

Flood risk assessment data

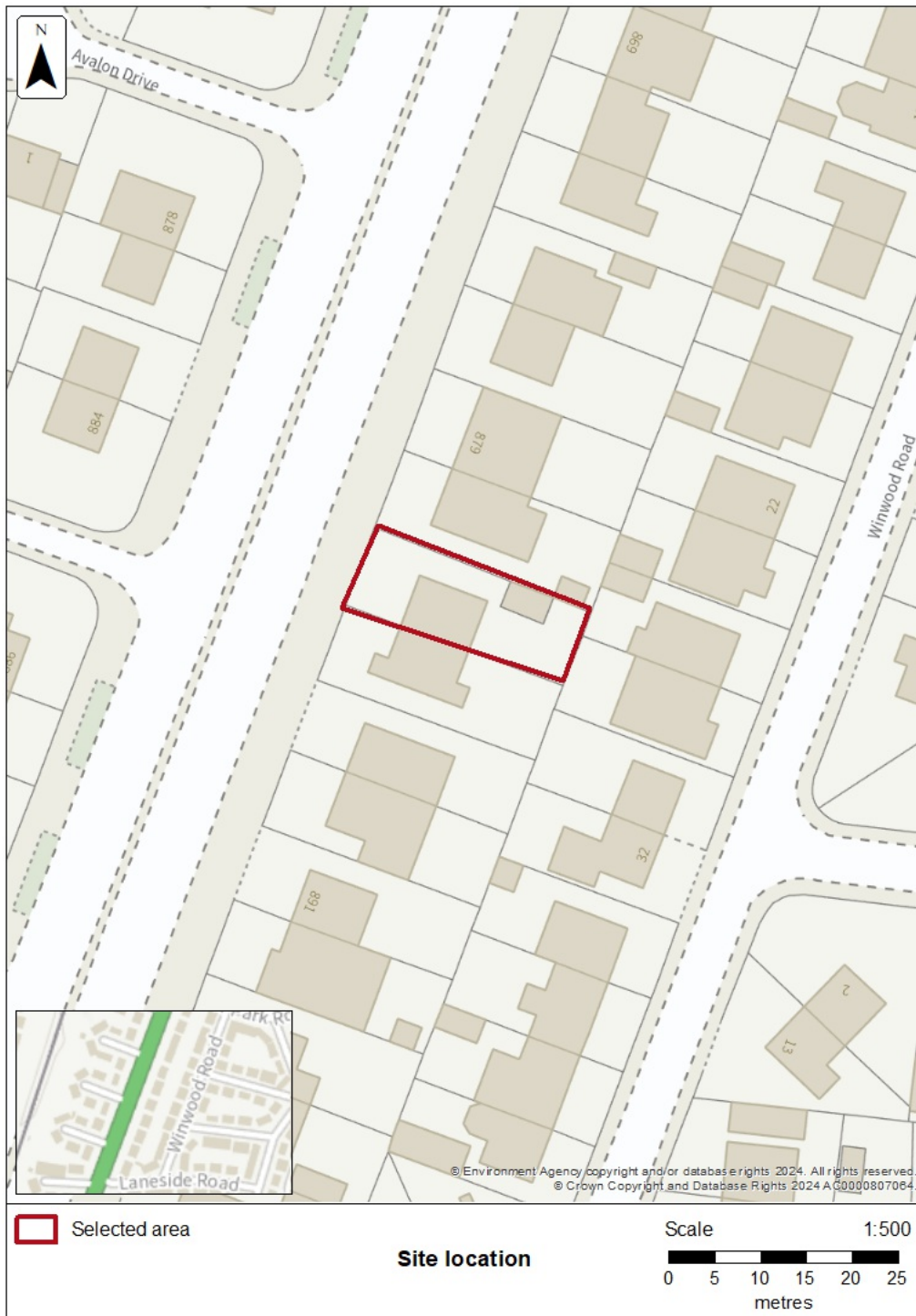
Location of site: 385335 / 389894 (shown as easting and northing coordinates)

Document created on: 11 November 2024

This information was previously known as a product 4.

Customer reference number: 3DWKP4D8JKX6

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

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

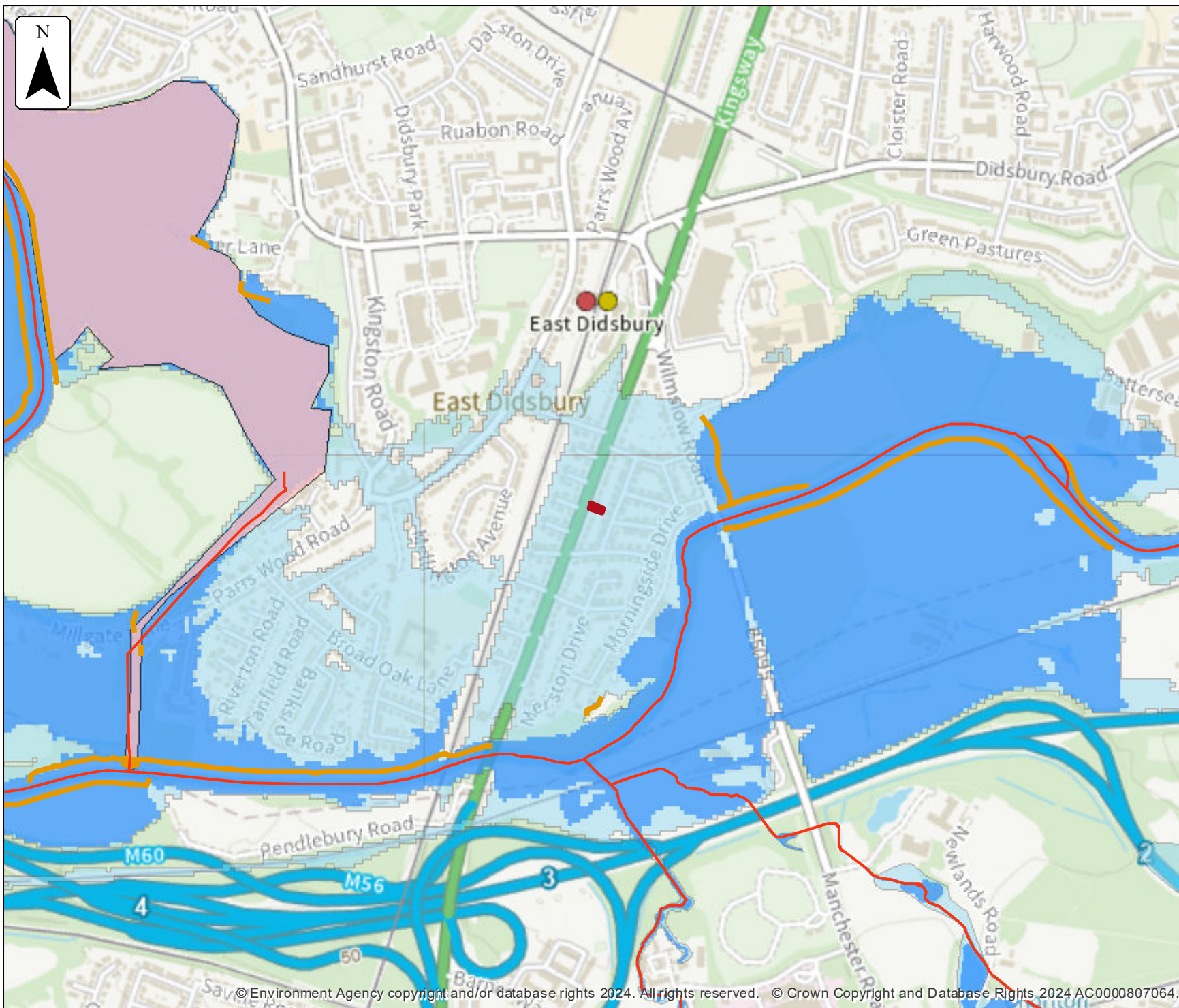
Flood zone 2 shows the area at risk of flooding for an undefended flood event with:

- 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)
385335/389894

Scale
1:10,000

Created
11 Nov 2024

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



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.

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)
385335/389894

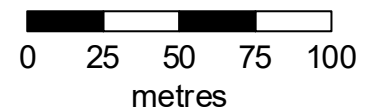
Scale
1:2,500

Created
11 Nov 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	120923	Wall			33.81	33.95	
2	112017	Engineered High Ground	50		34.99	32.81	
3	37538	Embankment	50		35.82	35.63	
4	37537	Wall	50		35.64	35.73	
5	59337	Embankment	50		33.28	33.14	
6	112016	Embankment	50		34.91	35.03	34.82

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

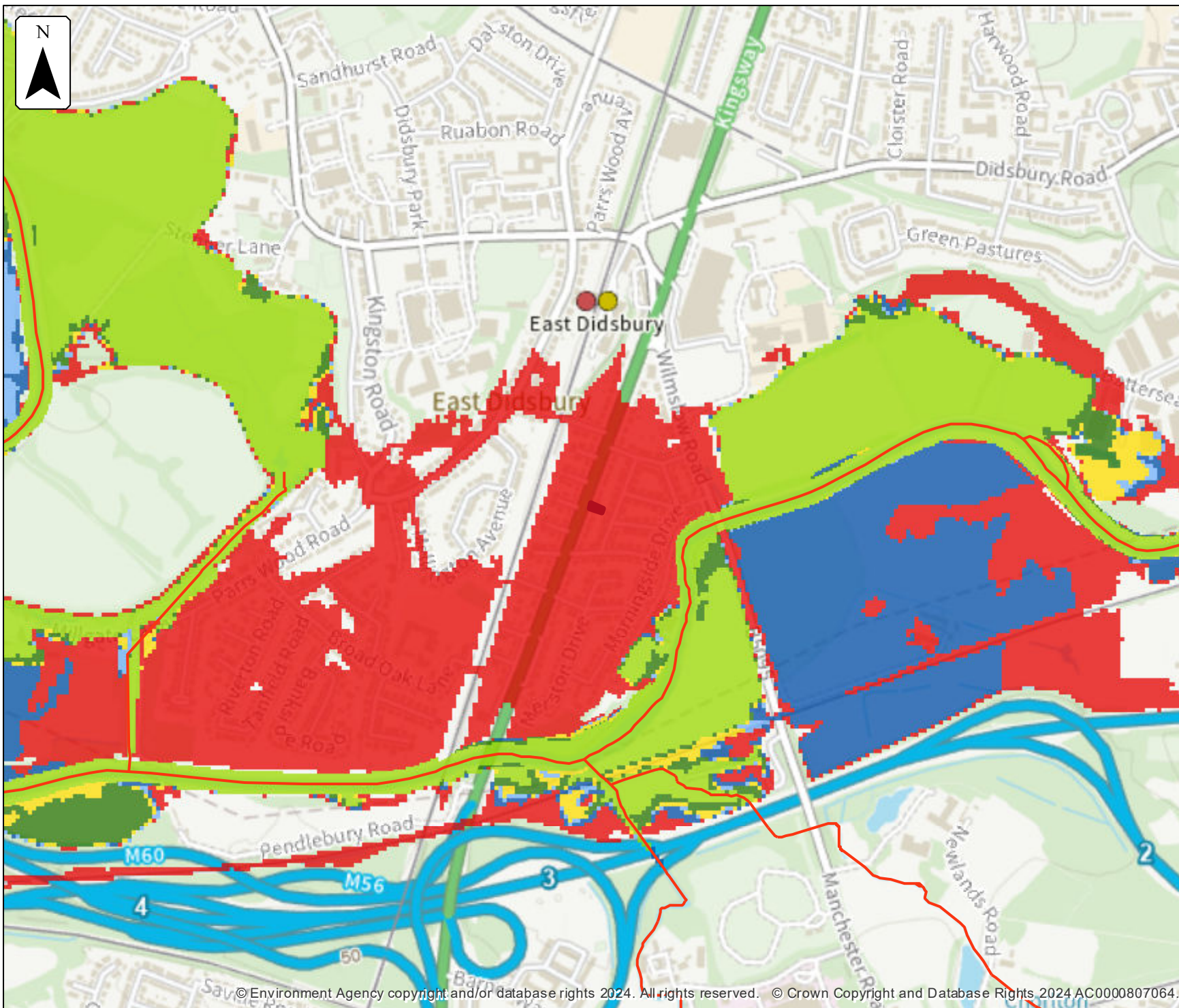
The climate change data included in the models may not include the latest [flood risk assessment climate change allowances](#). Where the new allowances are not available you will need to consider this data and factor in the new allowances to demonstrate the development will be safe from flooding.

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

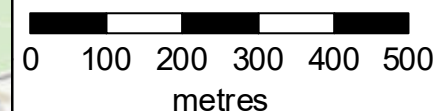
Location (easting/northing)
385335/389894

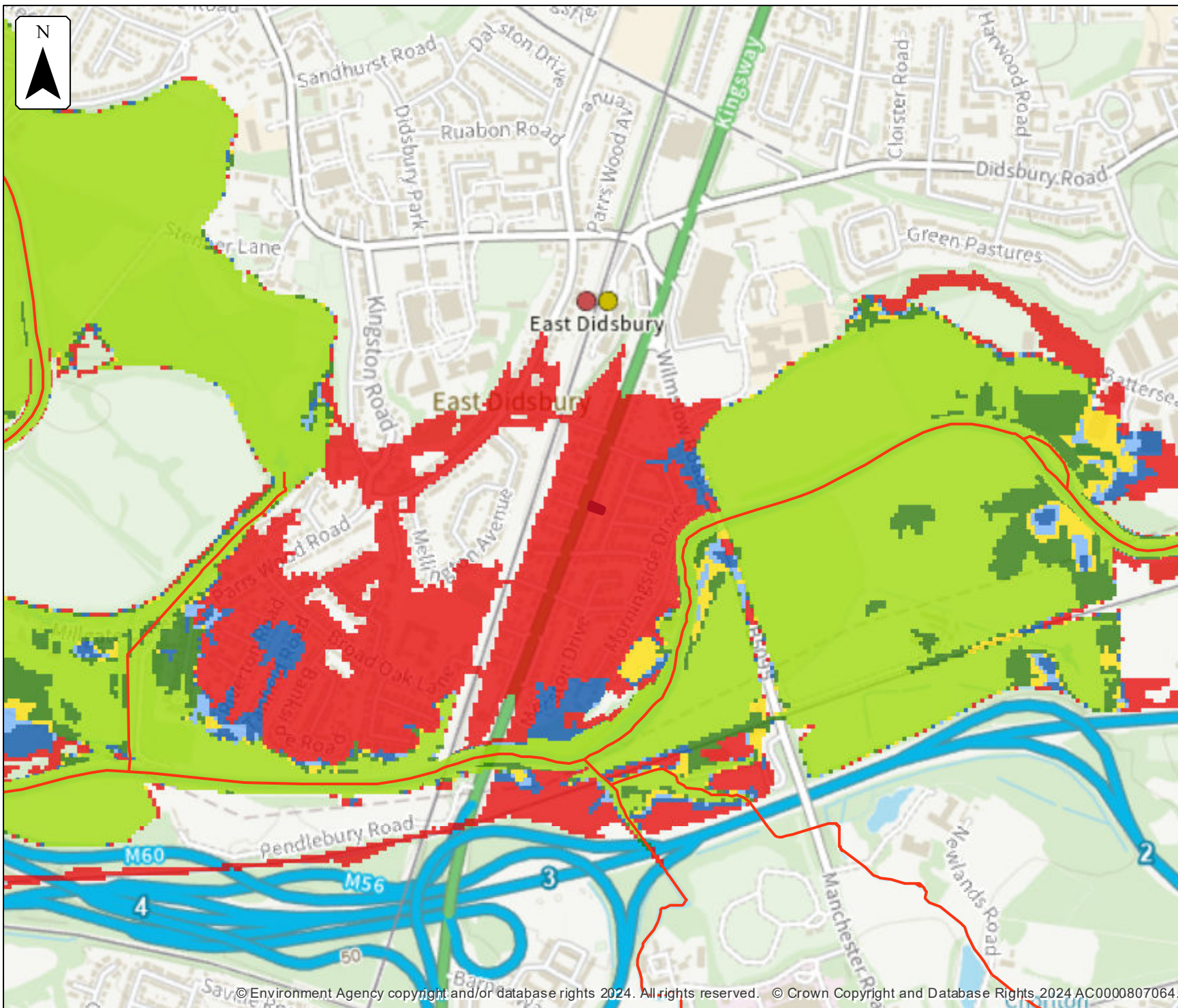
Scale Created
1:10,000 11 Nov 2024

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

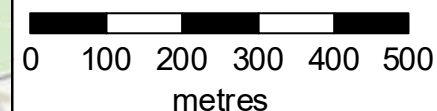
Location (easting/northing)
385335/389894

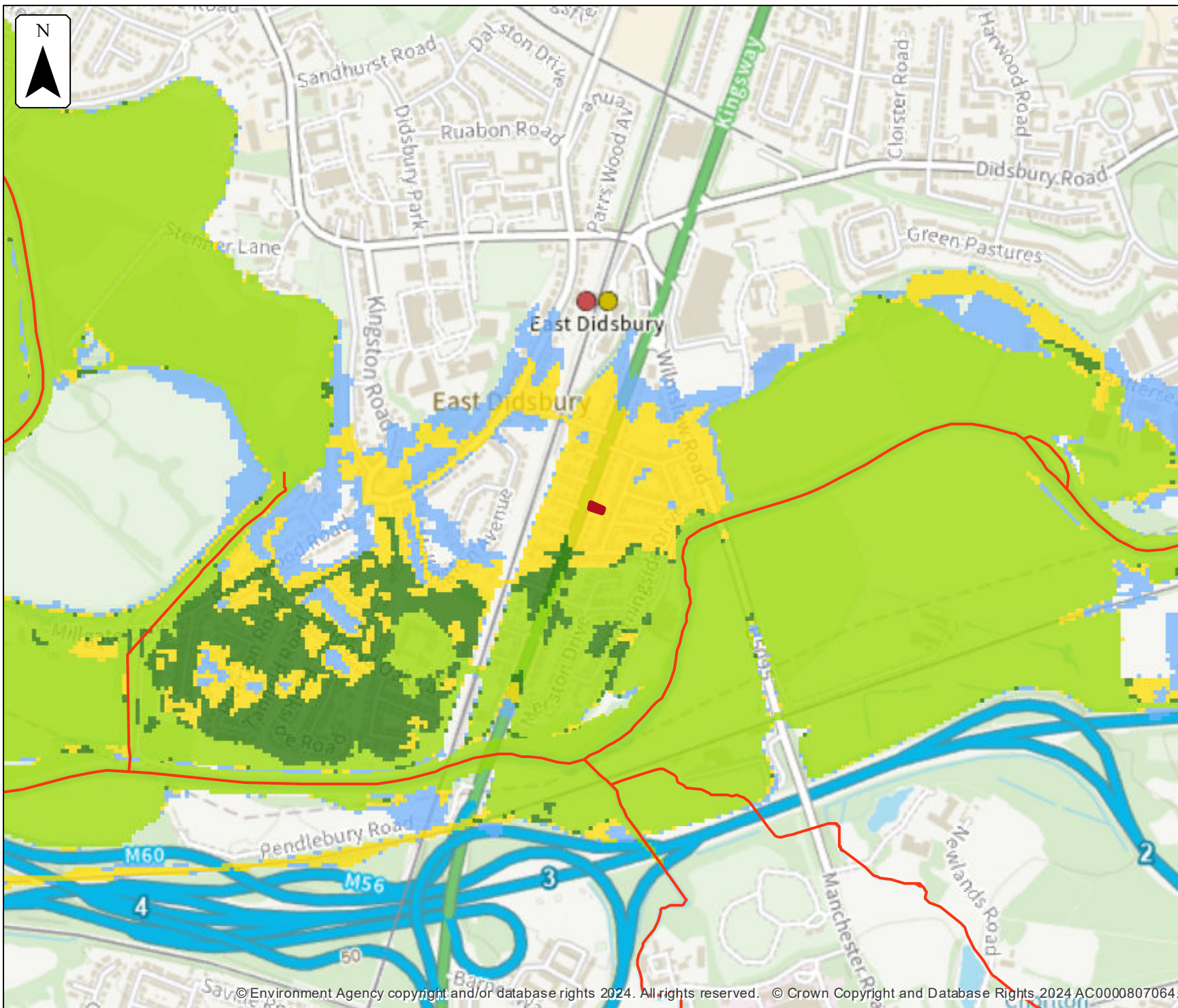
Scale Created
1:10,000 11 Nov 2024

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

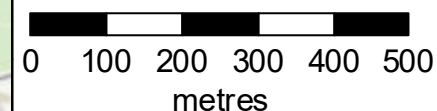
Location (easting/northing)
385335/389894

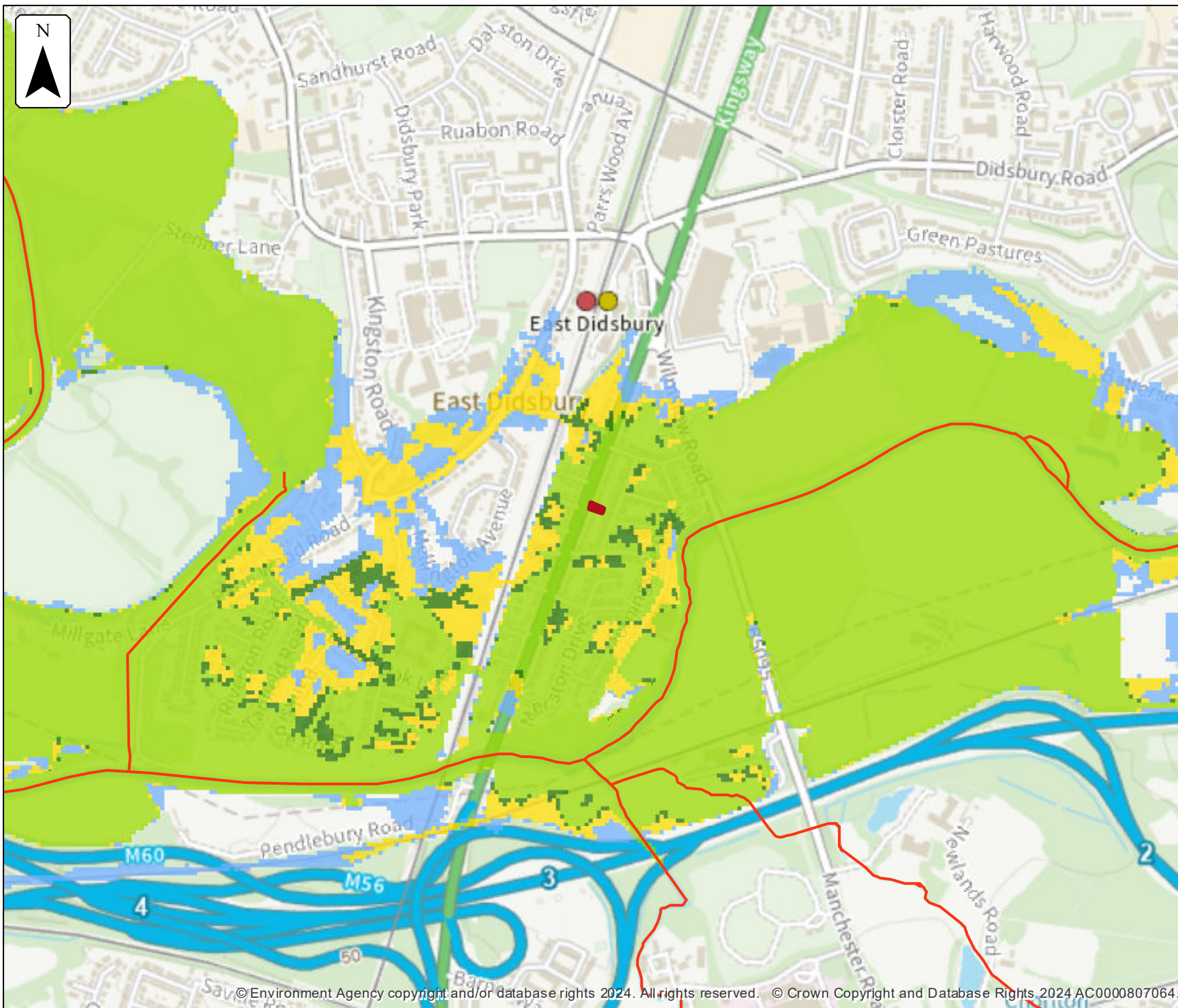
Scale Created
1:10,000 11 Nov 2024

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

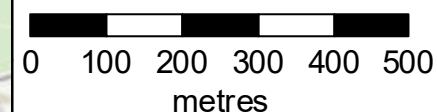
Location (easting/northing)
385335/389894

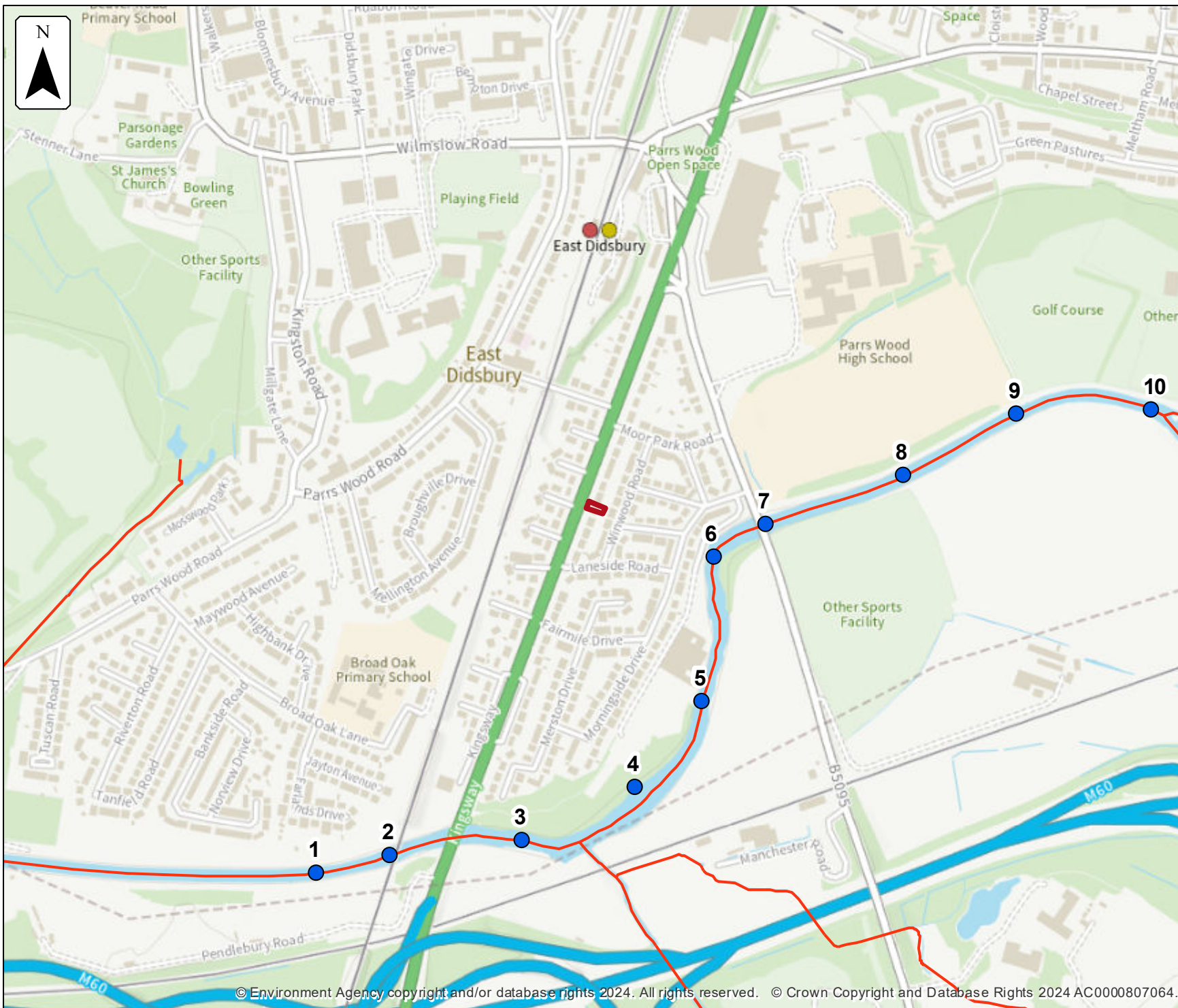
Scale Created
1:10,000 11 Nov 2024

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





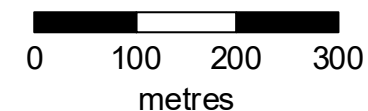
Defended modelled fluvial node locations

Location (easting/northing)
385335/389894

Scale Created
1:7,500 11 Nov 2024

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	1290830	384929	389361	31.75	32.25	32.42	32.73	32.82	32.89	33.06	33.17	33.24	33.38	33.94
2	1290644	385035	389387	31.85	32.36	32.54	32.85	32.94	33.01	33.19	33.29	33.37	33.52	34.23
3	1290672	385227	389409	32.0	32.54	32.76	33.09	33.20	33.27	33.47	33.60	33.69	33.88	35.0
4	1290659	385392	389486	32.17	32.75	33.0	33.34	33.45	33.53	33.75	33.86	33.97	34.14	35.17
5	1290729	385490	389612	32.21	32.75	32.99	33.33	33.44	33.53	33.74	33.86	33.97	34.13	35.15
6	1290547	385507	389821	32.40	32.94	33.19	33.54	33.64	33.69	33.82	33.91	34.0	34.16	35.29
7	1290584	385583	389870	32.63	33.25	33.56	33.96	34.08	34.16	34.34	34.48	34.64	34.92	35.73
8	1290597	385783	389940	32.72	33.32	33.64	34.13	34.27	34.36	34.57	34.71	34.87	35.14	35.55
9	1290593	385948	390030	32.93	33.55	33.85	34.17	34.28	34.37	34.57	34.71	34.88	35.14	35.68
10	1290748	386144	390036	33.17	33.81	34.07	34.26	34.35	34.42	34.60	34.74	34.90	35.16	35.67

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

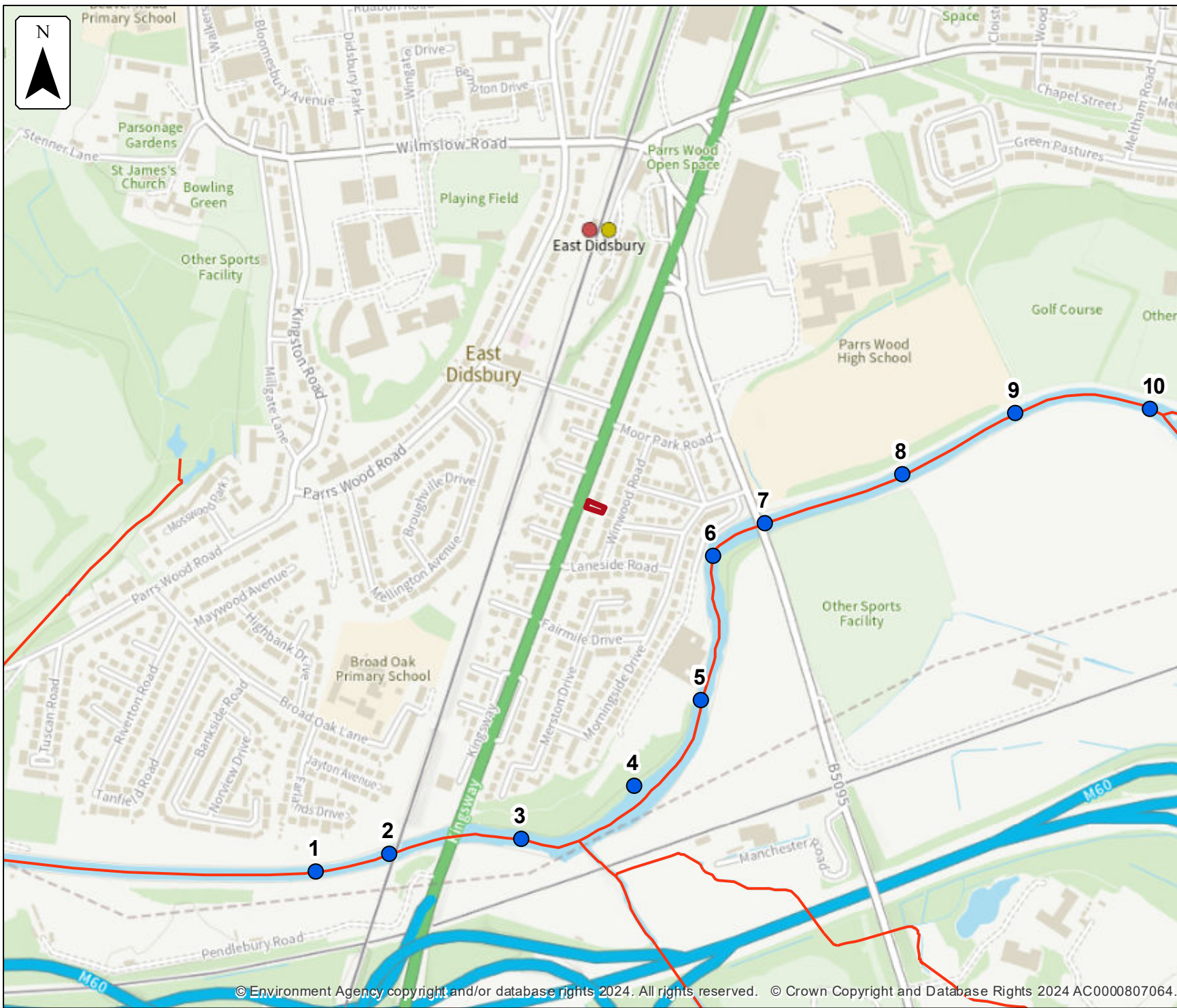
Label	Modelled location ID	Easting	Northing	50% AEP	20% AEP	10% AEP	5% AEP	4% AEP	3.33% AEP	2% AEP	1.33% AEP	1% AEP	0.5% AEP	0.1% AEP
				Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow
1	1290830	384929	389361	183.85	242.55	271.71	311.04	323.33	333.60	362.59	381.35	397.52	423.07	611.88
2	1290644	385035	389387	183.88	242.98	271.52	310.09	322.94	333.76	362.45	382.71	397.20	421.92	586.99
3	1290672	385227	389409	183.72	242.20	271.75	310.73	323.35	333.66	362.57	380.95	395.39	416.47	521.75
4	1290659	385392	389486	168.26	216.49	245.17	280.93	293.43	301.48	317.96	330.51	339.85	353.45	383.74
5	1290729	385490	389612	169.29	220.55	250.89	285.90	294.34	296.19	299.27	306.11	313.60	324.75	357.22
6	1290547	385507	389821	168.81	219.90	250.86	285.97	296.57	305.86	329.99	344.46	357.35	371.08	388.53
7	1290584	385583	389870	169.45	220.46	251.02	286.39	298.46	307.65	334.13	351.85	366.46	385.71	403.67
8	1290597	385783	389940	168.64	219.78	251.11	264.59	266.91	268.38	271.89	273.08	274.19	275.59	453.70
9	1290593	385948	390030	169.51	220.59	251.19	265.53	268.78	270.67	275.03	279.73	286.22	305.42	456.90
10	1290748	386144	390036	168.71	219.61	253.83	287.83	296.47	301.55	317.37	327.10	334.67	356.84	549.20

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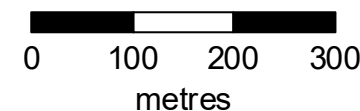
Defences removed modelled fluvial node locations

Location (easting/northing)
385335/389894

Scale Created
1:7,500 11 Nov 2024

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	1290830	384929	389361	31.54	31.84	31.99	32.10	32.13	32.16	32.25	32.32	32.37	32.50	33.08
2	1290644	385035	389387	31.66	31.99	32.17	32.29	32.32	32.36	32.46	32.54	32.60	32.74	33.35
3	1290672	385227	389409	31.84	32.21	32.44	32.62	32.67	32.72	32.87	33.0	33.09	33.32	34.63
4	1290659	385392	389486	32.04	32.46	32.73	32.92	32.98	33.05	33.22	33.36	33.46	33.75	34.86
5	1290729	385490	389612	32.10	32.49	32.74	32.93	32.99	33.05	33.22	33.36	33.46	33.76	34.86
6	1290547	385507	389821	32.30	32.71	32.99	33.19	33.26	33.32	33.51	33.64	33.71	33.86	35.04
7	1290584	385583	389870	32.55	33.03	33.38	33.63	33.72	33.81	34.04	34.22	34.32	34.51	35.50
8	1290597	385783	389940	32.65	33.11	33.55	33.83	33.97	34.08	34.34	34.53	34.64	34.83	35.45
9	1290593	385948	390030	32.88	33.35	33.70	33.90	34.0	34.08	34.32	34.50	34.62	34.81	35.55
10	1290748	386144	390036	33.13	33.61	33.80	33.97	34.05	34.12	34.35	34.53	34.64	34.82	35.55

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.

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Defences removed

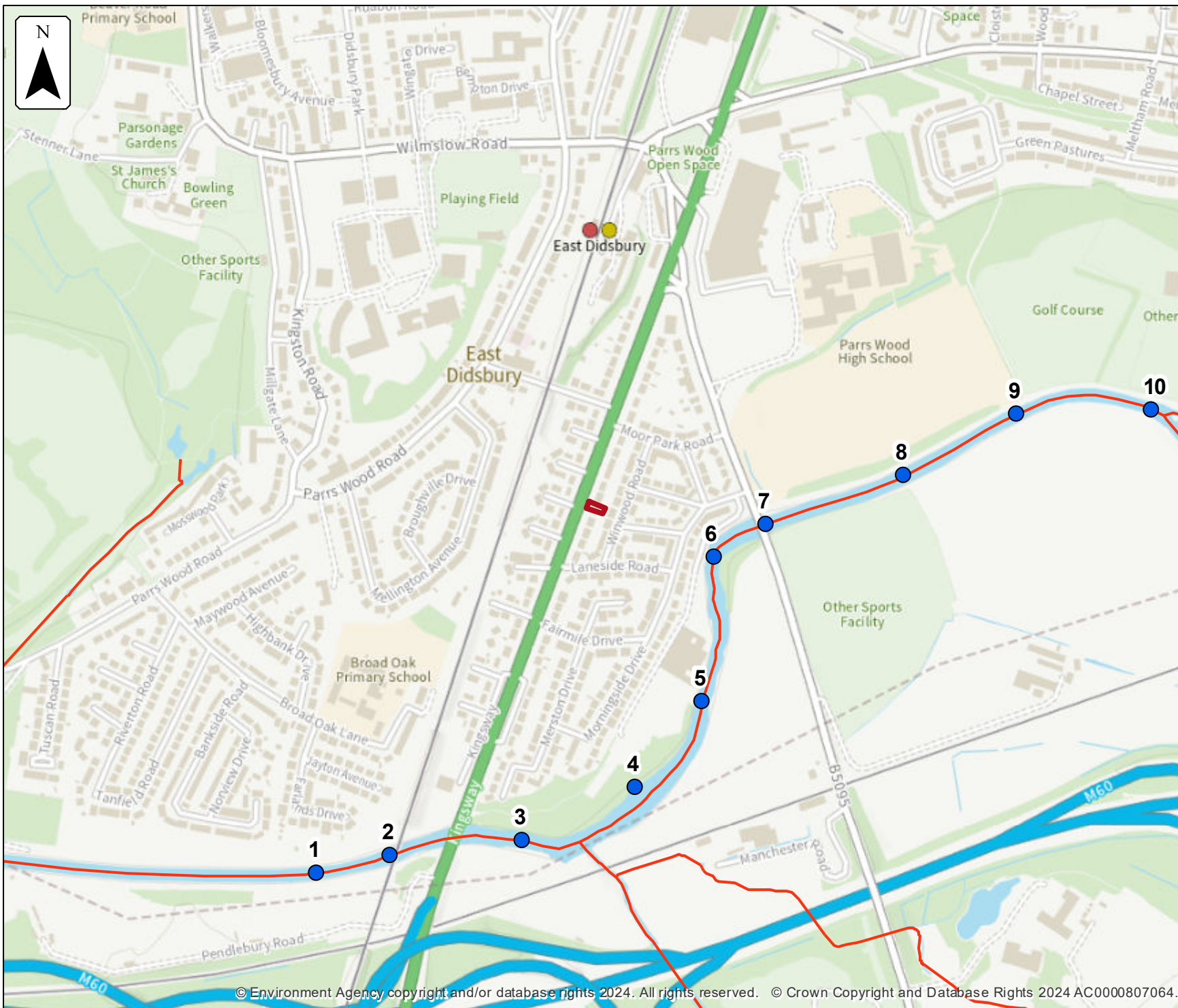
Label	Modelled location ID	Easting	Northing	50% AEP	20% AEP	10% AEP	5% AEP	4% AEP	3.33% AEP	2% AEP	1.33% AEP	1% AEP	0.5% AEP	0.1% AEP
				Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow
1	1290830	384929	389361	184.17	232.79	270.09	299.93	308.71	318.82	346.30	368.75	385.86	431.33	605.67
2	1290644	385035	389387	184.18	232.93	270.02	300.28	309.40	319.58	348.20	371.64	389.64	436.68	618.73
3	1290672	385227	389409	184.19	232.95	270.14	300.37	309.35	319.62	348.36	371.65	389.69	436.48	516.12
4	1290659	385392	389486	168.36	207.72	243.88	269.22	280.68	290.0	315.05	335.54	348.68	366.10	400.64
5	1290729	385490	389612	168.34	211.72	249.46	275.61	287.45	297.19	320.98	337.26	344.13	342.60	355.12
6	1290547	385507	389821	168.34	211.69	249.47	275.72	287.51	297.26	320.37	338.65	351.44	370.69	365.97
7	1290584	385583	389870	168.34	211.69	249.44	275.65	287.45	297.26	320.93	340.44	353.78	376.17	373.25
8	1290597	385783	389940	168.42	212.67	223.90	228.88	230.32	231.22	233.71	235.75	236.76	242.81	401.71
9	1290593	385948	390030	168.43	215.70	234.77	242.93	244.54	246.47	256.68	262.05	265.94	272.75	371.02
10	1290748	386144	390036	168.44	219.68	252.86	277.71	283.50	288.27	301.24	307.82	312.24	321.08	440.77

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.

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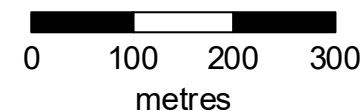
Defended climate change modelled fluvial node locations

Location (easting/northing)
385335/389894

Scale Created
1:7,500 11 Nov 2024

Model name
Upper Mersey 2017

-  Selected area
-  Modelled location
-  Main river



Modelled node locations data

Defended climate change

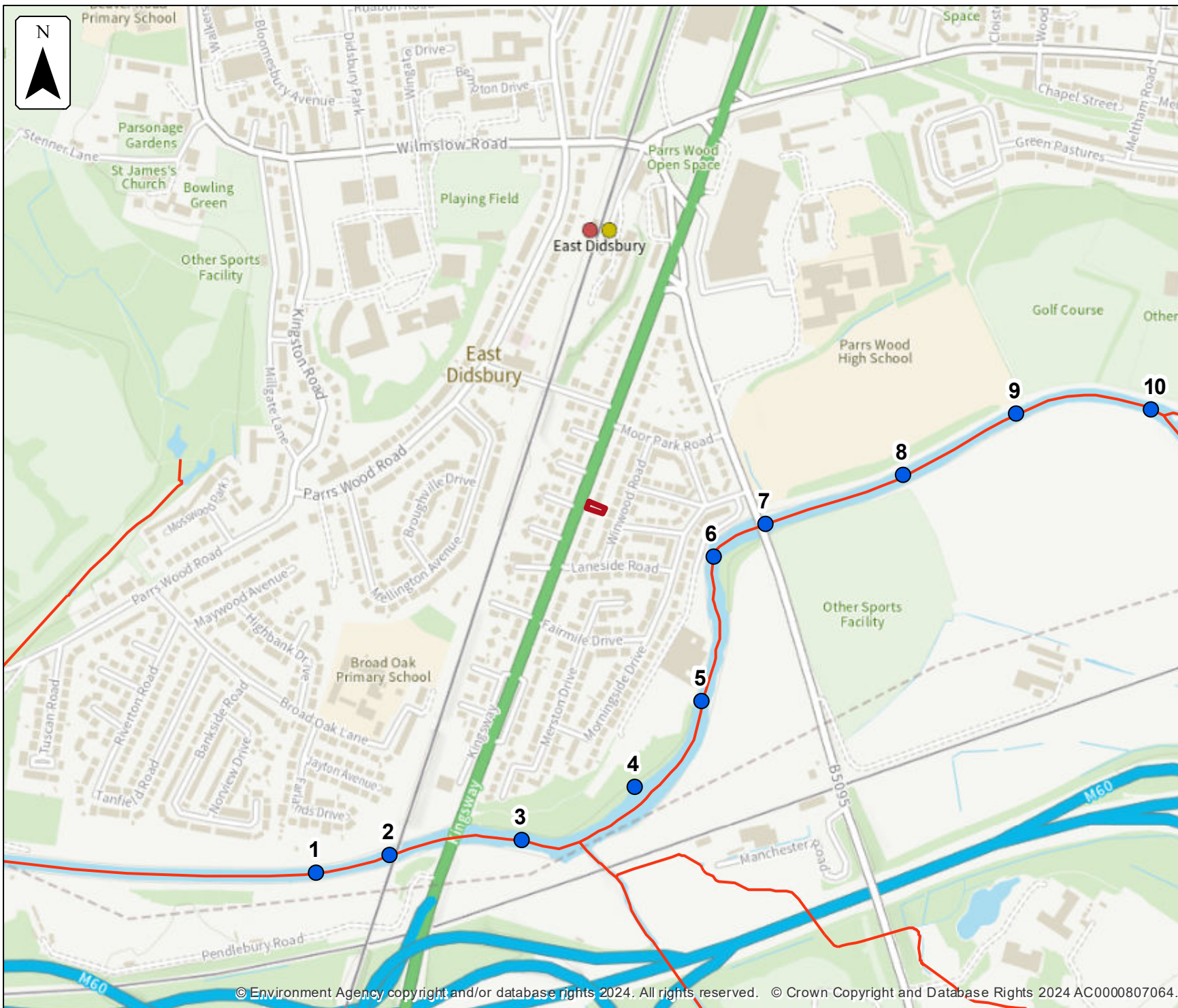
Label	Modelled location ID	Easting	Northing	1% AEP (+30%)	1% AEP (+35%)	1% AEP (+70%)	0.1% AEP (+30%)	1% AEP (+30%)	1% AEP (+35%)	1% AEP (+70%)	0.1% AEP (+30%)
				Level	Level	Level	Level	Flow	Flow	Flow	Flow
1	1290830	384929	389361	33.65	33.69	33.89	34.21	488.38	508.38	589.73	744.02
2	1290644	385035	389387	33.84	33.90	34.16	34.58	478.45	495.11	566.0	708.62
3	1290672	385227	389409	34.26	34.34	34.86	35.62	467.41	484.91	520.73	543.09
4	1290659	385392	389486	34.59	34.68	35.05	35.70	366.56	368.35	378.89	441.90
5	1290729	385490	389612	34.58	34.68	35.03	35.70	333.47	334.26	352.79	385.50
6	1290547	385507	389821	34.68	34.81	35.17	35.85	381.18	382.21	383.09	407.06
7	1290584	385583	389870	35.26	35.31	35.63	36.38	401.28	403.27	398.65	425.40
8	1290597	385783	389940	35.34	35.37	35.48	36.12	314.91	326.45	436.96	563.12
9	1290593	385948	390030	35.34	35.36	35.62	36.18	360.08	374.04	432.81	595.38
10	1290748	386144	390036	35.35	35.38	35.63	36.22	419.65	434.65	519.82	682.23

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.

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



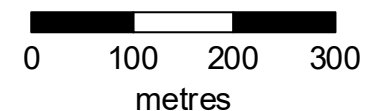
Defences removed climate change modelled fluvial node locations

Location (easting/northing)
385335/389894

Scale Created
1:7,500 11 Nov 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% 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	1290830	384929	389361	32.67	32.73	33.02	33.52	494.96	510.96	589.49	729.39
2	1290644	385035	389387	32.93	32.98	33.28	33.75	504.58	521.49	602.82	753.99
3	1290672	385227	389409	33.73	33.86	34.50	35.42	489.22	495.14	515.88	530.67
4	1290659	385392	389486	34.16	34.27	34.76	35.52	382.06	382.41	394.85	434.16
5	1290729	385490	389612	34.17	34.28	34.76	35.52	342.67	341.82	351.39	360.73
6	1290547	385507	389821	34.30	34.42	34.93	35.71	370.67	372.84	363.39	373.53
7	1290584	385583	389870	34.96	35.05	35.44	36.13	379.39	378.83	368.85	382.01
8	1290597	385783	389940	35.13	35.20	35.44	35.83	267.89	275.79	320.24	545.91
9	1290593	385948	390030	35.13	35.20	35.44	35.98	300.03	311.36	359.52	548.57
10	1290748	386144	390036	35.14	35.20	35.45	35.95	356.72	368.19	426.81	656.89

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)
385335/389894

Scale Created
1:500 11 Nov 2024

Model name
Upper Mersey 2017

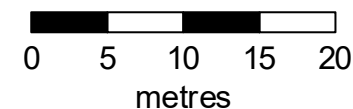
-  Selected area
-  Main river

Modelled 2D grid

Water level in mAOD

-  0 - 35.0
-  35.0 - 35.125
-  35.125 - 35.25
-  35.25 - 35.375
-  35.375 - 35.5
-  35.5 - 35.625
-  35.625 - 35.75
-  35.75 - 35.875
-  35.875 - 36.0

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	385336	389879	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.68
2	385343	389879	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.73
3	385350	389879	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.66
4	385315	389886	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.81
5	385322	389886	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.70
6	385329	389886	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.71
7	385336	389886	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.69
8	385343	389886	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.74
9	385350	389886	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.50
10	385315	389893	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.70
11	385322	389893	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.73
12	385329	389893	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.72
13	385336	389893	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.75
14	385343	389893	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.77
15	385350	389893	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.63
16	385357	389893	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.51

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	385315	389900	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.61
18	385322	389900	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.79
19	385329	389900	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.67
20	385336	389900	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.67
21	385343	389900	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.69
22	385350	389900	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.67
23	385322	389907	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.77
24	385329	389907	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.64
25	385336	389907	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.66
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	0.83

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	385336	389879	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	35.14
2	385343	389879	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	35.14
3	385350	389879	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	35.15
4	385315	389886	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	35.14
5	385322	389886	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	35.14
6	385329	389886	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	35.14
7	385336	389886	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	35.14
8	385343	389886	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	35.14
9	385350	389886	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	35.15
10	385315	389893	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	35.14
11	385322	389893	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	35.14
12	385329	389893	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	35.14
13	385336	389893	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	35.14
14	385343	389893	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	35.14
15	385350	389893	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	35.15
16	385357	389893	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	35.15
17	385315	389900	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	35.14
18	385322	389900	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	35.14

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	385329	389900	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	35.14
20	385336	389900	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	35.15
21	385343	389900	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	35.15
22	385350	389900	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	35.15
23	385322	389907	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	35.14
24	385329	389907	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	35.14
25	385336	389907	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	35.15
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	35.15

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)
385335/389894

Scale Created
1:500 11 Nov 2024

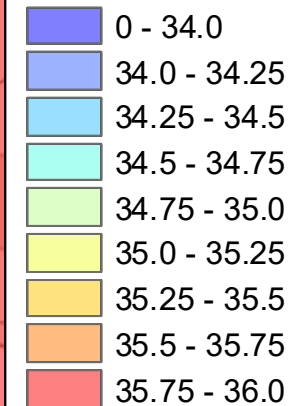
Model name
Upper Mersey 2017

 Selected area

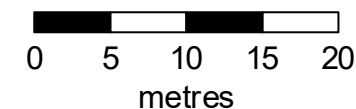
 Main river

Modelled 2D grid

Water level in mAOD



This map shows the
0.1% AEP height data



Sample point data

Defences removed

Label	Easting	Northing	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	385336	389879	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.54
2	385343	389879	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.59
3	385350	389879	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.52
4	385315	389886	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.67
5	385322	389886	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.57
6	385329	389886	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.58
7	385336	389886	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.56
8	385343	389886	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.61
9	385350	389886	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.37
10	385315	389893	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.57
11	385322	389893	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.60
12	385329	389893	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.59
13	385336	389893	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.63
14	385343	389893	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.64
15	385350	389893	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.52
16	385357	389893	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.42

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	385315	389900	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.49
18	385322	389900	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.67
19	385329	389900	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.55
20	385336	389900	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.56
21	385343	389900	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.59
22	385350	389900	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.58
23	385322	389907	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.65
24	385329	389907	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.53
25	385336	389907	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.56
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	385336	389879	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	35.01
2	385343	389879	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	35.01
3	385350	389879	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	35.01
4	385315	389886	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	35.00
5	385322	389886	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	35.01
6	385329	389886	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	35.01
7	385336	389886	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	35.01
8	385343	389886	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	35.02
9	385350	389886	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	35.02
10	385315	389893	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	35.01
11	385322	389893	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	35.01
12	385329	389893	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	35.02
13	385336	389893	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	35.02
14	385343	389893	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	35.02
15	385350	389893	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	35.04
16	385357	389893	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	35.05
17	385315	389900	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	35.02
18	385322	389900	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	35.02

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	385329	389900	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	35.02
20	385336	389900	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	35.03
21	385343	389900	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	35.04
22	385350	389900	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	35.05
23	385322	389907	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	35.03
24	385329	389907	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	35.03
25	385336	389907	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	35.04
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	35.03

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)
385335/389894

Scale Created
1:500 11 Nov 2024

Model name
Upper Mersey 2017

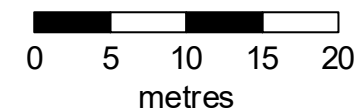
-  Selected area
-  Main river

Modelled 2D grid

Water level in mAOD

-  0 - 35.0
-  35.0 - 35.125
-  35.125 - 35.25
-  35.25 - 35.375
-  35.375 - 35.5
-  35.5 - 35.625
-  35.625 - 35.75
-  35.75 - 35.875
-  35.875 - 36.0

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	385336	389879	NoData	NoData	0.53	1.31	NoData	NoData	35.00	35.78
2	385343	389879	NoData	NoData	0.59	1.37	NoData	NoData	35.00	35.78
3	385350	389879	NoData	NoData	0.52	1.30	NoData	NoData	35.00	35.78
4	385315	389886	NoData	NoData	0.67	1.45	NoData	NoData	35	35.78
5	385322	389886	NoData	NoData	0.56	1.34	NoData	NoData	35.00	35.78
6	385329	389886	NoData	NoData	0.57	1.35	NoData	NoData	35.00	35.78
7	385336	389886	NoData	NoData	0.55	1.33	NoData	NoData	35.00	35.78
8	385343	389886	NoData	NoData	0.59	1.37	NoData	NoData	35.00	35.78
9	385350	389886	NoData	NoData	0.36	1.14	NoData	NoData	35.00	35.78
10	385315	389893	NoData	NoData	0.56	1.34	NoData	NoData	35.00	35.78
11	385322	389893	NoData	NoData	0.58	1.36	NoData	NoData	35.00	35.78
12	385329	389893	NoData	NoData	0.57	1.35	NoData	NoData	35.00	35.78
13	385336	389893	NoData	NoData	0.61	1.39	NoData	NoData	35.00	35.78
14	385343	389893	NoData	NoData	0.62	1.41	NoData	NoData	35.00	35.78
15	385350	389893	NoData	NoData	0.49	1.27	NoData	NoData	35.00	35.79
16	385357	389893	NoData	NoData	0.37	1.16	NoData	NoData	35.01	35.79

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	385315	389900	NoData	NoData	0.47	1.25	NoData	NoData	35.00	35.78
18	385322	389900	NoData	NoData	0.65	1.43	NoData	NoData	35.00	35.78
19	385329	389900	NoData	NoData	0.53	1.31	NoData	NoData	35.00	35.78
20	385336	389900	NoData	NoData	0.53	1.32	NoData	NoData	35.00	35.79
21	385343	389900	NoData	NoData	0.55	1.34	NoData	NoData	35.00	35.79
22	385350	389900	NoData	NoData	0.53	1.32	NoData	NoData	35.00	35.79
23	385322	389907	NoData	NoData	0.63	1.41	NoData	NoData	35.00	35.78
24	385329	389907	NoData	NoData	0.50	1.28	NoData	NoData	35.00	35.79
25	385336	389907	NoData	NoData	0.51	1.30	NoData	NoData	35.00	35.79
Max value in selected area:			Could not determine	Could not determine	0.69	1.47	Could not determine	Could not determine	35.00	35.79

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)
385335/389894

Scale Created
1:500 11 Nov 2024

Model name
Upper Mersey 2017

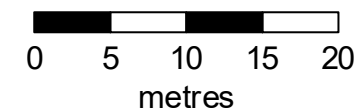
-  Selected area
-  Main river

Modelled 2D grid

Water level in mAOD

-  0 - 35.0
-  35.0 - 35.125
-  35.125 - 35.25
-  35.25 - 35.375
-  35.375 - 35.5
-  35.5 - 35.625
-  35.625 - 35.75
-  35.75 - 35.875
-  35.875 - 36.0

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	385336	389879	0.13	0.17	0.39	1.16	34.60	34.64	34.86	35.63
2	385343	389879	0.19	0.23	0.45	1.22	34.60	34.64	34.86	35.63
3	385350	389879	0.13	0.17	0.38	1.15	34.61	34.65	34.86	35.63
4	385315	389886	0.24	0.29	0.52	1.30	34.58	34.62	34.85	35.63
5	385322	389886	0.14	0.19	0.42	1.19	34.59	34.63	34.86	35.63
6	385329	389886	0.17	0.21	0.43	1.20	34.60	34.64	34.86	35.63
7	385336	389886	0.15	0.19	0.41	1.18	34.61	34.65	34.87	35.63
8	385343	389886	0.21	0.24	0.46	1.23	34.61	34.65	34.87	35.63
9	385350	389886	NoData	0.03	0.23	0.99	NoData	34.67	34.87	35.64
10	385315	389893	0.15	0.19	0.42	1.19	34.59	34.63	34.86	35.63
11	385322	389893	0.18	0.22	0.45	1.21	34.60	34.64	34.86	35.63
12	385329	389893	0.18	0.22	0.44	1.21	34.61	34.65	34.87	35.63
13	385336	389893	0.22	0.26	0.48	1.24	34.62	34.66	34.88	35.64
14	385343	389893	0.24	0.28	0.50	1.26	34.62	34.66	34.88	35.64
15	385350	389893	0.13	0.17	0.38	1.13	34.64	34.69	34.89	35.64
16	385357	389893	0.05	0.11	0.28	1.02	34.68	34.75	34.92	35.65

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	385315	389900	0.06	0.11	0.34	1.10	34.59	34.64	34.87	35.64
18	385322	389900	0.26	0.30	0.52	1.28	34.61	34.65	34.87	35.64
19	385329	389900	0.15	0.19	0.40	1.17	34.62	34.66	34.88	35.64
20	385336	389900	0.16	0.20	0.41	1.17	34.63	34.67	34.89	35.64
21	385343	389900	0.18	0.22	0.44	1.20	34.63	34.68	34.90	35.65
22	385350	389900	0.17	0.21	0.43	1.18	34.65	34.69	34.90	35.65
23	385322	389907	0.25	0.29	0.50	1.26	34.62	34.66	34.88	35.64
24	385329	389907	0.13	0.17	0.38	1.14	34.63	34.67	34.88	35.64
25	385336	389907	0.16	0.19	0.41	1.16	34.65	34.69	34.90	35.65
Max value in selected area:			0.30	0.34	0.56	1.32	34.63	34.67	34.88	35.64

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 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