Annex 1 Past floods

Field:	Flood ID	Summary description	Name of Location	National Grid Reference	Location Description	Start date	Days duration	Probability	Main source of flooding	Additional source(s) of flooding	Confidence in main source of flooding	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	Comments	Data owner	Area flooded	Flood event outline confidence	Flood event outline source	Survey date	Photo ID	Lineage	Sensitive data	Protective marking descriptor	European Flood Event Code
Mandatory / optional:	Mandatory	Mandatory	Mandatory	Mandatory	Optional	Optional for first cycle	Optional for first cycle	Optional for first cycle	Optional for first cycle	Optional for first cycle	Optional	Optional for first cycle	Optional for first cycle	Mandatory	Optional	Optional	Optional	Mandatory	Optional	Optional	Optional	Mandatory	Optional	Mandatory	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Auto-populated
Format:	Unique number between 1-9999	Max 5,000 characters	Max 250 characters	12 characters: 2 letters, 10 numbers	Max 250 characters	'yyyy' or 'yyyy-mm' or 'yyyy-mm-dd'	Number with two decimal places	Max 25 characters	Pick from drop-down	Max 250 characters, same source terms	Pick from drop-down	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	Max 1,000 characters	Max 250 characters	Number with two decimal places	Pick from drop-down	Pick from drop-down	'yyyy' or 'yyyy-mm' or 'yyyy-mm-dd'	Max 50 characters	Max 250 characters	Pick from drop-down	Max 50 characters	Max 42 characters
Notes:	A sequential number starting at 1 and incrementing by 1 for each record.	Description of the flood and its adverse or potentially adverse consequences. Where available, information from other fields (Start date, Days duration, Probability, Main source, Main mechanism, Main characteristics, Significant consequences) 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 affected the whole LLFA, then record the name of the LLFA.	National Gazetteer Reference of the centroid (centre point, falls within polygon) of the flood extent, or of the area defined if there is no extent information.	A description of the general location that was flooded.	The date when the flood commenced - when land not normally covered by water became covered by water.	The number of days (duration) of the flood that land not normally covered by water was covered by water. Values should be within the range 0.01 - 999.99 (permitting records to the nearest quarter of an hour, where appropriate).	The chance of the flood occurring in any given year - record X from "a 1 in X chance of occurring in any given year". Where this is difficult to estimate, a range can be recorded.	Pick the source from which the majority of flooding occurred. Refer to the PFRA guidance for definitions of sources.	If flooding occurred from, or interacted 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 about 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'.	Mandatory Where there any significant consequences to human health when the flood occurred, or would there be if it were to re-occur?	Optional Record the number of residential properties where the building structure was affected either internally or externally by the flood, or that would be so affected if the flood were to re-occur.	Optional 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'.	Optional Max 250 characters If there were other Significant consequences to human health occurred, describe them including information such as the number of critical services flooded.	Optional Record the number of non-residential properties where the building structure was affected either internally or externally by the flood, or that would be so affected if the flood were to re-occur.	Optional 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'.	Optional Max 250 characters If there were other Significant economic consequences to the environment occurred, describe them including information such as the area of agricultural land flooded, length of roads and rail flooded.	Mandatory Where there any significant consequences to the environment when the flood occurred, or would there be if it were to re-occur?	Optional Max 250 characters If there were Significant consequences to the environment, describe them including information such as national and international designated sites flooded, and pollution sources flooded.	Mandatory Where there any significant consequences to cultural heritage when the flood occurred, or would there be if it were to re-occur?	Optional Max 250 characters If there were Significant consequences to cultural heritage, describe them including information such as the number and type of heritage assets flooded.	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 km²	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 lists 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+GNS Code+>P or F>+LLFA Flood ID+. "GNS 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.
Example:	1	On the 14 April 1998 an intense storm system produced surface water flooding across Essex, concentrated in the west of the county. The flooding lasted about 6 hours, and 23 residential properties were recorded as suffering internal flooding, in Epping and North Weald. The surface runoff exceeded the drainage capacity in several places, and so probably had a 1 in 30 to 1 in 50 chance of occuring in any given year.	Essex	SX1234512345	Several towns and villages across west Essex	1998-04-15	0.25	20-50	Surface runoff		High	Natural exceedance	Natural flood	Yes	23	Observed number	No		No		No			Epping Forest District Council		Medium	Site survey	1998-04-20		Ordnance Survey Address/Point; CEH 1:50k River Centreline; NextMap DTM.	Unmarked	Private	UKE10000012P0001
Records begin here:	1	Rainfall in Hampshire in the water year April 2000-March 2001 was exceptional and prolonged, which caused the aquifers of the area to become saturated. This caused groundwater flooding particularly in areas underlain by chalk such as St Mary Bourne. Due to the variety of geology underlying the region the return period varies from once every 50 years to once every 200 years. The flooding occurred over the winter of 2000-01 and affected 713 properties across the region; 437 suffered internal flooding, 162 suffered from cellar/underfloor flooding and 114 were affected by externally. Areas not dominated by chalk, such as the New Forest and along the south coast, experienced flash flooding and fluvial flooding due to drainage systems being overwhelmed and watercourses not being able to discharge quick enough to deal with the prolonged rainfall. Poor maintenance of drainage infrastructure also played a major factor in many of the incidents	Hampshire	SU5029631873	Incidents at 713 properties in 109 settlements, within 76 parishes	2000-12 to 2001-03	2 months (winter 2000-01)	Varies across county due to different underlying bedrock, anything from 1 in 50 years to 1 in 200 years flooding	Groundwater	The majority of incidents were caused by elevated groundwater levels and high springflows. High rainfall throughout winter 2000-01 caused both surface water flooding and fluvial flooding	High-Medium	Natural exceedance	Natural flood	Yes	713	Observed number	No	0	No		No			Environment Agency	Unknown	High-Medium	Site survey	2001-09 (preliminary survey carried out by Halcrow, report published 2002-09)			Unknown		UKE09000002P0001
	2	The 2013/14 winter was reported by the England & Wales Precipitation Series as being the wettest on record since records began in 1766. This exceptional weather arrived following a wetter than average 2012 & 2013 which in turn were preceeded by 4 years of very much dryer than average years between 2008 & 2012 rendering the ground susceptable to groundwater and surface water flooding. The flood incident in Buckskin, Basingstoke began 7th February 2014 and continued to 24th February after which levels began to fall throughout March, with areas drying up in early April. The EA groundwater flood alert was no longer in force from 16th April. The flooding mechanism was a combination of surface water and groundwater flooding. The foul water flooding was a secondary source of flooding caused by the inundation of the foul sewer network from surface water and groundwater. It is estimated that 88 properties were affected by flooding.	Bucksk in Sperrin Close Bodmin Close Exmoor Close Antrim Close Quantock Close Prescelly Close Grampian Way Basingstoke Golf Course Basingstoke	SU6063351213	Bucksk in is a suberb of Basingstoke, approx. 5km west of the town centre of Basingstoke. The area impacted lies at the base of a SW-NE lying valley. The estate lies at the upstream end of the valley of the River Loddon, which flows in a north westerly direction.	07/02/2014	28 days		Groundwater	Fluvial, surface water, and foul water. Flooding instigated by high groundwater levels which caused a dormant spring to become active and the surface water drainage, formed by soakaways, not to function. This in turn caused run-off to follow the historic river course and accumulate in low lying areas.	High	Natural exceedance	Natural flood	Yes	88	Estimate from map	No	0	No		No				Unknown	High-Medium	Site survey	Section 19 Investigation - July 2014 this included Questionaire Public surgery Data from RMAs					UKE09000002P0002
	3	Flooding in Romsey began on the 23rd December 2013. Following a lengthy period of wet weather, a large recorded rainfall event on this date (74mm recorded in 12 hours) caused flooding across the town. Between 23rd December and 6th February 2014 there was 415mm of rainfall recored. Fluvial, surface water, foul water & groundwater affected the areas flooded. It is estimated that up to 96 properties were directly affected. and occured through a variety of flood mechanisms at various locations. At Cupernham Lane surface run-off due to the terrain & high groundwater levels led to flooding. At Winchester Road groundwater issues led to flooding of properties cellars & inundated sewers led surface water flooding of properties particularly near the Plaza Roundabout. At Mainstone & Causeway there were separate incidents which contributed to the flooding. Surface water flooding from the A3090/A27 to the properties at Mainstone & also groundwater levels combined with excess flows in the OWC in the field to the rear of Mainstone causing separate incidents flooding properties on the Causeway & the rear of properties on Mainstone. Riverside Garden properties were affected by surface water flooding from sewer networks. Some properties suffered directly from fluvial flooding from the River Test. Middlebridge Street was affected by surface water & foul flooding from sewer networks. Some properties also reported groundwater flooding.	Romsey - specifically Cupernham Lane Winchester Road Mainstone & Causeway Riverside Gardens Middlebridge Street.	SU3504820774	Romsey is a market town 10km north-west of Southampton. The River Test to the west of the town runs from north to south, the Test Valley slopes steeply to the east and the watercourses that run from the north-east of the town to join the River Test. Three largely residential areas of the town were affected: to the north Cupernham Lane & Fishlake Meadows (under development for housing), to the south Winchester Road and to the south-west Mainstone & Causeway and Middlebridge Street.	23/12/2013	46 days		Surface runoff	Fluvial, groundwater and foul water.	High	Natural exceedance	Natural flood	Yes	96	Estimate from map	No		No		No				Unknown	High-Medium	Site survey	Section 19 Investigation April 2014 this involved: Questionaire Public consultation event Data from RMAs Site visits					UKE09000002P0003
	4	Flooding occured to the north and west of Romsey, stretching from Mays Island in the north down to Mainstone and The Causeway at Middlebridge to the south. The exact duration of the incident is difficult to define, however, the peak of the event was from 14th February 2014 to 17th February. The incident beginning on the 14th February was predominated by fluvial flooding from the River Test and Fishlake Stream. However, there was also further flooding from smaller watercourses and streams. The fluvial flooding incidents were exacerbated by the hydrologically charged catchment with significant contributions from surface runoff feeding into watercourses as a result of high groundwater levels. Upto 80 properties were flooded (36 domestic and 44 commercial properties).	Romsey - specifically Mays Island River Test Fishlake Stream Budds Lane Industrial Estate Mainstone & Causeway.	SU3507622112	Area to the west of Romsey stretching from Mays Island in the north down to Mainstone and The Causeway at Middlebridge to the south. The area affected includes a mix of residential, commercial (Budds Lane Industrial Estate contains approx. 50 businesses) and rural uses.	14/02/2014			Main rivers	Surface runoff, groundwater and foul.	High	Natural exceedance	Natural flood	Yes	36	Estimate from map	Yes	44	Estimate from map	The closure of Budds Lane resulted in commercial losses to business.	No		No			Unknown	High-Medium	Site survey	Section 19 Investigation May 2014 this involved consultation with relevant RMAs, stakeholders and residents, witness accounts and site visits.					UKE09000002P0004
	5	In August 2015 there was significant rainfall across Hampshire with incidents of flooding reported in Hart District, a high concentration being in the Fleet area. 17 properties reported internal flooding with 34 others reporting external flooding. However, the exact duration is difficult to define. Ground conditions in Fleet are mostly impermeable, with surface water reliant on watercourses to control and distribute the flow. However, a significant number of watercourses have, over time, either disappeared completely or been culverted leaving less capacity within the local river systems. The majority of areas affected by the flooding are within Flood Zone 3 the functional floodplain. The severity of the rainfall overwhelmed the different drainage systems with localised blockages causing more significant issues in some locations.	Fleet - specifically two sub-catchments: Hart (Crondall to Elvetham) Key areas affected - Tavistock Road Basingbourne Road Longdown Greenways, Fleet Brook Key areas affected - Avondale Road Kings Road Southby Drive Albert Street.	SU8186454435	Fleet is located in the north-east of the county. It is one of the most urbanised areas in Hart District. It is situated within the Loddon catchment with a number of sub-catchments across the area. The largest concentration of reported flooding in the Fleet town area was within two sub-catchments: the fleet Brook and Hart (Crondall to Elvetham).	Aug-15	Unknown		Main rivers	Surface water and foul water.	High-Medium	Natural exceedance	Natural flood	Yes	17	Observed number	No		No		No				Unknown	Medium	Site survey	Section 19 Investigation					UKE09000002P0005
	6	Wickham has a history of flooding with reports going back to 2000, the most recent being in 2014. Flooding has accordingly occurred over various years and over differing durations. A Section 19 Investigation undertaken due to the ongoing issues. The cause of flooding is complex and varies across the catchment due to a combination of the following factors: Surface water flooding runoff in the rural and urban catchment, surcharging of the foul and combined sewers, high groundwater issues and main river flooding from the Meon - out of bank flows as well as high river levels surcharging outlet systems.	Wickham - specifically: The Wickham Centre Garnier Park Southwick Road Winchester Road Meon Park Bridge Street & Riverside Mews Tanfield Lane & Meonside Court	SU5739511475	Wickham is located in the valley of the river Meon north of Fareham. The village is within the floodplain. The layout of the village is defined by built up areas either side of the main river and valley, with the older village square to the north. The Meon navigates from north-east to south-west through the village and outlets into The Solent, approximately 19km to the south.	2000 - 2014	Unknown		Surface runoff	Fluvial, groundwater and surcharging of the foul and combined sewers.	High-Medium	Natural exceedance	Natural flood	Yes			No		No		No				Unknown	Medium	Site survey	Section 19 Investigation June 2015					UKE09000002P0006