Annex 1 Past floods

Annex 1 Past floods

Annex 1 Past floods

Comments	Data owner	Area flooded	Flood event outline confidence	Flood event outline source	Survey date	Photo ID	Lineage	Sensitive data	Protective marking descriptor
Optional Max 1,000 characters Any additional comments about the past flood record.	Optional Max 250 characters	Optional Number with two decimal places The total area of the land flooded, in km^2	Optional Pick from drop-down Choose from; 'High' (data includes one of: Aerial video, Aerial photos, Professional survey, Flood level information, EA flood data recording staff notes), 'Medium' (data includes one of: EA/LA ground video, EA/LA ground photos, EA/LA flood event outline map, LA/professional partner officer site records, Public ground video), 'Low' (not confident) or 'Unknown'.	Optional Pick from drop-down	Optional 'yyyy' or 'yyyy-mm' or 'yyyy-mm-dd'	Optional Max 50 characters Provide references to relevant specific photographs, or to a set of relevant photographs. It may not be practical to reference all relevant photographs for each flood event.	Optional Max 250 characters Lineage is how and what the data is made from. Has this data been created by using data owned or derived from data owned by 3rd party (external) organisations? If yes please give details.	Optional Pick from drop-down Has the information been classified under the Government's Protective Marking Scheme? Include protective marking time limit where known. Note: If "Approved for Access" then report "Unmarked".	Optional Max 50 characters For use where organisations apply the Government's Protective Marking Scheme.
	Epping Forest District Council		Medium	Site survey	1998-04-20		Ordnance Survey AddressPoint; CEH 1:50k River Centreline; NextMap DTM.	Unmarked	Private
	Various authorities. Data from water companies held under confidentiality agreement							Protect	Commercial

Annex 1 Past floods

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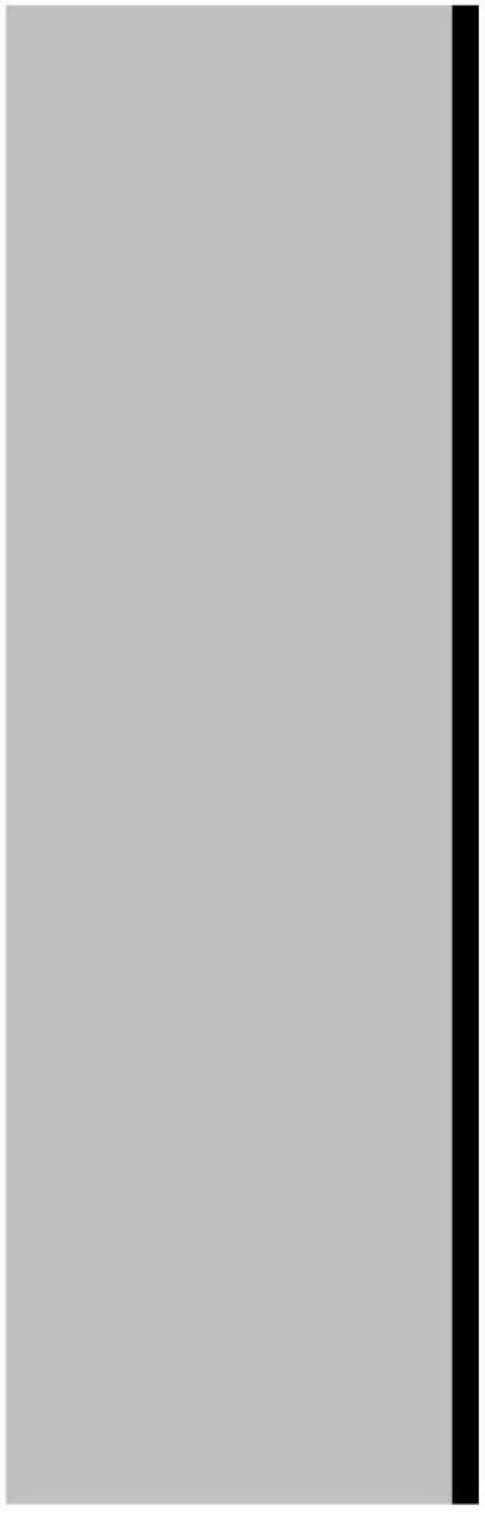
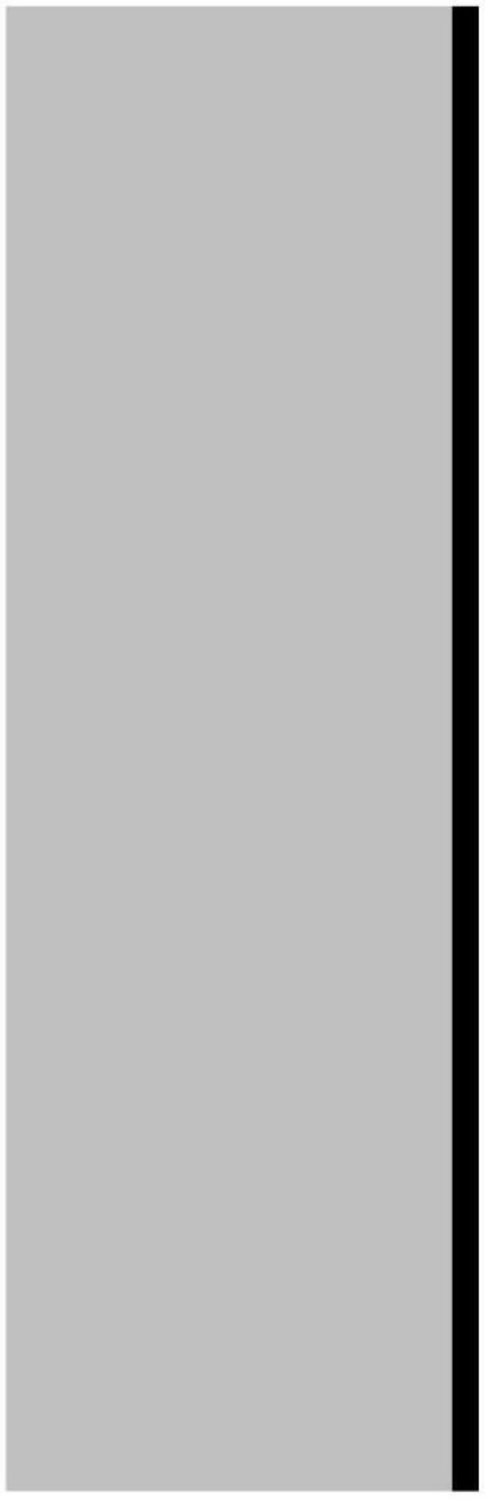
European Flood Event Code Auto-populated Max 42 characters This field will autopopulate using the LLFA name provided on the "Instructions" tab, and the Flood ID. It is an EU-wide unique identifier and will be used to report the flood information. Format: UK<ONS Code><P or F><LLFA Flood ID>. "ONS Code" is a unique reference for each LLFA. "P or F" indicates if the event is past or future. "LLFA Flood ID" is a sequential number beginning with 0001.
UKE10000012P0001
UKE10000013P0001

Annex 1 Past floods



Annex 1 Past floods



Annex 1 Past floods

ANNEX 3: Records of Flood Risk Areas and their rationale (preliminary assessment report spreadsheet)

Field:	Flood Risk Area ID	Name of Flood Risk Area	National Grid Reference	Main source of flooding	Additional source(s) of flooding	Confidence in main source of flooding	Main mechanism of flooding	Main characteristic of flooding
Mandatory / optional:	Mandatory	Mandatory	Mandatory	Mandatory	Optional	Optional	Mandatory	Mandatory
Format:	Unique number between 1-9999	Max 250 characters	12 characters: 2 letters, 10 numbers	Pick from drop-down	Max 250 characters, same source terms	Pick from drop-down	Pick from drop-down	Pick from drop-down
Notes:	A sequential number starting at 1 and incrementing by 1 for each record.	Name of the locality associated with the Flood Risk Area: a town, city, or county.	National Grid Reference of the centroid (centre point, falls within polygon) of the Flood Risk Area.	Pick the source from which there is a significant flood risk. Refer to the PFRA guidance for definitions of sources.	If there is also significant flood risk generated by another source (other than the Main source of flooding), report the source(s) here, using the same source terms.	Pick a broad level of confidence in the Main source of flooding from: 'High' (compelling evidence of source - about 80% confident that source is correct), 'Medium' (some evidence of source but not compelling - about 50% confident that source is correct) 'Low' (source assumed - about 20% confident that source is correct) or 'Unknown'.	Pick a mechanism from; 'Natural exceedance' (of capacity), 'Defence exceedance' (floodwater overtopping defences), 'Failure' (of natural or artificial defences or infrastructure, or of pumping), 'Blockage or restriction' (natural or artificial blockage or restriction of a conveyance channel or system), or 'No data'.	Pick a characteristic from; 'Flash flood' (rises and falls quite rapidly with little or no advance warning), 'Natural flood' (due to significant precipitation, at a slower rate than a flash flood), 'Snow melt flood' (due to rapid snow melt), 'Debris flow' (conveying a high degree of debris), or 'No data'. Most UK floods are 'Natural floods'.
Example:	1	London	SX1234512345	Surface runoff	NA	High	Natural exceedance	Natural flood
Records begin here:								

Significant consequences to human health	Human health consequences - residential properties	Property count method	Other human health consequences	Significant economic consequences	Number of non-residential properties flooded	Property count method	Other economic consequences	Significant consequences to the environment	Environment consequences	Significant consequences to cultural heritage	Cultural heritage consequences
Mandatory	Optional	Optional	Optional	Mandatory	Optional	Optional	Optional	Mandatory	Optional	Mandatory	Optional
Pick from drop-down	Number between 1-10,000,000	Pick from drop-down	Max 250 characters	Pick from drop-down	Number between 1-10,000,000	Pick from drop-down	Max 250 characters	Pick from drop-down	Max 250 characters	Pick from drop-down	Max 250 characters
Has the Flood Risk Area been identified as a result of significant consequences to human health?	Record the number of residential properties where the building structure would be affected either internally or externally by the flood.	Where residential or non-residential properties have been counted, it is important to record the method of counting, to aid comparisons between counts. Choose from: 'Detailed GIS' (using property outlines, as per Environment Agency guidance), 'Simple GIS' (using property points), 'Estimate from map', or 'Observed number'.	If the Flood Risk Area has been identified as a result of other Significant consequences to human health, describe them (such as information about the number of critical services flooded).	Has the Flood Risk Area been identified as a result of significant economic consequences?	Record the number of non-residential properties where the building structure would be affected either internally or externally by the flood.	Where residential or non-residential properties have been counted, it is important to record the method of counting, to aid comparisons between counts. Choose from: 'Detailed GIS' (using property outlines, as per Environment Agency guidance), 'Simple GIS' (using property points), 'Estimate from map', or 'Observed number'.	If the Flood Risk Area has been identified as a result of other Significant economic consequences, describe them (such as information about the area of agricultural land flooded, length of roads and rail flooded).	Has the Flood Risk Area been identified as a result of significant consequences to the environment?	If the Flood Risk Area has been identified as a result of Significant consequences to the environment, describe them (such as information about national and international designated sites flooded, and pollution sources flooded).	Has the Flood Risk Area been identified as a result of significant consequences to cultural heritage?	If the Flood Risk Area has been identified as a result of Significant consequences to cultural heritage, describe them (such as information about the number and type of heritage assets flooded).
Yes	30000	Detailed GIS		No				No		No	

Origin of Flood Risk Area	Amended Flood Risk Area rationale	New Flood Risk Area rationale	Rationale detail	European Flood Risk Area Code
Mandatory Pick from drop-down	Mandatory Pick from drop-down	Mandatory Pick from drop-down	Mandatory Max 1,000 characters	Auto-populated Max 42 characters
Pick the origin from either; 'Indicative' Flood Risk Area, 'Amended' Flood Risk Area (in which case Amended Flood Risk Area rationale is mandatory), or 'New' Flood Risk Area (in which case New Flood Risk Area rationale is mandatory).	Pick the main rationale from either; 'Geography', 'Past floods', or 'Future floods'. Then provide further detail in Rationale detail. This is not mandatory if the Flood Risk Area was an indicative Flood Risk Area and has not been amended, or is a new Flood Risk Area.	Pick the main rationale from either 'Past floods', or 'Future floods'. Then provide further detail in Rationale detail. This is not mandatory if the Flood Risk Area was an indicative Flood Risk Area.	Summarise the rationale for amending an indicative Flood Risk Area, or identifying a new Flood Risk Area. Refer to Defra & WAG guidance to LLFAs on "Selecting and reviewing Flood Risk Areas for local sources of flooding". If the Flood Risk Area was an indicative Flood Risk Area and has not been amended, record "Indicative Flood Risk Area".	This field will autopopulate using the LLFA name provided on the "Instructions" tab, and the Flood Risk Area ID. It is an EU-wide unique identifier and will be used to report the Flood Risk Area information. Format: UK<ONS Code><A><LLFA Flood ID>. "ONS Code" is a unique reference for each LLFA. "A" indicates it is a Flood Risk Area. "LLFA Flood ID" is a sequential number beginning with 0001.
Indicative	NA	NA	Indicative Flood Risk Area	UKE10000012A0001

ANNEX 2: Records of future floods and their consequences (preliminary assessment report spreadsheet)

Field:	Flood ID	Description of assessment method	Name of Location	National Grid Reference	Location Description	Name	Flood modelled	Probability	Main source of flooding	Additional source(s) of flooding	Confidence in main source of flooding
Mandatory / optional:	Mandatory	Mandatory	Mandatory	Mandatory	Optional	Optional	Optional	Mandatory	Mandatory	Optional	Optional
Format:	Unique number between 1-9999	Max 1,000 characters	Max 250 characters	12 characters: 2 letters, 10 numbers	Max 250 characters	Max 250 characters	Max 250 characters	Max 25 characters	Pick from drop-down	Max 250 characters, same source terms	Pick from drop-down
Notes:	A sequential number starting at 1 and incrementing by 1 for each record.	Description of the future flood information and how it has been produced. Cover Regulation 12(6) requirements of (a) topography, (b) the location of watercourses, (c) the location of flood plains that retain flood water, (d) the characteristics of watercourses, and (e) the effectiveness of any works constructed for the purpose of flood risk management. Information from other relevant fields (Probability, Main source, Name) should be repeated here.	Name of the locality associated with the flood, using recognised postal address names such as streets, towns, counties. If the flood affects the whole LLFA, then record the name of the LLFA.	National Grid Reference of the centroid (centre point, falls within polygon) of the flood extent, or of the area affected if there is no extent information. If the flood affects the whole LLFA, then record the centroid of the LLFA.	A description of the general location that could be flooded.	Name of the model or map product or project which produced the future flood information	Background, or additional information on the probability of the flood modelled - such as whether Probability refers to probability of rainfall or water on the ground.	The chance of the flood occurring in any given year - record X from '1 in X chance of occurring in any given year'.	Pick the source which generates the majority of flooding. Refer to the PFRA guidance for definitions of sources.	If the flood is generated by, or interacts with, any other sources (other than the Main source of flooding), report the source(s) here, using the same source terms.	Pick a broad level of confidence in the Main source of flooding from: 'High' (compelling evidence of source - about 80% confident that source is correct); 'Medium' (some evidence of source but not compelling - about 50% confident that source is correct) 'Low' (source assumed - about 20% confident that source is correct) or 'Unknown'.
Example:		1 See records below for examples of description of assessment method.	Essex	SX12345 12345		Flood Map for Surface Water - 1 in 200 deep	Probability refers to the probability of the rainfall event, in this case producing flooding of greater than 0.3m depth.	200	Surface runoff		High
Records begin here:		1 • Topography is derived from LIDAR (in larger urban areas, on 1, 2 and 3m grids; original accuracy ± 0.15m) and Geoperspective data (original accuracy ± 1.5m), processed to remove buildings and vegetation, then degraded to a composite 5m DTM. Manual edits applied where flow paths clearly omitted e.g. below bridges. • Flow routes dictated by topography; no allowance made for manmade drainage. The DTM may miss flow paths below bridges. • Areas that may flood are defined by dynamically routing a 6.5 hour duration storm with 1 in 200 chance of occurring in any year, over the DTM using JBA's JFLOW–GPU model. • Manning's n of 0.1 is used throughout, to allow broad scale effects of buildings and other obstructions to be approximated. • No allowance made for drainage, pumping or other works constructed for the purpose of flood risk management. • The 'less susceptible' layer shows where modelled flooding is 0.1-0.3m deep; you must not interpret this as depth of flooding, rather as indicative of susceptibility to flooding because of modelling uncertainties.	Gloucestershire	SO876400190790	Entire county of Gloucestershire	Areas Susceptible to Surface Water Flooding (ASTSWF) - Less	Probability refers to the probability of the rainfall event. This identifies areas which are 'less susceptible' to surface water flooding. For more information refer to "What are Areas Susceptible to Surface Water Flooding" Environment Agency December 2010.		200 Surface runoff		High
		2 • Topography is derived from LIDAR (in larger urban areas, on 1, 2 and 3m grids; original accuracy ± 0.15m) and Geoperspective data (original accuracy ± 1.5m), processed to remove buildings and vegetation, then degraded to a composite 5m DTM. Manual edits applied where flow paths clearly omitted e.g. below bridges. • Flow routes dictated by topography; no allowance made for manmade drainage. The DTM may miss flow paths below bridges. • Areas that may flood are defined by dynamically routing a 6.5 hour duration storm with 1 in 200 chance of occurring in any year, over the DTM using JBA's JFLOW–GPU model. • Manning's n of 0.1 is used throughout, to allow broad scale effects of buildings and other obstructions to be approximated. • No allowance made for drainage, pumping or other works constructed for the purpose of flood risk management. • The 'intermediate susceptibility' layer shows where modelled flooding is 0.3-1.0m deep; you must not interpret this as depth of flooding, rather as indicative of susceptibility to flooding because of modelling uncertainties.	Gloucestershire	SO876400190790	Entire county of Gloucestershire	Areas Susceptible to Surface Water Flooding (ASTSWF) - Intermediate	Probability refers to the probability of the rainfall event. This identifies areas with 'intermediate susceptibility' to surface water flooding.		200 Surface runoff		High

3	• Topography is derived from LIDAR (in larger urban areas, on 1, 2 and 3m grids; original accuracy ± 0.15m) and Geoperspective data (original accuracy ± 1.5m), processed to remove buildings and vegetation, then degraded to a composite 5m DTM. Manual edits applied where flow paths clearly omitted e.g. below bridges. • Flow routes dictated by topography; no allowance made for manmade drainage. The DTM may miss flow paths below bridges. • Areas that may flood are defined by dynamically routing a 6.5 hour duration storm with 1 in 200 chance of occurring in any year, over the DTM using JBA's JFLOW–GPU model. • Manning's n of 0.1 is used throughout, to allow broad scale effects of buildings and other obstructions to be approximated. • No allowance made for drainage, pumping or other works constructed for the purpose of flood risk management. • The 'more susceptible' layer shows where modelled flooding is >1.0m deep; you must not interpret this as depth of flooding, rather as indicative of susceptibility to flooding because of modelling uncertainties.	Gloucestershire	SO876400190790	Entire county of Gloucestershire	Areas Susceptible to Surface Water Flooding (AStSWF) - More	Probability refers to the probability of the rainfall event. This identifies areas which are 'more susceptible' to surface water flooding.	200 Surface runoff	High
4	• Topography is derived from 64.5% LIDAR (on 0.25m-2m grids; original accuracy ± 0.15m) and 35.5% NEXTMap SAR (on 5m grid; original accuracy ± 1.0m), processed to remove buildings & vegetation, then combined on a 2m grid; buildings added with an arbitrary height of 5m based on OS MasterMap 2009 building footprints, then resampled to a 5m grid DTM. Manual edits applied where flow paths clearly omitted e.g. below bridges. • Flow routes dictated by topography; a uniform allowance of 12mm/hr has been made for manmade drainage in urban areas. Infiltration allowance reduces runoff to 39% in rural areas and 70% in urban areas. • Areas that may flood are defined by dynamically routing a 1.1 hour duration storm with 1 in 30 chance of occurring in any year over the DTM using JBA's JFLOW–GPU model. • Manning's n of 0.1 in rural areas; 0.03 in urban areas, to reflect explicit modelling of buildings in urban areas. • No allowance made for local variations in drainage, pumping or other works constructed for the purpose of flood risk management. • The '>0.1m' layer shows where modelled flooding is greater than 0.1m deep.	Gloucestershire	SO876400190790	Entire county of Gloucestershire	Flood Map for Surface Water (FMfSW) - 1 in 30	Probability refers to the probability of the rainfall event, in this case producing flooding of greater than 0.1m depth.	30 Surface runoff	High
5	• Topography is derived from 64.5% LIDAR (on 0.25m-2m grids; original accuracy ± 0.15m) and 35.5% NEXTMap SAR (on 5m grid; original accuracy ± 1.0m), processed to remove buildings & vegetation, then combined on a 2m grid; buildings added with an arbitrary height of 5m based on OS MasterMap 2009 building footprints, then resampled to a 5m grid DTM. Manual edits applied where flow paths clearly omitted e.g. below bridges. • Flow routes dictated by topography; a uniform allowance of 12mm/hr has been made for manmade drainage in urban areas. Infiltration allowance reduces runoff to 39% in rural areas and 70% in urban areas. • Areas that may flood are defined by dynamically routing a 1.1 hour duration storm with 1 in 30 chance of occurring in any year over the DTM using JBA's JFLOW–GPU model. • Manning's n of 0.1 in rural areas; 0.03 in urban areas, to reflect explicit modelling of buildings in urban areas. • No allowance made for local variations in drainage, pumping or other works constructed for the purpose of flood risk management. • The '>0.3m' layer shows where modelled flooding is greater than 0.3m deep.	Gloucestershire	SO876400190790	Entire county of Gloucestershire	Flood Map for Surface Water (FMfSW) - 1 in 30 deep	Probability refers to the probability of the rainfall event, in this case producing flooding of greater than 0.3m depth.	30 Surface runoff	High
6	• Topography is derived from 64.5% LIDAR (on 0.25m-2m grids; original accuracy ± 0.15m) and 35.5% NEXTMap SAR (on 5m grid; original accuracy ± 1.0m), processed to remove buildings & vegetation, then combined on a 2m grid; buildings added with an arbitrary height of 5m based on OS MasterMap 2009 building footprints, then resampled to a 5m grid DTM. Manual edits applied where flow paths clearly omitted e.g. below bridges. • Flow routes dictated by topography; a uniform allowance of 12mm/hr has been made for manmade drainage in urban areas. Infiltration allowance reduces runoff to 39% in rural areas and 70% in urban areas. • Areas that may flood are defined by dynamically routing a 1.1 hour duration storm with 1 in 200 chance of occurring in any year over the DTM using JBA's JFLOW–GPU model. • Manning's n of 0.1 in rural areas; 0.03 in urban areas, to reflect explicit modelling of buildings in urban areas. • No allowance made for local variations in drainage, pumping or other works constructed for the purpose of flood risk management. • The '>0.1m' layer shows where modelled flooding is greater than 0.1m deep.	Gloucestershire	SO876400190790	Entire county of Gloucestershire	Flood Map for Surface Water (FMfSW) - 1 in 200	Probability refers to the probability of the rainfall event, in this case producing flooding of greater than 0.1m depth.	200 Surface runoff	High

7	• Topography is derived from 64.5% LIDAR (on 0.25m-2m grids; original accuracy ± 0.15m) and 35.5% NEXTMap SAR (on 5m grid; original accuracy ± 1.0m), processed to remove buildings & vegetation, then combined on a 2m grid; buildings added with an arbitrary height of 5m based on OS MasterMap 2009 building footprints, then resampled to a 5m grid DTM. Manual edits applied where flow paths clearly omitted e.g. below bridges. • Flow routes dictated by topography; a uniform allowance of 12mm/hr has been made for manmade drainage in urban areas. Infiltration allowance reduces runoff to 39% in rural areas and 70% in urban areas. • Areas that may flood are defined by dynamically routing a 1.1 hour duration storm with 1 in 200 chance of occurring in any year over the DTM using JBA's JFLOW–GPU model. • Manning's n of 0.1 in rural areas; 0.03 in urban areas, to reflect explicit modelling of buildings in urban areas. • No allowance made for local variations in drainage, pumping or other works constructed for the purpose of flood risk management. • The '>0.3m' layer shows where modelled flooding is greater than 0.3m deep.	Gloucestershire	SO876400190790	Entire county of Gloucestershire	Flood Map for Surface Water (FMfSW) - 1 in 200 deep	Probability refers to the probability of the rainfall event, in this case producing flooding of greater than 0.3m depth.		200 Surface runoff		High
8	• Areas Susceptible to Groundwater Flooding (AStGWF) is a strategic scale map showing groundwater flood areas on a 1km square grid • This data has used the top two susceptibility bands of the British Geological Society (BGS) 1:50,000 Groundwater Flood Susceptibility Map, which was developed on a 50m grid from: • NEXTMap 5m grid DTM. • National Groundwater Level data on a 50m grid • BGS 1:50 000 geological mapping, with classifications of permeability • It covers consolidated aquifers (chalk, limestone, sandstone etc.) and superficial deposits. • Flood plains are not explicitly identified; the mapping identifies where groundwater is likely to emerge, and not where the water is subsequently likely to flow or pond. • No allowance is made for engineering works, or for groundwater rebound or abstraction to prevent groundwater rebound. • Shows the proportion of each 1km grid square which is susceptible to groundwater	Gloucestershire	SO876400190790	Entire county of Gloucestershire	Areas Susceptible to Groundwater Flooding (AStGWF)	Does not describe a probability, but shows places where groundwater emergence more likely to occur.	Unknown	Groundwater		High
9	• Modelling developed from combination of national (2004) and local (generally 1998-2010) modelling. • Topography derived from LIDAR (on 0.25m-2m grids; original accuracy ± 0.15m), NEXTMap SAR (on 5m grid; original accuracy ± 1.0m), processed to remove buildings & vegetation. For local modelling, topography may include ground survey. • Location of watercourses and tidal flow routes dictated by topographic survey. • Areas that may flood are defined for catchments >3km² by routing appropriate flows for that catchment through the model to ascertain water level and thus depth and extent. • Manning's n of 0.1 used for national fluvial modelling; variable (calibrated) values for national tidal modelling; appropriate values selected for local modelling. Channel capacity assumed as QMED for national fluvial modelling; local survey methods used for local modelling. • For the purpose of flood risk management, models assume that there are no raised defences.	Gloucestershire	SO876400190790	Entire county of Gloucestershire	Flood Map (for rivers and sea) - flood zone 3	Fluvial 1 in 100, tidal 1 in 200		100 Main rivers	Sea, ordinary watercourses	Medium
10	• Modelling developed from combination of national (2004) and local (generally 2004-2010) modelling. • Topography derived from LIDAR (on 0.25m-2m grids; original accuracy ± 0.15m), NEXTMap SAR (on 5m grid; original accuracy ± 1.0m), processed to remove buildings & vegetation. For local modelling, topography may include ground survey. • Location of watercourses and tidal flow routes dictated by topographic survey. • Areas that may flood are defined for catchments >3km² by routing appropriate flows for that catchment through the model to ascertain water level and thus depth and extent. • Manning's n of 0.1 used for national fluvial modelling; variable (calibrated) values for national tidal modelling; appropriate values selected for local modelling. Channel capacity assumed as QMED for national fluvial modelling; local survey methods used for local modelling. • For the purpose of flood risk management, models assume that there are no raised defences.	Gloucestershire	SO876400190790	Entire county of Gloucestershire	Flood Map (for rivers and sea) - flood zone 2	Extreme flood outline is 1 in 1000, and includes some historic where judged that this gives an indication of areas at risk of future flooding.		1000 Main rivers	Sea, ordinary watercourses	Medium

11	Locally Agreed Surface Water Flood Map: Cheltenham Borough: Within Cheltenhan urban area SWMP mapping, outside of urban areas Flood Map for Surface Water Cotswold District: Local mapping undertaken by Cotswold District for Andoversford, Chipping Campden, Moreton-in-Marsh, Naunton, Weston sub-edge and Willersey. For remainder of District use the Flood Map for Surface Water. Forest of Dean District: Flood Map for Surface Water to be used throughout District. Gloucester City: SWMP mapping to be used for Gloucester City Stroud District: SWMP mapping to be used where available (covers River Frome catchment, covering the eastern half of Stroud District, including Stroud town itself). For the remainder of the District use the Flood Map for Surface Water. Tewkesbury Borough: SWMP mapping to be used where available (covers Carrant Brook, River Swilgate and Tirle Brook catchments), except in Tewkesbury town where the Areas Susceptible to Surface Water Flooding map should be used. For the remainder of the Borough use the Flood Map for Surface Water	Gloucestershire	SO876400190790	Entire county of Gloucestershire	SWMP mapping 1 in 200 yr (>0.3m) Flood Map for Surface Water - 1 in 200 deep Areas Susceptible to Surface Water Flooding - 'intermediate and more'	1 in 200 year rainfall event, proudueing flooding to a depth of greater than 0.3m	200 (except local mapping by Cotswold DC which is 100 yr + climate change)	Surface runoff	Ordinary watercourse flooding represented	High

Main mechanism of flooding	Main characteristic of flooding	Significant consequences to human health	Human health consequences - residential properties	Property count method	Other human health consequences	Significant economic consequences	Number of non-residential properties flooded	Property count method	Other economic consequences	Significant consequences to the environment	Environment consequences	Significant consequences to cultural heritage	Cultural heritage consequences
Mandatory	Mandatory	Mandatory	Optional	Optional	Optional	Mandatory	Optional	Optional	Optional	Mandatory	Optional	Mandatory	Optional
Pick from drop-down	Pick from drop-down	Pick from drop-down	Number between 1-10,000,000	Pick from drop-down	Max 250 characters	Pick from drop-down	Number between 1-10,000,000	Pick from drop-down	Max 250 characters	Pick from drop-down	Max 250 characters	Pick from drop-down	Max 250 characters
Pick a mechanism from: 'Natural exceedance' (of capacity), 'Defence exceedance' (flood/water overtopping defences), 'Failure' (of natural or artificial defences or infrastructure, or of pumping), 'Blockage or restriction' (natural or artificial blockage or restriction of a conveyance channel or system), or 'No data'.	Pick a characteristic from: 'Flash flood' (rises and falls quite rapidly with little or no advance warning), 'Natural flood' (due to significant precipitation, at a slower rate than a flash flood), 'Snow melt flood' (due to rapid snow melt), 'Debris flow' (conveying a high degree of debris), or 'No data'. Most UK floods are 'Natural floods'.	Would there be any significant consequences to human health if the future flood were to occur?	Record the number of residential properties where the building structure would be affected either internally or externally if the flood were to occur.	Where residential or non-residential properties have been counted, it is important to record the method of counting, to aid comparisons between counts. Choose from: 'Detailed GIS' (using property outlines, as per Environment Agency guidance), 'Simple GIS' (using property points), 'Estimate from map', or 'Observed number'.	If there would be other Significant consequences to human health, describe them including information such as the number of critical services flooded.	Would there be any significant economic consequences if the future flood were to occur?	Record the number of non-residential properties where the building structure would be affected either internally or externally if the flood were to occur.	Where residential or non-residential properties have been counted, it is important to record the method of counting, to aid comparisons between counts. Choose from: 'Detailed GIS' (using property outlines, as per Environment Agency guidance), 'Simple GIS' (using property points), 'Estimate from map', or 'Observed number'.	If there would be other Significant economic consequences, describe them including information such as the area of agricultural land flooded, length of roads and rail flooded.	Would there be any significant consequences to the environment if the future flood were to occur?	If there would be Significant consequences to the environment, describe them including information such as national and international designated sites flooded, and pollution sources flooded.	Would there be any significant consequences to cultural heritage if the future flood were to occur?	If there would be Significant consequences to cultural heritage, describe them including information such as the number and type of heritage assets flooded.
Natural exceedance	Natural flood	Yes	12000	Detailed GIS		No				No		No	
Natural exceedance	Natural flood	Yes	48100	Detailed GIS		Yes	18900	Detailed GIS		No		No	
Natural exceedance	Natural flood	Yes	20000	Detailed GIS		Yes	9500	Detailed GIS		No		No	

Natural exceedance	Natural flood	Yes		Yes		No	No
Natural exceedance	Natural flood	Yes		Yes		No	No
Natural exceedance	Natural flood	Yes		Yes		No	No
Natural exceedance	Natural flood	Yes	54100 Detailed GIS	Yes	22400 Detailed GIS	No	No

Natural exceedance	Natural flood	Yes	16500 Detailed GIS	Yes	9000 Detailed GIS	No	No
Natural exceedance	Natural flood	No		No		No	No
Natural exceedance	Natural flood	Yes		Yes		No	No
Natural exceedance	Natural flood	Yes		Yes		No	No

Natural exceedance	Natural flood	Yes	16753	Detailed GIS	168 critical services	Yes	1486	Detailed GIS	No	No

Comments	Data owner	Area flooded	Confidence in modelled outline	Model date	Model Type	Hydrology Type	Lineage	Sensitive data	Protective marking descriptor	European Flood Event Code
Optional Max 1,000 characters Any additional comments about the future flood record.	Optional Max 250 characters	Optional Number with two decimal places The total area of the land flooded, in km^2	Optional Pick from drop-down Pick a broad level of confidence in the modelled flood outline from; 'High' (good match to past flood extents - about 80% confident that outline is correct), 'Medium' (reasonable match - about 50% confident that outline is correct), 'Low' (poor match, sparse data - about 20% confident that outline is correct) or 'Unknown'.	Optional 'yyyy' or 'yyyy-mm' or 'yyyy-mm-dd'	Optional Max 250 characters Type of software used to create future flood information.	Optional Max 250 characters Type of hydrology method used to create future flood information.	Optional Max 250 characters Lineage is how and what the data is made from. Has this data been created by using data owned or derived from data owned by 3rd party (external) organisations? If yes please give details.	Optional Pick from drop-down Has the information been classified under the Government's Protective Marking Scheme? Include protective marking time limit where known. Note: If "Approved for Access" then report "Unmarked".	Optional Max 50 characters For use where organisations apply the Government's Protective Marking Scheme.	Auto-populated Max 42 characters This field will autopopulate using the LLFA name provided on the "Instructions" tab, and the Flood ID. It is an EU-wide unique identifier and will be used to report the flood information. Format: UK<ONS Code><P or F><LLFA Flood ID>. "ONS Code" is a unique reference for each LLFA. "P or F" indicates if the event is past or future. "LLFA Flood ID" is a sequential number beginning with 0001.
	Epping Forest District Council		Medium-Low	2008-08	2D-TuFlow	FEH (Revised Rainfall Runoff)	Ordnance Survey AddressPoint; CEH 1:50k River Centreline; NextMap DTM.	Unmarked	Private	UKE10000012F0001
	JBA Consulting (distributed by Environment Agency under licence)		Low	2009-07	JFLOW-GPU	Depth-duration-frequency curves derived from FEH CD-ROM, from centre of each 5km model, with areal reduction factor applied to convert point rainfall estimate to more representative figure. Curve then used to derive 6.5 hr, 1:200 chance rainfall depth; this is converted to hyetograph, using summer rainfall profile.		Protect	Commercial	UKE10000013F0001
	JBA Consulting (distributed by Environment Agency under licence)		Low	2009-07	JFLOW-GPU	Depth-duration-frequency curves derived from FEH CD-ROM, from centre of each 5km model, with areal reduction factor applied to convert point rainfall estimate to more representative figure. Curve then used to derive 6.5 hr, 1:200 chance rainfall depth; this is converted to hyetograph, using summer rainfall profile.		Protect	Commercial	UKE10000013F0002

JBA Consulting (distributed by Environment Agency under licence)	Low	2009-07	JFLOW-GPU	Depth-duration-frequency curves derived from FEH CD-ROM, from centre of each 5km model, with areal reduction factor applied to convert point rainfall estimate to more representative figure. Curve then used to derive 6.5 hr, 1:200 chance rainfall depth; this is converted to hyetograph, using summer rainfall profile.		Protect	Commercial	UKE10000013F0003
Environment Agency	Medium-Low	2010-11	JFLOW-GPU	Depth-duration-frequency curves derived from FEH CD-ROM, from centre of each 5km model, with areal reduction factor applied to convert point rainfall estimate to more representative figure. Curve then used to derive 1.1 hr, 1:30 chance rainfall depth; this is converted to hyetograph, using summer rainfall profile. See "Description of assessment method" for allowances for infiltration and drainage.	Rainfall Hyetograph, EA 2m Composite DTM, OSMM Topography	Unmarked		UKE10000013F0004
Environment Agency	Medium-Low	2010-11	JFLOW-GPU	Depth-duration-frequency curves derived from FEH CD-ROM, from centre of each 5km model, with areal reduction factor applied to convert point rainfall estimate to more representative figure. Curve then used to derive 1.1 hr, 1:30 chance rainfall depth; this is converted to hyetograph, using summer rainfall profile. See "Description of assessment method" for allowances for infiltration and drainage.	Rainfall Hyetograph, EA 2m Composite DTM, OSMM Topography	Unmarked		UKE10000013F0005
Environment Agency	Medium-Low	2010-11	JFLOW-GPU	Depth-duration-frequency curves derived from FEH CD-ROM, from centre of each 5km model, with areal reduction factor applied to convert point rainfall estimate to more representative figure. Curve then used to derive 1.1 hr, 1:200 chance rainfall depth; this is converted to hyetograph, using summer rainfall profile. See "Description of assessment method" for allowances for infiltration and drainage.	Rainfall Hyetograph, EA 2m Composite DTM, OSMM Topography	Unmarked		UKE10000013F0006

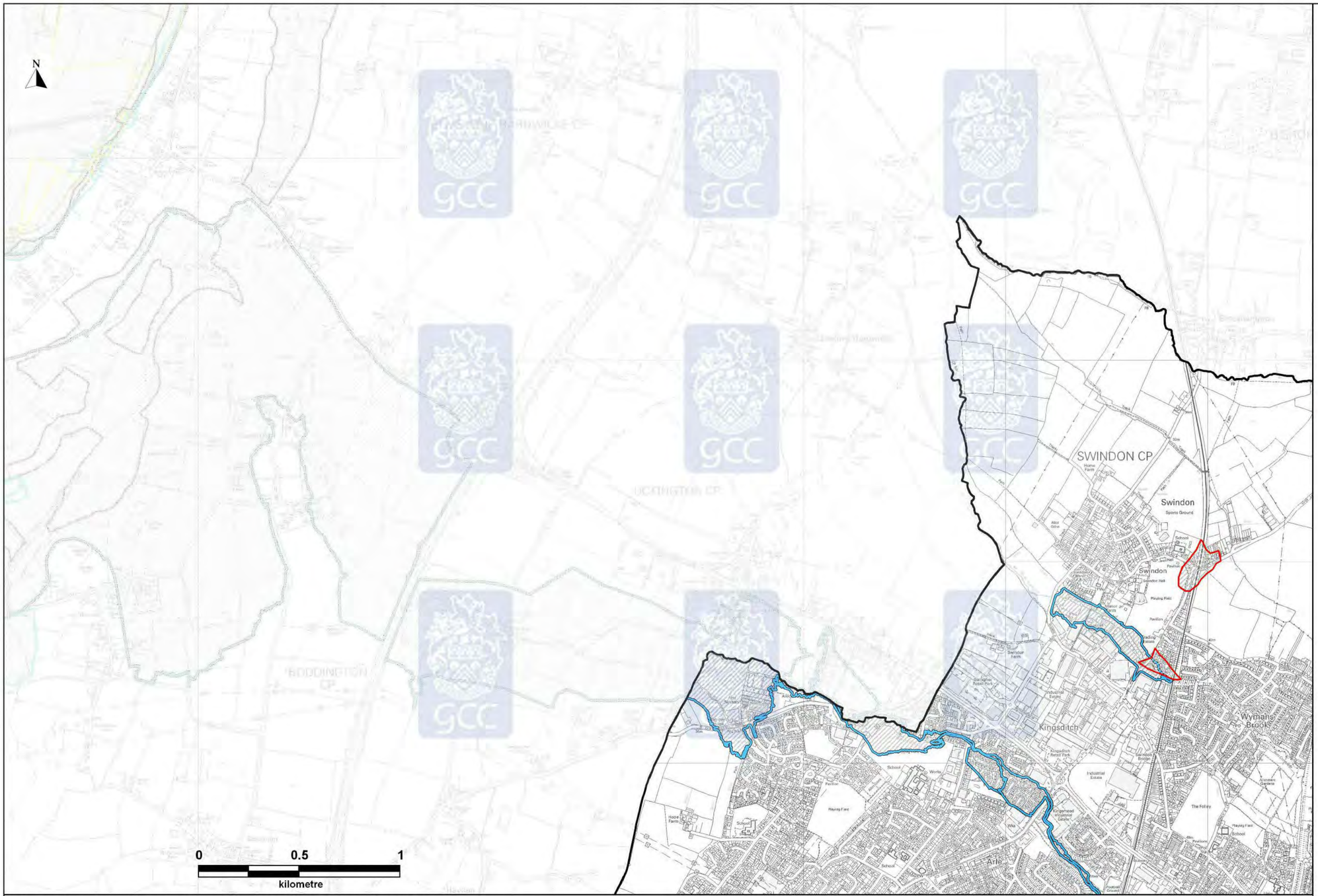
	Environment Agency	Medium-Low	2010-11	JFLOW-GPU	Depth-duration-frequency curves derived from FEH CD-ROM, from centre of each 5km model, with areal reduction factor applied to convert point rainfall estimate to more representative figure. Curve then used to derive 1.1 hr, 1:200 chance rainfall depth; this is converted to hyetograph, using summer rainfall profile. See "Description of assessment method" for allowances for infiltration and drainage.	Rainfall Hyetograph, EA 2m Composite DTM, OSMM Topography	Unmarked		UKE10000013F0007
Data developed specifically for PFRA, and is unlikely to be suitable for any other purposes.	Environment Agency	Low	2010-11	ArcGIS	Uses data which is developed from published BGS groundwater level contours, groundwater levels in BGS WellMaster database and some river levels. No probability is associated with this data.	British Geological Society (BGS) DiGMapGB-50 [Susceptibility to Groundwater Flooding].	Unmarked		UKE10000013F0008
Data updated quarterly. To understand the likelihood of future flooding, taking account of defences, refer to Areas Benefitting from Defences and National Flood Risk Assessment (NaFRA) data. Marked 'Protect' for complete national dataset only.	Environment Agency	Medium	2010-11	Varies but mainly JFLOW, ISIS, HEC-RAS, TUFLOW for fluvial, and HYDROF for tidal.	National methodology described in "National Generalised Modelling for Flood Zones - Fluvial & Tidal Modelling Methods - Methodology, Strengths and Limitations". A national dataset (for England and Wales) of fluvial flood peak estimates was derived from the Flood Estimation Handbook (FEH) to generate a 1 in 100 chance fluvial flood. Local fluvial modelling uses FEH methods. Peak tidal water levels from either Dixon & Tawn (DT3) or local data sets to derive 1 in 200 chance tide levels including surge from POL CSX model.	NextMap SAR DTMe, UKHO Admiralty Charts, 1:50K CEH River Centre Line, CEH FEH Q(T) Grids, POL CSX Peak Extreme Water Levels, POL CS3 Astronomical Tides, UKHO Admiralty Tide Time-Series Calibration Locations, OS 1:10 Boundary Line MHW	Protect	Commercial	UKE10000013F0009
Data updated quarterly. To understand the likelihood of future flooding, taking account of defences, refer to National Flood Risk Assessment (NaFRA) data. Marked 'Protect' for complete national dataset only.	Environment Agency	Medium	2010-11	Varies but mainly JFLOW, ISIS, HEC-RAS, TUFLOW for fluvial, and HYDROF for tidal.	National methodology described in "National Generalised Modelling for Flood Zones - Fluvial & Tidal Modelling Methods - Methodology, Strengths and Limitations". A national dataset (for England and Wales) of fluvial flood peak estimates was derived from the Flood Estimation Handbook (FEH) to generate a 1 in 1000 chance fluvial flood. Local fluvial modelling uses FEH methods. Peak tidal water levels from either Dixon & Tawn (DT3) or local data sets to derive 1 in 1000 chance tide levels including surge from POL CSX model.	NextMap SAR DTMe, UKHO Admiralty Charts, 1:50K CEH River Centre Line, CEH FEH Q(T) Grids, POL CSX Peak Extreme Water Levels, POL CS3 Astronomical Tides, UKHO Admiralty Tide Time-Series Calibration Locations, OS 1:10 Boundary Line MHW, Historic	Protect	Commercial	UKE10000013F0010

SWMP mapping owned by GCC, based on using 3rd party data Flood Map for Surface Water owned by EA Areas Susceptible to Surface Water Flooding owned by EA	High-Medium	SWMP mapping - 2009/10 FMfSW - 2010 AStSWF - 2009	SWMP - InfoWorks CS/2D FMfSW & AStSWF - JFLOW GPU		Protect	Commercial	UKE10000013F0011	[redacted]

Cheltenham Borough Council

Strategic Flood Risk Assessment for
Local Development Framework
Level 1
Volume 1 - FINAL
September 2008

Halcrow Group Limited



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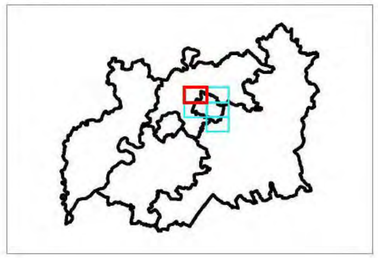

Legend:-

- Council Boundary
- July 1968
- July 2007

Project:- GLOUCESTERSHIRE STRATEGIC FLOOD RISK ASSESSMENT

Tile E1:- HISTORIC FLOODING
CHELTENHAM BOROUGH COUNCIL

Drawn By	:- A J Bryan	Revision	-	Drawing Scale	:- 1:10,000	Drawing No.	:- WB/GLOS/DRAWING - 044
Checked By	:- B L Dunn	Status	FINAL	Sheet No.	:- 1 of 4	Date	:- 26 March 2008
Approved By	:- J R Parkin			Plot Scale	:- 1:1 @ A1	Issuing Office	:- Birmingham

Rev.	By	Date	Description

CHELTENHAM BOROUGH COUNCIL
Municipal Offices
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Gloucestershire
GL50 9SA

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Lyndon House
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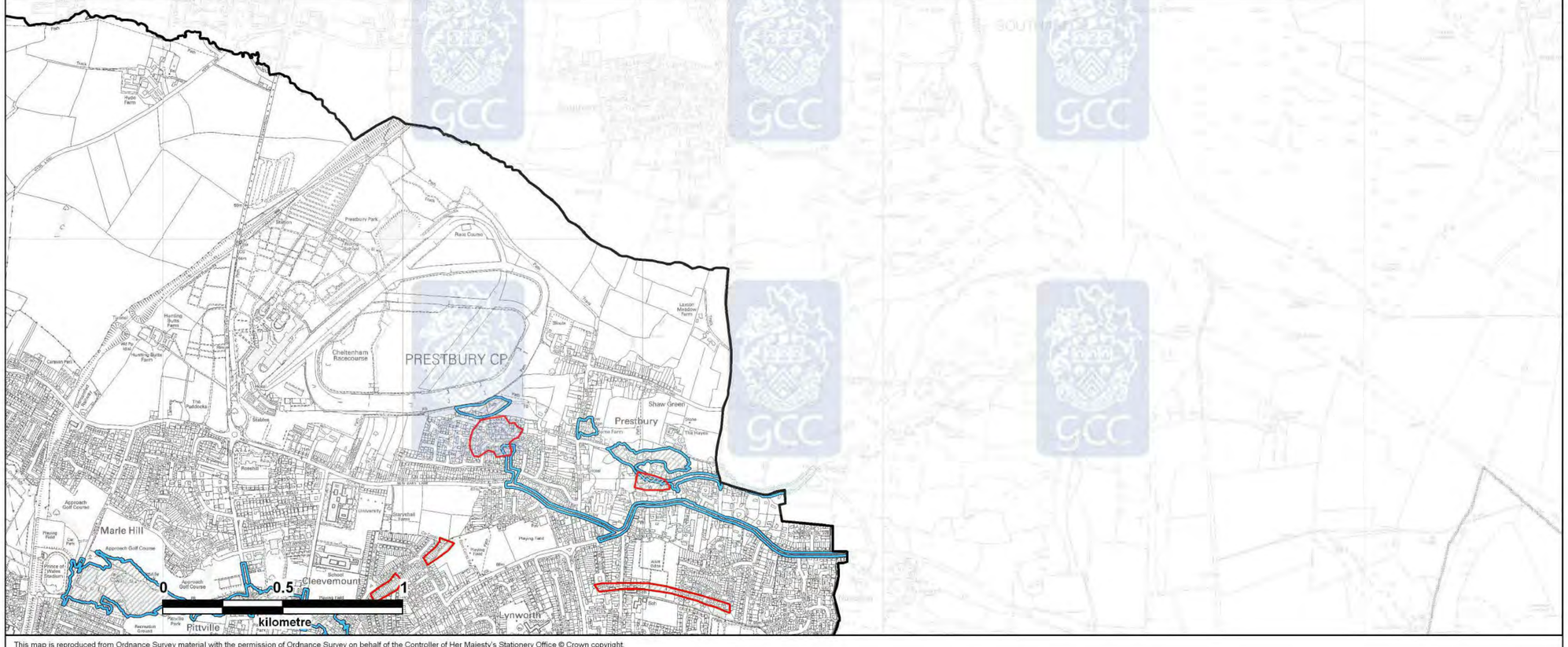
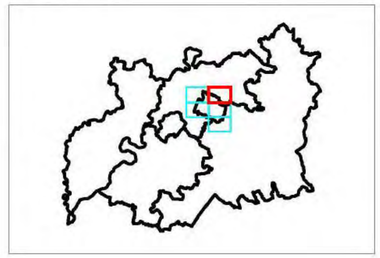
B16 8PE



Location Plan:-



Legend:-

- Council Boundary
- July 1968
- July 2007

Project:- GLOUCESTERSHIRE STRATEGIC FLOOD RISK ASSESSMENT

Tile E2:- HISTORIC FLOODING
CHELTENHAM BOROUGH COUNCIL

Drawn By	:- A J Bryan	Revision	-	Drawing Scale	:- 1:10,000	Drawing No.	:- WB/GLOS/DRAWING - 044
Checked By	:- B L Dunn	Status	FINAL	Sheet No.	:- 2 of 4	Date	:- 26 March 2008
Approved By	:- J R Parkin			Plot Scale	:- 1:1 @ A1	Issuing Office	:- Birmingham

Rev.	By	Date	Description

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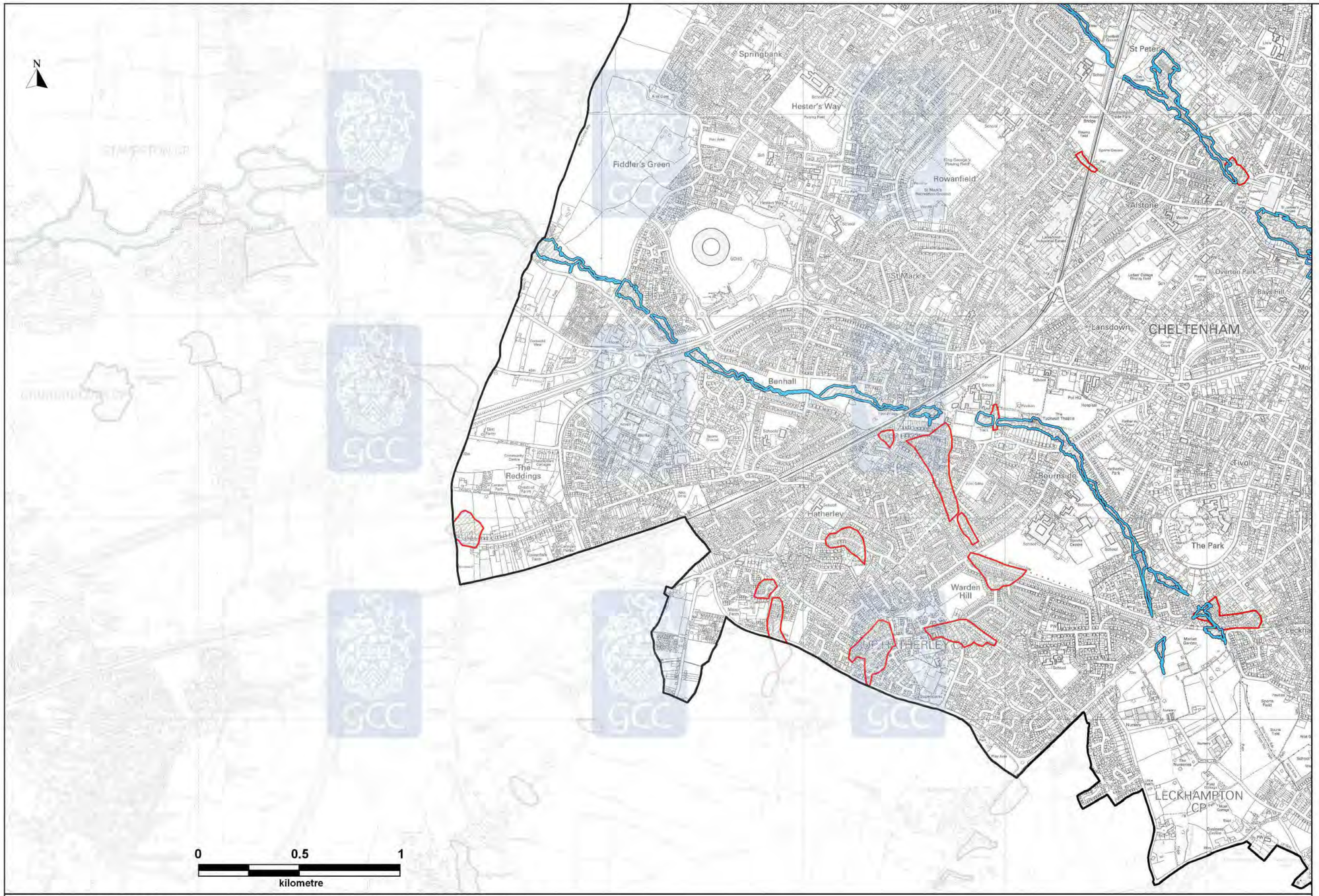
B16 8PE



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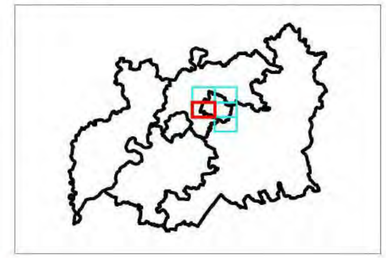

Legend:-

- Council Boundary
- July 1968
- July 2007

Project:- GLOUCESTERSHIRE STRATEGIC FLOOD RISK ASSESSMENT

Tile E3:- HISTORIC FLOODING
CHELTENHAM BOROUGH COUNCIL

Drawn By	:- A J Bryan	Revision	-	Drawing Scale	:- 1:10,000	Drawing No.	:- WB/GLOS/DRAWING - 044	
Checked By	:- B L Dunn	Status		Sheet No.	:- 3 of 4	Date	:- 26 March 2008	
Approved By	:- J R Parkin		FINAL	Plot Scale	:- 1:1 @ A1	Issuing Office	:- Birmingham	

Rev.	By	Date	Description

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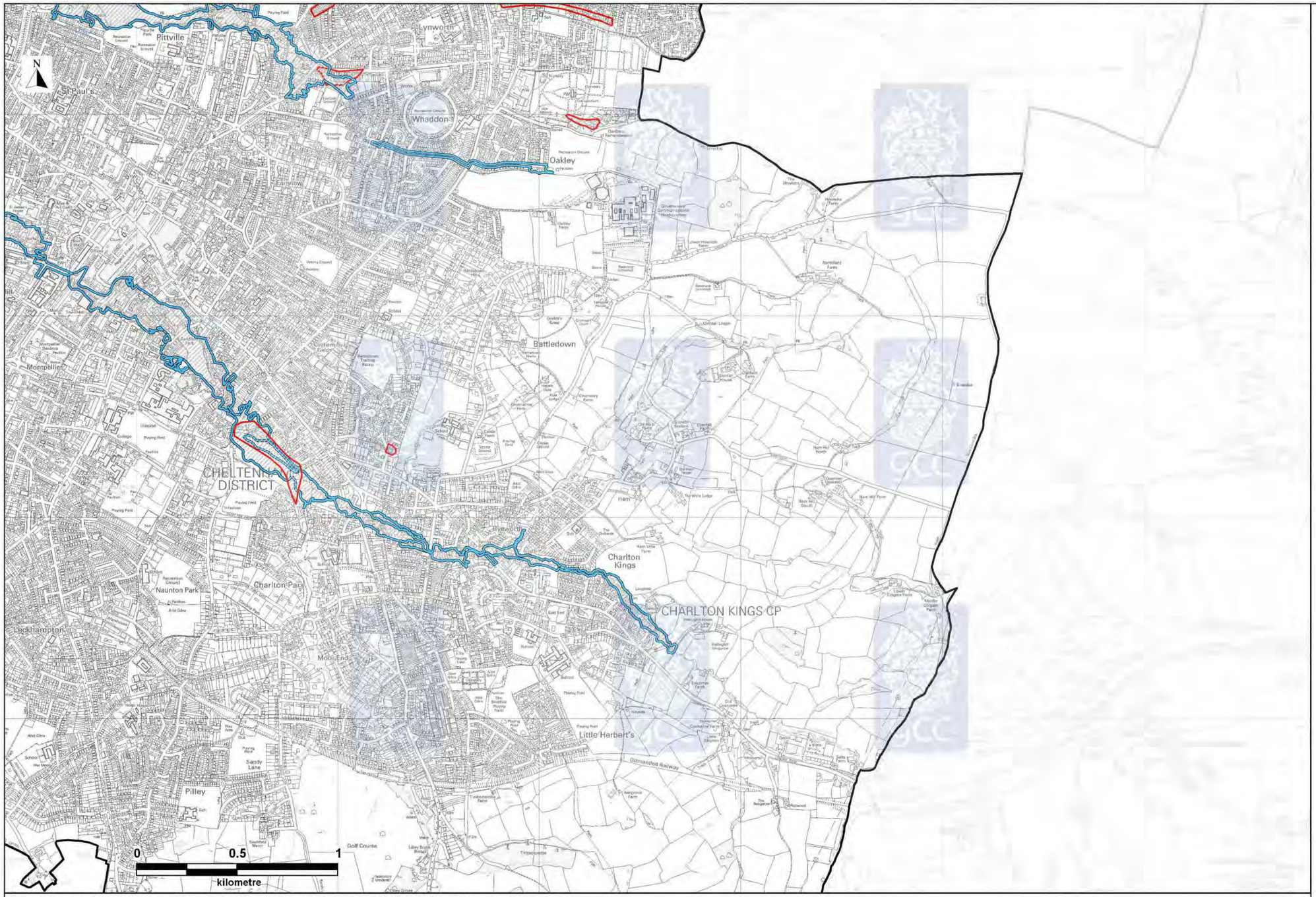

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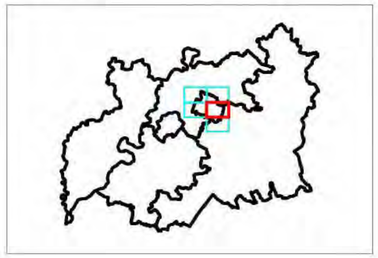

Legend:-

- Council Boundary
- July 1968
- July 2007

Project:- GLOUCESTERSHIRE STRATEGIC FLOOD RISK ASSESSMENT

Tile E4:- HISTORIC FLOODING
CHELTENHAM BOROUGH COUNCIL

Drawn By	:- A J Bryan	Revision	-	Drawing Scale	:- 1:10,000	Drawing No.	:- WB/GLOS/DRAWING - 044	
Checked By	:- B L Dunn	Status		Sheet No.	:- 4 of 4	Date	:- 26 March 2008	
Approved By	:- J R Parkin		FINAL	Plot Scale	:- 1:1 @ A1	Issuing Office	:- Birmingham	

Rev.	By	Date	Description

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B16 8PE

APPENDIX E

ENVIRONMENT AGENCY CONSULTATION

Environment Agency

Enter a postcode or place name: Go

Other topics for this area... Risk of Flooding from Rivers and Sea

Risk of Flooding from Rivers and Sea

X: 390,722;Y: 221,053 at scale 1:40,000

Data search Text only version

Map legend

Click on the map to see what is the Risk of Flooding at a particular location.

Flood Maps

- Flooding from rivers or sea without defences
- Extent of extreme flood
- Flood defences (Not all may be shown*)
- Areas benefiting from flood defences (Not all may be shown*)
- Main rivers

More about flooding:

Understanding the flood map

A more detailed explanation to help you understand the flood map shown above.

Current flood warnings

We provide flood warnings online 24 hours a day. Find out the current flood warning status in your local area.

Flood map - your questions answered

Answers to commonly asked questions about the flood map.

* **Legend Information:** Flood defences and the areas benefiting from them are gradually being added through updates. Please contact your local environment agency office for further details.

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Author: The Environment Agency | WIYBYSUPPORT@environment-agency.gov.uk
Last updated: 26th April 2013

Environment Agency

Enter a postcode or place name: Go

Other topics for this area... Risk of Flooding from Reservoirs

Risk of Flooding from Reservoirs

Map legend

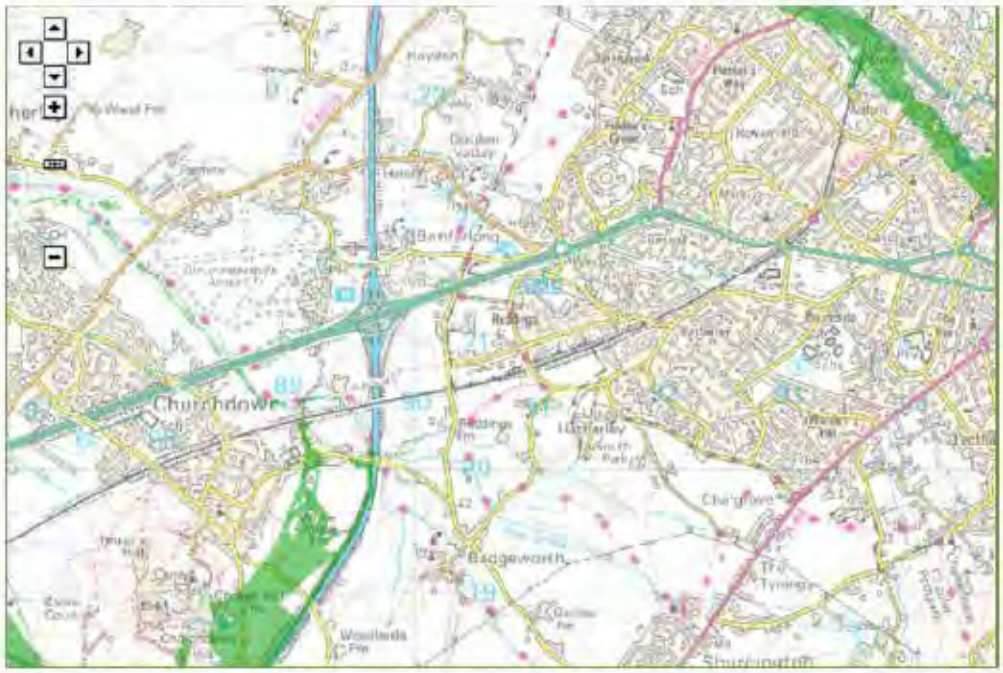
Click within the extent of flooding to see which reservoirs affect this area

Risk of Flooding from Reservoirs

Maximum extent of flooding

Map of X: 390,721.75; Y: 221,052.73 at scale 1:40,000

Data search Text only version



Find out more:

This map shows the largest area that might be flooded if a reservoir were to fail and release the water it holds. Since this is a prediction of a worst case scenario, it's unlikely that any actual flood would be this large.

Remember - reservoir flooding is extremely unlikely. There has been no loss of life in the UK from reservoir flooding since 1925. Since then reservoir safety legislation has been introduced to make sure reservoirs are well maintained.

Please note that only flood maps for large reservoirs are displayed. Flood maps are not displayed for smaller reservoirs or for reservoirs commissioned after reservoir mapping began in spring 2009. The reservoir flood maps also don't give any information about how likely any area is to be flooded.

If your property is within the green highlighted area, then you could be affected by reservoir flooding. To find out more about the reservoirs that could cause this flooding, click on the map within the green highlighted area. You will find the name and ownership details of the reservoirs that could cause flooding in your area.

If you want to find out about local emergency plans you should contact the local authority responsible for that emergency plan but be aware that these reservoir flood plans may take some time to develop. You can find out which local authority to contact by clicking on the map.

Reservoir flooding

Guidance for people living near reservoirs

Your questions answered

Who to contact

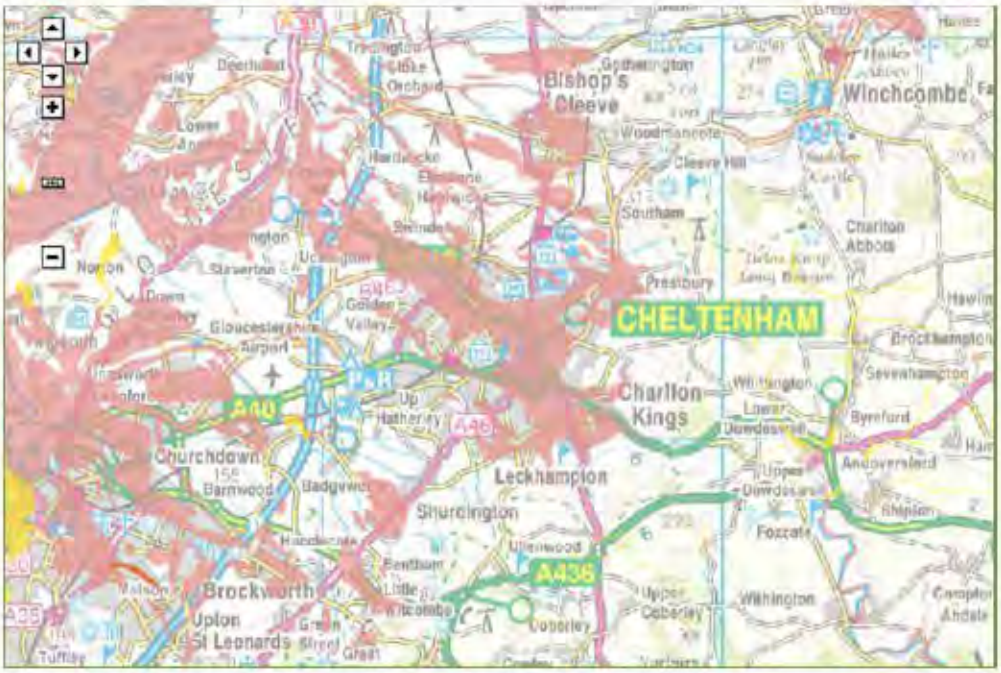
Environment Agency

Enter a postcode or place name: Other topics for this area... Groundwater

Cheltenham, Gloucestershire Go Groundwater

Map legend

Map of Cheltenham, Gloucestershire at scale 1:125,000 Data search Text only version



Groundwater source protection zones
- Inner zone (Zone 1)
- Outer zone (Zone 2)
- Total catchment (Zone 3)
- Special interest (Zone 4)

Aquifer Maps - Superficial Deposits Designation
- Principal
- Secondary A
- Secondary B
- Secondary (undifferentiated)
- Unknown (lakes and landslip)

Aquifer Maps - Bedrock Designation
- Principal
- Secondary A
- Secondary B
- Secondary (undifferentiated)

Groundwater Vulnerability Zones
- Major Aquifer High
- Major Aquifer Intermediate
- Major Aquifer Low
- Minor Aquifer High
- Minor Aquifer Intermediate
- Minor Aquifer Low

More about Groundwater

British Geological Survey Aquifer data:

The Aquifer Extents are not displayed at scales greater than 1:75,000 (Ordnance Survey 1:250,000 scale) as the data was only modelled to this level and is not accurate pass this.

New BGS Aquifer Designation Maps

From 1st April 2010 new aquifer designations replace the old system of classifying aquifers as Major, Minor and Non-Aquifer. This new system is in line with our Groundwater Protection Policy (GP3) and the Water Framework Directive (WFD) and is based on British Geological Survey mapping.

Groundwater Source Protection Zones data:

The Source Protection Zones are not displayed at scales greater than 1:20,000 (Ordnance Survey 1:50,000 scale) as the data was only modelled to this level and is not accurate pass this. They should not be compared against field boundaries.

Groundwater Source Protection Zones

Groundwater provides a third of our drinking water. We ensure that your water is safe to drink defining Source Protection Zones. These zones help to monitor the risk of contamination from any activities that might cause pollution in the area.

Facts and figures of our groundwater resources

Find out more about groundwater and groundwater levels.

Environment Agency

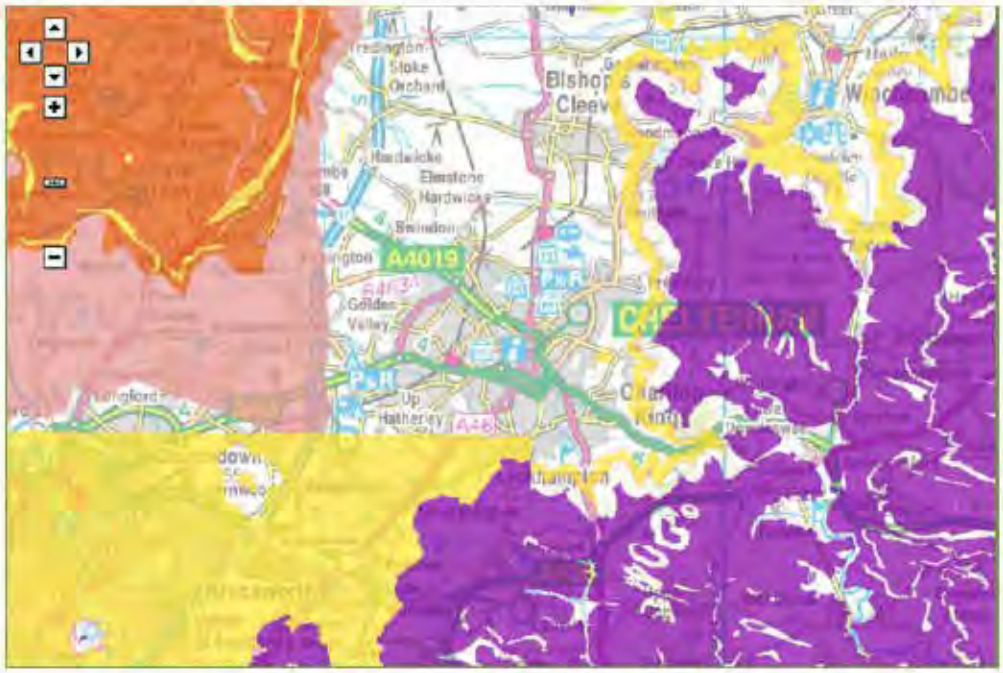
Enter a postcode or place name: Other topics for this area... Groundwater

Cheltenham, Gloucestershire Go Groundwater

Map legend

- Groundwater source protection zones
- Aquifer Maps - Superficial Deposits Designation
- Aquifer Maps - Bedrock Designation
  - Principal
  - Secondary A
  - Secondary B
  - Secondary (undifferentiated)
- Groundwater Vulnerability Zones

Map of Cheltenham, Gloucestershire at scale 1:125,000 Data search Text only version



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Enter a postcode or place name: Go

Other topics for this area... Drinking Water Protected Areas

Drinking Water Protected Areas

Map legend

- Surface Water Drinking Water Protected Areas
- Surface Water Safeguard Zones
- Groundwater Drinking Water Protected Areas
  - At Risk Areas
  - Probably At Risk Areas
  - Probably Not At Risk Areas
  - Not At Risk Areas
- Groundwater Safeguard Zones
- Safeguard Zones
- Water Protection Areas
- Dee Catchment

Map of X: 390,721.75; Y: 221,052.73 at scale 1:40,000

Data search Text only version

Drinking Water Protected Areas:

What are Drinking Water Protected Areas?

Drinking Water Protected Areas (DrWPAs) are water bodies where 'raw' water is abstracted for human consumption at a rate of at least 10m3/day or where over 50 people are served. Abstractions of raw water can be from reservoirs, rivers and groundwater.

Raw water quality needs to be improved in some DrWPAs to avoid the need for extra treatment at drinking water treatment plants. Wherever there is a risk of extra drinking water treatment being required the DrWPA is designated 'at risk'. This does not mean there is a risk to our tap water. Tap water supplied by water companies in England and Wales is robustly regulated by the Drinking Water Inspectorate to ensure that it meets the required drinking water quality standards.

For 'at risk' DrWPAs we may establish Safeguard Zones. These non-statutory Safeguard Zones are areas where activities can impact adversely on the quality of water abstracted in the DrWPA. Action to address pollution is targeted in these zones so that extra treatment of raw water can be avoided. Safeguard Zones are a joint initiative between the Environment Agency and water companies. Safeguard Zones are one of the main tools for delivering the Drinking Water Protected Area objectives of the Water Framework Directive.

For further information please see Annex D of our River Basin Management Plans.

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Author: The Environment Agency | WIYBYSUPPORT@environment-agency.gov.uk
Last updated: 25th April 2013

Environment Agency

Enter a postcode or place name: Go

Other topics for this area... Drinking Water Protected Areas

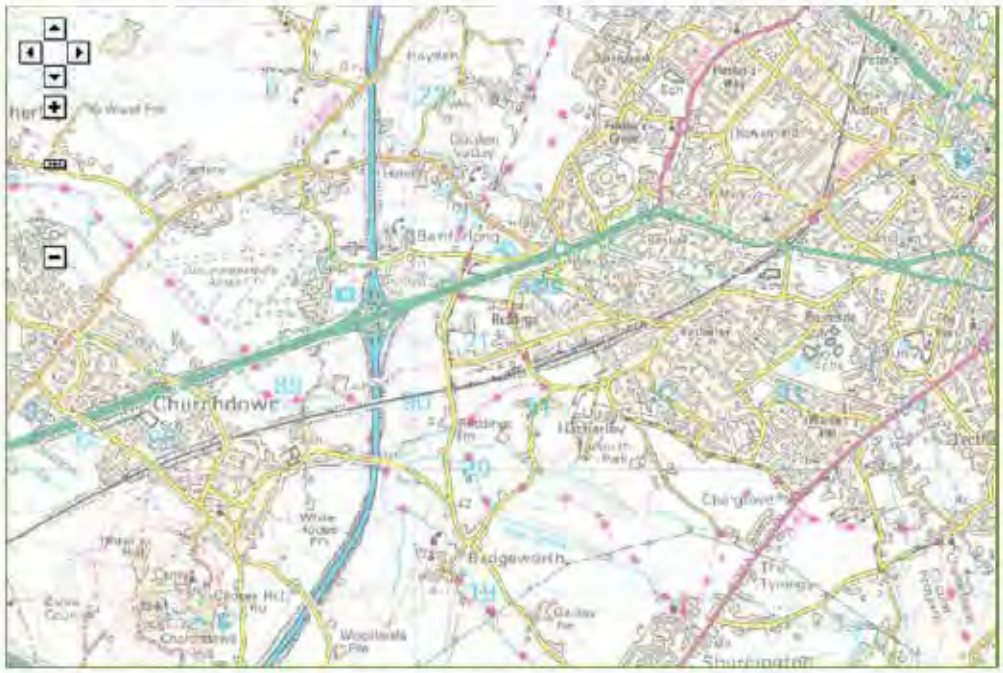
Drinking Water Protected Areas

Map legend

- Surface Water Drinking Water Protected Areas
  - At Risk Areas
  - Not At Risk Areas
- Surface Water Safeguard Zones
  - Safeguard Zones
- Groundwater Drinking Water Protected Areas
- Groundwater Safeguard Zones
- Water Protection Areas

Map of X: 390,721.75; Y: 221,052.73 at scale 1:40,000

Data search Text only version



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Environment Agency

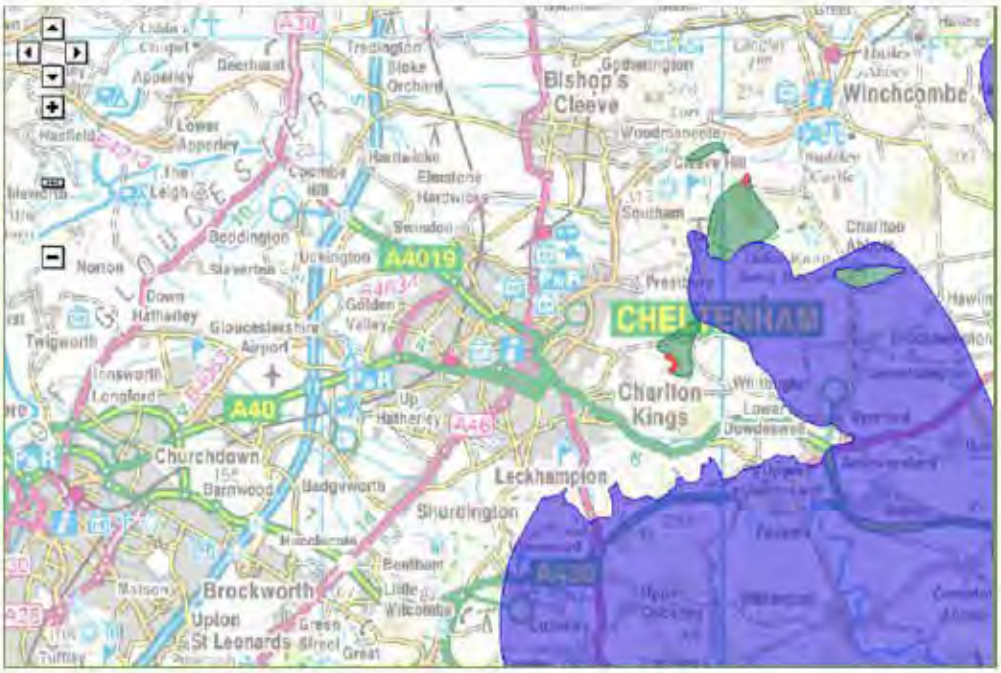
Enter a postcode or place name: Other topics for this area... Groundwater

Cheltenham, Gloucestershire Go Groundwater

Map legend

- Groundwater source protection zones
  - Inner zone (Zone 1)
  - Outer zone (Zone 2)
  - Total catchment (Zone 3)
  - Special interest (Zone 4)
- Aquifer Maps - Superficial Deposits Designation
- Aquifer Maps - Bedrock Designation
- Groundwater Vulnerability Zones

Map of Cheltenham, Gloucestershire at scale 1:125,000 Data search Text only version



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Map legend

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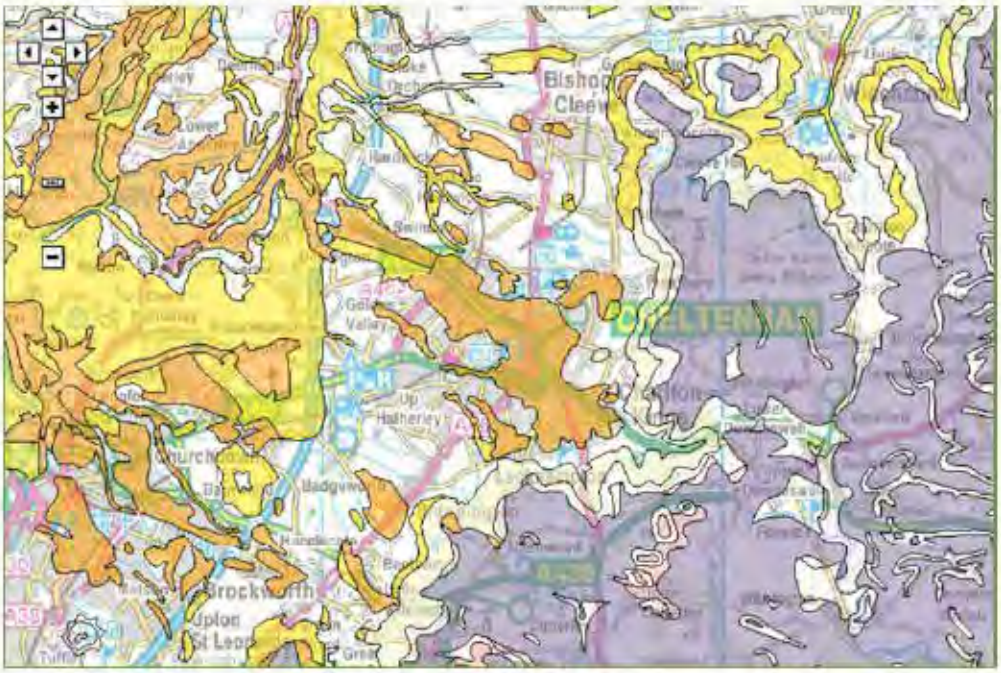
  - Major Aquifer High
  - Major Aquifer Intermediate
  - Major Aquifer Low
  - Minor Aquifer High
  - Minor Aquifer Intermediate
  - Minor Aquifer Low

Map of Cheltenham, Gloucestershire at scale 1:125,000 Data search Text only version



More about Groundwater

British Geological Survey Aquifer data:

The Aquifer Extents are not displayed at scales greater than 1:75,000 (Ordnance Survey 1:250,000 scale) as the data was only modelled to this level and is not accurate pass this.

New BGS Aquifer Designation Maps

From 1st April 2010 new aquifer designations replace the old system of classifying aquifers as Major, Minor and Non-Aquifer. This new system is in line with our Groundwater Protection Policy (GP3) and the Water Framework Directive (WFD) and is based on British Geological Survey mapping.

Groundwater Source Protection Zones data:

The Source Protection Zones are not displayed at scales greater than 1:20,000 (Ordnance Survey 1:50,000 scale) as the data was only modelled to this level and is not accurate pass this. They should not be compared against field boundaries.

Groundwater Source Protection Zones

Groundwater provides a third of our drinking water. We ensure that your water is safe to drink defining Source Protection Zones. These zones help to monitor the risk of contamination from any activities that might cause pollution in the area.

Facts and figures of our groundwater resources

Find out more about groundwater and groundwater levels.

Environment Agency

Enter a postcode or place name: Go

Other topics for this area... Nitrate Vulnerable Zones

Nitrate Vulnerable Zones

Map legend

- Nitrate Vulnerable Zones
- Surface Water NVZ Area
- Groundwater NVZ Area
- Eutrophic NVZ Area

Map of X: 390,721.75; Y: 221,052.73 at scale 1:40,000

Data search Text only version

Nitrate Vulnerable Zones

These maps show areas of England and Wales designated as Nitrate Vulnerable Zones from 15th May 2013. They reflect the outcome of English appeal decisions notified to Defra up to the 12 February 2013. Defra will introduce amending Regulations to update the maps to reflect the decisions notified after 12 February 2013.

These maps are for illustrative purposes only. For England, the version deposited at the offices of the Secretary of State for Environment, Food and Rural Affairs, Nobel House, 17 Smith Square, London SW1P 3JR is the definitive version under *The Nitrate Pollution Prevention (Amendment) and Water Resources (Control of Pollution) (Silage, Slurry and Agricultural Fuel Oil) (England) (Amendment) Regulations 2013*. For Wales the definitive version of these maps is deposited at the offices of the Welsh Government, Cathays Park, Cardiff, CF10 3NQ.

For further information and advice for farmers visit our Nitrate Vulnerable Zone pages.

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Author: The Environment Agency | WIYBYSUPPORT@environment-agency.gov.uk
Last updated: 25th April 2013

Environment Agency

Enter a postcode or place name: Go

Other topics for this area... Landfill

Waste

Map legend

Click on a feature for details of that site

Authorised Landfill

Site boundary

Historic landfill

Site boundary

Map of X: 390,721.75; Y: 221,052.73 at scale 1:40,000

Data search Text only version

Tell me more about waste and landfill:

Waste regulation

We regulate waste management through a system of licences. Find out how to get the correct licence here, get data on waste and find out if there are any rules applying to household waste.

Waste facts and figures

The UK produces about 220 million tonnes of controlled wastes per year. Find out about waste incineration, hazardous waste, recycling and landfill.

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Author: The Environment Agency | WIYBYSUPPORT@environment-agency.gov.uk
Last updated: 26th April 2013

Environment Agency

Interactive Maps

Historic landfill (Grid reference: X: 390,922.83; Y: 221,592.48)

Page 1 of 1 (1 result for selected location)

Site name	Site address	First waste received	Last waste received	
Land off Hatherley Lane	Hatherley	21 APR 1994	06 OCT 1994	

Tell me more about waste and landfill:

Waste regulation

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Author: The Environment Agency | WIYBYSUPPORT@environment-agency.gov.uk

Last updated: 25th April 2013

Environment Agency

Enter a postcode or place name: Go

Other topics for this area... Pollution

Pollution

Map legend

Map of X: 390,721.75; Y: 221,052.73 at scale 1:40,000

Data search Text only version

Click on a feature for details of that site

- Pollution Incidents
  - Major
  - Significant
- Industrial Pollution
  - Fuel & Power
  - Metal
  - Mineral
  - Chemical
  - Waste
  - Water
  - Radioactive
  - Associated
  - Other
  - Not Classified
- Industrial Operator Scores (OPRA) 2011
  - Band A
  - Band B
  - Band C
  - Band D
  - Band E
  - Band F
- Compliance Rating Scores
  - Very Good
  - Good
  - Moderate
  - Fair
  - Poor
  - Bad
- Mining Waste
  - Closed Mining Waste Sites
- Historic Industrial Operator Scores (OPRA)
  - Permitted Sites

Tell me more about Pollution:

Pollution Incidents

Find out how we categorise incidents and their possible effects on health and the environment

Industrial Pollution

Every industrial process could theoretically pose a risk to human health and the environment. Find out how we measure this risk and how we score operators on their potential to impact the environment.

Industrial Operator Scores (OPRA)

Industrial Operator Scores reflect two of the five attributes that make a site's Operational risk appraisal (Opra) profile. The Compliance Rating band reflects the number of non-compliances with permit conditions we have recorded at the site over the course of a year.
The Operator Performance band is influenced by the type of management system the operator has in place and any formal enforcement action we have taken at the site.

More information about OPRA

Compliance Rating Scores

Compliance Rating Scores is our report of the level of permit breaches we've recorded at sites during the year. We include both the number of breaches and also our assessment of the severity of these breaches, as determined by our Compliance Classification Scheme (CCS).

More information about Compliance Classification Scheme

Mining Waste

Closed mining waste facilities pose serious environmental impacts. The map states the cause of the impact: either water pollution, harm to human health, instability or fire hazard.

Environment Agency

Interactive Maps

Compliance Rating Scores

Grid reference: X: 390,658.25; Y: 221,899.4

Below is the compliance rating information of how industry sites comply with their permit conditions

Page 1 of 1 (1 result for selected location)

Cotswold View		
		View map
Site Name	Cotswold View	
Site Address	Golden Valley Gloucester Road Staverton Cheltenham Gloucestershire GL51 0SS	
Permit Number	48061	
Industry Type	Waste treatment	
Industrial Activity	Vehicle depollution facility	
Site Score	0	
Number of Category 1 Breaches		
Number of Category 2 Breaches		
Number of Category 3 Breaches		
Number of Category 4 Breaches		
Number of Breaches of Permit Conditions		

More information about Compliance Rating Scores

The Compliance Rating of a site shows the total Compliance Classification Scheme (CCS) score during that calendar year. All sites start the calendar year with no breaches and hence a Band A Compliance Rating. As the year progresses breaches may be recorded against permit requirements, points are accrued and band ratings go down.

These CCS breaches are awarded a different number of points as per the table below:

CCS Category	Points Value
Category 1	60
Category 2	31
Category 3	4
Category 4	0.1(1 point pre 2011)

Under the Operational Risk Appraisal (Opra) scheme, these scores are used to generate the compliance rating, which forms one part of a permits Opra profile.

More information about Compliance Classification Scheme

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Author: The Environment Agency | WIYBYSUPPORT@environment-agency.gov.uk

Last updated: 25th April 2013

APPENDIX F

ENVIRO-SEARCH REPORT

Sitecheck®
Assess

In association with:

WILBOURN ASSOCIATES
Chartered Environmental Surveyors

Land at Grovefield Way, and, North Road West, The Reddings, Gloucestershire, *

Prepared for:
Searchflow
Searchflow
42 Kings Hill Avenue
Kings Hill
West Malling
Kent
ME19 4AJ

Report Reference: SAS_35841089_1_1

Report Date: 23-AUG-2011

Customer Reference: SF16462501000

National Grid Reference: 390650 221460

Site Area: 67867 m²

If you have any questions on the contents of this Report please contact Landmark Customer Helpdesk which is open from 9:00am - 5:30pm, Monday - Friday, via one of the following channels:

Telephone: 0844 844 9966
Fax: 0844 844 9980
Email: info@landmarkinfo.co.uk
Website: www.sitecheck.co.uk

SearchFlow
An MDA Business

Landmark®
Information Group

Sitecheck®
Assess

In association with:

WILBOURN ASSOCIATES
Chartered Environmental Surveyors

Professional Opinion
on environmental risk

PASSED

The Sitecheck report dated 23-AUG-2011 and reference SAS_35841089_1_1 for Land at Grovefield Way, and, North Road West, The Reddings, Gloucestershire, * has examined the sources of potential contamination in terms of historical land use, environmental data and current land uses where known.

INTRODUCTION

This professional opinion determines the level of environmental risk, as to whether a pollutant linkage exists which is created when there is a source of contamination, a pathway for it to travel along and receptors, which may be harmed. This risk-based approach underpins the governments approach to contaminated land. If a pollutant linkage exists the property may be regarded by the local authority as being "Contaminated Land" for the purposes of Part IIA of the Environmental Protection Act 1990.

In completing this report Wilbourn Associates has undertaken a review of data made available to it. No site inspection, further enquiries or investigation of surface or ground conditions has been carried out by Wilbourn Associates. No information as to the age, value and type of property has been made available. It is important to note that it is not known by Wilbourn Associates for what purpose the report has been commissioned.

CONCLUSIONS

In the professional opinion of Wilbourn Associates the level of risk associated with the information disclosed in the associated Sitecheck report:

1) is unlikely to have an adverse effect on the value of the property, and
2) is not such that the property would be designated "Contaminated Land" within the meaning of Part IIA of the Environmental Protection Act 1990.

OTHER ENVIRONMENTAL FACTORS In this case the following environmental factors have been identified which a client may wish to be investigated before proceeding further:

An area of Subsidence Hazard Potential

Please refer to the relevant section in the report for each of the above factors.

Philip Wilbourn

Philip E. Wilbourn BSc C.Env FRICS
Chartered Environmental Surveyor

RICS

Sitecheck Assess

In association with:

WILBOURN ASSOCIATES
Chartered Environmental Surveyors

Professional Opinion
on environmental risk

SOURCES OF ADDITIONAL PROFESSIONAL GUIDANCE:

If the report is for valuation, or investment, or other forms of lending decision making there may be issues arising from the current occupation, which need to be examined. The Royal Institution of Chartered Surveyors has provided guidance with respect to such matters and specific reference should be made to the guidance note 'Contamination, the environment and sustainability - Implications for chartered surveyors and their clients' published April 2010. This guidance note is referred to in UKGN1.1 paragraph 2.2 of the RICS Valuation Standards (6th Edition) (The "Red Book").

It is recommended that the client reviews the outputs of any valuation report, which should include a Property Observation Checklist, contained at Appendix A for commercial property or Appendix B for rural property in the Royal Institution of Chartered Surveyors guidance note 'Contamination, the environment and sustainability - Implications for chartered surveyors and their clients'. Completion of these checklists does not constitute an environmental assessment for the purposes of Professional Indemnity Insurance where many surveyors are unlikely to have appropriate indemnity cover. Any contamination, which is observed on the site by the surveyor during the normal course of their inspection, can also be recorded.

If the property is let, the landlord or the tenant (as appropriate) should take legal advice as to whether the covenants in the lease constitute legal or financial burdens. The Law Society's "Environmental Law Handbook-6th Edition" provides valuable assistance.

In leases with no express covenants dealing with environmental matters, lawyers and surveyors need to be aware of the extent to which the repairing of covenants can be applied and, when advising tenant clients in particular, will need to draw attention to the client's obligations to comply with enacted legislation.

Should contamination have been observed on site a suitably qualified, insured and experienced professional, preferably with the Specialist in Land Condition (SiLC) accreditation, should quantify whether this could give rise to an action by a regulator or any other party. A suitable management plan for action incorporated in a Land Quality Statement in accordance with RICS guidance should be put in place and appropriate matters taken up with the tenant / occupier.

In terms of development this report should be seen as a precursor to a thorough investigation of the property for planning control purposes. The DTI funded guidance published by the Construction Industry Research and Information Association (CIRIA) Brownfields-managing the development of previously developed land-a clients guide may be a useful starting point.

Sitecheck Assess

Contents