

Flood risk assessment data

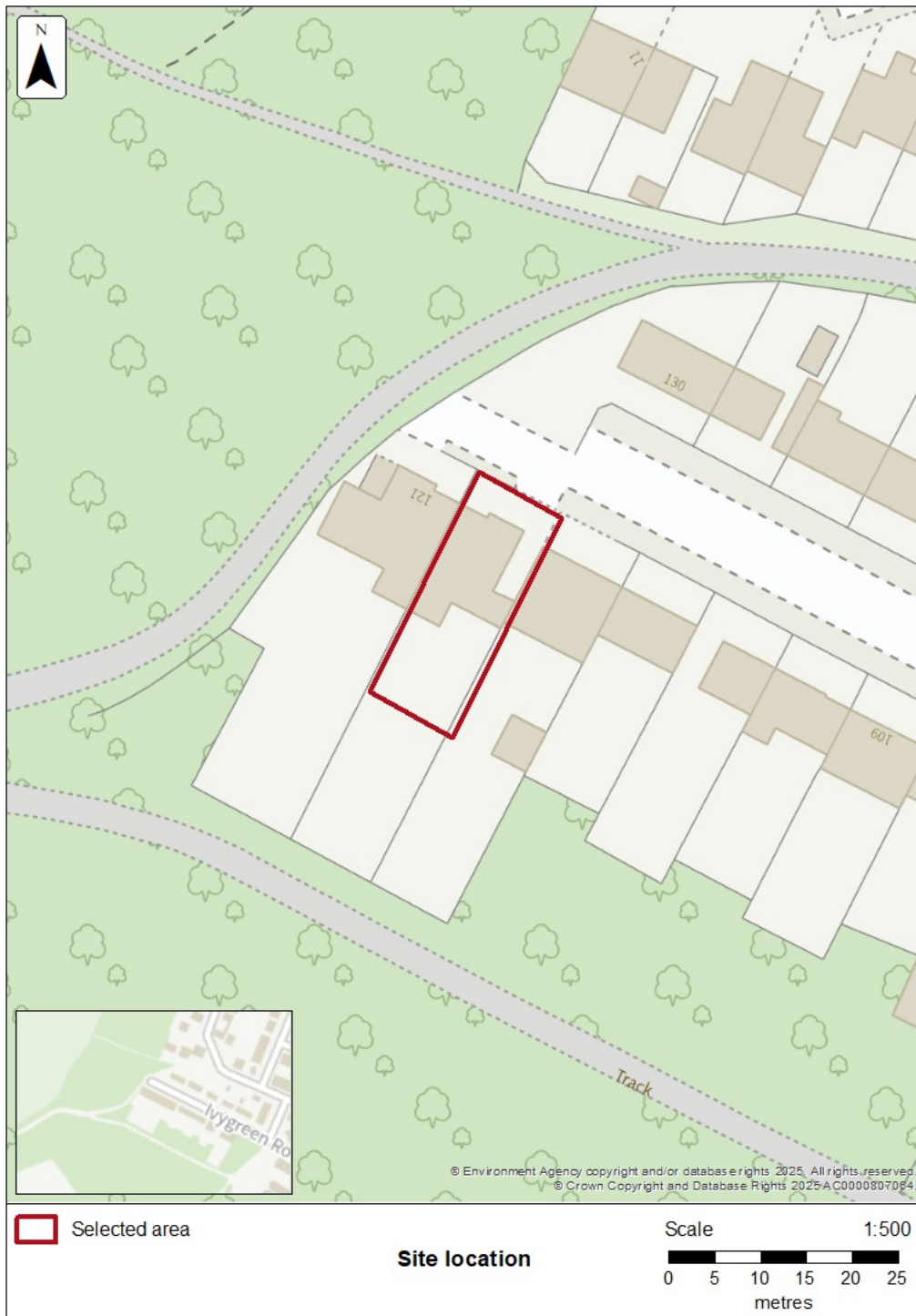
Location of site: 380839 / 393649 (shown as easting and northing coordinates)

Document created on: 3 February 2025

This information was previously known as a product 4.

Customer reference number: PE9BJFCK19W6

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)
- 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

Information that's unavailable

This document **does not** contain:

- past floods

We do not have past 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.

Surface water and other sources of flooding

Use the [long term flood risk service](#) to find out about the risk of flooding from:

- surface water
- ordinary watercourses
- reservoirs

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

Your Lead Local Flood Authority is Manchester District.

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

About the models used

Model name: Upper Mersey 2017

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

Date: 14 April 2022

These models contain 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 2.

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

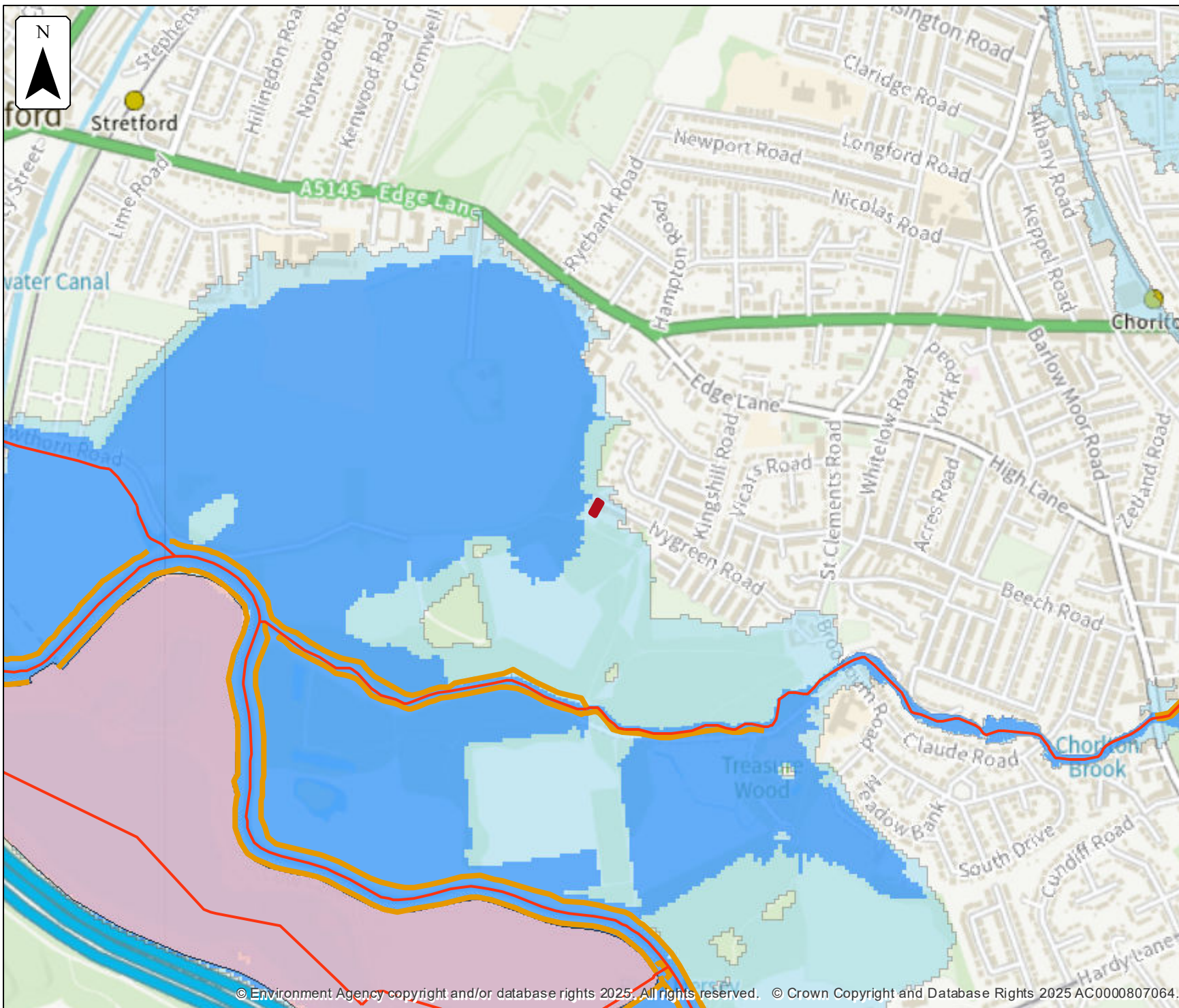
Flood zone 2 shows the area at risk of flooding for an undefended flood event with:

- 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)
380839/393649

Scale
1:10,000

Created
3 Feb 2025

-  Selected area
-  Main river
-  Flood defence
-  Water storage area
-  Flood zone 3
-  Flood zone 2



Flood defences and attributes

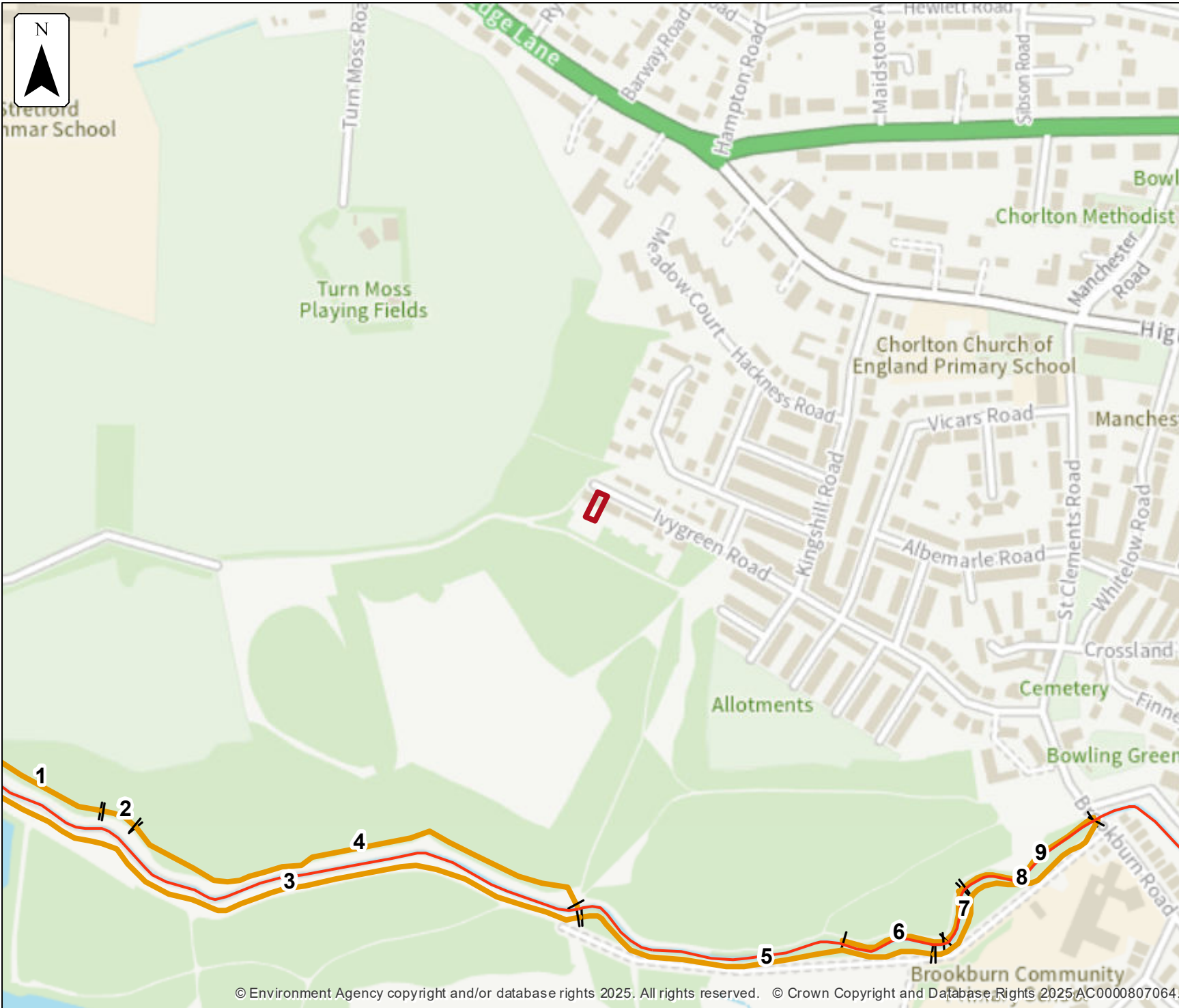
The flood defences map shows the location of the flood defences present.

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



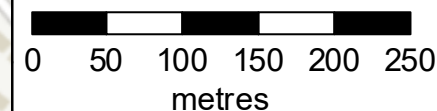
Flood defences

Location (easting/northing)
380839/393649

Scale
1:5,000

Created
3 Feb 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	122257	Embankment	50		22.17	24.19	
2	122259	Engineered High Ground	50		22.17	22.17	
3	122258	Embankment	50		24.21	23.94	
4	120856	Embankment	50		22.17	23.20	
5	120857	Embankment	50		23.94	24.08	
6	120860	Engineered High Ground	5		22.38	21.93	
7	120654	Engineered High Ground	5		21.74	21.72	
8	125813	Embankment			24.08	25.91	
9	120655	Engineered High Ground	50		23.35	21.72	

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

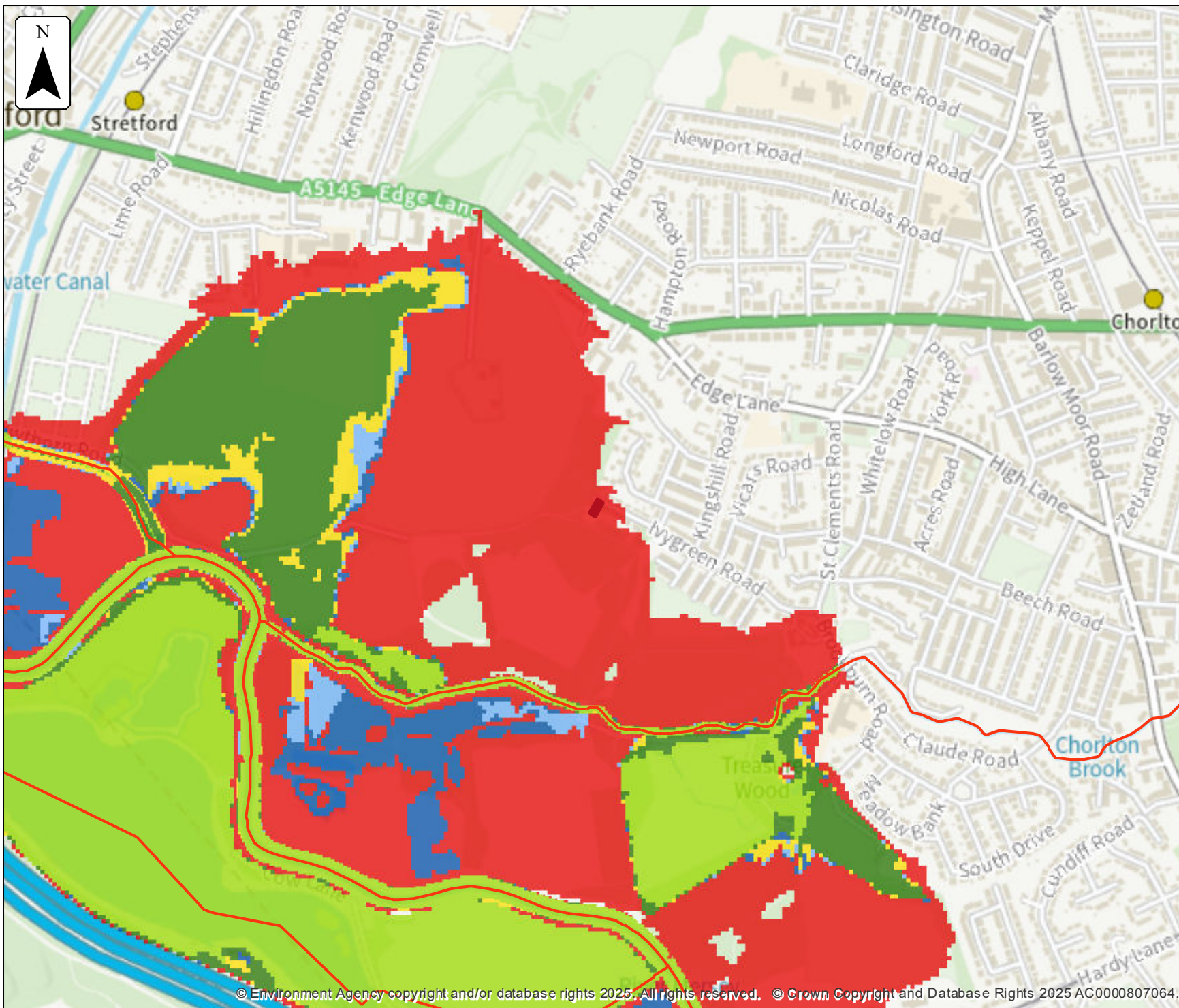
The climate change data included in the models may not include the latest [flood risk assessment climate change allowances](#). Where the new allowances are not available you will need to consider this data and factor in the new allowances to demonstrate the development will be safe from flooding.

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
- No defences exist modelled fluvial: risk of flooding from rivers where there are no flood defences
- 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
- 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

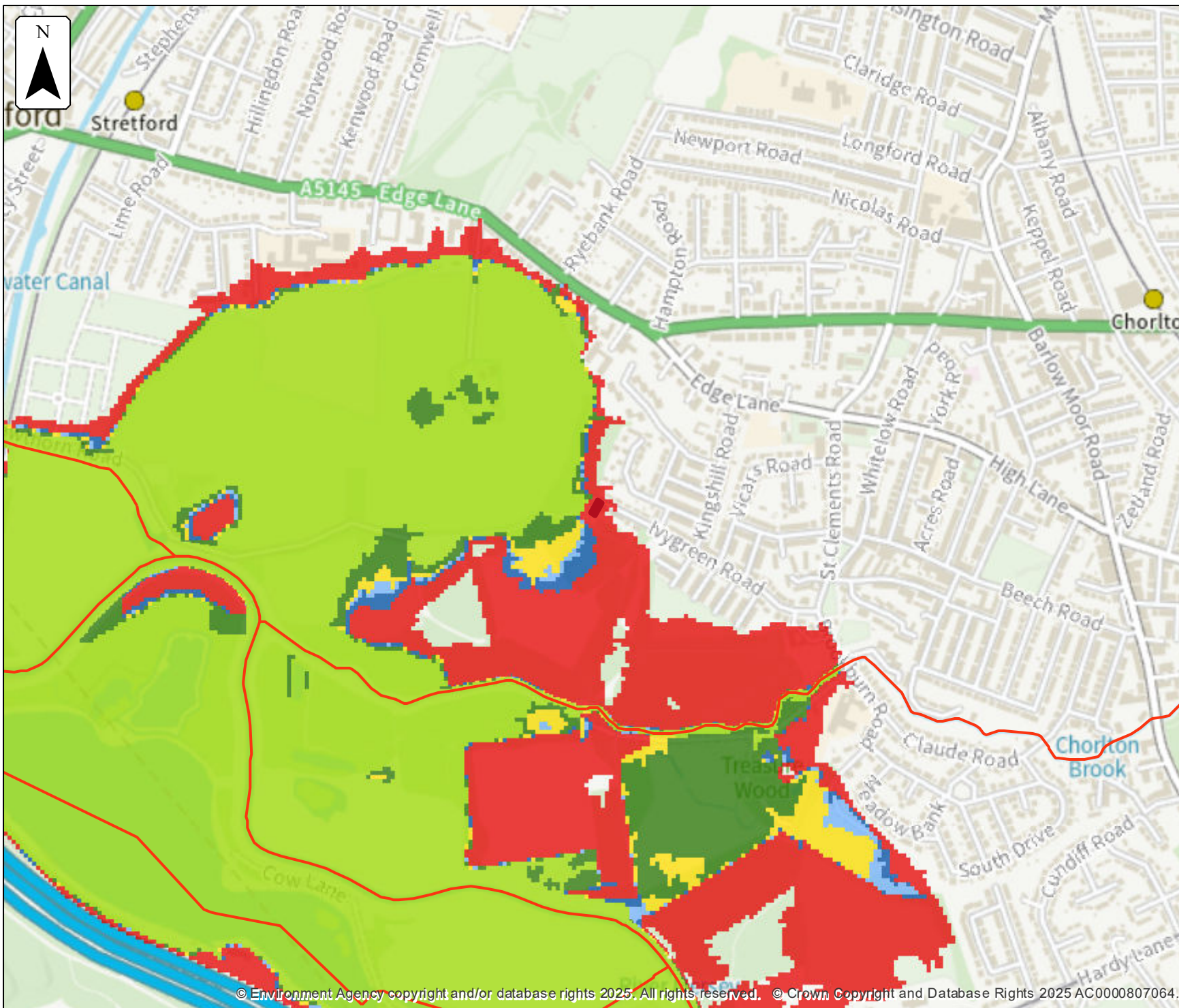
Location (easting/northing)
380839/393649

Scale Created
1:10,000 3 Feb 2025

Model name
Upper Mersey 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



Defences removed modelled fluvial extent

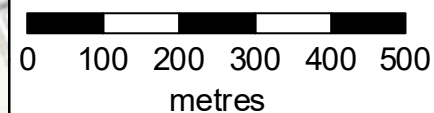
Location (easting/northing)
380839/393649

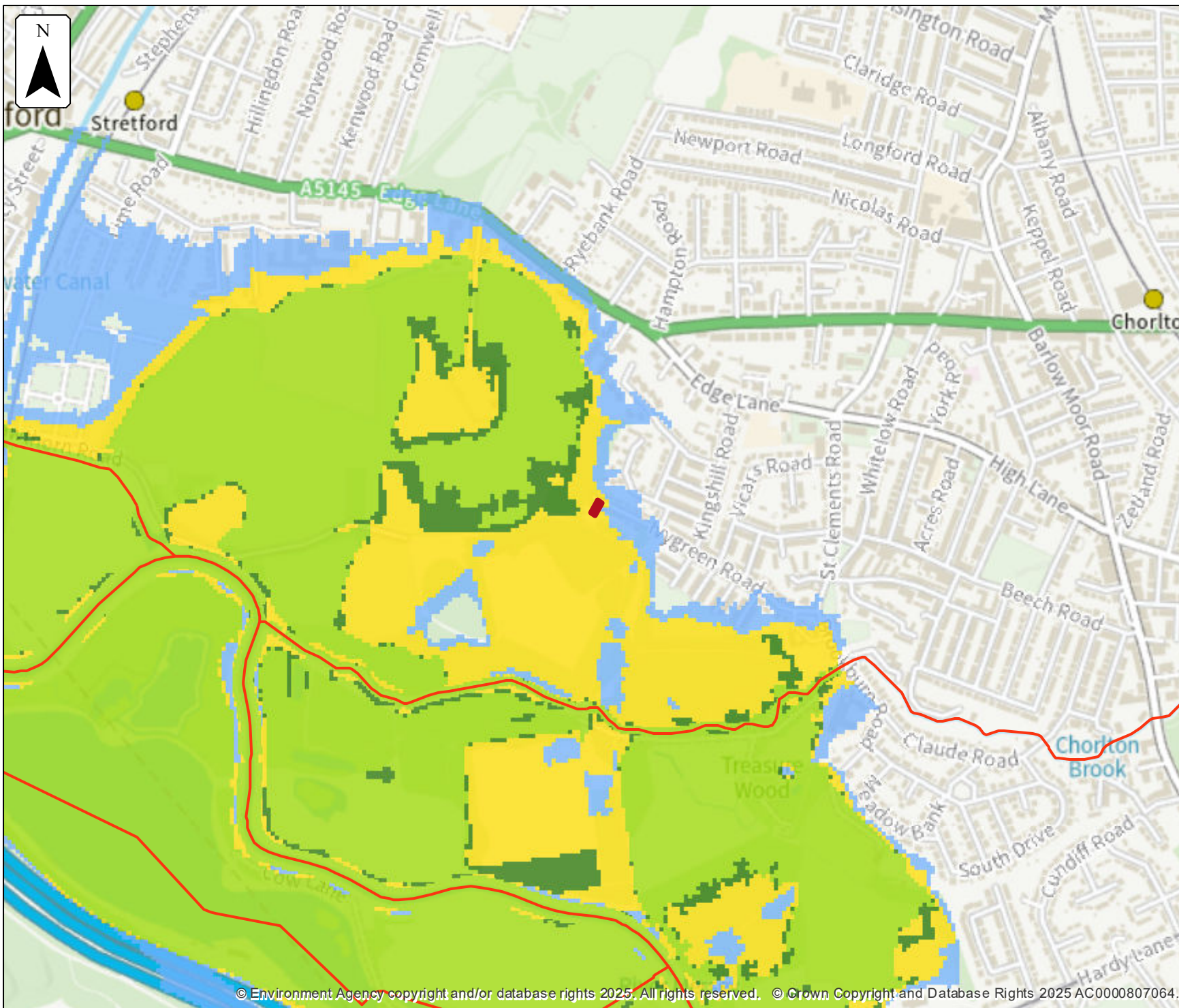
Scale Created
1:10,000 3 Feb 2025

Model name
Upper Mersey 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

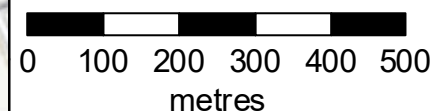
Location (easting/northing)
380839/393649

Scale Created
1:10,000 3 Feb 2025

Model name
Upper Mersey 2017

-  Selected area
-  Main river
- Modelled flood extent
 -  1.0% AEP (+30%)
 -  1.0% AEP (+35%)
 -  1.0% AEP (+70%)
 -  0.1% AEP (+30%)

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





Defences removed climate change modelled fluvial extent

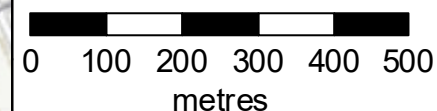
Location (easting/northing)
380839/393649

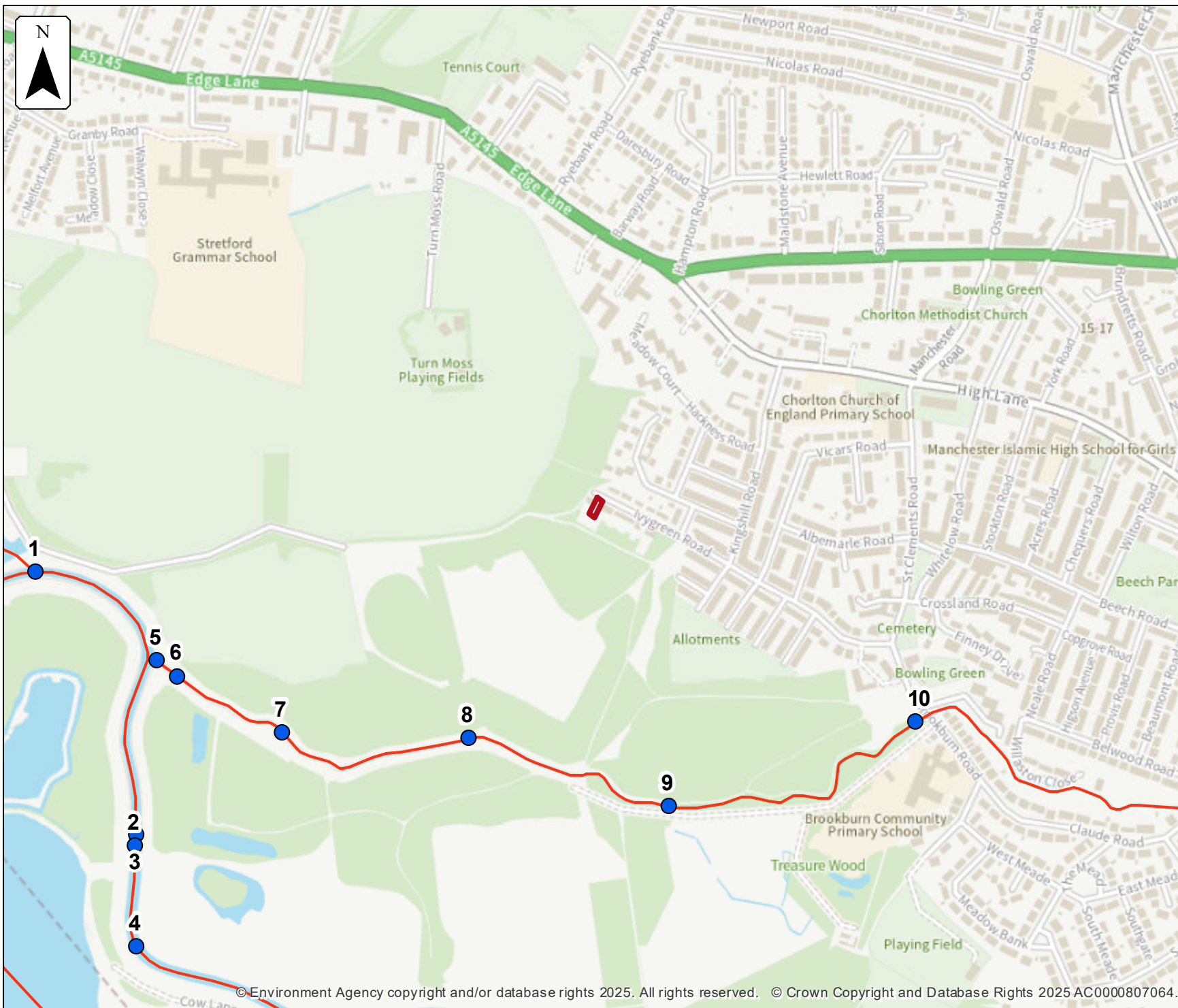
Scale Created
1:10,000 3 Feb 2025

Model name
Upper Mersey 2017

- Selected area
- Main river
- Modelled flood extent
 - 1.0% AEP (+30%)
 - 1.0% AEP (+35%)
 - 1.0% AEP (+70%)
 - 0.1% AEP (+30%)

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





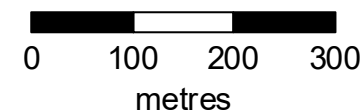
Defended modelled fluvial node locations

Location (easting/northing)
380839/393649

Scale Created
1:7,500 3 Feb 2025

Model name
Upper Mersey 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	1290535	380023	393555	22.62	22.97	23.05	23.42	23.51	23.55	23.60	23.73	23.80	23.86	25.36
2	1290753	380168	393155	23.32	23.63	23.70	24.06	24.14	24.18	24.24	24.31	24.37	24.44	25.51
3	1290521	380169	393171	23.08	23.40	23.47	23.83	23.90	23.95	24.0	24.09	24.15	24.21	25.45
4	1290579	380170	393010	23.42	23.73	23.80	24.16	24.24	24.28	24.34	24.41	24.47	24.53	25.46
5	1290702	380200	393425	22.82	23.16	23.25	23.60	23.68	23.72	23.78	23.88	23.94	24.0	25.42
6	1290798	380230	393403	22.83	23.22	23.35	23.62	23.70	23.74	23.79	23.88	23.93	23.97	25.45
7	1290794	380382	393321	22.83	23.23	23.36	23.62	23.70	23.74	23.79	23.88	23.93	23.97	25.38
8	1290792	380655	393312	22.84	23.24	23.37	23.63	23.70	23.74	23.79	23.88	23.93	23.96	25.28
9	1290833	380946	393213	22.84	23.26	23.41	23.63	23.71	23.74	23.80	23.88	23.93	23.97	25.41
10	1290731	381305	393336	22.95	23.41	23.62	23.80	23.90	23.94	24.0	24.03	24.06	24.09	25.77

Data in this table comes from the Upper Mersey 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.

If no level or flow data is available for a scenario, no table will be shown.

Defended

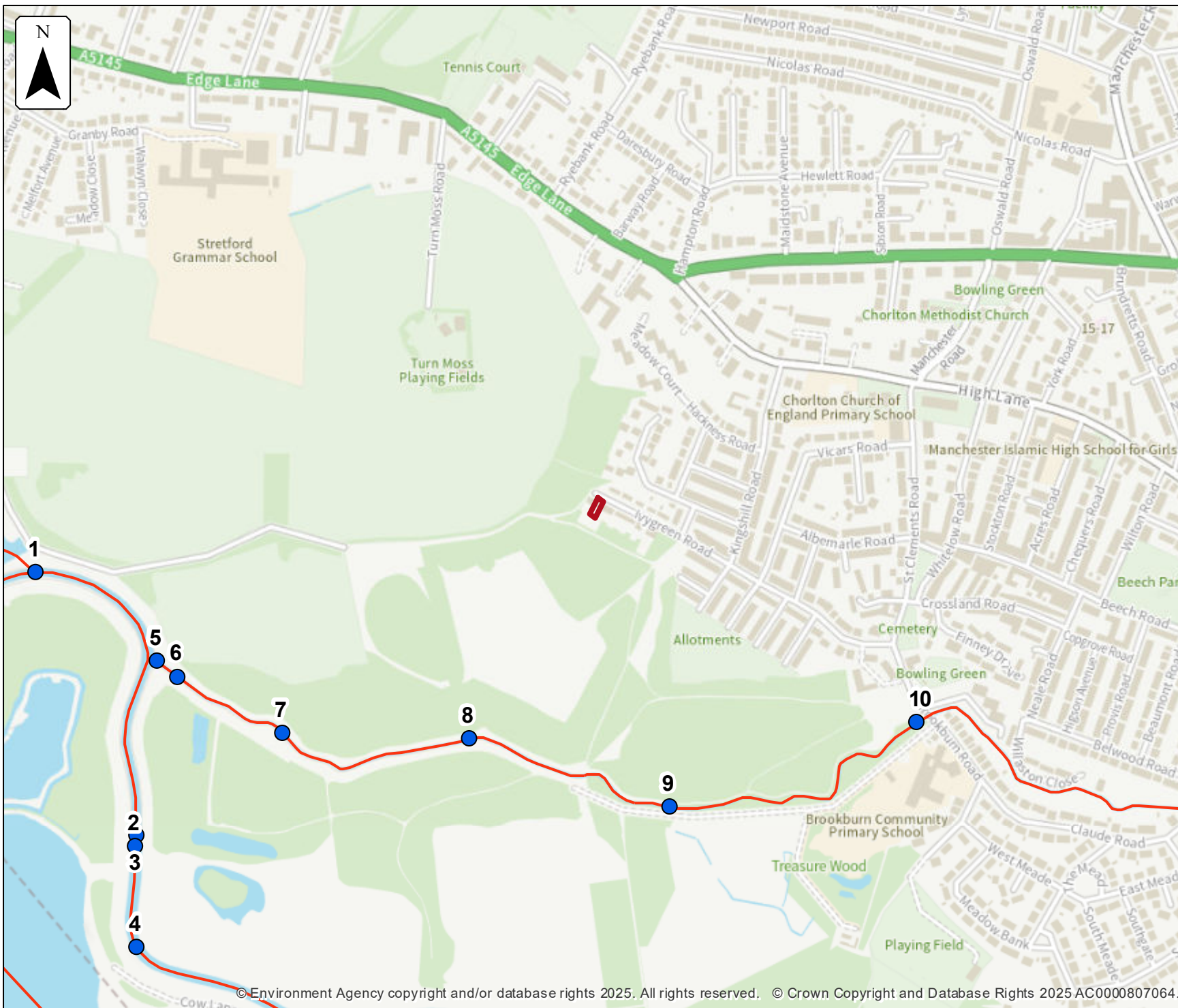
Label	Modelled location ID	Easting	Northing	50% AEP	20% AEP	10% AEP	5% AEP	4% AEP	3.33% AEP	2% AEP	1.33% AEP	1% AEP	0.5% AEP	0.1% AEP
				Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow
1	1290535	380023	393555	206.02	233.49	239.78	267.99	274.28	277.60	282.69	286.51	292.0	295.34	410.37
2	1290753	380168	393155	202.56	226.03	231.07	262.98	269.75	273.74	279.67	285.87	292.34	295.75	398.11
3	1290521	380169	393171	202.56	226.03	231.07	262.98	269.75	273.74	279.67	285.87	292.34	295.75	398.11
4	1290579	380170	393010	202.56	226.09	231.09	262.99	269.77	273.75	279.67	285.92	292.36	295.82	398.24
5	1290702	380200	393425	7.29	10.60	13.15	17.19	19.48	20.41	21.07	21.53	21.80	22.14	19.25
6	1290798	380230	393403	7.33	10.66	13.23	17.28	19.57	20.50	21.17	21.62	21.87	22.24	19.39
7	1290794	380382	393321	7.48	10.88	13.50	17.61	19.91	20.86	21.65	22.06	22.38	22.79	75.47
8	1290792	380655	393312	7.71	11.21	13.95	18.14	20.43	21.41	22.38	23.04	23.36	23.84	125.65
9	1290833	380946	393213	7.85	11.48	14.29	18.51	20.78	21.77	22.80	23.67	23.98	24.48	154.94
10	1290731	381305	393336	7.90	11.60	14.50	19.0	21.90	23.50	25.40	27.10	28.10	30.10	31.10

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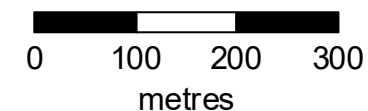
Defences removed modelled fluvial node locations

Location (easting/northing)
380839/393649

Scale Created
1:7,500 3 Feb 2025

Model name
Upper Mersey 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	1290535	380023	393555	21.72	22.21	22.46	22.71	22.82	22.90	23.10	23.27	23.33	23.54	25.03
2	1290753	380168	393155	22.19	22.48	22.65	22.85	22.93	22.99	23.16	23.31	23.38	23.59	25.03
3	1290521	380169	393171	22.02	22.39	22.59	22.81	22.89	22.96	23.14	23.29	23.36	23.57	25.03
4	1290579	380170	393010	22.28	22.48	22.60	22.74	22.81	22.87	23.02	23.15	23.21	23.39	24.89
5	1290702	380200	393425	21.85	22.30	22.52	22.76	22.86	22.92	23.12	23.28	23.36	23.57	24.93
6	1290798	380230	393403	21.87	22.39	22.60	22.81	22.89	22.95	23.13	23.28	23.36	23.57	25.03
7	1290794	380382	393321	21.88	22.42	22.62	22.81	22.89	22.95	23.13	23.28	23.36	23.57	25.01
8	1290792	380655	393312	21.91	22.48	22.65	22.83	22.91	22.96	23.14	23.29	23.36	23.58	25.03
9	1290833	380946	393213	21.92	22.48	22.66	22.84	22.92	22.98	23.15	23.29	23.36	23.58	25.03
10	1290731	381305	393336	22.95	23.23	23.43	23.71	23.84	23.89	23.95	24.0	24.03	24.08	25.03

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

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Defences removed

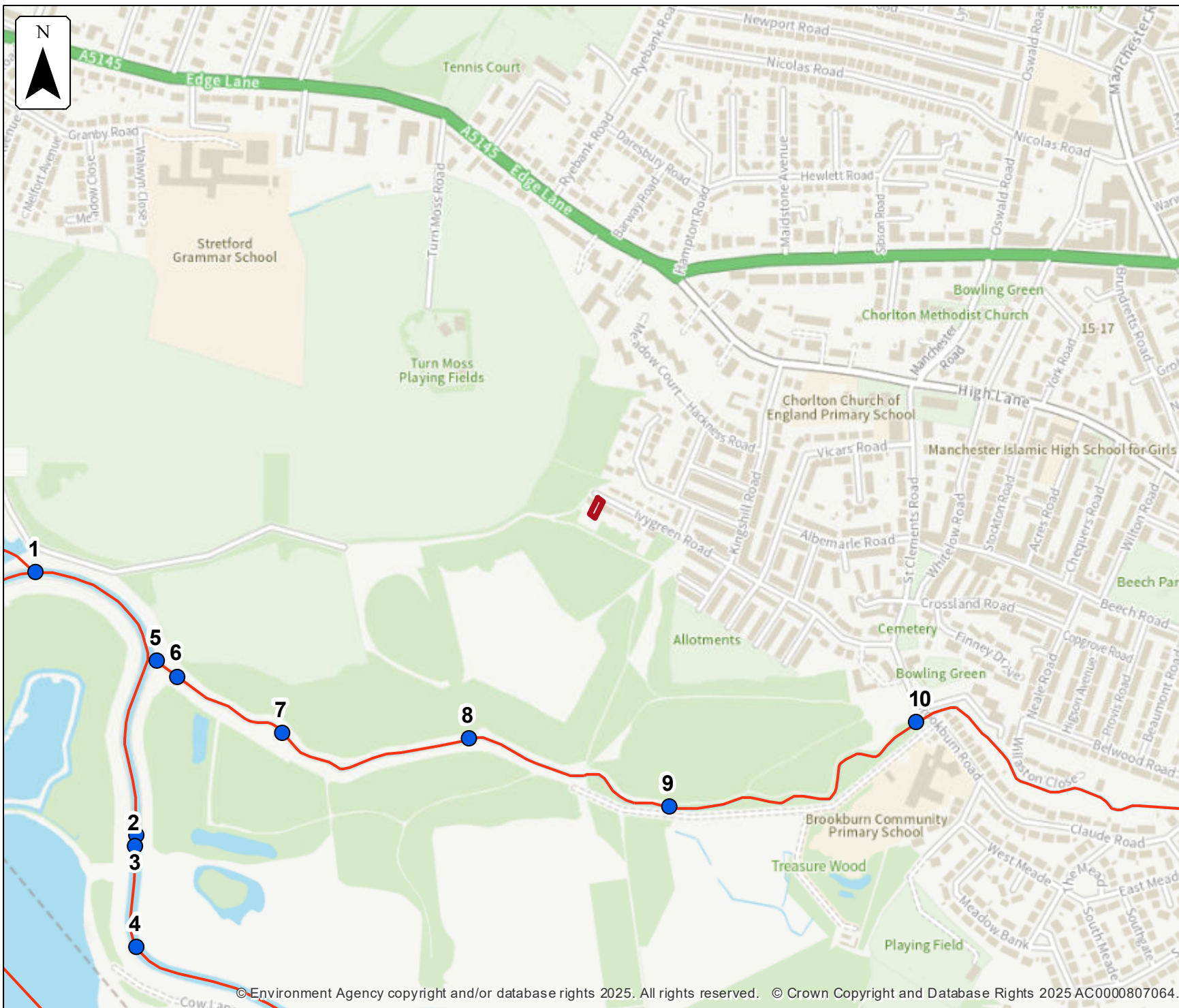
Label	Modelled location ID	Easting	Northing	50% AEP	20% AEP	10% AEP	5% AEP	4% AEP	3.33% AEP	2% AEP	1.33% AEP	1% AEP	0.5% AEP	0.1% AEP
				Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow
1	1290535	380023	393555	123.50	129.98	133.03	136.75	138.63	139.81	141.80	142.81	143.35	144.39	144.90
2	1290753	380168	393155	119.52	122.35	122.63	122.54	122.21	122.09	122.23	122.64	122.91	123.44	130.73
3	1290521	380169	393171	119.52	122.35	122.63	122.54	122.21	122.09	122.23	122.64	122.91	123.44	130.73
4	1290579	380170	393010	119.76	123.61	124.46	126.81	130.81	134.69	144.43	154.02	162.05	180.77	425.49
5	1290702	380200	393425	7.79	11.55	14.43	18.87	20.61	21.04	21.37	21.62	21.74	21.94	21.84
6	1290798	380230	393403	7.80	11.56	14.43	18.87	20.61	21.05	21.38	21.62	21.76	21.95	21.85
7	1290794	380382	393321	7.83	11.59	14.44	18.90	20.64	21.07	21.39	21.64	21.77	21.98	51.30
8	1290792	380655	393312	7.86	11.56	14.46	18.30	20.35	21.19	21.81	22.37	22.58	23.0	30.07
9	1290833	380946	393213	7.89	11.58	14.48	18.96	21.04	21.77	22.41	22.90	23.19	23.76	28.63
10	1290731	381305	393336	7.90	11.60	14.50	19.0	21.90	23.50	25.40	27.10	28.10	30.10	31.10

Data in this table comes from the Upper Mersey 2017 model.

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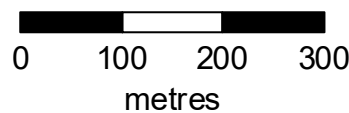
**Defended
climate change
modelled fluvial
node locations**

Location (easting/northing)
380839/393649

Scale Created
1:7,500 3 Feb 2025

Model name
Upper Mersey 2017

-  Selected area
-  Modelled location
-  Main river



Modelled node locations data

Defended climate change

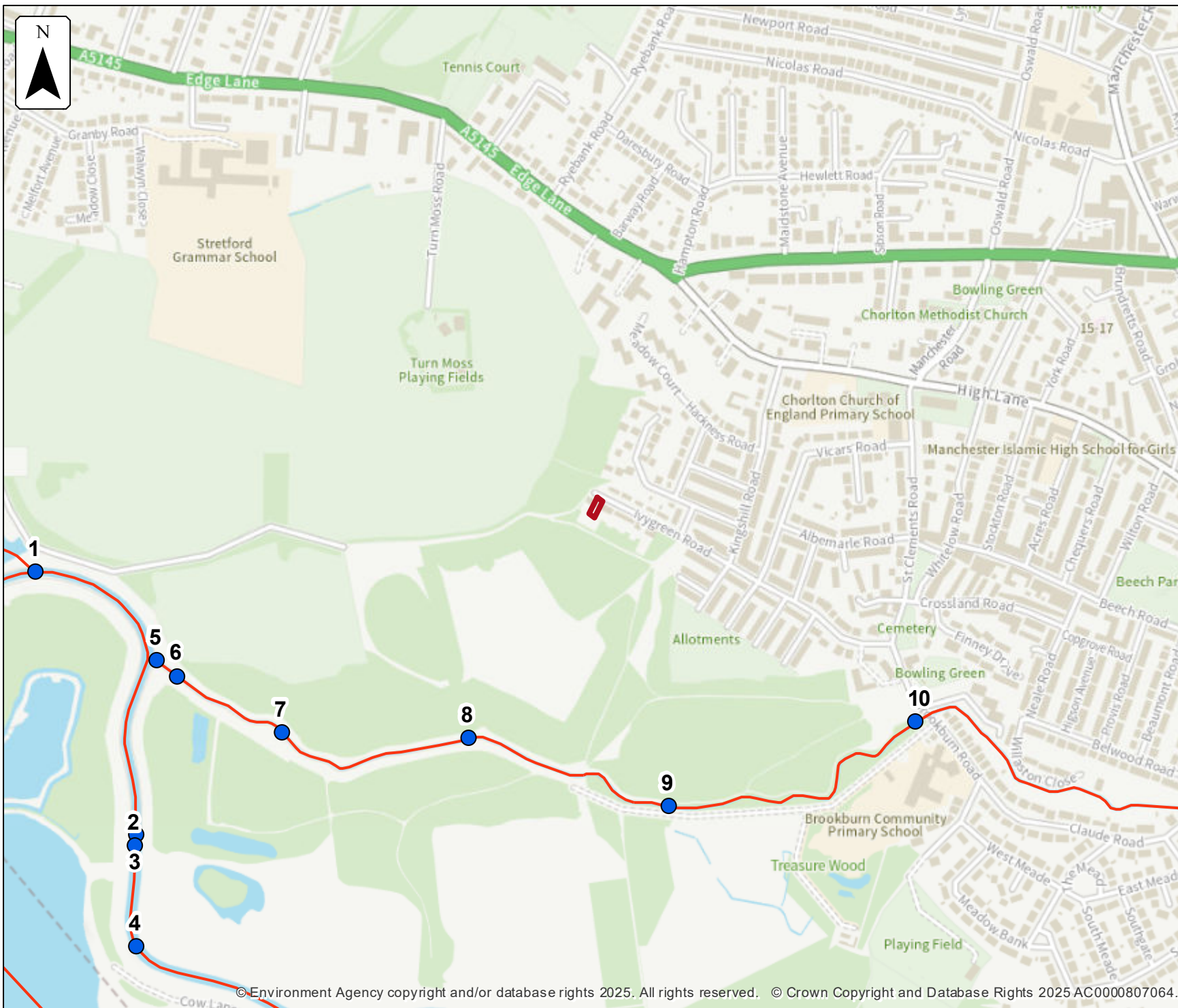
Label	Modelled location ID	Easting	Northing	1% AEP (+30%)	1% AEP (+35%)	1% AEP (+70%)	0.1% AEP (+30%)	1% AEP (+30%)	1% AEP (+35%)	1% AEP (+70%)	0.1% AEP (+30%)
				Level	Level	Level	Level	Flow	Flow	Flow	Flow
1	1290535	380023	393555	24.02	24.05	24.89	26.07	321.81	332.43	402.29	458.78
2	1290753	380168	393155	24.66	24.72	25.22	26.21	333.46	344.71	391.65	429.88
3	1290521	380169	393171	24.41	24.45	25.06	26.16	333.46	344.71	391.65	429.88
4	1290579	380170	393010	24.76	24.82	25.28	26.17	333.31	344.77	391.86	426.37
5	1290702	380200	393425	24.17	24.20	24.95	26.10	23.25	23.43	24.25	24.34
6	1290798	380230	393403	24.10	24.17	24.97	26.14	23.36	23.54	24.37	25.31
7	1290794	380382	393321	24.10	24.17	24.94	26.13	24.0	24.16	63.57	88.62
8	1290792	380655	393312	24.09	24.14	24.94	26.14	25.06	32.91	92.29	94.37
9	1290833	380946	393213	24.15	24.29	25.14	26.16	25.68	25.97	79.99	76.26
10	1290731	381305	393336	24.24	24.41	25.34	26.19	36.53	37.94	48.0	40.40

Data in this table comes from the Upper Mersey 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.

If no level or flow data is available for a scenario, no table will be shown.



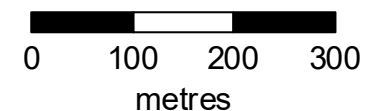
Defences removed climate change modelled fluvial node locations

Location (easting/northing)
380839/393649

Scale Created
1:7,500 3 Feb 2025

Model name
Upper Mersey 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%)	1% AEP (+30%)	1% AEP (+35%)	1% AEP (+70%)	0.1% AEP (+30%)
				Level	Level	Level	Level	Flow	Flow	Flow	Flow
1	1290535	380023	393555	24.01	23.95	24.89	25.84	146.75	147.49	148.24	213.76
2	1290753	380168	393155	24.0	24.08	24.90	25.93	124.40	124.67	127.15	166.53
3	1290521	380169	393171	23.99	24.06	24.90	25.90	124.40	124.67	127.15	166.53
4	1290579	380170	393010	23.85	23.86	24.77	25.87	230.74	256.74	396.31	260.02
5	1290702	380200	393425	24.0	24.06	24.89	25.87	22.62	22.97	24.28	24.34
6	1290798	380230	393403	23.98	24.03	24.91	25.89	22.63	22.98	24.30	24.35
7	1290794	380382	393321	23.97	24.04	24.87	25.89	30.95	42.85	26.70	39.46
8	1290792	380655	393312	24.02	24.07	24.88	25.90	24.84	26.64	38.75	30.15
9	1290833	380946	393213	23.99	24.09	24.88	25.98	26.56	28.56	40.19	30.92
10	1290731	381305	393336	24.25	24.29	24.89	26.03	36.53	37.94	48.0	40.40

Data in this table comes from the Upper Mersey 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.

If no level or flow data is available for a scenario, no table will be shown.



Defended modelled fluvial extent and height

Location (easting/northing)
380839/393649

Scale Created
1:500 3 Feb 2025

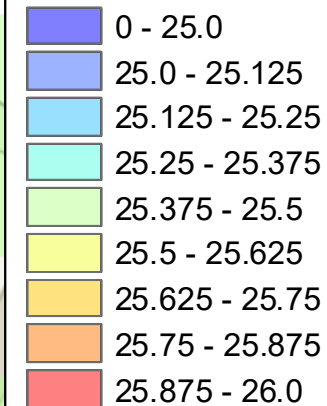
Model name
Upper Mersey 2017

 Selected area

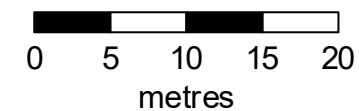
 Main river

Modelled 2D grid

Water level in mAOD



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	380829	393628	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	1.31
2	380836	393628	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	1.26
3	380843	393628	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	1.19
4	380822	393635	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	1.50
5	380829	393635	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	1.31
6	380836	393635	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	1.19
7	380843	393635	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	1.09
8	380822	393642	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	1.49
9	380829	393642	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	1.01
10	380836	393642	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.80
11	380843	393642	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.83
12	380850	393642	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.74
13	380829	393649	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.88
14	380836	393649	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.79
15	380843	393649	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.79
16	380850	393649	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.61

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
17	380829	393656	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	1.18
18	380836	393656	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.84
19	380843	393656	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.85
20	380850	393656	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.86
21	380857	393656	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.73
22	380836	393663	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.90
23	380843	393663	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.91
24	380850	393663	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.96
25	380857	393663	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.82
26	380836	393670	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	1.50
27	380843	393670	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	1.30
Max value in selected area:			Could not determine	Could not determine	Could not determine	Could not determine	Could not determine	Could not determine	Could not determine	Could not determine	Could not determine	Could not determine	1.05

Data in this table comes from the Upper Mersey 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.

If no height or depth data is available for a scenario, no table will be shown.

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

Defended

Label	Easting	Northing	50% AEP	20% AEP	10% AEP	5% AEP	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	380829	393628	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	25.43
2	380836	393628	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	25.43
3	380843	393628	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	25.43
4	380822	393635	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	25.43
5	380829	393635	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	25.43
6	380836	393635	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	25.43
7	380843	393635	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	25.43
8	380822	393642	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	25.43
9	380829	393642	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	25.43
10	380836	393642	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	25.43
11	380843	393642	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	25.43
12	380850	393642	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	25.43
13	380829	393649	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	25.43
14	380836	393649	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	25.43
15	380843	393649	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	25.43
16	380850	393649	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	25.43
17	380829	393656	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	25.43
18	380836	393656	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	25.43

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
19	380843	393656	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	25.43
20	380850	393656	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	25.43
21	380857	393656	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	25.43
22	380836	393663	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	25.43
23	380843	393663	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	25.43
24	380850	393663	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	25.43
25	380857	393663	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	25.43
26	380836	393670	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	25.43
27	380843	393670	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	25.43
Max value in selected area:			Could not determine	Could not determine	Could not determine	Could not determine	Could not determine	Could not determine	Could not determine	Could not determine	Could not determine	Could not determine	25.43

Data in this table comes from the Upper Mersey 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.

If no height or depth data is available for a scenario, no table will be shown.

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



Defences removed modelled fluvial extent and height

Location (easting/northing)
380839/393649

Scale Created
1:500 3 Feb 2025

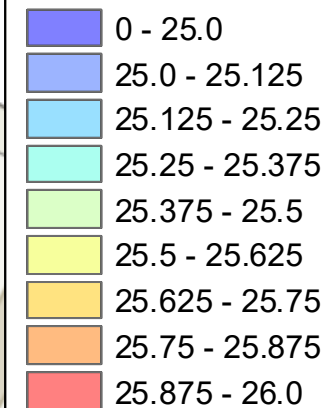
Model name
Upper Mersey 2017

 Selected area

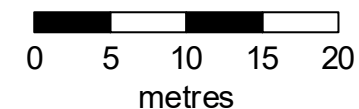
 Main river

Modelled 2D grid

Water level in mAOD



This map shows the
0.1% AEP height data



Sample point data

Defences removed

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	380829	393628	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.96
2	380836	393628	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.92
3	380843	393628	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.84
4	380822	393635	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	1.15
5	380829	393635	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.96
6	380836	393635	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.84
7	380843	393635	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.75
8	380822	393642	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	1.13
9	380829	393642	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.66
10	380836	393642	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.45
11	380843	393642	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.48
12	380850	393642	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.39
13	380829	393649	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.52
14	380836	393649	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.44
15	380843	393649	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.44
16	380850	393649	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.26

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
17	380829	393656	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.82
18	380836	393656	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.49
19	380843	393656	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.50
20	380850	393656	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.52
21	380857	393656	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.38
22	380836	393663	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.55
23	380843	393663	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.56
24	380850	393663	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.61
25	380857	393663	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.47
26	380836	393670	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	1.15
27	380843	393670	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.95
Max value in selected area:			Could not determine	Could not determine	Could not determine	Could not determine	Could not determine	Could not determine	Could not determine	Could not determine	Could not determine	Could not determine	0.70

Data in this table comes from the Upper Mersey 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.

If no height or depth data is available for a scenario, no table will be shown.

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

Defences removed

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	380829	393628	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	25.08
2	380836	393628	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	25.08
3	380843	393628	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	25.08
4	380822	393635	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	25.07
5	380829	393635	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	25.08
6	380836	393635	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	25.08
7	380843	393635	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	25.08
8	380822	393642	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	25.07
9	380829	393642	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	25.07
10	380836	393642	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	25.08
11	380843	393642	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	25.08
12	380850	393642	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	25.08
13	380829	393649	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	25.07
14	380836	393649	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	25.08
15	380843	393649	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	25.08
16	380850	393649	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	25.08
17	380829	393656	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	25.07
18	380836	393656	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	25.08

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
19	380843	393656	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	25.08
20	380850	393656	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	25.08
21	380857	393656	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	25.08
22	380836	393663	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	25.08
23	380843	393663	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	25.08
24	380850	393663	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	25.08
25	380857	393663	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	25.08
26	380836	393670	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	25.08
27	380843	393670	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	25.08
Max value in selected area:			Could not determine	Could not determine	Could not determine	Could not determine	Could not determine	Could not determine	Could not determine	Could not determine	Could not determine	Could not determine	25.08

Data in this table comes from the Upper Mersey 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.

If no height or depth data is available for a scenario, no table will be shown.

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



Defended climate change modelled fluvial extent and height

Location (easting/northing)
380839/393649

Scale Created
1:500 3 Feb 2025

Model name
Upper Mersey 2017

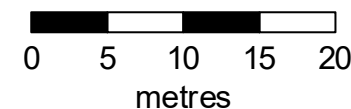
-  Selected area
-  Main river

Modelled 2D grid

Water level in mAOD

-  0 - 26.0
-  26.0 - 26.125
-  26.125 - 26.25
-  26.25 - 26.375
-  26.375 - 26.5
-  26.5 - 26.625
-  26.625 - 26.75
-  26.75 - 26.875
-  26.875 - 27.0

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%)	1% AEP (+30%)	1% AEP (+35%)	1% AEP (+70%)	0.1% AEP (+30%)
			Depth	Depth	Depth	Depth	Height	Height	Height	Height
1	380829	393628	NoData	NoData	0.82	1.98	NoData	NoData	24.94	26.10
2	380836	393628	NoData	NoData	0.78	1.93	NoData	NoData	24.94	26.10
3	380843	393628	NoData	NoData	0.70	1.86	NoData	NoData	24.94	26.10
4	380822	393635	NoData	NoData	1.01	2.17	NoData	NoData	24.94	26.10
5	380829	393635	NoData	NoData	0.82	1.98	NoData	NoData	24.94	26.10
6	380836	393635	NoData	NoData	0.70	1.85	NoData	NoData	24.94	26.10
7	380843	393635	NoData	NoData	0.61	1.76	NoData	NoData	24.94	26.10
8	380822	393642	NoData	NoData	1	2.16	NoData	NoData	24.94	26.10
9	380829	393642	NoData	NoData	0.53	1.68	NoData	NoData	24.94	26.10
10	380836	393642	NoData	NoData	0.31	1.47	NoData	NoData	24.94	26.10
11	380843	393642	NoData	NoData	0.34	1.50	NoData	NoData	24.94	26.10
12	380850	393642	NoData	NoData	0.25	1.40	NoData	NoData	24.94	26.10
13	380829	393649	NoData	NoData	0.39	1.54	NoData	NoData	24.94	26.10
14	380836	393649	NoData	NoData	0.30	1.46	NoData	NoData	24.94	26.10
15	380843	393649	NoData	NoData	0.30	1.46	NoData	NoData	24.94	26.10
16	380850	393649	NoData	NoData	0.12	1.28	NoData	NoData	24.94	26.10

Label	Easting	Northing	1% AEP (+30%)	1% AEP (+35%)	1% AEP (+70%)	0.1% AEP (+30%)	1% AEP (+30%)	1% AEP (+35%)	1% AEP (+70%)	0.1% AEP (+30%)
			Depth	Depth	Depth	Depth	Height	Height	Height	Height
17	380829	393656	NoData	NoData	0.69	1.85	NoData	NoData	24.94	26.10
18	380836	393656	NoData	NoData	0.35	1.51	NoData	NoData	24.94	26.10
19	380843	393656	NoData	NoData	0.36	1.52	NoData	NoData	24.94	26.10
20	380850	393656	NoData	NoData	0.38	1.53	NoData	NoData	24.94	26.10
21	380857	393656	NoData	NoData	0.26	1.40	NoData	NoData	24.94	26.10
22	380836	393663	NoData	NoData	0.41	1.57	NoData	NoData	24.94	26.10
23	380843	393663	NoData	NoData	0.43	1.58	NoData	NoData	24.94	26.10
24	380850	393663	NoData	NoData	0.47	1.63	NoData	NoData	24.94	26.10
25	380857	393663	NoData	NoData	0.33	1.49	NoData	NoData	24.94	26.10
26	380836	393670	NoData	NoData	1.01	2.17	NoData	NoData	24.94	26.10
27	380843	393670	NoData	NoData	0.82	1.97	NoData	NoData	24.94	26.10
Max value in selected area:			Could not determine	Could not determine	0.57	1.72	Could not determine	Could not determine	24.94	26.10

Data in this table comes from the Upper Mersey 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.

If no height or depth data is available for a scenario, no table will be shown.

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



**Defences removed
climate change
modelled fluvial
extent and height**

Location (easting/northing)
380839/393649

Scale Created
1:500 3 Feb 2025

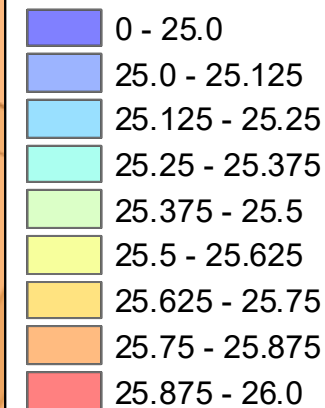
Model name
Upper Mersey 2017

 Selected area

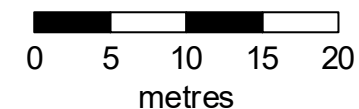
 Main river

Modelled 2D grid

Water level in mAOD



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



Sample point data

Defences removed climate change

Label	Easting	Northing	1% AEP (+30%)	1% AEP (+35%)	1% AEP (+70%)	0.1% AEP (+30%)	1% AEP (+30%)	1% AEP (+35%)	1% AEP (+70%)	0.1% AEP (+30%)
			Depth	Depth	Depth	Depth	Height	Height	Height	Height
1	380829	393628	NoData	0.01	0.78	1.75	NoData	24.11	24.90	25.86
2	380836	393628	NoData	NoData	0.74	1.70	NoData	NoData	24.90	25.86
3	380843	393628	NoData	NoData	0.66	1.63	NoData	NoData	24.90	25.86
4	380822	393635	0.14	0.19	0.97	1.94	24.07	24.12	24.89	25.86
5	380829	393635	NoData	0.04	0.78	1.75	NoData	24.12	24.90	25.86
6	380836	393635	NoData	NoData	0.66	1.62	NoData	NoData	24.90	25.86
7	380843	393635	NoData	NoData	0.57	1.53	NoData	NoData	24.90	25.86
8	380822	393642	0.15	0.19	0.95	1.93	24.06	24.12	24.89	25.86
9	380829	393642	NoData	NoData	0.48	1.45	NoData	NoData	24.89	25.86
10	380836	393642	NoData	NoData	0.27	1.24	NoData	NoData	24.90	25.86
11	380843	393642	NoData	NoData	0.30	1.27	NoData	NoData	24.90	25.86
12	380850	393642	NoData	NoData	0.21	1.17	NoData	NoData	24.90	25.86
13	380829	393649	NoData	NoData	0.34	1.31	NoData	NoData	24.89	25.86
14	380836	393649	NoData	NoData	0.26	1.23	NoData	NoData	24.90	25.86
15	380843	393649	NoData	NoData	0.26	1.22	NoData	NoData	24.90	25.86
16	380850	393649	NoData	NoData	0.09	1.05	NoData	NoData	24.90	25.86

Label	Easting	Northing	1% AEP (+30%)	1% AEP (+35%)	1% AEP (+70%)	0.1% AEP (+30%)	1% AEP (+30%)	1% AEP (+35%)	1% AEP (+70%)	0.1% AEP (+30%)
			Depth	Depth	Depth	Depth	Height	Height	Height	Height
17	380829	393656	NoData	NoData	0.65	1.62	NoData	NoData	24.89	25.86
18	380836	393656	NoData	NoData	0.31	1.28	NoData	NoData	24.90	25.86
19	380843	393656	NoData	NoData	0.32	1.29	NoData	NoData	24.90	25.86
20	380850	393656	NoData	NoData	0.34	1.30	NoData	NoData	24.90	25.86
21	380857	393656	NoData	NoData	0.23	1.17	NoData	NoData	24.90	25.86
22	380836	393663	NoData	NoData	0.37	1.34	NoData	NoData	24.90	25.86
23	380843	393663	NoData	NoData	0.38	1.35	NoData	NoData	24.90	25.86
24	380850	393663	NoData	NoData	0.43	1.40	NoData	NoData	24.90	25.86
25	380857	393663	NoData	NoData	0.29	1.25	NoData	NoData	24.90	25.86
26	380836	393670	0.21	0.28	0.97	1.93	24.07	24.16	24.89	25.86
27	380843	393670	NoData	NoData	0.77	1.74	NoData	NoData	24.90	25.86
Max value in selected area:			Could not determine	Could not determine	0.52	1.49	Could not determine	Could not determine	24.90	25.86

Data in this table comes from the Upper Mersey 2017 model.

Height values are shown in mAOD, and depth values are shown in metres.

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Cells which contain text 'NoData' for a scenario show that return period has been modelled but there is no flood risk for that return period for that location.

If no height or depth data is available for a scenario, no table will be shown.

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

Strategic flood risk assessments

We recommend that you check the relevant local authority's strategic flood risk assessment (SFRA) as part of your work to prepare a site specific flood risk assessment.

This should give you information about:

- the potential impacts of climate change in this catchment
- areas defined as functional floodplain
- flooding from other sources, such as surface water, ground water and reservoirs

Your Lead Local Flood Authority is 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