Appendix I

I Historical Flood Information

I.1 Introduction

Cotswold District has seen a number of large-scale flood events including Easter and October 1998, autumn 2000, February 2002, New Year 2003, February 2004, summer 2007, November/ December 2012, winter 2013/14 and December 2020. The Environment Agency has produced a number of historic and recorded flood outlines within the District and the following events have been mapped: March 1947, July 1968, August 1977, September 1992, October 1993, April 1998, December 2000, July 2007, January 2008. The LLFA, CDC, Thames Water, Severn Trent and Wessex Water have also provided their records of historic flooding across the district.

The Environment Agency Historic Flood Map and Recorded Flood Outlines data, along with the LLFA, CDC and water company data, can be viewed on the accompanying detailed maps (Appendix B).

I.2 December 2020

During the December 2020 flood event, significant flooding was observed in Bledington, Cirencester, Lower Slaughter and Moreton-in-Marsh. The event was characterised by a short period of intense rainfall that fell on saturated ground and elevated river levels, causing widespread flooding across the district. Peak river levels were exceeded by the River Evenlode at Moreton, the River Churn at Cerney Wick and the River Thames at Somerford Keynes.

CDC provided a list of properties, businesses, roads and carparks flooded during the December 2020 flood event. These have been summarised in Table 1 below.

Location		**Source Reported**	
Town	**Street**	**Source**	**Total Reported**
Bledington	Chapel Lane	River	8
	Main Road	River	3
	Church Street	River	1
	The Green	River	10
	Station Road	River	1
Cirencester	Corinium Gate	River	2
	Estcote Street	River	1
	Coxwell Street	River Groundwater	4
	Park Street	River	1
	Spitalgate Lane	Not Specified	1
	Dosditch Street	Not Specified	1
	Dollar Street	Groundwater	1
	St Peters Road	Groundwater	6

Location		Source Reported	
	Gloucester Street	Groundwater	1
	The Mead	Groundwater	1
	Watermoor Road	Surface Water	1
Coberley	Coberley	Groundwater	1
	Rosebank	Groundwater	1
Daglingworth	Church Street	River	1
	Wains Road	Not Specified	1
Evenlode	Green Lane	Not Specified	4
Lower Slaughter	Mill Lane	River	1
	The Square	River Groundwater	4
	Becky Hill	River Groundwater Surface Water	5
	Greystones	Groundwater	1
	Corpse Hill Road	Surface Water	1
Lower Swell	Lower Swell	Overloaded Sewer	1
Mickleton	High Street	Not Specified	1
Moreton-in-Marsh	Oxford Street	Not Specified River	4
	Croft Holm	Surface Water	1
	High Street	River Surface Water	2
Siddington	The Close	River	1
South Cerney	School Lane	River	1
	Clarks Hay	River	1
	Broadway Lane	River	1

Table 1: Cotswold District Council data on properties and business flooded (December 2020)

I.3 Winter 2013/14

Flooding problems were experienced in known flood risk areas e.g. Cirencester and South Cerney. Sewer flooding problems were again at Lakeside, Lechlade. The flood events did test the recently constructed defences at Moreton-in-Marsh and Fairford which were considered to have performed well.

I.4 November/ December 2012

CDC provided a list of properties, businesses, roads and carparks flooded during the December 2012 flood event. Full addresses or postcodes were not available for all of

these records, so it has not been possible to geo-reference them. The data should be considered only as indicative of a flooding problem, for the following reasons:

- It only includes incidents where CDC was notified. Very short flash floods will, in some cases, result in property flooding before a contact can be made to the local authority. In other cases, residents or businesses make their own arrangements for protecting properties.
- No reason for flooding is recorded.

The records were cleaned and combined into a single spreadsheet, which has been used to summarise numbers of incidents by road name and by settlement. This summary is presented below, see Table 2 and Table 3.

Town	Roads Reported as Flooded
Chipping Campden	B4035
Cirencester	A419
	Berry Hill Rd
	Dollar Street
	Dugdale Road
	Escote Road
	Gooseacre Lane
	Hereward Road
	Old Cricklade Road
	South Cerney Road
	Spitalgate Lane
	Trafalgar Road
Daglingworth	The Street
Driffield	A419
Lechlade	Lechlade Road
Moreton in Marsh	Moreton Railway Station
Preston	Preston Toll Bar
Shipton Moyne	Hedgeditch Lane
Siddington	Siddington Road
	The Common
South Cerney	Upper Up

Table 2: Roads flooded (December 2012)

Location		Source Reported	
Town	**Street**	**Source**	**Total Reported**
Ampney Crucis	Dumcourt Cottages	Surface Water	1
Bourton-on-the-Water	Rissington Road	Surface Water	1
Chipping Campden	Catbrook	Surface Water	1
Cirencester	Bowling Green Lane	Not Specified	1
	Admiralty Row	Not Specified	7
	Blake Road	Overloaded Sewer	5
	Dollar Street	Not Specified	4
	Dugdale Road	Surface Water	2
	Estcote Road	Surface Water	3
	Gloucester Road	Overloaded Sewer	2
	Greystones, Donside	Overloaded Sewer	1
	Grove Lane	Unknown	1
	Hereward Road	Not Specified Overloaded Drains Overloaded Sewer River	17
	Kemble Road	Not Specified	1
	Melmore Gardens	Surface Water	2
	Spitalgate Lane	Surface Water	1
	Thomas Street	Not Specified	1
	Trafalgar Road	Not Specified	2
Daglingworth	Daglingworth	Not Specified	1
	The Street	Not Specified	1
Lechlade	St Johns Priory Park	Not Specified	1
Moreton-in-Marsh	Croft Holm	Overloaded Drains Overloaded Sewer	2
	The Green	Surface Water	3
Naunton	Naunton	Overloaded Sewer	1
South Cerney	Boxbush Road	Not Specified	2

Location		Source Reported	
		Overloaded Sewer	
	The Limes	Overloaded Sewer	4

Table 3: Cotswold District Council data on properties and business flooded (December 2012)

Gloucestershire County Council has provided records of all flooding linked to property flooding from the November/ December 2012 event, see Table 4. It should be noted that some of these records may be a repeat of those described in Table 2 and Table 3.

Location		Source Reported	
Town	**Street**	**Source**	**Total Reported**
Bibury	Church Road	Unknown	1
	The Street	Overloaded Sewer	1
Cirencester	Gloucester Street	Overloaded Sewer	1
	Beeches Road	Overloaded Sewer	3
	Blake Road	Overloaded Sewer	6
	Corinium Gate	Overloaded Sewer	1
	Dugdale Road	Overloaded Sewer	2
	Estcote Road	Not Specified Overloaded Sewer	4
	Escote Road/Dugdale Road	Not Specified	1
	Estcote, Dugdale, Hereward Road generally	Overloaded Sewer	1
	Gloucester Street	Not Specified	1
	Hereward Road	Overloaded Sewer	1
	Melmore Gardens	Overloaded Sewer	1
	Queen Elizabeth Road	Surface Water	1
	Siddington Road	Overloaded Sewer	1
	Southmead	Overloaded Sewer	1
	Spitalgate	Overloaded Sewer	1
	The Mead	Overloaded Sewer	1
	Thomas Street	Not Specified	1
Kemble	Kemble	Not Specified	1

Location		Source Reported	
Lower Slaughter	Mill Lane	Overloaded Sewer	1
	Lower Slaughter	Overloaded Sewer	2
Naunton	Naunton	Overloaded Sewer and Pumping Station	1
Somerford Keynes	Elm View	Overloaded Pumping Station	1
South Cerney	Berkeley Close	Overloaded Sewer	1
	Bow Wow Area	River	1
	Boxbush Road	Overloaded Sewer River	2
	Broadway Lane	Not Specified Overloaded Sewer	3
	Clarks Hay	Overloaded Sewer	2
	School Lane	River	1
	The Limes	Overloaded Sewer	1
	Winchcombe Gardens	Overloaded Sewer	1
Lechlade	Lechlade	Not Specified	1

Table 4: Gloucestershire County Council data on properties affected during the flood event December 2012 - Cotswold District

I.5 July 2007[1]

During the July 2007 event, Cotswold District Council received over 1,150 reports of flooded homes and businesses. Approximately 40% of these properties were located in Moreton-in- Marsh, Bourton-on-the-Water and Chipping Campden to the north of the district. In total, 79 towns and villages across the Cotswold District are known to have been affected by the floods in summer 2007.

Rivers were reported as a source of flooding in 42 of the 79 (53%) locations affected. The River Windrush flooded over 100 homes and businesses in Naunton and Bourton-on-the-Water, while the River Churn flooded parts of Cirencester. The River Thames at Lechlade reached record levels and there were over 100 reports of property flooding at the confluence of the Thames and River Leach. The northernmost part of the District is located within the Avon catchment. The River Cam, a sub catchment of the Avon, caused severe flooding to a number of residential properties and businesses in Chipping Campden.

Some of the areas worst-affected by surface water flooding included Moreton-In-Marsh, Fairford and Whelford. Additionally, Thames Water has identified nine areas where properties were flooded internally by sewers (Fairford, South Cerney, Ampney St Peter, Ampney St Mary, Upper and Lower Slaughter, Moreton-in-Marsh, Bourton-on-the-Water, Quenington). However, it recognises that there were many other areas where sewers

[1] CDC (2008) S Strategic Flood Risk Assessment for Local Development Framework Level 1 Volume 1 - FINAL

caused flooding to gardens and open spaces. Further, groundwater was reported as a source of flooding in nine locations. Blewbury Rd East Hagbourne, report on flooding of 20th July 2007[2].

The flooding followed unprecedented rainfall; the wettest-ever May to July period since national records began in 1766. The Centre for Ecology and Hydrology[3] states that May to July produced hydrological conditions with no close modern parallel for the summer period in England and Wales. Met Office records show that an average of 414mm of rain fell across England and Wales during a three month period - 228mm greater than the average May to July rainfall recorded.

The Environment Agency prepared reports detailing the flooding during the 2007 event in the following areas:

- Buscott and Kelmscott[4]
- Fairford, Whelford Kempsford and Lechlade[5]
- Burford, Bourton-on-the-Water, Naunton and Lower Slaughter[6]
- River Churn and Ampney Brook[7]
- Moreton-in-Marsh, Bledington, Milton-under-Wychwood, Shipton-under-Wychwood, Ascottunder- Wychwood, Charlbury and Fawler[8]

The Environment Agency's review attributed the widespread flooding to be primarly caused by the sheer volume of water and inability of the overloaded drainage systems including drains, ditches, streams and rivers to convey the flood water.

Appendix F Summary Sheets provide further details relating to historic events in particular settlements.

I.6 April 1998[9]

The April 1998 flood event affected small rural areas along the River Evenlode to the west of Kingham.

I.7 October 1993[10]

The October 1993 flood event affected small rural areas along the River Evenlode to the east of Sydenham Farm, west of Daylesford and along the District boundary to the west of Kingham.

I.8 September 1992

The September 1992 flood event mainly affected locations along the River Thames, River Leach, River Churn and Ampney Brook. Along the River Thames, the historic flood outlines extend predominantly onto rural floodplain with some properties located within the historic flood outline at Somerford Keynes and Kempsford. To the East of Southrop, Baxters Farm is located within the historic flood outline for the River Leach; some rural

[2] Hyder Consulting (2008) Review of the Summer 2007 Floods in Cotswold District
[3] http://www.ceh.ac.uk/data/nrfa/index.html
[4] Environment Agency (2008) Buscot & Kelmscott Floods Review July 2007
[5] Environment Agency (2008) Fairford, Whelford, Kempsford & Lechlade Floods Review July 2007
[6] Environment Agency (2008) Lower Cotswolds Floods Review July 2007
[7] Environment Agency (2008) River Churn and Ampney Brook Floods Review July 2007
[8] Environment Agency (2008) Floods Review July 2007 Upper Cotswolds
[9] See note 1
[10] See note 1

areas along the Ampney Brook by Ampney St Peter and along the River Windrush and a supermarket adjacent to the River Churn are all shown to lie within the September 1992 flood outline.

I.9 August 1977

The August 1977 event also affected locations along the River Thames, but was smaller in magnitude than the March 1947 flood event. The historic flood outlines indicate that flooding was predominantly experienced in rural locations with some flooding to the Mobile Home Park to the east of Lechlade on Thames. The primary cause of the August 1977 flooding was thought to be local drainage problems and surface water.

I.10 July 1968

The July 1968 event occurred on the Knee Brook affecting a number of commercial and residential properties and a sewage works at Chipping Campden. A number of properties were also affected along an unnamed watercourse at Weston-sub-Edge.

I.11 March 1947

The March 1947 flood event that occurred on the River Thames, Flagham Brook, Swill Brook and River Churn flooded parts of the District in both rural and urban locations affecting a number of residential and commercial properties. The main locations affected include properties along the River Thames through Ewen, Somerford Keynes, the Caravan Park by Ashton Keynes, Kempsford and Lechlade on Thames. Along the River Churn a Water Sports Centre and residential properties at Cerney Wick were also affected

I.12 Chronology of British Hydrological Events

The table below is extracted from the Chronology of British Hydrological Events (https://cbhe.hydrology.org.uk/) filtered to contain events within the study area since 1500.

Year	Month	Quotation	River Basin
1535	10	Cricklade to Lechlade reach: "Of the weir at Watereaton we learn that in October 1535 Sir Walter Stonor....Sheriff of Oxfordshire and Berkshire....wrote to Thomas Cromwell....'I have pulled up the weir of Water Eyton according to the king's commandment.' " [upper Thames]	Thames
1757	1	"Northleach was reported as being partly flooded by melting snow upon the surrounding hills"	Thames
1774	3	"Three such dismal days as Monday, Tuesday, and Wednesday last, have scarcely been ever known in this climate. The rains on the two first days have occasioned an inundation that has only been exceeded by the great flood in 1770; the water rose so fast on Thursday, that it was feared we should have been much overflowed as at that memorable time; but it began to sink again on	Thames

Year	Month	Quotation	River Basin
		Friday, and in a few days we hope it will return to its usual channel. Nor were the hills less incommoded by Wednesday's snow, than the vale by the floods, for the road between this and Cirencester was entirely blocked up for two days."	
1789	11	1789 November 19 p[39]: "This day ... The Severn was united to the Thames by an intermediate canal ascending by Stroud, through the vale of Chalford, to the height of 343 feet, by 40 locks; there entering a tunnel through the hill of Sapertra, for the length of two miles and three furlongs, and descending by 22 locks, it joined the Thames near Lechlade ..." [ha 039, 054]	Thames
1789	11	1789 November 19 p[39]: "This day ... The Severn was united to the Thames by an intermediate canal ascending by Stroud, through the vale of Chalford, to the height of 343 feet, by 40 locks; there entering a tunnel through the hill of Sapertra, for the length of two miles and three furlongs, and descending by 22 locks, it joined the Thames near Lechlade ..." [ha 039, 054]	Severn
1814		1814 winter Cirencester: "The frost commenced the 26th December, 1813; the thermometer (placed against a house in Cirencester and taken at half-past 8 a.m.) fluctuated between 12 [degrees F.] and 22 degrees for the first three weeks; during this period there were two falls of snow about 2 inches deep ... At the beginning of the fourth week ... a fall of 15 inches of snow with deep drifts ...; hard frosts followed, the thermometer falling to 10 degrees on the 25th of January; the wind then shifted to the south and day thaws succeeded by frosty nights followed ... on the 5th we had snow, and then a rapid thaw, leaving only drifts of snow. The frost then resumed and continued with keen winds to the end of February; a slight tendency to thaw in the beginning of March was followed by a week of steady, clear, frosty weather until the 12th, about which time crystals of snow fell, then a week of cold, easterly winds with severe frosts until the 20th March, when a south wind brought mild weather and rain." [ha 039, Churn]	Thames
1852	9	1852 September 4 Further Barton, near Cirencester: "No [well water depth] record was kept as far back as 1852; but on September 4th	Thames

Year	Month	Quotation	River Basin
		of that year 2.83 ins. of rain was measured (in a gauge of 9 ins. diameter)."	
1867	11	1867 November para 2176 "I have gauged, I believe, every tributary of the Thames in Gloucestershire repeatedly during the last 25 years [to 1877]; [at Lechlade] I gauged the Thames by overfall, which is the most correct way of gauging it, in October and November 1867, at a dry season of the year, with a view to obtaining the summer flow of that stream. The gaugings which I have here for October give an average of 29,000,000 of gallons as the flow of the stream, but the rainfall was somewhat more, being 2.28 inches in October than I found it in November. para 2177. Lord Vernon] During what time was that 29,000,000 of gallons? In 24 hours. I took the flow of the water twice daily during the month of October 1867, between the 18th and 30th of that month. In November the rainfall was but .65 inches, and the mean of a vast number of gaugings is 19,165,041 gallons."	Thames
1880	7	1880 July 14 Rainfall observer at Cirencester noted: "A very wet month, the greater part of the rain being in thunder showers. On the evening of the 14th about 1.50 in. fell in less than half-an-hour; many cellars flooded." [ha 039, Churn]	Thames
1893	12	1893 December Observer at Cirencester, Further Barton noted p[77]: "The water in a well, 100 ft. deep, which was only 6 inches deep on November 15th, by December 8th had risen to 2 ft. 8 in., on 15th to 10 ft. 6 in., and by 29th to 20 ft." [ha 039]	Thames
1893	10	1893 October Observer at Cirencester (Further Barton) noted p[71]: "A well, 100 feet deep had only 1 ft. 3 in. deth of water" [ha 039]	Thames
1893	11	1893 November 15 Observer at Cirencester (Further Barton) noted p[33]: "A well, 100 feet deep reached its lowest, when there was only 6 inches of water left." [ha 039]	Thames
1894	11	1894 November "... depth of water in a well 100 feet deep at Further Barton, near Cirencester: October 26th 10 ft. 4 ins. November 2nd 37 ft. November 9th 37 ft. 5 ins. November 16th 52 ft. 1 ins. November 23rd 40 ft. 11 ins. November 30th 30 ft. 6 ins."	Thames

Year	Month	Quotation	River Basin
1895	5	1895 May 24 p[13]: "The Great Western Railway between Minety and Kemble [Glos.] was flooded to a depth of 2 feet." [ha 039, Swill Brook]	Thames
1896	8	1896 August 28 Observer at Cirencester (Further Barton), Glos., noted, p[14], "Water in a well 100 ft. deep reduced to 3 ft. 3 in."	Thames
1899	11	1899 November 8 Observer at Cirencester noted, p[98], "Hill springs commenced to run on November 8th" [R. Churn]	Thames
1900	11	1900 November Observer at Cirencester noted, p[98], "Although the springs were very full as late as early March, still the drought was severely felt even till November" [R. Churn]	Thames
1900	2	Rainfall observer at Cirencester (Further Barton) noted: "Excessively wet [month]. Very cold until 15th. The blizzard of 13th and 14th will long be remembered; almost all the roads were blocked. The heavy rain which followed every day afterwards caused severe floods. " [upper Thames]	Thames
1901	12	1901 December 14 Observer at Cirencester (Dollarward House) noted, p[83], "After wet weather in the first half of April the rain was never sufficient to affect springs ... till December 14th, an unusually late date ..." [R. Churn]	Thames
1904	2	1904 February 10 Rainfall observer at Cirencester (Further Barton) noted (p[30]) "Extremely wet ... The rain from 7th to 10th, amounting to 2.36 in., caused heavy floods in the Thames." [Upper Thames]	Thames
1904	12	1904 December Observer at Cirencester (Further Barton) noted (p[88]) "...wells and springs were remarkably dry as late as the middle of December." [Churn]	Thames
1905	4	1905 April Observer, Charles P. Hooker, at Cirencester (Dollarward House) noted in reviewing the year, p[75], "Had the wells not been filled in March and April, water would have been very scarce." [R. Churn]	Thames
1908	4	1908 April 27/28 Rainfall observer at Lechlade noted (p[10]) "Rain and melted snow caused floods"	Thames
1908		Cricklade to Lechlade reach: "Thacker writing of Hannington Bridge : ' The river was terribly choked with weeds; and I think most upward craft	Thames

Year	Month	Quotation	River Basin
		got stopped here in the summer of 1908...' " [upper Thames]	
1910	6	1910 June 7 p[116]: "... an equilateral triangle, about 16 miles in the side, near Chipping Norton and Stow-on-the-Wold, within which more than 2 inches fell. The greater part of this triangle received more than 3 inches, and near the centre a rain gauge at Churchill School recorded 4.25 in." [ha 039, R. Evenlode]	Thames
1910	6	1910 June 7 "... at Stow-on-the-Wold the exceptionally heavy fall of 3.55 in. was recorded." [ha 039, Windrush / Evenlode interfluve]	Thames
1911	12	1911 December Observer, C.P.Hooker, at Cirencester (Dollarward House) noted, p[57], "The heat, sunshine and drought of the summer will be long remembered. Though the last three months were wet, yet the springs never rose till mid-December, and were only full in the last 10 days of the year, and the shortage of water was most severely felt." [R. Churn]	Thames
1919		"The Churn, for instance, rises in seven wells in the Cotswolds. Gaugings have shown that at its source it discharged 31 cubic feet per minute, but went on accumulating as it passed over clays and other retentive soils until at 5.25 miles below its source it discharged 320 cubic feet per minute. After traversing a length of inferior oolite the volume gradually diminished. At 6.5 miles the flow had fallen to 290 cubic feet per minute; at 8.33 [miles] to 113 cubic feet per minute; and at Cirencester it was only 30 cubic feet per minute." NOTE: Although the book from this reference was extracted was originally published in 1919, the precise timing of the records above is not given.	Thames
1922		Local TV news report 14/12/2000 of current flooding of the High Street, Fairford, Glos. said that it was the worst such event since 1922. [lower R. Coln]	Thames
1923	2	1923 February p70: "In many places the precipitation was the largest ever known in February, this being the case in records covering 105 years at Ross-on-Wye, 80 years at Cirencester, 70 years at Bristol and 59 years at Wolstaston in Shropshire." A large area from Exmoor to Staffordshire, and in Aberdeenshire and Elgin, exceeded 300% of the 1881-1915	Severn

Year	Month	Quotation	River Basin
		average for February rain. [ha 054, 055, 009, 012]	
1929	12	"Extensive Floods at Cirencester Business Premises and Schools Closed Dwelling Houses Evacuated Cirencester, For a week or two extensive sheets of water have been standing in the meadows as the result of the abnormal rainfall of the past few weeks, and a week or ten days ago evidence of the extent of the swelling of the Churn was seen in the collection of water at the junction of Dollar-street and Thomas-street, which made this locality unpleasant for pedestrians. Towards the end of last week it was necessary to improvise a footway of raised planks on either side of the road in order that pedestrians might pass in comparative comfort. Cellars in this locality were generally flooded to a depth of several feet. Sunday saw a more serious state of affairs. Water had reached the furnaces of the heating apparatus of the Parish Church, also of the Congregational Church in Dyer-street, the Baptist Church in Coxwell-street, and the Wesleyan Church in Gloucester-street, and services in each of these buildings were considerably curtailed. The water in the centre of the roadway in Dollar-street rose to a depth of 18 inches and extended for a distance of about 150 yards. On the higher level of Gloucester-street was another great sheet of water, extending for a similar distance, this flowing in full stream from St. John's meadow through the playing ground of Powell's School. In the Whiteway and in Grove-lane there were also knee-deep floods, while the low-lying district of Watermoor also suffered. Fields within the vicinity of the Churn quickly became lakes. Sunday was a day of thunder storms and heavy downpours and many people who re-mained indoors were surprised to see the conditions which met their gaze on Monday morning, when rain continued to fall. Coxwell-street and Thomas-street were also affected by this time, and in many houses in these streets the inhabitants were forced to remain upstairs. Dams of brick and cement were hastily erected on doorsteps to keep back the flood, but the water continued to rise. The lower rooms of Powell's Schools were under several inches of water, and the schools were closed. The school house, too, was flooded, and Mr Henderson and his family had	Thames

Year	Month	Quotation	River Basin
		to seek shelter elsewhere. For several hundred yards in Gloucester-street dwellings were flooded, a similar state of things existing in the Whiteway Thomas-street, and Coxwell-street, and Purley-road were also grievously affected. The distress was sudden and great, many families being forced to remain in their upper rooms without fire or food. Immediate steps were taken to relieve cases of distress. On Tuesday, some houses water reached a level of three feet on the ground floor. The basements of any business houses have been flooded but the outstanding instance of interference to trade is that of Mr. J. M. Legg proprietor of Leggs Stores in Dollar-street, and of the Peoples Stores on the opposite side of the road, who has been seriously incommoded. When the flooding first became apparent Mr. Legg had everything in his shops raised to a level of twelve inches above the floor. On Monday morning, however, he found his shop flooded to a depth of 16 inches, and large quantities of his stock entirely spoilt in both establishments.	
1936	12	"The Autumn of 1935 was unusually wet and in December the low-lying lands were generally in waterlogged condition. Shortly before Christmas there occurred a cold spell during which a layer of snow accumulated. During the lasr few days of December heavy rain set in and this joined with the melting snow caused extensive flooding.. The Thames was running bank high with further heavy rains on the 29th and 30th December, causing many thousands of acres to be under water in the Lechlade and Radcot areas. The heavy rains continued on the 31st December and many main roads in the Thames Valley became impassable.... " [upper Thames]	Thames

Table 5: Chronology of Hydrological Events in Study Area, 1800 to Present