

Flood risk assessment data

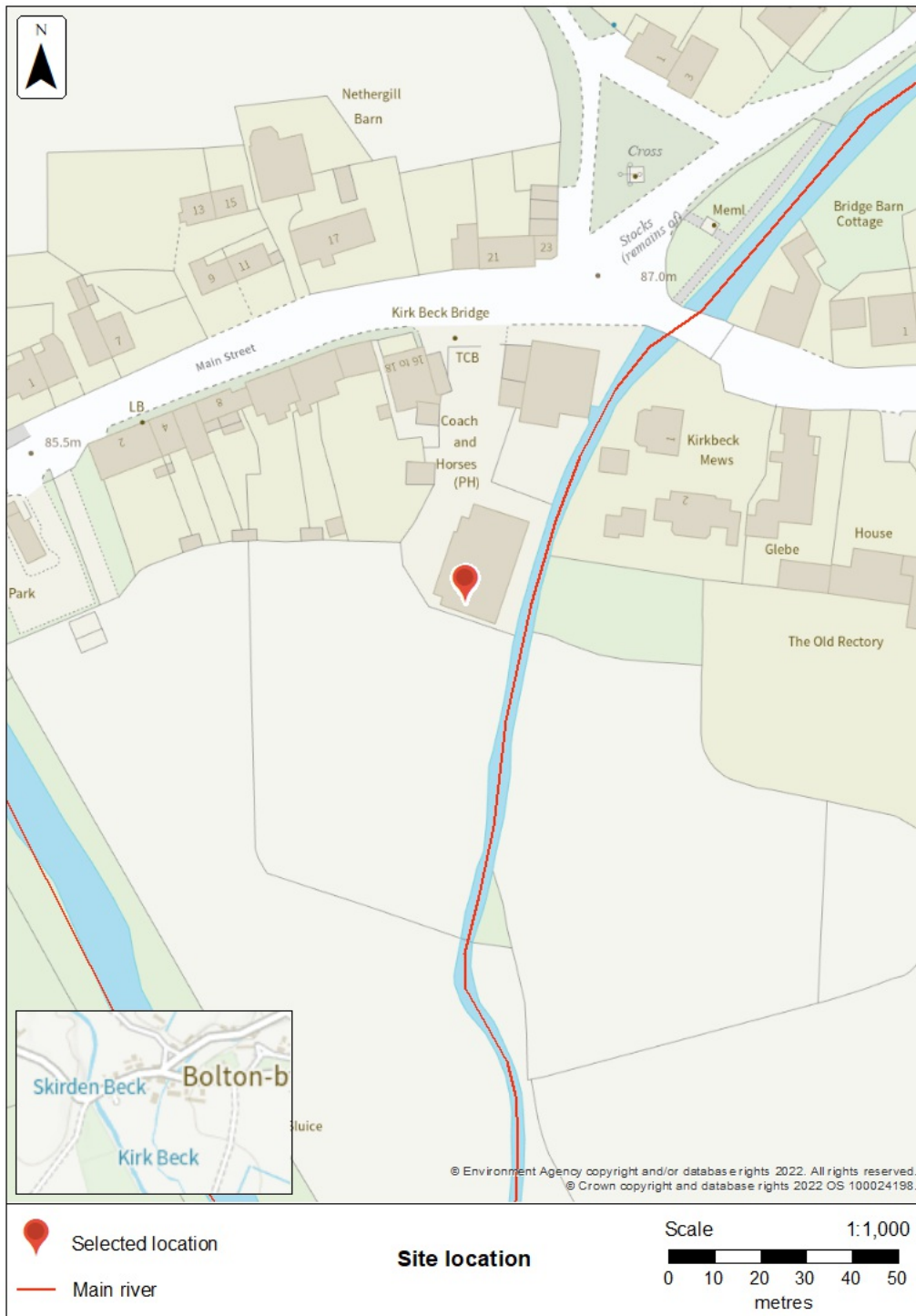
Location of site: 378508 / 449312 (shown as easting and northing coordinates)

Document created on: 16 May 2022

This information was previously known as a product 4.

Customer reference number: 4E7BRP677JVY

Map showing the location that flood risk assessment data has been requested for.



How to use this information

You can use this information as part of a flood risk assessment for a planning application. To do this, you should include it in the appendix of your flood risk assessment.

We recommend that you work with a flood risk consultant to get your flood risk assessment.

Included in this document

In this document you'll find:

- how to find information about surface water and other sources of flooding
- information on the models used
- definitions for the terminology used throughout
- flood map for planning (rivers and the sea)
- historic flooding
- flood defences and attributes
- modelled data
- climate change modelled data
- information about strategic flood risk assessments
- information about this data
- information about flood risk activity permits
- help and advice

Surface water and other sources of flooding

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

- surface water
- ordinary watercourses
- reservoirs

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

About the models used

Model name: Bolton-by-Bowland 2007

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

Date: 1 November 2007

This model contains the most relevant data for your area of interest.

Terminology used

Annual exceedance probability (AEP)

This refers to the probability of a flood event occurring in any year. The probability is expressed as a percentage. For example, a large flood which is calculated to have a 1% chance of occurring in any one year, is described as 1% AEP.

Metres above ordnance datum (mAOD)

All flood levels are given in metres above ordnance datum which is defined as the mean sea level at Newlyn, Cornwall.

Flood map for planning (rivers and the sea)

Your development 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

This data is updated on a quarterly basis as better data becomes available.



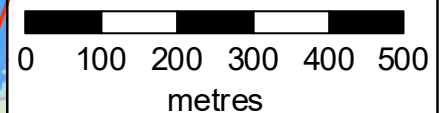
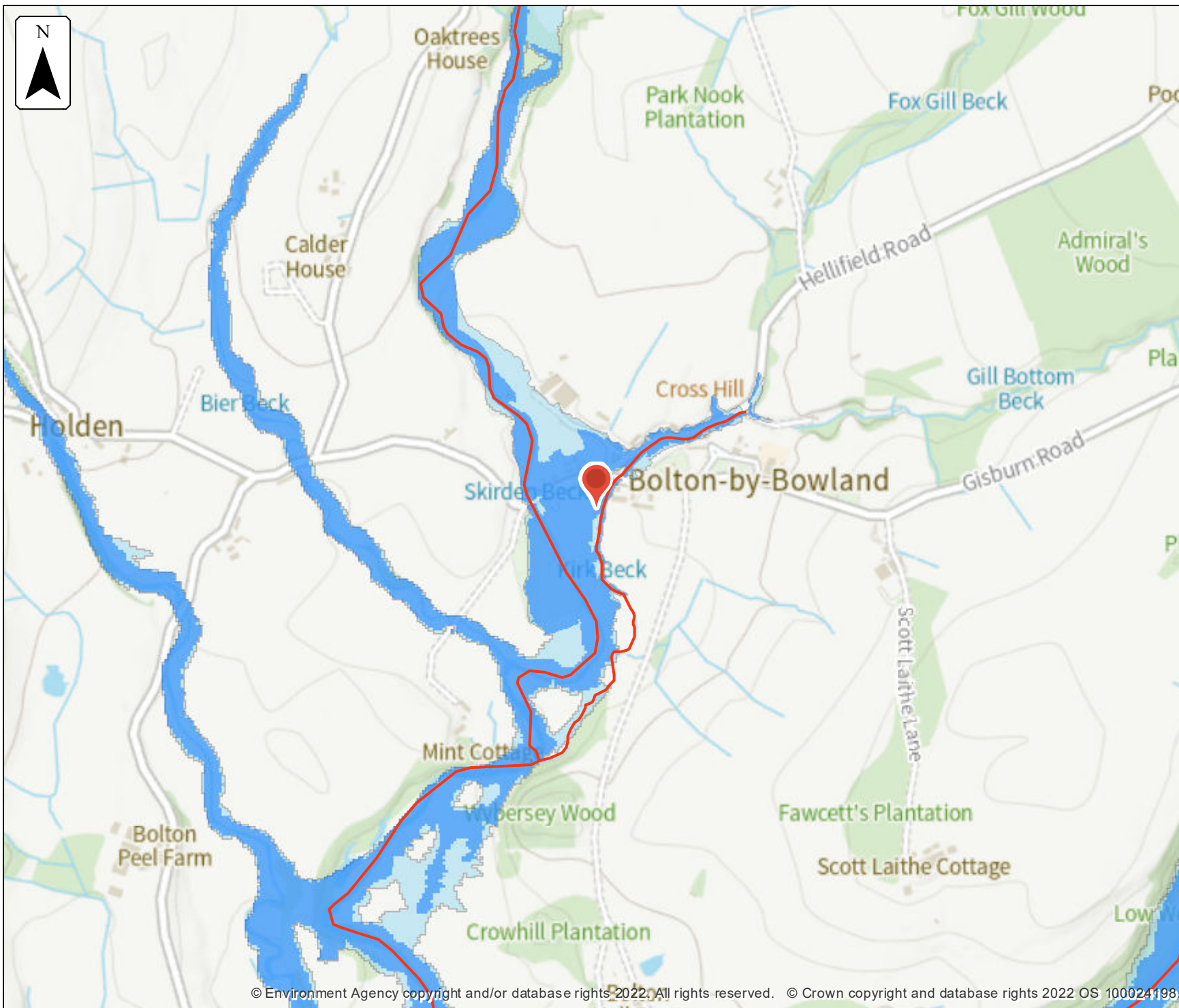
Flood map for planning

Location (easting/northing)
378508/449312

Scale
1:10,000

Created
16 May 2022

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



Historic flooding

This map is an indicative outline of areas that have previously flooded. Remember that:

- our records are incomplete, so the information here is based on the best available data
- it is possible not all properties within this area will have flooded
- other flooding may have occurred that we do not have records for
- flooding can come from a range of different sources - we can only supply flood risk data relating to flooding from rivers or the sea

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

[Download recorded flood outlines in GIS format](#)



Historic flood map

Location (easting/northing)
378508/449312

Scale
1:10,000

Created
16 May 2022



Selected location

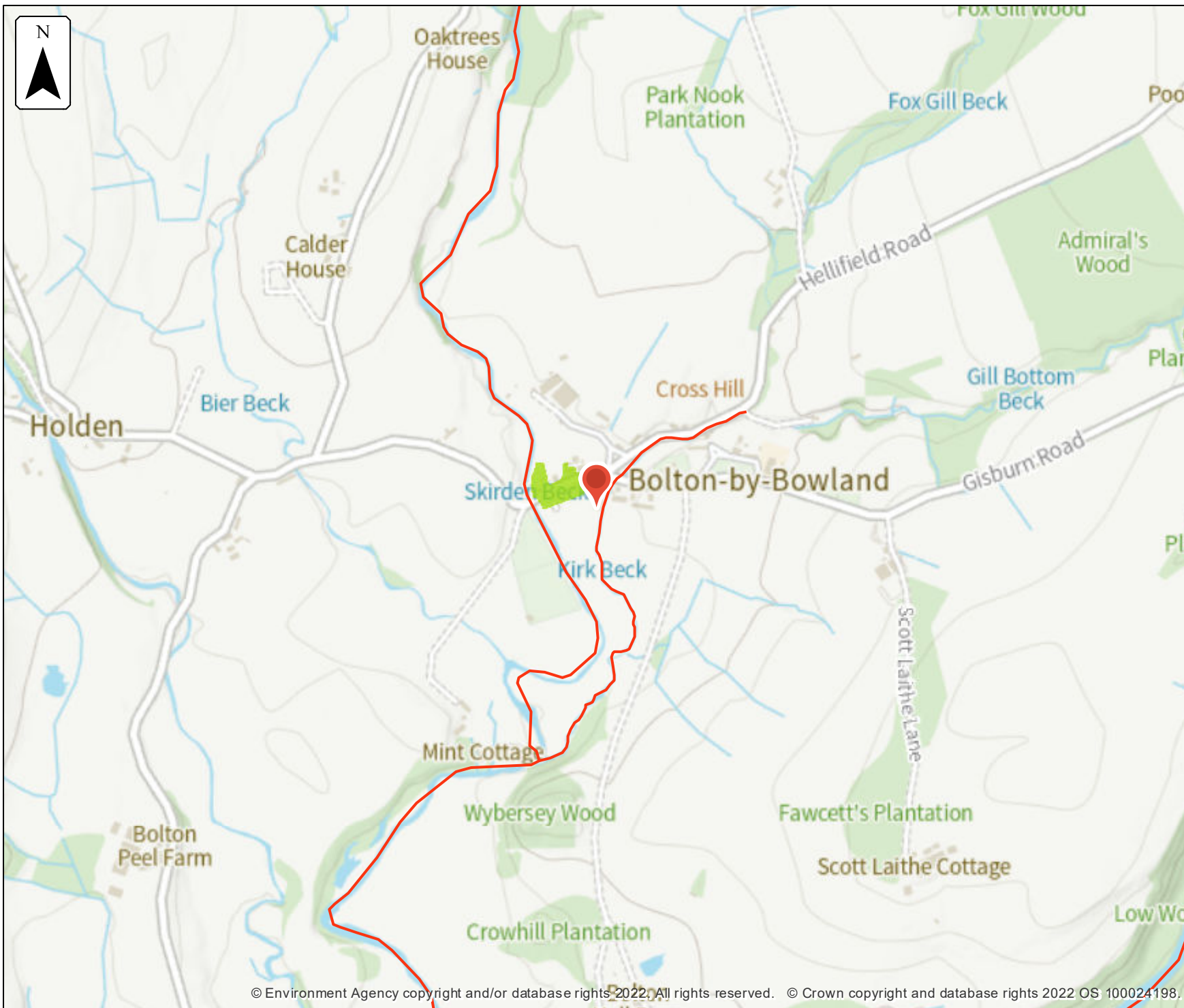


Main river

Date of flood event



August, 2004



Historic flood event data

Start date	End date	Source of flood	Cause of flood	Affects location
20 August 2004	21 August 2004	unknown	channel capacity exceeded (no raised defences)	No

Flood defences and attributes

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

The flood defences data table shows the type of defences, their condition and the standard of protection. It shows the height above sea level of the top of the flood defence (crest level). The height is in mAOD which is the metres above the mean sea level at Newlyn, Cornwall.

It's important to remember that flood defence data may not be updated on a regular basis. The information here is based on the best available data.



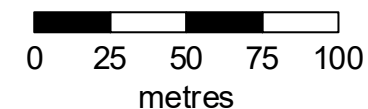
Flood defences

Location (easting/northing)
378508/449312

Scale
1:2,500

Created
16 May 2022

-  Selected location
-  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	181567	Embankment	100	Fair	87.79	87.79	87.79
2	184244	Embankment	100	Fair	87.83	87.83	87.83
3	184243	Wall	100	Fair	85.28	85.28	85.28
4	64748	Embankment	100	Fair	86.87	86.87	86.87
5	184242	Embankment	100	Fair	86.44	86.55	86.44
6	64416	Flood Gate	100	Good	86.45	86.45	86.45
7	61644	Wall	100	Fair	86.65	86.67	86.65
8	61648	Wall	100	Fair	86.67	90.74	86.67
9	106106	Wall	100	Fair	87.94	88.41	87.94
10	163351	Embankment	100	Fair	87.09	88.05	87.09
11	163352	Wall	100	Fair	88.05	88.79	88.05

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

Modelled data

This section provides details of different scenarios we have modelled and includes the following (where available):

- outline maps showing the area at risk from flooding in different modelled scenarios
- modelled node point map(s) showing the points used to get the data to model the scenarios and table(s) providing details of the flood risk for different return periods
- map(s) showing the approximate water levels for the return period with the largest flood extent for a scenario and table(s) of sample points providing details of the flood risk for different return periods

Climate change

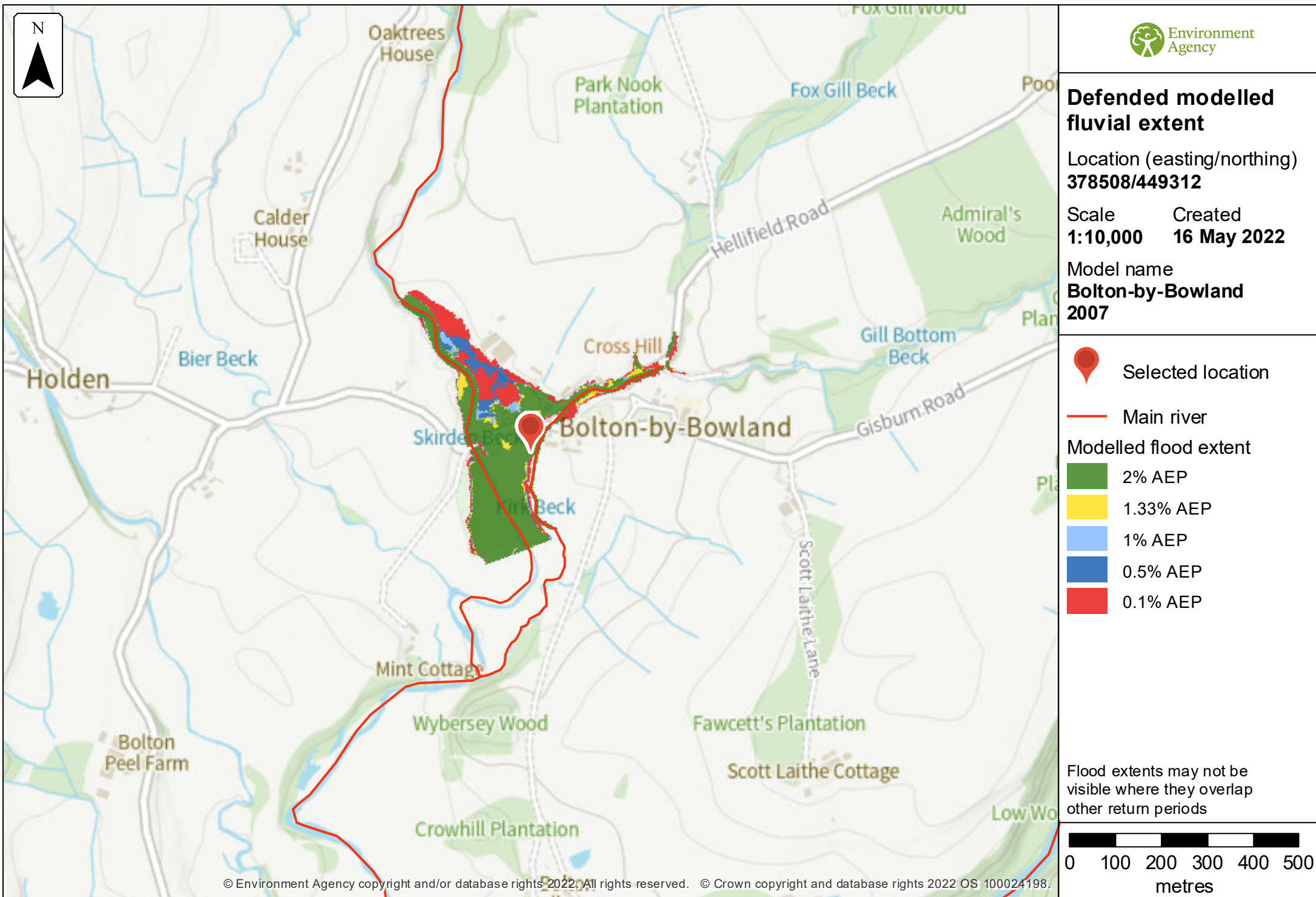
The climate change data included in the models may not include the latest [flood risk assessment climate change allowances](#). Where the new allowances are not available you will need to consider this data and factor in the new allowances to demonstrate the development will be safe from flooding.

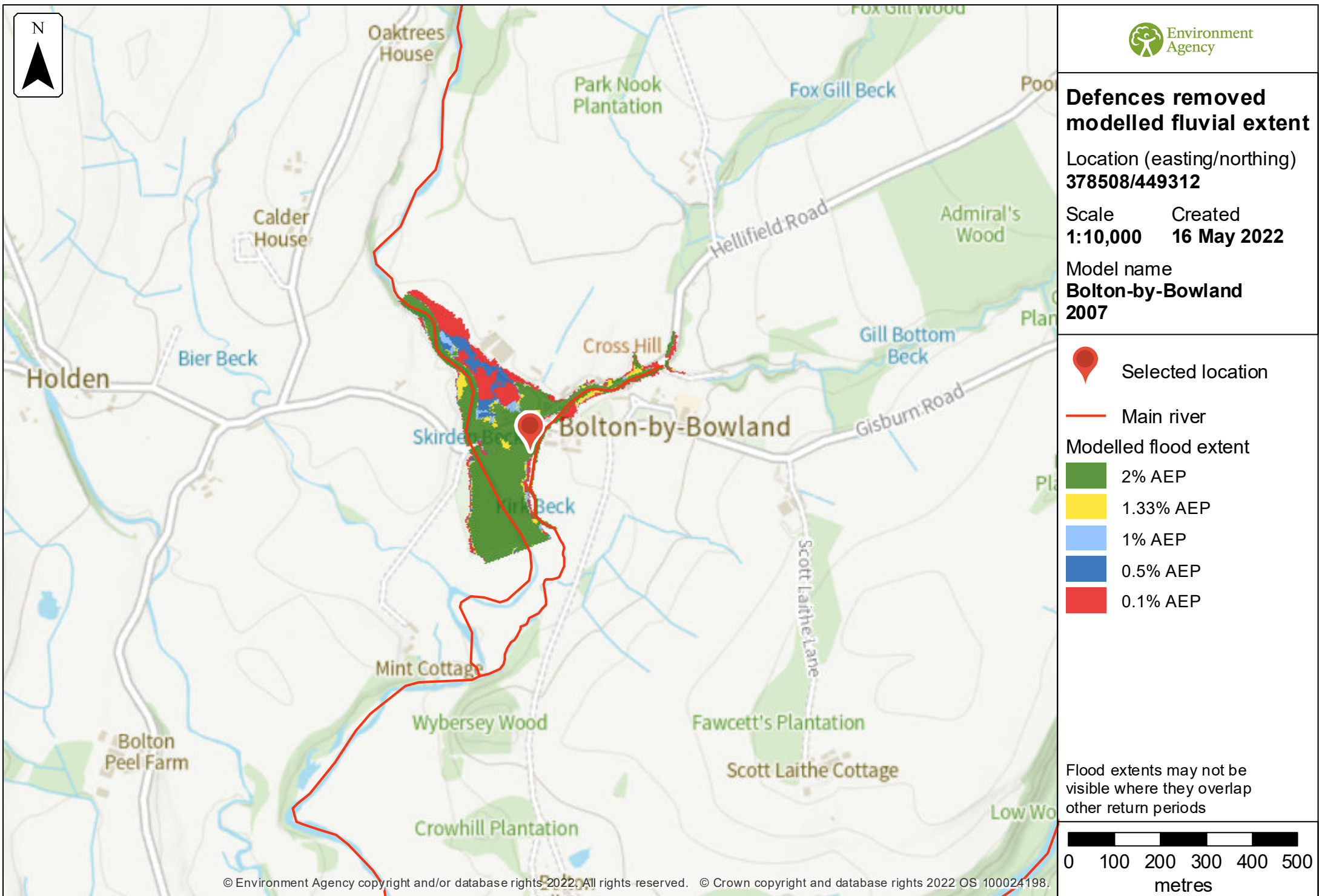
The Environment Agency will incorporate the new allowances into future modelling studies. For now, it's your responsibility to demonstrate that new developments will be safe in flood risk terms for their lifetime.

Modelled scenarios

The following scenarios are included:

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







Defended climate change modelled fluvial extent

Location (easting/northing)
378508/449312

Scale Created
1:10,000 16 May 2022

Model name
**Bolton-by-Bowland
2007**



Selected location



Main river

Modelled flood extent

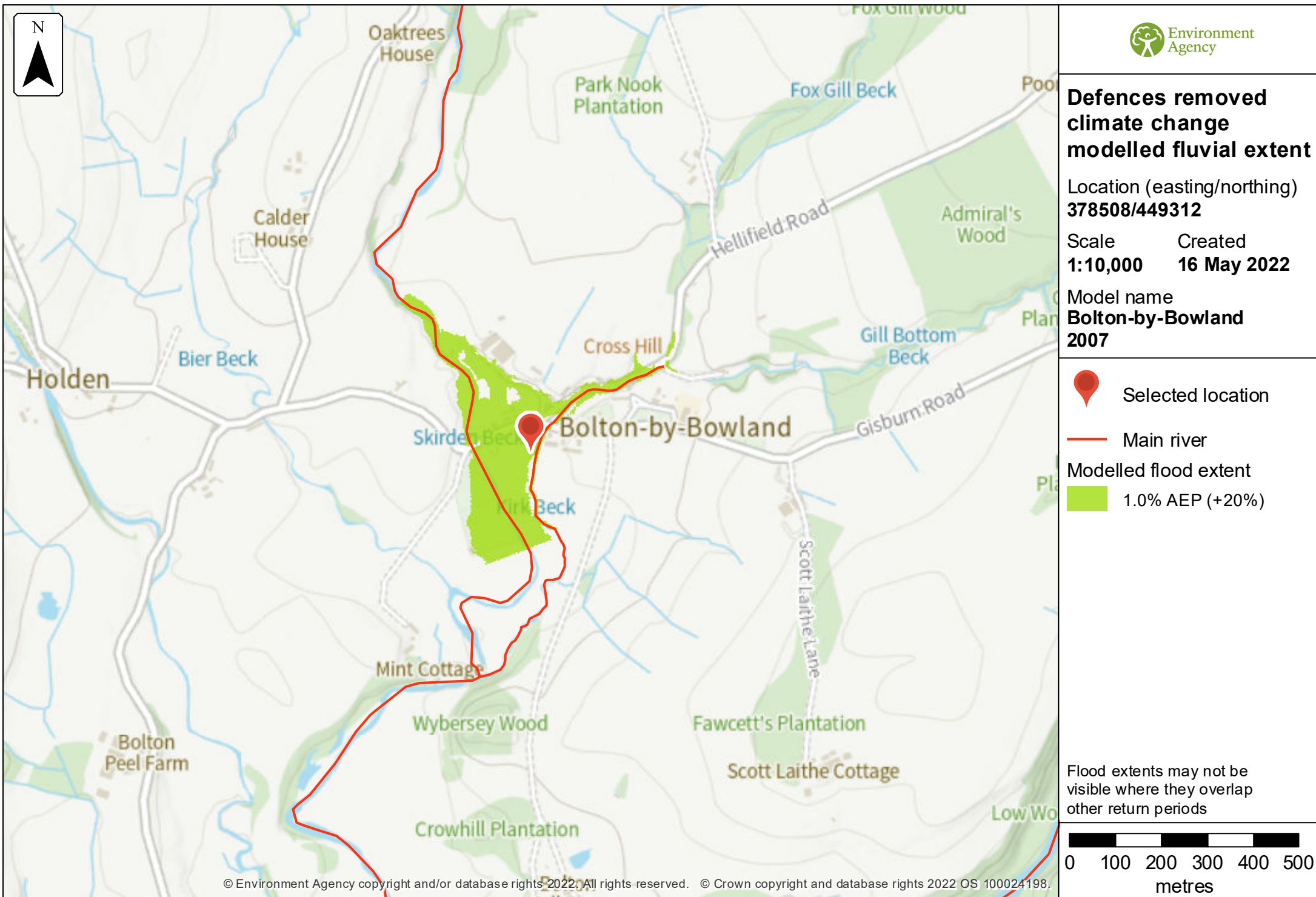


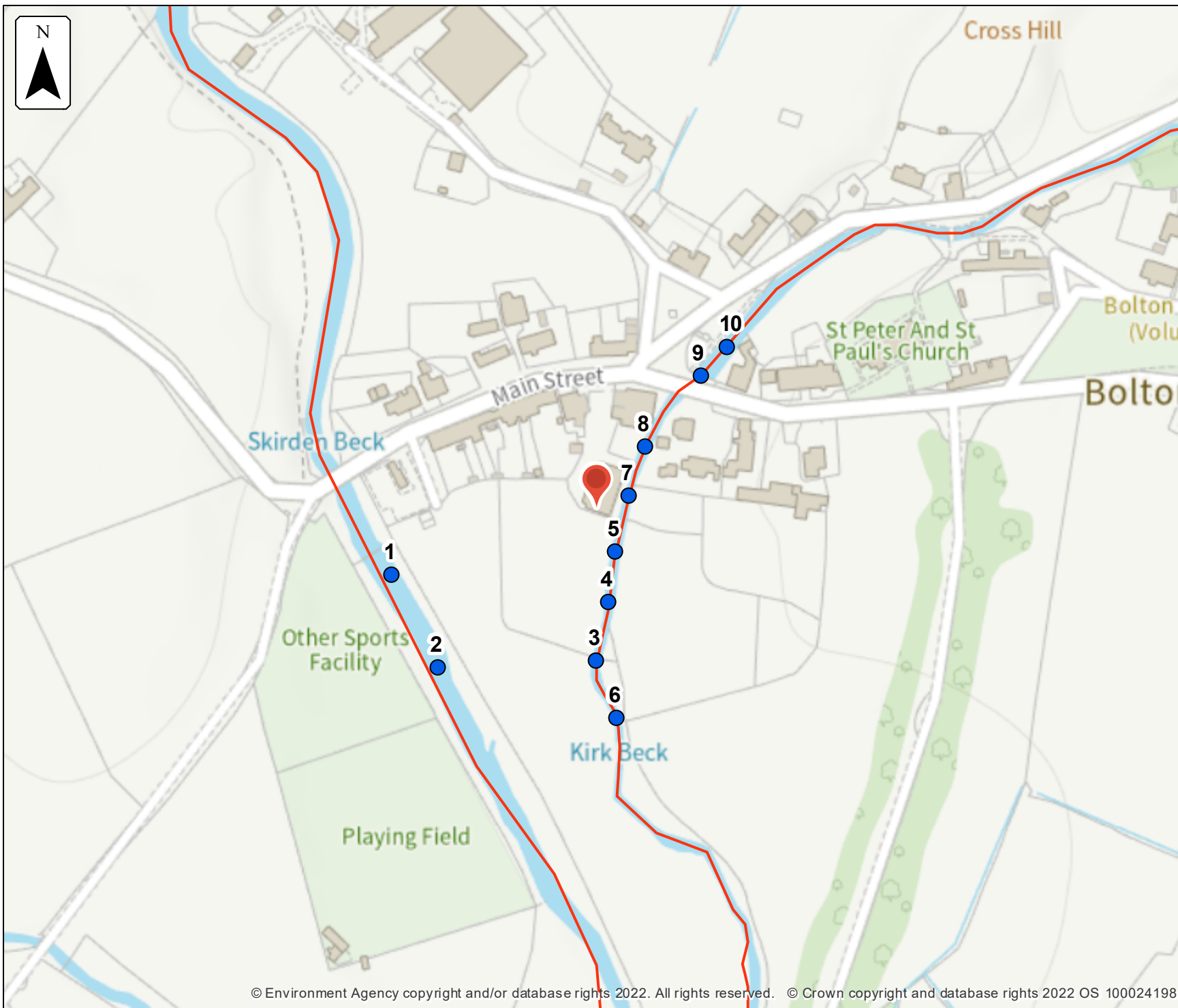
1.0% AEP (+20%)

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



0 100 200 300 400 500
metres





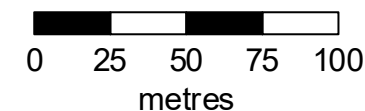
Defended modelled fluvial node locations

Location (easting/northing)
378508/449312

Scale Created
1:2,500 16 May 2022

Model name
**Bolton-by-Bowland
2007**

-  Selected location
-  Modelled location
-  Main river



Modelled node locations data

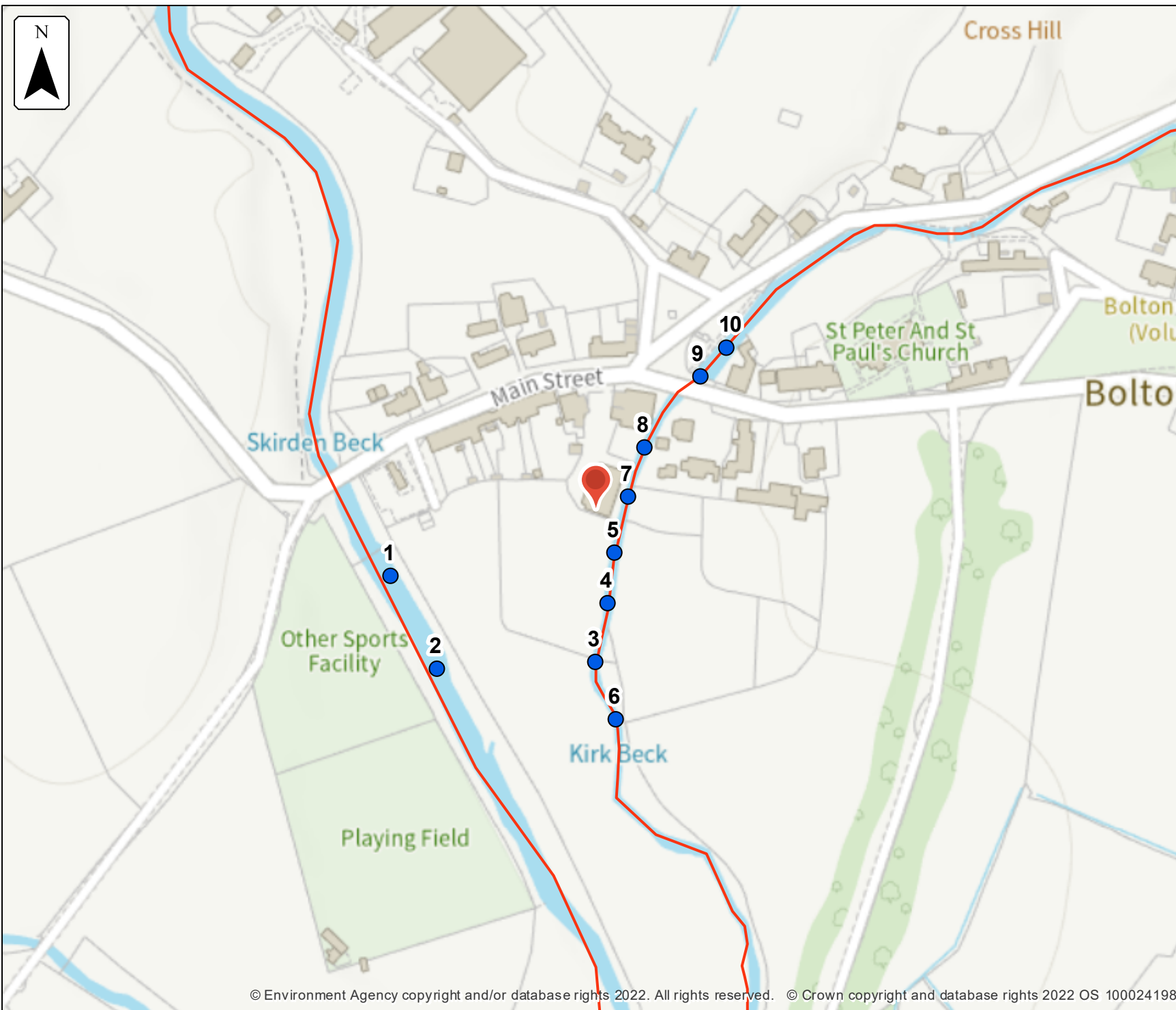
Defended

Label	Modelled location ID	Easting	Northing	4% AEP		2% AEP		1.33% AEP		1% AEP		0.5% AEP		0.1% AEP	
				Level	Flow	Level	Flow	Level	Flow	Level	Flow	Level	Flow	Level	Flow
1	1014162	378408	449279	85.21	47.86	85.29	51.35	85.32	53.29	85.35	54.54	85.38	56.53	85.62	65.81
2	1014146	378431	449233	84.89	47.70	84.97	50.94	85.02	52.40	85.05	53.25	85.09	54.64	85.34	63.59
3	1014175	378508	449237	85.22	4.81	85.23	4.95	85.23	5.0	85.24	5.05	85.24	5.07	85.28	5.47
4	1014142	378514	449265	85.50	4.81	85.52	4.95	85.52	5.0	85.52	5.05	85.53	5.08	85.57	5.43
5	1014138	378517	449290	85.86	4.81	85.87	4.95	85.88	5.0	85.88	5.06	85.88	5.08	85.93	5.44
6	1014176	378517	449209	84.95	4.84	84.96	4.97	84.97	5.03	84.97	5.07	84.98	5.10	85.01	5.47
7	1014157	378523	449317	86.29	4.46	86.32	4.55	86.32	4.56	86.33	4.58	86.34	4.57	86.37	4.92
8	1014140	378531	449341	86.69	5.13	86.72	5.36	86.72	5.46	86.74	5.53	86.74	5.57	86.80	6.20
9	1014151	378558	449376	87.02	5.60	87.04	5.94	87.05	6.12	87.06	6.30	87.06	6.37	87.14	7.64
10	1014133	378571	449389	87.20	5.60	87.23	5.94	87.24	6.12	87.25	6.29	87.26	6.37	87.35	7.59

Data in this table comes from the Bolton-by-Bowland 2007 model.

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

Any blank cells show where a particular scenario has not been modelled for this location.



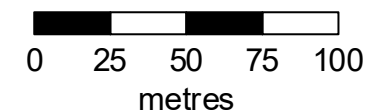
Defences removed modelled fluvial node locations

Location (easting/northing)
378508/449312

Scale Created
1:2,500 16 May 2022

Model name
**Bolton-by-Bowland
2007**

-  Selected location
-  Modelled location
-  Main river



Modelled node locations data

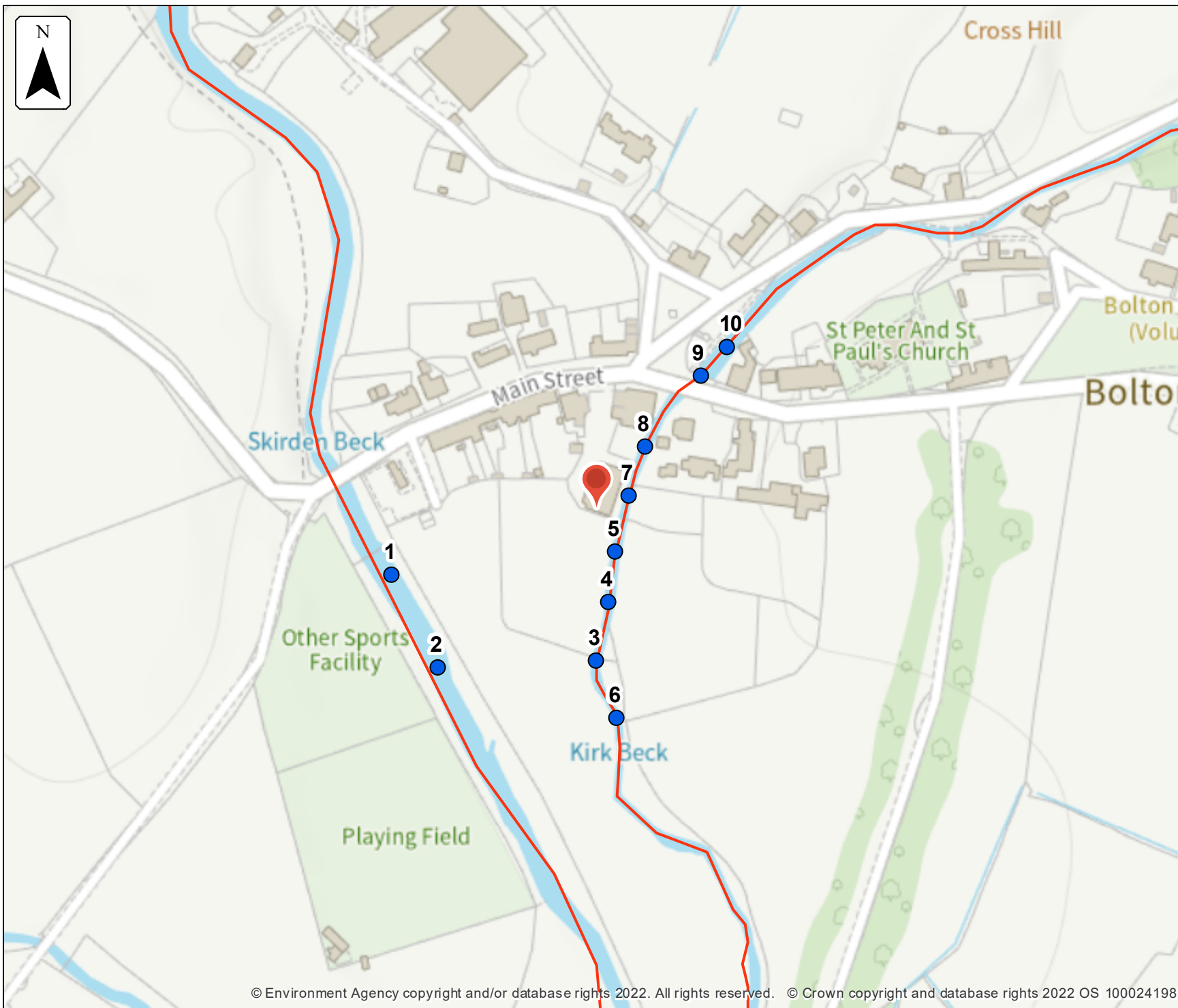
Defences removed

Label	Modelled location ID	Easting	Northing	4% AEP		2% AEP		1.33% AEP		1% AEP		0.5% AEP		0.1% AEP	
				Level	Flow	Level	Flow	Level	Flow	Level	Flow	Level	Flow	Level	Flow
1	1014162	378408	449279	85.21	47.86	85.29	51.35	85.32	53.29	85.35	54.54	85.38	56.53	85.61	65.17
2	1014146	378431	449233	84.89	47.70	84.97	50.93	85.02	52.41	85.05	53.25	85.09	54.64	85.34	63.34
3	1014175	378508	449237	85.23	4.96	85.25	5.13	85.26	5.19	85.26	5.27	85.27	5.39	85.30	5.77
4	1014142	378514	449265	85.52	4.95	85.53	5.12	85.55	5.18	85.55	5.25	85.56	5.37	85.59	5.75
5	1014138	378517	449290	85.88	4.95	85.89	5.11	85.90	5.23	85.90	5.32	85.91	5.30	85.96	5.68
6	1014176	378517	449209	84.96	4.98	84.98	5.15	84.99	5.22	84.99	5.28	85.0	5.38	85.03	5.75
7	1014157	378523	449317	86.29	4.78	86.31	5.03	86.32	5.12	86.33	5.16	86.33	5.22	86.36	5.72
8	1014140	378531	449341	86.63	5.28	86.66	5.50	86.67	5.62	86.68	5.72	86.69	5.75	86.76	6.36
9	1014151	378558	449376	87.0	5.60	87.03	5.95	87.04	6.12	87.05	6.29	87.06	6.38	87.14	7.63
10	1014133	378571	449389	87.20	5.60	87.22	5.95	87.24	6.13	87.25	6.30	87.26	6.38	87.35	7.59

Data in this table comes from the Bolton-by-Bowland 2007 model.

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

Any blank cells show where a particular scenario has not been modelled for this location.



Defended climate change modelled fluvial node locations

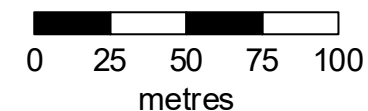
Location (easting/northing)
378508/449312

Scale
1:2,500

Created
16 May 2022

Model name
**Bolton-by-Bowland
2007**

-  Selected location
-  Modelled location
-  Main river



Modelled node locations data

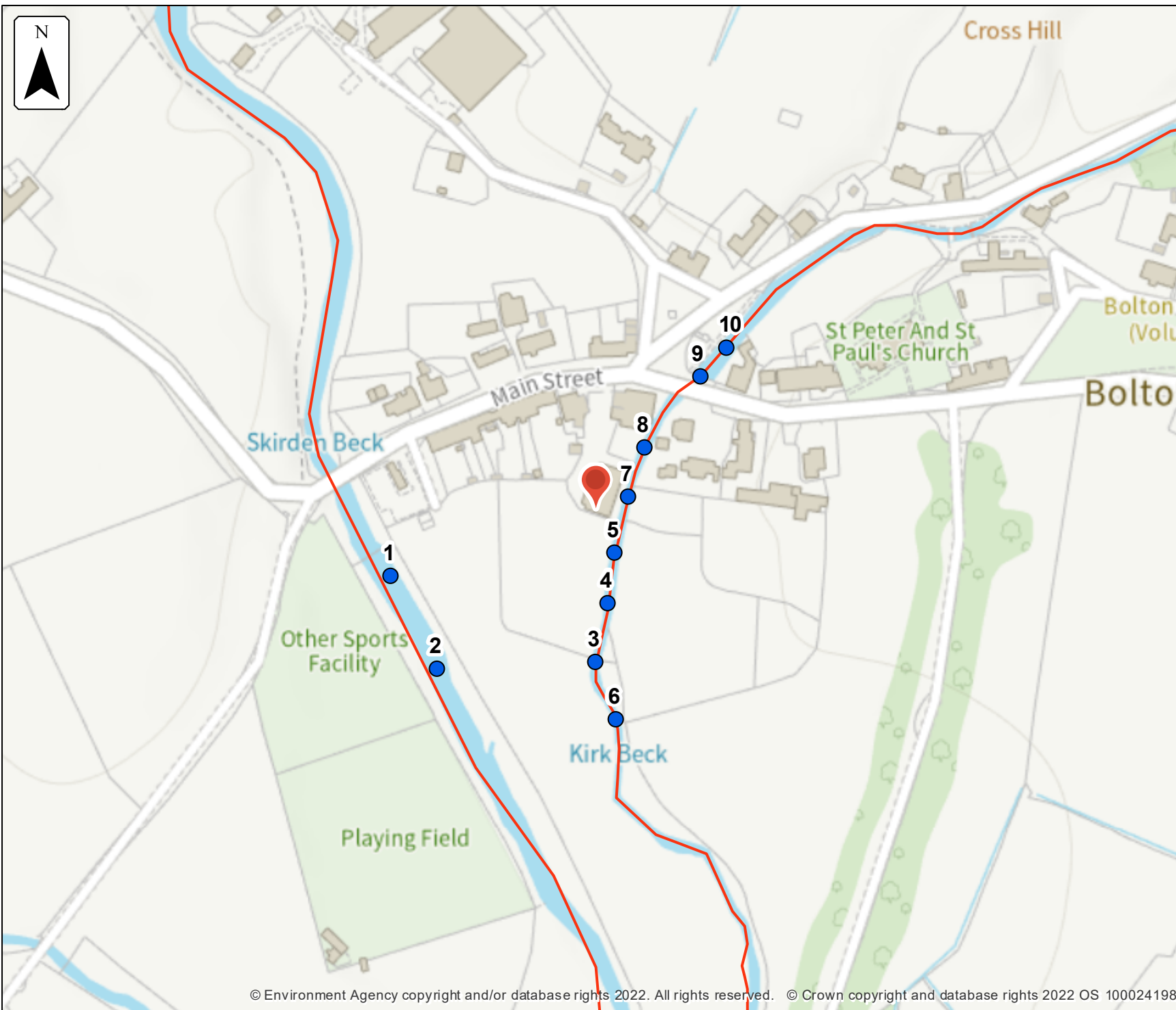
Defended climate change

Label	Modelled location ID	Easting	Northing	1.0% AEP (+20%)	
				Level	Flow
1	1014162	378408	449279	85.42	58.13
2	1014146	378431	449233	85.13	55.92
3	1014175	378508	449237	85.26	5.15
4	1014142	378514	449265	85.54	5.15
5	1014138	378517	449290	85.90	5.15
6	1014176	378517	449209	84.98	5.18
7	1014157	378523	449317	86.35	4.66
8	1014140	378531	449341	86.75	5.73
9	1014151	378558	449376	87.08	6.69
10	1014133	378571	449389	87.28	6.69

Data in this table comes from the Bolton-by-Bowland 2007 model.

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

Any blank cells show where a particular scenario has not been modelled for this location.



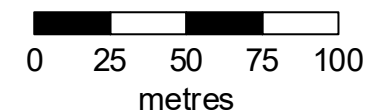
Defences removed climate change modelled fluvial node locations

Location (easting/northing)
378508/449312

Scale Created
1:2,500 16 May 2022

Model name
**Bolton-by-Bowland
2007**

-  Selected location
-  Modelled location
-  Main river



Modelled node locations data

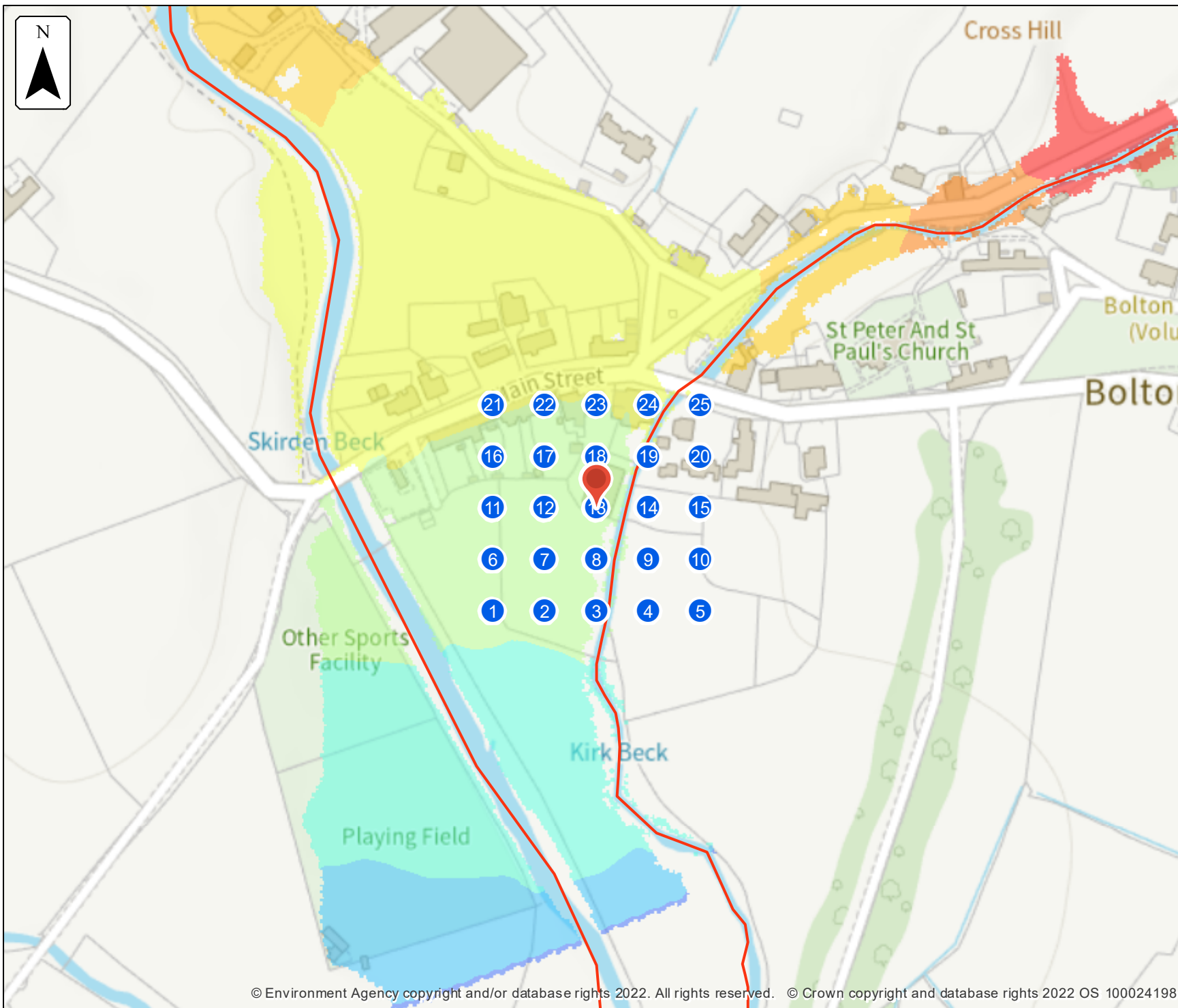
Defences removed climate change

Label	Modelled location ID	Easting	Northing	1.0% AEP (+20%)	
				Level	Flow
1	1014162	378408	449279	85.42	58.12
2	1014146	378431	449233	85.13	55.93
3	1014175	378508	449237	85.29	5.38
4	1014142	378514	449265	85.57	5.36
5	1014138	378517	449290	85.92	5.41
6	1014176	378517	449209	85.0	5.39
7	1014157	378523	449317	86.34	5.32
8	1014140	378531	449341	86.71	5.91
9	1014151	378558	449376	87.08	6.68
10	1014133	378571	449389	87.28	6.68

Data in this table comes from the Bolton-by-Bowland 2007 model.

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

Any blank cells show where a particular scenario has not been modelled for this location.



Defended modelled fluvial extent and height

Location (easting/northing)
378508/449312

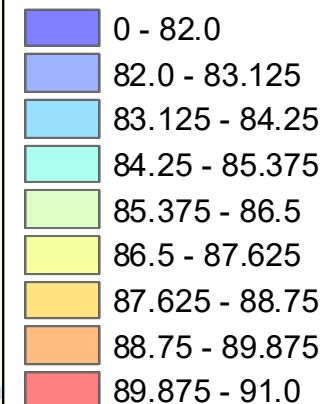
Scale Created
1:2,500 16 May 2022

Model name
Bolton-by-Bowland 2007

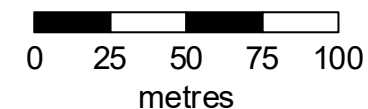
 Selected location

 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	5% AEP		2% AEP		1.33% AEP		1% AEP		0.5% AEP		0.1% AEP	
			Depth	Height	Depth	Height	Depth	Height	Depth	Height	Depth	Height	Depth	Height
1	378458	449262			0.31	85.17	0.35	85.21	0.38	85.24	0.42	85.28	0.69	85.55
2	378483	449262			0.26	85.20	0.31	85.24	0.34	85.28	0.38	85.32	0.68	85.61
3	378508	449262			NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
4	378533	449262			NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
5	378558	449262			NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
6	378458	449287			0.29	85.24	0.34	85.30	0.38	85.33	0.42	85.38	0.74	85.69
7	378483	449287			0.22	85.23	0.27	85.29	0.31	85.32	0.36	85.37	0.69	85.70
8	378508	449287			NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
9	378533	449287			NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
10	378558	449287			NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
11	378458	449312			0.05	85.30	0.09	85.35	0.13	85.38	0.18	85.43	0.51	85.77
12	378483	449312			0.11	85.28	0.16	85.34	0.20	85.37	0.25	85.43	0.60	85.78
13	378508	449312			0.05	86.12	0.05	86.12	0.06	86.13	0.06	86.13	0.07	86.14
14	378533	449312			NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
15	378558	449312			NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
16	378458	449337			0.03	85.82	0.05	85.84	0.06	85.85	0.08	85.87	0.35	86.14

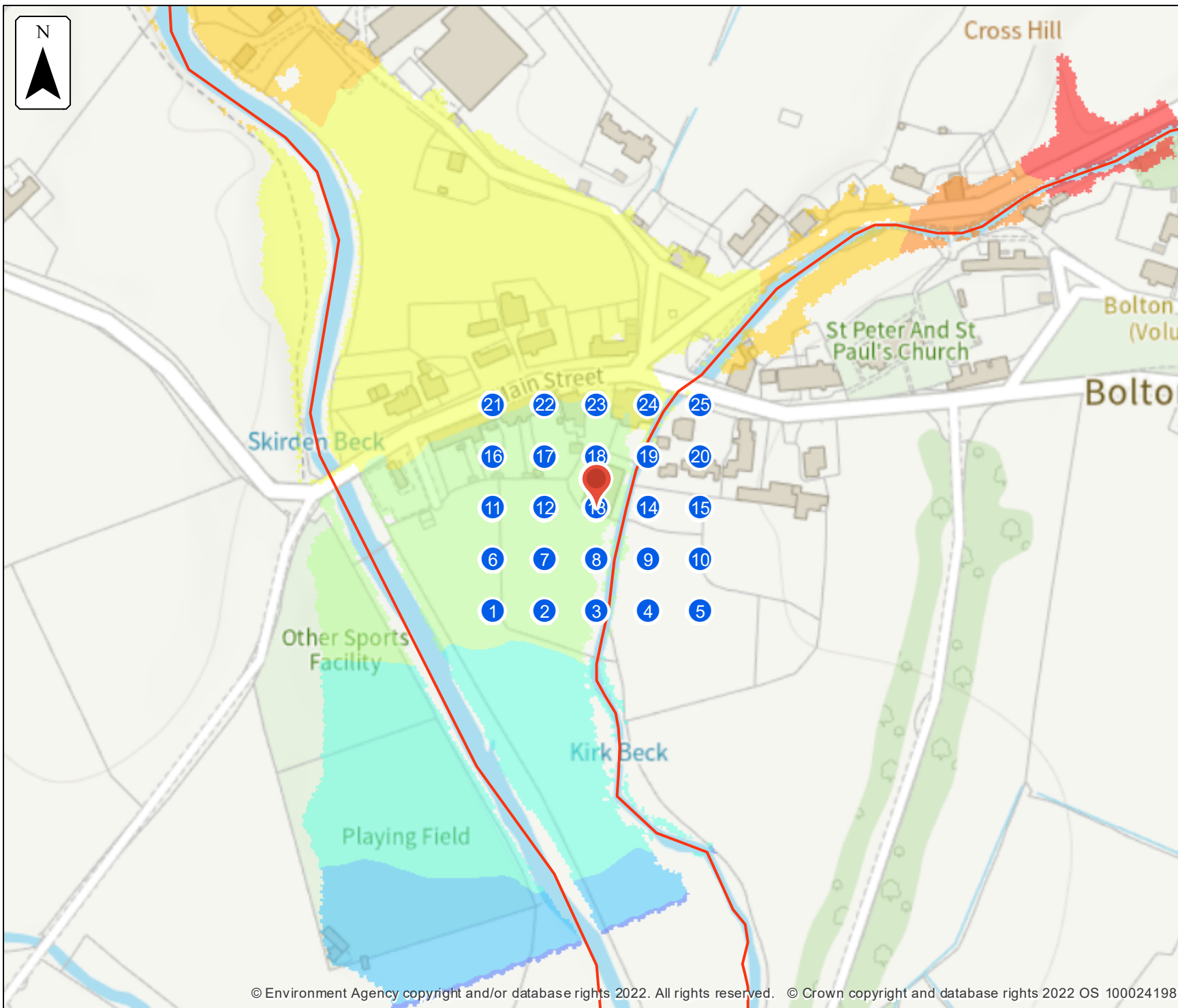
Label	Easting	Northing	5% AEP		2% AEP		1.33% AEP		1% AEP		0.5% AEP		0.1% AEP	
			Depth	Height	Depth	Height	Depth	Height	Depth	Height	Depth	Height	Depth	Height
17	378483	449337			0.16	85.75	0.20	85.79	0.23	85.82	0.27	85.85	0.56	86.14
18	378508	449337			0.09	85.92	0.10	85.93	0.11	85.93	0.11	85.94	0.44	86.27
19	378533	449337			0.41	86.61	0.42	86.62	0.43	86.63	0.43	86.63	0.50	86.71
20	378558	449337			NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
21	378458	449362			0.53	86.06	0.58	86.11	0.62	86.15	0.67	86.20	1.11	86.64
22	378483	449362			0.08	85.89	0.10	85.91	0.12	85.92	0.15	85.95	0.43	86.23
23	378508	449362			0.20	85.98	0.22	86.00	0.23	86.01	0.27	86.05	0.63	86.41
24	378533	449362			0.19	86.86	0.20	86.86	0.20	86.87	0.21	86.88	0.26	86.92
25	378558	449362			NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData

Data in this table comes from the Bolton-by-Bowland 2007 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.



Defences removed modelled fluvial extent and height

Location (easting/northing)
378508/449312

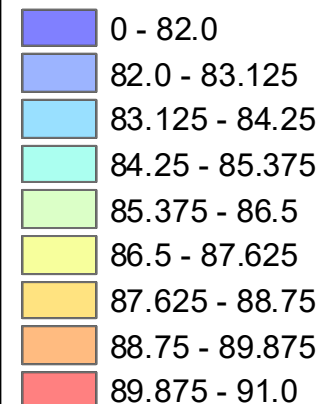
Scale Created
1:2,500 16 May 2022

Model name
**Bolton-by-Bowland
2007**

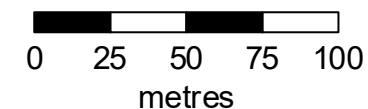
 Selected location

 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	Height	Depth	Height	Depth	Height	Depth	Height	Depth	Height	Depth	Height
1	378458	449262			0.31	85.17	0.35	85.21	0.38	85.24	0.42	85.28	0.70	85.56
2	378483	449262			0.26	85.20	0.31	85.24	0.34	85.28	0.38	85.32	0.68	85.62
3	378508	449262			NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
4	378533	449262			NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
5	378558	449262			NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
6	378458	449287			0.29	85.24	0.34	85.30	0.38	85.33	0.42	85.38	0.74	85.70
7	378483	449287			0.22	85.23	0.27	85.29	0.31	85.32	0.36	85.37	0.69	85.70
8	378508	449287			NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
9	378533	449287			NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
10	378558	449287			NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
11	378458	449312			0.05	85.30	0.09	85.35	0.13	85.38	0.18	85.43	0.51	85.77
12	378483	449312			0.11	85.28	0.16	85.34	0.20	85.37	0.25	85.43	0.61	85.78
13	378508	449312			0.05	86.12	0.05	86.12	0.05	86.13	0.05	86.12	0.06	86.13
14	378533	449312			NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
15	378558	449312			NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
16	378458	449337			0.03	85.82	0.05	85.84	0.06	85.85	0.08	85.87	0.36	86.15

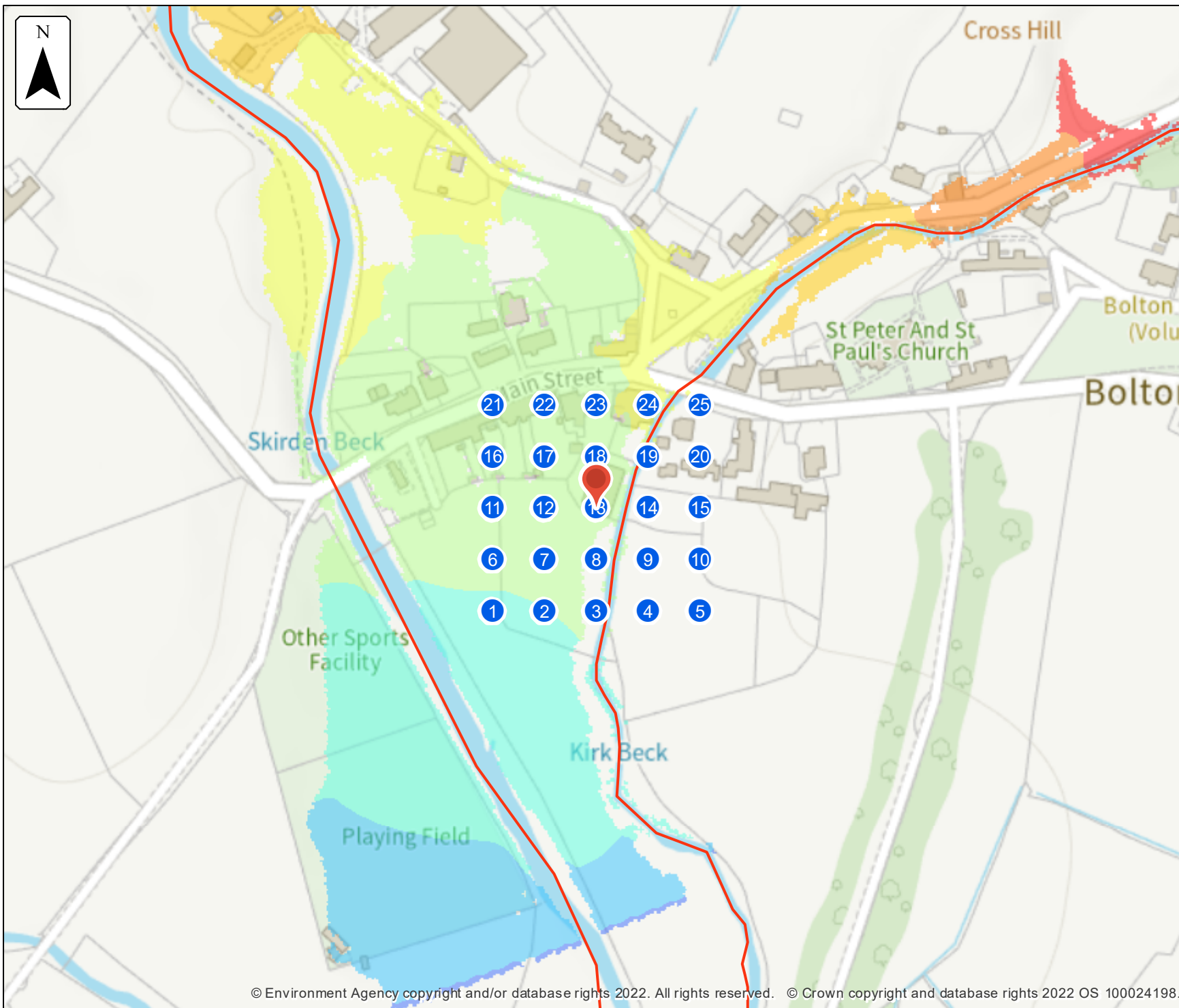
Label	Easting	Northing	5% AEP		2% AEP		1.33% AEP		1% AEP		0.5% AEP		0.1% AEP	
			Depth	Height	Depth	Height	Depth	Height	Depth	Height	Depth	Height	Depth	Height
17	378483	449337			0.16	85.75	0.20	85.79	0.23	85.81	0.27	85.85	0.56	86.15
18	378508	449337			0.07	85.90	0.09	85.92	0.10	85.93	0.11	85.94	0.45	86.28
19	378533	449337			0.34	86.53	0.35	86.55	0.36	86.55	0.36	86.56	0.41	86.61
20	378558	449337			NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
21	378458	449362			0.53	86.06	0.58	86.11	0.62	86.15	0.67	86.20	1.12	86.65
22	378483	449362			0.08	85.89	0.10	85.90	0.12	85.92	0.15	85.95	0.43	86.23
23	378508	449362			0.19	85.96	0.21	85.99	0.22	86.00	0.27	86.05	0.64	86.41
24	378533	449362			0.16	86.83	0.18	86.85	0.19	86.85	0.19	86.86	0.25	86.91
25	378558	449362			NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData

Data in this table comes from the Bolton-by-Bowland 2007 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.



Defended climate change modelled fluvial extent and height

Location (easting/northing)
378508/449312

Scale **1:2,500** Created **16 May 2022**

Model name
Bolton-by-Bowland 2007

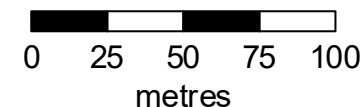
 Selected location

 Main river

Modelled 2D grid
Water level in mAOD

-  0 - 82.0
-  82.0 - 83.125
-  83.125 - 84.25
-  84.25 - 85.375
-  85.375 - 86.5
-  86.5 - 87.625
-  87.625 - 88.75
-  88.75 - 89.875
-  89.875 - 91.0

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



Sample point data

Defended climate change

Label	Easting	Northing	1% AEP (+20%)	
			Depth	Height
1	378458	449262	0.47	85.33
2	378483	449262	0.44	85.37
3	378508	449262	NoData	NoData
4	378533	449262	NoData	NoData
5	378558	449262	NoData	NoData
6	378458	449287	0.48	85.43
7	378483	449287	0.42	85.43
8	378508	449287	NoData	NoData
9	378533	449287	NoData	NoData
10	378558	449287	NoData	NoData
11	378458	449312	0.23	85.49
12	378483	449312	0.32	85.49
13	378508	449312	0.06	86.13
14	378533	449312	NoData	NoData
15	378558	449312	NoData	NoData
16	378458	449337	0.13	85.91

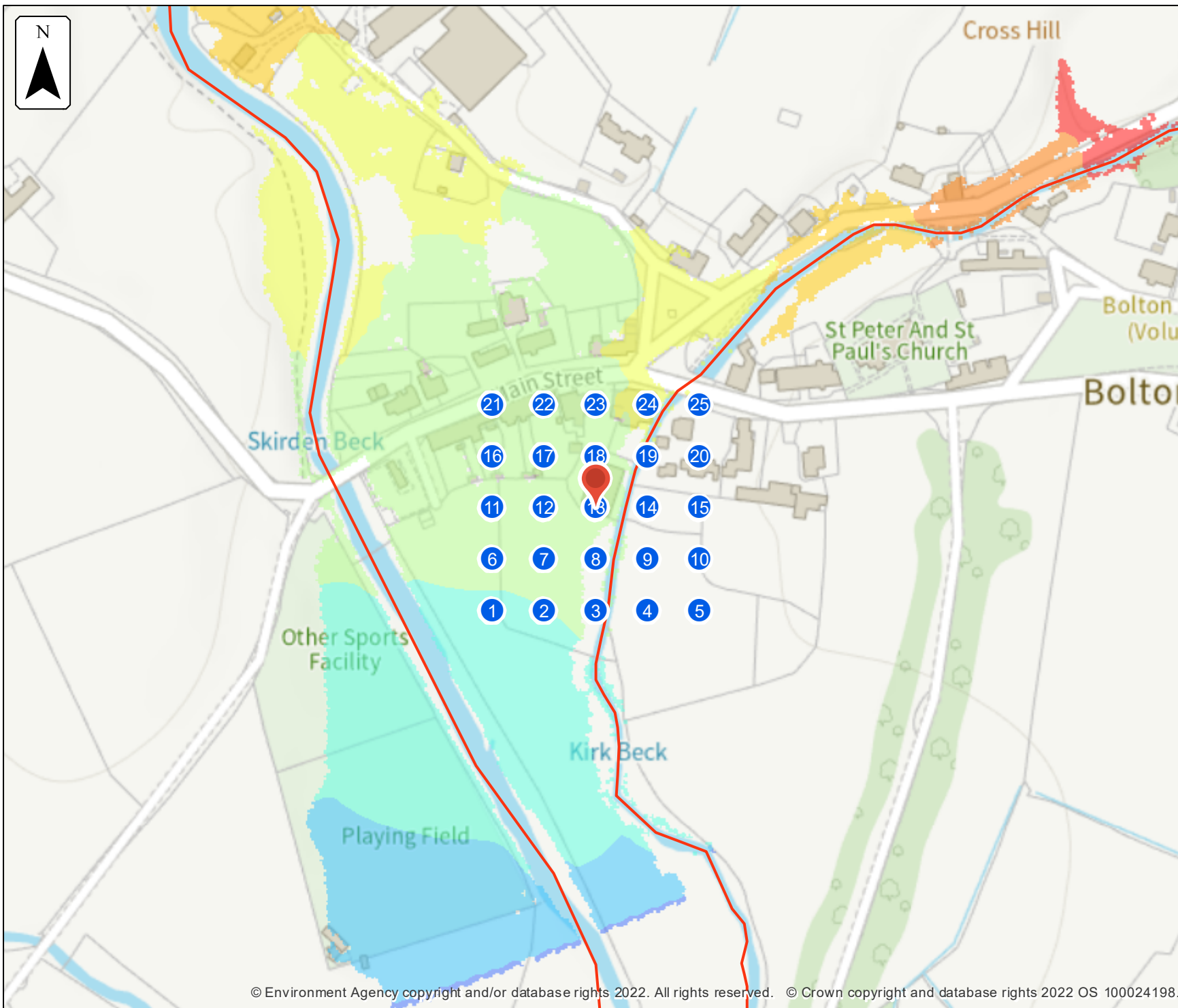
Label	Easting	Northing	1% AEP (+20%)	
			Depth	Height
17	378483	449337	0.32	85.91
18	378508	449337	0.15	85.98
19	378533	449337	0.44	86.64
20	378558	449337	NoData	NoData
21	378458	449362	0.74	86.26
22	378483	449362	0.19	85.99
23	378508	449362	0.35	86.12
24	378533	449362	0.22	86.89
25	378558	449362	NoData	NoData

Data in this table comes from the Bolton-by-Bowland 2007 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.



Defences removed climate change modelled fluvial extent and height

Location (easting/northing)
378508/449312

Scale Created
1:2,500 16 May 2022

Model name
**Bolton-by-Bowland
2007**

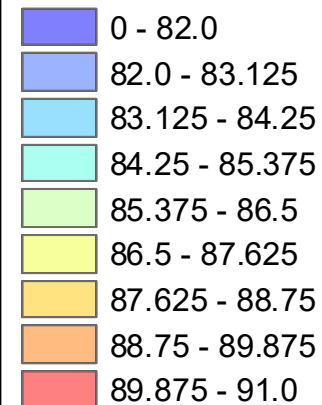


Selected location

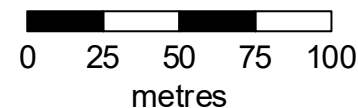
— Main river

Modelled 2D grid

Water level in mAOD



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



Sample point data

Defences removed climate change

Label	Easting	Northing	1% AEP (+20%)	
			Depth	Height
1	378458	449262	0.47	85.33
2	378483	449262	0.44	85.37
3	378508	449262	NoData	NoData
4	378533	449262	NoData	NoData
5	378558	449262	NoData	NoData
6	378458	449287	0.48	85.43
7	378483	449287	0.42	85.43
8	378508	449287	NoData	NoData
9	378533	449287	NoData	NoData
10	378558	449287	NoData	NoData
11	378458	449312	0.24	85.49
12	378483	449312	0.32	85.49
13	378508	449312	0.06	86.13
14	378533	449312	NoData	NoData
15	378558	449312	NoData	NoData
16	378458	449337	0.13	85.91

Label	Easting	Northing	1% AEP (+20%)	
			Depth	Height
17	378483	449337	0.32	85.90
18	378508	449337	0.15	85.98
19	378533	449337	0.37	86.57
20	378558	449337	NoData	NoData
21	378458	449362	0.74	86.26
22	378483	449362	0.19	85.99
23	378508	449362	0.35	86.12
24	378533	449362	0.20	86.87
25	378558	449362	NoData	NoData

Data in this table comes from the Bolton-by-Bowland 2007 model.

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

Any blank cells show where a particular scenario has not been modelled for this location.

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

Strategic flood risk assessments

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

This should give you information about:

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

About this data

This data has been generated by strategic scale flood models and is not intended for use at the individual property scale. If you're intending to use this data as part of a flood risk assessment, please include an appropriate modelling tolerance as part of your assessment. The Environment Agency regularly updates its modelling. We recommend that you check the data provided is the most recent, before submitting your flood risk assessment.

Flood risk activity permits

Under the Environmental Permitting (England and Wales) Regulations 2016 some developments may require an environmental permit for flood risk activities from the Environment Agency. This includes any permanent or temporary works that are in, over, under, or nearby a designated main river or flood defence structure.

[Find out more about flood risk activity permits](#)

Help and advice

Contact the Cumbria and Lancashire Environment Agency team at inforequests.cmblnc@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