

Flood risk assessment data

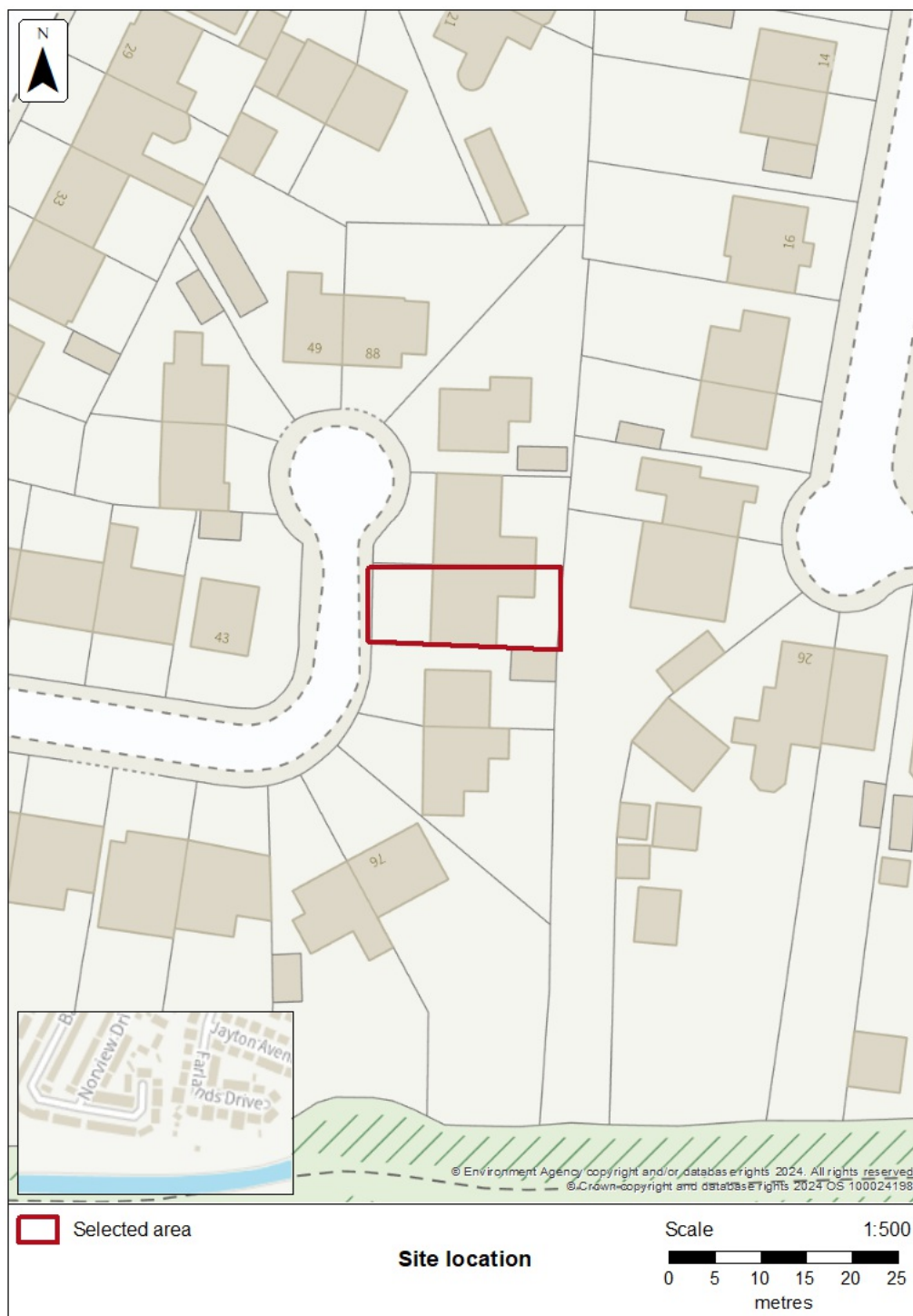
Location of site: 384853 / 389446 (shown as easting and northing coordinates)

Document created on: 4 October 2024

This information was previously known as a product 4.

Customer reference number: RFGCE71XDNUE

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:

- historic flooding

We do not have historic flooding data for this location.

Please note that:

- flooding may have occurred that we do not have records for
- flooding can come from a range of different sources
- we can only supply flood risk data relating to flooding from rivers or the sea

You can contact your Lead Local Flood Authority or Internal Drainage Board to see if they have other relevant local flood information. Please note that some areas do not have an Internal Drainage Board.

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

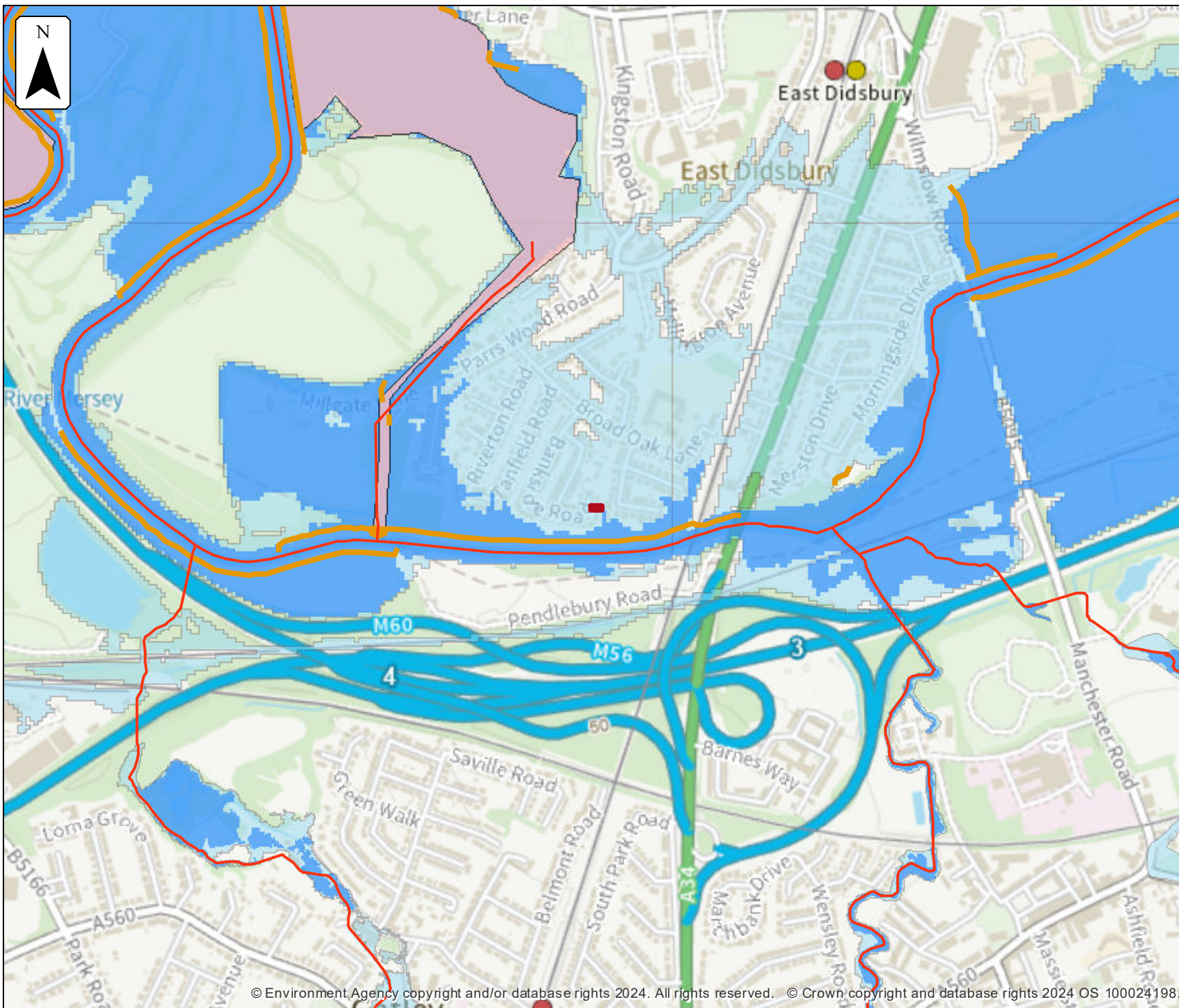
Flood zone 2 shows the area at risk of flooding for an undefended flood event with:

- 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.



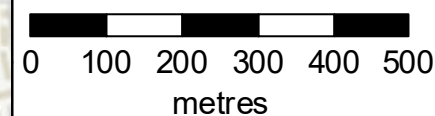
Flood map for planning

Location (easting/northing)
384853/389446

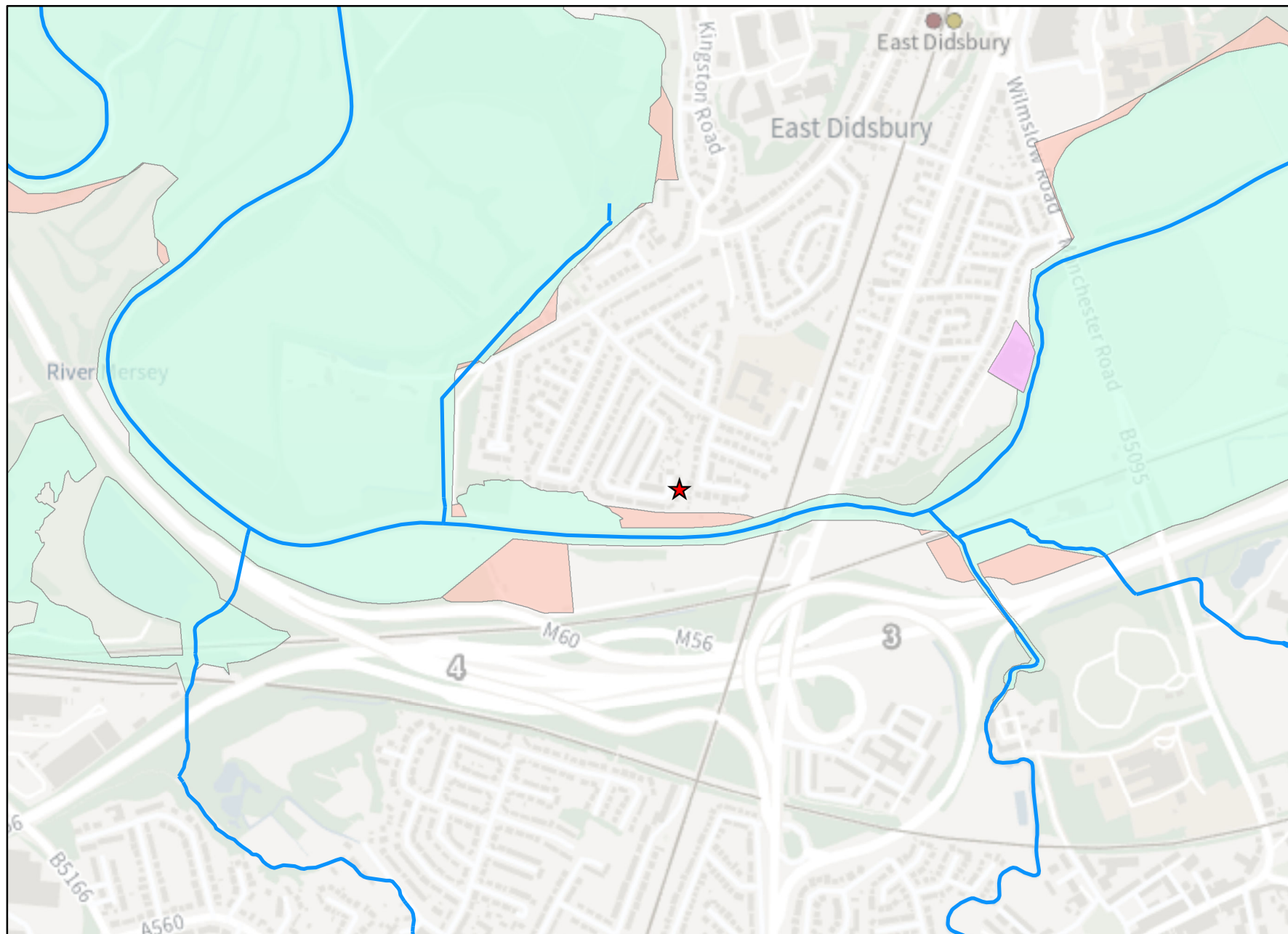
Scale
1:10,000

Created
4 Oct 2024

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



Recorded Flood Outline Map Centred on Bankside Road, Manchester, M20 5GD. Created 11/10/2024 [GMMC379007SW]



1:10,001



Legend

★ Site Location

— Main River

Recorded Flood Outlines

Start Date

- 01/01/1964
- 16/03/2019
- 20/01/2021

Recorded Flood Outlines

Flood Event Code	Name	Start Date	End Date	Source of Flooding	Cause of Flooding
19110	MERS	01/01/1964	02/01/1964	Unknown	Unknown
69497	Waterside Hotel	16/03/2019	16/03/2019	Main River	Channel capacity exceeded (no raised defences)
87092	Didsbury	20/01/2021	20/01/2021	Main River	Other

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



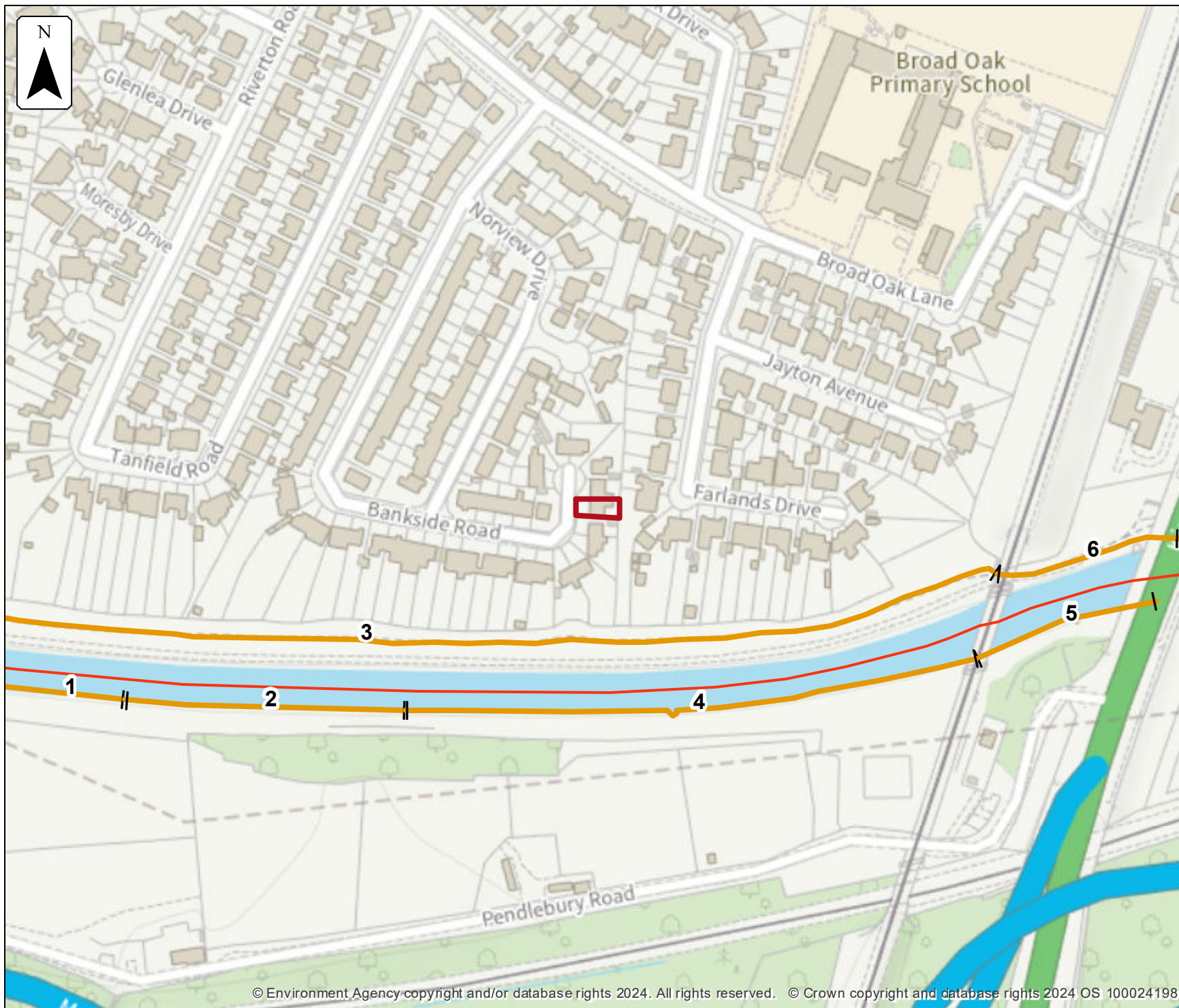
Flood defences

Location (easting/northing)
384853/389446

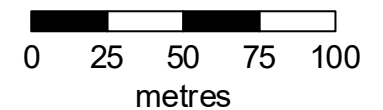
Scale
1:2,500

Created
4 Oct 2024

-  Selected area
-  Main river
-  Flood defence



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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	121960	Engineered High Ground	100		29.63	29.76	
2	412608	Engineered High Ground	100				
3	122331	Embankment	50		32.93	34.03	
4	412609	Engineered High Ground	100				
5	120921	Engineered High Ground	100		30.58	29.63	
6	122332	Embankment	100		33.59	34.27	

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

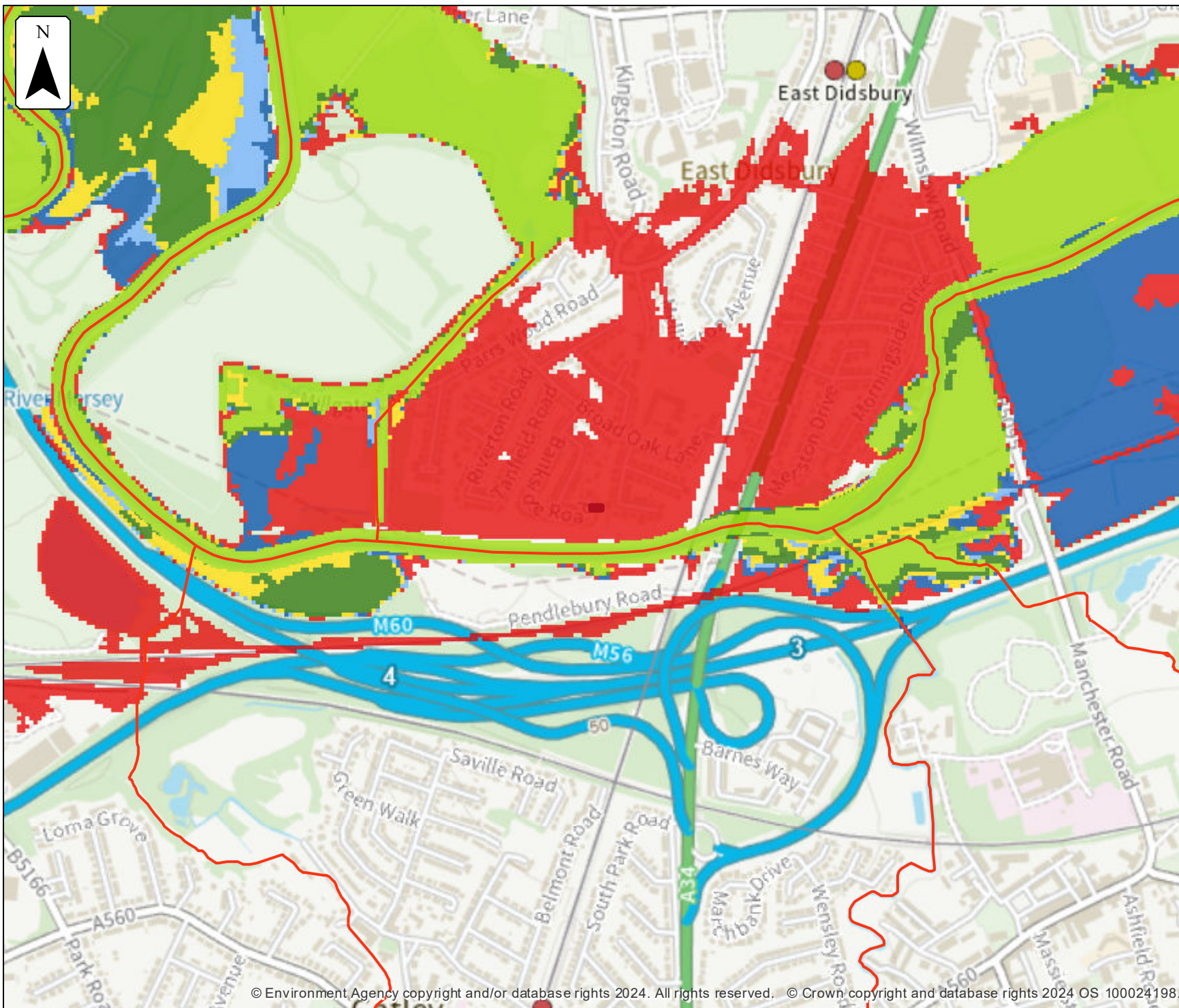
The climate change data included in the models may not include the latest [flood risk assessment climate change allowances](#). Where the new allowances are not available you will need to consider this data and factor in the new allowances to demonstrate the development will be safe from flooding.

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)
384853/389446

Scale Created
1:10,000 4 Oct 2024

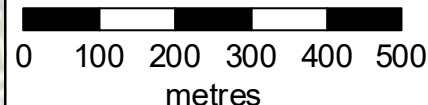
Model name
Upper Mersey 2017

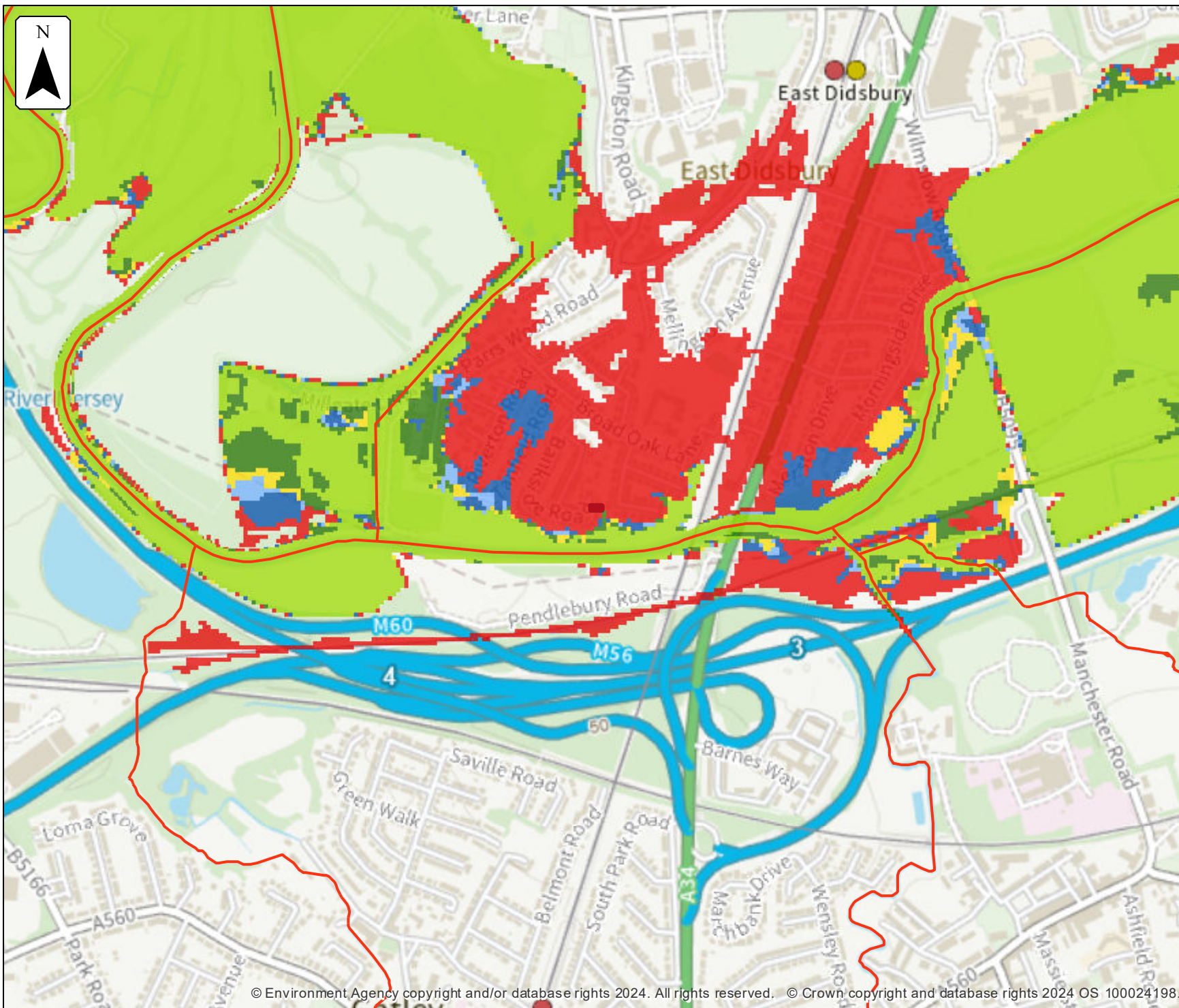
-  Selected area
-  Main river

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

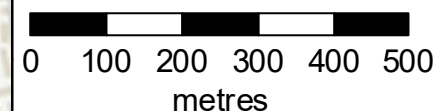
Location (easting/northing)
384853/389446

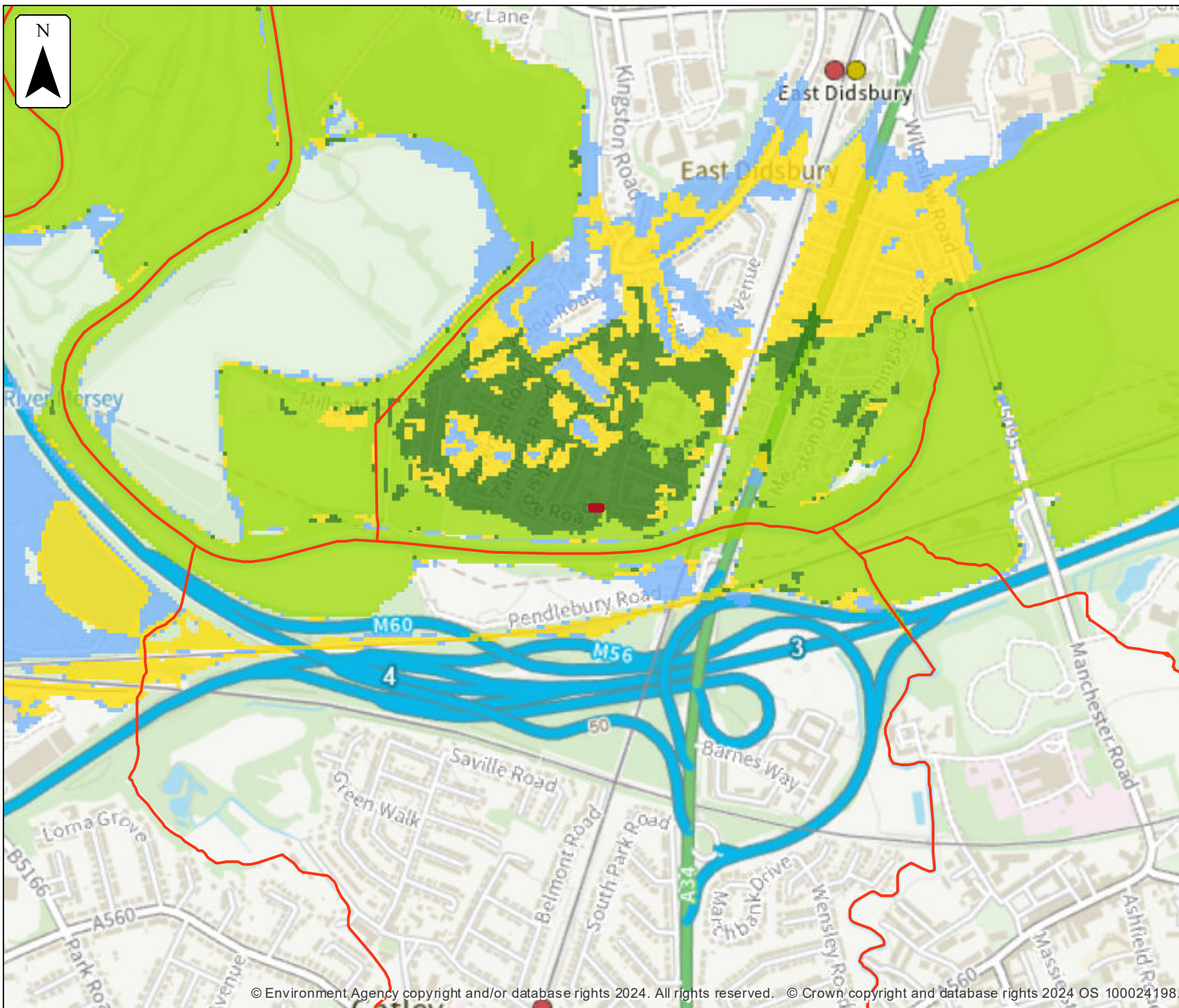
Scale Created
1:10,000 4 Oct 2024

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

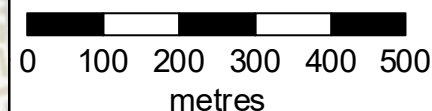
Location (easting/northing)
384853/389446

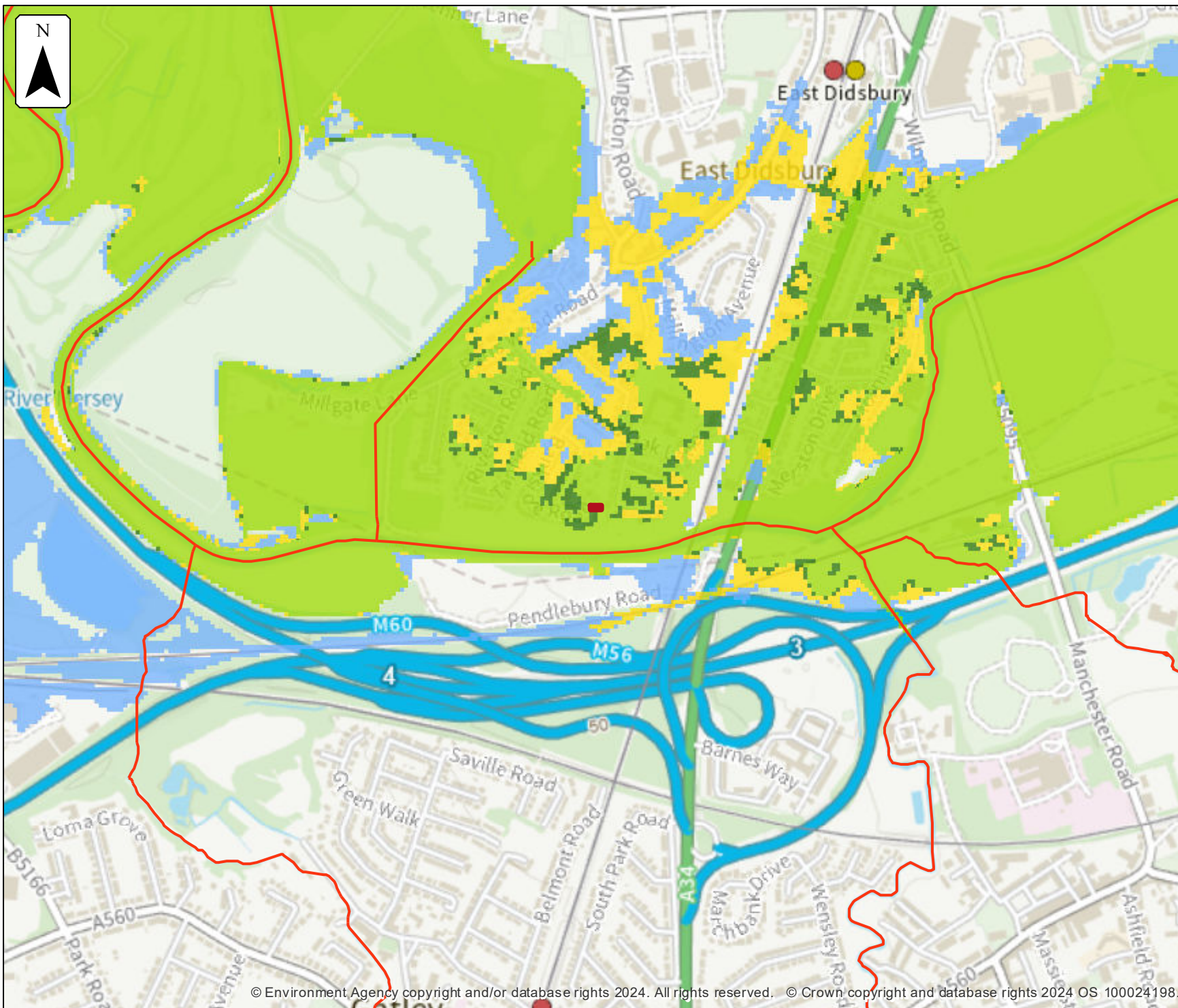
Scale Created
1:10,000 4 Oct 2024

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

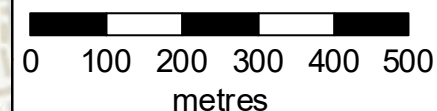
Location (easting/northing)
384853/389446

Scale Created
1:10,000 4 Oct 2024

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





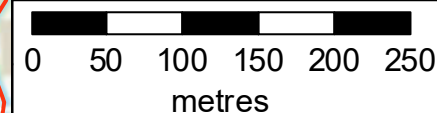
Defended modelled fluvial node locations

Location (easting/northing)
384853/389446

Scale	Created
1:5,000	4 Oct 2024

Model name
Upper Mersey 2017

-  Selected area
 Modelled location
 Main river



Defended

Label	Modelled location ID	Easting	Northing	5% AEP	2% AEP	1.33% AEP	1% AEP	0.5% AEP	0.1% AEP
				Flow	Flow	Flow	Flow	Flow	Flow
1	1290767	384402	389383	283.71	333.27	351.61	367.25	408.39	576.64
2	1290645	384425	389610	1.96	11.05	16.04	12.12	12.20	12.90
3	1290586	384427	389424	0.50	0.50	0.50	0.50	0.50	0.50
4	1290662	384454	389381	310.98	362.53	381.46	397.44	423.22	576.64
5	1290572	384624	389363	309.74	362.47	382.56	397.46	422.90	611.61
6	1290830	384929	389361	311.04	362.59	381.35	397.52	423.07	611.88
7	1290644	385035	389387	310.09	362.45	382.71	397.20	421.92	586.99
8	1290733	385057	389394	310.09	362.45	382.71	397.20	421.92	586.99
9	1290672	385227	389409	310.73	362.57	380.95	395.39	416.47	521.75
10	1290659	385392	389486	280.93	317.96	330.51	339.85	353.45	383.74

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.



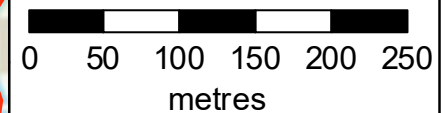
Defences removed modelled fluvial node locations

Location (easting/northing)
384853/389446

Scale Created
1:5,000 4 Oct 2024

Model name
Upper Mersey 2017

-  Selected area
-  Modelled location
-  Main river



Modelled node locations data

Defences removed

Label	Modelled location ID	Easting	Northing	5% AEP	2% AEP	1.33% AEP	1% AEP	0.5% AEP	0.1% AEP
				Level	Level	Level	Level	Level	Level
1	1290767	384402	389383	31.81	31.95	32.01	32.05	32.16	32.76
2	1290645	384425	389610	27.29	27.65	27.81	27.92	28.23	29.40
3	1290586	384427	389424	27.33	27.67	27.82	27.93	28.23	29.40
4	1290662	384454	389381	31.81	31.95	32.01	32.05	32.16	32.76
5	1290572	384624	389363	31.84	31.96	32.03	32.06	32.16	32.78
6	1290830	384929	389361	32.10	32.25	32.32	32.37	32.50	33.08
7	1290644	385035	389387	32.29	32.46	32.54	32.60	32.74	33.35
8	1290733	385057	389394	32.43	32.66	32.77	32.85	33.06	33.93
9	1290672	385227	389409	32.62	32.87	33.0	33.09	33.32	34.63
10	1290659	385392	389486	32.92	33.22	33.36	33.46	33.75	34.86

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

Label	Modelled location ID	Easting	Northing	5% AEP	2% AEP	1.33% AEP	1% AEP	0.5% AEP	0.1% AEP
				Flow	Flow	Flow	Flow	Flow	Flow
1	1290767	384402	389383	241.33	273.72	293.26	305.86	338.62	483.94
2	1290645	384425	389610	5.45	6.99	7.51	7.84	8.56	10.76
3	1290586	384427	389424	0.50	0.50	0.50	0.50	0.50	0.50
4	1290662	384454	389381	241.33	273.72	293.26	305.86	338.62	483.94
5	1290572	384624	389363	274.86	315.90	334.46	349.86	389.98	540.08
6	1290830	384929	389361	299.93	346.30	368.75	385.86	431.33	605.67
7	1290644	385035	389387	300.28	348.20	371.64	389.64	436.68	618.73
8	1290733	385057	389394	300.28	348.20	371.64	389.64	436.68	618.73
9	1290672	385227	389409	300.37	348.36	371.65	389.69	436.48	516.12
10	1290659	385392	389486	269.22	315.05	335.54	348.68	366.10	400.64

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.

Modelled node locations data

No defences exist

Label	Modelled location ID	Easting	Northing	5% AEP	2% AEP	1.33% AEP	1% AEP	0.5% AEP	0.1% AEP
				Level	Level	Level	Level	Level	Level
1	1580223	385493	389364	32.08	32.10	32.11	32.12	32.15	32.22
2	1580162	385560	389339	32.08	32.11	32.12	32.13	32.16	32.23
3	1580233	385668	389273	32.11	32.13	32.15	32.16	32.20	32.29
4	1580216	385682	389256	32.11	32.14	32.15	32.17	32.20	32.29

Data in this table comes from the Chorlton Brook 2023 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.

No defences exist

Label	Modelled location ID	Easting	Northing	5% AEP	2% AEP	1.33% AEP	1% AEP	0.5% AEP	0.1% AEP
				Flow	Flow	Flow	Flow	Flow	Flow
1	1580223	385493	389364	1.78	2.04	2.19	2.30	2.55	3.16
2	1580162	385560	389339	1.70	1.94	2.08	2.17	2.40	2.94
3	1580233	385668	389273	1.70	1.94	2.08	2.17	2.40	2.94
4	1580216	385682	389256	1.70	1.94	2.08	2.17	2.40	2.94

Data in this table comes from the Chorlton Brook 2023 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.



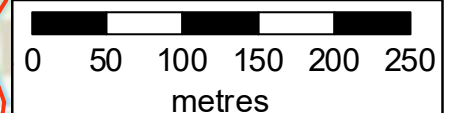
Defended climate change modelled fluvial node locations

Location (easting/northing)
384853/389446

Scale Created
1:5,000 4 Oct 2024

Model name
Upper Mersey 2017

-  Selected area
-  Modelled location
-  Main river



Defended climate change

Label	Modelled location ID	Easting	Northing	1.0% AEP (+30%)	1.0% AEP (+35%)	1.0% AEP (+70%)	0.1% AEP (+30%)
				Flow	Flow	Flow	Flow
1	1290767	384402	389383	477.18	493.36	557.24	689.95
2	1290645	384425	389610	12.30	12.32	12.62	13.40
3	1290586	384427	389424	0.50	0.50	0.50	0.50
4	1290662	384454	389381	477.18	493.36	557.24	689.95
5	1290572	384624	389363	488.72	508.09	589.21	738.06
6	1290830	384929	389361	488.38	508.38	589.73	744.02
7	1290644	385035	389387	478.45	495.11	566.0	708.62
8	1290733	385057	389394	478.45	495.11	566.0	708.62
9	1290672	385227	389409	467.41	484.91	520.73	543.09
10	1290659	385392	389486	366.56	368.35	378.89	441.90

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.



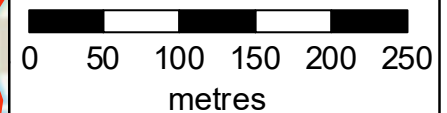
Defences removed climate change modelled fluvial node locations

Location (easting/northing)
384853/389446

Scale Created
1:5,000 4 Oct 2024

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	1.0% AEP (+30%)	1.0% AEP (+35%)	1.0% AEP (+70%)	0.1% AEP (+30%)
				Level	Level	Level	Level
1	1290767	384402	389383	32.33	32.39	32.70	33.28
2	1290645	384425	389610	28.72	28.82	29.32	29.89
3	1290586	384427	389424	28.72	28.82	29.32	29.90
4	1290662	384454	389381	32.33	32.39	32.70	33.28
5	1290572	384624	389363	32.33	32.39	32.71	33.30
6	1290830	384929	389361	32.67	32.73	33.02	33.52
7	1290644	385035	389387	32.93	32.98	33.28	33.75
8	1290733	385057	389394	33.38	33.46	33.85	34.50
9	1290672	385227	389409	33.73	33.86	34.50	35.42
10	1290659	385392	389486	34.16	34.27	34.76	35.52

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

Label	Modelled location ID	Easting	Northing	1.0% AEP (+30%)	1.0% AEP (+35%)	1.0% AEP (+70%)	0.1% AEP (+30%)
				Flow	Flow	Flow	Flow
1	1290767	384402	389383	387.75	400.88	469.65	586.05
2	1290645	384425	389610	9.38	9.54	10.39	12.41
3	1290586	384427	389424	0.50	0.50	0.50	0.50
4	1290662	384454	389381	387.75	400.88	469.65	586.05
5	1290572	384624	389363	443.71	456.89	525.88	644.09
6	1290830	384929	389361	494.96	510.96	589.49	729.39
7	1290644	385035	389387	504.58	521.49	602.82	753.99
8	1290733	385057	389394	504.58	521.49	602.82	753.99
9	1290672	385227	389409	489.22	495.14	515.88	530.67
10	1290659	385392	389486	382.06	382.41	394.85	434.16

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)
384853/389446

Scale Created
1:500 4 Oct 2024

Model name
Upper Mersey 2017

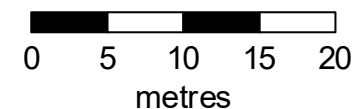
-  Selected area
-  Main river

Modelled 2D grid

Water level in mAOD

-  0 - 32.0
-  32.0 - 32.25
-  32.25 - 32.5
-  32.5 - 32.75
-  32.75 - 33.0
-  33.0 - 33.25
-  33.25 - 33.5
-  33.5 - 33.75
-  33.75 - 34.0

This map shows the
0.1% AEP height data



Sample point data

Defended

Label	Easting	Northing	5% AEP	2% AEP	1.33% AEP	1% AEP	0.5% AEP	0.1% AEP
			Depth	Depth	Depth	Depth	Depth	Depth
1	384842	389435	NoData	NoData	NoData	NoData	NoData	0.64
2	384848	389435	NoData	NoData	NoData	NoData	NoData	0.50
3	384854	389435	NoData	NoData	NoData	NoData	NoData	0.54
4	384860	389435	NoData	NoData	NoData	NoData	NoData	0.74
5	384866	389435	NoData	NoData	NoData	NoData	NoData	1.05
6	384836	389441	NoData	NoData	NoData	NoData	NoData	0.69
7	384842	389441	NoData	NoData	NoData	NoData	NoData	0.74
8	384848	389441	NoData	NoData	NoData	NoData	NoData	0.46
9	384854	389441	NoData	NoData	NoData	NoData	NoData	0.49
10	384860	389441	NoData	NoData	NoData	NoData	NoData	0.62
11	384866	389441	NoData	NoData	NoData	NoData	NoData	0.89
12	384872	389441	NoData	NoData	NoData	NoData	NoData	0.71
13	384836	389447	NoData	NoData	NoData	NoData	NoData	0.71
14	384842	389447	NoData	NoData	NoData	NoData	NoData	0.77
15	384848	389447	NoData	NoData	NoData	NoData	NoData	0.44
16	384854	389447	NoData	NoData	NoData	NoData	NoData	0.43

Label	Easting	Northing	5% AEP	2% AEP	1.33% AEP	1% AEP	0.5% AEP	0.1% AEP
			Depth	Depth	Depth	Depth	Depth	Depth
17	384860	389447	NoData	NoData	NoData	NoData	NoData	0.53
18	384866	389447	NoData	NoData	NoData	NoData	NoData	0.81
19	384872	389447	NoData	NoData	NoData	NoData	NoData	0.58
20	384836	389453	NoData	NoData	NoData	NoData	NoData	0.73
21	384842	389453	NoData	NoData	NoData	NoData	NoData	0.75
22	384848	389453	NoData	NoData	NoData	NoData	NoData	0.47
23	384854	389453	NoData	NoData	NoData	NoData	NoData	0.47
24	384860	389453	NoData	NoData	NoData	NoData	NoData	0.56
25	384866	389453	NoData	NoData	NoData	NoData	NoData	0.80
26	384872	389453	NoData	NoData	NoData	NoData	NoData	0.46
27	384842	389459	NoData	NoData	NoData	NoData	NoData	0.69
28	384848	389459	NoData	NoData	NoData	NoData	NoData	0.53
29	384854	389459	NoData	NoData	NoData	NoData	NoData	0.54
30	384860	389459	NoData	NoData	NoData	NoData	NoData	0.70
31	384866	389459	NoData	NoData	NoData	NoData	NoData	1.01
Max value in selected area:			NoData	NoData	NoData	NoData	NoData	0.62

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	5% AEP	2% AEP	1.33% AEP	1% AEP	0.5% AEP	0.1% AEP
			Height	Height	Height	Height	Height	Height
1	384842	389435	NoData	NoData	NoData	NoData	NoData	33.14
2	384848	389435	NoData	NoData	NoData	NoData	NoData	33.16
3	384854	389435	NoData	NoData	NoData	NoData	NoData	33.17
4	384860	389435	NoData	NoData	NoData	NoData	NoData	33.19
5	384866	389435	NoData	NoData	NoData	NoData	NoData	33.20
6	384836	389441	NoData	NoData	NoData	NoData	NoData	33.14
7	384842	389441	NoData	NoData	NoData	NoData	NoData	33.14
8	384848	389441	NoData	NoData	NoData	NoData	NoData	33.16
9	384854	389441	NoData	NoData	NoData	NoData	NoData	33.17
10	384860	389441	NoData	NoData	NoData	NoData	NoData	33.19
11	384866	389441	NoData	NoData	NoData	NoData	NoData	33.19
12	384872	389441	NoData	NoData	NoData	NoData	NoData	33.20
13	384836	389447	NoData	NoData	NoData	NoData	NoData	33.15
14	384842	389447	NoData	NoData	NoData	NoData	NoData	33.15
15	384848	389447	NoData	NoData	NoData	NoData	NoData	33.16
16	384854	389447	NoData	NoData	NoData	NoData	NoData	33.17
17	384860	389447	NoData	NoData	NoData	NoData	NoData	33.19
18	384866	389447	NoData	NoData	NoData	NoData	NoData	33.19

Label	Easting	Northing	5% AEP	2% AEP	1.33% AEP	1% AEP	0.5% AEP	0.1% AEP
			Height	Height	Height	Height	Height	Height
19	384872	389447	NoData	NoData	NoData	NoData	NoData	33.20
20	384836	389453	NoData	NoData	NoData	NoData	NoData	33.16
21	384842	389453	NoData	NoData	NoData	NoData	NoData	33.15
22	384848	389453	NoData	NoData	NoData	NoData	NoData	33.16
23	384854	389453	NoData	NoData	NoData	NoData	NoData	33.17
24	384860	389453	NoData	NoData	NoData	NoData	NoData	33.19
25	384866	389453	NoData	NoData	NoData	NoData	NoData	33.19
26	384872	389453	NoData	NoData	NoData	NoData	NoData	33.19
27	384842	389459	NoData	NoData	NoData	NoData	NoData	33.16
28	384848	389459	NoData	NoData	NoData	NoData	NoData	33.16
29	384854	389459	NoData	NoData	NoData	NoData	NoData	33.17
30	384860	389459	NoData	NoData	NoData	NoData	NoData	33.19
31	384866	389459	NoData	NoData	NoData	NoData	NoData	33.19
Max value in selected area:			NoData	NoData	NoData	NoData	NoData	33.19

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)
384853/389446

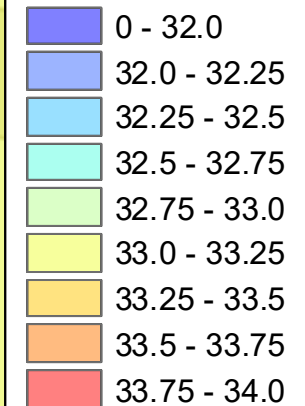
Scale Created
1:500 4 Oct 2024

Model name
Upper Mersey 2017

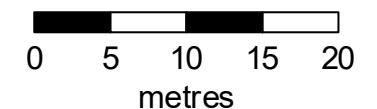
 Selected area

 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	5% AEP	2% AEP	1.33% AEP	1% AEP	0.5% AEP	0.1% AEP
			Depth	Depth	Depth	Depth	Depth	Depth
1	384842	389435	NoData	NoData	NoData	NoData	NoData	0.52
2	384848	389435	NoData	NoData	NoData	NoData	NoData	0.37
3	384854	389435	NoData	NoData	NoData	NoData	NoData	0.40
4	384860	389435	NoData	NoData	NoData	NoData	NoData	0.59
5	384866	389435	NoData	0.08	0.14	0.18	0.30	0.91
6	384836	389441	NoData	NoData	NoData	NoData	NoData	0.57
7	384842	389441	NoData	NoData	NoData	NoData	NoData	0.62
8	384848	389441	NoData	NoData	NoData	NoData	NoData	0.33
9	384854	389441	NoData	NoData	NoData	NoData	NoData	0.36
10	384860	389441	NoData	NoData	NoData	NoData	NoData	0.48
11	384866	389441	NoData	0.01	0.03	0.04	0.14	0.75
12	384872	389441	NoData	NoData	NoData	NoData	NoData	0.56
13	384836	389447	NoData	NoData	NoData	NoData	NoData	0.58
14	384842	389447	NoData	NoData	NoData	NoData	NoData	0.64
15	384848	389447	NoData	NoData	NoData	NoData	NoData	0.32
16	384854	389447	NoData	NoData	NoData	NoData	NoData	0.30

Label	Easting	Northing	5% AEP	2% AEP	1.33% AEP	1% AEP	0.5% AEP	0.1% AEP
			Depth	Depth	Depth	Depth	Depth	Depth
17	384860	389447	NoData	NoData	NoData	NoData	NoData	0.40
18	384866	389447	NoData	NoData	NoData	NoData	NoData	0.67
19	384872	389447	NoData	NoData	NoData	NoData	NoData	0.44
20	384836	389453	NoData	NoData	NoData	NoData	NoData	0.61
21	384842	389453	NoData	NoData	NoData	NoData	NoData	0.63
22	384848	389453	NoData	NoData	NoData	NoData	NoData	0.35
23	384854	389453	NoData	NoData	NoData	NoData	NoData	0.35
24	384860	389453	NoData	NoData	NoData	NoData	NoData	0.43
25	384866	389453	NoData	NoData	NoData	NoData	NoData	0.67
26	384872	389453	NoData	NoData	NoData	NoData	NoData	0.33
27	384842	389459	NoData	NoData	NoData	NoData	NoData	0.57
28	384848	389459	NoData	NoData	NoData	NoData	NoData	0.41
29	384854	389459	NoData	NoData	NoData	NoData	NoData	0.42
30	384860	389459	NoData	NoData	NoData	NoData	NoData	0.58
31	384866	389459	NoData	NoData	NoData	NoData	NoData	0.88
Max value in selected area:			NoData	NoData	NoData	NoData	NoData	0.49

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	5% AEP	2% AEP	1.33% AEP	1% AEP	0.5% AEP	0.1% AEP
			Height	Height	Height	Height	Height	Height
1	384842	389435	NoData	NoData	NoData	NoData	NoData	33.01
2	384848	389435	NoData	NoData	NoData	NoData	NoData	33.03
3	384854	389435	NoData	NoData	NoData	NoData	NoData	33.03
4	384860	389435	NoData	NoData	NoData	NoData	NoData	33.05
5	384866	389435	NoData	32.22	32.28	32.32	32.44	33.05
6	384836	389441	NoData	NoData	NoData	NoData	NoData	33.02
7	384842	389441	NoData	NoData	NoData	NoData	NoData	33.02
8	384848	389441	NoData	NoData	NoData	NoData	NoData	33.03
9	384854	389441	NoData	NoData	NoData	NoData	NoData	33.04
10	384860	389441	NoData	NoData	NoData	NoData	NoData	33.05
11	384866	389441	NoData	32.22	32.28	32.32	32.44	33.05
12	384872	389441	NoData	NoData	NoData	NoData	NoData	33.05
13	384836	389447	NoData	NoData	NoData	NoData	NoData	33.03
14	384842	389447	NoData	NoData	NoData	NoData	NoData	33.03
15	384848	389447	NoData	NoData	NoData	NoData	NoData	33.03
16	384854	389447	NoData	NoData	NoData	NoData	NoData	33.04
17	384860	389447	NoData	NoData	NoData	NoData	NoData	33.05
18	384866	389447	NoData	NoData	NoData	NoData	NoData	33.05

Label	Easting	Northing	5% AEP	2% AEP	1.33% AEP	1% AEP	0.5% AEP	0.1% AEP
			Height	Height	Height	Height	Height	Height
19	384872	389447	NoData	NoData	NoData	NoData	NoData	33.06
20	384836	389453	NoData	NoData	NoData	NoData	NoData	33.04
21	384842	389453	NoData	NoData	NoData	NoData	NoData	33.03
22	384848	389453	NoData	NoData	NoData	NoData	NoData	33.04
23	384854	389453	NoData	NoData	NoData	NoData	NoData	33.04
24	384860	389453	NoData	NoData	NoData	NoData	NoData	33.06
25	384866	389453	NoData	NoData	NoData	NoData	NoData	33.06
26	384872	389453	NoData	NoData	NoData	NoData	NoData	33.06
27	384842	389459	NoData	NoData	NoData	NoData	NoData	33.04
28	384848	389459	NoData	NoData	NoData	NoData	NoData	33.04
29	384854	389459	NoData	NoData	NoData	NoData	NoData	33.05
30	384860	389459	NoData	NoData	NoData	NoData	NoData	33.06
31	384866	389459	NoData	NoData	NoData	NoData	NoData	33.07
Max value in selected area:			NoData	NoData	NoData	NoData	NoData	33.06

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)
384853/389446

Scale Created
1:500 4 Oct 2024

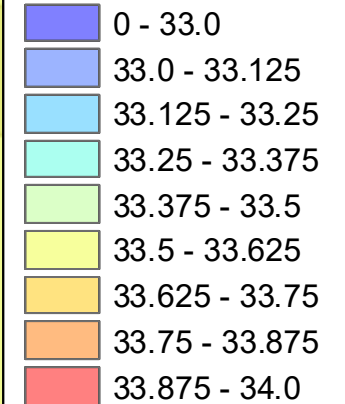
Model name
Upper Mersey 2017

 Selected area

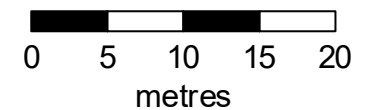
 Main river

Modelled 2D grid

Water level in mAOD



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



Sample point data

Defended climate change

Label	Easting	Northing	1% AEP (+30%)	1% AEP (+35%)	1% AEP (+70%)	0.1% AEP (+30%)
			Depth	Depth	Depth	Depth
1	384842	389435	NoData	0.33	0.60	0.96
2	384848	389435	NoData	0.18	0.45	0.81
3	384854	389435	NoData	0.21	0.49	0.85
4	384860	389435	NoData	0.40	0.69	1.06
5	384866	389435	0.19	0.72	1.01	1.38
6	384836	389441	NoData	0.38	0.65	1.01
7	384842	389441	NoData	0.42	0.69	1.05
8	384848	389441	NoData	0.14	0.41	0.77
9	384854	389441	NoData	0.17	0.44	0.80
10	384860	389441	NoData	0.29	0.57	0.94
11	384866	389441	0.04	0.56	0.85	1.21
12	384872	389441	NoData	0.37	0.66	1.02
13	384836	389447	NoData	0.39	0.66	1.02
14	384842	389447	NoData	0.45	0.72	1.08
15	384848	389447	NoData	0.13	0.40	0.76
16	384854	389447	NoData	0.10	0.38	0.74

Label	Easting	Northing	1% AEP (+30%)	1% AEP (+35%)	1% AEP (+70%)	0.1% AEP (+30%)
			Depth	Depth	Depth	Depth
17	384860	389447	NoData	0.20	0.49	0.85
18	384866	389447	NoData	0.48	0.76	1.13
19	384872	389447	NoData	0.25	0.54	0.90
20	384836	389453	NoData	0.41	0.68	1.03
21	384842	389453	NoData	0.43	0.70	1.06
22	384848	389453	NoData	0.16	0.43	0.79
23	384854	389453	NoData	0.16	0.43	0.78
24	384860	389453	NoData	0.23	0.51	0.87
25	384866	389453	NoData	0.47	0.76	1.11
26	384872	389453	NoData	0.13	0.42	0.78
27	384842	389459	NoData	0.37	0.64	0.99
28	384848	389459	NoData	0.22	0.49	0.84
29	384854	389459	NoData	0.23	0.50	0.85
30	384860	389459	NoData	0.38	0.66	1.01
31	384866	389459	NoData	0.68	0.96	1.32
Max value in selected area:			NoData	0.30	0.57	0.93

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

Label	Easting	Northing	1% AEP (+30%)	1% AEP (+35%)	1% AEP (+70%)	0.1% AEP (+30%)
			Height	Height	Height	Height
1	384842	389435	NoData	32.82	33.09	33.45
2	384848	389435	NoData	32.84	33.11	33.47
3	384854	389435	NoData	32.85	33.13	33.49
4	384860	389435	NoData	32.86	33.15	33.51
5	384866	389435	32.33	32.86	33.15	33.52
6	384836	389441	NoData	32.83	33.10	33.46
7	384842	389441	NoData	32.83	33.10	33.46
8	384848	389441	NoData	32.84	33.11	33.47
9	384854	389441	NoData	32.85	33.12	33.48
10	384860	389441	NoData	32.86	33.14	33.51
11	384866	389441	32.33	32.86	33.15	33.51
12	384872	389441	NoData	32.86	33.15	33.51
13	384836	389447	NoData	32.83	33.10	33.46
14	384842	389447	NoData	32.83	33.10	33.46
15	384848	389447	NoData	32.84	33.11	33.47
16	384854	389447	NoData	32.85	33.12	33.48
17	384860	389447	NoData	32.86	33.14	33.50

Label	Easting	Northing	1% AEP (+30%)	1% AEP (+35%)	1% AEP (+70%)	0.1% AEP (+30%)
			Height	Height	Height	Height
18	384866	389447	NoData	32.86	33.15	33.51
19	384872	389447	NoData	32.86	33.15	33.51
20	384836	389453	NoData	32.84	33.11	33.47
21	384842	389453	NoData	32.84	33.11	33.46
22	384848	389453	NoData	32.84	33.12	33.47
23	384854	389453	NoData	32.85	33.12	33.48
24	384860	389453	NoData	32.86	33.14	33.50
25	384866	389453	NoData	32.86	33.15	33.50
26	384872	389453	NoData	32.86	33.15	33.51
27	384842	389459	NoData	32.84	33.11	33.47
28	384848	389459	NoData	32.85	33.12	33.47
29	384854	389459	NoData	32.85	33.13	33.48
30	384860	389459	NoData	32.86	33.14	33.50
31	384866	389459	NoData	32.86	33.15	33.50
Max value in selected area:			NoData	32.86	33.14	33.50

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)
384853/389446

Scale Created
1:500 4 Oct 2024

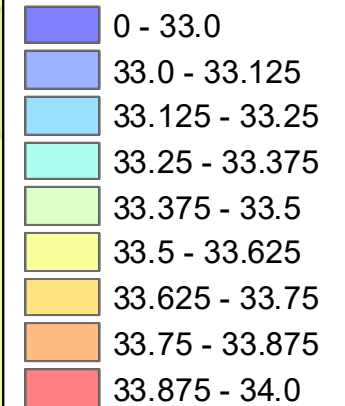
Model name
Upper Mersey 2017

 Selected area

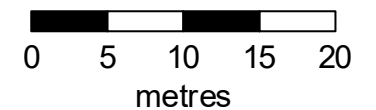
 Main river

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%)
			Depth	Depth	Depth	Depth
1	384842	389435	NoData	0.21	0.46	0.96
2	384848	389435	NoData	0.04	0.30	0.80
3	384854	389435	NoData	0.06	0.34	0.83
4	384860	389435	0.17	0.24	0.53	1.03
5	384866	389435	0.48	0.55	0.85	1.34
6	384836	389441	0.15	0.26	0.51	1.01
7	384842	389441	NoData	0.31	0.56	1.05
8	384848	389441	NoData	0.01	0.27	0.77
9	384854	389441	NoData	0.03	0.30	0.79
10	384860	389441	0.08	0.13	0.42	0.91
11	384866	389441	0.32	0.39	0.69	1.18
12	384872	389441	0.14	0.21	0.50	1.00
13	384836	389447	0.16	0.28	0.52	1.02
14	384842	389447	0.21	0.34	0.58	1.08
15	384848	389447	NoData	NoData	0.26	0.75
16	384854	389447	NoData	NoData	0.23	0.73

Label	Easting	Northing	1% AEP (+30%)	1% AEP (+35%)	1% AEP (+70%)	0.1% AEP (+30%)
			Depth	Depth	Depth	Depth
17	384860	389447	NoData	NoData	0.34	0.83
18	384866	389447	0.24	0.32	0.61	1.10
19	384872	389447	0.05	0.10	0.38	0.88
20	384836	389453	0.16	0.30	0.55	1.03
21	384842	389453	0.19	0.32	0.57	1.06
22	384848	389453	0.00	0.05	0.29	0.78
23	384854	389453	0.00	0.06	0.29	0.78
24	384860	389453	0.05	0.13	0.37	0.85
25	384866	389453	0.25	0.35	0.61	1.09
26	384872	389453	NoData	0.01	0.27	0.76
27	384842	389459	0.13	0.26	0.51	0.99
28	384848	389459	0.02	0.11	0.35	0.84
29	384854	389459	0.01	0.12	0.36	0.85
30	384860	389459	0.17	0.27	0.52	1.00
31	384866	389459	0.47	0.57	0.82	1.30
Max value in selected area:			0.09	0.19	0.43	0.93

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

Label	Easting	Northing	1% AEP (+30%)	1% AEP (+35%)	1% AEP (+70%)	0.1% AEP (+30%)
			Height	Height	Height	Height
1	384842	389435	NoData	32.71	32.95	33.45
2	384848	389435	NoData	32.70	32.96	33.46
3	384854	389435	NoData	32.70	32.97	33.47
4	384860	389435	32.62	32.69	32.99	33.49
5	384866	389435	32.62	32.69	32.99	33.49
6	384836	389441	32.59	32.71	32.96	33.46
7	384842	389441	NoData	32.71	32.96	33.46
8	384848	389441	NoData	32.71	32.97	33.46
9	384854	389441	NoData	32.70	32.97	33.47
10	384860	389441	32.62	32.70	32.99	33.48
11	384866	389441	32.62	32.69	32.99	33.49
12	384872	389441	32.63	32.70	32.99	33.49
13	384836	389447	32.59	32.72	32.97	33.46
14	384842	389447	32.59	32.72	32.97	33.46
15	384848	389447	NoData	NoData	32.97	33.46
16	384854	389447	NoData	NoData	32.98	33.47
17	384860	389447	NoData	NoData	32.99	33.48

Label	Easting	Northing	1% AEP (+30%)	1% AEP (+35%)	1% AEP (+70%)	0.1% AEP (+30%)
			Height	Height	Height	Height
18	384866	389447	32.63	32.71	32.99	33.49
19	384872	389447	32.63	32.71	32.99	33.49
20	384836	389453	32.59	32.73	32.98	33.46
21	384842	389453	32.59	32.72	32.97	33.46
22	384848	389453	32.62	32.74	32.98	33.47
23	384854	389453	32.64	32.74	32.99	33.47
24	384860	389453	32.65	32.75	33.00	33.48
25	384866	389453	32.64	32.74	33.00	33.49
26	384872	389453	NoData	32.74	33.00	33.49
27	384842	389459	32.60	32.73	32.98	33.47
28	384848	389459	32.62	32.74	32.98	33.47
29	384854	389459	32.64	32.74	32.99	33.47
30	384860	389459	32.65	32.75	33.00	33.48
31	384866	389459	32.65	32.75	33.01	33.49
Max value in selected area:			32.60	32.72	32.99	33.48

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.

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.

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