

Flood risk assessment data



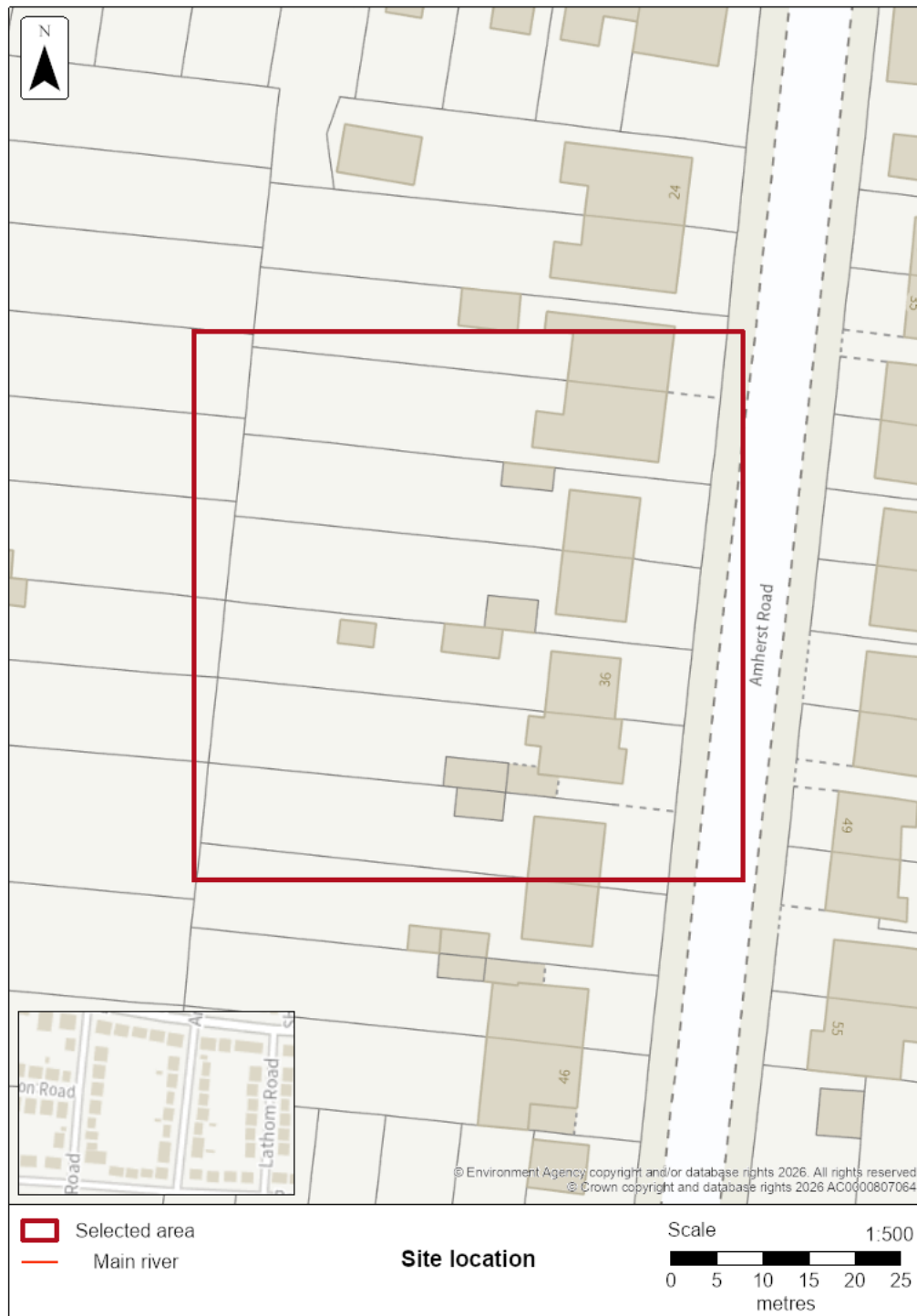
Location of site: 385453 / 393110 (shown as easting and northing coordinates)

Document created on: 8 July 2026

This information was previously known as a product 4.

Customer reference number: FXWW61VUDYJT

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 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 defence locations and attributes
- information to help you assess if there is a reduced flood risk from rivers and the sea because of defences
- modelled data
- modelled climate change data
- information about strategic flood risk assessments
- information about this data
- information about flood risk activity permits
- help and advice

Other sources of flooding

To find out about other factors that might affect the flood risk of this location, you should 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 strategic flood risk assessment (SFRA), which includes future flood risk

Your lead local flood authority is Manchester District.

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

About the models used

Model name: Cringle Black Brook 2017

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

Date: 1 April 2018

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



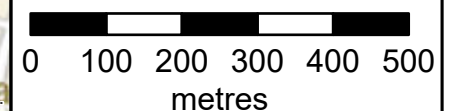
Flood map for planning

Location (easting/northing)
385453/393110

Scale
1:10,000

Created
8 Jul 2026

-  Selected area
-  Main river
-  Flood defence
-  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 Manchester District Lead Local Flood Authority (LLFA) and your drainage board to get information about past flooding caused by surface water or drainage systems.



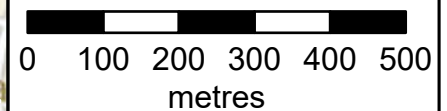
Past floods

Location (easting/northing)
385453/393110

Scale
1:10,000

Created
8 Jul 2026

-  Selected area
-  Main river
- Date of flood event
 -  August, 2004
 -  October, 2001
 -  November, 2000



Data on past flood events

Start date	End date	Source of flood	Cause of flood	Affects location
10 August 2004	11 August 2004	main river	local drainage/surface water	No
26 October 2001	27 October 2001	main river	obstruction/blockage - channel	No
16 November 2000	17 November 2000	unknown	other	No

Flood defences and attributes

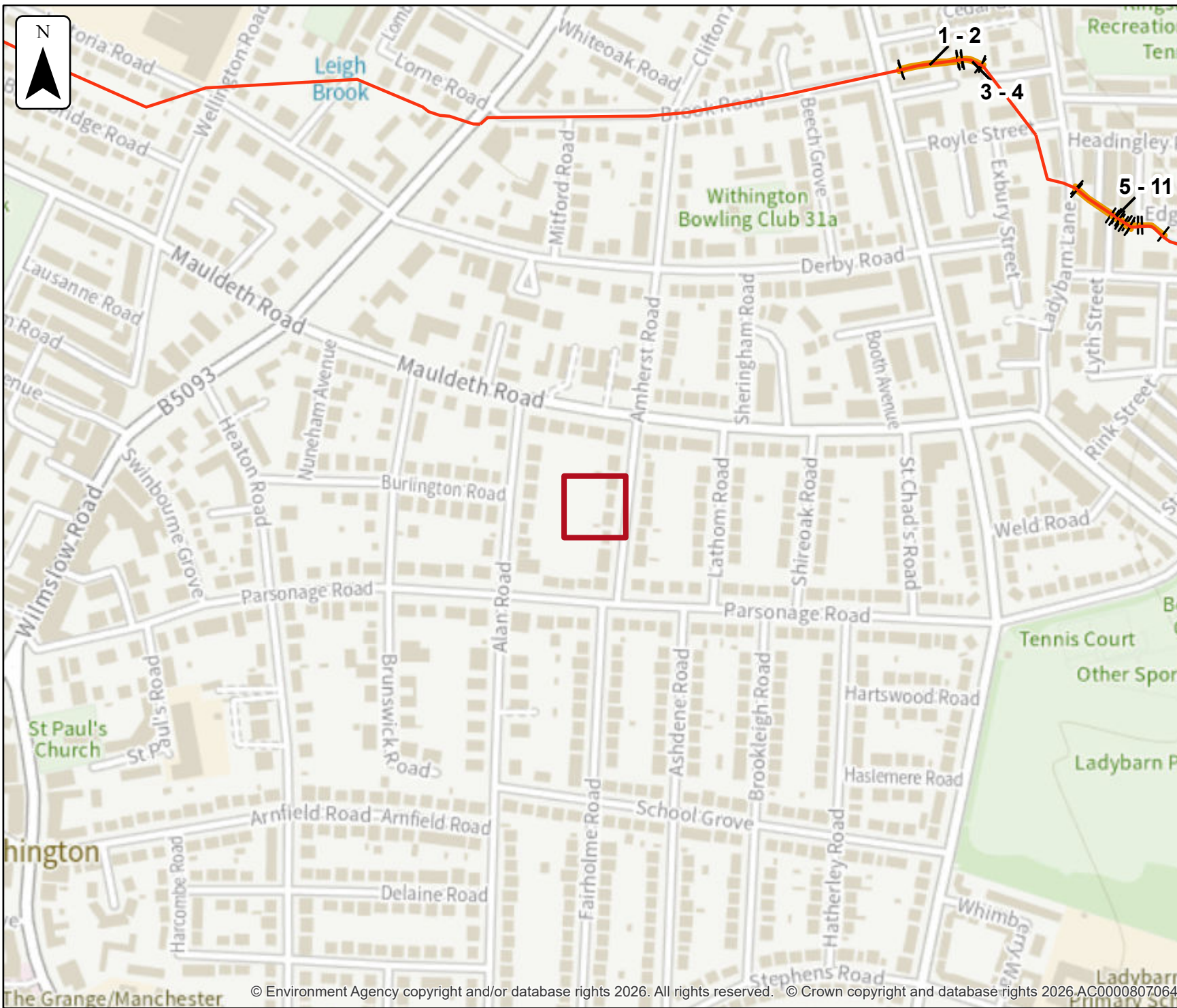
The flood defences map shows the location of the flood defences present.

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



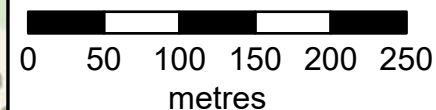
Flood defences

Location (easting/northing)
385453/393110

Scale
1:5,000

Created
8 Jul 2026

-  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	121699	Wall	100	Fair	39.28	39.24	
2	32270	Wall	100	Fair	39.21	39.28	
3	32271	Wall	100	Fair	39.40	39.73	
4	32836	Wall	100	Fair	39.40	39.36	
5	32357	Wall	100	Good	40.67	40.97	
6	121698	Wall	100	Good	40.70	40.96	
7	32358	Wall	100	Fair	40.72	40.71	
8	59161	Wall	100	Fair	40.13	40.13	
9	8870	Wall	100	Fair	39.84	39.83	
10	8872	Engineered High Ground	100	Fair	39.78	39.77	

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

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)
11	9557	Engineered High Ground	100	Fair	39.86	39.89	

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



Defences removed climate change modelled fluvial extent

Location (easting/northing)
385453/393110

Scale Created
1:10,000 8 Jul 2026

Model name
**Cringle Black Brook
2017**

- 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

0 100 200 300 400 500
metres



Defences removed modelled fluvial extent

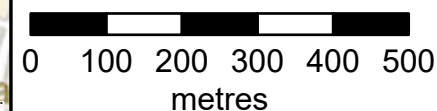
Location (easting/northing)
385453/393110

Scale Created
1:10,000 8 Jul 2026

Model name
**Cringle Black Brook
2017**

-  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





Defended climate change modelled fluvial extent

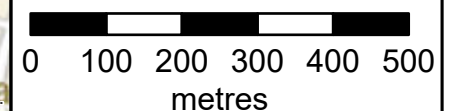
Location (easting/northing)
385453/393110

Scale Created
1:10,000 8 Jul 2026

Model name
**Cringle Black Brook
2017**

-  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

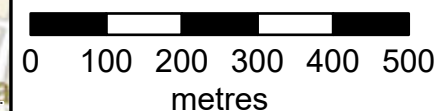
Location (easting/northing)
385453/393110

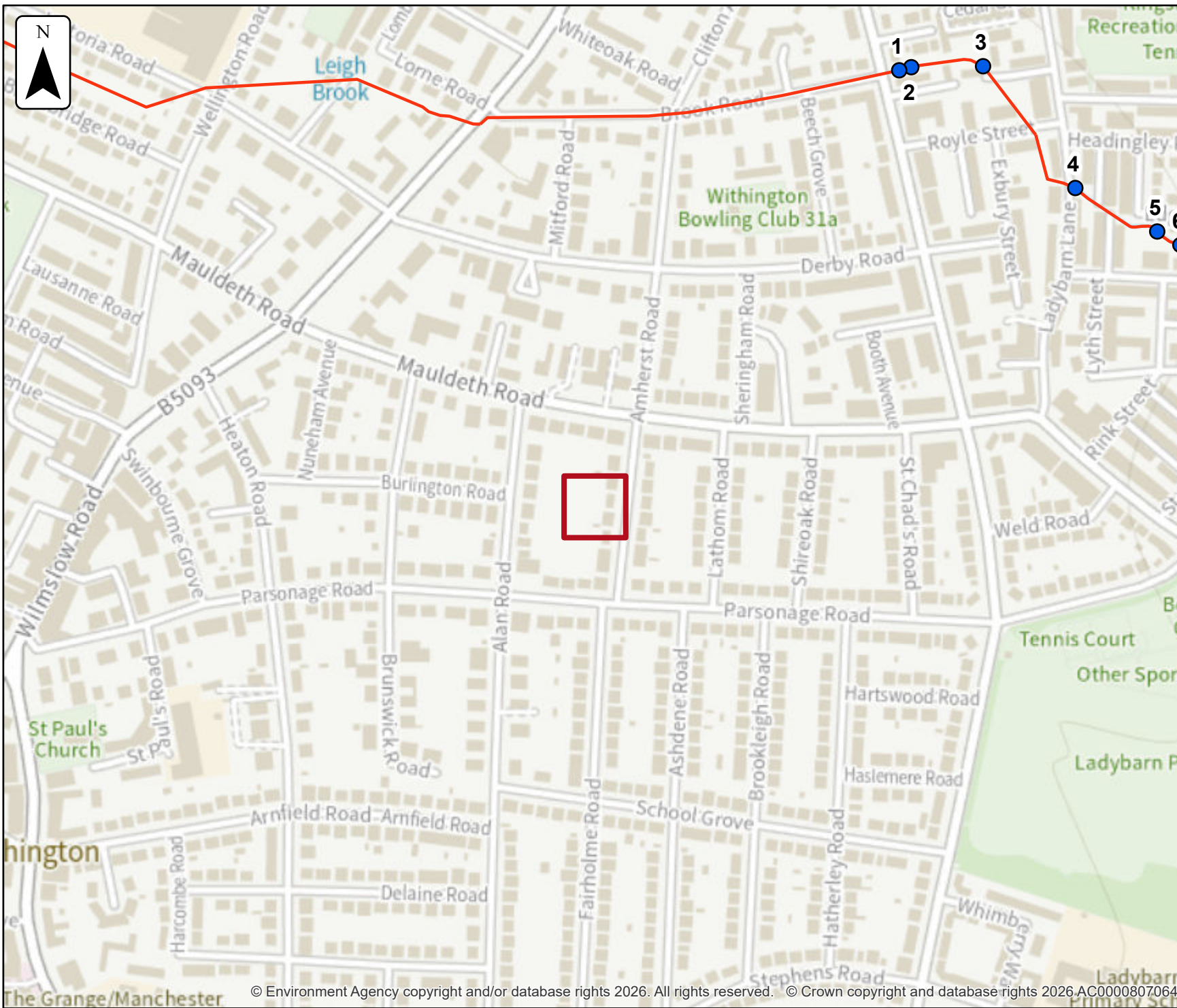
Scale Created
1:10,000 8 Jul 2026

Model name
**Cringle Black Brook
2017**

-  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





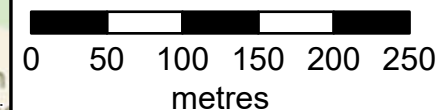
Defended modelled fluvial node locations

Location (easting/northing)
385453/393110

Scale Created
1:5,000 8 Jul 2026

Model name
**Cringle Black Brook
2017**

-  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	1440137	385748	393534	37.83	38.02	38.43	38.45	38.45	38.46	38.47	38.47	38.47	38.48	38.56
2	1440074	385760	393537	37.84	38.03	38.44	38.45	38.46	38.46	38.47	38.47	38.47	38.48	38.56
3	1440084	385830	393538	37.88	38.09	38.52	38.53	38.54	38.54	38.55	38.55	38.56	38.56	38.64
4	1440079	385920	393420	38.45	38.77	39.31	39.33	39.34	39.34	39.35	39.35	39.36	39.37	39.43
5	1440131	385999	393377	39.27	39.41	39.73	39.76	39.77	39.78	39.80	39.81	39.81	39.83	39.89
6	1440066	386022	393364	39.31	39.43	39.70	39.73	39.74	39.75	39.76	39.77	39.77	39.78	39.87

Data in this table comes from the Cringle Black 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.

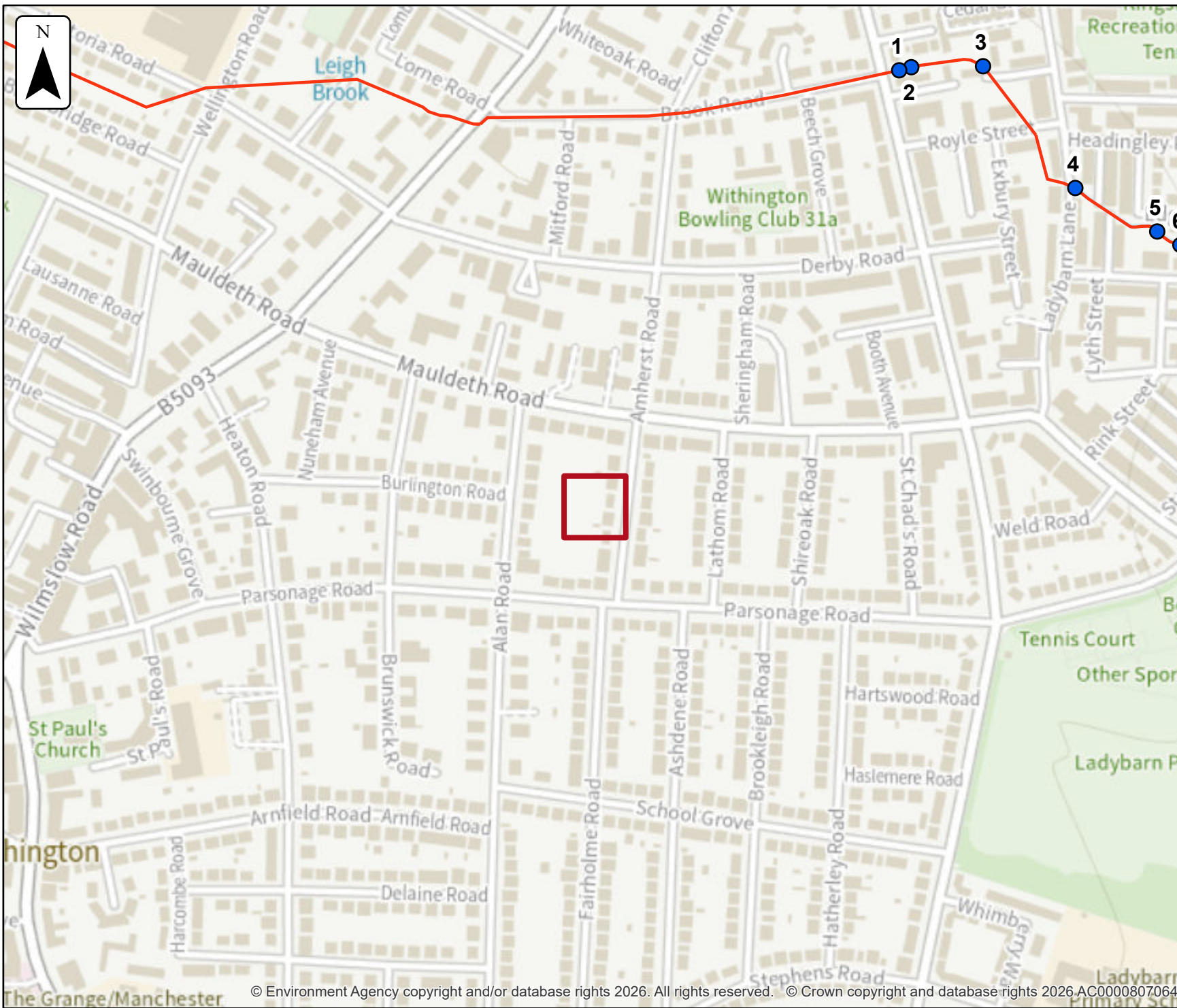
Defended

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	1440137	385748	393534	3.03	3.69	4.27	4.37	4.38	4.39	4.40	4.41	4.42	4.43	4.46
2	1440074	385760	393537	3.03	3.69	4.27	4.37	4.38	4.39	4.40	4.41	4.42	4.43	4.47
3	1440084	385830	393538	3.03	3.69	4.28	4.38	4.38	4.39	4.40	4.41	4.42	4.44	4.48
4	1440079	385920	393420	3.03	3.69	4.28	4.39	4.38	4.39	4.40	4.41	4.42	4.44	4.48
5	1440131	385999	393377	3.03	3.69	4.57	5.04	5.13	5.25	5.61	5.84	5.97	6.43	9.67
6	1440066	386022	393364	3.03	3.69	4.57	5.07	5.17	5.29	5.66	5.90	6.04	6.51	9.72

Data in this table comes from the Cringle Black 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.



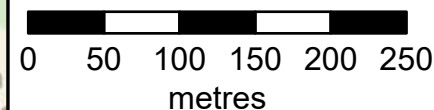
Defences removed modelled fluvial node locations

Location (easting/northing)
385453/393110

Scale Created
1:5,000 8 Jul 2026

Model name
**Cringle Black Brook
2017**

-  Selected area
-  Modelled location
-  Main river



Modelled node locations data

Defences removed

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	1440137	385748	393534	37.83	38.02	38.43	38.45	38.45	38.46	38.47	38.47	38.47	38.48	38.56
2	1440074	385760	393537	37.84	38.03	38.44	38.45	38.46	38.46	38.47	38.47	38.47	38.48	38.56
3	1440084	385830	393538	37.88	38.09	38.52	38.53	38.54	38.54	38.55	38.55	38.56	38.56	38.64
4	1440079	385920	393420	38.45	38.77	39.31	39.33	39.34	39.34	39.35	39.35	39.36	39.37	39.43
5	1440131	385999	393377	39.27	39.41	39.73	39.76	39.77	39.78	39.80	39.81	39.81	39.83	39.89
6	1440066	386022	393364	39.31	39.43	39.70	39.73	39.74	39.75	39.76	39.77	39.77	39.78	39.87

Data in this table comes from the Cringle Black 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.

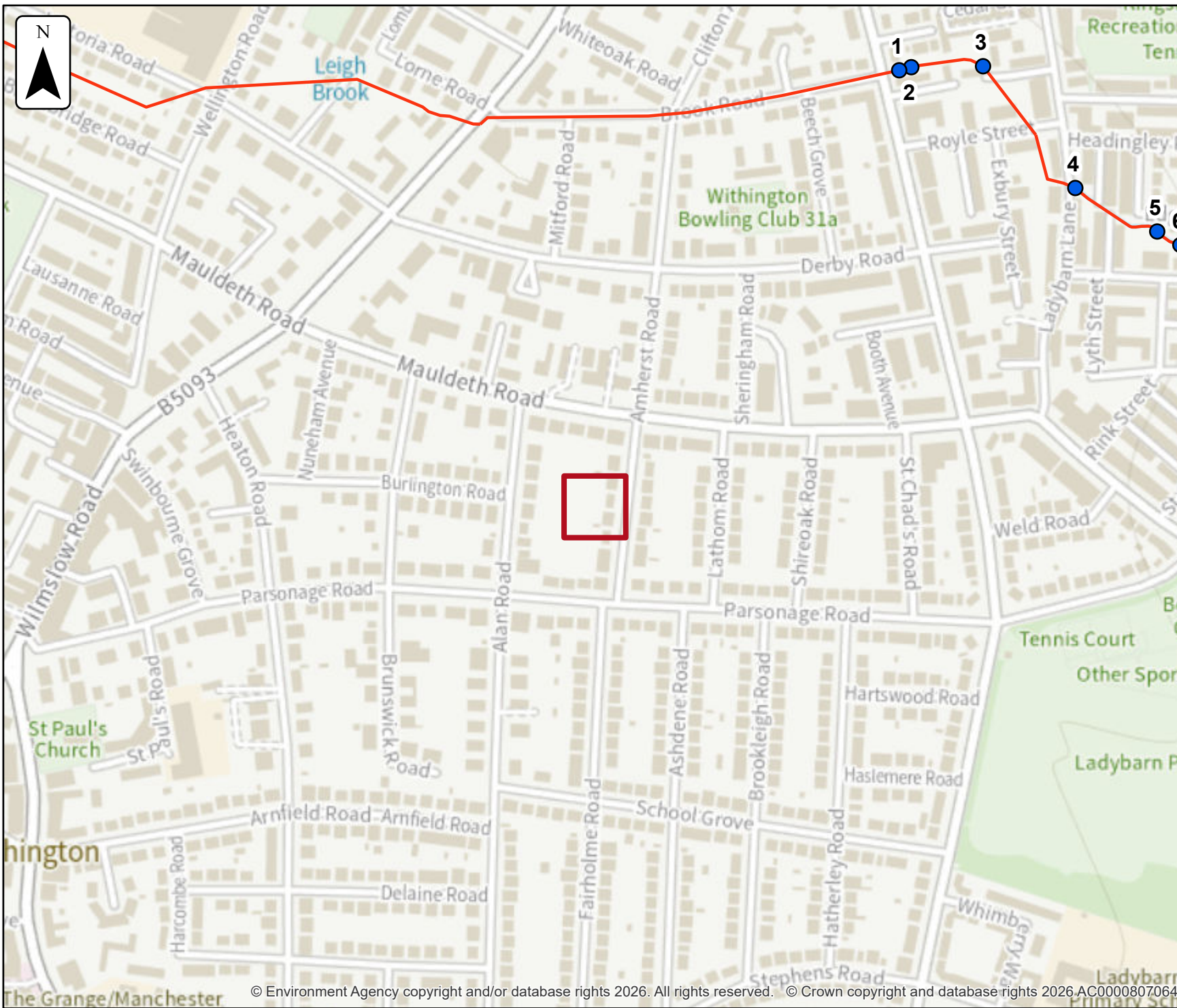
Defences removed

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	1440137	385748	393534	3.03	3.69	4.27	4.37	4.38	4.39	4.40	4.41	4.42	4.43	4.46
2	1440074	385760	393537	3.03	3.69	4.27	4.37	4.38	4.39	4.40	4.41	4.42	4.43	4.47
3	1440084	385830	393538	3.03	3.69	4.28	4.38	4.38	4.39	4.40	4.41	4.42	4.44	4.48
4	1440079	385920	393420	3.03	3.69	4.28	4.39	4.38	4.39	4.40	4.41	4.42	4.44	4.48
5	1440131	385999	393377	3.03	3.69	4.57	5.04	5.13	5.25	5.61	5.84	5.97	6.43	9.67
6	1440066	386022	393364	3.03	3.69	4.57	5.07	5.17	5.29	5.66	5.90	6.04	6.51	9.72

Data in this table comes from the Cringle Black 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.



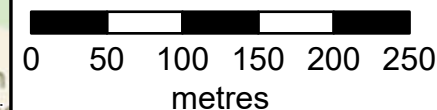
Defended climate change modelled fluvial node locations

Location (easting/northing)
385453/393110

Scale Created
1:5,000 8 Jul 2026

Model name
**Cringle Black Brook
2017**

-  Selected area
-  Modelled location
-  Main river



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	1440137	385748	393534	38.49	38.50	38.53	38.60
2	1440074	385760	393537	38.49	38.50	38.53	38.61
3	1440084	385830	393538	38.57	38.57	38.61	38.68
4	1440079	385920	393420	39.37	39.38	39.39	39.46
5	1440131	385999	393377	39.84	39.84	39.85	39.91
6	1440066	386022	393364	39.78	39.78	39.80	39.91

Data in this table comes from the Cringle Black 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.

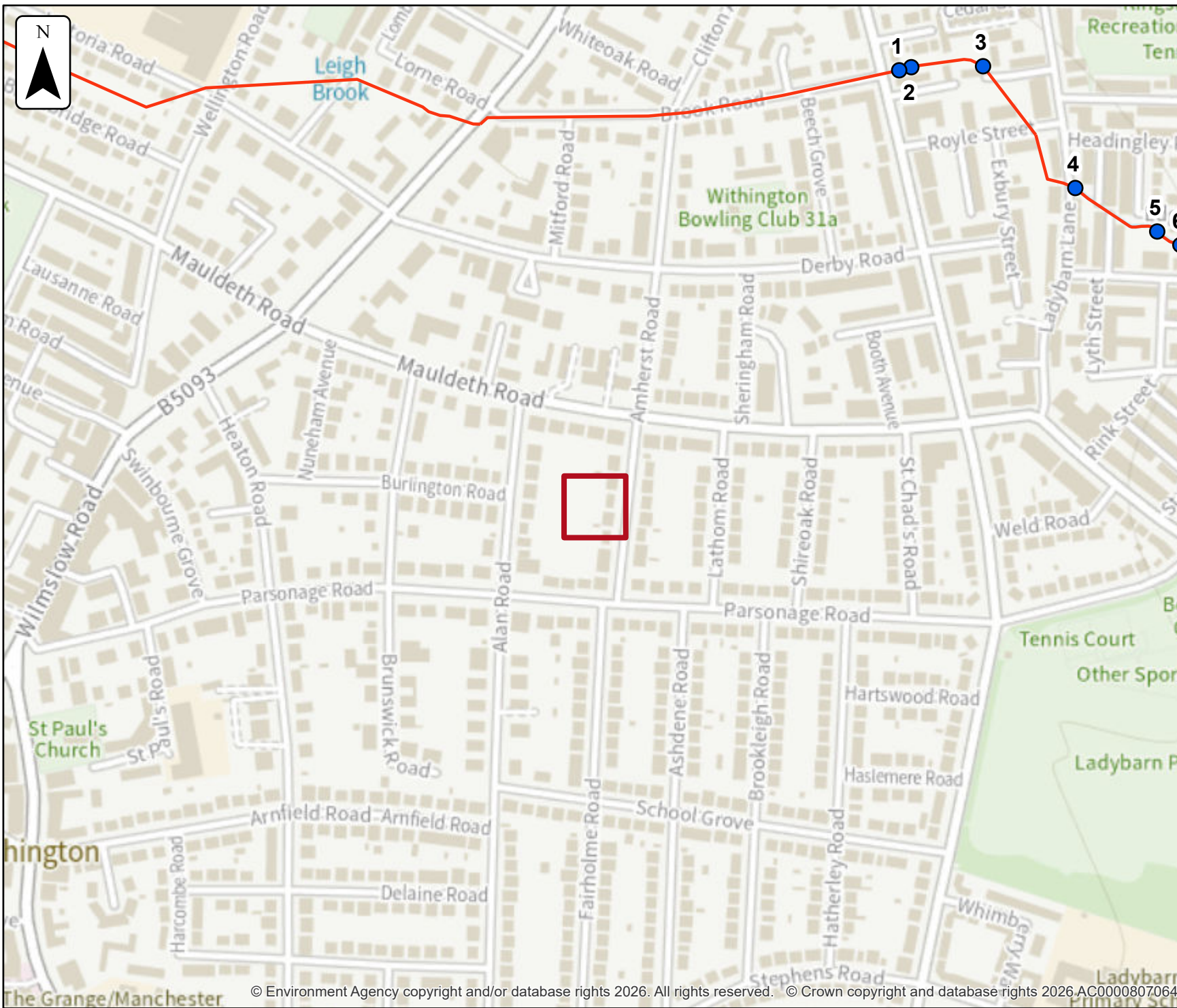
Defended climate change

Label	Modelled location ID	Easting	Northing	1% AEP (+30%)	1% AEP (+35%)	1% AEP (+70%)	0.1% AEP (+30%)
				Flow	Flow	Flow	Flow
1	1440137	385748	393534	4.43	4.44	4.44	4.49
2	1440074	385760	393537	4.43	4.44	4.45	4.49
3	1440084	385830	393538	4.44	4.44	4.45	4.50
4	1440079	385920	393420	4.44	4.44	4.49	4.50
5	1440131	385999	393377	6.70	6.80	7.65	10.93
6	1440066	386022	393364	6.78	6.88	7.74	10.79

Data in this table comes from the Cringle Black 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.



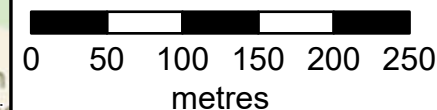
Defences removed climate change modelled fluvial node locations

Location (easting/northing)
385453/393110

Scale Created
1:5,000 8 Jul 2026

Model name
**Cringle Black Brook
2017**

-  Selected area
-  Modelled location
-  Main river



Modelled node locations data

Defences removed 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	1440137	385748	393534	38.49	38.50	38.53	38.60
2	1440074	385760	393537	38.49	38.50	38.53	38.61
3	1440084	385830	393538	38.57	38.57	38.61	38.68
4	1440079	385920	393420	39.37	39.38	39.39	39.46
5	1440131	385999	393377	39.84	39.84	39.85	39.91
6	1440066	386022	393364	39.78	39.78	39.80	39.91

Data in this table comes from the Cringle Black 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.

Defences removed 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	1440137	385748	393534	4.43	4.44	4.44	4.49
2	1440074	385760	393537	4.43	4.44	4.45	4.49
3	1440084	385830	393538	4.44	4.44	4.45	4.50
4	1440079	385920	393420	4.44	4.44	4.49	4.50
5	1440131	385999	393377	6.70	6.80	7.65	10.93
6	1440066	386022	393364	6.78	6.88	7.74	10.79

Data in this table comes from the Cringle Black 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.



Defended modelled fluvial extent and height

Location (easting/northing)
385453/393110

Scale Created
1:500 8 Jul 2026

Model name
**Cringle Black Brook
2017**

 Selected area

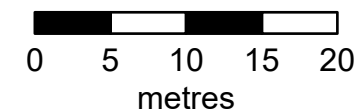
 Main river

Modelled 2D grid

Height in mAOD

-  36 - 36.25
-  36.25 - 36.5
-  36.5 - 36.75
-  36.75 - 37.0
-  37.0 - 37.25
-  37.25 - 37.5
-  37.5 - 37.75
-  37.75 - 38.0
-  38.0 - 38.25

This map shows the
0.1% AEP height data



Defended

[illegible]

[illegible]

Label	Easting	Northing	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
25	385480	393137	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	36.90
Max value in selected area:			36.06	36.76	36.77	36.77	36.78	36.78	36.79	36.85	36.94

Data in this table comes from the Cringle Black 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.

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

Defended

[illegible]

[illegible]

Label	Easting	Northing	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
25	385480	393137	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.03
Max value in selected area:			0.00	0.18	0.24	0.28	0.35	0.39	0.40	0.42	0.60

Data in this table comes from the Cringle Black 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.

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



Defences removed modelled fluvial extent and height

Location (easting/northing)
385453/393110

Scale Created
1:500 8 Jul 2026

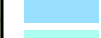
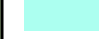
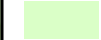
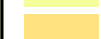
Model name
**Cringle Black Brook
2017**

 Selected area

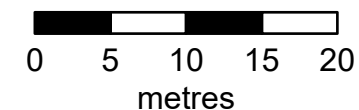
 Main river

Modelled 2D grid

Height in mAOD

-  36 - 36.25
-  36.25 - 36.5
-  36.5 - 36.75
-  36.75 - 37.0
-  37.0 - 37.25
-  37.25 - 37.5
-  37.5 - 37.75
-  37.75 - 38.0
-  38.0 - 38.25

This map shows the
0.1% AEP height data



Defences removed

[illegible]

[illegible]

Label	Easting	Northing	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
25	385480	393137	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	36.90
Max value in selected area:			36.26	36.77	36.78	36.78	36.78	36.85	36.85	36.86	36.96

Data in this table comes from the Cringle Black 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.

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

Defences removed

[illegible]

[illegible]

Label	Easting	Northing	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
25	385480	393137	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.04
Max value in selected area:			0.08	0.26	0.29	0.32	0.38	0.40	0.41	0.43	0.61

Data in this table comes from the Cringle Black 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.

'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)
385453/393110

Scale Created
1:500 8 Jul 2026

Model name
**Cringle Black Brook
2017**

 Selected area

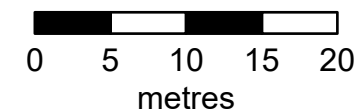
 Main river

Modelled 2D grid

Height in mAOD

-  36 - 36.25
-  36.25 - 36.5
-  36.5 - 36.75
-  36.75 - 37.0
-  37.0 - 37.25
-  37.25 - 37.5
-  37.5 - 37.75
-  37.75 - 38.0
-  38.0 - 38.25

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%)
			Height	Height	Height	Height
1	385420	393077	NoData	NoData	NoData	NoData
2	385435	393077	NoData	NoData	NoData	36.76
3	385450	393077	NoData	NoData	NoData	NoData
4	385465	393077	NoData	NoData	NoData	NoData
5	385480	393077	36.89	36.89	36.89	37.02
6	385420	393092	NoData	NoData	NoData	NoData
7	385435	393092	NoData	NoData	NoData	36.76
8	385450	393092	NoData	NoData	NoData	36.76
9	385465	393092	NoData	NoData	NoData	36.99
10	385480	393092	NoData	NoData	36.81	37.01
11	385420	393107	NoData	NoData	NoData	36.75
12	385435	393107	36.49	36.50	36.54	36.75

Label	Easting	Northing	1% AEP (+30%)	1% AEP (+35%)	1% AEP (+70%)	0.1% AEP (+30%)
			Height	Height	Height	Height
13	385450	393107	36.49	36.50	36.54	36.76
14	385465	393107	NoData	NoData	36.73	36.90
15	385480	393107	36.78	36.79	36.81	37.01
16	385420	393122	36.49	36.50	36.54	36.75
17	385435	393122	36.49	36.50	36.54	36.75
18	385450	393122	36.49	36.50	36.54	36.76
19	385465	393122	36.58	36.60	36.67	36.89
20	385480	393122	36.77	36.78	36.79	36.99
21	385420	393137	36.49	36.50	36.54	36.75
22	385435	393137	36.49	36.50	36.54	36.75
23	385450	393137	36.49	36.50	36.54	36.75
24	385465	393137	NoData	NoData	36.58	36.77

Label	Easting	Northing	1% AEP (+30%)	1% AEP (+35%)	1% AEP (+70%)	0.1% AEP (+30%)
			Height	Height	Height	Height
25	385480	393137	NoData	NoData	NoData	36.96
Max value in selected area:			36.86	36.86	36.87	37.02

Data in this table comes from the Cringle Black 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.

'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%)
			Depth	Depth	Depth	Depth
1	385420	393077	NoData	NoData	NoData	NoData
2	385435	393077	NoData	NoData	NoData	0.09
3	385450	393077	NoData	NoData	NoData	NoData
4	385465	393077	NoData	NoData	NoData	NoData
5	385480	393077	0.00	0.00	0.00	0.13
6	385420	393092	NoData	NoData	NoData	NoData
7	385435	393092	NoData	NoData	NoData	0.19
8	385450	393092	NoData	NoData	NoData	0.17
9	385465	393092	NoData	NoData	NoData	0.12
10	385480	393092	NoData	NoData	0.02	0.22
11	385420	393107	NoData	NoData	NoData	0.17
12	385435	393107	0.05	0.06	0.11	0.32

Label	Easting	Northing	1% AEP (+30%)	1% AEP (+35%)	1% AEP (+70%)	0.1% AEP (+30%)
			Depth	Depth	Depth	Depth
13	385450	393107	0.02	0.03	0.08	0.29
14	385465	393107	NoData	NoData	0.01	0.18
15	385480	393107	0.10	0.10	0.12	0.32
16	385420	393122	0.28	0.29	0.33	0.54
17	385435	393122	0.09	0.10	0.14	0.35
18	385450	393122	0.12	0.14	0.18	0.39
19	385465	393122	0.06	0.08	0.15	0.37
20	385480	393122	0.06	0.07	0.08	0.28
21	385420	393137	0.32	0.33	0.37	0.58
22	385435	393137	0.19	0.20	0.24	0.45
23	385450	393137	0.27	0.28	0.33	0.54
24	385465	393137	NoData	NoData	0.03	0.21

Label	Easting	Northing	1% AEP (+30%)	1% AEP (+35%)	1% AEP (+70%)	0.1% AEP (+30%)
			Depth	Depth	Depth	Depth
25	385480	393137	NoData	NoData	NoData	0.09
Max value in selected area:			0.43	0.44	0.48	0.69

Data in this table comes from the Cringle Black 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.

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



Defences removed climate change modelled fluvial extent and height

Location (easting/northing)
385453/393110

Scale Created
1:500 8 Jul 2026

Model name
**Cringle Black Brook
2017**

 Selected area

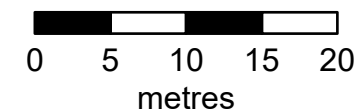
 Main river

Modelled 2D grid

Height in mAOD

-  36 - 36.25
-  36.25 - 36.5
-  36.5 - 36.75
-  36.75 - 37.0
-  37.0 - 37.25
-  37.25 - 37.5
-  37.5 - 37.75
-  37.75 - 38.0
-  38.0 - 38.25

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



Sample point data

Defences removed climate change

Label	Easting	Northing	1% AEP (+30%)	1% AEP (+35%)	1% AEP (+70%)	0.1% AEP (+30%)
			Height	Height	Height	Height
1	385420	393077	NoData	NoData	NoData	NoData
2	385435	393077	NoData	NoData	NoData	36.77
3	385450	393077	NoData	NoData	NoData	NoData
4	385465	393077	NoData	NoData	NoData	NoData
5	385480	393077	36.89	36.89	36.89	37.03
6	385420	393092	NoData	NoData	NoData	NoData
7	385435	393092	NoData	NoData	36.56	36.77
8	385450	393092	NoData	NoData	NoData	36.77
9	385465	393092	NoData	NoData	NoData	37.00
10	385480	393092	36.80	36.80	36.83	37.03
11	385420	393107	NoData	NoData	NoData	36.76
12	385435	393107	36.52	36.53	36.57	36.76

Label	Easting	Northing	1% AEP (+30%)	1% AEP (+35%)	1% AEP (+70%)	0.1% AEP (+30%)
			Height	Height	Height	Height
13	385450	393107	36.52	36.53	36.57	36.77
14	385465	393107	NoData	NoData	36.76	36.91
15	385480	393107	36.80	36.80	36.82	37.02
16	385420	393122	36.52	36.53	36.56	36.76
17	385435	393122	36.52	36.53	36.57	36.76
18	385450	393122	36.52	36.53	36.57	36.77
19	385465	393122	36.64	36.65	36.71	36.90
20	385480	393122	36.78	36.79	36.81	37.01
21	385420	393137	36.52	36.53	36.56	36.76
22	385435	393137	36.52	36.53	36.57	36.76
23	385450	393137	36.52	36.53	36.57	36.76
24	385465	393137	36.57	36.58	36.60	36.79

Label	Easting	Northing	1% AEP (+30%)	1% AEP (+35%)	1% AEP (+70%)	0.1% AEP (+30%)
			Height	Height	Height	Height
25	385480	393137	NoData	NoData	NoData	36.97
Max value in selected area:			36.87	36.87	36.89	37.03

Data in this table comes from the Cringle Black 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.

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

Defences removed climate change

Label	Easting	Northing	1% AEP (+30%)	1% AEP (+35%)	1% AEP (+70%)	0.1% AEP (+30%)
			Depth	Depth	Depth	Depth
1	385420	393077	NoData	NoData	NoData	NoData
2	385435	393077	NoData	NoData	NoData	0.10
3	385450	393077	NoData	NoData	NoData	NoData
4	385465	393077	NoData	NoData	NoData	NoData
5	385480	393077	0.00	0.00	0.00	0.14
6	385420	393092	NoData	NoData	NoData	NoData
7	385435	393092	NoData	NoData	0.00	0.20
8	385450	393092	NoData	NoData	NoData	0.18
9	385465	393092	NoData	NoData	NoData	0.14
10	385480	393092	0.01	0.01	0.03	0.24
11	385420	393107	NoData	NoData	NoData	0.19
12	385435	393107	0.09	0.09	0.14	0.33

Label	Easting	Northing	1% AEP (+30%)	1% AEP (+35%)	1% AEP (+70%)	0.1% AEP (+30%)
			Depth	Depth	Depth	Depth
13	385450	393107	0.06	0.06	0.10	0.30
14	385465	393107	NoData	NoData	0.04	0.19
15	385480	393107	0.12	0.12	0.14	0.34
16	385420	393122	0.31	0.32	0.36	0.55
17	385435	393122	0.12	0.13	0.17	0.36
18	385450	393122	0.16	0.17	0.21	0.40
19	385465	393122	0.12	0.13	0.19	0.38
20	385480	393122	0.08	0.08	0.10	0.30
21	385420	393137	0.35	0.36	0.40	0.59
22	385435	393137	0.22	0.23	0.27	0.46
23	385450	393137	0.31	0.31	0.35	0.55
24	385465	393137	0.01	0.02	0.04	0.23

Label	Easting	Northing	1% AEP (+30%)	1% AEP (+35%)	1% AEP (+70%)	0.1% AEP (+30%)
			Depth	Depth	Depth	Depth
25	385480	393137	NoData	NoData	NoData	0.11
Max value in selected area:			0.46	0.47	0.51	0.70

Data in this table comes from the Cringle Black 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.

'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 canals, groundwater and reservoirs

Your lead local flood authority is Manchester District.

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