

Appendix A: Interactive Mapping Portal User Guide

Please tick the boxes next to the dataset titles in the map legend to display the data. If data does not display, it means it is not present in that particular area.

Legend	Description	Reference
Authority Information High Peak Borough Boundary	The boundary of the High Peak Borough, the study area for this SFRA. This includes areas in the Borough covered by the Peak District National Park LPA.	Section 1.5 SFRA study area
Watercourses Main Rivers All Watercourses Canals	Main Rivers – the Environment Agency (EA) statutory main rivers map detailing the watercourses which are designated a Main River by the EA. All Watercourses – the EA Detailed River Network representing the river network based on Ordnance Survey (OS) MasterMap for surface features and EA culvert surveys for underground features (where available). Canals - WFD Artificial Water Bodies – Canals Cycle 1, is a polyline Shapefile dataset containing Water Framework Directive (WFD) attributes that have been collated as defined for the implementation of the Water Framework Directive. The WFD defines an ‘artificial water body’ as a body of surface water created by human activity.	Section 1.5 SFRA study area Section 4.3 Fluvial flood risk
Flood Zones Modelled Flood Zone 3b Indicative Flood Zone 3b Flood Zone 3a Flood Zone 2	The Flood Zones are for use in development planning and flood risk assessments: <ul style="list-style-type: none"> • Modelled Flood Zone 3b – Functional Floodplain: This zone comprises land where water must flow or be stored in times of flood. • Indicative Flood Zone 3b – Where no detailed hydraulic modelling exists, Indicative Flood Zone 3b should be used, which shows the same extent as Flood Zone 3a. 	Section 3.2.1 Flood Zones – fluvial risk Appendix B – for model details

Legend	Description	Reference
	<ul style="list-style-type: none"> • Flood Zone 3a – High probability: greater or equal to a 1% chance of river flooding in any given year (Excludes Flood Zone 3b, which is derived as part of the SFRA). • Flood Zone 2 – Medium probability: between a 1% and 0.1% chance of river flooding in any given year. <p>Flood Zones 2 and 3a, as shown on the interactive mapping portal, show the same extent as the online EA’s Flood Map for Planning (FMfP) (which incorporates latest modelled data) other than for the following watercourses, where additional detailed modelling was available that has not been incorporated into the FMfP and was used in preference: Glossop Brook, Hurst Brook and Long Clough.</p> <p>Flood Zone 3b is identified as land which would flood within a 3.3% annual chance where detailed hydraulic modelling exists. The following models have appropriate outputs which have been included: Hogshaw Nun, Hurst Brook, River Sett. Where detailed hydraulic modelling exists but the 3.3% AEP event is not available, the larger, more conservative 1% AEP event was used. This is the case for the following models: Black Brook, Glossop Brook at Tribbs, Hollingworth Clough Brook, Long Clough, Otter Brook, Peakshole Water, River Goyt, River Wye, Upper Derwent, Warm Brook.</p>	

Legend	Description	Reference
<p>Climate Change Fluvial Extent (Modelled) 1% AEP with Central Climate Change allowance 1% AEP with Higher Central Climate Change allowance</p>	<p>These extents are from existing hydraulic models, where the 1% AEP flow is upscaled by the EA's climate change allowances for the 2080s epoch for the relevant management catchment. The defended outputs are presented in the mapping.</p> <p>The High Peak Borough predominantly lies across two management catchments (see Table 5-1 of the main report for further details and allowances). From the modelled outlines available, the following allowances have been included:</p> <p>Central allowance:</p> <ul style="list-style-type: none"> • Hogshaw Nun – 1% AEP plus 29% CC <p>Higher Central allowance:</p> <ul style="list-style-type: none"> • Hogshaw Nun – 1% AEP plus 39% CC <p>Where no detailed modelling exists, Flood Zone 3a (1% AEP) can be compared against Flood Zone 2 (0.1% AEP), for an indication of areas most sensitive to climate change.</p>	<p>Section 5 Impact of Climate Change Appendix B – for model details</p>
<p>Risk of Flooding from Rivers and Sea (EA) Very Low Low Medium High</p>	<p>The Risk of Flooding from Rivers and Sea maps have been generated from the EA's National Flood Risk Assessment (NaFRA) and National Receptor Dataset (NRD).</p> <ul style="list-style-type: none"> • Very low risk: each year there is a chance of flooding of less than 1 in 1000 (0.1%) • Low risk: each year there is a chance of flooding of between 1 in 1000 (0.1%) and 1 in 100 (1%) • Medium risk: each year there is a chance of flooding of between 1 in 100 (1%) and 1 in 30 (3.3%) • High risk: each year there is a chance of flooding of greater than 1 in 30 (3.3%) 	<p>Section 4.3 Fluvial flood risk Appendix E Summary of flood risk</p>

Legend	Description	Reference
Reduction in Risk of Flooding from Rivers and Sea (EA)	The Reduction in Risk of Flooding from Rivers and Sea due to Defences is a spatial dataset that indicates where areas have reduced flood risk from rivers and sea due to the presence of flood defences.	Section 6 Flood alleviation schemes and assets
Risk of Flooding from Surface Water (EA) 3.3% AEP 1% AEP 0.1% AEP	The EA's Risk of Flooding from Surface Water (RoFSW) flood maps give an indication of the broad areas likely to be at risk of surface water flooding. This includes flooding that takes place from the surface runoff generated by rainwater. The data includes the extent, velocity, depth, and hazard mapping for the 3.3%, 1% and 0.1% AEP events. The extent of flooding for each of the events is shown in the mapping.	Section 4.4 Surface water flooding Appendix E Summary of flood risk
Climate Change Surface Water Extent (Modelled) 3.3% AEP 2070s 1% AEP 2070s	The RoFSW was uplifted to represent surface water climate change for the following events and scenarios: Derwent Derbyshire Catchment (East of Borough): <ul style="list-style-type: none"> • 3.3% AEP plus 35% • 1% AEP plus 40% Upper Mersey Catchment (West of Borough): <ul style="list-style-type: none"> • 3.3% AEP plus 40% • 1% AEP plus 45% 	Section 4.4 Surface water flooding Section 5 Impact of Climate Change
Reservoir Flood Extents (EA) Wet Day Dry Day	The EA reservoir flood extents show the predicted flooding which would occur if a dam or reservoir fails. The EA provide two scenarios: <ul style="list-style-type: none"> • Dry Day – the predicted flooding which would occur if the dam or reservoir fails when rivers are at normal levels. • Wet Day – the predicted worsening of the flooding which would be expected if a river is already experiencing an extreme natural flood. 	Section 4.8 Flooding from reservoirs

Legend	Description	Reference
<p>Groundwater Flooding Susceptibility (EA)</p> <p><25%</p> <p>>=25% <50%</p> <p>>=50% <75%</p> <p>>=75%</p>	<p>The EA's groundwater flooding susceptibility data shows the degree to which areas of England, Scotland and Wales are susceptible to groundwater flooding on the basis of geological and hydrogeological conditions. This is shown at a resolution of 50m. It does not show the likelihood of groundwater flooding occurring, i.e. it is a hazard not risk-based dataset.</p>	<p>Section 4.6 Groundwater flooding</p> <p>Appendix E Summary of flood risk</p>
<p>Historic Flooding</p> <p>EA Historic Flood Map</p> <p>EA Recorded Flood Outlines</p>	<p>The EA Historic Flood Map shows areas of land that have been previously subject to fluvial flooding in the area. This includes flooding from rivers, the sea and groundwater springs but excludes surface water. The EA Recorded Flood Outlines include surface water too.</p> <p>If an area is not covered by the Historic Flood Map or Recorded Flood Outlines, it does not mean that it has never flooded, only that currently there are no records of flooding in this area from the EA records.</p> <p>Other historic information is supplemented in the Level 1 report (section 4.1).</p>	<p>Section 4.1 Historical Flooding</p> <p>Appendix E Summary of flood risk</p>
<p>Flood Alert and Warning Areas</p> <p>EA Flood Alert Areas</p> <p>EA Flood Warning Areas</p>	<p>The EA issue flood warnings to designated Flood Warning Areas when a river level hits a certain threshold or when heavy rainfall or high tides and strong winds are forecast. "Flooding is expected, immediate action is required".</p> <p>Flood Alerts are issued when there is water out of bank for the first time anywhere in the catchment and when forecasts indicate flooding may be possible. "Flooding is possible, be prepared".</p> <p>Both datasets are a polygon GIS shapefile where the above are issued; they are not flood extents.</p>	<p>Section 4.9 Flood alerts and flood warnings</p> <p>Appendix D Flood Alerts and Flood Warnings</p>
<p>Defences</p> <p>Embankment</p> <p>Engineered High Ground</p>	<p>The EA Asset Information Management System (AIMS) spatial Flood Defence dataset, shows flood defences currently owned, managed, or inspected by the EA. A defence is any asset that provides flood defence or coastal protection functions.</p>	<p>Section 6.4 Major flood risk management assets in High</p>



Legend	Description	Reference
Natural High Ground Wall Flood Gate	The main defences within High Peak Borough are natural high ground, but there are also some embankments, walls and demountable defences.	Peak Borough Table 6-2 Locations shown in the 'EA AIMS' data set