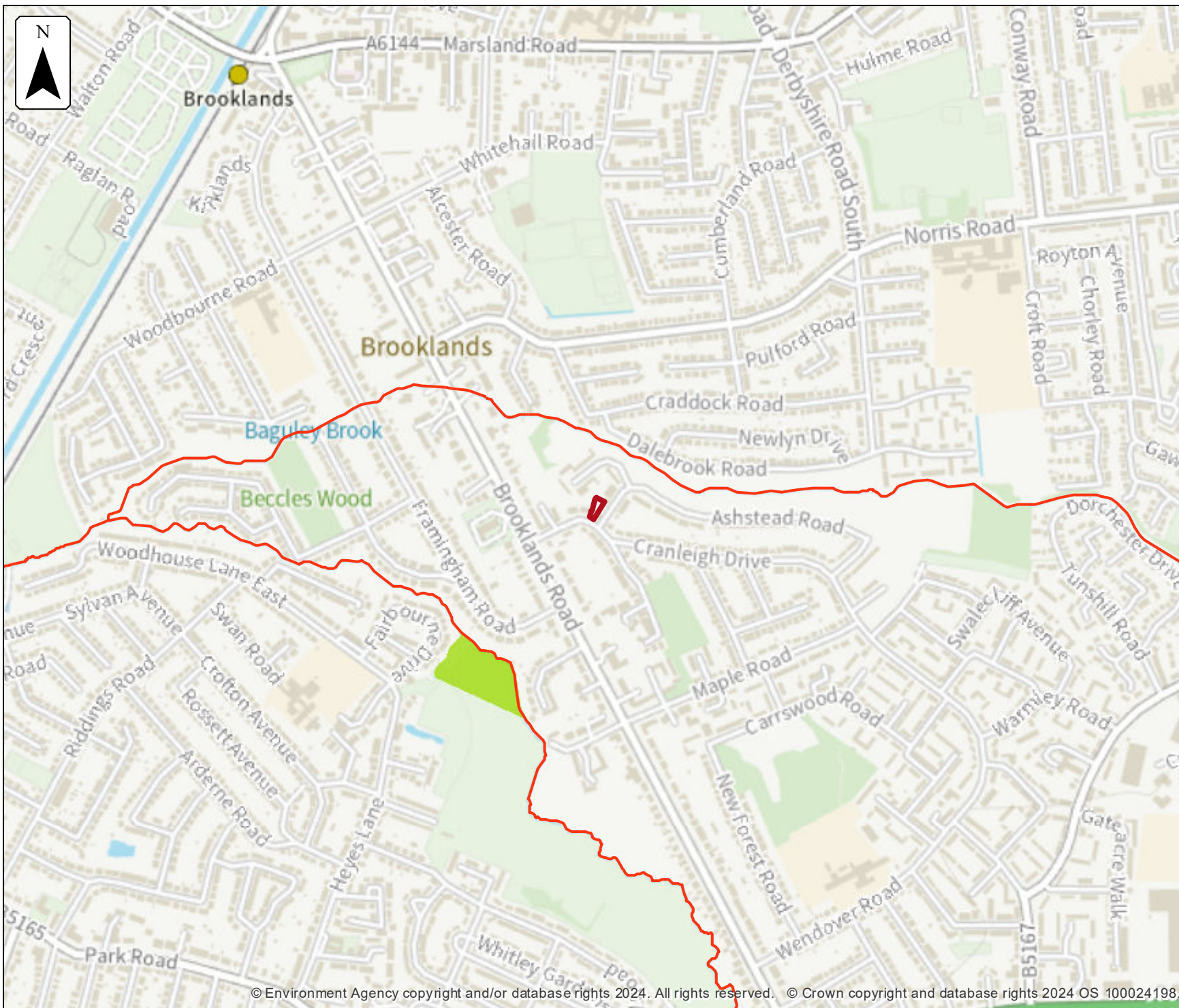
Historic flooding

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)
379118/390347

Scale
1:10,000

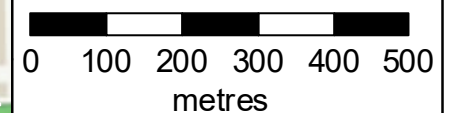
Created
5 Jul 2024

 Selected area

 Main river

Date of flood event

 January, 2021



Historic flood event data

Start date	End date	Source of flood	Cause of flood	Affects location
20 January 2021	20 January 2021	other	local drainage/surface water	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
- 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
- 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



Defended modelled fluvial extent

Location (easting/northing)
379118/390347

Scale Created
1:10,000 5 Jul 2024

Model name
Altrincham 2009

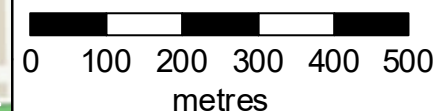
 Selected area

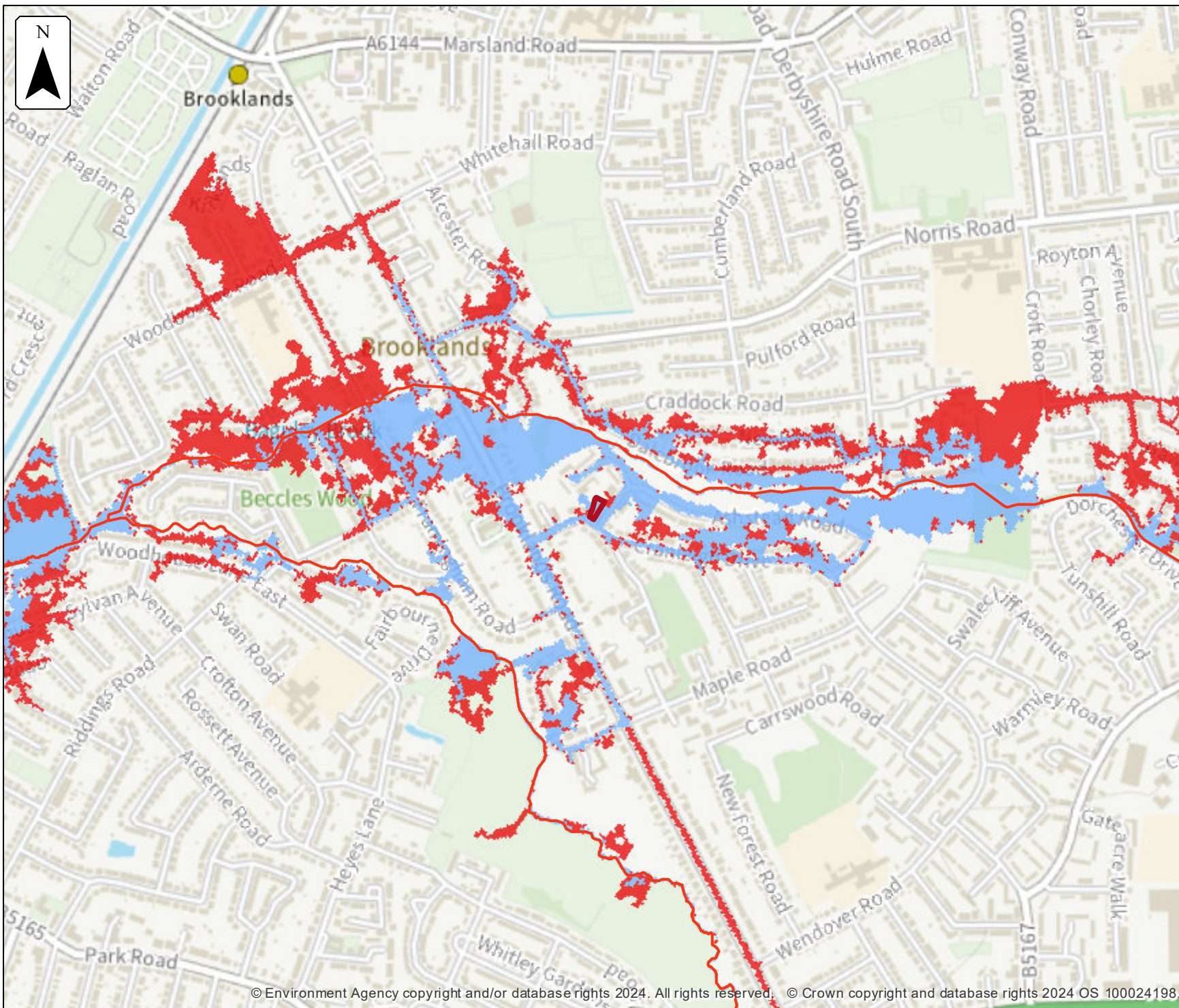
 Main river

Modelled flood extent

 1% AEP

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





No defences exist modelled fluvial extent

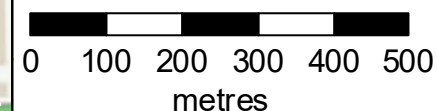
Location (easting/northing)
379118/390347

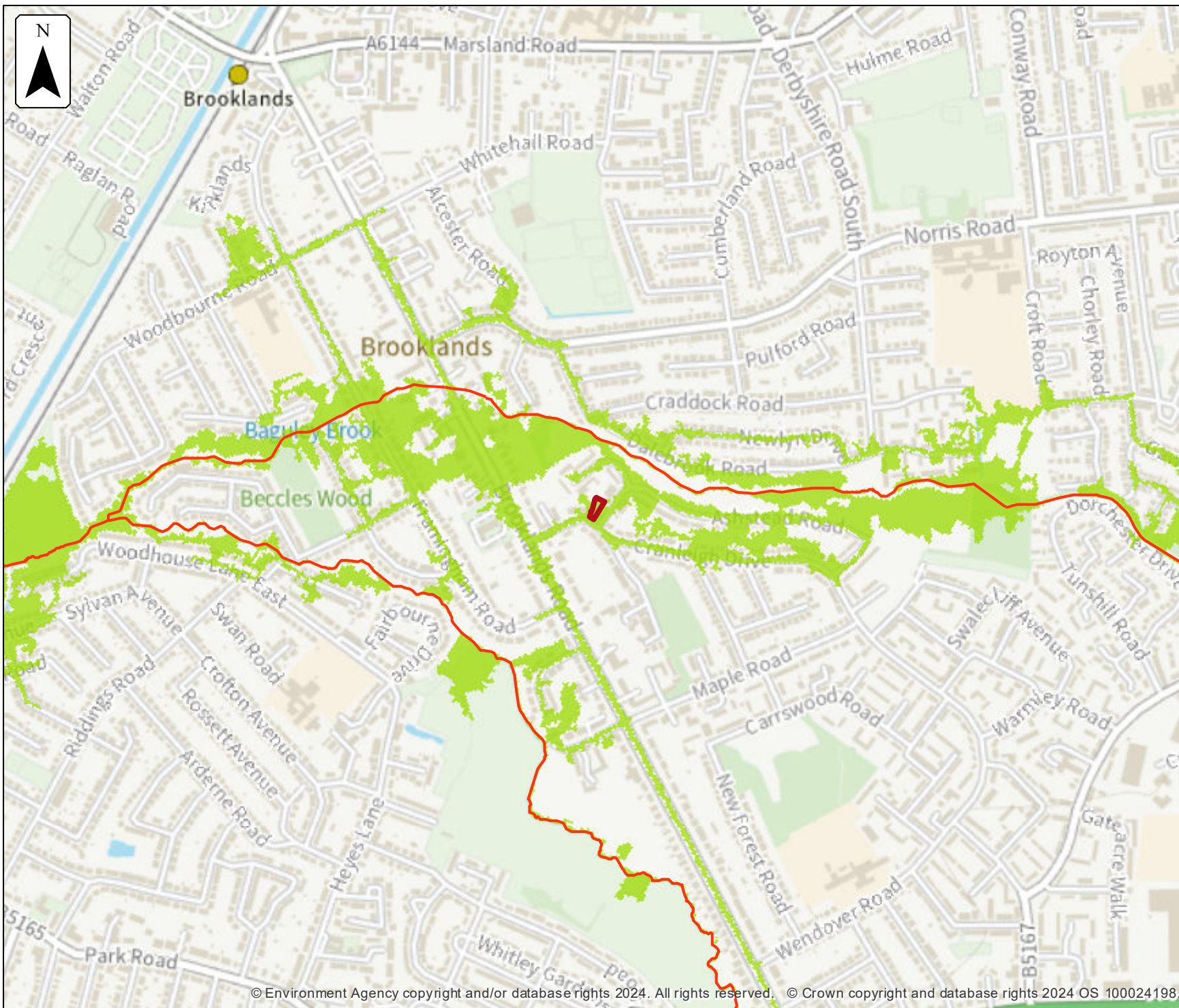
Scale Created
1:10,000 5 Jul 2024

Model name
Altrincham 2009

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

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





No defences exist climate change modelled fluvial extent

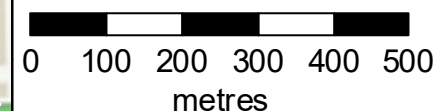
Location (easting/northing)
379118/390347

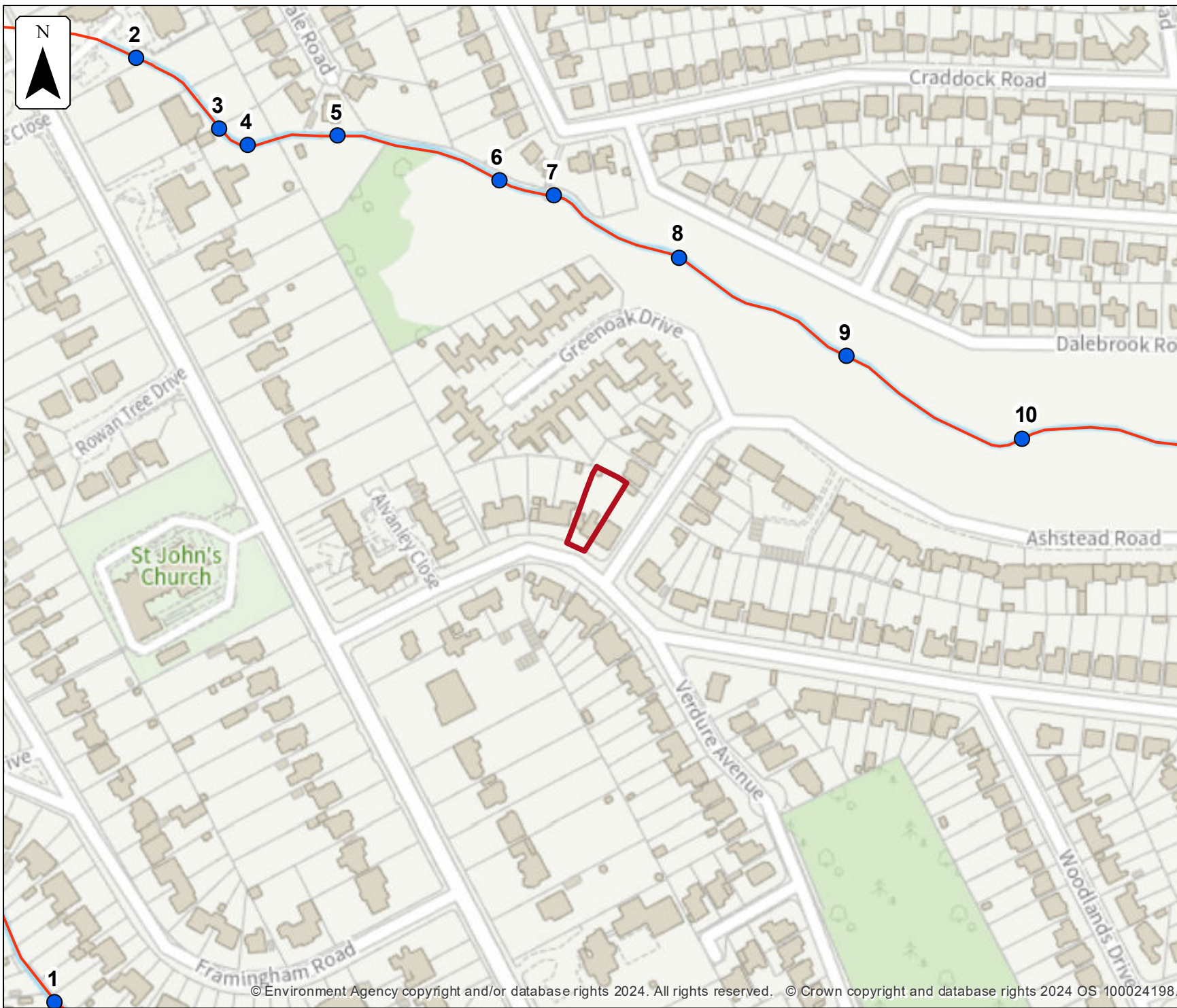
Scale Created
1:10,000 5 Jul 2024

Model name
Altrincham 2009

-  Selected area
-  Main river
- Modelled flood extent
 -  1.0% AEP (+20%)

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





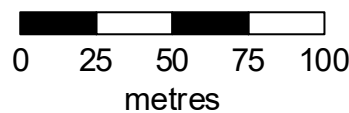
**Defended modelled
fluvial
node locations**

Location (easting/northing)
379118/390347

Scale Created
1:2,500 5 Jul 2024

Model name
Altrincham 2009

- Selected area
- Modelled location
- Main river



Modelled node locations data

Defended

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	1515296	378856	390106							26.59	2.25				
2	1515511	378895	390565							26.15	2.93				
3	1515225	378936	390531							26.26	2.72				
4	1515208	378949	390523							26.28	2.86				
5	1515446	378993	390527							26.32	2.88				
6	1515395	379071	390506							26.41	2.81				
7	1515480	379098	390498							26.40	3.33				
8	1515534	379159	390468							26.49	3.93				
9	1515363	379241	390420							26.74	3.92				
10	1515440	379326	390380							26.97	3.94				

Data in this table comes from the Altrincham 2009 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 depth

Location (easting/northing)
379118/390347

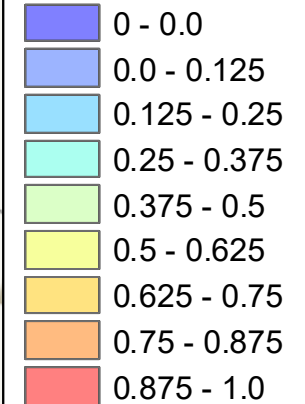
Scale Created
1:500 5 Jul 2024

Model name
Altrincham 2009

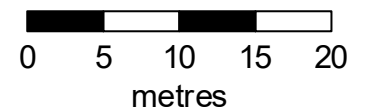
 Selected area

 Main river

Modelled 2D grid
Water level in mAOD



This map shows the
1.0% AEP depth data



Sample point data

Defended

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	379107	390320							0.06					
2	379115	390320							0.06					
3	379099	390328							0.04					
4	379107	390328							0.03					
5	379115	390328							NoData					
6	379123	390328							0.00					
7	379099	390336							NoData					
8	379107	390336							NoData					
9	379115	390336							0.01					
10	379123	390336							NoData					
11	379131	390336							NoData					
12	379107	390344							0.03					
13	379115	390344							NoData					
14	379123	390344							NoData					
15	379131	390344							0.13					
16	379107	390352							0.13					

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	379115	390352							0.12					
18	379123	390352							0.08					
19	379131	390352							NoData					
20	379139	390352							NoData					
21	379107	390360							NoData					
22	379115	390360							0.01					
23	379123	390360							0.03					
24	379131	390360							0.01					
25	379139	390360							NoData					
26	379115	390368							NoData					
27	379123	390368							NoData					
28	379131	390368							NoData					
29	379115	390376							NoData					
30	379123	390376							NoData					

Data in this table comes from the Altrincham 2009 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 modelled fluvial extent and depth

Location (easting/northing)
379118/390347

Scale Created
1:500 5 Jul 2024

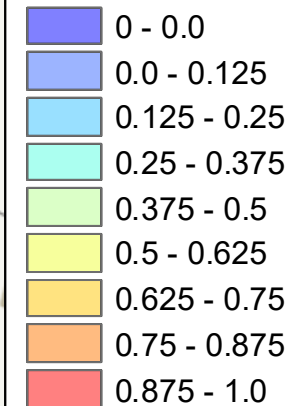
Model name
Altrincham 2009

 Selected area

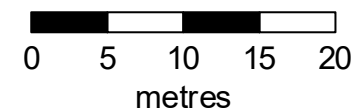
 Main river

Modelled 2D grid

Water level in mAOD



This map shows the
0.1% AEP depth 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	379107	390320							0.08				0.12	
2	379115	390320							0.08				0.11	
3	379099	390328							0.06				0.09	
4	379107	390328							0.05				0.08	
5	379115	390328							NoData				NoData	
6	379123	390328							0.02				0.02	
7	379099	390336							NoData				0.02	
8	379107	390336							NoData				NoData	
9	379115	390336							0.03				0.04	
10	379123	390336							0.01				0.02	
11	379131	390336							NoData				0.10	
12	379107	390344							0.05				0.06	
13	379115	390344							NoData				0.06	
14	379123	390344							NoData				NoData	
15	379131	390344							0.16				0.17	
16	379107	390352							0.17				0.17	

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	379115	390352							0.15				0.16	
18	379123	390352							0.11				0.12	
19	379131	390352							NoData				0.07	
20	379139	390352							NoData				NoData	
21	379107	390360							NoData				NoData	
22	379115	390360							0.02				0.02	
23	379123	390360							0.06				0.07	
24	379131	390360							0.02				0.03	
25	379139	390360							NoData				0.07	
26	379115	390368							NoData				NoData	
27	379123	390368							NoData				NoData	
28	379131	390368							NoData				NoData	
29	379115	390376							NoData				NoData	
30	379123	390376							NoData				NoData	

Data in this table comes from the Altrincham 2009 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 depth**

Location (easting/northing)
379118/390347

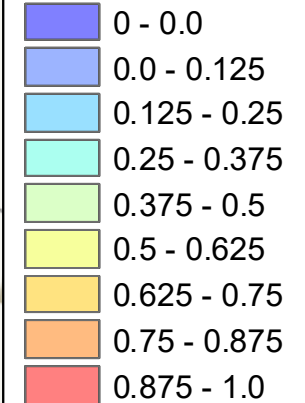
Scale Created
1:500 5 Jul 2024

Model name
Altrincham 2009

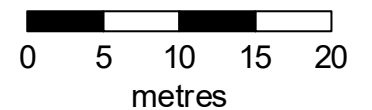
 Selected area

 Main river

Modelled 2D grid
Water level in mAOD



This map shows the
1.0% AEP +20% depth data



Sample point data

No defences exist climate change

Label	Easting	Northing	1% AEP (+20%)	
			Depth	Height
1	379107	390320	0.10	
2	379115	390320	0.10	
3	379099	390328	0.08	
4	379107	390328	0.06	
5	379115	390328	NoData	
6	379123	390328	0.02	
7	379099	390336	0.02	
8	379107	390336	NoData	
9	379115	390336	0.04	
10	379123	390336	0.02	
11	379131	390336	0.10	
12	379107	390344	0.06	
13	379115	390344	NoData	
14	379123	390344	NoData	
15	379131	390344	0.17	
16	379107	390352	0.17	

Label	Easting	Northing	1% AEP (+20%)	
			Depth	Height
17	379115	390352	0.16	
18	379123	390352	0.12	
19	379131	390352	0.07	
20	379139	390352	NoData	
21	379107	390360	NoData	
22	379115	390360	0.02	
23	379123	390360	0.06	
24	379131	390360	0.03	
25	379139	390360	0.03	
26	379115	390368	NoData	
27	379123	390368	NoData	
28	379131	390368	NoData	
29	379115	390376	NoData	
30	379123	390376	NoData	

Data in this table comes from the Altrincham 2009 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