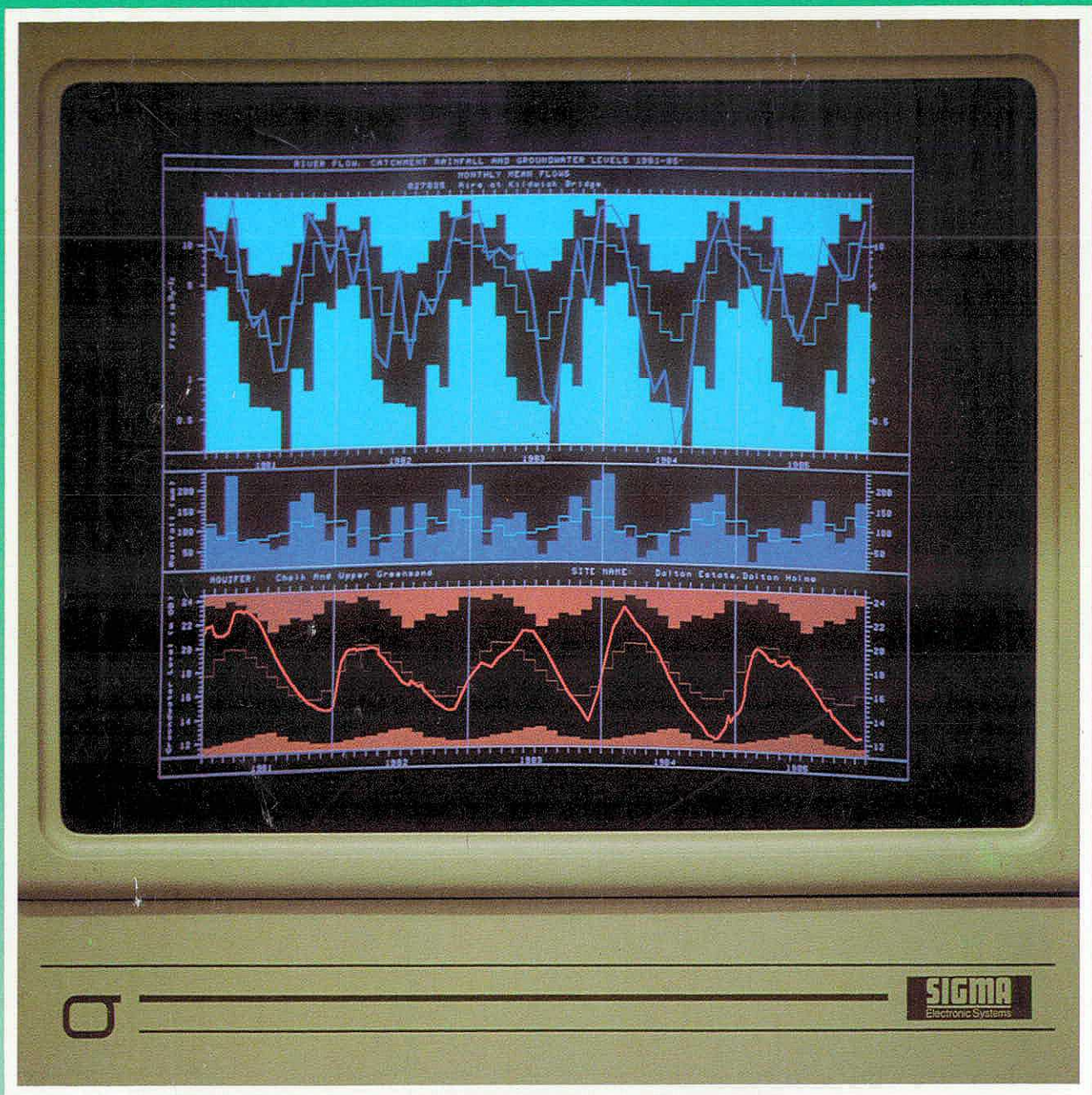




Hydrological data UK



Hydrometric Register and Statistics 1981-5

INSTITUTE OF HYDROLOGY • BRITISH GEOLOGICAL SURVEY

**HYDROLOGICAL DATA
UNITED KINGDOM**

**HYDROMETRIC REGISTER
AND
STATISTICS
1981-5**

**HYDROLOGICAL DATA
UNITED KINGDOM**

**HYDROMETRIC REGISTER
AND
STATISTICS
1981-5**

A catalogue of river flow gauging stations and
observation boreholes together with
summary hydrometric statistics

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A note for buyers of the loose-leaf version:-

In order to make the loose-leaf volume more manageable it is suggested that some of the background information which appears in each volume of the individual yearbooks be discarded. The 1985 material should be retained in its entirety; for the earlier volumes the following page sequences may be discarded:-

1981	pages:	119-141	and	161-168
1982	„	119-141	„	159-167
1983	„	143-167	„	179-187
1984	„	137-161	„	173-181

Cover:

A graphical representation of water resources variations in Yorkshire over the period 1981-5 displayed on a computer terminal.

Photograph: David Kirby

FOREWORD

In April 1982, care of the United Kingdom national archive of surface water data passed from the Department of the Environment's Water Data Unit (which was disbanded) to the Institute of Hydrology (IH). In a similar move, the Institute of Geological Sciences, subsequently renamed the British Geological Survey (BGS), took over the national groundwater archive. Both IH and BGS are component bodies of the Natural Environment Research Council (NERC). The BGS hydrogeologists are located with IH at Wallingford and close co-operation between the two groups has led, among other things, to the launching - in 1985 - of a new series of yearbooks and reports dealing with nationally archived surface and groundwater data and the use made of them. The work is overseen by a steering committee with representatives of Government Departments and the water industry from England, Wales, Scotland and Northern Ireland.

The published series - *Hydrological data UK* - includes an annual yearbook and, every five years, a catalogue of river flow gauging stations and groundwater level recording sites together with statistical summaries; the Hydrometric Register and Statistics 1981-5 is the first such publication. The six volumes of the 5-year cycle are available individually but are also designed to be inserted in a ring binder. Further details of these arrangements are given on page 173.

The series - but not the binder - also includes occasional reports dealing with significant hydrological events and analyses.

D.B. Smith
Acting Director, Institute of Hydrology



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INTRODUCTION

The Hydrometric Register and Statistics 1981-5 is both a companion publication to the individual yearbooks in the Hydrological data UK series - providing comprehensive hydrometric data relating to the featured period - and a reference source for hydrometric information which does not change materially from year to year and, thus, does not merit annual publication.

The summary statistical data are provided to allow an examination to be made of the variation in surface and groundwater resources both within the period 1981-5 and by comparison with the long term average conditions. Details of the gauging stations - and the catchments they command - and observation boreholes in the national networks, are presented to assist in the interpretation of the statistical data and

to help data users in the selection of appropriate hydrometric data sets for their particular application or area of interest.

A description is given of the surface water and groundwater archives together with the retrieval facilities which complement the data published in the Hydrological data UK series.

The constraints of space have required a number of abbreviations and acronyms to be used - particularly in the descriptive material in the surface water section. These - together with selected technical terms - are defined in a glossary; the accompanying bibliography references various standard works relating to the measurement and exploitation of hydrometric data.

SOURCES OF INFORMATION

The hydrometric data presented in this volume have been abstracted primarily from the surface water and groundwater archives. Responsibility for the collection and initial processing of the data rests mainly with the ten Water Authorities in England and Wales, the seven River Purification Boards in Scotland and the Department of the Environment (NI) in Northern Ireland. Additional data has been provided by the Geological Survey of Northern Ireland, the Borders Regional Council and by various research bodies and public undertakings.

River flows in the United Kingdom are often difficult to measure precisely - particularly in flood or drought conditions - and can be substantially affected by artificial influences. These influences can range from a steady diminution in flows caused by a major abstraction immediately upstream of the gauging station to the often subtle impact of land use change on river flow patterns. An appreciation of these effects is necessary to exploit the archived data

most effectively. The WAs, RPBs and DoE (NI) supplied important material relating to the changing pattern of water utilisation in individual catchments and the hydrometric characteristics of the river flow measurement stations.

Apart from the figures for the Institute of Hydrology's own experimental basins, the majority of the areal rainfall data presented in this volume has been provided by the Meteorological Office. A proportion of the Northern Ireland catchment rainfall data was supplied by the Department of the Environment (NI).

Some slight variations from contributors figures may occur; these may be due to different methods of computation or the need for uniformity in presentation.

The Natural Environment Research Council acknowledge and extend their appreciation to all who have assisted in the collection of information for this publication.

SURFACE WATER - REGISTER AND STATISTICS

Acquisition, Computation and Accuracy of Gauged Flows

Gauged flows are generally calculated by the conversion of stage, or water level, using a stage-discharge relation, often referred to as the rating or calibration. Stage is measured and recorded against time by instruments usually actuated by a float in a stilling well. The instrument records the level either continuously by pen and chart, or digitally on punched-tape or solid-state logger, generally at regular (normally 15 minute) intervals. These stage data may be collected routinely, typically at weekly or monthly intervals and taken to a regional centre for processing. At an increasing number of gauging stations provision is made for the routine transmission of river levels directly to the processing centre, by telephone lines or, less commonly, by radio; on occasions, satellites have been used to receive and retransmit the radio signal. The rapid growth in the use of the public telephone network for the transmission of river level - and, occasionally, river flow - data is enabling hydrometric data acquisition to proceed on a near real-time basis in many areas. Typically, the data are stored on site, using a solid state logger, and transmitted overnight for initial processing the following day. Often, both digital and analogue recording devices are deployed at gauging stations to provide a measure of security against loss of record caused by instrument malfunction.

The stage-discharge relation is obtained either by installing a gauging structure, usually a weir or flume with known hydraulic characteristics, or by measuring the stream velocity and cross-sectional area at points throughout the range of flow at a site characterised by its ability to maintain the relationship.

The accuracy of the processed gauged flows therefore depends upon several factors:

- i. accuracy and reliability in measuring and recording water levels,
- ii. accuracy and reliability of the derived stage-discharge relation, and
- iii. concurrency of revised ratings and the stage record with respect to changes in the station control.

Flow data from ultrasonic gauging stations are computed on-site where the times are measured for acoustic pulses to traverse a river section along an oblique path in both directions. The mean river velocity is related to the difference in the two timings and the flow is then assessed using the river's cross-sectional area. Accurate computed flows can be expected for stable river sections and within a range in stage that permits good estimates of mean

channel velocity to be derived from a velocity traverse set at a single depth, or at a series of fixed depths.

Flow data from electromagnetic gauging stations may also be computed on-site. The technique requires the measurement of the electromotive force (emf) induced in flowing water as it cuts a vertical magnetic field generated by means of a large coil buried beneath the river bed, or constructed above it. This emf is sensed by electrodes at each side of the river and is directly proportional to the average velocity in the cross-section.

British and International Standards are followed as far as possible in the design, installation and operation of gauging stations (see page 178). Most of these Standards include a section devoted to accuracy, which results in recommendations for reducing uncertainties in discharge measurements and for estimating the extent of the uncertainties which do arise.

The national surface water archive exists to provide not only a central database and retrieval service but also an extra level of hydrological validation. To further this aim, project staff at the Institute of Hydrology liaise with their counterparts in the water industry on a regional basis and, by visiting gauging stations and data processing centres, are acquiring the necessary knowledge of local conditions and problems to enable erroneous flow sequences to be more readily identified and rectified.

Scope of the Register and the Statistical Tabulations

Hydrometric and hydrological information is presented for Water Authority areas, River Purification Board areas and for Northern Ireland. Included in each geographical section are details of those few gauging stations operated by other organisations - usually academic or research institutes or other public undertakings. For each of the primary measuring authorities - or pair of measuring authorities - data are presented in five parts:

- i. A measuring authority location map together with reference details relating to the authority or authorities. Where two RPBs are featured together, reference to the Frontispiece may be made to clarify the spatial extent of each authority.
- ii. A gauging station location map; the scale varies between maps in order to make the most effective use of the available space. To improve clarity, a few stations are shown slightly displaced from their true national grid location; this is a cartographic necessity in

those localities where the river - or gauging station - network is particularly dense.

Data users are advised to consult the gauging station register to check whether individual stations are still operational.

- iii. A gauging station register. Stations are normally tabulated in groups of ten; additional breaks are provided to separate the station details relating to individual RPB areas where two are featured together.
- iv. A tabulation of hydrometric statistics together with reference information relating to the gauging station, its flow record and the catchment it commands.
- v. A summary of the river flow and catchment rainfall data held on the surface water archive.

The following explanatory notes will assist in the interpretation of particular items in the tabular material.

THE GAUGING STATION REGISTER

Flow measurement stations are featured in this register* where they have at least two complete years of river flow data - up to and including 1985 - held on the surface water archive.

Station Number

The gauging station number is a unique six digit reference number which serves as the primary identifier of the station record on the surface water archive. The first digit is a regional identifier being 0 for mainland Britain, 1 for the islands around Britain and 2 for Ireland. This is followed by the hydrometric area number given in the second and third digits. Hydrometric areas are either integral river catchments having one or more outlets to the sea or tidal estuary, or, for convenience, they may include several contiguous river catchments having topographical similarity with separate tidal outlets. In mainland Britain they are numbered from 1 to 97 in clockwise order around the coast commencing in north-east Scotland. Ireland has a unified numbering system from 1 to 40 commencing with the River Foyle catchment and circulating clockwise; not all Irish hydrometric areas, however, have an outlet to the coast. The numbers and boundaries of the United Kingdom hydrometric areas are shown on the gauging station location maps.

The fourth, fifth and sixth digits comprise the number, usually allocated chronologically, of the gauging station within the hydrometric area.

* The organisations with operational responsibility for individual gauging stations are given in the Hydrometric Statistics section and in each yearbook in the Hydrological data UK series.

An asterisk following the station number identifies those gauging stations known to have been closed prior to 1981.

River Name / Station Name

The river and station name assigned by the appropriate measuring authority. Space constraints require that abbreviations be used for a number of gauging stations; for the majority of monitoring sites the full river and station names are given in the table of Hydrometric Statistics.

Grid Reference

Standard two-letter and six figure map reference using the National Grid in Great Britain and the Irish Grid in Northern Ireland. (The Irish Grid has only one prefix letter but it is common practice to precede it with the letter I to make identification clear.)

Catchment Area

The surface catchment area, in the horizontal plane, draining to the gauging station in square kilometres. There are a number of gauging stations where, because of geological considerations, the groundwater catchment area differs appreciably from the surface water catchment area and, in consequence, the baseflow, whether augmented or diminished, may cause the runoff values to appear anomalous.

Station Type

The station type is coded by the list of abbreviations given below - two abbreviations may be applied to each station relating to the measurement of low or high flows.

B	Broad-crested weir
C	Crump (triangular profile) single crest weir
CB	Compound broad-crested weir. The compounding may include a mixture of types such as rectangular profiles, flumes and Flat Vs and with or without divide walls
CC	Compound Crump weir
EM	Electromagnetic gauging station
EW	Essex weir (single Crump weir modified with angled, sloping, triangular profile flanking crests) in trapezoidal channel
FL	Flume
FV	Flat V triangular profile weir
MIS	Miscellaneous method
TP	Rectangular thin-plate weir
US	Ultrasonic gauging station
VA	Velocity-area gauging station
VN	Triangular (V notch) thin-plate weir

Period of Record

The first year, and last year prior to 1986, for which daily river flow data are held on the surface water archive. Where the flow record is sensibly continuous - fewer than six missing days occurring in any one year - the first and last years are separated by a dash; otherwise dots are substituted. A detailed breakdown of the data available for each gauging station is given in the Summary of Archived Data (see below). Earlier data, often of a sporadic nature or of poorer quality, may occasionally be available from the measuring authority or other sources (see the corresponding station 'Comment'). Areal rainfall data and, particularly, peak monthly flows may not be available for the full period of record (POR).

Emboldening

Where the pre-1981 period of record equals, or exceeds, five complete years **emboldening** is used to highlight new maximum and minimum values, for selected statistical items, occurring during the period 1981-5; the statistical items concerned are identified by an asterisk following the item title in the explanatory notes.

Mean Annual Rainfall

The average annual rainfall over the catchment in millimetres. Normally the mean relates to the period of record given in the previous columns (rainfall data preceding the start of the corresponding river flow record are ignored); the mean rainfall is shown in italics where one, or more, catchment rainfall totals - corresponding to months for which runoff data are available - are missing.

The mean annual rainfall is derived by first obtaining the long period (1941-70) average annual rainfall for each catchment - this is provided by the Meteorological Office and is based on isohyets mapped at a scale of 1:250,000. Then, for each of a selected number of raingauges chosen to represent the catchment, the monthly rainfall is expressed as a percentage of its annual average rainfall. The percentage values of rainfall for each raingauge are summed and their mean obtained to give a catchment percentage value for the month, which is then converted to monthly mean rainfall. Finally, the mean annual rainfall is computed from the monthly mean rainfalls using data only for years where the rainfall record is complete. Accuracy depends largely on the reliability of the assessment of the areal annual average and on the adequacy of the network of raingauges used to represent an area. Where, as for instance in some small mountainous catchments, raingauges are few and their siting and exposure is not ideal, great precision in the areal rainfall estimates cannot be expected.

Mean Annual Runoff

The notional depth of water in millimetres over the catchment equivalent to the mean annual flow as measured at the gauging station. It is computed using the relationship:

$$\text{Runoff in mm} = \frac{\text{Mean Flow in cubic metres per second} \times 86.4 \times 365}{\text{Catchment Area (km}^2\text{)}}$$

The total runoff is rounded to the nearest millimetre.

As a consequence of missing data there will not be full equivalence between the mean annual rainfall and the mean annual runoff for some catchments.

Runoff statistics - and the corresponding mean flow - are computed on the basis of naturalised flows for the minority of catchments where sensibly continuous daily, or monthly, naturalised data are held on the surface water archive - an 'n' following the period of record identifies these catchments. Naturalised flows are derived from the corresponding gauged discharges by taking account of the net effect of upstream abstractions and discharges. The uncertainty in the magnitude of the necessary adjustment may be considerably greater than the uncertainty associated with the gauged flow.

Guidance as to how representative the mean annual runoff is of the natural flow regime may be found in the 'Comment' section of the Table of Hydrometric Statistics (see below).

*Maximum Annual Runoff / Year of Occurrence **

The maximum calendar year runoff in the period of record. The selection is based only on those years with complete flow records on the surface water archive.

*Minimum Annual Runoff / Year of Occurrence **

The minimum calendar year runoff in the period of record. The selection is based only on those years with complete flow records on the surface water archive.

Mean Flow

The average - weighted to account for the different number of days per month - of the mean monthly flows for the period of record.

Minimum Monthly Flow / Month and Year of Occurrence

The minimum monthly mean flow in the period of record. Minimum monthly flows greater than zero but less than $0.005 \text{ m}^3\text{s}^{-1}$ will appear as '>0.0'.

It should be emphasised that river flow measurement tends to become more imprecise at very low

discharges. Very low velocities, heavy weed growth and the insensitivity of stage-discharge relations combine with the difficulty of accurately measuring limited water depths to increase the uncertainty associated with the computed flows.

Mean Annual Flood

The mean of the annual peak discharges in the period of record. Generally, the Mean Annual Flood (MAF) has been computed using a data set compiled originally as part of the Flood Studies (see page 8). This data set has been updated at intervals. Mean Annual Floods have been computed only when at least five water year (October-September) peaks have been recorded. For a few stations (indicated by an asterisk following the MAF value) instantaneous flow values cannot readily be established and the Mean Annual Flood has been determined on the basis of the highest daily mean flows. The Mean Annual Flood has been omitted for a few stations where catchment changes – normally the construction of a major reservoir – make the computed MAF unrepresentative of current conditions.

Accurate high flow measurement can present severe logistical and hydrometric problems and flood discharges may often be based on substantial extrapolations of the stage-discharge relation. The precision may vary greatly from station to station; some relevant additional information may be found in the 'Comment' section.

Base Flow Index

The Base Flow Index (BFI) was developed at the Institute of Hydrology during the Low Flow Study to help assess the low flow characteristics of rivers in the United Kingdom. In this volume it has been computed using the archived record of gauged daily mean flows* and may be thought of as a measure of the proportion of the river runoff that derives from stored sources; the more permeable the rock, drift and soil material of a catchment the higher the baseflow – and the more sustained the river's flow during periods of dry weather. Thus, the BFI is an effective means of indexing catchment geology – rivers draining impervious clay catchments (with minimal lake or reservoir storage), for instance, typically have baseflow indices in the range 0.15 to 0.35 whereas a Chalk stream may well have a BFI greater than 0.9 as a consequence of the high groundwater component in the river discharge. Details of the procedures used to compute the BFI are given in: Low Flow Studies Report, 1980, Institute of Hydrology.

* For ungauged catchments, the BFI may be estimated using geological maps. By refining the relationship between the BFI and solid and drift geology, maps of the river network categorised according to its BFI values can be produced; the Institute of Hydrology has published a 1:625,000 scale Base Flow Index map of Scotland¹.

10 Percentile

The flow in cubic metres per second which was equalled or exceeded for 10 per cent of the specified term – a high flow parameter which, when compared with the mean may give a measure of the variability, or 'flashiness', of the flow regime. The 10 percentile is computed using daily flow data only for those years with five days, or less, missing on the surface water archive.

95 Percentile

The flow in cubic metres per second which was equalled or exceeded for 95 per cent of the specified term – a significant low flow parameter relevant in the assessment of river water quality consent conditions. The same conditions for completeness of the annual records apply as for the 10 percentile flow. Ninety-five percentile flows greater than zero but less than $0.005 \text{ m}^3\text{s}^{-1}$ will appear as '>0.0'.

The reliability of the 95 percentile flows – as with the minimum monthly mean – as representative measures of low flow must be considered carefully and the values used with caution in view of the problems associated with the measuring of very low discharges and the increasing proportional variability between the natural flow and the artificial influences, such as abstractions, discharges, and storage changes as the river flow diminishes.

HYDROMETRIC STATISTICS

Flow measurement stations are, generally, featured in this section where at least three complete years of data are available – on the surface water archive – over the period 1981–85. Some stations which appear in the Gauging Station Register have been omitted from this section for reasons other than the length of flow record. Normally this is because of the poor quality of the hydrometric data or because of the limited value to the national network of a particular gauging site, e.g. a gauging station immediately below a reservoir.

Certain key items are repeated from the Register of Gauging Stations.

Catchment Area – C.A. See page 4.

Measuring Authority – M.A.

An abbreviation referencing the organisation responsible for the operation of the gauging station. A list of measuring authority codes together with the full name of the organisation is given in the Glossary. The addresses of the Water Authorities and River Purification Boards appear together with the relevant location map.

Level

The level of the station; generally, the level of the gauge zero in metres above Ordnance Datum, or above Malin Head Datum for stations in Northern Ireland. Although gauge zero is usually closely related to zero discharge, it is the practice in some areas for an arbitrary height, typically one metre, to be added to the level of the lowest crest of a measuring structure to avoid the possibility of false recording of negative values by some digital recorders.

Factors affecting flow - F.A.F.

An indication of the various types of abstractions from, and discharges to, the river operating within the catchment which alter the natural flow is given by a standard set of code letters. An explanation of the code letters follows. With the exception of the induced loss in surface flow resulting from underlying groundwater abstraction, these codes and descriptions refer to quantifiable variations and do not include the progressive, and difficult to measure, modifications in the regime related to land use changes.

Except for a small set of gauging stations for which the net variation, i.e. the sum of abstractions and discharges, is assessed in order to derive the 'naturalised' flow from the gauged flow (see page 5), the record of individual abstractions, discharges and changes in storage as indicated in the code above is not held centrally.

CODE EXPLANATION

N Natural, i.e. there are no abstractions and discharges or the variation due to them is so limited that the gauged flow is considered to be within 10% of the natural flow at, or in excess of, the 95 percentile flow.

Storage or impounding reservoir. Natural river flows will be affected by water stored in a reservoir situated in, and supplied from, the catchment above the gauging station.

R Regulated river. Under certain flow conditions the river will be augmented from surface water and/or groundwater storage upstream of the gauging station.

Public water supplies. Natural river flows are reduced by the quantity abstracted from a reservoir or by a river intake if the water is conveyed outside the gauging station's catchment area.

Groundwater abstraction. Natural river flow may be reduced or augmented by groundwater abstraction or recharge. This category includes catchments where mine-water discharges influence the flow regime.

Effluent return. Outflows from sewage treatment works will augment the river flow if the effluents originate from outside the catchment.

Industrial and agricultural abstractions. Direct industrial and agricultural abstractions from surface water and from groundwater may reduce the natural river flow.

H Hydro-electric power. The river flow is regulated to suit the need for power generation; catchment to catchment diversions may also significantly affect average runoff.

Bankfull (B-full) / Structurefull (S-full)

The flow in cubic metres per second at which the river begins to overlap the banks - or the wing walls of a structure - at a gauging station. The discharges have been obtained from stage-discharge relations and since they are at the upper limit of the in-bank flow they may be derived by extrapolation. At a few weirs the upstream channel capacity may be less than the capacity of the structure. Under such circumstances bypassing will commence before structurefull is reached.

This item is omitted where the bankfull or structurefull discharges have not been registered on the surface water archive.

Comment

A short commentary providing a guide to the characteristics of the station, its flow record and the catchment it commands; the catchment description will normally be separated from the rest of the material by a '#' symbol. The objectives of this summary information are to assist data users in the selection of gauging station records appropriate to their needs and to assist in the interpretation of flow data for individual gauging stations particularly where the natural flow pattern is significantly disturbed by artificial influences.

The 'Comment' will be updated and revised to reflect the availability of more information and in response to changing hydrometric conditions at the measuring site and changing water use and land use within the catchment.

Please refer to the Glossary for an explanation of technical terms, abbreviations and acronyms used in the Comment section.

1981-5 Hydrometric Statistics

Hydrometric statistics are presented both for the period of record up to, and including, 1980 and for each calendar year 1981 to 1985. Please note when

comparing period of record values with those given in the Gauging Station Register that the figures given in the latter table relate to the full period of record up to and including 1985. This allows the impact of the 1981-5 rainfall and runoff patterns on the long term averages to be examined.

The same conditions for completeness (for the inclusion of a particular year in the analysis) apply as in the corresponding entries in the Gauging Station Register. Runoff data for individual years are featured only where a sensibly complete (up to five missing days permitted) annual flow record is held on the surface water archive.

Emboldening

The period of record statistics are shown **emboldened** where they are based on five, or more, complete years of data. For such records emboldening is also used to highlight certain data items where new maximum or minimum values have been established over the period 1981-5; the statistics concerned are identified by an asterisk following the heading in the explanatory notes.

Rainfall

The rainfall over the catchment for each year and for the period of record (see page 5 for the method of derivation); '% of pre-1981' expresses the individual yearly totals as a percentage of the period of record average.

Runoff

The catchment runoff for each year and for the period of record; '% of pre-1981' expresses the individual yearly totals as a percentage of the period of record average.

In the 1981-5 statistical tabulations gauged flows have been used, exclusively, to compute runoff totals. For a few gauging stations - those where runoff has been computed using naturalised data in the Gauging Station Register - a guide to the net impact of artificial influences on the average annual runoff may be estimated by comparing the corresponding mean runoff figures given in the Register and in the tabulation of Hydrometric Statistics.

Mean Flow

The POR mean flow is based on all available pre-1981 daily mean gauged flows; for the method of computation see page 5. The annual mean flows are derived from the complete daily record for each year.

*Peak Flow / Date of Peak **

The peak flow in cubic metres per second during the term indicated together with the date of occurrence, normally the water-day (which commences at 09.00 hrs). Generally, the peak flows are derived from the record of monthly instantaneous maximum flows stored on the surface water archive. Where instantaneous flows are not recorded or where the peak value - in an incomplete series - is exceeded by the highest daily mean flow, the latter is substituted; such substitutions are indicated by a 'd' flag.

As a result of particular flow measurement difficulties in the flood range, the peak flow series (on the surface water archive) is often incomplete and the recorded discharges may be of limited accuracy. Consequently, in some cases, the peak flows have been abstracted from an archive of flood events maintained by the Institute of Hydrology since the inception of the Flood Studies project; an 'f' following the peak flow indicates that the Flood Studies archive is the data source. Reference to Volume IV of the Flood Studies Report² should be made to check for historical flood events which may exceed the peak falling within the gauged flow record.

*Minimum Daily Flow / Date of Minimum **

The value and date of occurrence of the lowest daily (normally, a water-day) mean flow in cubic metres per second during the term indicated. In a record in which the value recurs, the date is that of the last occasion.

Percentiles: 10%, 50% and 95%

The flow in cubic metres per second which was equalled or exceeded for the specified percentage of the term indicated. See page 6 for details of the computation of the 10 and 95 percentiles.

SUMMARY OF ARCHIVED DATA

This tabulation summarises - in decade blocks - the river flow and catchment areal rainfall data currently held on the surface water archive. Part I relates to daily gauged flows, monthly peaks and monthly catchment rainfalls. Part II relates to naturalised daily and monthly flows. The following keys are provided for the interpretation of the data summaries.

SURFACE WATER - REGISTER AND STATISTICS

Part I Gauged daily flows, monthly peaks and monthly rainfall

KEY:

	Complete rainfall	Incomplete or missing rainfall
Complete daily and complete peaks	A	a
Complete daily and partial peaks	B	b
Complete daily and no peaks	C	c
Partial daily and complete peaks	D	d
Partial daily and partial peaks	E	e
Partial daily and no peaks	F	f
No flow data	†	

Part II Naturalised daily and monthly flows

KEY:

Complete daily and complete monthly	A
Partial daily and complete monthly	B
Partial daily and partial monthly	C
Partial daily and no monthly	D
No daily and complete monthly	E
No daily and partial monthly	F
No naturalised flow data	-

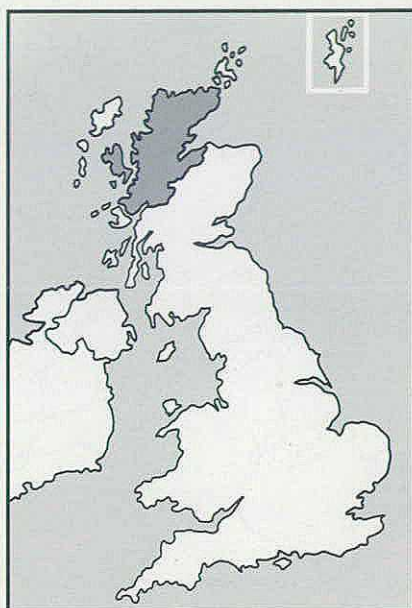
Up to date summaries of the data held on the surface water archive are published in the Yearbooks which complement this volume. Data summaries are also

available on request from the Surface Water Archive Office (see page 173).

References

1. Gustard, A., Jones, P. and Sutcliffe, M.F. 1986. Base Flow Index map of Scotland. Institute of Hydrology.
2. Flood Studies Report. 1975. Natural Environment Research Council (5 vols).

HIGHLAND RIVER PURIFICATION BOARD



Area: 23,110 km²

Average Rainfall (1941-70): 1722 mm

Headquarters of the Highland River Purification Board:

Strathpeffer Road
Dingwall
IV15 9QY

Telephone: Dingwall (0349) 62021

	Period	Rainfall (mm)	Runoff (mm)	Mean flow (m ³ s ⁻¹)	Peak flow (m ³ s ⁻¹)	Date of peak	Min. daily flow (m ³ s ⁻¹)	Date of min.	10 Percentile (m ³ s ⁻¹)	50 Percentile (m ³ s ⁻¹)	95 Percentile (m ³ s ⁻¹)				
		% of pre-1981	% of pre-1981												
004004 M.A: HRPB Level: 20m F.A.F: H Comment: 50m wide river section with unstable gravel control requiring regular recalibration at low flows. Runoff from 50% of the natural catchment along with interbasin transfers from the rivers Broom and Carron amounting to 20% of the natural catchment bypass the station for power generation and discharge to Loch Luichart. Storages in Loch Vaich and Loch Glascarnoch controlled for power generation. # Typical Highland mix of rough grazing and moorland with some afforestation in the middle reaches.	1981 1982 1983 1984 1985	847 585 711 459 495	9.04 6.25 7.59 4.90 5.27	135.0 163.5 107.6 63.2	30/01 31/12 01/01 31/01	1.46 1.45 1.22 1.31	20/04 01/06 08/05 18/02	21.6 12.0 16.6 10.5 9.9	4.69 3.62 3.43 2.71 3.34	1.65 1.64 1.69 1.57 1.53					
006007 M.A: HRPB Level: 7m F.A.F: H Comment: 80m wide fully contained river section. Frequent recalibration of low flow rating due to alteration of stop-log configuration on weir which forms the control. Fully calibrated to maximum recorded flow. Substantial hydro-electric schemes on the Garry, Moriston and Foyers tributaries utilising runoff from 56% of the catchment. Flows in the Caledonian Canal bypass the station. Hydrograph damped by influence of Loch Ness with a surface area of some 48 km ² .	1981 1982 1983 1984 1985	1806 2098 2091 1624 1716	103 1575 119 93 98	1531 1575 1755 1429 1352	114 118 131 107 101	89.26 91.88 102.35 83.35 78.61	419.0 331.0 588.0 619.2 369.8	19/01 23/11 31/12 01/01 21/12	1974 1974 1974 1974 1974	7.85 13.42 14.49 15.26 10.00 24.52	03/07 25/05 24/06 07/08 21/08 04/06	160.9 184.9 184.9 238.5 159.3 151.5	58.26 60.21 79.71 81.65 71.77 62.75	17.71 19.11 20.30 17.95 11.32 28.96	
006008 M.A: HRPB Level: 109m F.A.F: N Comment: 15m wide river section with bypassing on the right bank at extreme flows. Well established, stable rating up to bankfull. Computed flows 100% natural but whole catchment drains through Loch Meikle (1 km ² surface area). Flows recede to unexpected low levels possibly due to sub-surface flows below the station. # Typical upland catchment (rough grazing and moorland) with some afforestation around Loch Meikle.	1981 1982 1983 1984 1985	1344 1339 1603 1612 1232 1327	100 119 119 120 92 99	826 1026 1040 1030 737 874	95 95 125 124 88 105	2.77 3.49 3.46 2.48 2.93	50.4 32.3 49.7 37.9 51.3	27/07 1980 04/10 26/12 27/12 01/01 30/09	0.08 0.03 0.04 0.01 0.01 0.43	18/05 08/09 04/08 17/08 28/08 17/02	1980 1980 1980 1980 1980 1980	6.8 7.7 8.7 9.4 6.4 7.1	1.51 0.83 1.90 1.93 1.28 1.54	0.19 0.06 0.05 0.03 0.53	
007001 M.A: HRPB Level: 254m F.A.F: N Comment: 50m wide river section adequately gauged to bankfull. Liable to extremely rapid rises in level. Prior to January, 1978 station was located 700m upstream and cableway 500m downstream of present site. 100% natural runoff with minimal surface storage. # Extensive blanket peat over long, narrow, steep-sided catchment which is nested within that of station 7002.	1981 1982 1983 1984 1985	1197 1353 1637 1458 1267 1322	113 113 137 122 106 110	1160 1323 1323 1223 1094 1195	121 139 17.43 16.11 115 125	15.29 17.43 16.11 14.41 15.70	480.0 577.7 235.7 364.3 322.3 250.4	17/08 20/09 30/01 31/12 23/09 03/12	1970 1970 1970 1970 1970 1970	1.14 1.60 1.57 1.37 1.08 2.80	22/08 03/09 04/08 01/09 27/08 29/10	29.0 36.4 35.2 40.9 31.3 30.3	7.23 6.96 11.82 8.75 8.29 9.79	2.16 1.93 1.96 1.62 1.23 3.74	
007002 M.A: HRPB Level: 10m F.A.F: N Comment: 50m wide river section in a mobile gravel reach which necessitates frequent recalibration of low flow rating. Adequately gauged to bankfull. 100% natural catchment with minimal surface storage. # Other than a narrow agricultural coastal plain the catchment drains the Monadhliath Mountains with an extensive blanket peat cover.	1981 1982 1983 1984 1985	1084 1141 1366 1209 1128 1231	107 128 114 106 116	820 902 871 802 848	113 124 120 110 117	20.33 22.36 21.61 19.87 20.96	2410.0 861.1 292.8 440.6 591.9 321.7	17/08 20/09 30/01 11/09 23/09 01/09	1970 1970 1970 1970 1970 1970	1.75 2.65 2.58 2.63 2.07 4.24	23/08 03/09 01/08 12/08 29/08 23/07	39.9 46.5 49.2 48.4 41.9 40.8	10.82 8.49 14.31 14.02 12.40 14.46	3.28 3.20 3.07 2.85 2.38 5.97	
007004 M.A: HRPB Level: 7m F.A.F: N Comment: 20m wide river section with overbank flow at extreme levels. Adequately gauged to bankfull and a rock protection to a downstream pipeline provides a stable low flow control. Only net abstraction is PWS for Inverness from Loch Dunleith through which only 7% of the upper catchment drains. No other significant surface storage. Daily level observations from April, 1974 to January, 1976. # Catchment comprises hill pastures and peat moorland except for some 20% of the downstream reach which is cultivated.	1981 1982 1983 1984 1985	595 993 1167 1050 940 1110		595 635 630 97 545 632	107 107 6.30 5.75 5.41 106	5.91 6.31 6.30 9.41 5.41 6.26	127.7 198.4 83.1 94.1 138.8 54.9	27/07 1980 03/10 07/10 31/12 25/10 01/09	0.75 0.63 0.67 0.65 0.46 1.71	04/06 15/09 30/07 14/08 23/08 23/07	1980 1980 1980 1980 1980 1980	13.3 13.8 13.7 13.6 11.6 12.7	3.53 3.03 3.76 3.74 3.66 4.38	1.06 0.70 0.87 0.74 0.53 2.21	
007005 M.A: HRPB Level: m F.A.F: N Comment: 15m wide fully contained river section. Unstable gravel control requires recalibration of low flows following flood events. Calibrated to 35 m ³ s ⁻¹ . Computed flows 100% natural. 20% of catchment drains through Lochindorb with a surface area of some 2.3 km ² which is the only significant storage. # Catchment is mainly peat moorland.	1981 1982 1983 1984 1985	839d 1065		486 609 726		2.54 3.18 3.79	83.9d 118.7 73.5	06/06 23/09 01/12	1980 1980 1980	0.47 0.42 0.90	25/05 29/08 29/10	1980 1980 1980	4.8 6.3 8.0	1.83 2.06 2.58	0.52 0.46 1.09
090003 M.A: HRPB Level: 4m F.A.F: N Comment: 20m wide river section with boulder control. Difficulty in gauging low flows results in a scattered low flow rating. Computed flows 90% natural with runoff from the headwaters diverted to Loch Tieg. Authorised abstraction of 5% of Q95 for public water supply. # Wet, steep-sided, high altitude catchment draining southern slopes of Ben Nevis with no storage. Prolonged winter snow cover.	1981 1982 1983 1984 1985	2932 2356 2458		7.14 5.74 5.97		189.0 100.1 128.5	27/12 18/10 27/08	0.34 0.14 0.71	14/08 26/08 16/01	17.2 14.7 14.9	3.41 3.01 3.00	0.51 0.42 0.86			
091002 M.A: HRPB Level: 12m F.A.F: N Comment: 60m wide, fully contained river section with stable gravel bed calibrated to 600 m ³ s ⁻¹ . Abstractions for power generation and flows in the Caledonian Canal regularly bypass the station. Complex catchment with three large reservoirs controlled for power generation and transfers from the Rivers Nevis, Mashie and Spey increasing the natural catchment by 17%. Significant snow cover during winter. Staff gauge observations from February, 1977 to July, 1979. # Catchment is mainly rough grazing and moorland with some afforestation.	1981 1982 1983 1984 1985	2263 2681 2646 2188 2110		1688 1531 1674 1276 1191		67.00 60.77 66.45 50.67 47.17	699.4 942.9 527.0 1252.0 642.9 556.8	30/12 07/02 18/11 27/12 01/01 27/08	14.65 5.14 4.49 4.00 1.15 4.95	20/10 1980 27/04 24/07 01/09 27/08 26/01	1980 1980 1980 1980 1980 1980	160.1 154.4 180.9 119.9 114.4	33.29 42.20 28.20 30.03 32.45	8.64 4.97 5.21 3.88 6.35	
093001 M.A: HRPB Level: 6m F.A.F: N Comment: 40m wide river section with floodbank on right bank. Any bypassing in extreme floods will be over 30m wide floodplain on left bank. Unstable gravel control requires regular calibration of low flow range. Adequately gauged to bankfull. Computed flows are 100% natural. 70% of catchment drains through Loch Dughall with little additional surface storage. # Typical mix of rough grazing and moorland. One of the wetter Highland catchments currently gauged.	1981 1982 1983 1984 1985	2734 2942 3005 3087 2577 2508		2421 108 113 121 94 92		10.58 11.92 10.72 12.77 9.15 9.63	197.3 217.4 143.1 295.5 150.6 144.5	03/03 1979 26/11 30/01 31/12 10/12 27/08	0.45 0.82 0.43 0.67 0.60 0.93	26/05 23/04 24/06 26/07 27/08 16/02	1980 1980 1980 1980 1980 1980	25.2 28.8 26.5 29.6 24.5 24.7	5.13 5.87 6.84 6.22 4.16 4.37	0.99 1.07 0.62 1.31 0.78 1.32	
094001 M.A: HRPB Level: 5m F.A.F: N Comment: 50m wide river section with stable gabion control which has been modified infrequently resulting in recalibration of low flows. (No overbank flow). Rating improved following installation of cableway in 1970: In excess of 95% of the catchment drains through Loch Maree with a surface area of some 30km ² which dominates the flow regime. Low to medium flows from 3% of the upper catchment diverted to Conon hydro scheme. # Catchment is typical Highland uplands.	1981 1982 1983 1984 1985	2409 2753 2611 2837 2316 2290		1908 114 108 118 96 95		26.69 33.96 31.64 35.55 29.15 27.00	120.2 147.6 124.5 179.8 177.1 91.0	08/12 03/01 30/01 31/12 01/01 21/12	1974 1974 1974 1974 1974 1974	1.96 4.33 1.98 4.60 2.51 5.22	18/05 1974 27/06 27/07 10/06 28/01	57.3 81.2 65.2 76.9 59.7 53.5	20.48 19.59 28.04 27.44 22.24 22.85	5.59 5.29 3.14 5.99 2.99 7.28	

			Period	Rainfall (mm)	Runoff (mm)	Mean flow (m ³ s ⁻¹)	Peak flow (m ³ s ⁻¹)	Date of peak	Min. daily flow (m ³ s ⁻¹)	Date of min.	10 Percentile (m ³ s ⁻¹)	50 Percentile (m ³ s ⁻¹)	95 Percentile (m ³ s ⁻¹)		
095001	Inver at Little Assynt	C.A: 137.5 km ²	77-80	2246	1869	8.15	57.5	05/10 1978	1.03	24/05 1980	17.0	6.67	1.87		
M.A: HRPB	Level: 60m	F.A.F: N													
Comment: 30m wide completely contained river section with adequately gauged stable calibration in excess of MAF. Flow regime completely natural except for twice yearly operation of gates immediately upstream at the outlet to Loch Assynt with a surface area of 7.9 square kilometres. Loch levels available for beginning of each month. # Catchment is rough grazing and moorland with many lochans.			1981	2608	116	2473	132	10.78	56.5	21/09	1.65	05/03	25.0	6.10	2.32
			1982	2282	102	1826	98	7.96	49.9	30/01	1.08	27/06	16.5	5.83	1.42
			1983	2410	107	2107	113	9.19	62.8	06/03	1.06	07/06	18.5	6.62	1.48
			1984	2060	93	1853	99	8.08	39.5	10/12	1.33	11/06	16.6	5.99	1.91
			1985	1950	87	1645	88	7.15	19.6	18/12	1.92	09/06	12.9	6.46	2.32
096001	Hallisdale at Hallisdale	C.A: 204.6 km ²	76-80	1186	771	5.00	163.2	24/11 1980	0.14	22/08 1976	13.1	2.26	0.25		
M.A: HRPB	Level: 23m	F.A.F: N													
Comment: 20m wide river section adequately gauged to bankfull. Computed flows 100% natural. # Catchment is largely moorland with a peat based cover. Extensive afforestation from late 70's.			1981	1318	111	913	118	5.92	189.1	20/09	0.26	24/05	15.2	2.33	0.30
			1982	1176	99	747	97	4.85	95.7	25/09	0.17	04/08	12.8	2.22	0.23
			1983	1122	95	689	89	4.47	93.5	31/12	0.13	01/09	11.4	2.17	0.18
			1984	1235	104	861	112	5.59	127.6	23/09	0.12	26/08	14.9	2.28	0.21
			1985	1240	105	921	119	5.96	162.0	01/12	0.49	03/06	14.7	2.94	0.64
096002	Naver at Apigill	C.A: 477.0 km ²	77-80	1463	1023	15.47	146.4	06/10 1978	0.82	26/05 1980	35.9	11.24	1.42		
M.A: HRPB	Level: 5m	F.A.F: N													
Comment: 40m wide river section with short 6m floodplain on right bank but otherwise completely contained. Gravel control - regular need to reassess low flow rating. Calibrated to bankfull. Computed flows 98% natural with small interbasin transfer to the Shin hydro-electric scheme. Several small high level lochs in addition to the total surface area of Lochs Coire, Meadie and Naver of 13 km ² . 50% of the catchment drains through the latter. # Catchment is typical Highland mix of rough grazing and moorland. Relatively little loch storage.			1981	1708	117	1297	127	19.61	234.0	04/10	1.13	11/09	49.4	9.33	1.36
			1982	1464	100	1035	101	15.65	189.8	30/01	0.53	26/06	35.4	10.86	0.83
			1983	1553	106	1057	103	15.99	213.5	31/12	0.69	14/08	37.1	9.95	0.78
			1984	1387	95	1031	101	15.59	191.9	01/01	0.55	25/07	36.7	11.04	0.67
			1985	1414	97	1024	100	15.45	174.7	09/11	2.45	23/06	30.7	11.12	3.10
097002	Thurso at Halkirk	C.A: 412.8 km ²	72-80	1036	635	8.31	163.7	24/11 1980	0.22	29/08 1976	19.9	4.51	0.50		
M.A: HRPB	Level: 30m	F.A.F: RP													
Comment: 30m wide river section with full containment and a completely stable rock bar control. Adequately rated to bankfull but difficulty in current metering low flows. 50% of catchment drains through Loch More which is used for river regulation. Average net abstraction from Loch Calder of some 5% of the computed long-term average runoff. # Catchment characterised by small lochs on predominantly blanket peat cover. Extensive afforestation of upper catchment from late 70's.			1981	1264	122	850	134	11.13	130.7	31/12	0.83	10/08	26.8	6.74	0.93
			1982	1099	106	757	119	9.91	119.6	01/01	0.48	04/08	21.9	6.53	0.64
			1983	1002	97	582	92	7.62	84.6	31/12	0.39	25/07	19.0	4.74	0.46
			1984	1137	110	767	121	10.04	128.3	26/10	0.34	27/08	26.3	6.24	0.37
			1985	1184	114	807	127	10.53	156.2	01/12	1.18	20/10	19.8	6.71	2.39

Summary of Archived Data

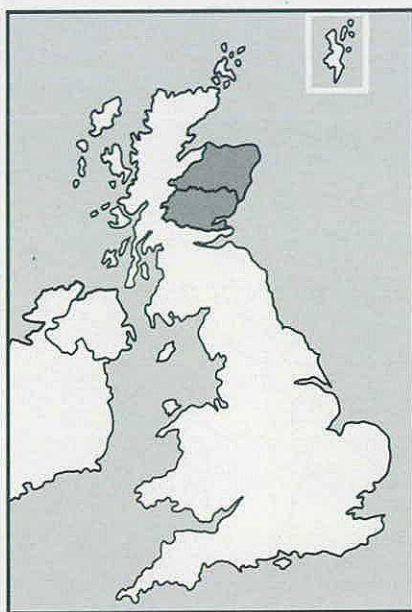
Gauged daily flows, monthly peaks and monthly rainfall

Stn. number	Gauged daily flows, monthly peaks and rainfall	Stn. number	Gauged daily flows, monthly peaks and rainfall	Stn. number	Gauged daily flows, monthly peaks and rainfall
002001	70s ----aaaaa 80s aAAAAA	006001	30s ----eAAB 40s BBBABBBAA 50s E↑↑EAAAAAA 60s AAAE↑↑↑↑↑ 70s ↑↑↑↑	091002	80s eAAAAA
003001	50s ---eAAAE	006003	20s ----cf 30s cccccccccc	093001	70s -----A 80s AAAAAA
003002	70s ----aaaaa 80s aAAAAA	006006	40s cccccf	094001	60s -↑↑↑↑↑↑↑↑ 70s EAAAAAAaAa
003003	70s -----eAA 80s AAAAAA	006007	50s --eAAAAAB 60s BAe	095001	70s ----eAA 80s AAAAAA
003004	70s -----E 80s AAAAAA	006008	70s -----E 80s AAAAAA	096001	70s ----AAAA 80s AAAAAA
003005	80s -eaaaA	007001	60s eAAAAAAAAA 70s AAAAAAAAAA 80s AAAAAA	096002	70s ----eAA 80s AAAAAA
004001	40s -----fcf 50s cccbAEAAEA 60s BABABAAAAA 70s E↑↑↑↑↑AAAAA	007002	50s -----eA 60s AAAAAAAAAA 70s AAAAAAAAAA 80s AAAAAA	097002	60s -↑↑↑↑↑↑↑↑ 70s ↑↑AAAAAAaA
004003	70s ----aaaaa 80s aAAAAA	007004	70s -----a 80s aAAAAA		
004004	80s -eaaaA	007005	70s -----fff 80s f-aaA		
005001	50s --eAAAAAA 60s AA-E↑↑↑↑↑ 70s ↑↑↑↑	090003	80s -eaaa		

Naturalised daily and monthly flows

Stn. number	Naturalised daily, and monthly flows	Stn. number	Naturalised daily, and monthly flows	Stn. number	Naturalised daily, and monthly flows
006007	70s ---EEEEEF			097002	70s -EEEEEF

NORTH EAST RIVER PURIFICATION BOARD
and the
TAY RIVER PURIFICATION BOARD



NERPB
Area: 10,420 km²
Average Rainfall (1941-70): 1023 mm

TRPB
Area: 8,710 km²
Average Rainfall (1941-70): 1255 mm

Headquarters of the
North East River Purification Board:

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Headquarters of the
Tay River Purification Board:

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Gauging Station Register

Station number	River name	Station name	Grid reference	Catchment area (sq km)	Station type	Period of record	Mean ann. rainfall (mm)	Mean ann. runoff (mm)	Max. ann. runoff (mm)	Year of max.	Min. ann. runoff (mm)	Year of min.	Mean flow (m ³ s ⁻¹)	Min. mon. flow (m ³ s ⁻¹)	Month/Year of min.	Mean ann. flood (m ³ s ⁻¹)	Base flow index	10 Percentile (m ³ s ⁻¹)	95 Percentile (m ³ s ⁻¹)
007003	Lossie	Sheriff Mills	NJ 194626	216.0	VA	1963-85	830	383	583	66	182	72	2.62	0.49	08/76	42.4	.52	5.1	0.70
008001	Spey	Aberlour	NJ 278439	2654.7	VA	1938-74	1091	669	840	54	488	64	56.28	9.94	08/55	468.2	.58	105.2	16.86
008002	Spey	Kinrara	NH 881082	1011.7	VA	1951-85	1295	653	845	54	474	55	20.95	3.03	08/84	150.7	.58	40.7	5.96
008003	Spey	Ruthven Bridge	NN 759996	533.8	VA	1951-73	1364	551	836	54	420	69	9.32	1.66	08/55	106.9	.50	18.1	2.73
008004	Avon	Dalnashagh	NJ 186352	542.8	VA	1952-85	1079	858	1120	66	575	71	14.76	2.87	08/76	254.9	.55	27.8	4.07
008005	Spey	Boat o Garten	NH 946191	1267.8	VA	1951-85	1241	700	947	54	477	55	28.16	5.18	08/55	174.7	.62	52.7	9.03
008006	Spey	Boat o Brig	NJ 318518	2861.2	VA	1952-85	1106	710	913	54	487	72	64.41	11.31	08/55	560.1	.60	120.6	19.18
008007	Spey	Invertrium	NN 687962	4.00	VA	1952-85	1439	446	633	54	332	69	5.66	0.85	08/84	104.5	.54	9.7	1.59
008008	Tromie	Tromie Bridge	NH 789995	130.3	VA	1952-85	1387	580	828	61	415	69	2.40	0.52	08/84	66.7	.64	3.4	1.18
008009	Dulnain	Balnaan Bridge	NH 977247	272.2	VA	1952-85	1010	682	881	53	411	72	5.89	0.74	08/84	97.6	.47	12.5	1.14
008010	Spey	Granton	NJ 033268	1748.8	VA	1953-85	1151	661	838	54	494	69	36.67	7.23	08/55	241.2	.60	70.6	10.77
009001	Deveron	Avochie	NJ 532464	441.6	VA	1959-85	1005	643	888	60	374	72	9.00	1.62	08/76	127.6	.59	16.9	2.29
009002	Deveron	Muireas	NJ 705498	954.9	VA	1960-85	932	555	761	85	294	72	16.80	2.58	08/76	230.5	.58	33.1	3.63
009003	Isla	Grange	NJ 494506	176.1	VA	1969-85	857	475	761	85	234	72	2.65	0.37	08/76	39.7	.54	5.5	0.56
009004	Bogle	Redcraig	NJ 519373	179.0	VA	1980-85		626	769	85	487	83	3.56	0.81	08/84		.70	6.7	0.91
010002	Ugie	Inverugie	NK 101485	325.0	VA	1971-85	819	444	625	85	291	72	4.58	0.76	08/76	55.9	.60	9.5	0.96
010003	Ythan	Ellon	NJ 947303	523.0	VA	1983-85	1031	563	635	85	630	84	9.34	1.25	08/84		.71	20.0	1.53
011001	Don	Parkhill	NJ 887141	1273.0	VA	1969-85	905	531	753	85	263	73	21.43	3.35	08/76	157.4	.67	43.4	5.51
011002	Don	Haughton	NJ 756201	787.0	VA	1969-85	935	590	787	85	324	73	14.72	3.31	08/76	130.1	.67	29.4	3.97
011003	Don	Bridge of Alford	NJ 566170	499.0	VA	1973-85	1035	693	848	85	519	75	10.96	2.43	08/76	106.1	.68	20.7	3.15
012001	Dee	Woodend	NO 635956	1370.0	VA	1929-85	1119	838	1129	82	557	73	36.40	5.14	08/84	420.4	.53	72.5	8.40
012002	Dee	Park	NO 798983	1844.0	VA	1972-85	1119	795	1052	82	462	73	46.48	5.94	08/76	603.6	.54	98.5	8.14
012003	Dee	Polhollick	NO 343965	690.0	VA	1975-85	1434	1049	1384	82	858	76	22.96	2.83	08/83	259.1	.51	49.3	4.37
012004	Girnock Burn	Littlemill	NO 324956	30.3	VA	1969-85	1196	524	978	82	297	73	0.50	0.03	07/77	17.9	.41	1.1	0.04
012005	Muick	Invermuick	NO 364947	110.0	VA	1976-85	1446	1075	1441	82	860	79	3.75	0.40	08/84		.52	7.4	0.60
012006	Gairn	Invergairn	NO 352971	150.0	VA	1978-85	1089	907	1024	82	754	81	4.31	0.61	08/84		.54	8.7	0.78
012007	Dee	Mar Lodge	NO 098895	289.0	VA	1982-85	1518	1411	1429	83	1319	85	12.93	1.16	08/84		.49	27.0	1.60
013001	Bervie	Inverbervie	NO 826733	123.0	VA	1979-85	967	623	802	84	414	83	2.43	0.32	08/83		.53	5.0	0.33
013002	Luther Water	Luther Bridge	NO 660668	138.0	VA	1982-85		645	774	84	427	83	2.82	0.36	08/82		.55	5.6	0.38
013003	South Esk	Stannochoy Br	NO 583593	487.0	VA	1979-82		861	1063	82	679	81	13.30	1.98	08/81		.53	26.8	2.25
013005	Lunan Water	Kirkton Mill	NO 655494	124.0	VA	1981-85		501	625	85	315	83	1.97	0.17	08/84		.50	4.6	0.19
013007	North Esk	Logie Mill	NO 699640	730.0	VA	1976-85n	1187	907	1077	82	662	81	21.00	2.55	08/76		.52	42.7	3.10
013008	South Esk	Brechin	NO 600596	490.0	VA	1983-85	1218	859	946	84	734	83	13.35	1.40	08/84		.57	28.1	1.83
014001	Eden	Kemback	NO 415158	307.4	VA	1967-85	785	392	574	85	148	73	3.82	0.75	09/73	40.1	.60	8.2	0.92
014002	Dightly Water	Balmossie Mill	NO 477324	126.9	VA	1969-85	780	384	551	85	121	73	1.55	0.17	08/84		.57	3.6	0.23
014005	Motray Water	St Michaels	NO 441224	52.0	VA	1984-85		471	540	85	404	84	0.78	0.08	08/84		.51	1.7	0.09
015001	Isla	Forter	NO 187647	70.7	FL	1953-68	1405	1207	1496	62	752	64	2.71	0.66	07/64	46.9	.56	5.2	0.74
015002	Newton Burn	Newton	NO 230605	15.4	TP	1959-68	1303	997	1392	60	696	64	0.49	0.14	08/68	7.4	.58	1.0	0.14
015003	Tay	Caputh	NO 082395	3211.0	VA	1947-85	1585	1303	1809	48	883	55	132.70	9.59	08/55	780.5	.63	258.9	35.56
015004	Inzion	L of Linrathen	NO 280559	24.7	TP	1927-68	1115	710	1052	60	499	64	0.56	0.09	08/33	6.3	.63	1.1	0.13
015005	Meigan	L of Linrathen	NO 275558	40.9	TP	1927-68	1151	767	1164	28	561	64	1.00	0.07	09/68	15.4	.58	2.1	0.24
015006	Tay	Ballathie	NO 147367	4587.1	VA	1952-85	1421	1087	1429	54	738	55	158.10	14.69	08/55	955.6	.65	307.4	42.84
015007	Tay	Pitnacree	NN 924534	1149.4	VA	1957-85	1851	1470	1877	82	1152	73	53.56	4.32	08/84	333.5	.64	105.3	12.96
015008	Dean Water	Cookston	NO 340479	177.1	VA	1958-85	856	485	673	60	189	73	2.61	0.50	08/84	30.1	.57	5.6	0.60
015010	Isla	Wester Cardean	NO 295466	366.5	VA	1972-85	1109	668	919	82	349	73	7.77	1.35	07/84	102.3	.53	16.5	1.50
015011	Lyon	Comrie Bridge	NN 786486	391.1	VA	1958-85	1939	937	1602	56	672	73	11.62	2.22	08/84		.47	26.1	3.00
015012	Tummel	Port-na-craig	NN 940577	1649.0	VA	1973-85	1513	1349	1633	82	1050	73	70.54	17.50	08/84		.65	142.8	18.81
015013	Almond	Almondbank	NO 067258	174.8	VA	1955-85	1425	939	1522	61	489	73	5.20	0.37	08/84	103.8	.45	11.5	0.69
015016	Tay	Kenmore	NN 782467	600.9	VA	1974-85	2104	2374	2760	82	1942	75	45.23	2.07	08/84	167.1	.67	96.0	5.39
015017	Braan	Ballinloan	NN 979406	197.0	VA	1975-80	1383	959	1058	77	914	80	5.99	0.36	07/77	123.2	.39	15.6	0.38
015018	Lyon	Moor	NN 534448	161.4	VA	1953-58	2077	1983	2853	54	1500	55	10.15	0.51	08/55		.23	26.1	0.66
015023	Braan	Hermitage	NO 014422	210.0	VA	1983-85		1112	1160	85	1019	83	7.40	0.26	08/84		.47	17.9	0.34
015024	Dochart	Killin	NN 567320	239.0	VA	1982-85n		2039	2345	82	1939	84	15.45	0.95	08/83		.31	42.8	0.70
016001	Earn	Kinkell Bridge	NN 933167	590.5	VA	1948-85	1472	1126	1628	48	696	55	21.09	1.09	08/55	189.1	.48	46.2	2.93
016002	Earn	Aberuchill	NN 754216	176.9	VA	1955-77	1699	1804	2406	61	1292	56	10.12	1.10	06/57	60.5		24.2	1.27
016003	Ruchill Water	Cultybraggan	NN 764204	99.5	VA	1970-85	1970	1517	2087	82	1040	73	4.79	0.16	08/84	168.3	.31	12.1	0.31
016004	Earn	Forteviot Bridge	NO 043184	782.2	VA	1972-85	1428	1060	1285	84	625	73	26.28	2.46	08/84	229.7	.51	59.8	3.36

Hydrometric Statistics

	Period	Rainfall (mm)	Runoff (mm)	Mean flow (m ³ s ⁻¹)	Peak flow (m ³ s ⁻¹)	Date of peak	Min. daily flow (m ³ s ⁻¹)	Date of min.	10 Percentile (m ³ s ⁻¹)	50 Percentile (m ³ s ⁻¹)	95 Percentile (m ³ s ⁻¹)
		% of pre-1981	% of pre-1981								
007003 M.A: NERPB Level: 18m F.A.F: P C.A: 216.0 km ² B-full: 35.7 m ³ s ⁻¹ Comment: Cableway rated. The main control is a long and insensitive stone weir 350m downstream. Site moved 150m upstream in September 1978. Levels recorded from 20/06/58, flows from 01/10/63. Flood warning station. # Schists, gneisses and valley gravels with some Old Red Sandstone, Moorland, some forestry and arable in valley bottoms.	63-80	812	370	2.54	89.8	17/08 1970	0.36	26/08 1976	4.8	1.52	0.68
	1981	878 108	421 114	2.89	73.8	02/10	0.69	10/09	6.0	1.70	0.77
	1982	916 113	393 106	2.69	32.4	07/10	0.56	04/08	5.8	1.70	0.74
	1983	744 92	317 86	2.17	19.3	28/05	0.64	30/08	3.9	1.79	0.72
	1984	925 114	452 122	3.09	59.8	23/09	0.64	30/08	6.0	2.10	0.71
	1985	1027 126	556 150	3.80	35.4	01/12	1.31	09/03	7.3	2.77	1.47
008002 M.A: NERPB Level: 210m F.A.F: H C.A: 1011.7 km ² B-full: 161.2 m ³ s ⁻¹ Comment: Cableway rated to bankfull, natural control. Station is 5 km downstream of confluence with River Feshie. Well inlet pipes, fractured in early 1980s (giving some data problems), re-laid March 1987. 380 km ² developed for hydro-power with diversions and storage. # Moianian metamorphic and granites. High mountain and moorland, some forestry and valley grazing.	51-80	1270	632	20.29	317.0	18/12 1966	2.43	06/09 1976	38.6	14.96	6.22
	1981	1348 106	784 124	25.14	187.3	04/10	4.31	04/09	60.0	13.04	5.13
	1982	1687 133	830 131	26.62	144.7	01/10	3.56	03/08	55.8	21.35	4.84
	1983	1516 119	829 131	26.59	241.8	31/12	3.32	31/08	61.6	17.87	3.92
	1984	1398 110	733 116	23.51	251.6	01/01	2.43	22/08	48.5	16.74	2.93
	1985	1275 100	706 112	22.59	154.0	03/12	7.55	28/10	41.6	16.85	9.03
008004 M.A: NERPB Level: 150m F.A.F: N C.A: 542.8 km ² B-full: 364.5 m ³ s ⁻¹ Comment: Cableway rated, natural control. Lowest levels not recorded 1981-84, well dry. Rating liable to change after major floods. Station reconstructed 1985. # Gneisses and metamorphosed limestone with some igneous, some sandstone. Mountain catchment draining the north side of the highest Cairngorm peaks with moorland and rough grazing, a little arable farming at valley bottom.	52-80	1054	852	14.66	525.0	17/08 1970	1.93	17/02 1955	27.5	10.52	4.16
	1981	1139 108	873 102	15.02	428.5	02/10	2.89	07/09	31.7	9.04	3.50
	1982	1334 127	972 114	16.73	308.3	13/10	2.80	04/08	32.4	12.03	4.09
	1983	1121 106	813 95	13.99	227.4	10/09	2.90	30/08	28.1	10.55	3.38
	1984	1268 120	744 87	12.81	1331	10/09	2.90	30/08	23.7	10.13	3.39
	1985	1236 117	1020 120	17.56	324.8	01/09	5.43	27/10	32.8	13.26	6.90
008005 M.A: NERPB Level: 197m F.A.F: H C.A: 1267.8 km ² B-full: 402.0 m ³ s ⁻¹ Comment: Cableway rated with natural control. 380 km ² developed for hydro-power with diversions and storage. # Granites and Moianian metamorphics. High mountain, moorland, some forestry, pastoral and some arable farming.	51-80	1220	690	27.72	373.6	18/12 1966	4.08	06/09 1976	51.0	21.44	9.36
	1981	1271 104	790 114	31.74	219.7	04/10	7.28	03/09	71.5	18.96	8.75
	1982	1600 131	816 118	32.82	155.2	30/01	5.30	04/08	66.4	25.68	6.90
	1983	1415 116	803 116	32.27	214.9	12/01	5.02	01/09	69.8	22.54	6.16
	1984	1331 109	742 108	29.83	249.5	01/01	5.07	28/08	58.4	22.42	6.13
	1985	1229 101	679 98	27.22	157.1	04/12	11.46	18/02	49.2	20.77	12.71
008006 M.A: NERPB Level: 43m F.A.F: IH C.A: 2861.2 km ² B-full: 730.8 m ³ s ⁻¹ Comment: Lowest station currently operating on the Spey. Cableway rated 65m wide section with natural control, extreme floods bypass station on left bank. 380 km ² developed for hydro-power with diversions and storage. # Mainly granites and Moianian metamorphics. Some Dalradian and a little Old Red Sandstone. Mountain (includes all northern slopes of Cairngorms), moorland, hill grazing and some arable. Forestry.	52-80	1089	698	63.31	1675.0	17/08 1970	9.31	16/08 1955	117.2	48.81	19.70
	1981	1106 102	791 113	71.76	723.6	02/10	16.12	09/09	163.7	44.84	20.26
	1982	1319 121	829 119	75.14	480.6	13/10	12.74	05/08	151.1	62.40	17.85
	1983	1154 106	715 102	64.91	431.1	31/12	13.05	01/09	130.3	54.70	14.71
	1984	1223 112	613 108	68.31	613.9	23/09	12.11	29/08	131.5	54.01	14.42
	1985	1193 110	813 116	73.53	536.7	01/09	30.08	23/07	126.3	61.02	33.15
008007 M.A: NERPB Level: 243m F.A.F: H C.A: 400.4 km ² B-full: 189.0 m ³ s ⁻¹ Comment: Highest station on the Spey. Cableway rated 50m wide section with natural control. 267 km ² (70%) developed for hydro-power by British Aluminium; diversions and storage. # Granite and Moianian metamorphic. Mountain, moorland, pastoral.	52-80	1409	437	5.55	274.5	02/03 1979	0.42	06/09 1976	9.3	3.84	1.71
	1981	1505 107	557 127	7.07	108.0	20/09	1.27	10/08	13.9	3.95	1.54
	1982	1888 134	527 121	6.69	100.1	25/12	0.86	04/08	11.9	4.38	1.14
	1983	1724 122	593 136	7.53	254.0	31/12	0.73	14/08	13.4	3.88	0.96
	1984	1510 107	438 100	5.57	137.1	01/01	0.62	27/08	10.5	3.44	0.84
	1985	1419 101	372 85	4.71	93.6	03/12	1.66	17/02	7.8	3.29	2.00
008008 M.A: NERPB Level: 240m F.A.F: H C.A: 130.3 km ² B-full: 151.7 m ³ s ⁻¹ Comment: Cableway rated with natural control. Very turbulent flow. 112 km ² (85%) developed for hydro-power with diversions out of the catchment. # Mountain, moorland, pastoral.	52-80	1378	583	2.41	117.4	28/09 1961	0.35	05/08 1955	3.4	1.76	1.24
	1981	1383 100	605 104	2.50	72.4	20/09	0.95	07/06	3.9	1.45	1.14
	1982	1724 125	627 108	2.59	78.2	01/10	0.76	08/07	4.4	1.72	0.88
	1983	1465 106	578 99	2.39	49.8	31/12	0.76	27/08	3.3	1.64	0.87
	1984	1351 98	514 88	2.12	62.9	27/11	0.44	21/07	3.4	1.60	0.51
	1985	1310 95	514 88	2.12	84.2	03/12	1.14	03/11	3.0	1.59	1.31
008009 M.A: NERPB Level: 224m F.A.F: N C.A: 272.2 km ² B-full: 100.0 m ³ s ⁻¹ Comment: Cableway rated with natural control. Not affected by diversions nor storages. # Granites and Moianian metamorphic. Highland, moorland and pastoral.	52-80	1002	687	5.76	230.0	17/08 1970	0.60	23/07 1955	12.1	3.70	1.17
	1981	991 99	696 104	6.00	116.3	02/10	0.85	03/09	14.7	2.61	1.01
	1982	1207 120	872 131	7.53	82.9	30/01	0.93	04/08	16.2	5.18	1.12
	1983	1080 108	794 119	6.85	111.0	31/12	0.82	01/09	15.7	4.47	0.98
	1984	1007 100	712 107	6.14	68.7	25/10	0.62	26/08	13.7	4.17	0.71
	1985	966 96	778 117	6.70	93.7	03/12	1.20	22/01	12.9	4.37	2.27
008010 M.A: NERPB Level: 193m F.A.F: H C.A: 1748.8 km ² B-full: 100.0 m ³ s ⁻¹ Comment: Cableway rated with stable natural control. Recorder and cableway move to a united site (NJ 033268) in mid-1987. 380 km ² (22% of catchment) developed for hydro-power with diversions and storage. # Granites and Moianian metamorphic. Mountain, high moorland, forestry, pastoral and arable in valley bottoms.	53-80	1128	645	35.79	461.3	19/12 1966	6.01	07/09 1976	68.2	27.57	11.00
	1981	1183 105	728 113	40.36	313.0	02/10	8.13	04/09	92.5	23.70	9.92
	1982	1485 132	825 128	45.73	202.0	25/12	7.53	04/08	91.4	37.95	10.63
	1983	1310 116	760 118	42.14	267.5	31/12	6.43	31/08	92.2	32.84	7.56
	1984	1250 111	714 111	39.59	262.2	01/01	6.06	27/08	77.9	31.44	7.57
	1985	1160 103	717 111	39.64	211.5	03/12	15.76	22/01	70.3	31.07	18.14
009001 M.A: NERPB Level: 82m F.A.F: N C.A: 441.6 km ² B-full: 100.0 m ³ s ⁻¹ Comment: Cableway rated with stable rubble weir. Inlet pipes - periodically silted in early 1980s - extended in March 1985. No artificial influences on flow. # Complex granites and basic intrusive with Dalradian metamorphic. Moorland, pastoral and arable in valley.	59-80	992	630	8.82	236.5	17/08 1970	1.30	26/08 1976	16.5	6.17	2.29
	1981	968 98	648 103	9.07	153.3	02/10	1.79	10/09	18.3	5.67	2.29
	1982	1005 101	670 106	9.38	221.9	13/10	1.82	29/07	17.9	6.42	2.11
	1983	915 92	545 87	7.63	71.3	10/09	2.01	30/08	14.4	6.23	2.31
	1984	1170 118	773 123	10.82	153.4	03/11	1.85	30/08	22.2	7.84	2.15
	1985	1249 126	859 136	12.00	106.6	01/12	4.43	19/03	20.1	9.63	5.32
009002 M.A: NERPB Level: 25m F.A.F: N C.A: 954.9 km ² B-full: 261.9 m ³ s ⁻¹ Comment: Cableway rated, natural control, water abstraction point immediately downstream. No visible effect on level records. Floodplain flows have been measured at this site. # Complex granite and older basic intrusive with Dalradian, metamorphic. Some Old Red Sandstone. Some high moorland, mainly pastoral and arable.	60-80	922	546	18.53	506.6	06/05 1968	2.06	27/08 1976	32.4	11.30	3.69
	1981	902 98	530 97	16.05	233.3	02/10	3.01	09/09	32.8	9.76	3.27
	1982	908 98	543 99	16.44	254.7	13/10	2.90	04/08	34.2	11.25	3.60
	1983	826 90	454 83	13.74	90.1	21/12	2.70	30/08	24.8	12.31	3.38
	1984	1068 116	671 123	20.30	236.8	03/11	2.72	30/08	43.1	14.71	3.40
	1985	1163 126	763 140	23.05	215.2	01/12	7.27	25/10	40.6	18.64	9.67

	Period	Rainfall (mm)	Runoff (mm)	Mean flow (m ³ s ⁻¹)	Peak flow (m ³ s ⁻¹)	Date of peak	Min. daily flow (m ³ s ⁻¹)	Date of min.	10 Percentile (m ³ s ⁻¹)	50 Percentile (m ³ s ⁻¹)	95 Percentile (m ³ s ⁻¹)		
		% of pre-1981	% of pre-1981										
012006 M.A: NERP Level: 218m F.A.F: Comment: Cableway rated, natural control includes rubble from early gabion construction (broken up by spate of Nov 1978) # Some Dalradian metamorphic, mainly granite intrusive. Pastoral and mountain moorland.	78-80		899	4.28	88.9	02/03 1979	1.02	01/11 1978	8.1	3.01	1.39		
	1981	988	753	84	3.58	95.1	02/10	0.61	08/09	7.9	2.13	0.74	
	1982	1238	1024	114	4.87	68.9	13/10	0.45	04/08	10.1	3.58	0.77	
	1983	973	866	96	4.12	46.3	31/12	0.56	31/08	8.6	3.09	0.68	
	1984	1169	942	105	4.48	51.7	09/11	0.52	26/08	10.3	3.05	0.60	
	1985	1077	971	108	4.60	47.3	24/06	0.81	22/01	8.9	3.53	1.66	
012007 M.A: NERP Level: m F.A.F: Comment: Highest gauging station on the Dee. Cableway rated, unstable natural control. # Dalradian and Moianian metamorphic and granite mountains. Mountain, moorland, some forestry.													
	1981		1429	13.10	177.5	31/12	1.01	01/09	28.2	8.60	1.54		
	1982		1347	12.34	158.2	27/11	0.67	27/08	27.3	8.54	1.17		
	1983												
	1984												
	1985	1518	1323	12.09	213.7	03/12	1.29	22/01	25.2	8.46	3.02		
013001 M.A: NERP Level: 70m F.A.F: Comment: Cableway rated. Artificial control recently de-stabilised. New control planned for 1988. Extreme floods bypass the station. # Arable in valley, pastoral on hills and some forestry. Old Red Sandstone.	79-80		689	2.69	59.8	04/10 1979	0.55	13/06 1980	5.6	1.52	0.65		
	1981	838	464	67	1.81	36.4	02/10	0.29	08/09	3.4	1.13	0.35	
	1982	951	616	89	2.40	61.0	13/10	0.26	05/08	5.2	1.67	0.30	
	1983	771	413	60	1.61	25.5	06/05	0.24	31/08	3.4	1.21	0.31	
	1984	1139	802	116	3.13	41.4	03/11	0.29	26/07	7.2	1.40	0.32	
	1985	1135	774	112	3.01	57.9	01/12	0.91	03/11	5.8	2.29	1.00	
013002 M.A: TRPB Level: m F.A.F: Comment: Velocity-area station with cableway. 10m wide. Situation not ideal due to bend upstream and island downstream, but stage-discharge relation is regularly reviewed using routine gaugings. Stable bedrock control at low flows. # Upper third of catchment is fairly steep (Grampian Mountains), the rest has moderate slopes. Lower 80% is on Old Red Sandstone, the rest is metamorphic. Land use - forest and rough grazing at higher levels; arable and cattle elsewhere.													
	1981												
	1982		646	2.83	51.9d	13/10	0.27	04/08	5.8	1.86	0.33		
	1983		427	1.87	19.6d	07/05	0.39	31/08	3.5	1.46	0.45		
	1984		774	3.39	34.3d	15/11	0.34	30/08	7.5	1.38	0.36		
	1985	1119	735	3.21	72.4	01/12	0.92	18/05	5.5	2.40	1.17		
013005 M.A: TRPB Level: m F.A.F: Comment: Velocity-area station with cableway. 6m wide. Control at low and medium flows is unstable gravel bed. # A moderately sloping catchment typically rising to 250m, divided in almost equal proportions between Old Red Sandstone and igneous rocks. Land use - pasture and arable.													
	1981												
	1982		563	2.21	22.4d	13/10	0.15	27/08	5.5	1.20	0.18		
	1983		315	1.24	11.8d	24/12	0.23	30/08	2.6	0.86	0.27		
	1984		588	2.31	19.5d	29/01	0.13	31/08	6.0	0.86	0.16		
	1985	1025	627	2.46	31.4	30/11	0.51	20/06	5.0	1.52	0.63		
013007 M.A: TRPB Level: 11m F.A.F: SPI Comment: Compound Crump weir, width 41m. Cableway added; current meter calibration is used throughout. Minor abstractions for public water supplies and irrigation. Daily flows from 1/76 to 4/83 derived from North Water Bridge and Luther Bridge believed accurate to 10%. Naturalised monthly flows available from 1976. # Drains SE flank of Grampians. Steeply sloping apart from lower 30%. The lower 40% lies on Old Red Sandstone, the rest is igneous and metamorphic. Land use - rough grazing on open moorland; cattle and arable at lower levels.	76-80	1201	908	21.03	296.8d	04/10 1979	2.03	07/09 1976	41.7	14.02	3.56		
	1981	1009	84	662	73	15.31	178.4d	26/09	2.68	08/09	27.5	10.55	3.06
	1982	1298	108	1077	119	24.93	307.4d	13/10	2.30	04/08	53.0	16.19	2.84
	1983	954	79	678	75	15.69					34.0	11.26	3.14
	1984	1341	112	1052	116	24.35	462.1	10/11	2.29	26/08	47.2	14.76	2.52
	1985	1263	105	1009	111	23.30	416.9	30/11	6.40	14/05	45.2	16.68	8.11
013008 M.A: TRPB Level: 18m F.A.F: I Comment: Velocity-area station with cableway. 20m wide. High flows can cut off access to the cableway. Summer flows can be affected by agricultural abstractions. Supersedes 13003, Stannochy Bridge (1979-82), 3km u/s. # A long narrow catchment draining the SE flank of the Grampians. The upper 2/3 are steeply sloping. Land use is a mix of rough grazing on open moorland, forestry and, at lower levels, arable. The lower half lies on Old Red Sandstone, the rest is metamorphic.													
	1981												
	1982												
	1983	1005	733	11.40	82.8	25/12	1.90	13/08	25.8	8.27	2.04		
	1984	1362	946	14.70	172.0	10/11	1.21	27/08	31.5	10.50	1.36		
	1985	1283	902	13.97	181.1	01/12	4.19	14/05	27.4	9.91	4.90		
014001 M.A: TRPB Level: 6m F.A.F: SGEI B-full: 47.0 m ³ s ⁻¹ Comment: Velocity-area station with cableway. 15m wide. Abstractions for irrigation; minor influences from storage reservoirs, groundwater abstractions and effluent returns. # A gently sloping basin lying between the Tay and Forth estuaries. Land use is mainly arable. Very mixed geology: Old Red Sandstone along the central valley; igneous to the north; some igneous plus Carboniferous Limestone and Sandstone to the south.	67-80	752	364	3.55	71.3	11/02 1977	0.64	30/08 1973	7.5	2.24	0.87		
	1981	768	102	352	97	3.43	32.2	02/10	1.01	09/09	6.4	2.46	1.09
	1982	897	119	478	131	4.66	59.1	03/01	0.86	10/08	9.8	2.91	0.94
	1983	762	101	415	114	4.05	41.9	02/06	1.12	14/08	7.5	2.91	1.18
	1984	923	123	529	145	5.16	54.9	26/03	0.87	26/07	13.3	2.69	0.94
	1985	1026	136	575	158	5.59	53.6	23/09	1.21	20/07	11.3	3.46	1.51
014002 M.A: TRPB Level: 16m F.A.F: B-full: 55.0 m ³ s ⁻¹ Comment: Velocity-area station with cableway. 8m wide. Summer weed growth necessitates frequent revisions to the stage-discharge relation. Very flashy. # Gently sloping catchment except for the far north and west edges which drain the south flank of the Sidlaw Hills (up to 450m). The lower 10% is urban (Dundee), the rest mainly arable. The geology is predominantly Devonian Sandstone.	69-80	753	350	1.41	29.5	10/02 1977	0.13	15/09 1975	3.3	0.75	0.23		
	1981	784	104	370	106	1.49	14.0d	10/03	0.17	01/09	2.8	1.05	0.23
	1982	822	109	492	141	1.98	19.9d	03/01	0.23	25/06	4.9	1.26	0.24
	1983	710	94	349	100	1.40					3.1	1.00	0.31
	1984	904	120	540	154	2.17	20.4d	26/03	0.14	21/08	5.5	0.93	0.17
	1985	994	132	553	158	2.22	30.7	23/09	0.32	25/07	4.4	1.51	0.46
015003 M.A: TRPB Level: 36m F.A.F: H Comment: Velocity-area station with cableway. 95m wide. 1980 km ² (62%) of catchment controlled for HEP; development began in 1957. Surface storage is substantial. Water imported. Twice daily stage readings from 7/37, continuous from 10/51. Monthly naturalised data available from 1973. Flow of 1503 m ³ s ⁻¹ for 17/2/50 is estimated. # Most of catchment steep; mountains and moorland. Land use mainly rough grazing and forestry. Geology: mostly metamorphics and granites. Numerous lochs, largest are Ercht, Rannoch, Tummel and Tay.	47-80	1561	1274	129.70	1503.0d	17/02 1950	8.07	12/08 1955	245.9	102.30	36.65		
	1981	1592	102	1392	109	141.74	837.2	26/09	30.93	03/09	290.5	101.89	36.36
	1982	1991	128	1675	131	170.55	580.3d	01/10	22.78	04/08	330.6	147.69	29.13
	1983	1717	110	1546	121	157.41					311.5	126.00	25.18
	1984	1724	110	1475	116	150.17	655.9d	27/11	20.18	19/08	302.8	116.57	22.04
	1985	1667	107	1467	115	148.99	813.8	21/12	33.75	20/06	288.0	113.45	44.23

Station ID	Station Name	C.A. (km ²)	Period	Rainfall (mm)		Runoff (mm)		Mean flow (m ³ s ⁻¹)	Peak flow (m ³ s ⁻¹)	Date of peak	Min. daily flow (m ³ s ⁻¹)	Date of min.	Percentile (m ³ s ⁻¹)				
				1981	% of pre-1981	1981	% of pre-1981						10	50	95		
016003	Ruchill Water at Cultybraggan	99.5	70-80	1940	1395	4.40	250.4	13/01	0.17	16/07	10.7	2.17	0.35				
M.A: TRPB	Level: 62m	F.A.F: N	B-full: 159.4 m ³ s ⁻¹	1981	1903	98	1409	101	4.45	227.3	17/09	0.24	03/09	10.0	2.18	0.35	
Comment: Velocity-area station with cableway. 10m wide. Flashiness and remoteness hinder flood gauging. One of the few natural catchments in the Tay RPB area. # A mountainous catchment with steep slopes. Land is used mainly for rough grazing and army ranges. Thick peat on the flatter hill tops. Main channel follows a major geological fault: sandstone to its south, metamorphic to its north (40/60 split).				1982	2293	118	2087	150	6.59	141.2	19/12	0.21	31/07	17.6	3.55	0.31	
				1983	1979	102	1861	133	5.87	220.0	05/01	0.13	01/09	14.2	2.67	0.25	
				1984	1918	99	1850	133	5.84	141.5	27/11	0.09	28/08	14.2	2.73	0.15	
				1985	2073	107	1642	118	5.17	143.0	14/08	0.39	13/05	13.2	2.53	0.63	
016004	Eam at Forteviot Bridge	782.2	72-80	1365	979	24.29	328.6	15/11	2.66	08/07	57.1	16.03	3.47				
M.A: TRPB	Level: 8m	F.A.F: PH	B-full: 130.0 m ³ s ⁻¹	1981	1399	102	1009	103	25.03	1978	1975	51.0	18.50	3.75			
Comment: Velocity-area station. Cableway now removed. 30m wide. 189 km ² controlled for HEP. Loch Turret used for public water supply. Naturalised monthly flows available from 1975. # Drains the southern Grampians. Steep slopes plus extensive flatter areas in the lower catchment. Mixed agricultural use in the lowland east; forestry and rough grazing in the west. Metamorphic in the western 45%; sandstone in the east, with much Drift in the valley.				1982	1711	125											
				1983	1449	106	1130	115	28.03	277.5	06/01	2.36	30/08	59.2	18.03	3.04	
				1984	1528	112	1255	128	31.14	314.2	28/11	2.12	26/07	77.1	22.04	2.37	
				1985	1564	115	1244	127	30.77	241.2	01/10	4.09	16/06	66.9	19.46	4.64	

Summary of Archived Data

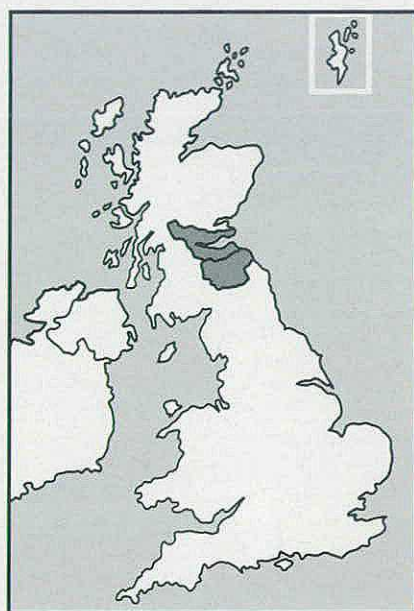
Gauged daily flows, monthly peaks and monthly rainfall

Stn. number	Gauged daily flows, monthly peaks and rainfall	Stn. number	Gauged daily flows, monthly peaks and rainfall	Stn. number	Gauged daily flows, monthly peaks and rainfall
007003	60s --eAAAAA 80s AAAAAAd	011001	60s -++++E 80s AAAAAA	015003	40s -----fc 60s AAAAAA 80s ABCFCA
008001	30s -----fc 50s bBBAAAAA 70s AAAAA+tt	011002	60s -++++E 80s AAAACA 60s -++++F 80s AAAACA	015004	20s -----CCC 40s -----ttt 60s AAAAAAEEt 80s +++++
008002	50s -eABAAAA 70s AAABAAAA 50s -eAAAAA 70s AAAAA+ttt	011003	20s -----e 40s BABBAABCCC 60s CCCCCBAAAA 80s AAAAAA	015005	20s -----CCC 40s -----ttt 60s AEAAAAAEEt 80s +++++
008003	50s -eAAAAA 70s AAAAA+ttt	012001	20s -----e 40s BABBAABCCC 60s CCCCCBAAAA 80s AAAAAA	015006	50s -eAAAAA 70s AAAAAA 50s -eA 70s AAAAAA
008004	50s -EAAAAA 70s AAAAAA	012002	70s -eAAAAA 80s AAAAAA	015007	70s AAAAAA 50s -eA 70s AAAAAA
008005	50s -eBAAAAA 70s AAAAAA	012003	70s -----eaa 80s bCCCCAa	015008	70s AAAAAA 50s -cAAAAA 60s -----cc 70s cCBAAAAA
008006	50s -eAAAAA 70s AAAAAA	012004	70s -----f 80s AAAAAA	015009	70s AAAAAA 50s -eA 70s AAAAAA
008007	50s -eAAAAA 70s AAAAAA	012005	70s -----eaa 80s AAAAAA	015010	70s AAAAAA 50s -cAAAAA 60s -----cc 70s cCBAAAAA
008008	50s -eAAAAA 70s AAAAAA	012006	70s -----ea 80s AAAAAA	015011	70s AAAAAA 50s -c 60s cCBAAAAA
008009	50s -EAbdABBA 70s AAAAAA	012007	80s -eaaAa	015012	70s -BAAaAa 50s -----cc 60s cCBAAAAA
008010	50s -eAAAAA 70s AAAAAA	013001	70s -----e 80s -cccA	015013	50s -----cc 60s cCBAAAAA 70s CCBAAAAA
009001	50s -----e 70s AAAAAA	013002	70s -----c 80s -cccA	015016	70s -bAAAAA 80s -eAAAA 50s -eaaae
009002	60s eAAAAA 80s AAAAAA	013003	70s -----c 80s -cccA	015017	70s -cAAAAA 80s -----ccA 50s -eaaae
009003	60s -++++E 80s AAAAAA	013005	80s -ecccA 70s -----CCCC 80s -AAA	015018	50s -eaaae 80s -ccA 90s -cccD
009004	80s eaaacaa	013007	70s -----CCCC 80s -AAA	015024	80s -cccD
010002	60s -++++E 80s AAAAAA	013008	80s -AAA	016001	40s -----Cc 60s AAAAAA 80s BDFCCA
010003	80s --eAa	014001	60s -++++EAA 80s AAAAAA	016002	50s -eAAAA 70s AAAAAA
		014002	60s -++++E 80s ACCFCA	016003	60s -++++E 80s AAAAAA
		014005	80s -ca	016004	70s -eAAAAA
		015001	50s -ee 70s +++++E 50s -----e 70s +++++E		
		015002	50s -----e 70s +++++E		

Naturalised daily and monthly flows

Stn. number	Naturalised daily, and monthly flows	Stn. number	Naturalised daily, and monthly flows	Stn. number	Naturalised daily, and monthly flows
007003	60s ----FE 80s F	014001	70s -F-E	015013	70s -EEEEEE
008001	30s -----FE 50s EEEEEEE 70s -F-E	014002	70s -E-E	015016	70s -EEEEEE
008005	70s -F-E	015003	70s -EEEEEE	015017	70s -----F
012002	70s -FF	015006	60s -----FEE 80s EEEEE	015024	80s -EEEE
012004	70s -----EEE	015007	70s -EEEEEE	016001	60s -EEEEEE
013007	70s -----EEE	015008	70s -EEEEEE	80s EEEEE	
		015010	70s -EEEEEE	016004	70s -EEEEEE
		015011	70s -EEEEEE		
		015012	70s -EEEEEE		

FORTH RIVER PURIFICATION BOARD
and the
TWEED RIVER PURIFICATION BOARD



FRPB

Area: 4,520 km²

Average Rainfall (1941-70): 1117 mm

Headquarters of the
Forth River Purification Board:

Colinton Dell House
West Mill Road
Colinton
Edinburgh EH13 0PH

Telephone: Edinburgh (031) 441 4691

TWRPB

Area: 4,580 km²

Average Rainfall (1941-70): 1003 mm

Headquarters of the
Tweed River Purification Board:

Burnbrae
Mossilee Road
Galashiels TD1 1NF

Telephone: Galashiels (0896) 2425

Gauging Station Register

Station number	River name	Station name	Grid reference	Catchment area (sq km)	Station type	Period of record	Mean ann. rainfall (mm)	Mean ann. runoff (mm)	Max. ann. runoff (mm)	Year of max.	Min. ann. runoff (mm)	Year of min.	Mean flow (m ³ s ⁻¹)	Min. mon. flow (m ³ s ⁻¹)	Month/Year of min.	Mean ann. flood (m ³ s ⁻¹)	Base flow Index	10 Percentile (m ³ s ⁻¹)	95 Percentile (m ³ s ⁻¹)
017001	Carron	Headwood	NS 832820	122.3	VA	1969-85	1496	808	1180	85	544	72	3.13	0.42	10/72	69.6	.36	7.9	0.54
017002	Leven	Leven	NO 369006	424.0	VA	1969-85	899	441	691	85	169	73	5.92	0.80	10/72	45.0	.65	13.2	1.00
017003	Bonny Water	Bonnybridge	NS 824804	50.5	VA	1971-85	1179	765	1029	85	550	75	1.23	0.21	08/83	.44	2.7	0.25	
017004	Ore	Balfour Mains	NT 330997	162.0	VA	1972-85	858	378	565	85	110	73	1.94	0.16	08/75	.53	4.5	0.20	
017005	Avon	Polmonthill	NS 952797	195.3	VA	1971-85	990	579	812	85	333	73	3.58	0.54	08/75	57.5	.40	6.7	0.58
018001	Allan Water	Kinbuck	NN 792053	161.0	VA	1957-85	1307	950	1152	82	674	75	4.85	0.53	07/84	70.9	.45	10.9	0.78
018002	Devon	Glenochà	NS 858960	181.0	VA	1959-85	1260	752	942	82	425	73	4.32	0.75	10/72	46.9	.54	9.1	0.98
018003	Teith	Bridge of Teith	NN 725011	518.0	VA	1957-85	1927	1319	1692	82	919	69	21.67	3.14	08/84	190.8	.44	50.4	4.07
018005	Allan Water	Bridge of Allan	NS 786980	210.0	VA	1971-85	1259	914	1121	85	641	75	6.09	0.65	08/84	88.6	.46	14.4	0.81
018008	Leny	Anie	NN 585096	190.0	VA	1973-85	2248	1959	2349	82	1551	75	11.80	0.34	08/84	82.0	.38	30.0	0.64
018011	Forth	Craigforth	NS 775955	1036.0	VA	1981-85	1650	1457	1585	85	1377	84	47.85	3.57	08/84	.42	118.9	4.05	
018017	Monachyle	Balquhiddier	NN 475230	7.7	C	1963-85	2638	2007	2056	85	1925	84	0.49	0.01	08/83			1.3	0.01
018018	Kirkton Burn	Balquhiddier	NN 532219	6.9	C	1983-85	2246	1818	1961	85	1726	83	0.39	0.03	08/83			0.9	0.03
019001	Almond	Craigiehall	NT 165752	369.0	VA	1957-85	877	473	643	85	247	73	5.54	0.67	10/72	118.4	.38	12.6	0.86
019002	Almond	Almond Weir	NT 004652	43.8	CB	1962-85	1052	679	895	82	412	73	0.94	0.13	08/83	17.1	.34	2.3	0.16
019003	Breich Water	Breich Weir	NT 014639	51.8	B	1961-80	949	538	751	82	328	75	0.88	0.05	08/76	20.3	.30	2.1	0.10
019004	North Esk	Dalmore Weir	NT 252616	81.6	MIS	1960-85	934	575	728	79	303	73	1.49	0.25	08/75	21.1	.54	3.1	0.35
019005	Almond	Almondell	NT 086686	229.0	FV	1962-85	930	513	709	85	267	73	3.72	0.39	10/72	92.1	.35	8.7	0.51
019006	Wtr of Leith	Murrayfield	NT 228732	107.0	VA	1963-85	867	401	602	65	155	73	1.36	0.26	10/73	34.0	.46	2.8	0.33
019007	Esk	Musselburgh	NT 339723	330.0	VA	1962-85	836	377	599	62	156	73	3.95	0.88	09/73	71.7	.51	8.0	0.95
019008	South Esk	Prestonholm	NT 325623	112.0	C	1964-85	859	371	578	85	114	73	1.32	0.28	09/73	22.6	.54	2.7	0.33
019010	Braid Burn	Liberton	NT 273707	16.2	C C	1969-85	750	261	341	84	113	73	0.13	0.02	08/84	3.8	.81	0.2	0.03
019011	North Esk	Dalkeith Palace	NT 333678	137.0	VA	1963-85	936	467	668	65	222	73	2.03	0.49	09/73	42.9	.51	3.9	0.54
020001	Tyne	East Linton	NT 591768	307.0	VA	1961-85	727	288	426	63	73	73	2.80	0.45	10/72	55.6	.52	5.6	0.54
020002	W Peffer Brn	Luffness	NT 489811	26.2	MIS	1968-85	624	162	317	85	11	73	0.13	>0.00	08/74	3.0	.46	0.3	0.01
020003	Tyne	Spilmersford	NT 456689	161.0	VA	1965-85	720	267	374	66	72	73	1.36	0.20	08/76	39.4	.49	2.8	0.26
020004	E Peffer Brn	Lochhouses	NT 610824	31.1	MIS	1967-85	609	208	444	84	15	73	0.20	0.01	09/73	8.3	.37	0.4	0.01
020005	Birns Water	Saltoun Hall	NT 457688	93.0	VA	1965-85	715	321	473	66	98	73	0.95	0.13	09/73	27.2	.48	1.9	0.17
020006	Biel Water	Belton House	NT 645768	51.8	VA	1973-85	812	352	451	83	96	73	0.58	0.13	09/73	16.7	.61	1.0	0.14
020007	Gifford Water	Lennoxlove	NT 511717	64.0	VA	1973-85	788	363	495	83	98	73	0.74	0.13	09/73	22.8	.58	1.5	0.17
021001	Fruid Water	Fruid	NT 088205	23.7	TP	1959-88	1744	893	1066	83	770	66	0.67	0.10	06/61	18.9		1.8	0.12
021002	Whiteadder	Hungry Snout	NT 663633	45.6	MIS	1959-88	969	694	1074	63	393	64	1.00	0.11	10/59	25.1		2.0	0.15
021003	Tweed	Peebles	NT 257400	694.0	VA	1959-85	1189	675	851	82	336	73	14.86	2.43	10/72	222.8	.54	31.5	3.19
021004	Watch Water	Watch Wtr Res	NT 664566	10.7	TP	1965-68	1027	383	395	67	206	66	0.13	0.02	01/68	.68		0.3	
021005	Tweed	Lyne Ford	NT 206397	373.0	VA	1961-85	1297	732	971	82	395	73	8.66	1.44	10/72	123.4	.56	18.2	1.99
021006	Tweed	Boleside	NT 498334	1500.0	VA	1961-85	1205	735	932	82	391	73	34.95	4.44	10/72	452.9	.50	75.3	6.49
021007	Etrick Water	Lindean	NT 486315	499.0	VA	1961-85	1366	925	1165	82	507	73	14.64	0.95	08/76	234.7	.40	33.4	1.76
021008	Teviot	Ormiston Mill	NT 702280	1110.0	VA	1960-85	966	545	739	63	250	73	19.17	2.01	08/84	320.5	.45	41.9	2.85
021009	Tweed	Norham	NT 898477	4390.0	VA	1962-85	986	551	735	63	244	73	76.71	9.88	08/76	789.4	.52	163.3	14.02
021010	Tweed	Dryburgh	NT 588320	2080.0	VA	1960-80	1098	643	827	67	330	73	42.43	6.34	10/72	545.5	.51	92.4	8.08
021011	Yarrow Wtr	Philippaugh	NT 439277	231.0	VA	1963-85	1394	909	1145	77	507	73	6.66	0.60	08/78	88.9	.45	15.1	0.95
021012	Teviot	Hawick	NT 522159	323.0	VA	1963-85	1169	800	1070	82	408	73	8.19	0.73	08/83	182.2	.43	18.7	0.98
021013	Gala Water	Galashiels	NT 479374	207.0	VA	1964-85	935	544	721	85	238	73	3.57	0.40	08/76	41.9	.51	7.8	0.52
021014	Tweed	Kingledores	NT 109285	139.0	VA	1961-85	1583	861	1128	67	415	73	3.80	0.60	10/72	.45		8.3	0.88
021015	Leader Water	Earlston	NT 565388	239.0	VA	1966-85	828	459	605	79	155	73	3.48	0.35	08/76	58.8	.48	7.5	0.46
021016	Eye Water	Eyemouth Mill	NT 942635	119.0	VA	1967-85	719	346	491	85	62	73	1.31	0.10	08/76	33.0	.44	2.9	0.13
021017	Etrick Water	Brockhoperig	NT 234132	37.5	VA	1965-85	1849	1485	2067	82	896	73	1.77	0.11	07/84	65.6	.34	4.0	0.18
021018	Lyne Water	Lyne Station	NT 209401	175.0	VA	1968-85	918	509	667	85	257	73	2.83	0.59	09/73	34.9	.59	6.0	0.67
021019	Manor Water	Cademuir	NT 217369	81.6	VA	1968-85	1389	774	999	79	409	73	1.51	0.21	09/84	22.2	.57	3.2	0.29
021020	Yarrow Wtr	Gordon Arms	NT 309247	155.0	VA	1967-85	1512	1030	1333	77	619	73	5.06	0.41	08/76	57.9	.45	11.3	0.87
021021	Tweed	Sprouston	NT 752354	3330.0	VA	1969-85	1006	571	743	82	291	73	60.34	8.23	10/72	780.9	.50	137.5	9.90
021022	Whiteadder	Hutton Castle	NT 881550	503.0	CC	1969-85	792	402	555	85	285	75	6.40	0.99	09/73	148.9	.52	13.4	1.11
021023	Leet Water	Coldstream	NT 839396	113.0	FLVA	1970-85	647	239	367	79	32	73	0.86	0.01	08/76	49.0	.34	2.1	0.02
021024	Jed Water	Jedburgh	NT 655214	139.0	VA	1971-85	904	504	678	85	242	73	2.22	0.31	08/76	57.5	.42	5.1	0.38
021025	Ale Water	Ancrum	NT 634244	174.0	VA	1972-85	914	456	657	85	190	73	2.52	0.14	08/76	40.1	.43	6.2	0.23
021026	Tima Water	Deephope	NT 278138	31.0	VA	1973-85	1677	1312	1640	79	1008	76	1.29	0.04	07/84	43.8	.27	3.3	0.07
021027	Blackadder	Mouth Bridge	NT 826530	159.0	VA	1973-85	765	355	487	85	201	75	1.79	0.17	08/76	48.7	.49	3.7	0.29
021030	Megget Water	Henderland	NT 231232	56.2	VA	1968-85	1665	1123	1544	77	651	83	2.00	0.20	08/76	60.5	.38	4.6	0.27
021034	Yarrow Wtr	Craig Douglas	NT 288244	116.0	FL	1968-85	1567	1014	1343	77	827	73	3.73	0.35	08/76	45.6	.45	8.7	0.52

Hydrometric Statistics

	Period	Rainfall (mm)	Runoff (mm)	Mean flow (m ³ s ⁻¹)	Peak flow (m ³ s ⁻¹)	Date of peak	Min. daily flow (m ³ s ⁻¹)	Date of min.	10 Percentile (m ³ s ⁻¹)	50 Percentile (m ³ s ⁻¹)	95 Percentile (m ³ s ⁻¹)	
		% of pre-1981	% of pre-1981									
017001 M.A: FRPB Level: 17m F.A.F: SE B-full: 150.0 m ³ s ⁻¹ C.A: 122.3 km ² Comment: Velocity-area station; the reach is an artificial meander cutoff. The channel is straight and uniform and has been lined with gabions and concrete walls. The banks are steep to 2.5m. Due to recent instability in the rating, caused by d/s deposition, a Flat V weir will be installed in 1988/89. # The upper part of the catchment drains part of the Campsie Fells and flows through the Carron Valley reservoir. Geology - composed of igneous rocks in headwaters and Carboniferous rocks in the valley.	69-80	1416	737	2.86	147.9	07/12 1979	0.26	22/10 1972	7.1	1.40	0.54	
	1981	1567	111	876	119		0.41	09/12	8.4	1.26	0.58	
	1982	1838	130	958	130		0.35	04/08	9.7	1.88	0.50	
	1983	1679	119	945	128		0.43	22/02	8.4	1.51	0.53	
	1984	1596	113	916	124		0.44	07/09	9.2	1.23	0.54	
	1985	1738	123	1183	161		0.22	10/07	13.0	1.37	0.60	
017002 M.A: FRPB Level: 4m F.A.F: SREI B-full: 660.0 m ³ s ⁻¹ C.A: 424.0 km ² Comment: River section in a straight reach with artificially heightened and steeped banks. The control was formerly a gravel bar but this has now been stabilised with gabions - to form an irregular broad-crested weir. Possible movement in control - evident at low flows. There are a number of small storage reservoirs in the catchment plus Loch Leven whose outflow is controlled by sluice gates. # Geology - predominantly Carboniferous rocks. Land use - lowland arable farming.	69-80	847	389	5.23	128.0	10/02 1977	0.40	27/07 1974	11.3	3.44	0.90	
	1981	922	109	469	121		0.99	31/07	12.6	5.73	1.53	
	1982	969	118	512	132		1.03	27/07	13.9	5.42	1.27	
	1983	929	110	490	126		1.13	28/07	12.9	4.97	1.47	
	1984	1106	131	646	166		0.85	24/07	22.7	3.81	1.40	
	1985	1186	140	693	178		1.06	19/07	18.3	6.66	2.19	
017003 M.A: FRPB Level: 23m F.A.F: EI B-full: 18.0 m ³ s ⁻¹ C.A: 50.5 km ² Comment: Open river section with rock bar low flow control. Possible shift in control. Floodplain at 2.1m on left bank. Severe congestion by aquatic weeds in summer necessitates large correction to recorded stage. Low flows affected by effluent discharge. # Catchment composed of Carboniferous rocks with igneous intrusions. Land use - predominantly rural with urban development at Cumbernauld in the headwaters.	71-80	1111	599	1.12	31.9	07/12 1979	0.15	20/09 1978	2.5	0.63	0.24	
	1981	1283	115	839	129		0.20	09/09	2.9	0.73	0.31	
	1982	1408	127	903	120		0.24	09/08	3.0	0.92	0.34	
	1983	1263	114	797	114		0.15	11/08	2.7	0.74	0.19	
	1984	1236	111	916	131		0.16	08/08	3.2	0.71	0.25	
	1985	1370	123	1032	148		0.25	10/07	3.1	0.82	0.37	
017004 M.A: FRPB Level: 23m F.A.F: EI C.A: 162.0 km ² Comment: Open river section with stable rock bar low flow control, has shown instability at right bank. A railway embankment forms the right bank, whilst the left bank is steep to the floodplain at 1.6m. Low flows moderately affected by pumping from colliers. # The catchment is in the coal mining area of west Fife and is composed of Carboniferous rocks. Land use - arable farming.	72-80	803	329	1.89	52.8	10/02 1977	0.09	21/08 1973	3.9	1.01	0.17	
	1981	850	106	374	114		0.38	31/08	3.9	1.32	0.46	
	1982	929	116	416	126		0.37	03/09	4.3	1.34	0.46	
	1983	848	106	385	117		0.39	14/08	4.2	1.37	0.43	
	1984	1041	130	552	168		0.38	26/08	7.5	1.37	0.44	
	1985	1099	137	567	172		0.59	21/07	5.9	1.59	0.75	
017005 M.A: FRPB Level: 4m F.A.F: EI C.A: 195.3 km ² Comment: Velocity-area station; the river takes a sharp left turn upstream at a site of river capture. There is a small island in mid-channel immediately below the station which forms the high flow control. The control has shifted over a period, but is now stable and the banks have contained all recorded flows. Low flows are moderately affected by effluent discharges. Extensive moorland drainage schemes in headwaters. # Geology - Carboniferous sedimentaries. The catchment is predominantly rural with a few small coal-mining towns.	71-80	930	514	3.18	68.9	31/10 1977	0.45	07/08 1974	7.7	1.60	0.57	
	1981	1038	112	627	122		0.50	17/08	10.7	1.58	0.55	
	1982	1154	124	731	142		0.46	31/07	11.8	2.42	0.81	
	1983	1022	110	608	118		0.55	07/09	9.6	2.03	0.61	
	1984	1116	120	727	141		0.44	26/07	10.0	1.83	0.55	
	1985	1188	128	815	159		0.73	02/11	12.1	2.15	0.84	
018001 M.A: FRPB Level: 93m F.A.F: N B-full: 34.0 m ³ s ⁻¹ C.A: 161.0 km ² Comment: Velocity-area station; stage recorder is sited 40m upstream of a twin-arch bridge which acts as a control at all stages. Gabions were installed in 1980 beneath one arch to stabilise the control. The section has steep banks which contain all floods. The rating is stable and well defined throughout the full range. Flows are broadly natural. Level of control protected by Scottish Development Department. # The river flows through a broad flat valley. Lateral tributaries drain steep hillsides. Geology - predominantly Old Red Sandstone.	57-80	1288	929	4.74	101.4	28/07 1958	0.35	19/09 1976	10.5	2.96	0.84	
	1981	1288	100	922	99		0.38	02/09	10.4	2.83	0.64	
	1982	1489	116	1152	124		0.45	31/07	13.7	3.93	0.62	
	1983	1369	106	1041	112		0.56	31/08	11.9	3.07	0.63	
	1984	1388	108	1023	110		0.41	26/07	13.2	2.87	0.51	
	1985	1457	113	1123	121		0.96	10/07	12.7	3.15	1.17	
018002 M.A: FRPB Level: 6m F.A.F: SI B-full: 59.0 m ³ s ⁻¹ C.A: 181.0 km ² Comment: This natural section has steep banks and a good stable flood rating. The low flow control is a gravel bar under a road bridge 100m downstream. Severe weed growth in summer and very low velocities make low flow measurement difficult. The RAFT rising air-bubble technique has been used unsuccessfully. Low flows are moderated by Castlehill reservoir in the headwaters, commissioned in 1977. River level protected by SDD. # Headwaters are steep and composed of extrusive igneous rocks; the lower valley is broad and very flat.	59-80	1221	727	4.17	109.1	08/08 1972	0.53	25/09 1976	8.8	2.68	0.98	
	1981	1331	109	824	113		0.93	15/08	9.7	2.67	1.04	
	1982	1461	120	942	130		0.86	14/07	11.5	4.03	1.02	
	1983	1271	104	731	101		0.96	14/08	7.4	2.60	1.02	
	1984	1536	126	885	122		0.79	22/07	11.2	3.13	0.87	
	1985	1538	126	943	130		1.20	17/05	11.5	2.90	1.32	
018003 M.A: FRPB Level: 15m F.A.F: SP B-full: 163.0 m ³ s ⁻¹ C.A: 518.0 km ² Comment: A well sited station on a straight, natural river section which is 70 metre wide. On 6/6/56 the recorder was moved downstream to its current position. No rating is available for the earlier period from 7/4/40. The banks are steep to 3m and have contained all recorded floods. Six large lochs in the catchment - some of which supply water to Glasgow. # Complex geology - predominantly metamorphic rocks. The Teith drains from the Trossachs.	57-80	1861	1277	20.97	246.5	13/01 1975	2.07	19/09 1959	48.3	12.57	4.22	
	1981	2032	109	1352	106		3.24	02/09	56.4	12.31	3.98	
	1982	2343	126	1692	132		3.21	03/08	66.4	17.88	3.77	
	1983	2099	113	1487	116		3.02	20/08	55.0	14.62	3.20	
	1984	2023	109	1445	113		2.77	16/08	56.4	12.63	3.17	
	1985	2167	116	1648	129		4.62	14/05	65.5	13.96	5.48	
018005 M.A: FRPB Level: 11m F.A.F: I B-full: 230.0 m ³ s ⁻¹ C.A: 210.0 km ² Comment: Velocity-area station; the recorder is sited in a natural reach with a vertical stone wall on the right bank. The left bank is steep to 2.6m. The flood rating is stable but large boulders make current metering a problem at low flows. The site is within a caravan park so the low flow control is susceptible to rearrangement by children. Station useful for obtaining flood data, as flooding frequently occurs in the town of Bridge of Allan. # The Allan Water has a broad flat valley with steep lateral tributaries. Geology predominantly Old Red Sandstone.	71-80	1208	844	5.62	98.2	30/01 1974	0.58	18/08 1975	13.1	3.48	0.82	
	1981	1261	104	930	110		0.79	31/08	13.8	4.04	0.93	
	1982	1437	119	1119	133		0.73	29/07	17.6	5.12	0.95	
	1983	1321	109	1031	122		0.70	14/08	15.6	4.26	0.76	
	1984	1346	111	1064	126		0.58	27/08	19.4	3.83	0.63	
	1985	1420	118	1124	133		1.05	10/07	16.1	4.22	1.37	
018008 M.A: FRPB Level: 120m F.A.F: N B-full: 127.0 m ³ s ⁻¹ C.A: 190.0 km ² Comment: A well sited station on a natural section of an upland gravel bed river draining steep slopes. The site is adjacent to a picnic area so the gravel bar low flow control is susceptible to rearrangement by children. The response of the catchment is damped by two large natural storage lochs. # The catchment is underlain by metamorphic rocks with igneous intrusions. Mostly open heather moorland; rugged topography.	73-80	2188	1879	11.32	118.1	03/03 1979	0.17	12/09 1976	28.6	6.57	0.67	
	1981	2206	101	1905	101		0.60	02/09	32.0	6.58	0.99	
	1982	2682	123	2349	125		0.35	02/08	34.8	10.06	0.95	
	1983	2332	107	1982	105		0.25	17/08	33.0	7.41	0.35	
	1984	2218	101	1949	104		0.16	25/08	28.6	6.50	0.31	
	1985	2279	104	2189	116		1.27	14/05	31.8	7.27	1.76	
018011 M.A: FRPB Level: 4m F.A.F: C.A: 1036.0 km ² Comment: Originally opened in 1972 - known as Drip Bridge. Rebuilt on same site in 1982. 70m wide section - part of a large meander just above the tidal limit. Left bank floods at high stages. Low flows measured d/s in tidal section. Large tides can influence levels for short periods; data corrected. Flow velocities low, but stable control. A good rating exists over the whole range. # Geology - Devonian and Carboniferous sedimentaries in lower catchment; metamorphic rocks with igneous intrusions above. Mostly heather moorland; rugged.												
	1981			1555	51.09	254.8d	03/03	3.31	03/08	123.9	36.17	4.57
	1982			1656	46.63	486.4	05/01	3.54	11/08	111.4	27.70	3.90
	1983			1582	45.24	421.3	27/11	2.96	16/08	116.5	23.20	3.63
	1984			1713	52.08	398.8	21/12	6.86	12/05	128.2	26.56	8.43

Period	Rainfall (mm)	Runoff (mm)	Mean flow (m ³ s ⁻¹)	Peak flow (m ³ s ⁻¹)	Date of peak	Min. daily flow (m ³ s ⁻¹)	Date of min.	10 Percentile (m ³ s ⁻¹)	50 Percentile (m ³ s ⁻¹)	95 Percentile (m ³ s ⁻¹)
018017 Monachyle Burn at Bakquhadder C.A.: 7.7 km²										
M.A: IH Level: m F.A.F:										
Comment: Crump weir (capacity 26 m ³ s ⁻¹ - 50 yr flood) plus trapezoidal flume (in series) for greater sensitivity at low flows. Calibration is theoretical confirmed by gaugings. Natural; heather moorland causes large interception losses. IH experimental catchment. # Steep-sided glaciated valley with shallow peats, peaty gleys and upland brown earths overlying mica schists; deeper peat found on the more gently sloping upper catchment. Grasses predominate in the lower basin, heather above - some exposed rock. Afforestation began 1987.										
1981										
1982										
1983	2811	2040	0.50	13.7	15/01	0.01	14/07	1.3	0.18	
1984	2582	1925	0.47	14.7	13/01	0.01	26/07	1.3	0.20	0.01
1985	2520	2062	0.50	17.0	04/10	0.03	08/06	1.3	0.17	0.04
018018 Kirkton Burn at Bakquhadder C.A.: 6.9 km²										
M.A: IH Level: m F.A.F:										
Comment: Crump weir (capacity 30 m ³ s ⁻¹ - 50 yr flood) plus trapezoidal flume (in series) for greater low flow sensitivity. Steep channel - approach conditions not ideal. Theoretical rating underestimates flow; calibration based on multi-meter gaugings. Natural (large interception losses from heather); a few lochans provide local storage. An IH experimental catchment. # Steep-sided glaciated valley. Shallow peats, gleys and brown earths overlay mica schists. 35% coniferous forest (1982) peats, heather and grass. Clear felling of the mature forest began in 1986.										
1981										
1982										
1983	2368	1725	0.37	11.4	15/10	0.02	28/08	0.9	0.21	0.03
1984	2162	1775	0.39	8.7	21/11	0.03	04/07	1.0	0.22	0.03
1985	2208	1965	0.43	7.8	06/10	0.07	28/03	0.9	0.24	0.08
019001 Almond at Craigiehall C.A.: 369.0 km²										
M.A: FRPB Level: 23m F.A.F: PEI B-full: 215.0 m ³ s ⁻¹										
Comment: The recorder is well sited on a straight even reach with steep banks which have contained all recorded floods. Stable rating over the period of record. Some adjustment to stage is required to accommodate weed growth in the summer. Low flows are substantially affected by sewage effluent. There is an abstraction at Almondell to feed a canal. A number of storage reservoirs are situated in the catchment. # Geology - predominantly Carboniferous rocks. Land use - rural with several small mining towns.										
1981	856	450	5.26	180.6	31/10	0.24	09/10	12.0	2.69	0.84
1982					1977		1959			
1983	918	107	520	116	6.09	180.5	02/10	0.75	31/08	14.0
1984	1046	122	641	142	7.50	181.8	19/12	0.99	31/07	17.4
1985	864	101	496	110	5.81	90.9	01/06	0.62	13/08	14.3
1986	972	114	627	139	7.34	199.6	03/11	0.64	11/08	17.5
1987	1043	122	644	143	7.52	169.7	21/09	1.17	06/06	16.3
019002 Almond at Almond Weir C.A.: 43.8 km²										
M.A: FRPB Level: 128m F.A.F: E S-full: 24.0 m ³ s ⁻¹										
Comment: The control is a broad-crested masonry weir of a former pumping station intake works. The sluice is permanently closed. The structure has been rated by current metering to 0.6m, there is no cableway and the highest flow measurement is 0.34m. Several small storage reservoirs in the headwaters. # The catchment drains the SE slopes of the Pentland hills. Geology - Carboniferous and Devonian sedimentaries with igneous intrusions. Rural catchment - mostly rough grazing.										
1981	1024	864	0.92	23.1	22/11	0.04	23/06	2.2	0.45	0.16
1982					1989		1980			
1983	1142	112	692	104	0.96	25.1	01/10	0.07	03/09	2.7
1984	1243	121	774	117	1.07	23.6	19/12	0.11	10/06	2.8
1985	1097	107	636	96	0.88	22.5	05/01	0.09	13/09	2.4
1986	1132	111	756	114	1.05	26.5	03/11	0.09	29/07	2.6
1987	1193	117	831	125	1.15	20.0	20/09	0.13	03/07	2.7
019004 North Esk at Datmore Weir C.A.: 81.6 km²										
M.A: FRPB Level: 132m F.A.F: EI B-full: 110.0 m ³ s ⁻¹										
Comment: The control is a dog-legged 25m wide ogee section masonry weir rated entirely by current meter. There is no cableway and the highest flow measurement is 0.34m. Several small storage reservoirs in the headwaters. # The catchment drains the SE slopes of the Pentland hills. Geology - Carboniferous and Devonian sedimentaries with igneous intrusions. Rural catchment - mostly rough grazing.										
1981	919	561	1.45	37.1	14/08	0.14	26/08	3.0	0.97	0.36
1982					1986		1975			
1983	906	99	571	102	1.48	21.2	01/10	0.39	07/09	3.3
1984	1097	119	664	118	1.72	22.2	23/11	0.30	10/06	3.7
1985	924	101	596	106	1.54	16.2	28/05	0.22	30/08	3.2
1986	1009	110	631	112	1.63	37.7	03/11	0.14	25/07	3.8
1987	1102	120	702	125	1.81	24.0	20/09	0.38	21/02	3.5
019005 Almond at Almondell C.A.: 229.0 km²										
M.A: FRPB Level: 73m F.A.F: PEI B-full: 700.0 m ³ s ⁻¹										
Comment: Informal Flat V weir - installed at the site in June 1970. The structure was widened and a sluice incorporated in June 1971. The previous control was a natural bar with large boulders. Calibration is entirely by current metering. Immediately above the station a measured quantity of water is abstracted to supply a canal. Low flows are significantly increased by discharge from East Calder sewage works. # The catchment is composed of mainly Carboniferous rocks. Land use is predominantly rural with several small coal mining towns.										
1981	892	490	3.56	165.8	30/10	0.19	14/10	8.3	1.74	0.49
1982					1977		1972			
1983	1023	115	545	111	3.96	113.1	01/10	0.43	01/09	10.2
1984	1173	132	667	136	4.84	116.1	19/12	0.57	26/07	11.2
1985	967	108	519	106	3.77	78.8	01/06	0.44	06/08	9.6
1986	1064	119	617	126	4.48	138.9	03/11	0.47	11/08	10.8
1987	1114	125	641	131	4.64	99.6	21/09	0.64	11/05	9.8
019006 Water of Leith at Murrayfield C.A.: 107.0 km²										
M.A: FRPB Level: 38m F.A.F: SR B-full: 86.0 m ³ s ⁻¹										
Comment: Velocity-area station in a straight even reach 50m upstream of a road bridge. The right bank is a vertical wall and the left bank is steep to 2.5m. The high flow control is possibly the piers of a railway bridge 0.5km downstream. The catchment contains several storage reservoirs. # The headwaters of the catchment are in the Pentland Hills. The lower part of the catchment has undergone urban development.										
1981	847	378	1.28	66.8	14/08	0.13	20/07	2.6	0.71	0.31
1982					1988		1978			
1983	834	98	411	109	1.40	61.0	01/10	0.44	10/08	2.6
1984	1055	125	534	141	1.81	53.5	03/01	0.34	31/07	3.8
1985	837	99	409	108	1.39	29.2	28/05	0.37	30/08	2.8
1986	945	112	516	137	1.75	84.9	03/11	0.28	13/08	3.5
1987	1021	121	543	144	1.84	47.4	21/09	0.30	22/03	3.4
019007 Esk at Musselburgh C.A.: 330.0 km²										
M.A: FRPB Level: 3m F.A.F: SPEI B-full: 200.0 m ³ s ⁻¹										
Comment: Velocity-area station; recorder is sited in a section with steep banks. The high rating appears to oscillate with periodic dredging and accretion of a bar on the right bank. Flows abstracted upstream of the main station along a mill leade are monitored - summation needed to give total basin runoff. The floods of 1891 and 1948 reached levels around 1m above bankfull at Inversesk Mill. # The catchment is predominantly exposed moorland (developed on Carboniferous sediments) of the Moor foothills with several small mining towns in the valley.										
1981	818	384	3.81	175.6	14/08	0.70	24/07	7.7	2.26	0.95
1982					1986		1986			
1983	795	97	350	96	3.66	95.8	01/10	0.74	13/09	7.6
1984	968	118	452	124	4.73	106.1	23/11	0.68	31/05	9.4
1985	841	103	392	108	4.10	79.9	01/06	0.94	12/08	8.1
1986	899	110	450	124	4.71	148.2	03/11	0.83	17/08	10.2
1987	1017	124	503	138	5.25	105.5	21/09	1.46	07/07	9.4
019008 South Esk at Prestonholm C.A.: 112.0 km²										
M.A: FRPB Level: 77m F.A.F: S B-full: 500.0 m ³ s ⁻¹										
Comment: The recorder is on a straight artificial cut which diverts the flow from a coal mining waste site. Crump weir control. Accretion upstream deflects the flow which is skewed at the weir crest. The theoretical calibration has been superseded by one based on current meter gaugings. Low flows are moderately augmented by pumping from collieries. There are several small storage reservoirs in the headwaters. # The catchment is predominantly exposed moorland (developed on Carboniferous sediments) of the Moor foothills. Some mining.										
1981	838	338	1.20	70.8	14/08	0.22	16/04	2.4	0.76	0.32
1982					1988		1973			
1983	837	100	378	112	1.34	33.0	02/10	0.33	16/08	2.4
1984	1013	121	501	148	1.78	51.7	03/01	0.33	10/08	3.8
1985	869	104	434	128	1.54	41.4	01/06	0.47	05/09	2.9
1986	923	110	523	155	1.86	55.8	03/11	0.43	15/10	3.9
1987	1060	126	578	171	2.05	34.8	21/09	0.59	17/03	3.7
019010 Braid Burn at Liberton C.A.: 16.2 km²										
M.A: FRPB Level: 50m F.A.F: S-full: 20.0 m ³ s ⁻¹										
Comment: Flows were originally measured by a Crump weir and trapezoidal flume in parallel. The flume suffered from choking by domestic refuse and childrens dams and so was replaced in October 1985 by a second Crump weir at a lower level than the first. # The headwater tributaries are steep rising in the Pentland Hills, whilst the lower part of the catchment is urbanised. Complex geology - Silurian/Devonian sedimentaries and igneous intrusions.										
1981	710	237	0.12	5.6	19/03	0.02	18/10	0.2	0.08	0.03
1982					1971		1969			
1983	684	96	225	95	0.12	6.2	01/10	0.03	15/08	0.2
1984	981	138	328	138	0.17	8.5	03/01	0.03	02/09	0.3
1985	822	116	310	131	0.16	11.2	28/05	0.03	05/09	0.3
1986	854	120	341	144	0.18	10.9	03/11	0.01	01/08	0.4
1987	941	133								
019011 North Esk at Dalkeith Palace C.A.: 137.0 km²										
M.A: FRPB Level: m F.A.F: N										
Comment: The recorder is sited on a bend in a natural river reach immediately upstream of a footbridge. Flow velocities are faster near the right bank, especially in floods. The water is stained red from effluent pumped from mine workings. The right bank is a vertical stone wall, whilst the left bank slopes gently to the hut at 2.5m. # Geology - Carboniferous and Devonian sedimentaries with igneous intrusions. The headwaters drain the steep slopes of the Pentland Hills. Mostly rough grazing.										
1981	854	451	1.96	55.1	25/11	0.33	29/08	3.8	1.23	0.53
1982					1980		1965			
1983	827	97	457	101	1.98	58.5	01/10	0.54	04/09	3.8
1984	1041	122	548	122	2.38	68.7	23/11	0.56	31/07	4.6
1985	913	107	486	108	2.11	30.6	01/06	0.54	15/11	4.3
1986	926	108	532	118	2.31	105.2	03/11	0.51	17/08	4.8
1987	1050	123	607	135	2.63	53.2	21/09	0.71	10/07	4.7

Period	Rainfall (mm)		Runoff (mm)		Mean flow (m ³ s ⁻¹)	Peak flow (m ³ s ⁻¹)	Date of peak	Min. daily flow (m ³ s ⁻¹)	Date of min.	10 Percentile (m ³ s ⁻¹)	50 Percentile (m ³ s ⁻¹)	95 Percentile (m ³ s ⁻¹)			
	% of pre-1981	% of pre-1981	% of pre-1981	% of pre-1981											
020001	Tyne at East Linton			C.A.: 307.0 km ²	61-80	715	277	2.70	112.7	04/08	0.33	06/09	5.4	1.60	0.53
	M.A: FRPB	Level: 17m	F.A.F: EI	B-full: 300.0 m ³ s ⁻¹											
	Comment: The low flow control is a gravel bar some 100m downstream. In 1970 a pipe crossing was constructed but did not unduly influence the rating. During 1982 recorded stage was adjusted during rebuilding of the roadbridge 200m downstream. This provides a stable high-flow control. Allowance is made for weed growth during the summer when abstraction for irrigation also takes place. # The catchment is characterised by steep headwaters in the Lammermuir Hills and broad flat arable valleys. Geology - Silurian and Ordovician sedimentary rocks.														
1981	701	98	253	91	2.47	82.7	02/10	0.46	09/09	4.8	1.38	0.54			
1982	769	108	319	115	3.11	93.0	03/01	0.39	31/07	6.1	1.70	0.58			
1983	788	110	339	122	3.30	119.7	28/05	0.55	31/08	5.1	2.02	0.83			
1984	798	112	366	132	3.56	127.5	03/11	0.40	27/08	7.8	2.09	0.47			
1985	866	121	375	135	3.64	90.8	21/09	0.79	10/07	7.1	1.95	0.95			
020002	West Peffer Burn at Luffness			C.A.: 26.2 km ²	66-80	605	144	0.12	4.5	10/02	0.00	30/08	0.3	0.05	0.01
	M.A: FRPB	Level: 4m	F.A.F: I	B-full: 78.0 m ³ s ⁻¹											
	Comment: The section is within steep banks on a straight reach of a small ditch with low gradient. Flows are measured by a trapezoidal flume and Crump weir in parallel. Low flows are severely reduced by abstraction for spray irrigation during dry summers. # The catchment drains flat arable land. A mainly impervious catchment with an extensive Boulder Clay cover.														
1981	591	98	129	90	0.11	2.3	02/10	0.00	29/08	0.2	0.07	0.01			
1982	658	109	187	130	0.16	5.9	04/01	0.00	09/06	0.3	0.05	0.02			
1983	644	106	183	127	0.15	3.6	01/06	0.01	19/06	0.3	0.08	0.02			
1984	721	119	255	177	0.21	3.7	26/03	0.00	23/07	0.5	0.09	0.01			
1985	790	131	317	220	0.26	4.8	23/09	0.03	21/07	0.5	0.14	0.04			
020003	Tyne at Spilmersford			C.A.: 161.0 km ²	65-80	703	253	1.29	103.1	04/08	0.14	20/09	2.6	0.76	0.25
	M.A: FRPB	Level: 69m	F.A.F: I	B-full: 130.0 m ³ s ⁻¹											
	Comment: The channel reach is within steep, high floodbanks which contain all floods. In September 1975 an irregular broad-crested weir was installed. Before that date the low flow control was a gravel bar. The gauge board was lowered by 0.125m on 1/9/69. Flows from this station are used as part of the Haddington flood warning system. # The headwaters drain exposed moorland.														
1981	683	97	234	92	1.20	50.6	02/10	0.25	04/09	2.2	0.71	0.28			
1982	789	112	308	122	1.57	47.0	03/01	0.28	18/09	3.3	0.73	0.30			
1983	789	112	329	130	1.68	74.9	28/05	0.34	30/08	3.1	0.93	0.38			
1984	815	116	354	140	1.81	131.2	03/11	0.21	26/08	4.2	0.92	0.25			
1985	868	123	331	131	1.66	41.1	21/09	0.32	09/07	3.4	0.90	0.44			
020004	East Peffer Burn at Lochhouses			C.A.: 31.1 km ²	67-80	587	179	0.18	13.5	07/12	0.00	31/08	0.4	0.07	0.01
	M.A: FRPB	Level: 4m	F.A.F: I	B-full: 11.0 m ³ s ⁻¹											
	Comment: Flows are measured by a concrete Crump weir and glass-fibre trapezoidal flume sited in parallel. Low flows are measured accurately but the low gradient and dense vegetation result in drowning during high flows. For a short time non-modular flows were computed using water levels from a second recorder 15m downstream. Abstraction for spray irrigation seriously affects low flows during dry summers. # The catchment is composed of flat arable land developed upon Boulder Clay; impervious strata below.														
1981	592	101	193	108	0.19	10.2	02/10	0.00	08/07	0.3	0.09	0.01			
1982	652	111	297	166	0.29	19.3	04/01	0.02	11/08	0.4	0.07	0.03			
1983	665	113	241	135	0.24	10.1	02/06	0.01	31/07	0.4	0.11	0.02			
1984	700	119	444	248	0.44	18.1	04/11	0.00	25/07	1.1	0.10	0.01			
1985	767	131													
020005	Birns Water at Saltoun Hill			C.A.: 93.0 km ²	65-80	718	307	0.90	36.5d	04/08	0.07	08/09	1.9	0.51	0.16
	M.A: FRPB	Level: 72m	F.A.F: I	B-full: 58.0 m ³ s ⁻¹											
	Comment: A natural section on a straight well defined reach. The low flow control is a compound irregular broad-crested weir. Rating is entirely by current meter. Before installation of the cableway the high flow rating was calculated by correlation with Spilmersford (20003) and current meter measurements from a bridge 100m upstream. There are a few small storage reservoirs in the catchment, otherwise flows are natural. # The catchment drains the upland moorland of the Lammermuir Hills. Geology - Silurian/Devonian sedimentaries.														
1981	620	86	290	94	0.85	40.8	02/10	0.17	04/09	1.6	0.51	0.19			
1982	712	99	373	121	1.10	29.0	03/01	0.18	02/09	2.2	0.55	0.20			
1983	686	96	368	126	1.14	45.4	27/05	0.22	16/08	2.0	0.63	0.24			
1984	748	104	392	128	1.15	94.6	03/11	0.16	27/08	2.3	0.57	0.17			
1985	806	112	389	127	1.14	33.3	21/09	0.23	21/07	2.2	0.65	0.28			
020006	Biel Water at Belton House			C.A.: 51.8 km ²	73-80	797	319	0.52	24.3	30/08	0.10	05/10	0.9	0.33	0.14
	M.A: FRPB	Level: 14m	F.A.F: I	B-full: 70.0 m ³ s ⁻¹											
	Comment: Velocity-area station. The section is a well defined straight channel whose banks have contained all recorded floods. An irregular broad-crested weir of gabions was installed in 1969. The rating has changed slightly as the control has settled. Flow regime is flashy and broadly natural. # The catchment drains part of the north-east Lammermuir Hills. Predominantly moorland. Geology - Silurian and Ordovician sedimentary rocks.														
1981	759	95	330	103	0.54	45.2	02/10	0.18	01/09	0.8	0.40	0.21			
1982	815	102	370	116	0.61	35.9	03/01	0.15	16/09	1.1	0.36	0.18			
1983	796	100	451	141	0.74	29.1	26/05	0.17	30/11	1.2	0.41	0.22			
1984	847	106	435	136	0.71	21.5	03/11	0.20	09/10	1.3	0.47	0.22			
1985	901	113	430	135	0.70	14.5	29/07	0.25	21/07	1.1	0.49	0.29			
020007	Gifford Water at Lennoxlove			C.A.: 64.0 km ²	73-80	770	331	0.67	28.9	15/10	0.11	05/09	1.3	0.38	0.16
	M.A: FRPB	Level: 51m	F.A.F: I												
	Comment: Velocity-area station. The recorder is sited immediately downstream of a footbridge on a slight bend in a natural channel. The low flow control is a stable rock bar. The flow regime is flashy. # Geology - predominantly Silurian and Ordovician beds. The catchment drains the steep moorland slopes of the Lammermuir Hills.														
1981	771	100	326	98	0.66	32.8	02/10	0.15	04/09	1.2	0.45	0.17			
1982	743	96	400	121	0.81	28.3	03/01	0.15	12/09	1.8	0.44	0.17			
1983	827	107	495	150	1.00	75.6	28/05	0.21	06/09	1.7	0.48	0.23			
1984	834	108	435	131	0.88	42.3	03/11	0.15	07/10	1.8	0.51	0.15			
1985	900	117	412	124	0.83	19.9	21/09	0.24	21/07	1.5	0.55	0.30			
021003	Tweed at Peebles			C.A.: 694.0 km ²	59-80	1178	658	14.49	481.4	15/01	1.93	11/10	30.3	9.64	3.22
	M.A: TWRPB	Level: 155m	F.A.F: SP	B-full: 220.0 m ³ s ⁻¹											
	Comment: Natural section with stable gravel bed. Cableway. From 1939 to 1958 flows measured at Priorsford Bridge about 360m upstream; records correlated from 1950. Storage at Talla, Fruid, Baddinsgill and Watch Water Reservoirs - overall runoff is diminished; monthly naturalised flows available. # Upland catchment developed on impervious Palaeozoic and igneous formations - with substantial Drift cover in the valleys. Hill grazing predominates; some improved grassland to the north.														
1981	1158	98	686	104	15.10	156.1	07/03	2.64	04/09	31.7	10.79	3.49			
1982	1381	117	851	129	18.74	218.3	03/01	3.18	15/08	41.2	11.16	3.49			
1983	1133	96	630	96	13.86	78.2d	16/10	2.81	29/08	30.1	10.69	3.14			
1984	1223	104	756	115	16.64	143.7d	03/11	1.97	27/08	39.4	9.36	2.39			
1985	1312	111	812	123	17.83	273.9	21/09	3.93	10/07	38.3	9.39	4.67			
021005	Tweed at Lynne Ford			C.A.: 373.0 km ²	61-80	1272	708	8.37	256.2	15/01	1.19	07/10	17.4	5.63	2.02
	M.A: TWRPB	Level: 167m	F.A.F: SP	B-full: 227.0 m ³ s ⁻¹											
	Comment: Natural section on straight gravel bedded reach. Cableway. Left bank overtopped during large floods. Slight seasonal weed growth effect on rating. Runoff diminished by abstractions from Fruid and Talla Reservoirs - compensation releases also influence flow regime. Monthly naturalised flows available. # Upland catchment developed mainly on Silurian shales - with alluvial gravels in valley bottoms. Land use is principally hill grazing.														
1981	1312	103	783	111	9.26	125.7	07/03	1.80	09/09	18.4	6.44	2.26			
1982	1580	124	971	137	11.49	137.4	03/01	1.94	15/08	25.0	7.33	2.16			
1983	1142	101	709	100	8.39	49.4d	05/01	1.59	29/08	17.5	6.49	1.89			
1984	1382	109	814	115	9.63	72.4d	03/11	1.15	27/08	21.7	5.83	1.39			
1985	1427	112	857	121	10.11	127.2	21/09	2.39	10/07	22.8	5.57	2.81			
021006	Tweed at Boisdie			C.A.: 1500.0 km ²	61-80	1189	718	34.13	1019.0	31/10	3.46	27/08	72.9	22.89	6.43
	M.A: TWRPB	Level: 95m	F.A.F: SP	B-full: 808.0 m ³ s ⁻¹											
	Comment: Velocity-area station with cableway on straight section with stable gravel bed. Seasonal weed growth effects rating. Reservoir storage modifies natural flow regime but overall impact is minor; monthly naturalised flows available. # Gauging site is central in Tweed basin and marks divide between hilly uplands and lowland areas. Geology comprises - mainly - impervious Silurian formations with significant Drift cover. Hill grazing with some forestry and a little arable land.														
1981	1206	101	759	106	36.10	467.2	01/10	5.41	10/09	73.3	25.30	6.92			
1982	1420	119	932	130	44.32	678.6	03/01	6.26	10/06	100.4	29.85	7.84			
1983	1142	96	660	92	31.37	263.4	05/01	6.24	29/08	68.4	23.39	7.53			
1984	1195	101	766	107	36.44	374.7	04/02	4.45	27/08	81.8	18.69	5.31			

	Period	Rainfall (mm)	Runoff (mm)	Mean flow (m ³ s ⁻¹)	Peak flow (m ³ s ⁻¹)	Date of peak	Min. daily flow (m ³ s ⁻¹)	Date of min.	10 Percentile (m ³ s ⁻¹)	50 Percentile (m ³ s ⁻¹)	95 Percentile (m ³ s ⁻¹)		
		% of pre-1981	% of pre-1981										
021019	Manor Water at Cademuir	C.A.: 61.6 km ²	68-80	1329	740	1.45	40.2	30/10	0.19	26/10	3.0	1.01	0.30
M.A: TWRPB	Level: 197m	F.A.F: P	B-full: 58.0 m ³ s ⁻¹										
Comment:	Velocity-area station with artificial control - flat concrete bar with stone pitched banks. Site situated at end of straight reach with bend just below bar. Runoff is slightly diminished by an upstream abstraction (Langhaugh intake); monthly naturalised flows available. # Steep catchment developed on Silurian shales. Land use is mostly hill grazing.												
1981	1493	112	866	117	1.69	32.5	07/03	0.30	13/09	3.3	1.27	0.36	
1982	1766	133	1041	141	2.01	28.50	03/01						
1983	1408	106	763	103	1.47	15.99	15/10	0.24	30/08				
1984	1515	114	913	123	1.76	24.95	12/01	0.16	27/08				
1985	1557	117	931	126	1.81	30.55	21/12	0.41	10/07	3.6	1.04	0.50	
021021	Tweed at Sprouston	C.A.: 3330.0 km ²	69-80	984	534	56.37	1235.0	31/10	6.55	07/09	126.3	36.37	9.66
M.A: TWRPB	Level: 25m	F.A.F: SP	B-full: 1600.0 m ³ s ⁻¹										
Comment:	Wide section on gentle bend in river. Natural channel controls. Cableway. Significant seasonal weed growth effects on rating. Reservoirs in the headwaters have a very minor impact on the flow regime; monthly naturalised flows available. # The geology is dominated by impervious Silurian formations (with some Drift). Hill grazing predominates with improved grassland and arable farming in the lower catchment.												
1981	1059	110	615	115	64.94	953.5	02/10	8.24	31/08	141.2	43.54	10.64	
1982	1208	125	743	139	78.42	1409.0	04/01	10.76	10/06	170.6	47.25	12.35	
1983	1013	105	577	108	60.94	320.3d	16/10	9.42	15/08	135.2	47.22	12.00	
1984	1047	109	625	117	66.04	639.6d	03/11	7.78	22/07	151.8	34.66	8.55	
1985	1198	124	742	139	78.16	920.4	21/09	14.75	11/07	164.2	44.78	18.46	
021022	Whiteadder Water at Hutton Castle	C.A.: 503.0 km ²	69-80	782	373	5.95	186.0	22/11	0.67	17/01	12.4	3.19	1.06
M.A: TWRPB	Level: 29m	F.A.F: SP	S-full: 175.0 m ³ s ⁻¹										
Comment:	Compound Crump weir with theoretical rating. Catchment contains Whiteadder and Watchwater Reservoirs which can have substantial effects. Monthly naturalised flows available. # Mixed geology, mostly impervious Palaeozoic formations with significant Drift cover. Hill grazing at high levels with arable farming below about 150m.												
1981	802	105	353	95	5.62	190.0	02/10	1.15	06/09	10.5	3.43	1.38	
1982	827	109	448	120	7.15	265.9	03/01	1.07	03/09	14.4	4.04	1.31	
1983	864	113	473	127	7.54	226.2	27/05	1.34	19/08	15.6	4.16	1.56	
1984	887	116	505	135	8.05	279.8	03/11	1.01	16/10	18.2	3.32	1.12	
1985	962	126	556	149	8.85	105.8	21/09	2.09	21/07	16.1	6.01	2.61	
021023	Leet Water at Coldstream	C.A.: 113.0 km ²	70-80	628	216	0.77	38.9	28/12	0.00	27/08	1.9	0.23	0.02
M.A: TWRPB	Level: 12m	F.A.F: N	S-full: 3.0 m ³ s ⁻¹										
Comment:	Velocity-area station with artificial control containing trapezoidal flume for low flow measurement. Backwater effects from bridge below station and River Tweed. Natural flow regime. # A relatively flat (for TWRPB) catchment developed on Boulder Clay overlying calciferous sandstone. Mainly arable farming.												
1981	652	104	229	106	0.82	33.8	30/12	0.03	05/09	1.9	0.34	0.03	
1982	677	108	277	128	0.99	36.1	04/01	0.02	03/09	2.3	0.30	0.04	
1983	663	106	263	122	0.94	11.8d	02/05	0.03	18/08	2.6	0.39	0.04	
1984	717	114	307	142	1.10	18.5d	26/03	0.01	26/07	3.6	0.26	0.02	
1985	783	125	353	163	1.26	13.0	07/12	0.07	21/07	3.2	0.58	0.11	
021024	Jed Water at Jedburgh	C.A.: 139.0 km ²	71-80	857	456	2.01	84.9	25/03	0.26	06/09	4.5	1.07	0.36
M.A: TWRPB	Level: 68m	F.A.F: N	B-full: 112.0 m ³ s ⁻¹										
Comment:	Velocity-area station on straight reach. A rock ledge is the control for very low flows; under higher flow conditions control passes to downstream channel bar. Flows are largely natural and uncontrolled. # An upland, mainly sandstone (ORS), catchment. Land use: Hill grazing with some forestry.												
1981	956	112	513	113	2.26	71.6	01/10	0.39	04/09	4.6	1.21	0.44	
1982	1058	123	631	138	2.78	68.3d	03/01	0.37	10/08	6.4	1.32	0.40	
1983	1000	117	581	127	2.56	21.9d	15/10	0.51	30/08	5.3	1.52	0.57	
1984	915	107	580	127	2.56	84.8d	03/11	0.33	07/09	6.2	1.12	0.39	
1985	1034	121	680	149	2.99	75.8	21/12	0.59	10/07	6.2	1.65	0.71	
021025	Ale Water at Ancrum	C.A.: 174.0 km ²	72-80	894	412	2.27	66.4	31/10	0.11	07/09	5.6	1.24	0.23
M.A: TWRPB	Level: 61m	F.A.F: SP	B-full: 52.0 m ³ s ⁻¹										
Comment:	Velocity-area station at natural river section. Low flow control by solid rock bar very close to gauge. Runoff is marginally diminished by a small reservoir in the headwaters. # An upland catchment - mostly Silurian shales. Hill pasture predominates.												
1981	955	107	495	120	2.73	50.5	02/10	0.30	09/09	5.6	1.71	0.34	
1982	1021	114	601	146	3.32	53.2d	03/01	0.25	03/09	8.2	1.84	0.30	
1983	866	97	429	104	2.36	17.9d	06/01	0.18	19/08	5.9	1.46	0.22	
1984	881	99	465	113	2.57	22.9d	13/01	0.16	26/07	6.7	0.85	0.17	
1985	1063	119	659	160	3.62	51.4	21/09	0.38	10/07	8.3	1.83	0.55	
021026	Tina Water at Deephope	C.A.: 31.0 km ²	73-80	1518	1260	1.24	100.0	30/10	0.04	20/06	3.2	0.62	0.07
M.A: TWRPB	Level: 232m	F.A.F: N	B-full: 80.0 m ³ s ⁻¹										
Comment:	Velocity-area station at natural river section. Control is gravel bed, unstable. Natural flow regime. # High rainfall, steep, upland catchment developed on Silurian shales. Now mainly forested.												
1981	1852	122	1352	107	1.33	41.0	23/11	0.06	04/09	3.2	0.59	0.10	
1982	2290	151	1608	128	1.58	15.5d	03/01	0.08	29/04	4.0	0.74	0.10	
1983	1775	117	1224	97	1.20	14.3d	05/01	0.04	14/08	3.0	0.59	0.05	
1984	1705	112	1174	93	1.15	16.5d	27/11	0.03	26/07	3.1	0.47	0.04	
1985	2059	136	1620	129	1.59	49.8	21/12	0.13	13/05	3.7	0.68	0.16	
021027	Blackadder Water at Mouth Bridge	C.A.: 159.0 km ²	73-80	751	334	1.69	65.7	24/02	0.14	07/09	3.5	0.94	0.26
M.A: TWRPB	Level: 57m	F.A.F: N	B-full: 21.0 m ³ s ⁻¹										
Comment:	Velocity-area station. Natural river section with rock control. # Natural catchment. Grazing on hills, arable on lower land. Mostly Old Red Sandstone and calciferous sandstone overlain by Boulder Clay.												
1981	735	98	298	89	1.50	33.0	02/10	0.28	05/09	2.8	0.96	0.32	
1982	778	104	386	116	1.94	48.9d	03/01	0.25	03/09	4.1	1.01	0.30	
1983	756	101	348	104	1.75	13.6d	28/05	0.31	19/08	3.9	1.08	0.38	
1984	794	106	410	123	2.07	43.1d	03/11	0.25	25/07	4.8	0.90	0.28	
1985	884	118	488	146	2.46	38.0	21/09	0.50	21/07	4.6	1.52	0.61	

Summary of Archived Data

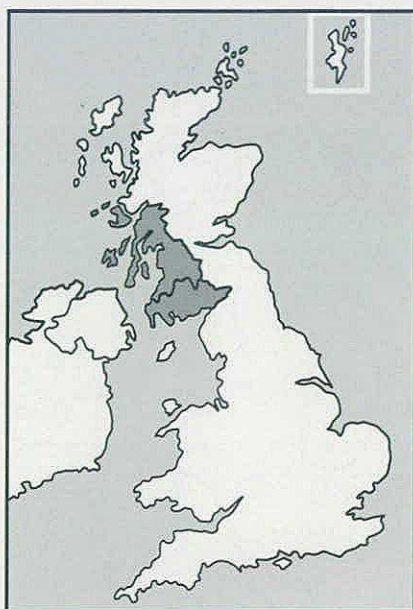
Gauged daily flows, monthly peaks and monthly rainfall

Stn. number	Gauged daily flows, monthly peaks and rainfall	Stn. number	Gauged daily flows, monthly peaks and rainfall	Stn. number	Gauged daily flows, monthly peaks and rainfall
017001	60s -----E 70s AAAAAAAAAAB	019011	60s -ccccccc 70s cccccaaaa	021012	60s -††EAAAAA 70s AAAAAAAAAA
017002	80s AAAAAA 60s -----E 70s AAAAAAAAAA	020001	60s -AAAAAAAA 70s AAAAAAAAAA	021013	60s -††EAAAAA 70s AAAAAAAAAA
017003	80s AAAAAA 60s AAAAAA 70s †EAAAAAA 80s AAAAAA	020002	60s AAAAAA 70s AAAAAAA 80s -††††EAAA 70s AAAAAAAAAA	021014	60s -EAAAAAA 70s AAAAAAAAAA 80s AABCCAA 70s AAAAAAAAAA
017004	80s AAAAAA 60s -----E 70s AAAAAA	020003	60s AAAAAA 70s AAAAAAA 80s AAAAAA 70s AAAAAAA 80s -††††AAAA 70s AAAAAAAAAA	021015	60s -††††EAAA 70s AAAAAAAAAA 80s AACCCAA 70s AAAAAAAAAA
017005	80s AAAAAA 60s -----EAA 70s AAAAAAAAAA	020004	60s AAAAAA 70s AAAAAAA 80s -†††††AAA 70s AAAAAAAAAA	021016	60s -†††††EAA 70s AAAAAAAAAA 80s AACCCAA 70s AAAAAAAAAA
018001	50s -----EAA 60s AAAAAAAAAA 70s AAAAAAAAAA 80s AAAAAA	020005	60s AAAAAE 70s CCCCCAAa 80s -†††††AAA 70s AAAAAAAAAA	021017	60s -††††EAAA 70s AAAAAAAAAA 80s AABCCAA 70s AAAAAAAAAA
018002	50s -----b 60s AAAAAAAAAA 70s ABAAAAAA 80s BbbAAAAA 80s AAAAAA	020006	60s -††††CCCC 70s CCCCCAAa 80s -††††CCCC 70s CCCCCAAa	021018	60s -††††††E 70s AAAAAAAAAA 80s AAAAAAA 70s AAAAAAAAAA
018003	50s -----ccc 60s cccbAAAAA 70s AAAAAA 80s AAAAAA 80s AAAAAA	020007	60s -cccAAD 70s AAAAAA 80s AAAAAA 70s ††††††E	021019	60s -††††††E 70s AAAAAAAAAA 80s AAAAAAA 70s AAAAAAAAAA
018005	70s †EAAAAAA 80s AAAAAA	021001	50s -----e 60s AAAAAEAAE† 70s ††††††††† 70s ††††††††† 60s aBCBAAAAE†	021020	60s -††††††EBA 70s AAAAAAAAAA 80s AABCCAA 70s -----E 70s AAAAAAAAAA
018008	70s -EAAAAAA 80s AAAAAA	021002	50s -----††††††††† 60s AAAAAABAA 70s ††††††††† 60s AAAAAABAA 80s ABCCAAa	021021	60s -††††††††† 70s ††EAAAAAA 80s AAAAAAA 70s ††††††††† 70s †EAAAAAA
018011	80s -EAAAAAA 80s AAAAAA	021003	70s AAAAAA 80s AAAAAA 80s AAAAAA 70s -----††††††††† 70s AAAAAAA	021022	60s -††††††††† 70s †††EAAAAA 80s AAAAAAA 70s ††††††††† 70s †††EAAAAA
018017	80s -bbbc 80s -bbbc	021004	60s -EAAAAAAB 80s AABCCAAa 70s -----††††††††† 70s AAAAAAA	021023	60s -††††††††† 70s †EAAAAAA 80s AAAAAAA 70s ††††††††† 70s ††EAAAAA
018018	80s -bbbc	021005	60s -EAAAAAAB 80s AABCCAAa 70s -----††††††††† 70s AAAAAAA	021024	60s -††††††††† 70s †EAAAAAA 80s AAAAAAA 70s ††††††††† 70s ††EAAAAA
019001	50s -----AAA 60s AAAAAAAAAA 70s AAAAAAAAAA 80s AAAAAA	021006	60s -EAAAAAAB 80s AABCCAAa 70s -----††††††††† 70s AAAAAAA	021025	60s -††††††††† 70s ††EAAAAA 80s AAAAAAA 70s ††††††††† 70s †††EAAAAA
019002	60s -†AAAAAA 70s AAACAAAAA 80s AAAAAA	021007	60s -EAAAAAAB 80s AABCCAAa 70s -----††††††††† 70s AAAAAAA	021026	60s -††††††††† 70s †††EAAAAA 80s AAAAAAA 70s ††††††††† 70s †††EAAAAA
019003	60s -eAAAAAA 70s AAAAAAA 80s D††	021008	60s -EAAAAAAB 80s AABCCAAa 70s -----††††††††† 70s AAAAAAA	021027	60s -††††††††† 70s †††EAAAAA 80s AAAAAAA 70s ††††††††† 70s †††EAAAAA
019004	60s AAAAAA 70s AAACAAAAA 80s AAAAAA	021009	60s -EAAAAAAB 80s AABCCAAa 70s -----††††††††† 70s AAAAAAA	021030	60s -††††††††† 70s BAAAAAA 80s AAAAAAA 70s ††††††††† 70s CCCCCAAAA
019005	60s -eAAAAAA 70s AAAAAAA 80s AAAAAA	021010	60s -EAAAAAAB 80s AABCCAAa 70s -----††††††††† 70s AAAAAAA	021034	60s -††††††††† 70s CCCCCAAAA 80s AAAAAAA 70s ††††††††† 70s CCCCCAAAA
019006	60s -††AAAAA 70s AAAAAAA 80s AAAAAA	021011	60s -EAAAAAAB 80s AABCCAAa 70s -----††††††††† 70s AAAAAAA		
019007	60s -†BAAAAA 70s AAAAAAA 80s AAAAAA				
019008	60s -††BAAAA 70s AAAAAAA 80s AAAAAA				
019010	60s -----A 70s AAAAAAA 80s AAAAAA				

Naturalised daily and monthly flows

Stn. number	Naturalised daily, and monthly flows	Stn. number	Naturalised daily, and monthly flows	Stn. number	Naturalised daily, and monthly flows
017001	60s -----F 70s EF---E	019010	60s -----E 70s EEEEEEE	021009	60s -FEFFFFFFE 70s EEEFEFFFFFFE
017002	60s -----F 70s EF---E	019011	70s -----E 70s EEEEEEE	021010	60s F-----E 70s EF-FF-EE-
017003	70s -----E	020001	60s -EEEEEEEE 70s EEEEEEE	021011	60s -----E 70s EEEFEFFFFFFE
017004	70s -----E	020002	60s -----EE 70s EEEEEEE	021014	60s -FEFFFFFFE 70s EEEFEFFFFFFE
017005	70s -----E	020003	60s -----E 70s EEEEEEE	021018	60s F-----E 70s EEEFEFFFFFFE
018001	70s -----E	020004	60s -----E 70s EEEEEEE	021019	60s F-----E 70s EEEFEFFFFFFE
018002	60s -----FEEEE 70s F---E	020005	60s -----E 70s EEEEEEE	021020	60s F-----E 70s EEEFEFFFFFFE
018003	60s -----FEEEE 70s EF---E	020006	60s -----E 70s EEEEEEE	021021	60s -----F 70s EEEFEFFFFFFE
018005	70s -----E	020007	60s -----E 70s EEEEEEE	021022	60s -----F 70s EEEFEFFFFFFE
018008	70s -----E	021001	50s -----F 60s EEEFEFFEF	021025	60s -FEFFFFFFE 80s F---E
019001	50s -----EEE 60s EEEFEFFFFFFE	021002	50s -----F 60s EEEFEFFEF	021030	60s -----E 80s EEEFEFFFFFFE
019002	60s EEEFEFFFFFFE 70s EEE-EEE	021003	50s -----F 60s EEEFEFFEF	021034	60s -----E 80s EEEFEFFFFFFE
019003	60s -FEFFFFFFE 70s EEE-EEE	021004	60s EEEFEFFEF 80s EF---E		
019004	60s EEEFEFFFFFFE 70s EEE-EEE	021005	60s -FEFFFFFFE 70s EEEFEFFFFFFE		
019005	60s -FEFFFFFFE 70s EEEFEFFFFFFE	021006	60s EF---E 70s EEEFEFFFFFFE		
019006	60s -FEFFFFFFE 70s EEEFEFFFFFFE	021007	60s -FEFFFFFFE 80s F---E		
019007	60s -FEFFFFFFE 70s EEEFEFFFFFFE				
019008	60s -FEFFFFFFE 70s EEEFEFFFFFFE				

SOLWAY RIVER PURIFICATION BOARD
and the
CLYDE RIVER PURIFICATION BOARD



SRPB

Area: 6,970 km²

Average Rainfall (1941-70): 1425 mm

Headquarters of the
Solway River Purification Board:

Rivers House
Irongray Road
Dumfries DG2 0JE

Telephone: Dumfries (0387) 720502

CRPB

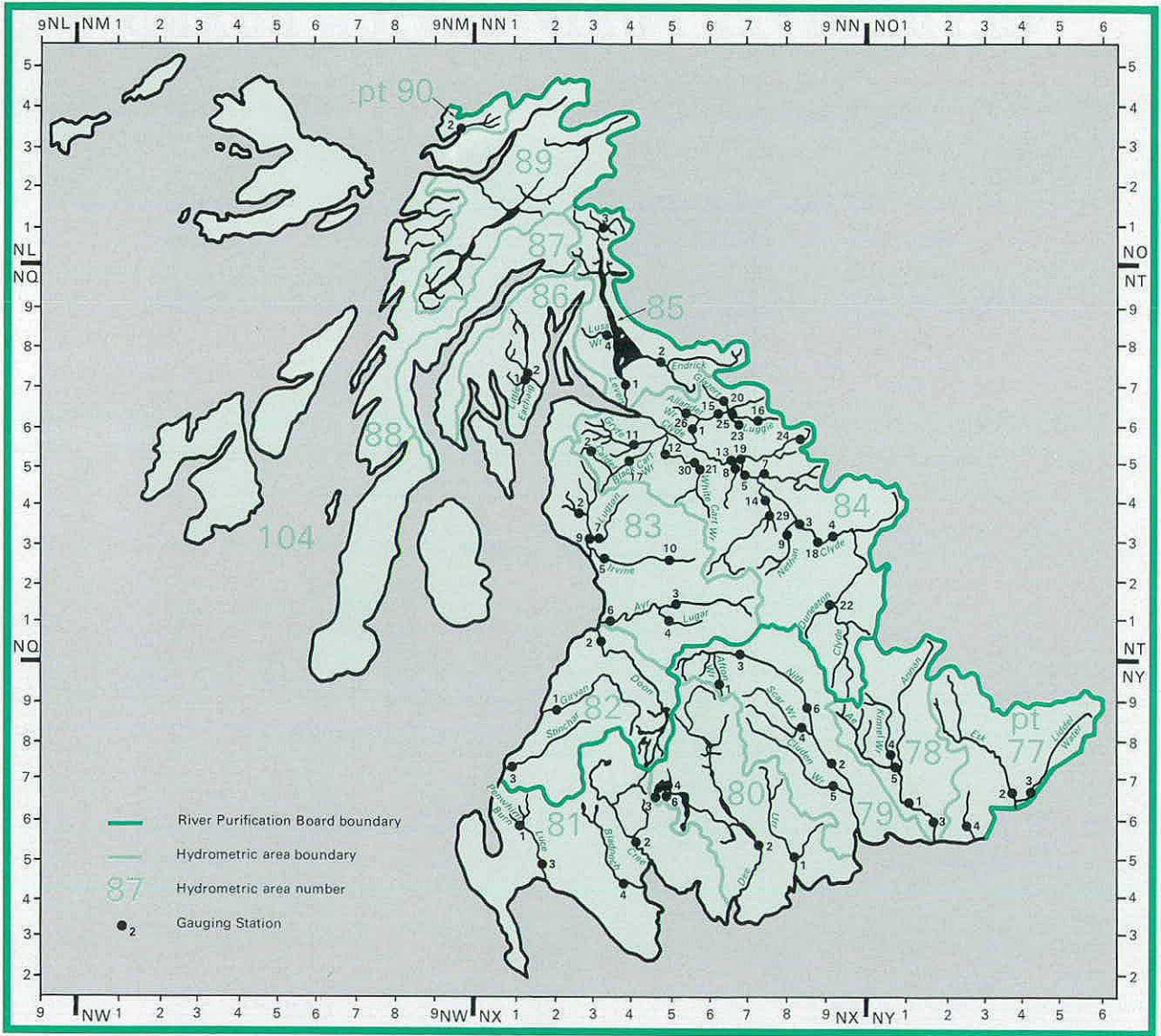
Area: 13,555 km²

Average Rainfall (1941-70): 1665 mm

Headquarters of the
Clyde River Purification Board:

Rivers House
Murray Road
East Kilbride
Glasgow G75 0LA

Telephone: East Kilbride (03552) 38181-6



Gauging Station Register

Station number	River name	Station name	Grid reference	Catchment area (sq km)	Station type	Period of record	Mean ann. rainfall (mm)	Mean ann. runoff (mm)	Max. ann. runoff (mm)	Year of max.	Min. ann. runoff (mm)	Year of min.	Mean flow (m ³ s ⁻¹)	Min. mon. flow (m ³ s ⁻¹)	Monthly/Year of min.	Mean ann. flood (m ³ s ⁻¹)	Base flow index	10 Percentile (m ³ s ⁻¹)	95 Percentile (m ³ s ⁻¹)
077002	Esk	Canonbie	NY 397751	495.0	VA	1962-85	1455	1043	1403	82	645	73	16.37	1.27	07/84	405.9	.38	38.1	2.05
077003	Liddell Water	Rowanburnfoot	NY 415759	319.0	VA	1973-85	1370	964	1200	82	743	76	9.75	0.87	08/76		.33	24.0	0.98
077004	Kirtie Water	Mossknowe	NY 285693	72.0	VA	1979-85	1252	820	927	80	653	84	1.87	0.08	08/84		.29	4.9	0.11
078001	Annan	Saint Mungo's	NY 125755	730.3	VA	1958-61	1403	922	1090	60	835	59	21.34	3.22	09/59		.41	55.6	2.61
078003	Annan	Brydekirk	NY 191704	925.0	VA	1967-85	1324	921	1208	82	559	73	27.02	1.94	07/84	320.5	.43	64.4	3.27
078004	Kinnel Water	Redhall	NY 077858	76.1	VA	1963-85	1435	1050	1443	82	625	73	2.53	0.05	07/84	72.2	.28	6.4	0.12
078005	Kinnel Water	Bridgemuir	NY 091845	229.0	VA	1979-85	1527	1079	1229	82	939	83	7.84	0.39	08/84	139.4	.35	19.1	0.57
079001	Afton Water	Afton Reservoir	NS 631050	8.5	TP	1965-81	2160	735	1109	77	293	73	0.20	>0.00	12/71		.10	0.6	0.01
079002	Nith	Friars Carse	NX 923851	799.0	VA	1957-85	1496	1014	1351	82	681	71	25.70	1.54	08/84	487.9	.38	62.8	2.64
079003	Nith	Hall Bridge	NS 684129	155.0	VA	1959-85	1609	1075	1459	82	673	71	5.29	0.27	08/76	80.8	.27	14.3	0.33
079004	Scar Water	Capenoch	NX 845940	142.0	VA	1963-85	1636	1162	1548	82	787	73	5.23	0.17	07/84	148.8	.31	12.8	0.29
079005	Cuden Water	Fiddlers Ford	NX 928795	238.0	VA	1963-85	1383	986	1387	82	614	73	7.44	0.25	08/84	128.3	.38	18.0	0.46
079006	Nith	Drumlanrig	NX 858994	471.0	VA	1967-85	1521	1049	1453	82	718	71	15.66	0.84	08/84	309.7	.34	40.4	1.31
080001	Urr	Balbeattie	NX 822610	199.0	VA	1963-85	1287	899	1325	82	493	73	5.67	0.14	07/84	97.3	.35	14.4	0.24
080002	Dee	Glenoch	NX 733641	809.0	VA	1977-85	1836	1584	1874	82	1368	78	40.84	2.05	08/84		.41	101.5	3.29
080003	White Laggan	Loch Dee	NX 468781	5.7	VA	1980-85	2296	2506	82	1887	84	0.42	0.01	05/84		.18	1.1	0.02	
080004	Blackwater	Loch Dee	NX 478797	15.6	VA	1982-85	2359	2470	85	2106	84	1.17	0.06	08/83		.45	2.7	0.07	
080006	Green Burn	Loch Dee	NX 481791	2.6	VA	1983-85	2050	2135	85	1904	84	0.17	>0.00	05/84		.18	0.5	>0.00	
081001	Penwhirn Brn	Penwhirn Res.	NX 128694	18.2	TP	1965-68	1558	891	995	67	962	66	0.51	0.10	07/66		.23	1.5	0.07
081002	Cree	Newton Stewart	NX 412653	368.0	VA	1963-85	1730	1295	1626	82	854	71	15.11	0.43	05/80	247.3	.27	37.5	0.96
081003	Luce	Airyhemming	NX 180599	171.0	VA	1967-85	1423	1073	1406	80	681	71	5.82	0.19	07/84	148.4	.23	15.6	0.28
081004	Bladnoch	Low Malzie	NX 382545	334.0	VA	1977-85	1375	965	1159	80	828	83	10.22	0.18	07/84		.33	26.3	0.36
082001	Girvan	Robstone	NX 217997	245.5	VA	1963-85	1349	804	1010	82	542	73	6.26	0.30	08/84	95.7	.33	15.3	0.52
082002	Doon	Auchendrane	NS 338160	323.8	VA	1974-85	1605	702	818	82	541	76	7.21	2.39	05/84		.59	14.4	2.76
082003	Stinchar	Balnawart	NX 108832	341.0	VA	1973-85	1584	977	1026	82	577	75	10.56	0.30	08/76		.30	26.2	0.41
083002	Garnock	Dalry	NS 293488	88.8	VA	1963-77	1656	980	1214	66	701	69	2.76	0.16	04/74	56.9	.21	7.3	0.15
083003	Ayr	Catrine	NS 525259	166.3	VA	1970-85	1278	921	1124	81	685	71	4.86	0.41	08/84	157.1	.29	12.6	0.50
083004	Lugar	Langholm	NS 508217	181.0	VA	1972-85	1266	922	1196	82	659	76	5.29	0.25	07/76	145.8	.24	14.2	0.24
083005	Irvine	Shewalton	NS 345369	380.7	VA	1972-85	1213	771	932	80	555	73	9.31	0.33	08/84	221.2	.27	23.4	0.54
083006	Ayr	Mainholm	NS 361216	574.0	VA	1976-85		871	1017	81	717	83	15.86	1.15	08/83	283.2	.30	42.0	1.36
083007	Lugton Water	Eglinton	NS 315420	54.6	VA	1977-85		942	1076	80	821	83	1.63	0.08	06/84	29.2	.25	4.5	0.08
083009	Garnock	Kilwinning	NS 307424	183.8	VA	1978-85	1090	1277	80	931	83	6.35	0.12	07/84	191.9	.23	17.0	0.16	
083010	Irvine	Newmilns	NS 532372	72.8	VA	1980-85	1089	1187	82	945	83	2.52	0.16	07/84		.43	6.8	0.18	
084001	Kelvin	Killermont	NS 558705	335.1	VA	1948-85	1220	772	1231	54	521	59	8.20	1.38	05/84	90.4	.44	18.8	1.62
084002	Calder	Muirshiel	NS 309638	12.4	TP	1952-76	2189	1640	2235	61	1101	69	0.64	0.05	04/74	18.1	.15	1.8	0.03
084003	Clyde	Hazelbank	NS 835452	1092.9	VA	1956-85	1168	737	1030	82	511	73	25.54	3.84	08/84	290.3	.50	57.3	5.31
084004	Clyde	Silts	NS 927424	741.8	VA	1957-85	1226	747	1004	85	454	73	17.58	2.28	08/84	214.6	.52	38.6	3.47
084005	Clyde	Blairston	NS 704579	1704.2	VA	1958-85	1138	747	1001	82	501	73	40.36	6.19	08/84	416.9	.45	93.9	8.07
084007	S Calder Wtr	Forgewood	NS 751585	93.0	CC	1966-85	942	639	857	79	417	73	1.88	0.66	08/75	23.2	.62	3.5	0.71
084008	Rotten Calder	Redlees	NS 679604	51.3	CC	1966-85	1155	872	1067	82	579	69	1.42	0.12	06/68	33.6	.32	3.7	0.16
084009	Nethan	Kirkmuirhill	NS 809429	66.0	CC	1966-83	1168	720	1000	82	522	69	1.51	0.14	08/76	41.6	.34	3.7	0.16
084011	Gryfe	Craigend	NS 415664	71.0	VA	1963-85	1753	1540	2050	82	1009	69	3.47	0.16	07/84	83.4	.30	9.1	0.25
084012	Wht Cart Wtr	Hawkhead	NS 499629	227.2	VA	1963-85	1235	944	1519	80	613	69	6.80	0.82	07/84	118.9	.36	17.6	0.97
084013	Clyde	Daldowie	NS 672616	1903.1	VA	1963-85	1117	729	946	82	512	73	43.99	8.58	08/84	439.2	.45	101.7	9.49
084014	Avon Water	Fairholm	NS 755518	265.5	VA	1964-85	1239	876	1189	82	588	69	7.37	0.28	07/84	194.6	.26	19.4	0.45
084015	Kelvin	Dryfield	NS 638739	235.4	VA	1960-85	1269	879	1116	78	537	72	6.56	0.80	10/72	55.5	.43	15.2	1.17
084016	Luggie Water	Condorrat	NS 739725	33.9	VA	1969-85	1052	774	1030	85	501	72	0.83	0.12	08/83	23.3	.40	1.8	0.13
084017	Blk Cart Wtr	Miliken Park	NS 411620	103.1	VA	1967-85	1687	1300	1832	82	796	72	4.25	0.25	06/78	42.9	.37	10.8	0.36
084018	Clyde	Tulliford Mill	NS 891404	932.6	VA	1969-85	1202	805	1093	82	504	73	23.82	2.50	08/76	264.5	.53	54.0	3.48
084019	N Calder Wtr	Calderpark	NS 681625	129.8	VA	1963-85	974	567	783	85	355	73	2.33	0.43	07/84	32.4	.49	4.9	0.54
084020	Glazert Water	Milton of C.	NS 656763	51.9	VA	1968-85	1565	1144	1388	85	824	72	1.88	0.09	07/84	58.2	.31	4.7	0.16
084021	Wht Cart Wtr	Netherlee	NS 587597	91.6	MIS	1969-74	1174	1495	2084	70	1900	71	4.34	0.18	08/74		.51	13.6	1.69
084022	Duneaton	Maidencots	NS 929259	110.3	VA	1966-85	1353	809	1038	82	578	73	2.83	0.22	07/84		.45	6.7	0.42
084023	Bothlin Burn	Auchengeich	NS 680717	35.7	C	1973-85	1011	689	783	85	542	75	0.78	0.12	07/84	10.1	.51	1.8	0.16
084024	N Calder Wtr	Hillend	NS 828676	19.9	FV	1972-85	1042	493	658	85	236	73	0.31	0.09	03/85		.68	0.7	0.11
084025	Luggie Water	Oxgang	NS 666734	87.7	VA	1975-85	1071	838	1037	85	592	75	2.33	0.21	07/84	33.3	.41	5.5	0.30
084026	Allander Wtr	Mlingavie	NS 558738	32.8	VA	1974-85	1277	823	85	884	75	1.33	0.07	07/84	31.5	.33	3.2	0.09	
084029	Cander Water	Candermill	NS 765471	24.5	VA	1975-85	720	990	77	494	76	0.56	0.03	08/84	25.1	.27	1.5	0.04	
084030	Wht Cart Wtr	Overlee	NS 587598	111.8	MIS	1981-85	1050	1151	82	996	84	3.72	0.30	07/84		.32	10.4	0.34	
085001	Leven	Linnbrane	NS 394803	7															

Hydrometric Statistics

	Period	Rainfall (mm)	Runoff (mm)	Mean flow (m ³ s ⁻¹)	Peak flow (m ³ s ⁻¹)	Date of peak	Min. daily flow (m ³ s ⁻¹)	Date of min.	10 Percentile (m ³ s ⁻¹)	50 Percentile (m ³ s ⁻¹)	95 Percentile (m ³ s ⁻¹)		
077002 M.A: SRPB Level: 22m F.A.F: SP C.A: 495.0 km ² B-full: 400.0 m ³ s ⁻¹	62-80	1421	1003	15.75	648.3	31/10 1977	1.03	19/06 1978	36.1	9.20	2.14		
Comment: Velocity-area station located on straight reach with natural channel control. Cableway. Steep bed, not high banks but all bar highest floods contained. Gravel bed. Black Esk reservoir impounds about 1% of flows for export. # Natural upland catchment area around Eskdalemuir.	1981	1532	108	1182	118	18.56	433.6	26/09	1.73	04/09	43.0	10.75	2.19
	1982	1819	128	1403	140	22.02	556.2	19/12	2.02	22/06	54.3	12.82	2.51
	1983	1428	100	1036	103	16.26	251.5	03/03	1.46	30/08	42.5	8.25	1.73
	1984	1335	94	1008	100	15.82	336.5	13/01	1.05	24/07	45.0	5.49	1.25
	1985	1779	125										
077003 M.A: SRPB Level: 27m F.A.F: F.A.F: C.A: 319.0 km ²	73-80	1334	909	9.19	334.3	30/10 1977	0.69	05/09 1976	22.9	4.87	0.98		
Comment: Velocity-area station on straight gravel bedded reach. Gravel shoal gives low flow control. Cableway. # Natural catchment.	1981	1374	103	1063	117	10.72	281.0	23/11	0.97	04/09	25.1	5.21	1.24
	1982	1631	122	1200	132	12.14	393.2	19/12	1.15	05/08	29.0	6.10	1.28
	1983	1297	97	958	105	9.69	173.4	24/12	0.93	14/08	24.2	5.99	1.06
	1984	1249	94	899	99	9.09	277.8	03/11	0.63	26/07	25.3	3.10	0.70
	1985	1604	120										
077004 M.A: SRPB Level: 21m F.A.F: F.A.F: C.A: 72.0 km ²	79-80			890	2.03	195.6	11/03 1979	0.15	13/05 1980	5.2	1.11	0.18	
Comment: Velocity-area station with cableway. Sited on straight reach above fall over rock bar acting as control. # Natural catchment.	1981	1214		825	93	1.88	66.1	23/11	0.12	04/09	4.7	0.79	0.19
	1982	1408		906	102	2.07	66.3	03/01	0.11	10/08	5.4	0.94	0.15
	1983	1132		670	75	1.53	36.5	03/03	0.07	13/08	4.1	0.70	0.10
	1984	1063		653	73	1.49	32.5	13/01	0.05	24/08	4.5	0.34	0.06
	1985	1416											
078003 M.A: SRPB Level: 10m F.A.F: F.A.F: C.A: 925.0 km ² B-full: 420.0 m ³ s ⁻¹	67-80	1275	877	25.72	499.1	31/10 1977	2.13	20/06 1978	58.9	16.07	3.34		
Comment: Velocity-area station with cableway located on straight section below bend and with slightly curving channel below. # Natural agricultural catchment.	1981	1432	112	993	113	29.05	315.2	27/09	3.29	04/09	68.3	17.86	4.08
	1982	1655	130	1208	138	35.43	405.4	04/01	3.58	11/08	89.5	19.69	4.08
	1983	1335	105	907	103	26.61	206.8	03/03	2.84	14/08	67.2	14.79	3.21
	1984	1327	104	923	105	27.06	325.0	28/11	1.35	23/07	78.4	10.65	1.68
	1985	1545	121	1182	135	34.57	471.9	21/09	5.25	22/05	76.5	18.89	5.99
078004 M.A: SRPB Level: 54m F.A.F: F.A.F: C.A: 76.1 km ² B-full: 170.0 m ³ s ⁻¹	63..80	1385	1007	2.43	110.9	30/10 1977	0.04	20/06 1978	6.1	1.14	0.13		
Comment: Velocity-area station. Informal low-flow control installed in 1966. Located on straight gravel bedded reach. # Natural catchment.	1981	1622	117	1095	109	2.64	56.2	19/09	0.10	02/09	6.3	1.19	0.15
	1982	1887	136	1443	143	3.48	103.6	19/12	0.06	21/06	8.8	1.32	0.17
	1983	1490	108	1074	107	2.59	66.3	04/10	0.05	15/08	6.9	1.12	0.09
	1984	1404	101	1041	103	2.51	79.3	13/01	0.03	21/08	7.1	0.91	0.04
	1985	1623	117	1312	130	3.16	91.4	21/09	0.23	22/05	7.4	1.42	0.33
078005 M.A: SRPB Level: 45m F.A.F: F.A.F: C.A: 229.0 km ²	79-80	1541	1120	8.13	115.4	27/12 1979	0.51	19/05 1980	18.8	4.64	0.73		
Comment: Velocity-area station on small channel at well confined section. Large bend upstream but straight at gauge. Natural channel control. Cableway. # Natural catchment. Drains Forest of Ae.	1981	1530	99	1040	93	7.55	114.8	19/09	0.57	04/09	18.7	3.84	0.89
	1982	1789	116	1229	110	8.92	149.4	04/01	0.65	10/06	22.2	4.13	0.77
	1983	1385	90	939	84	6.82	93.8	04/10	0.42	14/08	17.9	3.30	0.58
	1984	1359	88	960	86	6.97	126.2	27/11	0.30	25/08	18.9	2.87	0.37
	1985	1556	101										
079002 M.A: SRPB Level: 20m F.A.F: SP C.A: 799.0 km ² B-full: 590.0 m ³ s ⁻¹	57-80	1481	989	25.05	1274.0	16/01 1962	1.46	02/03 1963	60.0	14.17	2.76		
Comment: Velocity-area station with cableway. Straight approach with bends 150m below station which probably control higher flows. Shallow section with gravel bed. # Natural catchment.	1981	1568	106	1169	118	29.53	423.5	02/10	2.30	09/09	68.0	17.14	3.04
	1982	1876	127	1351	137	34.24	690.2	19/12	2.41	15/08	89.5	15.18	2.84
	1983	1426	96	914	92	23.17	393.9	15/10	1.80	15/08	61.3	12.09	1.98
	1984	1510	102	1106	112	26.01	509.1	13/01	1.15	27/08	75.2	11.68	1.41
	1985	1576	106	1155	117	29.18	510.8	21/09	4.04	21/06	71.8	15.49	4.97
079003 M.A: SRPB Level: 173m F.A.F: SP C.A: 155.0 km ²	59-80	1600	1041	5.12	212.4	15/01 1962	0.13	28/08 1976	13.8	2.29	0.34		
Comment: Velocity-area station. All flows contained by bridge opening below station which is likely high flow control. Low flows controlled by riffles near bridge. Straight and uniform approach. # Largely natural with controlled storage of Afon Reservoir having occasional significant effect.	1981	1661	104	1305	125	6.41	108.3	02/01	0.35	04/09	15.8	2.78	0.47
	1982	1919	120	1459	140	7.17	111.6	07/01	0.25	05/08	19.6	3.02	0.36
	1983	1469	92	1041	100	5.12	62.1	15/10	0.17	12/08	13.8	2.48	0.26
	1984	1626	102	1214	117	5.97	71.8	13/01	0.15	26/08	18.1	2.23	0.21
	1985	1542	96										
079004 M.A: SRPB Level: 49m F.A.F: F.A.F: C.A: 142.0 km ² B-full: 187.0 m ³ s ⁻¹	63-80	1586	1133	5.10	232.1	30/10 1977	0.08	26/08 1976	12.5	2.60	0.32		
Comment: Velocity-area station with cableway. Control of precast concrete sections installed during winter of 1986/7 replacing earlier 1981 gabion control. Fairly straight gravel bedded reach. Well confined. # Natural catchment.	1981	1751	110	1239	109	5.57	107.3	06/03	0.28	03/09	13.1	3.02	0.41
	1982	2178	137	1548	137	6.97	190.1	19/12	0.28	04/08	19.0	2.95	0.37
	1983	1583	100	1047	92	4.71	112.6	29/05	0.14	15/08	12.0	2.43	0.20
	1984	1752	110	1221	108	5.50	123.7	13/01	0.08	24/08	15.2	2.19	0.15
	1985	1790	113										
079005 M.A: SRPB Level: 23m F.A.F: SP C.A: 238.0 km ² B-full: 82.0 m ³ s ⁻¹	63-80	1333	966	7.29	278.0	01/11 1977	0.17	18/08 1977	17.7	4.01	0.49		
Comment: Velocity-area station under natural channel control. Straight reach with gravel bed. Cableway. # Natural catchment. Contains Glenkin Reservoir, 1-2% of flows abstracted.	1981	1555	117	1033	107	7.78	113.0	02/10	0.56	03/09	18.8	4.41	0.76
	1982	1942	146	1387	144	10.47	214.2	19/12	0.47	10/08	26.9	4.62	0.83
	1983	1334	100	849	88	6.41	87.3	15/10	0.27	29/08	16.0	3.33	0.32
	1984	1429	107	980	101	7.39	143.4	27/11	0.18	25/08	20.9	2.68	0.24
	1985	1567	118										
079006 M.A: SRPB Level: 52m F.A.F: SP C.A: 471.0 km ²	67-80	1476	992	14.81	449.2	30/10 1977	0.75	28/08 1976	37.5	7.60	1.34		
Comment: Velocity-area station on long straight reach at particularly well confined site. Cableway. Gravel and rock bed. Natural channel control. # Natural catchment. Afon Reservoir has small influence.	1981	1645	111	1285	130	19.14	366.0	01/10	1.14	23/04	45.0	10.89	1.47
	1982	1913	130	1453	146	21.70	538.4	17/10	1.23	05/08	58.6	9.64	1.52
	1983	1465	99	1001	101	14.95	311.3	15/10	0.94	31/08	39.0	7.45	1.08
	1984	1596	108	1147	116	17.13	413.3	13/01	0.61	26/08	48.1	7.48	0.74
	1985	1603	109	1154	116	17.19	333.1	21/09	2.15	21/06	41.5	8.58	2.90

				Period	Rainfall (mm)	Runoff (mm)	Mean flow (m ³ s ⁻¹)	Peak flow (m ³ s ⁻¹)	Date of peak	Min. daily flow (m ³ s ⁻¹)	Date of min.	10 Percentile (m ³ s ⁻¹)	50 Percentile (m ³ s ⁻¹)	95 Percentile (m ³ s ⁻¹)	
					% of pre-1981	% of pre-1981									
080001	Urr at Dalbeattie	C.A.: 199.0 km ²	63-80	1236	857	5.41	113.4	19/01	0.07	22/07	13.4	2.88	0.26		
M.A.: SRPB	Level: 4m	F.A.F.: B-full: 95.0 m ³ s ⁻¹													
Comment: Velocity-area station located between two sharp bends. Gravel and rock bar forms low flow control. Cableway. Occasional tidal peaks recorded. # Natural catchment.															
			1981	1442	117	982	115	6.20	87.3	02/10	0.21	03/09	15.3	3.39	0.31
			1982	1823	147	1325	155	8.36	164.3	19/12	0.18	16/08	21.7	3.56	0.43
			1983	1287	104	871	102	5.50	85.3	15/10	0.15	21/08	14.6	2.72	0.17
			1984	1341	108	965	113	6.09	129.7	27/11	0.09	23/08	19.3	1.88	0.12
			1985	1477	119	1064	126	6.82	114.1	21/09	0.51	17/06	15.2	3.76	0.66
080002	Dee at Glenlochiar	C.A.: 809.0 km ²	77-80	1793	1546	39.67	280.0	24/01	1.38	16/05	99.0	30.13	3.90		
M.A.: SRPB	Level: 43m	F.A.F.: B-full: 400.0 m ³ s ⁻¹													
Comment: Velocity-area station on a gentle bend about 500m downstream of Glen Lochiar Barrage. Flood banks contain all flows. Gravel bed with some large boulders. Natural channel control. Cableway. # Lowest gauge on highly regulated river.															
			1981	1851	103	1640	106	42.08	245.2	02/10	4.23	09/09	99.8	32.94	5.15
			1982	2214	123	1874	121	48.08	341.8	04/01	2.79	11/08	122.9	28.40	3.75
			1983	1661	93	1375	89	35.28	202.1	14/12	2.48	24/08	89.3	23.99	2.97
			1984	1722	96	1493	97	38.30	268.6	28/11	1.63	26/08	103.5	21.04	2.03
			1985	1839	103	1624	105	41.54	262.8	21/09	2.79	02/11	93.6	28.66	6.39
081002	Cree at Newton Stewart	C.A.: 368.0 km ²	63-80	1677	1264	14.75	312.7	26/09	0.14	02/09	36.3	7.72	1.04		
M.A.: SRPB	Level: 5m	F.A.F.: B-full: 330.0 m ³ s ⁻¹													
Comment: Velocity-area station on long reasonably straight gravel bedded reach. Cableway. Natural controls, gravel riffle 50m below site controls lower flows. # Natural catchment with a few small lochs, moorland and forest.															
			1981	2017	120	1479	117	17.26	264.3	02/10	0.77	03/09	42.2	9.35	1.96
			1982	2213	132	1626	129	18.98	318.0	01/10	0.42	31/07	49.2	8.83	1.06
			1983	1763	105	1202	95	14.02	173.1	12/10	0.35	16/08	35.6	7.90	0.67
			1984	1723	103	1273	101	14.86	175.4	13/01	0.34	27/07	39.8	7.28	0.51
			1985	1877	112	1449	115	16.86	283.6	21/09	1.18	07/06	42.8	8.61	1.82
081003	Luce at Airyhemming	C.A.: 171.0 km ²	67-80	1378	1033	5.60	197.6	03/04	0.11	08/07	14.8	2.26	0.29		
M.A.: SRPB	Level: 19m	F.A.F.: SP B-full: 64.0 m ³ s ⁻¹													
Comment: Velocity-area station on long straight and uniform reach with wooded banks. Natural channel controls. Cableway. # Natural catchment draining westerly end of Southern Uplands. Penwhin Reservoir abstractions constitute about 2% of flows.															
			1981	1652	120	1345	130	7.29	231.8	02/10	0.39	03/09	19.3	3.22	0.49
			1982	1692	123	1259	122	6.83	177.1	04/01	0.22	31/07	19.9	2.27	0.26
			1983	1394	101	928	90	5.03	118.8	12/10	0.16	30/08	14.8	2.47	0.24
			1984	1454	106	1103	107	5.98	116.0	12/11	0.09	26/07	17.8	1.96	0.14
			1985	1586	115	1284	124	6.94	188.9	21/09	0.38	16/06	16.9	3.03	0.56
081004	Biadnoch at Low Matzie	C.A.: 334.0 km ²	77-80	1344	961	10.18	130.8	27/09	0.09	20/06	25.8	6.09	0.38		
M.A.: SRPB	Level: 11m	F.A.F.: B-full: 70.0 m ³ s ⁻¹													
Comment: Velocity-area station on straight reach in a meandering section of river situated in pastures. Long cableway ensures flows over berms gauged. Weedy islands below gauge. Natural controls.															
			1981	1491	111	1082	113	11.46	144.4	02/10	0.42	04/09	29.1	6.83	0.68
			1982	1566	117	1069	111	11.32	117.0	02/10	0.12	31/07	30.5	5.25	0.29
			1983	1240	92	828	86	8.76	79.5	13/10	0.20	01/09	24.0	5.54	0.51
			1984	1258	94	849	88	8.99	82.8	13/01	0.05	27/07	28.3	3.50	0.16
			1985	1397	104	1009	105	10.65	118.0	21/09	0.77	07/06	23.0	5.90	1.10
082001	Girvan at Robstone	C.A.: 245.5 km ²	63-80	1330	779	6.06	101.6	09/10	0.16	31/07	14.7	3.10	0.56		
M.A.: CRPB	Level: 9m	F.A.F.: S													
Comment: Velocity-area station with gravel bar control - subject to regrading in substantial floods. Flood banks now contain all flows, previously inundation across the right bank. Runoff diminished by abstractions from Loch Bradan. Additional storage in a few high level lochs. # An upland catchment draining from Carrick Forest. Complex geology. Ordovician/Carboniferous metamorphics and igneous formations; Drift and peat also. Land use: mostly hill pasture with some mixed farming in the valley and afforestation in the headwaters.															
			1981	1515	114	900	116	7.01	147.2	02/10	0.77	09/09	16.1	3.32	0.92
			1982	1639	123	1010	130	7.86	183.0	19/12	0.14	29/07	20.7	2.94	-0.46
			1983	1266	95	782	100	6.09	85.6	14/12	0.24	31/07	15.3	3.31	0.49
			1984	1346	101	878	113	6.84	101.0	13/01	0.10	21/08	19.4	3.13	0.14
			1985	1358	102	898	115	6.97	157.6	21/09	0.37	22/06	15.1	3.59	0.73
082003	Stinchar at Balnowlart	C.A.: 341.0 km ²	73-80	1507	928	10.03	238.3	05/10	0.03	08/07	24.3	5.09	0.37		
M.A.: CRPB	Level: 3m	F.A.F.: B-full: 500.0 m ³ s ⁻¹													
Comment: Velocity-area station in long straight reach; riffle control. All but exceptional floods contained. Hydrometric performance has been modestly affected by a leaking stilling well. PWS abstractions cause a small reduction in runoff. Very limited storage within the catchment. # Upland catchment draining from Carrick Forest. Geology is dominated by metamorphosed sediments (Ordovician) with igneous outcrops in the headwaters - and peat; Drift also. Hill pasture is the principal land use with some afforestation in the headwaters.															
			1981	1830	121	1169	126	12.65	211.8	18/09	0.88	23/04	31.6	6.99	1.18
			1982	1980	131	1261	136	13.64	273.0	19/12	0.41	05/06	39.8	5.89	0.52
			1983	1487	99	924	100	9.99	179.4	12/10	0.31	15/08	25.5	5.85	0.45
			1984	1619	107	953	103	10.31	142.2	13/01	0.27	09/07	29.2	4.96	0.29
			1985	1662	110	968	104	10.44	202.2	08/09	0.61	08/06	23.0	5.91	0.92
083003	Ayr at Catrine	C.A.: 166.3 km ²	70-80	1238	887	4.68	143.4	10/09	0.21	26/05	12.1	2.04	0.50		
M.A.: CRPB	Level: 90m	F.A.F.: H B-full: 500.0 m ³ s ⁻¹													
Comment: Velocity-area station in a long straight reach with a large pipe forming an informal broad-crested control (somewhat insensitive). All flows contained. A responsive, natural catchment but the flow pattern is modestly affected by the operation of a small HEP scheme 1km upstream. # A catchment of rugged topography draining westwards from the Southern Uplands. Geology is complex with Carboniferous sediments and igneous outcrops predominating; Drift and peat also. Hill grazing is the main land use.															
			1981	1404	114	1124	127	5.93	178.5	02/01	0.66	29/08	15.2	2.50	0.79
			1982	1518	123	1111	125	5.86	121.8	17/10	0.51	03/08	14.5	2.77	0.62
			1983	1325	107	886	100	4.67	83.8	16/10	0.43	21/07	12.9	2.43	0.50
			1984	1266	102	861	97	4.54	117.9	13/01	0.32	26/07	12.6	1.89	0.36
			1985	1339	108	991	112	5.21	157.4	21/09	0.61	03/11	13.2	2.33	0.80
083004	Lugar at Langholm	C.A.: 181.0 km ²	72-80	1229	856	4.91	255.0	31/10	0.12	28/06	13.0	1.99	0.23		
M.A.: CRPB	Level: 81m	F.A.F.: B-full: 150.0 m ³ s ⁻¹													
Comment: Velocity-area station with rock/boulder control (may be subject to erosion/accretion) plus a thin-plate weir in the mill lade. Combined flows are archived. Very responsive, natural catchment (minor effluent discharge close to the station). # An upland catchment developed, mainly, on Carboniferous sediments (chiefly Coal Measures) and igneous formations; Drift also. Hill grazing is the major land use; some forestry.															
			1981	1422	116	998	117	5.73	261.7	02/01	0.07	03/09	14.9	1.76	0.14
			1982	1516	123	1196	140	6.87	217.9	19/12	0.16	23/07	18.3	2.67	0.30
			1983	1186	97	931	109	5.34	135.1	15/10	0.24	23/07	14.8	2.64	0.34
			1984	1261	103	1044	122	5.99	157.1	13/01	0.30	26/08	15.9	2.28	0.37
			1985	1277	104	1029	120	5.89	199.2	21/09	0.60	05/06	15.0	2.65	0.75
083005	Irvine at Shewalton	C.A.: 380.7 km ²	72-80	1164	768	9.25	341.2	18/01	0.37	08/07	22.8	4.06	0.81		
M.A.: CRPB	Level: 5m	F.A.F.: E B-full: 600.0 m ³ s ⁻¹													
Comment: Velocity-area station with rock bar/bridge debris control - channel control at high flows. All but rarest floods contained. A responsive, sensibly natural flow regime (but affected by effluent from STW). # Generally an upland catchment but topography more subdued below Greenholm. Geology: mostly Carboniferous sediments with basalt tracts towards headwaters; Drift also. Land use: mixed farming and hill grazing; some forestry in the upper catchment. Kilmarnock (12km u/s) is the only large urban area.															
			1981	1347	116	863	113	10.42	272.3	02/10	0.55	03/09	26.5	3.90	0.87
			1982	1443	124	847	111	10.23	226.1	19/12	0.35	30/07	27.5	4.39	0.54
			1983	1219	105	691	90	8.34	169.3	31/12	0.33	14/08	24.1	3.66	0.43
			1984	1165	100	691	90	8.34	187.2	13/01	0.19	22/08	23.8	2.76	0.27
			1985	1340	115	799	104	9.62	212.8	21/09	0.33	06/06</			

	Period	Rainfall (mm)	Runoff (mm)	Mean flow (m ³ s ⁻¹)	Peak flow (m ³ s ⁻¹)	Date of peak	Min. daily flow (m ³ s ⁻¹)	Date of min.	10 Percentile (m ³ s ⁻¹)	50 Percentile (m ³ s ⁻¹)	95 Percentile (m ³ s ⁻¹)			
		% of pre-1981	% of pre-1981											
083006 M.A: CRPB Level: 3m F.A.F: N C.A: 574.0 km ²	76-80		861	15.68	286.9	31/10 1977	1.18	31/07 1978	41.1	8.98	1.73			
Comment: Velocity-area station in a long straight section; channel control. Very steep banks; the great majority of flows are contained - overspilling occurs on the left bank. A responsive, natural catchment. # Largely an upland catchment with more subdued topography below Catrine. Complex geology: Carboniferous (chiefly Coal Measures) sediments predominate, some igneous formations; Drift and peat also. Hill grazing is the principal land use in the headwaters, some mixed farming at lower levels.	1981 1982 1983 1984 1985		1017 980 771 812 818	118 114 90 94 95	18.51 17.83 14.03 14.78 14.85	398.9 375.9 193.4 284.3 385.1	02/01 19/12 16/10 13/01 21/09	1.33 1.01 0.86 0.87 1.05	31/07 04/09 15/08 22/08 06/06	45.9 47.2 40.0 42.8 38.6	9.33 9.00 7.01 6.07 6.41	1.86 1.31 1.02 1.05 1.83		
083007 M.A: CRPB Level: m F.A.F: N C.A: 54.6 km ²	77-80		941	1.63	38.5	10/09 1978	0.05	17/07 1978	4.6	0.70	0.09			
Comment: Velocity-area station with a broad-crested masonry weir as control - insensitive at low flows; algae can accumulate on crest. Cableway (in a straight reach) used for rating. Wide floodplain. Very responsive flow pattern. # A linear catchment of subdued relief. Impervious - basalts predominate in the headwaters, Carboniferous sediments below; significant spreads of Drift.	1981 1982 1983 1984 1985		1016 976 821 869 1012	108 104 87 92 108	1.76 1.69 1.42 1.51 1.75	34.0 25.0 16.4 24.3 33.6	27/09 04/01 15/10 13/01 19/09	0.06 0.03 0.04 0.04 0.14	16/08 27/07 03/08 01/07 12/05	4.5 4.7 4.1 4.5 5.0	0.67 0.70 0.59 0.44 0.70	0.10 0.05 0.06 0.07 0.17		
083009 M.A: CRPB Level: m F.A.F: N C.A: 183.8 km ²	78-80		1095	6.38	315.3	10/09 1978	0.10	19/07 1978	16.9	2.70	0.18			
Comment: River section with long round - crested weir (with central rectangular notch) acting as the control. All flows contained. Exceptionally high tides may influence water levels. Very responsive catchment notwithstanding several reservoirs (including Muirhead) in the headwaters - small net diminution in runoff. # Rugged upland headwaters (peat overlying igneous formations), significant development in the lower valley (mostly Carboniferous sediments and Drift).	1981 1982 1983 1984 1985		1252 1139 931 936 1187	114 104 85 85 108	7.29 6.64 5.42 5.46 6.90	228.1 169.2 95.4 188.0 313.1	27/09 01/10 18/10 13/01 19/09	0.22 0.13 0.09 0.06 0.20	02/09 07/08 12/08 17/08 16/06	20.3 17.7 14.8 15.1 19.5	2.88 3.26 2.51 2.14 2.67	0.44 0.21 0.15 0.08 0.43		
083010 M.A: CRPB Level: m F.A.F: N C.A: 72.8 km ²	1980		1120	2.59	58.0	12/09 1980	0.17	27/05 1980	7.4	1.12	0.19			
Comment: Flat V weir within broad-crested flanks in a long straight reach, superseded - in Sept 1976 - an unstable gravel bar control. Stage data collected for this site dates back to 1959. Sensibly natural flow regime. # Upland catchment developed on basalts and metamorphosed sedimentary formations (mostly Carboniferous and ORS); Drift also. Moorland and rough pasture predominate, significant afforestation in the north and some mixed farming in the valley. Greenholm and Darvel are the largest settlements.	1981 1982 1983 1984 1985		1158 1187 945 946 1185	103 106 84 84 106	2.67 2.74 2.18 2.18 2.73	89.3 83.6 52.7 65.1 75.9	02/01 19/12 31/12 04/02 21/09	0.19 0.15 0.09 0.09 0.21	03/09 31/07 14/08 25/08 05/06	6.7 7.8 6.0 5.9 7.5	1.07 1.13 1.02 0.92 1.14	0.27 0.21 0.13 0.12 0.35		
084001 M.A: CRPB Level: 27m F.A.F: E B-full: 120.0 m ³ s ⁻¹ C.A: 335.1 km ²	48-80	1200	755	8.02	175.2	18/10 1954	0.74	17/07 1962	18.4	4.92	1.59			
Comment: Velocity-area station with channel control; vigorous seasonal weedgrowth. All flows contained within steep banks. Station moved 300m u/s (from Killermont) in 1962. Forth and Clyde canal drains through the catchment. Some monthly naturalised flows available. # The main channel runs along the northern edge of the Central Lowlands taking tributaries from the faulted igneous block to the north - remainder of catchment is chiefly Carboniferous sediments and Drift. Mixed land use: moorland to urban concentrations.	1981 1982 1983 1984 1985		1348 1406 1319 1273 1416	112 117 110 106 118	919 919 837 810 901	122 122 111 107 119	9.76 9.77 8.90 8.61 9.55	75.5 72.2 77.2 78.7 86.1	27/09 27/09 18/10 13/01 19/09	1.68 1.67 1.33 1.06 1.52	23/04 21/08 31/08 15/05 13/05	6.26 6.90 5.37 4.31 5.21	2.39 2.52 2.36 1.28 1.93	
084003 M.A: CRPB Level: 52m F.A.F: H B-full: 300.0 m ³ s ⁻¹ C.A: 1092.9 km ²	56-80	1154	708	24.55	530.3	31/10 1977	2.20	11/10 1959	54.8	15.52	5.34			
Comment: Velocity-area station in a straight section. Well calibrated. All flows contained. Very minor net impact of artificial influences (some naturalised data) but flow pattern is affected by operation of u/s HEP station (Stonebyres Falls). # Catchment drains from the Southern Uplands. Complex geology: Metamorphics/igneous/Drift. Hill grazing is principal land use; thinly populated but Lanark is 5km u/s.	1981 1982 1983 1984 1985		1166 1430 1143 1191 1250	101 124 99 103 108	852 1030 759 817 917	120 145 2631 2833 130	29.51 35.69 20.75 28.33 31.69	313.8 357.3 207.5 293.4 447.3	02/10 19/12 16/10 05/02 22/09	5.21 5.44 4.84 2.86 6.49	03/09 05/08 01/08 27/08 08/07	64.6 80.8 59.1 69.0 66.2	18.98 21.75 17.64 14.87 19.60	5.74 5.98 5.38 3.72 7.36
084004 M.A: CRPB Level: 183m F.A.F: N B-full: 410.0 m ³ s ⁻¹ C.A: 741.8 km ²	57-80	1212	718	16.89	410.4	14/08 1966	1.81	12/10 1959	36.1	11.00	3.52			
Comment: Transferred to Clyde RPB from SDD in July 1969. Sited on a 200m straight natural reach between two sharp opposing bends. Low flow control is a riffle 30m downstream. Section rated by current meter to 2.9m. Flows are straight at cableway but there is some turbulence. # Drains part of Southern uplands, with several small storage reservoirs in headwaters. Geology - Silurian and Ordovician sedimentary rocks. Land use - rough grazing with increasing afforestation.	1981 1982 1983 1984 1985		1219 1509 1200 1259 1310	101 125 99 104 108	831 988 728 871 1006	116 138 101 121 140	19.55 23.24 17.14 20.50 23.61	193.5 281.8 140.8 206.3 285.4	02/10 19/12 15/10 13/01 22/09	3.13 3.65 2.69 1.81 5.00	04/09 21/06 31/08 27/08 22/06	42.3 54.5 37.9 50.0 49.9	12.25 12.41 11.56 11.14 14.50	3.76 3.86 3.28 2.15 5.64
084005 M.A: CRPB Level: 18m F.A.F: N C.A: 1704.2 km ²	58-80	1118	718	38.82	662.4	31/10 1977	4.50	11/10 1959	88.5	22.88	8.12			
Comment: Recorder moved to present position in Nov 1974 from opposite bank. Section is natural with steep grass and tree covered banks. Velocity profile slightly uneven due to upstream bend. Control - piers of redundant rail bridge, 300m d/s Section rated by current meter to 3.44m, just below max. recorded stage. Some naturalised flows available. # Very mixed geology with the older formations (Ordovician/Silurian) to the south. Hill pasture and moorland predominates but some mixed farming and urban development is found in the lower valley.	1981 1982 1983 1984 1985		1169 1390 1138 1162 1252	105 124 102 104 112	855 1000 756 839 928	119 139 105 117 129	46.22 54.07 40.83 45.36 49.99	525.0 534.2 355.5 410.8 671.2	02/10 04/01 16/10 04/11 22/09	9.52 7.63 6.67 8.87 9.08	16/07 31/07 30/08 23/08 13/05	102.9 124.3 107.7 107.3 110.0	23.08 32.45 23.84 21.88 29.10	10.33 8.34 7.61 5.96 11.04
084007 M.A: CRPB Level: 44m F.A.F: E S-full: 130.0 m ³ s ⁻¹ C.A: 93.0 km ²	65-80	926	619	1.83	52.1	13/08 1966	0.29	30/11 1965	3.4	1.29	0.70			
Comment: Compound Crump weir (centre: 3.658m, flanks: 13.405m). Gradient sufficient to avoid drowning. All flows contained. Theoretical rating confirmed by gaugings. Flow pattern influenced by industrial abstractions and discharges - net import of water from the Clyde. # Relatively subdued topography developed on sedimentary formations of Carboniferous age (chiefly Coal Measures); extensive Drift. Land use: arable and pasture plus significant woodland and > 15% urban - the gauging station is located in Motherwell.	1981 1982 1983 1984 1985		994 1088 907 940 1029	107 117 98 110 111	783 730 624 678 671	126 118 101 100 108	2.31 2.15 1.84 2.00 1.97	21.2 28.8 20.2 38.6 23.5	02/10 03/01 06/01 03/11 27/07	0.96 0.69 0.71 0.57 0.61	17/12 26/07 23/07 17/07 10/08	4.2 4.3 3.5 4.0 3.6	1.65 1.43 1.35 1.30 1.40	1.15 0.82 0.78 0.66 0.89
084008 M.A: CRPB Level: 17m F.A.F: E S-full: 4.88m each C.A: 51.3 km ²	66-80	1096	827	1.35	51.5	08/10 1977	0.07	11/08 1968	3.4	0.60	0.15			
Comment: Compound Crump weir (central crest: 1.83m, flanks: 4.88m each). Theoretical rating confirmed by gaugings. River gradient obviates drowning. All flows contained. Runoff augmented by sewage and industrial effluent. # A mainly impervious catchment (Carboniferous deposits predominate; Drift cover). Moorland and hill pasture in the headwaters, some significant urban growth in the lower catchment (East Kilbride).	1981 1982 1983 1984 1985		1268 1444 1240 1266 1367	116 132 113 116 125	900 1066 952 1028 1054	109 129 115 124 127	1.46 1.73 1.55 1.67 1.71	23.0 37.5 39.4 60.8 37.9	10/03 19/12 06/01 13/01 21/09	0.18 0.13 0.14 0.11 0.19	29/08 31/07 13/08 25/08 16/06	3.9 4.6 4.4 4.4 4.3	0.64 0.85 0.73 0.57 0.74	0.21 0.15 0.16 0.14 0.24
084011 M.A: CRPB Level: 10m F.A.F: S C.A: 71.0 km ²	63-80	1698	1480	3.33	106.5	26/11 1979	0.09	01/07 1974	8.7	1.56	0.28			
Comment: Velocity-area station with a curving broad-crested weir control (on a gentle bend). Cableway on site. Left bank overlapped at about 1.1m. Catchment includes a number of small lochs and reservoirs. Runoff is augmented by compensation flows and spillages from a neighbouring catchment (10km ²). Some naturalised flows. # A wet responsive catchment draining from Duchal Moor. The geology is dominated by basaltic lavas of Carboniferous age - some Drift also.	1981 1982 1983 1984 1985		1968 2206 1903 1747 1929	116 130 112 103 114	1838 2050 1725 1525 1625	124 139 112 103 110	4.14 4.61 3.88 3.43 3.65	58.9 68.1 72.8 60.1 60.9	07/03 19/12 03/01 13/01 30/09	0.32 0.20 0.15 0.09 0.34	31/08 06/08 13/08 26/07 15/06	10.3 12.4 10.4 10.0 9.3	2.27 2.52 1.84 1.25 1.71	0.46 0.28 0.22 0.13 0.44

			Period	Rainfall (mm)	Runoff (mm)	Mean flow (m ³ s ⁻¹)	Peak flow (m ³ s ⁻¹)	Date of peak	Min. daily flow (m ³ s ⁻¹)	Date of min.	10 Percentile (m ³ s ⁻¹)	50 Percentile (m ³ s ⁻¹)	95 Percentile (m ³ s ⁻¹)
				% of pre-1981	% of pre-1981								
084012	White Cart Water at Hawkhead	C.A.: 227.2 km ²	63-80	1200	888	6.40	187.4	18/01	0.65	28/05	16.1	3.09	1.00
M.A.: CRPB	Level: 4m F.A.F.: S	B-full: 155.0 m ³ s ⁻¹						1974		1978			
Comment: Velocity-area station in a straight reach of uniform cross-section. Rock bar control but weed growth causes low flow rating variations. Complex water utilisation; some naturalised flows available. # Carboniferous rocks (basalts in the headwaters) predominate; Drift and terrace deposits also. Much of the catchment is open pasture (with several small lochs) but the northern part is heavily urbanised (Glasgow).													
			1981	1376 115	1149 129	8.28	119.7	02/10	0.85	29/08	21.9	3.92	0.98
			1982	1474 123	1278 144	9.21	125.7	19/12	0.87	30/07	24.6	5.49	0.98
			1983	1279 107	1023 115	7.37	125.7	31/12	0.80	13/08	20.6	3.41	0.95
			1984	1280 107	1053 119	7.59	161.1	13/01	0.65	26/08	21.5	2.71	0.76
			1985	1451 121	1181 133	8.49	128.3	21/09	0.94	05/06	21.4	4.02	1.04
084013	Clyde at Daldowie	C.A.: 1903.1 km ²	63-80	1091	703	42.41	738.8	31/10	6.54	01/06	96.4	25.54	9.74
M.A.: CRPB	Level: 8m F.A.F.: E	B-full: 370.0 m ³ s ⁻¹						1977		1980			
Comment: Velocity-area station; the lowest on the Clyde. Well calibrated. Some naturalised flows available. # Large catchment developed on a mixed geology - Ordovician (in the south) to Carboniferous with Drift cover below the headwaters. Hill pasture is the major land use; some mixed farming and urbanisation in the lower valley.													
			1981	1159 106	797 113	48.10	530.3	02/10	7.62	03/09	112.4	23.50	9.13
			1982	1350 124	946 135	57.08	559.0	04/01	7.47	10/06	135.3	32.66	9.49
			1983	1110 102	726 103	43.82	371.1	16/10	8.41	13/07	109.6	25.11	10.00
			1984	1165 107	786 112	47.54	485.7	13/01	6.09	19/08	115.6	21.73	7.92
			1985	1234 113	848 121	51.03	765.4	22/09	6.74	13/05	116.2	27.77	9.74
084014	Avon Water at Fairholm	C.A.: 265.5 km ²	64-80	1200	832	7.01	397.3	13/08	0.16	20/08	18.0	2.93	0.45
M.A.: CRPB	Level: 54m F.A.F.:	B-full: 650.0 m ³ s ⁻¹						1988		1976			
Comment: Velocity-area station in a very straight uniform reach. Rock platform below a bridge forms the control. All flows contained. Some naturalised flows. Two small reservoirs in the catchment but flow pattern remains responsive. # An impervious catchment - mostly ORS and Carboniferous formations. Hill grazing is the main land use.													
			1981	1368 114	1072 129	9.03	229.6	02/01	0.52	03/09	23.1	3.64	0.68
			1982	1490 124	1189 143	10.01	237.0	19/12	0.47	31/07	24.9	5.11	0.61
			1983	1299 108	951 114	8.00	178.5	31/12	0.46	14/08	22.7	3.76	0.59
			1984	1262 105	878 106	7.39	215.5	13/01	0.16	17/08	20.2	2.05	0.20
			1985	1410 118	1018 122	8.54	258.9	21/09	0.47	05/06	22.7	3.29	0.76
084015	Kelvin at Dryfield	C.A.: 235.4 km ²	60-80	1225	836	6.24	78.0	22/01	0.56	18/09	14.4	3.68	1.09
M.A.: CRPB	Level: 31m F.A.F.: E	B-full: 76.0 m ³ s ⁻¹						1975		1972			
Comment: Recorder sited in straight even reach where erosion has made banks very steep. The river was canalised during last war and floodbanks made on both banks from dredged material. The section is affected by weed growth and requires constant attention. Rated by current meter measurements up to 2.97m. Cableway installed in 1960 so no high measurements prior to this date. # Catchment in the low lying central valley of Scotland. Geology - Millstone Grit and coal bearing rocks of Carboniferous age.													
			1981	1401 114	1088 130	8.12	65.7	27/03	1.48	23/04	20.2	4.82	1.92
			1982	1484 121	1048 125	7.82	59.4	27/09	1.30	29/04	16.9	5.42	1.72
			1983	1386 113	927 111	6.92	64.2	18/10	1.68	01/05	16.0	4.02	2.00
			1984	1346 110	938 112	7.00	65.7	13/01	0.88	12/05	17.3	3.51	1.07
			1985	1492 122	1059 127	7.89	84.9	19/09	1.11	02/06	19.1	4.17	1.42
084016	Luggie Water at Condorrat	C.A.: 33.9 km ²	69-80	1004	715	0.77	37.4	09/12	0.07	31/08	1.7	0.45	0.13
M.A.: CRPB	Level: 68m F.A.F.:	B-full: 32.0 m ³ s ⁻¹						1979		1978			
Comment: Compound broad-crested weir - central low flow notch. Calibrated by current meter. No controlled storages but significant local depressions and boggy areas. # Geology: mostly Coal Measures with intrusive basalts and substantial Drift. Much of the catchment is agricultural in character but urban development in the north has been rapid (Cumbernauld).													
			1981	1189 119	953 133	1.02	42.4	02/10	0.11	30/08	2.3	0.46	0.13
			1982	1216 121	881 123	0.95	27.4	03/01	0.11	26/07	2.1	0.52	0.14
			1983	1078 107	758 106	0.81	24.1	05/01	0.09	28/08	2.0	0.43	0.12
			1984	1119 111	956 134	1.03	38.9	02/01	0.08	25/08	2.2	0.39	0.11
			1985	1224 122	1033 144	1.11	42.3	19/09	0.14	01/07	2.3	0.49	0.18
084017	Black Cart Water at Milliken Park	C.A.: 103.1 km ²	67-80	1608	1215	3.97	79.1	18/01	0.14	20/07	10.0	2.45	0.37
M.A.: CRPB	Level: 25m F.A.F.: S	B-full: 47.0 m ³ s ⁻¹						1974		1978			
Comment: Velocity-area station with informal (dished) concrete control, length: 26.52m. Very stable rating. Overtopping of the right bank can occur when stage exceeds 1m. Several lochs and reservoirs (e.g. Rowbanks) provide storage - the effect of regulation is evident in the hydrograph trace. Monthly naturalised flows available. # A wet, principally impervious catchment - Carboniferous, and earlier, series overlain by Drift. Rural.													
			1981	1960 122	1618 133	5.29	46.5	27/09	0.39	09/08	14.0	3.23	0.48
			1982	2042 127	1632 134	5.33	49.9	01/10	0.28	14/08	13.0	3.26	0.44
			1983	1802 112	1418 117	4.44	52.6	18/10	0.26	16/08	12.3	2.67	0.40
			1984	1708 106	1324 109	4.33	43.0	13/01	0.08	27/08	12.6	1.76	0.15
			1985	1974 123	1628 134	5.31	59.9	23/09	0.42	22/10	12.7	2.74	0.65
084018	Clyde at Tullford Mill	C.A.: 932.6 km ²	69-80	1167	748	22.12	558.6	31/10	1.52	05/09	49.4	14.71	3.52
M.A.: CRPB	Level: 174m F.A.F.: P							1977		1976			
Comment: Velocity-area station with a natural control. Banks overtopped at flows in excess of the mean annual flood. Catchment includes a number of PWS gathering grounds from which the yield is exported. Monthly naturalised flows available. # Mixed geology - ancient sedimentaries (ORS/Ordovician) dominate the headwaters; mostly igneous formations below. Substantial Drift cover. The catchment ranges in height from 180-800m. About one third is cultivated, the remainder is hill grazing and moorland.													
			1981	1222 105	927 124	27.43	280.2	02/10	4.99	10/09	57.6	17.91	5.99
			1982	1480 127	1093 146	32.33	350.8	19/12	3.03	05/08	78.4	18.71	3.99
			1983	1171 100	776 104	22.95	194.0	16/10	1.49	12/08	52.0	15.30	3.11
			1984	1248 107	894 120	26.44	299.5	05/02	1.48	27/08	65.8	12.80	2.13
			1985	1296 111	1028 137	30.31	530.1	22/09	5.99	07/07	62.6	18.19	7.12
084019	North Calder Wtr at Calderpark	C.A.: 129.8 km ²	63-80	947	541	2.23	71.0d	05/05	0.17	11/08	4.6	1.44	0.55
M.A.: CRPB	Level: 13m F.A.F.: RP	B-full: 21.0 m ³ s ⁻¹						1968		1968			
Comment: Recorder sited on U shaped bend so velocity profile is not symmetrical. Outer bank is a steep cliff being undercut by river. The inner bank is quite steep. Rated by current meter to 1.12m. Monkland Canal drains through catchment. # Lies in Scottish central lowlands east of Glasgow. Contains several small storage lochs. Geology - Sedimentary rocks of Carboniferous age.													
			1981	1086 115	671 124	2.76	70.8	02/10	0.44	23/08	6.3	1.35	0.49
			1982	1119 118	677 125	2.79	59.7	04/01	0.48	27/07	6.1	1.59	0.57
			1983	973 103	538 99	2.21	34.8	06/01	0.50	10/07	5.2	1.30	0.57
			1984	1036 109	629 116	2.59	53.5	03/11	0.29	26/07	6.0	1.33	0.40
			1985	1116 118	785 145	3.22	53.9	21/09	0.65	10/07	6.7	2.13	0.75
084020	Glazert Water at Milton of Campsie	C.A.: 51.9 km ²	68-80	1505	1070	1.78	76.0	30/09	0.11	11/09	4.2	0.91	0.17
M.A.: CRPB	Level: 39m F.A.F.: E							1977		1976			
Comment: Velocity-area station; broad-crested weir with rectangular low flow notch acts as the control (gaugings confirm the theoretical rating). No significant lochs or storages. Some (1970s) naturalised flows available. # An upland catchment draining the Campsie Fells. Geology: Carboniferous series (principally the Scottish Carb. Limestone) predominate - overlain by Drift. Very thinly populated. A small area is given over to forestry.													
			1981	1676 111	1293 121	2.13	57.8	18/09	0.18	27/08	5.5	0.97	0.21
			1982	1835 122	1378 129	2.27	50.7	27/09	0.11	04/08	5.9	1.34	0.15
			1983	1754 117	1306 122	2.15	57.5	18/10	0.09	28/08	5.4	1.04	0.11
			1984	1608 107	1242 116	2.04	63.7	13/01	0.06	24/08	5.8	0.94	0.07
			1985	1735 115	1392 130	2.28	67.7	19/09	0.18	16/06	6.1	0.97	0.24
084022	Duneston at Maidencots	C.A.: 110.3 km ²	66-80	1327	765	2.68	114.3	31/10	0.15	21/06	6.1	1.77	0.45
M.A.: CRPB	Level: 228m F.A.F.:							1977		1970			
Comment: Velocity-area station with a ragged rock bar control - considered to be stable and sensitive. Bypassing is unlikely. No significant storages or (currently) abstractions. Some early flow data available from 1965. # An upland catchment developed mainly on Drift overlying ORS (and older) formations. Some forestry.													
			1981	1410 106	949 124	3.32	54.6	07/03	0.37	09/09	7.5	1.81	0.48
			1982	1673 126	1038 136	3.63	83.7	19/12	0.32	10/08	8.7	2.11	0.40
			1983	1314 99	737 96	2.58	51.2	15/10	0.31	01/09	6.1	1.65	0.45
			1984	1352 102	909 119	3.18	96.4	13/01	0.13	26/07	8.2	1.75	0.17
			1985	1407 106	943 123	3.29	81.7	21/09	0.67	10/07	6.6	2.06	0.82
084023	Bothlin Burn at Auchengeich	C.A.: 35.7 km ²	73-80	988	670	0.76	12.6	23/07	0.15	28/06	1.7	0.49	0.21
M.A.: CRPB	Level: 57m F.A.F.: E							1975		1975			

	Period	Rainfall (mm)	Runoff (mm)	Mean flow (m ³ s ⁻¹)	Peak flow (m ³ s ⁻¹)	Date of peak	Min. daily flow (m ³ s ⁻¹)	Date of min.	10 Percentile (m ³ s ⁻¹)	50 Percentile (m ³ s ⁻¹)	95 Percentile (m ³ s ⁻¹)		
084026	Allander Water at Milngavie	C.A: 32.8 km ²	74..80	1177	1.22	45.5	11/09	0.01	14/07	3.0	0.60	0.08	
M.A: CRPB	Level: 33m	F.A.F: S											
Comment:	Velocity-area station with Flat V low flow control (installed 1973). The catchment contains a number of natural and artificial storages but the flow regime remains responsive. # Hilly catchment developed mostly on Carboniferous formations (basaltic lavas and Scottish Carb. Limestone predominate); some Drift. Upland grazing is the main land use; some afforestation and also urban development (Milngavie) near the outfall.												
	1981	1465	124	1.52	35.0	19/09	0.16	04/07	3.6	0.75	0.23		
	1982	1374	117	1.43	29.3	19/12	0.10	10/08	3.6	0.83	0.13		
	1983	1320	112	1.37	44.7	18/10	0.07	01/08	3.4	0.71	0.09		
	1984	1222	104	1.27	42.0	13/01	0.03	24/07	3.2	0.45	0.06		
	1985	1628	138	1.69	53.8	19/09	0.17	16/06	3.8	0.73	0.22		
084029	Cander Water at Candermill	C.A: 24.5 km ²	75.80	694	0.54	60.9	31/10	0.02	25/08	1.4	0.21	0.04	
M.A: CRPB	Level: m	F.A.F: S											
Comment:	A non-standard Flat-V/broad-crested weir with no wing walls; current meter calibration. Flood flows spill onto the banks. High flow rating under review following road works involving the right bank. Responsive flow regime. # A small rural catchment developed on the productive Coal Measures (overlain by Drift).												
	1981	702	101	0.55	12.9	02/01	0.02	31/08	1.4	0.20	0.04		
	1982	880	127	0.68	29.2	23/11	0.02	14/07	1.8	0.25	0.05		
	1983	672	97	0.52	11.7	16/10	0.01	13/08	1.6	0.24	0.03		
	1984	703	101	0.55	29.4	13/01	0.02	27/08	1.6	0.13	0.03		
	1985	754	109	0.58	31.3	21/09	0.05	04/07	1.4	0.21	0.07		
085001	Leven at Linnbrane	C.A: 784.3 km ²	63-80	2005	1600	39.80	150.5	31/01	5.18	02/06	72.7	36.87	9.04
M.A: CRPB	Level: 4m	F.A.F: S	B-full: 30.0 m ³ s ⁻¹										
Comment:	Velocity-area station with channel control at the outflow from Loch Lomond. Prior to 1971 - when the control weir at the outfall from the loch was built - the flow regime was natural; it is now highly regulated. Some naturalised flows available. # A large, wet, upland catchment. The geology is dominated by ancient metamorphic formations - overlain by Drift in the west of the catchment.												
	1981	2061	103	1816	114	45.17	137.0	03/01	7.50	13/05	87.0	43.92	10.71
	1982	2319	116	1778	111	44.22	106.7	23/11	7.85	15/08	81.7	47.79	8.80
	1983	2142	107	1725	108	42.91	138.5	19/10	5.16	01/09	93.4	38.03	6.00
	1984	2009	100	1623	101	40.36	125.0	08/12	2.64	29/08	96.9	17.75	3.97
	1985	2094	104	1896	119	47.02	128.0	07/10	6.20	22/04	97.1	47.47	7.03
085002	Endrick Water at Gaidrew	C.A: 219.9 km ²	63-80	1392	957	6.67	134.7	30/01	0.15	19/04	17.0	3.11	0.68
M.A: CRPB	Level: 9m	F.A.F: P	B-full: 130.0 m ³ s ⁻¹										
Comment:	Velocity-area station with channel control. Low and medium flows considered reliable but flood discharges are of a lesser accuracy (due to overspill on to the left bank floodplain and a curved approach to the measuring reach). Runoff is diminished by the export of water from the Carron Res. into the Forth system. Some naturalised flows available. # An upland catchment, draining from the Campsie Fells, developed on ORS overlain with Drift; large tracts of sands and gravels also.												
	1981	1523	109	1030	108	7.18	127.3	27/09	0.32	02/09	20.8	2.98	0.44
	1982	1684	121	1263	132	8.80	116.7	19/12	0.31	01/08	23.8	4.50	0.35
	1983	1565	112	1046	109	7.30	108.5	03/01	0.31	13/08	19.0	3.28	0.39
	1984	1482	106	1079	113	7.52	111.4	13/01	0.24	25/08	21.6	1.93	0.28
	1985	1623	117										
085003	Falloch at Glen Falloch	C.A: 80.3 km ²	70..80	2809	2052	5.23	226.7	22/10	0.03	12/07	14.4	1.95	0.21
M.A: CRPB	Level: 10m	F.A.F: S											
Comment:	Velocity-area station with artificial low flow control (long broad-crested weir with rectangular low flow notch) - installed 1975. Damage to part of the high flow crest results in a small discharge bypassing the central notch. All but very high flows contained. No significant abstractions or discharges. Very responsive flow regime. # A very wet mountainous catchment developed on ancient metamorphic formations - some Drift cover.												
	1981	2837	101	2202	107	5.59	160.3	20/11	0.16	23/04	16.2	1.96	0.27
	1982	3258	116	2542	124	6.47	165.0	19/12	0.05	04/08	17.9	2.75	0.17
	1983	3232	115	2383	116	6.07	187.4	31/12	0.05	14/08	17.3	2.48	0.12
	1984	2820	100	1938	94	4.93	156.9	13/01	0.07	26/08	12.1	2.05	0.14
	1985	2714	97	2052	100	5.21	184.7	27/08	0.23	13/05	14.3	1.70	0.32
086001	Little Eacheig at Dalninggart	C.A: 30.8 km ²	68-80	2140	1574	1.54	91.2	03/11	0.01	14/07	4.1	0.71	0.08
M.A: CRPB	Level: 10m	F.A.F: I	B-full: 170.0 m ³ s ⁻¹										
Comment:	Velocity-area station with compound artificial control (low flow notch, broad-crested flanks); Cableway on site. Flood flows contained. Natural flow regime but catchwaters divert a small runoff volume to Loch Tarsan. Very responsive flow pattern # A compact, steep, mountainous catchment - very wet - developed on ancient metamorphic formations; some Drift.												
	1981	2527	118	1908	121	1.86	48.8	17/09	0.10	02/09	4.9	0.77	0.13
	1982	2776	130	2030	129	1.98	33.1	19/12	0.03	07/08	5.5	0.93	0.08
	1983	2529	118	1808	115	1.77	43.7	03/01	0.03	14/08	5.2	0.78	0.05
	1984	2299	107	1603	102	1.57	37.6	29/10	0.02	26/07	4.3	0.70	0.04
	1985	2438	114	2011	128	1.96	49.9	30/11	0.05	16/06	5.3	0.84	0.12
086002	Eacheig at Eckford	C.A: 139.9 km ²	68..80	2220	2080	9.23	95.4	11/09	0.24	29/06	21.8	5.97	0.74
M.A: CRPB	Level: 6m	F.A.F: S	B-full: 100.0 m ³ s ⁻¹										
Comment:	Velocity-area station with riffle control. The rating is stable and well defined. All but major floods are contained within the channel. The catchment contains Loch Eck, a major PWS reservoir. Some naturalised flows available. # A very wet, steep-sided, mountainous catchment developed on ancient metamorphic formations - some overlying Drift.												
	1981	2678	121	2409	116	10.69	80.0	02/01	0.55	27/04	26.6	6.18	0.80
	1982	2943	133	2465	119	10.93	74.6	24/09	0.44	07/08	26.2	7.25	0.66
	1983	2702	122	2406	116	10.67	85.7	18/10	0.34	27/07	26.9	6.77	0.52
	1984	2452	110	2159	104	9.58	81.2	13/01	0.35	31/05	26.2	5.49	0.44
	1985	2490	112	2442	117	10.81	74.6	06/10	0.58	14/01	28.4	6.13	1.01

Summary of Archived Data

Gauged daily flows, monthly peaks and monthly rainfall

Stn. number	Gauged daily flows, monthly peaks and rainfall	Stn. number	Gauged daily flows, monthly peaks and rainfall	Stn. number	Gauged daily flows, monthly peaks and rainfall	
077002	60s -fCGBAAAA 80s AAAAAAD	070s AAAAAAAAAA	082001	60s -tEAAAAAA 80s AAAAAA	084014	60s -eAAAAA 80s AAAAAA
077003	70s -DAAAAAA	80s AAAAAAD	082002	70s -tEAAAAA 80s AAAAAA	084015	60s e+t+t+tEAAAA 80s AAAAAA
077004	70s -----o	80s aAAAAAD	082003	70s -AAEEEA	084016	60s -t+t+t+t+tA 80s AAAAAA
078001	50s -----eA 70s t+t+t+t	60s AE+t+t	083002	60s -eAAAAa 80s t+t+t+t+t	084017	60s -----EAA 80s AAAAAA
078003	60s -t+t+t+tDAA 80s AAAAAA	70s AAAAAAAAAA	083003	60s AAAAAA 80s AAAAAA	084018	60s -----A 80s AAAAAA
078004	60s -tEBEAAAA 80s AAAAAA	70s AAAAAAAAAA	083004	70s -tEAAAAAA 80s AAAAAA	084019	60s -AAAAAA 80s AAAAAA
078005	70s -----A	80s AAAAAAD	083005	70s -EAAAAAA 80s aaaaaa	084020	60s -----eE 80s AAAAAA
079001	60s -t+t+tEBBEF 80s cf	70s FCCCCCcc	083006	70s -----edab 80s aaaaaa	084021	60s -----E 80s AAAAAA
079002	50s -----eAA 70s AAAAAAAAAA	60s AAAAAAAAAA	083007	70s -----ea 80s aaaaaa	084022	60s -----eEEE 80s AAAAAA
079003	50s -----e 70s AAAAAAAAAA	60s AAAAAA	083008	70s -----aa 80s aaaaaa	084023	70s -EAAAAEA 80s AAAAAA
079004	60s -tFCBAAAA 80s AAAAAAD	70s AAAAAAAAAA	083009	70s -----eA 80s AAAAAA	084024	70s -eAAAAAAE 80s AAAAAA
079005	60s -tEAAAAAA 80s AAAAAA	70s AAAAAAAAAA	083010	70s AAAAAA 80s AAAAAA	084025	70s -t+AAAAE 80s aaaaaa
079006	60s -t+t+t+tEAA 80s AAAAAA	70s AAAAAAAAAA	084001	40s -----eE 60s AAAAAAAAAA	084026	70s -eaaab 80s aaaaaa
080001	60s -tEAAAAAA 80s AAAAAA	70s AAAAAAAAAA	084002	50s -eAEEEEE 70s AEEEEE+t+t	084003	50s -----eBDA 70s AAAAAAAAAA
080002	70s -----dAA 80s daaaaa	80s AAAAAA	084003	50s -----eBDA 70s AAAAAAAAAA	084004	50s -----eAA 70s AAAAAAAAAA
080003	80s daaaaa		084004	50s -----eAA 70s AAAAAAAAAA	084005	50s -----eA 70s AAAAAAAAAA
080004	80s -fcc		084005	50s -----eA 70s AAAAAAAAAA	084006	60s -eEAAA 80s AAAAAA
080006	80s -fcc		084006	60s -eAAA 80s AAAAAA	084007	60s -eAAA 80s AAAAAA
081001	60s -----eBBe 80s -tEAAAAAA	70s -----t+t	084007	60s -eAAA 80s AAAAAA	084008	60s -eAAA 80s AAAAAA
081002	60s -tEAAAAAA 80s AAAAAA	70s AAAAAAAAAA	084008	60s -eAAA 80s AAAAAA	084009	60s -eAAA 80s AAAAAA
081003	60s -t+t+t+tAAA 80s AAAAAA	70s AAAAAAAAAA	084009	60s -eAAA 80s AAAAAA	084010	60s -eAAA 80s AAAAAA
081004	70s -----dAA 80s AAAAAA	80s AAAAAA	084011	60s -eAAAAAA 80s AAAAAA	084011	60s -----eA 80s AAAAAA
			084012	60s -tEAAAAAA 80s AAAAAA	084012	60s -t+t+t+t+tEE 80s AAAAAA
			084013	60s -eAAAAAA 80s AAAAAA	084013	70s -----eaa 80s ae

Naturalised daily and monthly flows

Stn. number	Naturalised daily, and monthly flows	Stn. number	Naturalised daily, and monthly flows	Stn. number	Naturalised daily, and monthly flows
077002	60s -----FEE 70s EF	084002	60s -----FE 70s EEEF	084017	60s -----FEE 70s EEEF
078004	70s -F	084003	60s -----FE 70s EEEF	084018	60s -----F 70s EEEF
079002	50s -----F 70s EF	084004	60s -----FEE 70s EEEF	084019	60s -----FE 70s EEEF
079003	50s -----F 70s EEF	084005	60s -----FE 70s EEEF	084020	70s FEEF
079006	60s -----FEE 70s EF	084006	60s -----FE 70s EEEF	084021	70s FEF
081003	60s -----FE 70s FF	084007	60s -----FE 70s EEEF	084022	70s --FF
082001	60s --FEEEEEE 70s EF	084008	60s -----FEE 70s EEEF	084023	70s --FF
084001	70s FEEF	084009	60s -----FFF 70s EEEF	084024	70s --FF
		084011	60s --FEEEEEE 70s EEEF	085001	60s --FEEEEEE 70s EEEF
		084012	60s --FEEEEEE 70s EEEF	085002	60s -----FEE 70s EEEF
		084013	60s -----FEE 70s EEEF	085003	70s FEEF
		084014	60s --FEEEEEE 70s EEEF	086001	70s FEEF
		084015	70s FEEF	086002	70s FEEF
		084016	70s FEEF		

NORTHUMBRIAN WATER



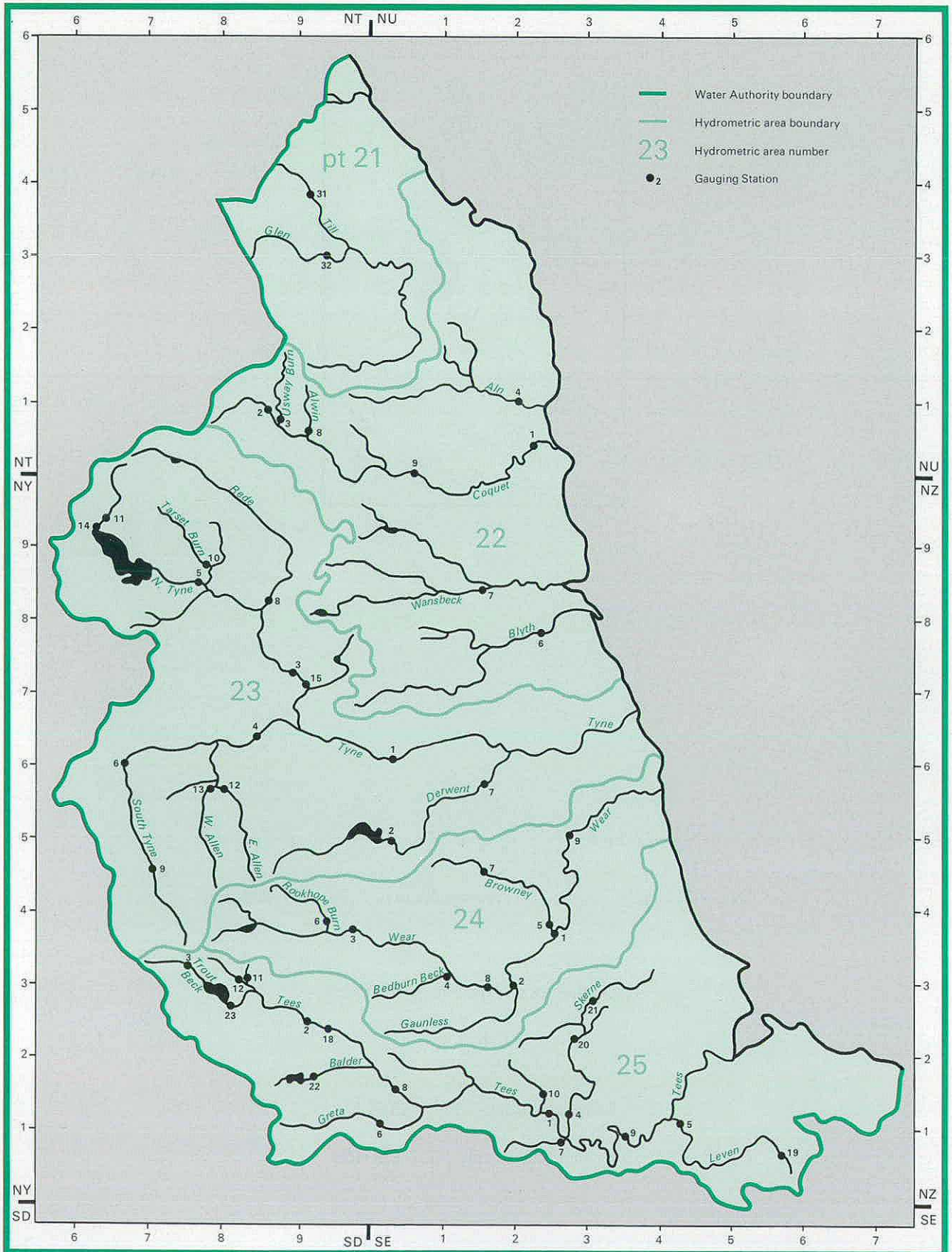
Area: 9,274 km²

Average Rainfall (1941-70): 879 mm

Headquarters of Northumbrian Water:

PO Box 4
Regent Centre
Gosforth
Newcastle-upon-Tyne NE3 3PX

Telephone: Tyneside (091) 2843151



- Water Authority boundary
- Hydrometric area boundary
- 23 Hydrometric area number
- Gauging Station

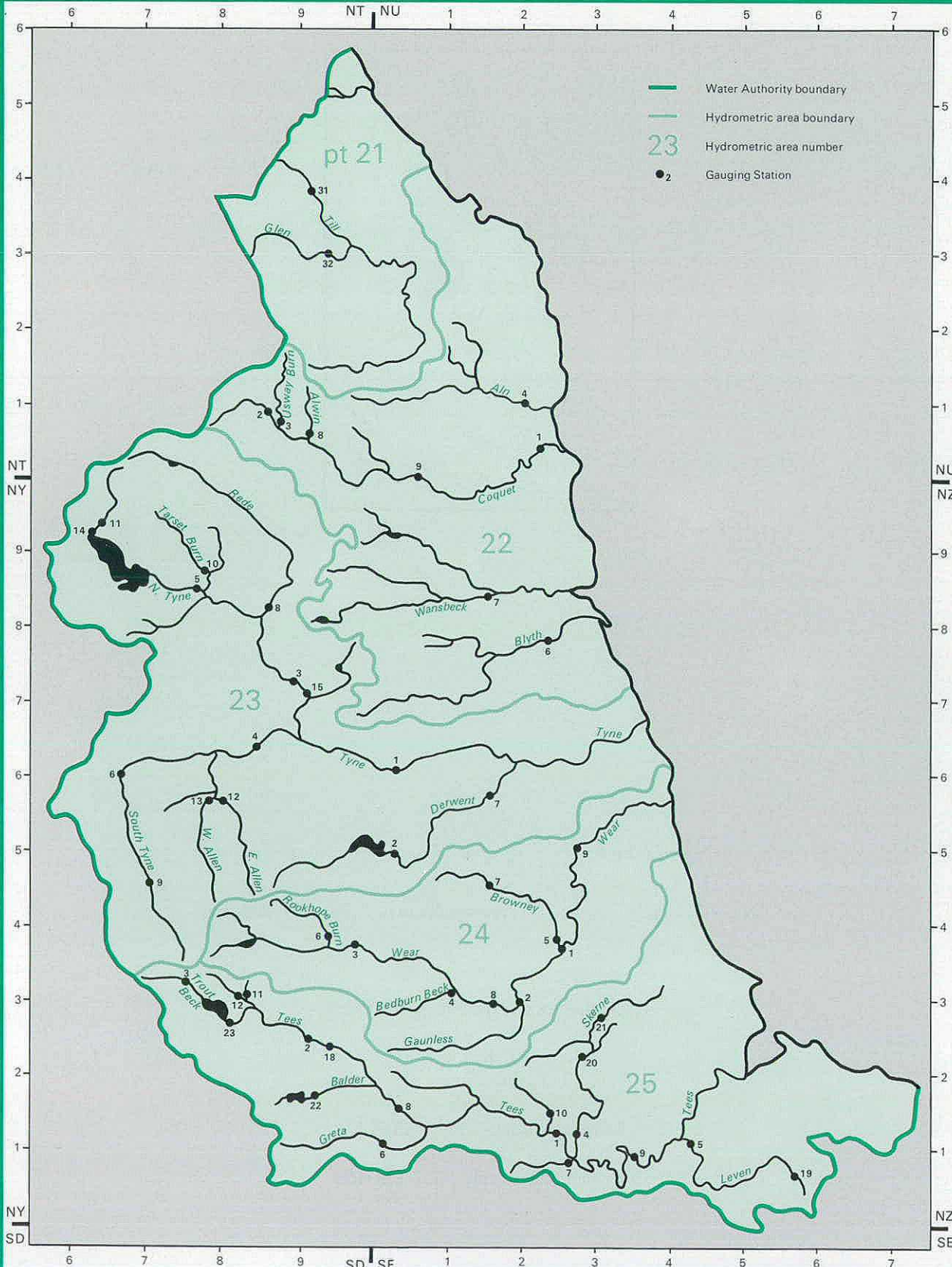
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Gauging Station Register

Station number	River name	Station name	Grid reference	Catchment area (sq. km)	Station type	Period of record	Mean ann. rainfall (mm)	Mean ann. runoff (mm)	Max. ann. runoff (mm)	Year of max.	Min. ann. runoff (mm)	Year of min.	Mean flow (m ³ s ⁻¹)	Min. mon. flow (m ³ s ⁻¹)	Month/Year of min.	Mean ann. flood (m ³ s ⁻¹)	Base flow index	10 Percentile (m ³ s ⁻¹)	95 Percentile (m ³ s ⁻¹)	
021031	Till	Etal	NT 927396	648.0	VA	1956..80	811	412	616	63	129	73	8.47	1.03	08/76	86.7		17.1	1.43	
021032	Glen	Kirknewton	NT 919310	198.9	FVVA	1966..83	866	455	603	79	178	73	2.87	0.24	08/83	45.8	.48	6.0	0.43	
022001	Coquet	Morwick	NU 234044	569.8	VA	1963..85	872	482	630	69	206	73	8.72	1.08	10/72	144.4	.44	19.0	1.36	
022002	Coquet	Bygate	NT 870083	59.5	MIS	1957..80	983	637	889	63	352	73	1.20	0.12	09/59	25.5		2.5	0.20	
022003	Usway Burn	Shillmoor	NT 886077	21.4	TP	1957..80	1036	812	1226	79	447	73	0.55	0.05	09/59	17.4		1.3	0.09	
022004	Aln	Hawkhill	NU 211129	205.0	VA	1966..80	744	370	571	69	119	73	2.40	0.38	07/76	67.3		4.5	0.46	
022006	Blyth	Hartford Bridge	NZ 243800	269.4	FV	1966..85	707	251	399	69	63	73	2.15	0.07	08/76	64.7	.34	5.1	0.11	
022007	Wansbeck	Mitford	NZ 175858	287.3	MIS	1968..85	791	358	515	69	133	73	3.26	0.13	08/76	122.6	.37	7.1	0.22	
022008	Arwin	Clennell	NT 925063	27.7	FV	1969..83	953	641	1137	70	312	73	0.56	0.06	08/76	14.0	.49	1.2	0.08	
022009	Coquet	Rotbury	NU 067016	346.0	VA	1972..85	886	522	741	79	374	75	5.73	0.65	08/76	119.7	.48	12.0	0.91	
023001	Tyne	Bywell	NZ 038617	2175.6	VA	1956..85	1026	636	925	65	375	73	43.87	3.40	08/76	975.6	.35	101.9	5.44	
023002	Derwent	Eddys Bridge	NZ 041508	118.0	FL	1954..85	952	332	742	60	97	85	1.24	0.15	08/59	27.2	.49	2.6	0.29	
023003	North Tyne	Reaverhill	NY 906732	1007.5	VA	1959..85	1051	624	883	65	354	73	19.94	1.36	08/76	419.4	.31	47.8	2.19	
023004	South Tyne	Haydon Bridge	NY 856647	751.1	VA	1962..85	1154	743	997	67	490	73	17.70	1.51	08/76	365.1	.35	42.2	2.19	
023005	North Tyne	Tarset	NY 776861	284.9	VA	1963..85	1237	877	1220	85	537	81	7.92	0.60	08/76	202.1	.32	19.1	0.89	
023006	South Tyne	Featherstone	NY 672611	321.9	CC	1966..85	1331	1019	1265	79	747	71	10.40	0.96	08/76	245.1	.33	24.5	1.36	
023007	Derwent	Rowlands Gill	NZ 243800	242.1	CC	1962..85	847	350	726	65	146	73	2.68	0.63	09/79	45.1	.57	5.4	0.79	
023008	Rede	Rede Bridge	NY 868832	343.8	FVVA	1968..85	920	529	766	79	251	73	5.76	0.47	08/76	159.1	.33	13.8	0.60	
023009	South Tyne	Alston	NY 176465	118.5	VA	1969..83	1437	1051	1272	77	864	71	3.95	0.32	08/76	125.1	.30	9.6	0.40	
023010	Tarset Burn	Greenhaugh	NY 789879	96.0	VA	1970..80	926	575	852	79	366	73	1.75	0.12	08/76	59.6		4.3	0.14	
023011	Kielder Burn	Kielder	NY 644946	58.8	FVVA	1970..85	1218	975	1325	85	644	73	1.82	0.24	08/76	62.4	.34	4.3	0.28	
023012	East Allen	Wide Eats	NY 802583	88.0	VA	1971..80	1034	771	1161	79	592	73	2.15	0.15	08/76	72.7		5.0	0.24	
023013	West Allen	Hindley Wrae	NY 791583	75.1	VA	1971..80	1024	693	991	77	541	75	1.65	0.03	05/80	52.9	.27	4.2	0.06	
023014	North Tyne	Kielder temp	NY 631931	27.0	VA	1960..74	1106	952	1256	65	842	64	0.81	0.09	10/72			1.8	0.11	
023015	North Tyne	Barrasford	NY 924721	1043.8	FL	1942..59	996	537	653	58	486	53	17.78	1.93	08/55			30	42.2	2.39
024001	Wear	Sunderland Br	NZ 264376	657.8	CB	1957..85	946	534	787	79	294	73	11.13	1.21	08/59	221.3	.41	25.1	1.96	
024002	Gaunless	Bishop Auckland	NZ 215306	93.0	C	1958..83	727	310	474	68	138	73	0.92	0.09	08/76	20.2	.51	1.9	0.14	
024003	Wear	Stanhope	NY 984391	171.9	CC	1958..85	1292	660	861	79	404	73	3.60	0.30	08/59	121.9	.34	8.3	0.50	
024004	Bedburn Beck	Bedburn	NZ 118322	74.9	CC	1959..85	875	506	688	65	281	75	1.20	0.12	08/76	25.4	.46	2.6	0.18	
024005	Brownay	Burn Hall	NZ 259387	178.5	CB	1954..85	757	306	491	60	150	73	1.73	0.21	10/59	37.6	.52	3.6	0.34	
024006	Rookhope	Eastgate	NY 952390	36.5	CC	1957..80	1170	668	1021	79	334	59	0.77	0.03	08/59	24.6		1.8	0.07	
024007	Brownay	Lanchester	NZ 165462	44.6	CC	1968..83	747	392	585	69	209	73	0.55	0.06	10/70	13.9	.45	1.3	0.07	
024008	Wear	Wilton Park	NZ 174309	455.0	VA	1972..85	1073	534	618	77	349	73	7.70	0.91	08/76	196.1	.44	16.4	1.21	
024009	Wear	Chester le Street	NZ 283512	1008.3	FV	1977..85	901	462	619	79	393	85	14.78	2.95	07/84			31.7	3.29	
025001	Tees	Broken Scar	NZ 259137	818.4	CC	1956..85	1147	655	895	79	362	73	17.00	0.46	08/59	375.2	.48	42.7	1.35	
025002	Tees	Dent Bank	NY 932260	217.3	CC	1956..74	1665	1114	1517	67	776	64	7.68	0.21	06/57	282.0		18.8	0.68	
025003	Trout Beck	Moor House	NY 759336	11.4	CC	1957..80	1917	1530	2902	79	1051	71	0.55	0.02	05/80	16.3		1.5	0.03	
025004	Skerne	South Park	NZ 284129	250.1	CB	1956..85	661	212	336	69	104	75	1.68	0.30	08/76	23.3	.53	3.4	0.40	
025005	Leven	Laven Bridge	NZ 445122	196.3	MIS	1959..85	753	308	540	79	125	64	1.91	0.13	08/76	45.4	.43	4.2	0.27	
025006	Greta	Rutherford Br	NZ 034122	86.1	CC	1960..85	1122	820	1072	79	530	73	2.24	0.09	07/84	72.8	.21	5.7	0.13	
025007	Clow Beck	Croft	NZ 282101	78.2	TP	1961..80	727	300	471	79	123	73	0.74	0.06	08/76	19.3		1.7	0.09	
025008	Tees	Barnard Castle	NZ 047166	509.2	CC	1966..83	1358	831	1102	67	558	73	13.41	3.05	06/70	240.0	.40	30.0	3.10	
025009	Tees	Low Moor	NZ 364105	1264.0	VA	1969..85	966	436	623	79	284	75	17.47	2.37	08/76	303.1	.37	40.6	2.77	
025010	Baydale Beck	Mowden Bridge	NZ 280156	31.1	MIS	1967..74	646	224	334	69	60	73	0.22	0.01	06/73	6.6		0.4	0.01	
025011	Langdon Bk	Langdon	NY 852309	13.0	FV	1969..83	1478	1014	1499	79	713	73	0.42	0.02	08/76	17.9	.20	1.1	0.02	
025012	Harwood Bk	Harwood	NY 849309	25.1	FV	1969..85	1569	1210	1592	79	890	73	0.96	0.04	08/76	36.7	.22	2.6	0.06	
025018	Tees	Middleton	NY 950250	242.1	VA	1971..85	1522	1113	1385	79	794	73	8.55	2.62	04/74	153.2	.42	18.0	2.47	
025019	Leven	Easby	NZ 585087	14.8	FV	1971..85	816	435	650	79	305	75	0.20	0.04	08/76	6.1	.59	0.4	0.06	
025020	Skerne	Preston le Skerne	NZ 292238	147.0	VA	1972..85	647	188	324	79	120	73	0.88	0.08	09/77	15.7	.41	1.8	0.14	
025021	Skerne	Bradbury	NZ 318285	70.1	VA	1973..85	680	191	301	79	123	82	0.42	0.06	07/84	8.2	.46	0.9	0.08	
025022	Balder	Balderhead Res	NY 931182	20.4	CC	1974..80		935	1180	79	640	75	0.61	0.00	12/76	10.5	.23	1.7		
025023	Tees	Cow Green Res	NY 813288	58.2	FV	1971..83	1773	1496	1803	79	1170	76	2.76	0.52	03/83	21.6	.47	6.3	0.49	

Hydrometric Statistics

Station number	Station name	C.A.	Period	Rainfall (mm)	Runoff (mm)	Mean flow (m ³ s ⁻¹)	Peak flow (m ³ s ⁻¹)	Date of peak	Min. daily flow (m ³ s ⁻¹)	Date of min.	10 Percentile (m ³ s ⁻¹)	50 Percentile (m ³ s ⁻¹)	95 Percentile (m ³ s ⁻¹)		
022001	Coquet at Morwick	C.A.: 569.8 km ²	63..80	860	482	8.71	218.0	27/12 1978	0.72	20/06 1970	18.7	5.02	1.38		
M.A.: NWA	Level: 5m	F.A.F.: N													
Comment: Velocity-area station with 34m wide concrete Flat V weir made with pre-cast segments (installed 1963). Cableway. Fairly straight section with high banks. Replaced earlier station at Guyzance. # Natural catchment.															
1981				906	105	478	99	8.65	243.6	02/03	1.32	09/09	18.7	4.60	1.58
1982				832	97	480	100	8.67	289.7	04/01	1.17	10/08	18.9	4.20	1.42
1983				854	99	443	92	8.01	107.3	24/12	0.98	02/08	19.4	4.62	1.16
1984				964	112	493	102	8.91	141.4	04/02	0.96	07/09	25.0	4.17	1.13
1985				974	113	524	109	9.45	80.3	31/01	1.88	04/07	20.4	6.70	2.33
022006	Blyth at Hartford Bridge	C.A.: 269.4 km ²	66..80	699	251	2.14	122.3	27/12 1978	0.05	23/08 1976	5.1	0.74	0.11		
M.A.: NWA	Level: 25m	F.A.F.: E													
Comment: Velocity-area station with Flat V weir for low flow control installed in 1968. Straight approach. # Natural catchment.															
1981				796	114	302	120	2.58	150.2	02/03	0.13	06/09	5.6	0.98	0.16
1982				652	93	199	79	1.70	146.6	03/01	0.12	12/08	3.4	0.49	0.15
1983				721	103	244	97	2.09	40.8	24/12	0.11	07/09	5.6	0.79	0.12
1984				704	101	241	96	2.06	44.4	26/03	0.06	26/07	5.9	0.52	0.08
1985				755	108	270	108	2.30	35.8	21/01	0.21	12/07	5.5	1.02	0.31
022007	Wansbeck at Mitford	C.A													

				Period	Rainfall (mm)	Runoff (mm)	Mean flow (m ³ s ⁻¹)	Peak flow (m ³ s ⁻¹)	Date of peak	Min. daily flow (m ³ s ⁻¹)	Date of min.	10 Percentile (m ³ s ⁻¹)	50 Percentile (m ³ s ⁻¹)	95 Percentile (m ³ s ⁻¹)	
					% of pre-1981	% of pre-1981									
022009	Coquet at Rothbury	C.A: 346.0 km ²	72-80	847	509	5.58	164.7	28/03	0.52	25/08	11.7	3.38	0.98		
M.A: NWA	Level: 71m	F.A.F: SPN						1979		1976					
Comment: Velocity-area station with informal mill weir below station providing good control. Well confined section with straight approach. Cableway. # Natural catchment located on Cheviot Igneous, Cementstone and Fell Sandstone.				1981	964 114	554 109	6.08	211.8	02/03	0.86	05/09	12.5	3.51	1.04	
				1982	917 108	545 107	5.97	282.1	03/01	0.75	10/08	12.0	3.17	0.93	
				1983	926 109	506 99	5.55	98.7	24/12	0.71	30/08	12.5	3.70	0.82	
				1984	944 111	542 106	5.95	195.0	04/02	0.54	26/07	13.7	2.98	0.62	
				1985	1045 123	581 114	6.35	89.1	31/01	1.31	17/07	11.7	4.59	1.53	
023001	Tyne at Bywell	C.A: 2175.6 km ²	56-80	1013	628	43.34	1586.0	17/10	2.48	07/09	101.3	23.87	5.14		
M.A: NWA	Level: 14m	F.A.F: S						1967		1976					
Comment: Lowest station on Tyne. Velocity-area station. # Abstractions upstream to River Tees. New station upstream at Riding Mill where abstractions are made. Catcleugh and Kielder Reservoirs, and Barrasford intake which transfers some higher flows to Hallington.				1981	1105 109	629 100	43.40	982.9	23/11	5.95	26/08	98.9	22.07	6.79	
				1982	1086 107	700 111	48.27	1525.0	03/01	5.74	16/09	104.4	23.51	6.74	
				1983	1050 104	629 100	43.37	756.6	06/01	5.69	08/08	100.2	25.76	6.61	
				1984	1018 100	659 105	45.44	1168.0	03/11	4.69	28/08	108.0	21.06	5.86	
				1985	1137 112	758 121	52.13	1243.0	21/09	7.60	11/07	108.3	31.53	9.29	
023002	Derwent at Eddys Bridge	C.A: 118.0 km ² S-full: 126.0 m ³ s ⁻¹	54-80	952	383	1.36	58.1	15/07	0.11	12/09	2.9	0.58	0.31		
M.A: NWA	Level: 181m	F.A.F: S						1981		1959					
Comment: Broad crested weir with central low flow flume. Model calibration. # Since 1965 flows controlled by Derwent reservoir 2km upstream.				1981	935 98	190 52	0.71	14.9	07/03	0.34	09/09	1.0	0.43	0.37	
				1982	929 98	142 39	0.53	10.4	03/01	0.34	15/01	0.6	0.43	0.41	
				1983	989 104	245 67	0.92	25.8	28/04	0.33	05/09	1.3	0.42	0.34	
				1984	1022 107	159 44	0.60	11.4	03/11	0.22	27/08	1.0	0.43	0.25	
				1985	884 93	97 27	0.36	2.2	30/01	0.27	25/07	0.5	0.33	0.28	
023003	North Tyne at Reaverhill	C.A: 1007.5 km ² B-full: 560.0 m ³ s ⁻¹	59-80	1047	621	19.83	631.5	09/12	0.98	25/08	47.1	9.90	2.05		
M.A: NWA	Level: 65m	F.A.F: S						1964		1976					
Comment: Velocity-area station with natural channel control. Replaced earlier station at Barrasford. # Catcleugh Reservoir.				1981	1085 104	551 89	17.59	310.9	23/11	1.89	26/08	43.3	8.92	2.76	
				1982	1071 102										
				1983	1023 98	604 97	19.28	300.6	24/12	2.46	08/08	44.7	12.06	2.94	
				1984	963 92	626 101	20.00	292.4	12/01	2.08	26/06	59.9	5.98	2.35	
				1985	1230 117	801 129	25.52	356.7	21/09	2.90	08/06	55.0	17.60	3.57	
023004	South Tyne at Haydon Bridge	C.A: 751.1 km ² B-full: 500.0 m ³ s ⁻¹	62-80	1138	739	17.60	516.3	16/10	0.92	09/09	41.8	9.87	2.31		
M.A: NWA	Level: 59m	F.A.F: N						1967		1969					
Comment: Velocity-area station with informal Flat V weir as low flow control installed in 1972. Cableway. # Natural catchment.				1981	1227 108	795 108	18.94	378.1	26/11	1.73	10/09	43.2	9.25	2.07	
				1982	1203 106	787 106	18.73	408.2	02/01	1.71	11/08	42.7	9.23	2.03	
				1983	1184 104	732 99	17.42	289.8	05/01	1.58	30/08	43.1	9.49	1.83	
				1984	1185 104	727 98	17.31	455.3	03/11	1.52	27/07	42.9	9.40	1.70	
				1985	1240 109	763 103	18.13	415.4	21/09	2.34	08/07	40.8	10.31	3.09	
023005	North Tyne at Tarsat	C.A: 284.9 km ² S-full: 4.0 m ³ s ⁻¹	63-80	1207	865	7.81	338.7	30/08	0.16	13/03	19.1	3.82	0.82		
M.A: NWA	Level: 117m	F.A.F: S						1975		1969					
Comment: Velocity-area station on straight reach with Flat V weir for low flow control installed in 1973. # Kielder reservoir constructed upstream, controlling 80% of catchment. Natural before 1980.				1981	1292 107	537 62	4.85	54.1	09/12	1.05	17/09	8.8	3.77	1.40	
				1982	1402 116	970 112	8.76	66.5	03/01	1.18	30/03	27.8	3.16	1.47	
				1983	1236 102	866 100	7.83	74.6	03/03	1.16	07/12	15.7	5.14	1.60	
				1984	1185 98	993 115	8.97	103.5	13/01	0.62	29/02	21.7	2.53	1.46	
				1985	1530 127	1223 141	11.02	100.9	21/12	1.40	08/06	21.5	7.86	1.87	
023006	South Tyne at Featherstone	C.A: 321.9 km ² S-full: 500.0 m ³ s ⁻¹	66-80	1286	993	10.14	283.7	10/12	0.71	28/08	23.4	5.13	1.37		
M.A: NWA	Level: 132m	F.A.F: N						1980		1976					
Comment: Compound Crump weir. Lower crest 15.2m, upper crest 29.5m. Theoretical rating. # Natural flow regime.				1981	1425 111	1093 110	11.16	275.2	26/11	1.17	10/09	28.5	5.03	1.60	
				1982	1481 115	1162 117	11.86	292.1	02/01	1.16	11/08	27.7	5.83	1.39	
				1983	1410 110	1030 104	10.52	214.5	05/01	1.07	29/08	26.4	6.01	1.18	
				1984	1420 110	1031 104	10.52	309.9	03/11	0.98	26/07	25.7	5.72	1.13	
				1985	1562 121	1139 115	11.59	251.3	21/09	1.74	07/07	27.6	5.92	2.17	
023007	Derwent at Rowlands Gill	C.A: 242.1 km ²	62-80	855	365	2.80	98.0	05/11	0.28	18/04	5.7	1.63	0.78		
M.A: NWA	Level: 29m	F.A.F: P						1967		1972					
Comment: Two Crump profile weirs with slightly different crest levels have been built beneath the two arches of a bridge to form the control at the site. # Controlled flow regime, Derwent Reservoir started impounding 1965. Carboniferous Limestone (upper catchment), Millstone Grit and Coal Measures.				1981	830 97	271 74	2.08	28.0	02/03	0.75	05/09	4.0	1.29	0.80	
				1982	790 92	263 72	2.02	55.0	03/01	0.76	03/09	4.0	1.27	0.80	
				1983	862 101	352 96	2.70	53.7	28/04	0.81	05/10	5.1	1.51	0.85	
				1984	848 99	311 85	2.39	39.3	03/11	0.74	12/09	4.6	1.42	0.79	
				1985	776 91	268 73	2.05	24.3	23/03	0.88	25/07	3.6	1.53	0.95	
023008	Rede at Rede Bridge	C.A: 343.8 km ² B-full: 65.0 m ³ s ⁻¹	66-80	891	515	5.61	282.7	19/02	0.38	26/08	13.1	2.44	0.60		
M.A: NWA	Level: 107m	F.A.F: SP						1970		1976					
Comment: Flat V weir constructed with prefabricated crest units. Width 24.3m. # Forestry and grazing. Lower Carboniferous rocks mostly covered by Boulder Clay and alluvium. Contains Catcleugh Reservoir which has significant effect on flows.				1981	1008 113										
				1982	990 111	591 115	6.44	266.8	03/01	0.53	11/08	15.1	2.50	0.63	
				1983	967 109	523 102	5.71	127.1	24/12	0.59	14/08	14.3	2.89	0.66	
				1984	919 103	532 103	5.80	164.3	04/02	0.43	27/08	14.8	2.10	0.49	
				1985	1134 127	672 130	7.31	147.2	21/12	0.84	17/07	16.0	3.88	1.10	
023011	Kielder Burn at Kielder	C.A: 58.8 km ² B-full: 46.0 m ³ s ⁻¹	70-80	1177	909	1.69	138.9	29/08	0.12	05/07	3.8	0.85	0.28		
M.A: NWA	Level: 214m	F.A.F: N						1975		1970					
Comment: Flat V weir 12m broad (1:2 u/s and d/s slopes; 1:20 cross-slope) with low wing walls (0.61m). Cableway upstream (straight reach) - rating based on gaugings; possible overestimation of high flows. # The catchment embraces Kielderhead Moor and - at lower levels - Kielder Forest. Geology comprises mainly Carboniferous formations cut by numerous faults and dykes; thick covering of Boulder Clay in the valley, peat on the hills.				1981	1189 101	1101 121	2.05	73.0	23/11	0.27	04/09	5.2	1.00	0.34	
				1982	1389 118	1110 122	2.07	63.0	03/01	0.22	10/08	5.4	0.97	0.27	
				1983	1224 104	1069 118	1.99	45.1	24/12	0.24	30/08	5.0	1.09	0.27	
				1984	1236 105	956 105	1.78	106.7	03/11	0.19	21/08	3.9	0.86	0.21	
				1985	1509 128	1328 146	2.47	63.2	21/12	0.42	07/07	6.0	1.26	0.50	
024001	Wear at Sunderland Bridge	C.A: 657.8 km ²	57-80	940	527	11.00	576.7	05/11	0.90	04/10	25.2	5.73	1.94		
M.A: NWA	Level: 40m	F.A.F: SE						1967		1959					
Comment: Compound broad-crested weir within the arches of road bridge. High flows are above vertical walls of bridge openings and tapping point within drawdown effect. Weed growth in summer. # Significant artificial influences; Burnhope, Waskerly and Tunstall Reservoirs and mine-water discharges.				1981	994 106	632 120	13.18	362.4	04/01	1.67	03/09	32.7	5.7		

Station	Location	C.A.	Period	Rainfall (mm)	Runoff (mm)	Mean flow (m³ s⁻¹)	Peak flow (m³ s⁻¹)	Date of peak	Min. daily flow (m³ s⁻¹)	Date of min.	10 Percentile (m³ s⁻¹)	50 Percentile (m³ s⁻¹)	95 Percentile (m³ s⁻¹)
025018	Tees at Middleton in Teesdale	242.1 km²	71..80	1462	1075	8.25	258.8	02/01 1976	0.88	01/07 1976	17.9	4.52	2.43
M.A: NWA	Level: 211m	F.A.F: SR											
		B-full: 360.0 m³ s⁻¹											
Comment: Velocity-area station with Flat V weir for low-flow control constructed in 1972. Cableway. Replaced earlier station at Dent Bank. Straight reach, gravel and rock bed. Steep gradient. Flows affected by Cow Green Reservoir.													
1981				1755	120								
1982				1656	113								
1983				1653	113	1167	109	8.96	124.4	08/10	1.75	26/09	18.1
1984				1531	105	1101	102	8.45	145.0	04/02	1.65	23/08	17.4
1985				1648	113	1194	111	9.14	194.0	14/05	1.82	11/01	18.7
025019	Leven at Esby	14.8 km²	71-80	832	456	0.21	12.8	11/09 1976	0.03	07/09 1976	0.4	0.13	0.06
M.A: NWA	Level: 101m	F.A.F: N											
		B-full: 16.0 m³ s⁻¹											
Comment: Flat V Crump profile weir, width 5m, in rectangular concrete river section. # Natural catchment. Grazing and arable land. Upper Lias rock overlain by Lower Oolite series (sandstone). Sands, gravels and Boulder Clays in valleys.													
1981				832	100	419	92	0.20	4.9	21/03	0.06	09/09	0.3
1982				715	86	327	72	0.15	2.8	03/01	0.05	14/09	0.3
1983				762	92	409	90	0.19	7.7	09/12	0.06	06/09	0.3
1984				810	97	425	93	0.20	4.0	02/11	0.05	27/06	0.4
1985				800	96	405	89	0.19	3.4	11/04	0.06	25/07	0.3
025020	Skeme at Preston le Skeme	147.0 km²	72..80	645	197	0.92	26.6	28/03 1979	0.07	29/09 1977	1.9	0.52	0.14
M.A: NWA	Level: 68m	F.A.F: E											
Comment: Velocity-area station with informal low-flow control constructed in 1978. Cableway. Straight approach. All flows contained in channel. # Mainly on Magnesium Limestone. Mine water additions at top of catchment in historic record but reduced in recent years.													
1981				686	106	199	101	0.93	21.7	01/10	0.10	10/09	1.6
1982				575	89	141	72	0.66	20.1	03/01	0.11	10/08	1.1
1983				690	107	207	105	0.96	19.2	20/04	0.13	18/11	2.3
1984				610	95	153	78	0.71	14.5	28/01	0.09	23/07	1.5
1985				673	104	170	86	0.79	13.4	21/01	0.14	29/10	1.7
025021	Skeme at Bradbury	70.1 km²	73-80	685	216	0.48	21.0	29/03 1979	0.10	06/11 1978	0.9	0.26	0.12
M.A: NWA	Level: 72m	F.A.F: SPGE											
		S-full: 1.4 m³ s⁻¹											
Comment: Velocity-area station with informal Flat V low-flow weir constructed in 1974. High flow control by bridge invert 10m below weir. Cableway.													
1981				710	104	168	78	0.37	7.3	22/03	0.08	09/09	0.7
1982				577	84	123	57	0.27	7.7	04/01	0.07	22/09	0.5
1983				709	104	170	79	0.38	7.5	21/04	0.04	06/09	0.9
1984				636	93	144	67	0.32	5.7	29/01	0.04	24/06	0.7
1985				714	104								

Summary of Archived Data

Gauged daily flows, monthly peaks and monthly rainfall

Stn. number	Gauged daily flows, monthly peaks and rainfall	Stn. number	Gauged daily flows, monthly peaks and rainfall	Stn. number	Gauged daily flows, monthly peaks and rainfall
021031	50s -----eAAB 60s AAAAAAAAAAE 70s AAAAAAAAAE 80s AAEE	023006	60s -----eAAA 70s AAAAAAEEA 80s AAAAAAEEA 90s AAAAAAEEA	024009	70s -----eAA 80s AAAAAAe
021032	60s -----eAAA 70s AAAAAAEEA 80s AAEE	023007	60s -----eAAA 70s AAAAAAEEA 80s BAAAAAEEA 90s -----EA 00s AAAAAAEEA	025001	50s -----eAAA 60s AAAAAAADAA 70s AAAAAAEEA 80s AAAAAAEEA 90s AAAAAAEEA
022001	60s ---ffBAAA 70s AAAAAAEEA 80s AAAAAAEEA	023008	60s AAAAAAEEA 70s AAAAAAEEA 80s AAAAAAEEA 90s AAAAAAEEA	025002	50s -----ff-e 60s BAAAAAEEA 70s AAAAAAEEA 80s AAAAAAEEA 90s AAAAAAEEA
022002	50s -----eAA 60s AAAAAAEEA 70s AAAAAAEEA 80s AAAAAAEEA	023009	60s AAAAAAEEA 70s AAAAAAEEA 80s AAAAAAEEA 90s AAAAAAEEA	025003	50s -----eAA 60s AAAAAAEEA 70s AAAAAAEEA 80s AAAAAAEEA 90s AAAAAAEEA
022003	50s -----eAA 60s AAAAAAEEA 70s AAAAAAEEA 80s AAAAAAEEA	023010	60s AAAAAAEEA 70s AAAAAAEEA 80s AAAAAAEEA 90s AAAAAAEEA	025004	50s -----eAAA 60s AAAAAAEEA 70s AAAAAAEEA 80s AAAAAAEEA 90s AAAAAAEEA
022004	60s -----eAAA 70s AAAAAAEEA 80s E↑↑↑ 90s AAAAAAEEA	023011	60s AAAAAAEEA 70s AAAAAAEEA 80s AAAAAAEEA 90s AAAAAAEEA	025005	50s -----e 60s AAAAAAEEA 70s AAAAAAEEA 80s AAAAAAEEA 90s AAAAAAEEA
022006	60s -----eDAA 70s AAAAAAEEA 80s AAAAAAEEA 90s AAAAAAEEA	023012	60s AAAAAAEEA 70s AAAAAAEEA 80s AAAAAAEEA 90s AAAAAAEEA	025006	60s AAAAAAEEA 70s AAAAAAEEA 80s AAAAAAEEA 90s AAAAAAEEA
022007	60s -----fEA 70s AAAAAAEEA 80s AAAAAAEEA 90s AAAAAAEEA	023013	60s AAAAAAEEA 70s AAAAAAEEA 80s AAAAAAEEA 90s AAAAAAEEA	025007	60s AAAAAAEEA 70s AAAAAAEEA 80s AAAAAAEEA 90s AAAAAAEEA
022008	60s -----E 70s AAAAAAEEA 80s AAAAAAEEA 90s AAAAAAEEA	023014	60s AAAAAAEEA 70s AAAAAAEEA 80s AAAAAAEEA 90s AAAAAAEEA	025008	60s -----fEAAA 70s AAAAAAEEA 80s AAAAAAEEA 90s AAAAAAEEA
022009	70s --EDAAAAA 80s AAAAAAEEA	023015	60s AAAAAAEEA 70s AAAAAAEEA 80s AAAAAAEEA 90s AAAAAAEEA	025009	60s AAAAAAEEA 70s AAAAAAEEA 80s AAAAAAEEA 90s AAAAAAEEA
023001	50s -----eAAA 60s AAAAAAEEA 70s AAAAAAEEA 80s AAAAAAEEA	024001	50s -----fCC 60s AAAAAAEEA 70s AAAAAAEEA 80s AAAAAAEEA	025010	60s -----EAA 70s AAAAAAEEA 80s AAAAAAEEA 90s AAAAAAEEA
023002	50s -----fCCCB 60s AAAAAAEEA 70s AAAAAAEEA 80s AAAAAAEEA	024002	50s -----eA 60s AAAAAAEEA 70s AAAAAAEEA 80s AAAAAAEEA	025011	60s -----E 70s AAAAAAEEA 80s AAAAAAEEA 90s AAAAAAEEA
023003	50s -----e 60s AAAAAAEEA 70s AAAAAAEEA 80s AAAAAAEEA	024003	50s -----eA 60s AAAAAAEEA 70s AAAAAAEEA 80s AAAAAAEEA	025012	60s AAAAAAEEA 70s AAAAAAEEA 80s AAAAAAEEA 90s AAAAAAEEA
023004	60s -----eAAAA 70s AAAAAAEEA 80s AAAAAAEEA 90s AAAAAAEEA	024004	50s -----e 60s AAAAAAEEA 70s AAAAAAEEA 80s AAAAAAEEA	025018	60s AAAAAAEEA 70s AAAAAAEEA 80s AAAAAAEEA 90s AAAAAAEEA
023005	60s -----eAADAD 70s AAAAAAEEA 80s AAAAAAEEA 90s AAAAAAEEA	024005	50s -----eeEAAA 60s AAAAAAEEA 70s AAAAAAEEA 80s AAAAAAEEA	025019	60s AAAAAAEEA 70s AAAAAAEEA 80s AAAAAAEEA 90s AAAAAAEEA
		024006	60s AAAAAAEEA 70s AAAAAAEEA 80s AAAAAAEEA 90s AAAAAAEEA	025020	60s AAAAAAEEA 70s AAAAAAEEA 80s AAAAAAEEA 90s AAAAAAEEA
		024007	60s AAAAAAEEA 70s AAAAAAEEA 80s AAAAAAEEA 90s AAAAAAEEA	025021	60s AAAAAAEEA 70s AAAAAAEEA 80s AAAAAAEEA 90s AAAAAAEEA
		024008	60s AAAAAAEEA 70s AAAAAAEEA 80s AAAAAAEEA 90s AAAAAAEEA	025022	60s AAAAAAEEA 70s AAAAAAEEA 80s AAAAAAEEA 90s AAAAAAEEA

Naturalised daily and monthly flows

Stn. number	Naturalised daily, and monthly flows	Stn. number	Naturalised daily, and monthly flows	Stn. number	Naturalised daily, and monthly flows
023001	50s -----FEEE 60s CC 70s CA 80s CA 90s CA	023015	40s -----FFFFF 50s FEFEFEFEF	025001	50s -----FEEE 60s AC-CAAC 70s FFFF 80s FFFF 90s FFFF
023002	60s -----CAAAA 70s AC 80s AC 90s AC	024001	60s -----CA 70s AC 80s AC 90s AC	025002	60s FFFF 70s FFFF 80s FFFF 90s FFFF
023003	50s -----F 60s EEEEEBAAAA 70s AAAC 80s AAAC 90s AAAC	024003	50s -----FE 60s EEEEEBACAA 70s AC-CC 80s AC-CC 90s AC-CC	025004	50s -----FEE 60s EEEEEBAACC 70s C 80s C 90s C
023007	60s -----CAAAA 70s BCAC 80s BCAC 90s BCAC			025008	60s -----CAAB 70s BBEF 80s BBEF 90s BBEF

YORKSHIRE WATER



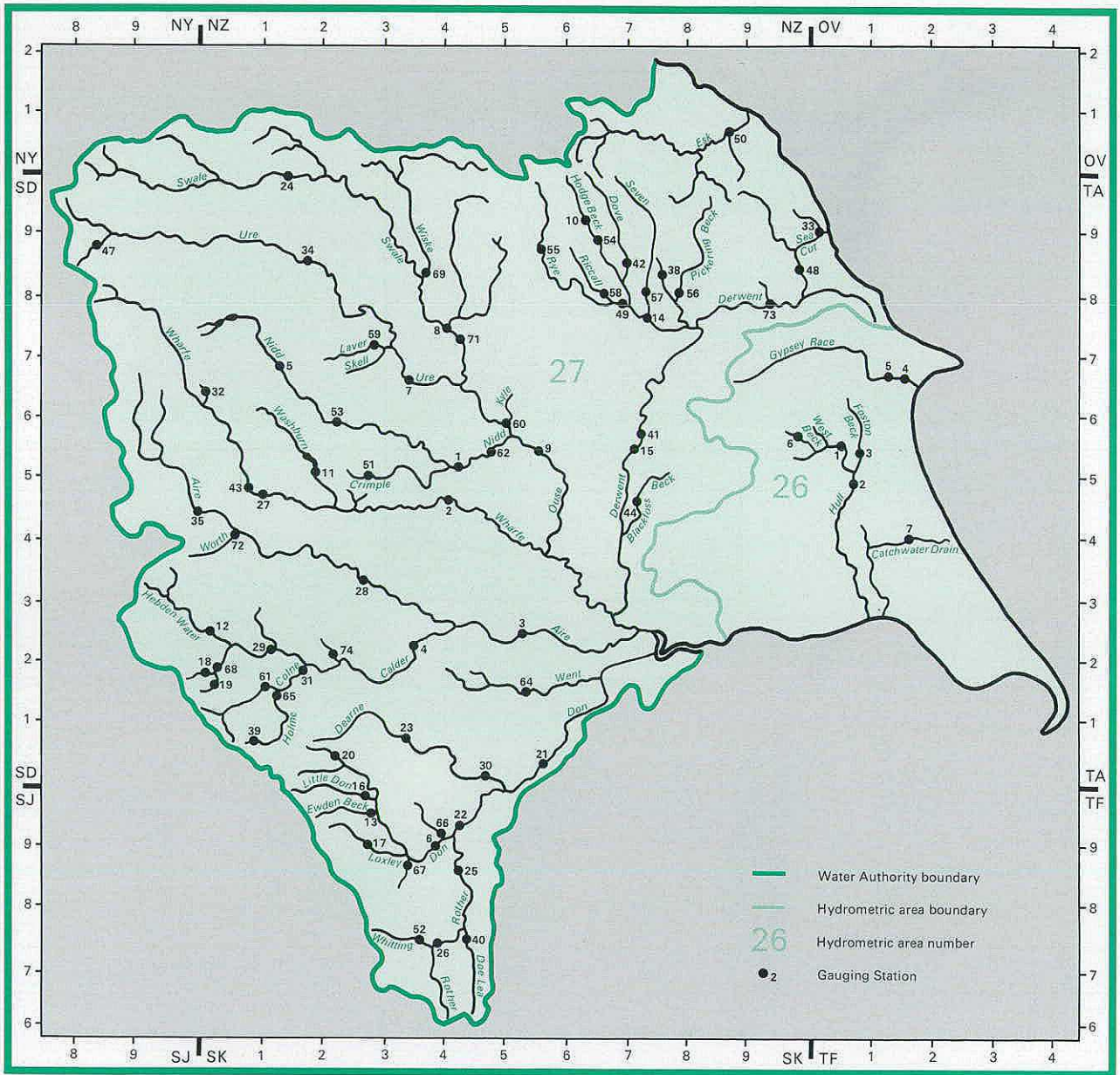
Area: 13,503 km²

Average Rainfall (1941-70): 833 mm

Headquarters of Yorkshire Water:

West Riding House
67 Albion Street
Leeds LS1 5AA

Telephone: Leeds (0532) 448201



Gauging Station Register

Station number	River name	Station name	Grid reference	Catchment area (sq km)	Station type	Period of record	Mean ann. rainfall (mm)	Mean ann. runoff (mm)	Max. ann. runoff (mm)	Year of max.	Min. ann. runoff (mm)	Year of min.	Mean flow (m ³ s ⁻¹)	Min. mon. flow (m ³ s ⁻¹)	Month/Year of min.	Mean ann. flood (m ³ s ⁻¹)	Base flow index	10 Percentile (m ³ s ⁻¹)	95 Percentile (m ³ s ⁻¹)	
026001	West Beck	Wansford Bridge	TA 064560	192.0	MIS	1953..74	729	410	688	66	156	73	2.49	0.38	02/65	6.4	.95	5.4	0.54	
026002	Hull	Hempholme	TA 080498	378.1	MIS	1961..85	710	319	451	80	114	73	3.83	0.45	08/76	12.4	.86	8.9	0.82	
026003	Foston Beck	Foston Mill	TA 093548	57.2	TP	1959..85	738	378	707	69	85	73	0.69	0.10	09/73	1.9	.95	1.5	0.19	
026004	Gypsey Race	Bridlington	TA 165675	253.8	C	1971..85	737	33	79	79	74	0.26	0.00	10/85			.88	0.8		
026005	Gypsey Race	Boyrton	TA 137677	240.0	FV	1981-85	781	34	36	84	19	83	0.26	>0.00	10/85			.95	0.5	0.01
026006	Elmswell Bk	Little Driffield	TA 009575	136.0	TP	1984-85	141	157	84	126	85	0.61	0.01	10/84			.97	1.5	0.02	
026007	Catchwater	Witherwick	TA 171403	15.5	FL	1965..79	210	401	69	79	73	0.10	0.00	08/76		1.7	.42	0.3		
027001	Nidd	Hunsingore Weir	SE 428530	484.3	B	1935..81	969	531	800	79	296	64	8.15	0.84	09/59	133.4	.50	18.8	1.84	
027002	Wharfe	Flint Mill Weir	SE 422473	758.9	B VA	1937..85	1136	719	968	66	474	75	17.31	0.99	08/76	242.9	.39	41.2	2.18	
027003	Aire	Beal Weir	SE 534255	1932.1	B VA	1958..85	979	596	832	66	347	75	36.50	5.05	08/76		.53	76.4	8.77	
027004	Calder	Newlands	SE 365220	899.0	VA	1960..76	1053	625	883	66	399	75	17.81	4.51	10/72		.53	38.2	4.89	
027005	Nidd	Gouthwaite Res	SE 141683	113.7	MIS	1936..85	1368	734	1136	54	399	75	2.65	0.27	09/59			.48	7.8	0.61
027006	Don	Hadfields Weir	SK 390910	373.0	B VA	1965-85	1022	474	667	79	246	76	5.60	1.02	08/76	106.5	.48	11.1	1.47	
027007	Ure	Westwick Lock	SE 356671	914.6	B VA	1958..85	1131	707	933	66	446	75	20.50	1.29	08/76	264.9	.40	47.9	2.75	
027008	Swale	Leckby Grange	SE 415748	1345.6	VA	1955..84	851	472	610	58	261	64	20.13	2.08	09/59	175.1	.48	41.9	3.78	
027009	Ouse	Skalton	SE 568554	3315.0	VA	1982-85	946	458	497	82	407	85	48.13	7.01	07/84	302.0	.43	123.3	7.89	
027010	Hodge Beck	Bransdale Weir	SE 627944	18.9	TP	1936..79	1001	586	844	60	259	64	0.35	0.04	09/59	10.6	.48	0.7	0.06	
027011	Washburn	Lindley Wood	SE 219488	87.3	MIS	1953-76	1006	209	430	60	71	75	0.58	0.05	01/76			.38	1.0	0.16
027012	Hebden Wtr	High Greenwood	SD 973309	36.0	TP	1954-73	1402	611	910	66	315	71	0.70	0.22	09/55	13.5	.44	1.7	0.23	
027013	Ewden Beck	More Hall Res	SK 289957	26.4	MIS	1954..80	1159	352	564	60	91	76	0.30	0.06	01/76			.38	0.6	0.05
027014	Rye	Little Habton	SE 743771	679.0	VA	1958..71	805	429	624	60	206	64	9.23	1.41	09/59	89.8	.62	19.1	1.74	
027015	Derwent	Stamford Bridge	SE 714557	1634.3	VA	1961-75	729	317	454	66	188	64	16.44	3.79	09/84	103.3	.69	31.8	5.35	
027016	Little Don	Underbank Res	SK 253992	38.6	MIS	1956..80	1177	523	794	80	120	76	0.64	0.12	12/75			.40	1.5	0.14
027017	Loxley	Damflask Res	SK 286906	43.5	MIS	1956..80	1145	410	623	66	115	76	0.56	0.09	12/59			.39	0.9	0.11
027018	Ryburn	Ryburn Res	SE 025187	10.7	MIS	1956-74	1336	463	781	58	121	73	0.16	0.00	06/73			.33	0.3	
027019	Booth Dean	Booth Wd Mill	SE 033166	15.9	CC	1956-74	1386	446	744	66	238	73	0.23	0.08	10/59			.31	0.4	0.04
027020	Scout Dike St	Scout Dike Res	SE 236047	15.2	VP	1956..80	1038	230	421	80	56	76	0.11	>0.00	11/78			.13	0.2	
027021	Don	Doncaster	SE 569040	1256.2	VA	1959..85	783	395	567	60	223	75	15.72	3.80	09/59	163.1	.58	34.3	5.14	
027022	Don	Rotherham Weir	SK 427928	826.0	VA	1960..71	869	465	607	66	298	64	12.18	3.15	09/84	147.5	.52	24.1	3.27	
027023	Dearne	Barnsley Weir	SE 350073	118.9	CB	1960-85	779	380	547	69	197	75	1.43	0.20	08/76	27.5	.47	3.0	0.26	
027024	Swale	Richmond	NZ 146006	381.0	VA	1961..80	1211	857	1217	67	543	75	10.35	0.45	05/80	273.3	.35	24.2	1.26	
027025	Rother	Woodhouse Mill	SK 432857	352.2	VA	1961..85	777	381	570	66	227	64	4.25	0.69	10/72	54.5	.53	9.1	0.98	
027026	Rother	Whittington	SK 394744	165.0	VA	1963..85	798	341	499	66	189	75	1.78	0.20	08/76	41.4	.45	3.9	0.26	
027027	Wharfe	Ilkley	SE 112481	443.0	VA	1961..75	1330	980	1326	67	702	64	13.77	1.85	06/75	273.7	.37	33.0	2.12	
027028	Aire	Armsley	SE 281340	691.5	B VA	1961..85	1067	669	858	66	432	71	14.68	2.28	08/76	131.9	.47	33.3	3.23	
027029	Calder	Elland	SE 124219	341.9	C VA	1961..85	1285	806	1208	81	560	64	8.74	1.74	08/76	187.8	.49	18.5	2.30	
027030	Dearne	Adwick	SE 477020	310.8	C VA	1963..85	713	344	534	69	213	76	3.39	0.76	08/76	44.2	.60	6.8	1.06	
027031	Colne	Colnebridge	SE 174199	245.0	C VA	1964..85	1163	583	859	66	320	75	4.53	0.37	08/76	127.8	.39	9.8	0.71	
027032	Hebden Beck	Hebden	SE 025643	22.2	MIS	1966..85	1423	245	321	79	172	73	0.17	0.02	08/83	3.8	.41	0.4	0.02	
027033	Sea Cut	Scarborough	TA 028908	33.2	CB	1969..85	787	136	2074	79	591	73	1.41	0.06	08/76	39.2	.42	3.6	0.08	
027034	Ure	Kilgram Bridge	SE 190860	510.2	VA	1967-85	1351	931	1175	79	645	75	15.07	0.56	08/76	236.2	.33	37.1	1.13	
027035	Aire	Kildwick Bridge	SE 013457	282.3	VA	1968..85	1162	675	900	81	408	71	6.04	0.29	08/76	64.3	.37	15.3	0.52	
027038	Costa Beck	Gatehouses	SE 774836	7.8	C	1970..85	711	2442	3004	79	2066	73	0.60	0.37	09/85			.97	0.8	0.41
027039	Holme	Digley Reservoir	SE 112069	9.1	VN	1967-73	1444	301	367	68	267	71	0.09	0.06	11/69			.38	0.1	0.03
027040	Doe Lea	Staveley	SK 443746	67.9	FL	1970-85	712	323	490	79	173	76	0.69	0.10	08/76			.51	1.4	0.17
027041	Derwent	Buttercrambe	SE 731587	1586.0	C	1973-85	795	349	503	79	233	75	17.53	3.22	08/76			.68	35.1	4.92
027042	Dove	Kirkby Mills	SE 705855	59.2	FV	1972-85	943	586	828	79	341	73	1.10	0.16	08/76			.60	2.1	0.25
027043	Wharfe	Addingham	SE 092494	427.0	C VA	1974..85	1395	1095	1443	79	775	75	14.82	1.14	08/76			.32	35.0	1.54
027044	Blackfoss Bk	Sandhills Bridge	SE 725475	47.0	FV	1974..85	689	288	423	79	146	75	0.43	0.01	08/76			.45	1.0	0.04
027047	Snaizeholme	Low Houses	SD 833883	10.2	FL	1972..85	1710	1651	1991	80	621	72	0.53	0.00	07/72			.19	1.5	
027048	Derwent	West Ayton	SE 990853	127.0	TP	1972..85	887	68	92	79	48	74	0.27	0.00	08/76			.75	0.5	0.05
027049	Rye	Ness	SE 696791	238.7	FV	1974-85	895	499	665	79	313	75	3.78	0.71	08/76			.66	7.3	0.89
027050	Esk	Sleights	NZ 865081	308.0	VA	1970..85		357	409	72	389	71	3.48	0.27	08/76			.45	7.8	0.58
027051	Crimple	Burn Bridge	SE 284519	8.1	FV	1972..85	838	440	541	77	323	73	0.11	>0.00	08/76			.31	0.3	0.01
027052	Whitting	Sheepbridge	SK 376747	50.2	C	1976-85	897	550	665	79	354	85	0.88	0.12	08/76			.48	1.9	0.18
027053	Nidd	Birstwith	SE 230603	217.6	VA	1975..85	1321	756	1036	79	583	85	5.21	0.65	08/84			.44	12.7	1.01
027054	Hodge Beck	Cherry Farm	SE 652902	37.1	FV	1974..85	978	594	715	80	496	83	0.70	0.10	08/76			.53	1.5	0.15
027055	Rye	Broadway Foot	SE 560883	131.7	C	1974..85	925	566	695	78	353	76	2.38	0.46	08/76			.56	4.1	0.55
027056	Pickering Bk	Ings Bridge	SE 791819	68.6	C	1974..85	879	394	511	80	304	76	0.86	0.16	08/76			.69	1.5	0.28
027057	Seven	Normanby	SE 736821	121.8	C	1974..85	95													

			Period	Rainfall (mm)	Runoff (mm)	Mean flow (m ³ s ⁻¹)	Peak flow (m ³ s ⁻¹)	Date of peak	Min. daily flow (m ³ s ⁻¹)	Date of min.	10 Percentile (m ³ s ⁻¹)	50 Percentile (m ³ s ⁻¹)	95 Percentile (m ³ s ⁻¹)
				% of pre-1981	% of pre-1981								
027030	Desme at Adwick	C.A: 310.8 km ²	63..80	705	336	3.31	58.4	13/04	0.57	18/08	6.9	2.20	1.01
M.A: YWA	Level: 13m	F.A.F: GEI						1970		1976			
B-full: 45.0 m ³ s ⁻¹													
Comment: Crump weir 5.5m wide with broad-crested flanking weirs. Flows greater than the capacity of the Crump weir are rated by current meter from a cableway 25m upstream. The flow regime is substantially effected by industrial water use, water supply abstractions and sewage effluent augmentation. # Geology is primarily Coal Measures.													
			1981	818 116	401 119	3.94	35.0	09/02	1.21	06/09	7.2	2.80	1.37
			1982	717 102									
			1983	796 113	412 123	4.06	37.9	09/12	1.22	22/11	8.0	2.73	1.49
			1984	749 106	384 114	3.78	34.8	03/11	1.24	02/09	7.2	2.56	1.32
			1985	594 84	273 81	2.68	39.5	11/04	1.04	13/10	4.5	2.19	1.22
027031	Coine at Coinebridge	C.A: 245.0 km ²	64..80	1150	578	4.49	272.1	16/10	0.17	22/08	9.5	2.77	0.70
M.A: YWA	Level: 48m	F.A.F: SPGI						1987		1976			
S-full: 42.0 m ³ s ⁻¹													
Comment: Curved broad-crested weir 52m wide with central Crump notch 3.8m wide for more accurate low flow measurement. Rated by a current meter at a cableway 0.2km downstream. Substantial artificial influences due to numerous reservoirs. # Mixed geology with Millstone Grit in the upper catchment and Coal measures in the lower part. Catchment comprises moorland headwaters with heavily urbanised valleys.													
			1981	1397 121	777 134	6.04	143.0	21/03	0.72	02/08	14.5	3.14	1.02
			1982	1219 106	633 110	4.92	113.9	02/01	0.58	30/05	10.6	2.66	0.83
			1983	1276 111	675 117	5.24	168.0	08/12	0.54	14/08	12.3	3.10	0.83
			1984	1135 99	544 94	4.22	82.8	06/02	0.36	01/08	8.7	1.69	0.50
			1985	1000 87	376 65	2.91	51.1	21/12	0.60	02/11	5.7	1.87	0.86
027032	Hebden Beck at Hebden	C.A: 22.2 km ²	66..80	1392	246	0.17	5.8	01/07	0.01	21/07	0.4	0.10	0.03
M.A: YWA	Level: 228m	F.A.F: P						1968		1975			
S-full: 6.0 m ³ s ⁻¹													
Comment: Thin-plate V notch (half 90 degree) in parallel with a 3.35m wide Crump weir. The capacity of the V notch is limited by a horizontal cut-off wall and at high flows it behaves as a submerged orifice. Steep stream with heavy bedload - substantial upstream accretion, some erosion evident on the weir surfaces. Predominately natural flow regime but true drainage area uncertain due to numerous swallow holes and resurgences. # Upland catchment, mostly moorland developed on Carboniferous Limestone, Millstone Grit and shales.													
			1981	1571 113									
			1982	1447 104	232 94	0.16	5.4	02/01	0.02	04/06	0.3	0.09	0.03
			1983	1584 114	240 98	0.17	5.3	09/12	0.01	19/08	0.4	0.11	0.01
			1984	1481 106	235 96	0.17	5.9	12/01	0.01	23/08	0.4	0.07	0.02
			1985	1465 105	241 98	0.17	2.5	04/08	0.03	07/07	0.3	0.11	0.03
027033	Sea Cut at Scarborough	C.A: 33.2 km ²	69..80	782	1310	1.38	47.5	28/03	0.05	27/08	3.6	0.55	0.08
M.A: YWA	Level: 21m	F.A.F: R						1979		1976			
B-full: 115.0 m ³ s ⁻¹													
Comment: Compound broad-crested weir 21m wide with central notch 2.9m wide. Rated by model tests. The channel was artificially extended in the last century to join the River Derwent and now acts as an overflow channel at times of high flow. Variable contributing area - the natural catchment which drains part of the North York Moors is increased during floods by runoff from the headwaters of the Derwent.													
			1981	835 107	1478 113	1.56	36.6	22/03	0.09	24/09	3.7	0.81	0.12
			1982	769 98	1355 103	1.43	45.4	23/06	0.10	17/09	3.4	0.68	0.14
			1983	776 99	1373 105	1.45	55.7	09/12	0.09	06/09	3.7	0.72	0.11
			1984	731 93	1326 101	1.40	18.6	01/02	0.07	20/08	3.8	0.70	0.07
			1985	867 111	1447 110	1.52	25.5	21/01	0.12	07/07	3.3	0.84	0.16
027034	Ure at Kilgram Bridge	C.A: 510.2 km ²	67-80	1334	911	14.74	318.8	17/10	0.28	25/08	36.4	7.82	1.24
M.A: YWA	Level: 88m	F.A.F: P						1967		1976			
B-full: 375.0 m ³ s ⁻¹													
Comment: Velocity-area station rated by current meter. Low flow control is exercised by the silt of Kilgram Bridge 70m downstream. Predominantly natural flow; contains washland storage. # Geology is predominantly Carboniferous Limestone and Millstone Grit. Rural catchment.													
			1981	1493 112	1051 115	17.00	265.3	07/03	0.58	09/09	42.7	8.09	0.95
			1982	1426 107	1054 116	17.05	367.6	03/01	0.87	12/08	36.9	8.67	1.27
			1983	1469 110	979 107	15.84	203.8	09/12	0.58	15/08	42.4	8.58	0.84
			1984	1293 97	930 102	15.04	230.0	04/02	0.40	30/07	39.3	7.20	0.53
			1985	1294 97	921 101	14.85	275.1	21/12	1.25	10/07	32.9	8.28	2.66
027035	Aire at Kildwick Bridge	C.A: 282.3 km ²	68..80	1150	627	5.61	98.1	05/12	0.18	23/08	13.7	2.89	0.54
M.A: YWA	Level: 87m	F.A.F: S						1972		1978			
B-full: 77.0 m ³ s ⁻¹													
Comment: Velocity-area station rated by current meter cableway 150m downstream. Low flow control is the sill of the bridge. Washland storage and headwater reservoirs influence the flow pattern. # Geology is mainly Carboniferous Limestone. Rural catchment.													
			1981	1292 112	900 144	8.06	69.7	22/03	0.40	09/09	20.6	3.80	0.60
			1982	1175 102	779 124	6.97	66.6	04/01	0.48	11/08	17.6	3.56	0.64
			1983	1234 107	815 130	7.29	68.3	09/12	0.27	15/08	18.1	3.90	0.37
			1984	1152 100	737 118	6.60	63.4	03/11	0.22	27/07	18.5	2.57	0.26
			1985	1090 95	711 113	6.35	70.8	22/12	0.67	07/07	15.1	3.41	0.99
027038	Costs Beck at Gatehouses	C.A: 7.8 km ²	70..80	689	2515	0.62	3.2	30/07	0.38	03/09	0.8	0.58	0.44
M.A: YWA	Level: 22m	F.A.F: G						1978		1976			
Comment: Crump weir 5m wide. Theoretical rating. Some bypassing of the gauge via West Drain. The data indicates that the groundwater catchment greatly exceeds the topographical catchment. Flows are predominantly natural apart from some pumping at Keldhead Spring and abstractions / returns from some cress beds and a trout farm. # Small rural catchment on the southern edge of the North York Moors. Geology is permeable Oolitic Limestone.													
			1981	891 129	2694 107	0.67	1.4	21/03	0.50	07/09	0.8	0.64	0.52
			1982	765 111	2149 85	0.53	1.1	03/01	0.35	11/08	0.7	0.51	0.37
			1983	720 104									
			1984	678 98	2245 89	0.56	1.2	01/02	0.38	01/11	0.8	0.48	0.40
			1985	751 109									
027040	Doe Lea at Staveley	C.A: 67.9 km ²	70-80	701	313	0.67	13.1	16/07	0.06	27/08	1.4	0.37	0.16
M.A: YWA	Level: 48m	F.A.F: GEI						1973		1976			
S-full: 9.8 m ³ s ⁻¹													
Comment: Rectangular flume, throat width: 3m. Theoretical rating. Structure has been affected by mining subsidence. Artificial influences include a net import of water including mine drainage. # Mixed geology comprising Coal Measures, Permian Marls and Magnesium Limestone. Predominantly rural catchment and urbanised lower reaches.													
			1981	856 122	448 143	0.96	13.2	30/12	0.18	26/08	1.9	0.55	0.23
			1982	714 102	329 105	0.71	13.6	22/06	0.21	17/09	1.3	0.46	0.25
			1983	723 103	367 117	0.79	13.7	01/06	0.20	06/11	1.6	0.50	0.23
			1984	705 101	325 104	0.70	9.8	16/01	0.17	29/08	1.2	0.43	0.19
			1985	658 94	246 79	0.53	9.3	21/01	0.18	25/10	0.9	0.37	0.21
027041	Derwent at Buttercrambe	C.A: 1586.0 km ²	73-80	796	359	18.03	123.7	29/12	2.70	23/08	37.9	12.87	4.81
M.A: YWA	Level: 10m	F.A.F: P						1978		1976			
S-full: 74.8 m ³ s ⁻¹													
Comment: Compound Crump weir, 20m wide, with current meter rating for high flows. Supersedes 27015. Peak flows from the headwaters upstream of Forge Valley (8% catchment) are diverted down the Sea Cut (27033). # Mixed geology of clays, shales and limestone. Rural catchment draining the North York Moors.													
			1981	883 111	391 109	19.67	114.7	23/03	6.08	09/09	35.6	15.76	7.02
			1982	759 95	325 91	16.37	37.4	05/01	4.91	17/09	30.7	12.38	5.32
			1983	770 97	310 86	15.59	97.8	10/12	5.04	15/08	31.3	12.60	5.37
			1984	753 95	322 90	16.20	92.1	29/01	3.91	28/08	32.6	10.77	4.25
			1985	811 102	322 90	16.14	76.9	12/04	5.78	25/07	27.6	12.97	6.50
027042	Dove at Kirkby Mills	C.A: 59.2 km ²	72-80	946	594	1.11	56.4	12/09	0.13	26/08	2.2	0.75	0.24
M.A: YWA	Level: 36m	F.A.F: N						1976		1976			
Comment: Flat V weir, 8m wide. Theoretical rating. Predominantly natural flows. Subsurface inflow from River Severn catchment may represent a significant proportion of summer baseflow. # Jurassic limestone, clays and sandstone. Rural catchment with moorland headwaters.													
			1981	1047 111	640 108	1.20	39.3	22/03	0.32	09/09	2.1	0.93	0.38
			1982	931 98	563 95	1.06	37.4	03/01	0.23	12/08	2.0	0.80	0.27
			1983	878 93	534 90								

		Period	Rainfall (mm)	Runoff (mm)	Mean flow (m ³ s ⁻¹)	Peak flow (m ³ s ⁻¹)	Date of peak	Min. daily flow (m ³ s ⁻¹)	Date of min.	10 Percentile (m ³ s ⁻¹)	50 Percentile (m ³ s ⁻¹)	95 Percentile (m ³ s ⁻¹)	
			% of pre-1981	% of pre-1981									
027044	Blackfoss Beck at Sandhills Bridge	C.A: 47.0 km ²	74-80	576	295	0.44	10.7	01/01	0.00	20/08	1.0	0.18	0.03
M.A: YWA	Level: 6m	F.A.F: EI											
Comment:	Flat V weir, 4m wide. Theoretical rating. Low flow gauge, subject to drowning. High flows should be treated with caution, in summer 1984 the weir crest was lowered for land drainage requirements and its modular limit was reduced. # Predominantly a rural catchment draining the western side of the Yorkshire Wolds.												
			1981	757	112	0.50	11.8	25/04	0.06	02/09	1.0	0.27	0.07
			1982	648	95	0.30	7.5	03/01	0.04	06/08	0.7	0.15	0.05
			1983	708	105	0.44	12.1	09/12	0.06	05/09	1.1	0.24	0.07
			1984	732	108								
			1985	684	101	0.41	15.9	21/01	0.06	05/10	0.9	0.21	0.07
027048	Derwent at West Ayton	C.A: 127.0 km ²	72..80	886	69	0.28	2.3	28/03	0.00	21/09	0.5	0.25	0.05
M.A: YWA	Level: 34m	F.A.F: PG											
Comment:	Compound thin-plate weir, 11m wide. Theoretical rating. Catchment contains swallow holes. High flows are diverted down the Sea Cut (27033) # Jurassic sandstone, limestone and shales. Predominantly rural catchment with substantial forest cover.												
			1981	939	106	0.36	1.2	22/03	0.03	03/11	0.6	0.36	0.09
			1982	820	93	0.22	2.8	23/06	0.02	01/06	0.4	0.18	0.07
			1983	874	99	0.27	1.2	09/12	0.00	07/10	0.4	0.27	0.06
			1984	844	95	0.22	1.1	27/01	0.00	12/09	0.4	0.23	0.02
			1985	920	104	0.28	1.3	13/11	0.02	23/10	0.4	0.30	0.05
027049	Rye at Neas	C.A: 238.7 km ²	74-80	915	525	3.98	74.1	12/09	0.60	26/08	8.1	2.70	0.87
M.A: YWA	Level: 26m	F.A.F: N											
Comment:	Flat V weir, 12m wide. Theoretical rating. Significant groundwater abstractions. # Geology is Jurassic limestone, clays and sandstones. Predominantly rural catchment with moorland headwaters.												
			1981	952	104	3.95	63.5	22/03	1.13	09/09	6.9	3.22	1.32
			1982	841	92	3.53	68.2	03/01	0.86	17/09	6.2	2.75	0.99
			1983	834	91	3.31	45.1	09/12	0.84	07/09	6.5	2.67	0.97
			1984	829	91	3.34	39.9	03/11	0.61	27/08	6.6	2.26	0.72
			1985	901	98	3.49	39.1	11/04	1.10	25/07	5.7	2.90	1.40
027051	Crimple at Burn Bridge	C.A: 8.1 km ²	72..80	811	424	0.11	6.1	27/12	0.00	05/09	0.3	0.05	0.01
M.A: YWA	Level: 112m	F.A.F: N											
Comment:	Flat V weir, 3.5m wide. Theoretical rating. Subcatchment flows have been measured by Leeds University. No artificial influences. # Geology is Carboniferous shales and grits. Rural catchment, mainly used for pasture.												
			1981	973	120	0.14	3.9	02/02	0.01	04/09	0.3	0.06	0.01
			1982	865	107								
			1983	900	111	0.13	7.4	09/12	0.00	15/08	0.3	0.05	0.01
			1984	881	109	0.12	4.9	03/11	0.00	11/07	0.3	0.04	0.01
			1985	804	99	0.10	4.7	14/05	0.01	03/07	0.2	0.05	0.01
027052	Whitting at Sheepbridge	C.A: 50.2 km ²	76-80	946	582	0.93	39.3	30/05	0.11	05/09	2.1	0.52	0.18
M.A: YWA	Level: 70m	F.A.F: SE											
Comment:	Crump weir, 6m wide. Theoretical rating. # Geology is Coal Measures sandstones and shales. Industrialised catchment with moorland headwaters.												
			1981	1043	110	1.01	17.5	28/04	0.16	05/09	2.0	0.61	0.19
			1982	978	93	0.89	49.2	22/06	0.18	15/09	1.9	0.43	0.20
			1983	901	95	0.88	25.9	31/05	0.17	29/08	1.9	0.51	0.18
			1984	888	94	0.82	15.2	06/02	0.13	02/09	1.8	0.49	0.17
			1985	716	76	0.56	14.5	21/12	0.16	05/10	1.1	0.39	0.18
027053	Nidd at Birstwith	C.A: 217.6 km ²	75..80	1322	763	5.27	203.4	08/03	0.62	22/06	13.4	2.77	1.10
M.A: YWA	Level: 67m	F.A.F: SRP											
Comment:	Velocity-area station approximately 17m wide, with current metering from bridge at the section. Heavily reservoird with substantial effect on flows. # Geology is mostly Millstone Grit. Rural catchment.												
			1981	1386	105	5.69	169.2	21/03	0.94	07/09	11.7	2.85	1.06
			1982	1329	101	5.46	185.7	14/03	0.98	11/08	12.6	2.51	1.04
			1983	1375	104	5.41	141.9	09/12	0.83	30/08	14.0	2.67	0.91
			1984	1266	96	5.28	204.4	13/01	0.39	21/08	12.3	1.68	0.82
			1985	1235	93	4.02	91.4	21/12	0.99	25/07	8.1	2.54	1.09
027054	Hodge Beck at Cherry Farm	C.A: 37.1 km ²	74..80	998	632	0.74	15.0	14/08	0.09	26/08	1.8	0.50	0.16
M.A: YWA	Level: 38m	F.A.F: N											
Comment:	Limited range Flat V weir, 6m wide. Theoretical rating. Superseded the gauge upstream at Bransdale (027010). Flows unaffected by artificial influences. # Geology is mainly shales and sandstones. Rural catchment.												
			1981	1059	106	0.73	17.4	21/03	0.18	09/09	1.3	0.47	0.21
			1982	922	92	0.63	16.1	03/01	0.14	12/08	1.3	0.42	0.15
			1983	892	89	0.58	14.8	09/12	0.13	31/08	1.3	0.41	0.15
			1984	910	91	0.64	10.5	02/01	0.11	27/08	1.3	0.41	0.13
			1985	961	96	0.67	12.4	11/04	0.17	25/07	1.1	0.49	0.21
027055	Rye at Broadway Foot	C.A: 131.7 km ²	74..80	947	597	2.49	68.6	24/02	0.41	19/08	4.4	1.37	0.54
M.A: YWA	Level: 38m	F.A.F: N											
Comment:	Limited range Crump weir, 15m wide. Theoretical rating. Low modular limit, higher flows are only approximate. # Geology is Jurassic limestone, shales and sandstones. Rural catchment draining the Cleveland Hills.												
			1981	969	102	2.42	82.3	21/03	0.73	09/09	3.9	1.68	0.81
			1982	838	88								
			1983	857	90	2.06	59.9	09/12	0.50	05/09	4.1	1.39	0.56
			1984	888	94	2.15	68.5	03/11	0.39	27/08	4.0	1.35	0.48
			1985	934	99	2.19	47.9	11/04	0.66	25/07	3.4	1.67	0.81
027056	Pickering Beck at Ings Bridge	C.A: 68.6 km ²	74..80	904	423	0.92	21.9	29/03	0.14	24/08	1.7	0.60	0.19
M.A: YWA	Level: 28m	F.A.F: N											
Comment:	Limited range Crump weir, 7m wide. Theoretical rating. Low modular limit, higher flows are only approximate. Flow unaffected by artificial influences. # Geology is mostly grits and limestones. Rural catchment draining parts of the North York Moors.												
			1981	938	104	1.00	11.3	24/07	0.38	09/09	1.7	0.80	0.44
			1982	782	87	0.74	14.9	04/01	0.25	12/09	1.3	0.58	0.27
			1983	827	91	0.73	15.2	09/12	0.26	31/08	1.4	0.59	0.29
			1984	824	91	0.73	5.6	01/02	0.23	30/08	1.3	0.53	0.25
			1985	872	96	0.73	5.4	21/01	0.29	02/10	1.2	0.59	0.32
027057	Seven at Normanby	C.A: 121.6 km ²	74..80	984	516	1.99	120.2	17/10	0.04	14/08	4.0	0.87	0.14
M.A: YWA	Level: 29m	F.A.F: I											
Comment:	Limited range Crump weir, 8m wide. Theoretical rating. Low modular limit, higher flows are only approximate. There is significant loss of water underground to the adjacent river Dove. # Geology is Jurassic Limestone, shales and sandstones. Rural catchment with moorland headwaters. Contains significant areas of forestry.												
			1981	1029	105	2.09	115.8	22/03	0.30	15/07	3.8	1.00	0.36
			1982	882	90	1.74	119.0	03/01	0.20	12/08	3.3	0.82	0.25
			1983	872	89	1.50	127.7	09/12	0.18	07/09	3.2	0.78	0.21
			1984	858	87	1.58	74.1	24/03	0.14	26/08	3.2	0.76	0.19
			1985	906	92	1.62	59.1	11/04	0.24	25/07	3.0	0.94	0.32
027058	Riccal at Crook House Farm	C.A: 57.6 km ²	74..80	881	278	0.51	18.1	27/12	0.16	31/08	0.9	0.26	0.18
M.A: YWA	Level: 30m	F.A.F: N											
Comment:	Limited range Flat V weir, 4m wide. Theoretical rating. Low modular limit, higher flows are only approximate. # Geology is shales, sandstones and limestones. Rural catchment draining the North York Moors.												
			1981	968	110	0.50	18.2	26/09	0.22	28/08	0.9	0.31	0.23
			1982	832	94	0.46	18.4	03/01	0.21	10/08	0.9	0.27	0.22
			1983	794	90	0.37	10.6	09/12	0.20	01/11	0.7	0.27	0.20
			1984	795	90	0.43	7.7	02/01	0.18	23/08	0.8	0.25	0.20
			1985	862	98	0.38	9.3	11/04	0.20	25/07	0.6	0.27	0.22

	Period	Rainfall (mm)	Runoff (mm)	Mean flow (m ³ s ⁻¹)	Peak flow (m ³ s ⁻¹)	Date of peak	Min. daily flow (m ³ s ⁻¹)	Date of min.	10 Percentile (m ³ s ⁻¹)	50 Percentile (m ³ s ⁻¹)	95 Percentile (m ³ s ⁻¹)		
027059	Lever at Ripon	C.A.: 87.5 km ²	77-80	1025	432	1.20	39.1	26/12	0.11	31/10	2.6	0.48	0.14
M.A.: YWA	Level: 30m	F.A.F.: SP	S-full: 39.1 m ³ s ⁻¹					1978		1978			
Comment: Crump weir, 10m wide. Theoretical rating. Insensitive at low flows, but a notch in the staffing basin toe wall could be used for very low flow measurement.													
	1981	1036	101	400	93	1.11	22.6	21/03	0.10	06/09	2.4	0.62	0.13
	1982	1010	99	410	95	1.14	23.5	03/01	0.13	16/09	2.3	0.53	0.18
	1983	957	93	404	94	1.12	29.7	09/12	0.12	30/08	2.7	0.61	0.15
	1984	927	90	385	89	1.07	24.1	13/01	0.05	29/08	2.5	0.49	0.08
	1985	919	90	303	70	0.84	13.3	14/05	0.15	25/07	1.7	0.51	0.19
027061	Colne at Longroyd Bridge	C.A.: 72.3 km ²	78-80	1468	709	1.63	37.8	28/12	0.29	26/07	3.6	0.99	0.39
M.A.: YWA	Level: 73m	F.A.F.: SPGI	S-full: 22.1 m ³ s ⁻¹					1978		1979			
Comment: Limited range Flat V weir, 12m wide. Theoretical rating. Reservoirs in catchment. # Geology is Millstone Grit. Moorland headwaters with urban and industrial development in the lower catchment.													
	1981	1576	107	852	120	1.95	38.9	21/03	0.27	05/09	4.6	1.03	0.40
	1982	1359	93	701	99	1.61	34.3	19/12	0.25	26/07	3.5	0.91	0.34
	1983	1635	111	721	102	1.65	35.1	31/01	0.20	13/07	3.7	1.00	0.29
	1984	1250	85	579	82	1.33	37.2	12/01	0.11	25/08	2.9	0.57	0.21
	1985	1167	79	457	64	1.04	22.9	11/04	0.25	11/07	2.1	0.65	0.35
027062	Nidd at Skip Bridge	C.A.: 516.0 km ²	79-80	1067	961	15.73	286.6	27/12	2.01	24/07	30.9	5.73	2.17
M.A.: YWA	Level: 8m	F.A.F.: SRPI	S-full: 25.5 m ³ s ⁻¹					1979		1979			
Comment: Limited range Flat V weir, 17m wide. This gauge is intended to be used in conjunction with the gauge at Hunsingore (27001) which is insensitive at low flows. Heavily reservoired headwaters of the Nidd and Washburn valleys have a significant effect on flows. # Geology is Carboniferous Millstone Grits, Permian Marls and Triassic sandstones. Predominantly rural catchment.													
	1981	1051	99										
	1982	988	93	913	95	14.94	290.7	15/03	1.79	12/08	28.8	4.23	2.00
	1983	1007	94	893	93	14.62	292.6	09/12	1.62	30/08	40.3	5.04	1.79
	1984	978	92	965	100	15.78	282.6	13/01	1.07	29/08	33.3	3.56	1.48
	1985	960	90	615	64	10.03	240.6	22/12	1.94	25/07	16.6	4.84	2.26
027064	Went at Walden Stubbs	C.A.: 83.7 km ²	79-80		336	0.89	12.4	18/03	0.29	04/10	1.5	0.55	0.33
M.A.: YWA	Level: 6m	F.A.F.: I	S-full: 11.3 m ³ s ⁻¹					1980		1980			
Comment: Flat V weir, 7m wide. Some waters travel underground, bypassing the gauge to emerge downstream. # Comprises shales, sandstones and limestones. Rural catchment.													
	1981			260	77	0.69	10.9	25/04	0.20	03/08	1.2	0.44	0.25
	1982			215	64	0.57	12.7	23/06	0.18	31/05	0.9	0.37	0.21
	1983			282	84	0.75	21.7	01/06	0.22	06/09	1.5	0.45	0.24
	1984	632		233	69	0.62	7.3	30/01	0.17	26/07	1.2	0.39	0.19
	1985	565		153	46	0.41					0.6	0.33	0.18
027065	Holme at Queens Mill	C.A.: 97.4 km ²	79-80		865	2.67	37.6	21/11	0.41	25/05	5.4	1.63	0.64
M.A.: YWA	Level: 68m	F.A.F.: SRI	S-full: 6.5 m ³ s ⁻¹					1980		1980			
Comment: Flat V weir 11m wide. Reservoirs in headwaters. # Predominantly Millstone Grit. Moorland headwaters; urban and industrial development in the lower catchment.													
	1981			760	88	2.34	35.2	02/01	0.46	08/08	5.2	1.37	0.64
	1982			794	92	2.45	59.8	09/12	0.39	14/08	6.0	1.37	0.57
	1983						33.7	05/02	0.27	26/08	4.7	0.99	0.38
	1984	1233		666	77	2.06	18.7	11/04	0.45	07/07	2.7	1.13	0.62
	1985	1101		495	57	1.52							
027071	Swale at Crakehill	C.A.: 1363.0 km ²	1980				142.0	27/10	4.38	04/06			
M.A.: YWA	Level: 12m	F.A.F.: N						1980		1980			
Comment: Crump weir for low flow measurement with higher flows determined by current meter cableway at Leckby. Replaces the gauge at Leckby Grange (027008). # Rural catchment draining the northern Yorkshire Dales and lower catchment in the flat Vale of York. Geology is mainly limestones, sandstones and shales with a covering of Boulder Clay.													
	1981			488		21.10	188.3	22/03	3.15	09/09	47.8	12.94	3.67
	1982			496		21.43	230.7	05/01	3.40	12/08	46.3	12.08	4.07
	1983	876		469		20.29	179.1	09/12	3.09	15/08	47.5	13.56	3.59
	1984	860		444		19.20	187.9	05/02	2.33	26/07	42.4	11.22	2.58
	1985	858		431		18.60	183.7	22/12	4.01	10/07	39.5	13.05	5.21

Summary of Archived Data

Gauged daily flows, monthly peaks and monthly rainfall

Stn. number	Gauged daily flows, monthly peaks and rainfall	Stn. number	Gauged daily flows, monthly peaks and rainfall	Stn. number	Gauged daily flows, monthly peaks and rainfall	
026001	50s ---eAABBB 60s BBBBABABB 70s ACABE↑↑↑↑ 80s ---↑↑↑	027014	50s -----eA 60s AAAAAAABA 70s EE↑↑↑↑↑↑ 80s ---↑↑↑	027034	60s -----eBA 70s BAAAAAAAAA 80s AAAAAAa	
026002	60s -eAAEEEBE 70s EAAAAAEBE 80s B↑CCCF↑	027015	60s -eAAAAAAA 70s AAAAAE↑↑↑ 80s ---↑↑↑	027035	60s -----EA 70s AAAABAEAAA 80s EAAAAa	
026003	50s -----e 60s AAAAAAAAB 70s AAAAAEEAAA 80s AAAAAa	027016	50s -----eBBB 60s BBBBBAAAA 70s AEBBEBCEEE 80s B↑↑↑↑↑	027038	70s EAAAAAATA 80s EAADADa 027039	60s -----eAB 70s BBAE↑↑↑↑↑ 80s ---↑↑↑
026004	70s -DaaAa	027017	70s AEBBEBCEBE 80s E↑↑↑↑↑ 80s -----eBBB 60s BBBBBAAAA	027040	70s EBAAAAATA 80s AAAAAa	
026005	80s -----aaa	027018	50s -----eAAB 60s BBABBAAAA 70s BBbE-↑↑↑ 80s ---↑↑↑	027042	70s ↑↑EAAAAA 80s AAAAAa	
026006	80s -----fccc	027019	50s EAAe-↑↑↑ 80s ---↑↑↑ 70s -----eAAA 60s AAEBAAAAE	027043	70s -----AAAA 80s AAAAAa	
026007	60s -----fccc 70s fcccffccc	027020	70s -----eBBB 60s BBBBBAABB 70s BBbE-↑↑↑ 80s ---↑↑↑	027044	70s -↑↑EAAAA 80s AAAAAa	
027001	30s ---eAAE↑ 40s ↑EBABCCF↑ 50s ↑↑↑EAAAAE 60s AAAAAAATA 70s AAAAAAATA 80s AE↑↑↑↑	027021	50s -----e 60s AEBBBAABB 70s BBbE-↑↑↑ 80s ---↑↑↑	027047	70s -↑BAAAAAE 80s AEADAEc	
027002	30s -----E↑↑ 40s ↑↑↑↑↑↑↑↑ 50s ↑↑↑↑↑EAAA 60s AAAAAABAA 70s AAAAAAATA 80s AAAAAa	027022	70s AAAAAE↑↑↑ 80s ↑↑Aaaa 80s eEAAAAATA 70s EE↑↑↑↑↑↑	027048	70s ↑↑EAAEEAA 80s AAAAAa	
027003	50s -----e 60s EAAAAAATA 70s AAAAAABAE 80s AAAAAa	027023	60s eAAAAAATA 70s AAAAAAATA 80s AAAAAE↑↑ 70s AAAAAAATA	027049	70s -eAAAA 80s AAAAAa	
027004	60s eAAAAAATA↑ 70s ↑↑EAAE↑↑	027024	60s -eAAAA 70s AAAAAEAAA 80s E↑↑↑↑	027050	70s fccff- 80s ↑↑-ee	
027005	30s ---↑CF↑ 40s ↑↑↑↑EAAA 50s ABCCCCCCCB 60s BBBBBAATA 70s AABCCCCCC 80s C↑CFCF↑	027025	60s -eAAAA 70s AAAE↑↑AAA 80s -----eAAA 70s AAAAAAATAE	027051	70s -eAAEAAE 80s AADAAAa	
027006	60s -----eAAA 70s AAAAAAATA 80s AAAAAa	027026	60s -eAAAA 70s AAAAAAATAE 80s ↑↑↑↑AA 70s AAAAAE↑↑↑	027052	70s -----eaaa 80s AAAAAa	
027007	50s -----eA 60s AAAAAAATA 70s EBDAAAAEE 80s AAAAAa	027027	60s -eAAAAEA 70s AAAAAE↑↑↑ 80s AAAAAA 70s AAAAAE↑	027053	70s -eEAAA 80s AAAAAa	
027008	50s ---eAAE 60s AAAAAAATA 70s AAAAAEEAE 80s AEDE↑	027028	60s AAAAAA 70s AAAAAE↑ 80s AAAAAa	027054	70s ---FFFAE 80s AAAAAa	
027009	60s -↑↑↑↑↑↑↑ 70s ↑↑↑↑↑↑↑ 80s ↑↑AAAE	027029	60s -eAAAAATA 70s ↑EAAAAATA 80s AEAATA 70s AAAAAEAEA	027055	70s ---↑CCEAE 80s AADAAAa	
027010	30s ---↑cf↑ 40s ↑↑↑↑↑↑ 50s c↑f↑bAAAA 60s BAAEAAAAA 70s ABAAAAEEAE 60s BBBBBAATA	027030	60s -eAAAA 70s AAAAAEAEA 80s AADAAA 70s AAAAAEAEA	027056	70s ---↑CCEAE 80s AAAAAa	
027011	50s ---↑BBBBB 60s BBBBBAATA 70s AABCCF↑↑↑	027031	60s -----AAAA 70s AAAAAEAEA 80s AAAAAA 70s AAAAAEAAA	027057	70s ---↑CCEAE 80s AAAAAa	
027012	50s -----eAAAA 60s AAAAAAATA 70s AAAE↑↑↑↑↑	027032	60s ---↑EEAA 70s AAAAAEAAA 80s AEAATA 70s CCCCCBEAAA	027058	70s ---↑CCEAE 80s AAAAAa	
027013	50s ---eBBBBB 60s BBBBBAATA 70s AABBCBEE 80s B↑↑↑↑	027033	60s -----f 70s CCCCCBEAAA 80s AAAAAa	027059	70s -----eA 80s AAAAAa	

Naturalised daily and monthly flows

Stn. number	Naturalised daily, and monthly flows	Stn. number	Naturalised daily, and monthly flows	Stn. number	Naturalised daily, and monthly flows
026002	60s ---FFEEF 70s FFFF	027011	50s ---FEEEEEE 60s EEEEEEEEEE 70s EEEF	027020	50s ---FFEF 60s FFEEEEEE 70s FEEF
027001	30s -----FF. 40s -FEFEF---- 50s ---FEEEEF 60s EEEEEEEF-	027012	50s ---FEEEEEE 60s EEEEEEEEEE 70s EF	027021	60s FFEFEFEFE 70s EF 80s ---FEEEEEE 70s FF
027002	50s ---FEEEE 60s EEEEEEEEEE 70s E	027013	50s ---FEEEEEE 60s EEEEEEEEFE 70s EF	027022	60s ---FEEEEEE 70s EF 80s ---FEEEEEE 70s EF
027003	60s -FEEEEEE 70s EF	027015	60s ---CAAC 60s EEEEEEEEFE 80s ---FEEE	027023	60s ---FEEEEEE 70s EF 80s -FEFEF
027004	60s FEEEEEEE	027016	50s ---FEEE 60s EEEEEEEEFE 70s EF	027024	60s -FEFEF 70s EF 80s -FEFEFEFE 70s EF
027005	40s ---FEEEE 50s EEEEEFEFE 60s EEEEEEEEEE 70s FF	027017	50s ---FEEE 60s EEEEEEEEFE 70s EF	027025	60s -FEFEFEFE 70s EF 80s -FEFEFEFE 70s EEEF
027006	60s ---FEEEE 70s EF	027018	50s ---FEEE 60s EEEEEEEEEE 70s EEEF	027026	60s -FEFEFEFE 70s EEEF 80s -FEFEFEFE 70s EEEF
027007	50s ---FE 60s EEEEEEEEEE 70s EF	027019	50s ---FEEE 60s EEEFEFEFE 70s -FEF	027027	60s -FEFEFEFE 70s EEEF 80s -FEFEFEFE 70s EEEF
027009	60s -----F 70s EF			027028	60s ---FEFEFE 70s EF 80s ---FEFEFE 70s EF

SEVERN TRENT WATER



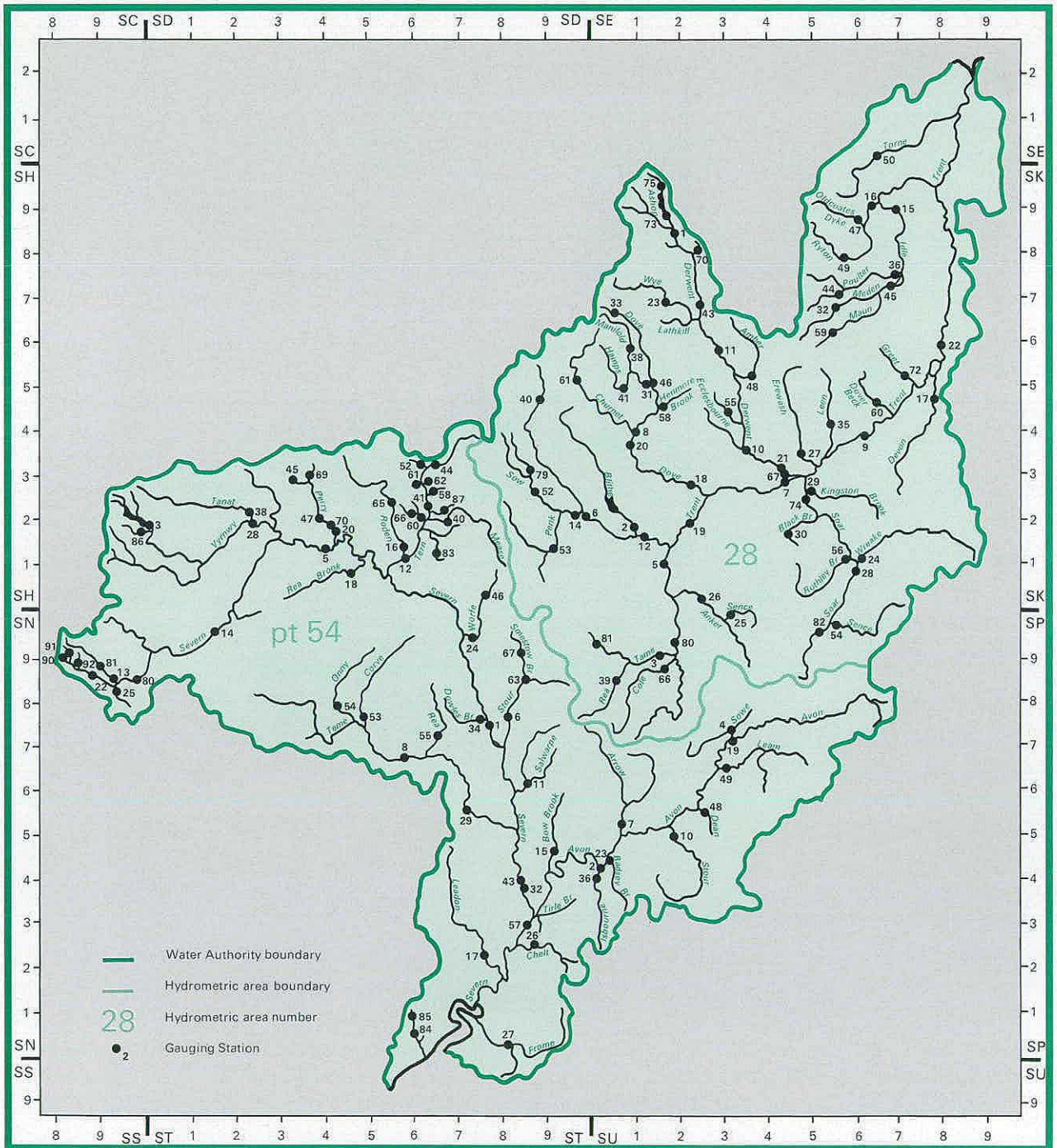
Area: 21,666 km²

Average Rainfall (1941-70): 773 mm

Headquarters of Severn Trent Water:

Abelson House
2297 Coventry Road
Sheldon
Birmingham B26 3PU

Telephone: Birmingham (021) 722 4000



Gauging Station Register

Station number	Rivlor name	Station name	Grid reference	Catchment area (sq km)	Station type	Period of record	Mean ann. rainfall (mm)	Mean ann. runoff (mm)	Max. ann. runoff (mm)	Year of max.	Min. ann. runoff (mm)	Year of min.	Mean flow (m ³ s ⁻¹)	Min. mon. flow (m ³ s ⁻¹)	Month/Year of min.	Mean ann. flood (m ³ s ⁻¹)	Base flow index	10 Percentile (m ³ s ⁻¹)	95 Percentile (m ³ s ⁻¹)
028001	Derwent	Yorkshire Bridge	SK 198851	126.0	FL	1933-85	1377	526	883	54	159	76	2.10	0.22	05/74	.47	4.5	0.54	
028002	Blithe	Hamsst'ld Ridware	SK 109192	163.0	FL	1937..84	784	235	430	51	82	76	1.22	0.28	09/76	.41	2.8	0.32	
028003	Tame	Water Orton	SP 169915	408.0	VA	1955..82	737	451	628	60	310	56	5.84	2.41	06/57	75.6	.62	10.2	2.70
028005	Tame	Elford	SK 173105	1475.0	VA	1955-84	698	410	535	60	279	64	19.19	5.81	07/84	116.9	.65	35.4	8.25
028006	Trent	Great Haywood	SJ 994231	325.0	VA	1957-64	762	432	641	60	324	63	4.45	1.95	09/64	30.0	.71	7.8	2.32
028007	Trent	Shardlow	SK 448299	4400.0	VA	1957-66	779	387	579	60	259	64	53.97	10.46	09/59	270.9	.65	109.8	16.34
028008	Dove	Rocaster Weir	SK 112397	399.0	VA	1953-85	1034	584	871	66	314	59	7.39	0.67	09/59	90.9	.61	15.4	1.66
028009	Trent	Cotwick	SK 620399	7486.0	VA	1958-85	774	359	522	66	198	76	85.14	18.45	08/76	505.8	.64	188.2	28.54
028010	Derwent	Longbridge Weir	SK 356363	1054.0	VA	1935..85	998	527	754	66	288	76	17.61	3.65	08/76	163.4	.62	35.9	4.99
028011	Derwent	Matlock Bath	SK 296586	690.0	VA	1958..85	1108	575	852	66	341	64	12.57	1.61	09/59	111.5	.64	25.9	3.47
028012	Trent	Yoxall	SK 131177	1229.0	VA	1959..85	774	321	467	66	190	76	12.52	2.48	08/76	71.8	.70	20.7	5.04
028014	Sow	Milford	SJ 975215	591.0	VA	1960..77	718	276	460	60	167	76	5.17	1.00	04/76	31.4	.95	5.5	1.44
028015	Idle	Mattersey	SK 690895	529.0	VA	1965..85	677	231	309	69	214	83	3.87	0.97	08/65	13.5	.79	7.0	1.99
028016	Ryton	Serby Park	SK 641897	231.0	VA	1965-78	647	240	425	69	96	76	1.76	0.22	09/75	12.4	.69	3.1	0.43
028017	Devon	Cotham	SK 787486	284.0	VA	1966..78	561	173	281	77	119	72	1.56	0.05	04/78	23.4	.52	3.6	0.15
028018	Dove	Marston	SK 235288	883.2	FV	1961..85	948	496	693	65	276	76	13.88	1.91	08/76	137.2	.60	27.4	3.73
028019	Trent	Drakelow Park	SK 239204	3072.0	VA	1966-85	728	355	444	80	234	76	35.59	10.80	08/76	181.9	.66	63.8	14.75
028020	Churnet	Rocoster	SK 103389	236.0	VA	1954..82	1001	485	717	81	282	76	3.63	0.54	09/59	.55	.76	0.95	
028021	Derwent	Draycot	SK 443327	1175.0	VA	1965..77	973	551	771	75	318	76	20.54	4.59	08/76	.66	34.8	5.43	
028022	Trent	North Muskham	SK 801601	8231.0	VA	1968-84	754	348	439	79	196	76	90.87	19.36	08/76	.65	177.1	29.63	
028023	Wye	Ashford	SK 182696	154.0	VA	1965-77	1066	625	865	66	352	71	3.05	0.35	08/76	.74	5.4	0.96	
028024	Wreake	Syston Mill	SK 615124	413.8	C VA	1967..85	627	219	335	79	70	76	2.88	0.12	08/76	.40	6.7	0.29	
028025	Sence	Ratcliffe Culey	SP 321996	169.4	C	1966-84	661	282	366	80	106	76	1.51	0.11	08/76	.43	3.0	0.25	
028026	Anker	Polesworth	SK 263034	368.0	C VA	1966..84	647	242	319	81	104	76	2.82	0.34	07/76	.47	5.9	0.61	
028027	Erewash	Stapleford	SK 482364	182.2	MIS	1965..84	717	376	575	74	269	68	2.17	0.32	10/69	.54	4.2	0.43	
028028	Soar	Wanlip	SK 603109	480.0	CC	1972..81	664	178	255	80	121	73	2.70	0.31	08/75	.35	6.4	0.38	
028029	Kingston Brk	Kingston Hall	SK 503277	57.0	CC	1966..84	590	208	314	79	65	76	0.38	0.02	08/76	.38	0.7	0.03	
028030	Black Brook	Onabarrow	SK 486171	8.4	FL	1967..84	737	297	435	77	109	76	0.08	0.01	08/76	.44	0.2	0.01	
028031	Manifold	Ilam	SK 140507	148.5	C	1968-85	1089	752	1021	81	476	75	3.54	0.39	08/76	.53	7.5	0.67	
028032	Meden	Church Warsop	SK 558680	62.8	VA	1965..84	739	324	451	79	231	75	0.65	0.18	11/78	6.1	.77	1.0	0.26
028033	Dove	Hollinsclough	SK 063668	8.0	CC	1965..82	1432	1009	1999	81	646	75	0.26	0.02	08/76	.45	0.6	0.04	
028035	Leen	Nottingham	SK 549392	111.0	VA	1981-84	730	232	226	82	220	83	0.82	0.38	08/83	.66	1.3	0.36	
028036	Poulter	Twyford Bridge	SK 700752	128.2	C	1969..75	590	188	238	70	146	74	0.77	0.41	06/74	.85	1.2	0.39	
028038	Manifold	Hulme End	SK 106595	46.0	VA	1969..82	1150	782	981	81	505	75	1.14	0.03	07/78	.31	2.8	0.09	
028039	Rea	Calthorpe Park	SP 071847	74.0	C	1967..85	803	355	451	81	257	73	0.83	0.26	07/76	.49	1.6	0.26	
028040	Trent	Stoke on Trent	SJ 892467	53.2	C	1968-85	861	408	523	81	301	84	0.69	0.15	07/84	.48	1.4	0.18	
028041	Hamps	Waterhouses	SK 082502	35.1	FV	1968-82	1067	645	851	81	381	75	0.72	0.02	08/76	.35	1.7	0.06	
028043	Derwent	Chatsworth	SK 261683	335.0	VA	1968..85	1182	575	816	81	309	76	6.10	0.93	08/84	.55	13.1	1.50	
028044	Poulter	Cuckney	SK 563714	85.0	C	1969..84	701	161	261	79	79	76	0.33	0.11	08/76	.92	0.5	0.17	
028045	Meden	Bothamsall	SK 681732	106.2	VA	1965..84	691	499	650	69	252	76	1.68	0.39	08/76	9.8	.74	2.7	0.82
028046	Dove	Izaak Walton	SK 146509	83.0	FV	1969-85	1119	733	974	81	448	76	1.93	0.34	08/76	.78	3.5	0.57	
028047	Oldcoates Dk	Blyth	SK 615876	85.2	FVVA	1970..84	646	251	397	79	106	76	0.68	0.11	08/76	.70	1.1	0.23	
028048	Amber	Wingfield Park	SK 376520	139.0	FVVA	1971-85	784	295	397	81	152	76	1.30	0.21	08/76	.51	2.7	0.33	
028049	Ryton	Worksop	SK 575794	77.0	FVVA	1970-84	716	198	350	79	60	76	0.48	0.05	08/76	.63	1.0	0.09	
028050	Torne	Auckley	SE 646012	141.0	FVVA	1971..84	629	227	310	80	112	76	1.02	0.21	08/76	.65	1.8	0.32	
028052	Sow	Great Bridgford	SK 883270	163.0	FVVA	1971-84	753	227	308	80	138	76	1.17	0.14	08/76	.66	2.2	0.34	
028053	Penk	Penkridge	SJ 923144	272.0	VA	1976-83	724	272	320	80	207	78	2.34	0.35	08/76	.58	4.2	0.70	
028054	Sence	Blaby	SP 566985	133.0	FVVA	1971-84	623	265	389	80	118	76	1.12	0.10	07/76	.39	2.5	0.16	
028055	Ecclesbourne	Dutfield	SK 320447	50.4	FV	1971..82	852	420	574	81	209	76	0.67	0.05	08/76	.49	1.5	0.12	
028056	Rothley Brk	Rothley	SK 580121	94.0	FVVA	1973..84	676	267	368	80	87	76	0.80	0.09	07/76	.48	1.6	0.15	
028058	Henmore Brk	Ashbourne	SK 188486	42.0	FV	1974-84	865	381	502	81	211	76	0.51	0.03	08/76	.46	1.1	0.06	
028059	Moun	Mansfield	SK 548623	28.8	FLVA	1966..84	718	498	667	79	347	76	0.45	0.20	06/76	12.2	.71	0.7	0.23
028060	Dover Beck	Lowdham	SK 653479	69.0	FVVA	1972-84	686	69	110	79	24	76	0.15	0.03	08/76	.73	0.3	0.05	
028061	Churnet	Basford Bridge	SJ 983520	139.0	FVVA	1975-84	973	518	732	81	285	76	2.28	0.58	08/76	.45	5.0	0.82	
028066	Cole	Coleshill	SP 183874	130.0	FV	1973-85	727	234	292	77	174	75	0.97	0.20	07/76	.44	2.0	0.20	
028067	Derwent	Church Wile	SK 438316	1177.5	FVVA	1973-85	1001	511	684	81	275	76	19.07	3.97	08/76	.64	39.1	5.17	
028070	Burbage Brk	Burbage	SK 259804	9.1	TP	1965..82	1188	589	794	79	426	76	0.17	0.02	08/76	5.4	.45	0.4	0.02
028072	Great	Southwell	SK 711541	46.2	FV	1975-84	635	240	328	79	104	76	0.35	0.06	08/76	.68	0.6	0.12	
028073	Ashop	Ashop diversion	SK 171896	42.0	VA	1976..84	747	47	851	79	677	81	1.00	0.03	10/78	.40	2.4	0.13	
028074	Soar	Kegworth	SK 492263	1292.0	US	1978-84		324	351	79	291	83	13.27	3.54	09/79	.52	28.3	3.55	
028075	Derwent	Slippery Stones	SK 169951	17.0	FV	1979-82		1096	1302	81	1067	80	0.59	0.11	05/80	.37	1.5	0.09	
028079	Meece	Shallowford	SJ 874291	86.3	FV	1981-85		218	238	83	191	85	0.60	0.13	08/84	.61	1.1	0.13	
028080	Tame	Lea Marston Lks	SP 207937	799.0	C	1957..85	728	534	685	66	383	76	13.54	6.37	07/76	.69	22.8	7.18	
028081	Tame	Bescot	SP 012958	169.0	EM	1982..85		564	572	83	506	85	3.02	1.60	09/85	.71	4.5	1.51	
028082	Soar	Littlithorpe	SP 542973	183.9	EM	1971..85	630	258	366	80	110	76	1.50	0.16	07/76	.56	3.3	0.30	
054001	Savern	Bewdley	SO 782762	4325.0	VA	1921-85n	918	452	691	60	266	64	62.03	7.46	08/76	378.8	.53	147.5	11.37
054002	Avon	Evesham	SP 040438	2210.0	VA	1938-85	666	214	357	60	98	44	15.03	1.94	06/44	160.7	.51	33.5	2.52
054003	Vyrnwy	Vyrnwy Res	SJ 019191	94.3	TP	1920..85n	1909	704	1252	28	206	76	2.10	0.28	07/79	91.3	.35	5.0	0.51
054004	Sowe	Stoneleigh	SP 332731	262.0	C	1952..85	675	353	474	60	209	53	2.94	0.89	08/61	29.9	.60		

Station number	River name	Station name	Grid reference	Catchment area (sq km)	Station type	Period of record	Mean ann. rainfall (mm)	Mean ann. runoff (mm)	Max. ann. runoff (mm)	Year of max.	Min. ann. runoff (mm)	Year of min.	Mean flow (m ³ s ⁻¹)	Min. mon. flow (m ³ s ⁻¹)	Month/Year of min.	Mean ann. flood (m ³ s ⁻¹)	Base flow index	10 Percentile (m ³ s ⁻¹)	95 Percentile (m ³ s ⁻¹)
054017	Leadon	Wedderburn Br	SO 777234	293.0	CBVA	1962-83	709	221	358	68	99	73	2.05	0.10	07/76	21.9	.50	5.0	0.31
054018	Rea Brook	Hookagate	SJ 466092	178.0	CBVA	1962..84	749	306	431	66	139	64	1.73	0.11	08/76	23.1	.51	4.2	0.24
054019	Avon	Staraton	SP 333715	347.0	C	1962-85	669	227	326	66	99	76	2.50	0.25	07/76	38.4	.49	5.6	0.48
054020	Perry	Yeaton	SJ 434192	180.8	C	1963-85	766	290	407	69	141	64	1.66	0.21	08/76	9.9	.65	3.4	0.45
054022	Severn	Plynlimon flume	SN 853872	8.7	FL	1953..85	2425	1816	2342	54	1211	76	0.50	0.04	08/76	13.9	.32	1.3	0.05
054023	Badsey Brook	Offenham	SP 063449	95.8	FL	1968..83	673	221	321	77	92	78	0.67	0.03	07/76	10.6	.42	1.6	0.07
054024	Worfe	Burcote	SO 747953	258.0	C	1969-85	693	149	186	72	84	78	1.22	0.09	08/76	.71	2.2	4.0	0.40
054025	Dulas	Rhos-y-pentref	SN 950824	52.7	FL	1969..85	1265	816	1029	77	535	75	1.36	0.10	08/76	.37	3.6	0.05	
054026	Chelt	Slate Mill	SO 892264	34.5	FL	1969..83	742	543	654	77	400	73	0.59	0.27	06/72	.70	1.0	0.29	
054027	Frome	Ebley Mill	SO 831047	198.0	MIS	1969-84	855	384	503	77	183	76	2.41	0.33	08/76	.86	4.7	0.71	
054028	Vyrnwy	Llanymynech	SJ 252195	778.0	VA	1970-85	1305	816	1036	82	565	75	20.12	1.01	08/76	.45	46.1	2.02	
054029	Teme	Knightsford Br	SO 735557	1480.0	VA	1970-85	833	376	509	77	239	75	17.64	1.00	08/76	.57	40.4	2.16	
054032	Severn	Saxons Lode	SO 863390	6850.0	VA	1970-85	859	401	517	77	268	75	87.12	9.92	08/76	.56	217.7	16.23	
054034	Dowles Brook	Dowles	SO 768764	40.8	FV	1971-83	736	305	393	77	186	73	0.39	0.02	07/76	.42	1.0	0.04	
054036	Isbourne	Hinton on Green	SP 023408	90.7	C	1972-84	706	224	332	74	93	76	0.64	0.02	07/76	.53	1.4	0.10	
054038	Tanat	Llanyblodwel	SJ 252225	229.0	VA	1973..85	1193	876	1034	82	576	75	6.36	0.19	08/76	.47	14.8	0.55	
054040	Meese	Tibberton	SJ 680205	167.8	C	1973-85	689	231	309	80	156	76	1.23	0.25	08/76	.80	2.1	0.49	
054041	Tern	Eaton On Tern	SJ 649230	192.0	C	1972-85	721	290	378	80	201	76	1.77	0.44	08/76	.71	3.0	0.77	
054043	Severn	Upton	SO 863399	6850.0	VA	1955..70	805	445	676	60	309	56	96.58	14.77	09/59	.55	258.2	25.22	
054044	Tern	Ternhill	SJ 629316	92.6	TP	1972-85	742	296	378	80	213	76	0.87	0.29	08/76	.76	1.4	0.44	
054045	Perry	Perry Farm	SJ 347303	49.1	FV	1974-79	830	386	482	77	302	75	0.60	0.13	08/76	.71	1.1	0.17	
054046	Worfe	Cusford	SJ 781046	54.9	TP	1975-84	724	115	149	81	82	76	0.20	0.03	08/76	.62	0.4	0.04	
054047	Perry	Ruyton Bridge	SJ 403223	155.0	VA	1975-78	246	338	77	212	76	1.21	0.15	08/76	.67	2.9	0.19		
054048	Dene	Wellesbourne	SP 273556	102.0	FV	1976-84	659	220	301	77	158	83	0.71	0.03	08/76	.45	1.7	0.08	
054049	Leam	Princes Drive	SP 307654	362.0	MIS	1979-85	185	242	81	136	84	2.12	0.20	07/84	.37	4.5	0.26		
054052	Bailey Brook	Ternhill	SJ 629316	34.4	MIS	1970..83	698	294	421	80	194	75	0.32	0.07	08/76	.65	0.5	0.12	
054053	Corve	Ludlow	SO 510752	164.0	VA	1972-76	720	195	268	74	156	73	1.01	0.08	10/75	.57	2.2	0.09	
054054	Onny	Onisbury	SO 455789	235.0	VA	1972-76	759	294	401	74	226	75	2.19	0.26	09/75	.48	4.6	0.23	
054055	Rea	Neau Sollars	SO 664724	129.0	MIS	1972..82	214	224	73	174	78	0.87	0.16	10/78	.55	1.6	0.15		
054057	Severn	Haw Bridge	SO 844279	9895.0	MIS	1971-85	332	436	77	229	76	104.30	12.27	08/76	.57	242.4	20.03		
054058	Stoke Pk Brk	Stoke Park	SJ 644260	14.3	FV	1972-78	203	201	74	150	75	0.09	>0.00	08/76	.59	0.2	0.02		
054060	Potford Brk	Potford	SJ 634220	25.0	FV	1972..84	154	175	82	98	76	0.12	0.02	08/76	.76	0.2	0.05		
054061	Hodnet Brk	Hodnet	SJ 628288	5.1	FV	1972..77	111	117	73	80	76	0.02	>0.00	10/75	.76	0.0			
054062	Stoke Brook	Stoke	SJ 637280	13.7	FV	1972..83	699	193	274	80	94	76	0.08	0.02	08/76	.75	0.1	0.03	
054063	Stour	Prestwood Hosp	SO 865858	89.9	MIS	1972..83	408	476	80	317	73	1.16	0.51	07/76	.66	1.9	0.56		
054065	Roden	Stanton	SJ 555241	210.0	VA	1973..79	679	211	215	74	142	75	1.41	0.20	08/76	.66	2.6	0.26	
054066	Platt Brook	Platt	SJ 628229	15.7	FV	1973..85	679	279	205	80	96	76	0.14	0.01	08/76	.60	0.2	0.03	
054067	Smestow Brk	Swindon	SO 861906	81.3	VA	1974-78	209	266	77	168	75	0.54	0.18	08/76	.62	1.0	0.17		
054069	Springs Brook	Lower Hordley	SJ 387297	10.4	FV	1974-78	176	230	77	127	75	0.06	0.01	08/76	.65	0.1	0.01		
054070	War Brook	Walford	SJ 432198	22.5	FV	1974-83	205	275	82	101	75	0.15	0.00	08/76	.57	0.4	>0.00		
054080	Severn	Dolven	SN 996851	187.0	VA	1977..83	1120	1139	81	1036	82	6.64	0.68	05/80	.45	16.9	0.85		
054081	Clywedog	Bryntail	SN 913868	49.0	FV	1977-85	1947	1497	1669	83	1250	84	2.33	0.25	10/84	.52	5.4	0.27	
054083	Crow Brook	Horton	SJ 678141	16.7	FV	1978-83	261	287	82	238	79	0.14	0.08	09/79	.73	0.2	0.07		
054084	Cannop Brk	Parkend	SO 616075	31.5	C	1978-83	343	421	82	272	83	0.34	0.05	11/78	.58	0.8	0.06		
054085	Cannop Brk	Cannop Cross	SO 609115	10.4	FV	1979-83	418	519	82	358	83	0.14	0.02	08/82	.61	0.3	0.02		
054087	Allford Brook	Childs Ercaill	SJ 667228	4.7	VN	1980..83	168	208	80	181	81	0.02	>0.00	08/83	.66	0.1	0.01		
054090	Tanllwyth	Tanllwyth Flume	SN 844876	0.9	FL	1973..84	2067	2313	83	1647	75	0.06	>0.00	08/76	.29	0.1	>0.00		
054091	Severn	Hatfen Flume	SN 843878	3.6	FL	1976-84	752	1945	2199	79	1253	76	0.22	0.02	08/76	.39	0.5	0.03	
054092	Hore	Hore Flume	SN 846873	3.2	FL	1973..84	883	1853	2188	79	1202	76	0.19	0.01	08/76	.32	0.4	0.02	

Hydrometric Statistics

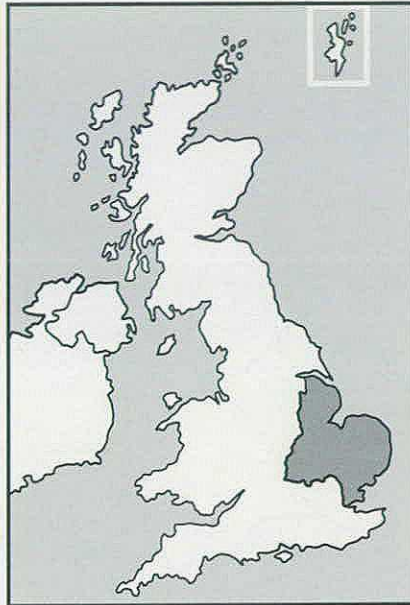
Station number	River name	Station name	C.A.	Period	Period	Period	Period	Period	Period	Period	Period	Period	Period	Period	Period	Period	Period	Period	Period	Period	
					1981	1981	1981	1981	1981	1981	1981	1981	1981	1981	1981	1981	1981	1981	1981	1981	1981
028001	Derwent at Yorkshire Bridge	C.A: 126.0 km ²	33-80	1367	525	2.10	150.6	09/12	0.10	05/05	4.5	0.95	0.55								
M.A: STWA	Level: 159m	F.A.F: SRP																			
Comment:	Two shallow profile trapezoidal flumes with a whaleback divide since 1936; compound sharp-edged weir previously. Below a cascade of 3 reservoirs (1912, 1916, 1946). Within basin diversions (Ashop) and imports (Noe); PWS exports. Long naturalised series available. #Steep moorland catchment, much hilltop peat. Shales and sandstones form the lower parts of the valleys, griststones top the hills (Middle Carboniferous).																				
1981	1709	125	811	154	3.24	55.6	02/01	0.67	17/06	8.4	1.17	0.81									
1982	1389	102	495	94	1.98	35.7	05/01	0.66	22/05	5.4	0.87	0.67									
1983	1535	112	609	116	2.43	47.3	31/01	0.64	24/07	6.5	1.02										
1984	1383	101	468	89	1.87	41.3	06/02	0.39	03/08	1.9	0.68	0.40									
1985	1177	86	268	51	1.07	16.5	14/04	0.64	07/09	1.0	0.75	0.67									
028005	Tame at Elford	C.A: 1475.0 km ²	55-80	694	407	19.02	155.3	02/02	5.92	30/06	35.2	14.15	8.17								
M.A: STWA	Level: 50m	F.A.F: EI	B-full: 66.0 m ³ s ⁻¹																		
Comment:	Velocity-area station. Cableway spans river channel only; no measurement of bypassing on rb where there is a broad floodplain. Severe summer weed growth requires rating shifts. Substantial flow modification; large imports. Significant storage in river gravel terraces. #Substantially urbanised. Geology dominated by Boulder Clay and glacial sands and gravel in equal proportions, some outcrop Keuper Marl.																				
1981	767	111	451	111	21.12	280.8	31/12	8.76	23/08	36.5	16.18	9.61									
1982	729	105	479	118	22.40	121.3	01/01	9.68	01/06	37.8	17.15	10.73									
1983	687	99	418	103	19.56	112.3	03/05	6.55	30/09	35.4	15.45	7.81									
1984	707	102																			
1985	692	100																			
028008	Dove at Rochester Weir	C.A: 399.0 km ²	53-80	1034	575	7.27	150.81	04/12	0.62	28/09	15.4	5.19	1.57								
M.A: STWA	Level: 86m	F.A.F: GE	S-full: 50.0 m ³ s ⁻¹																		

					Period	Rainfall (mm)	Runoff (mm)	Mean flow (m ³ s ⁻¹)	Peak flow (m ³ s ⁻¹)	Date of peak	Min. daily flow (m ³ s ⁻¹)	Date of min.	10 Percentile (m ³ s ⁻¹)	50 Percentile (m ³ s ⁻¹)	95 Percentile (m ³ s ⁻¹)	
						% of pre-1981	% of pre-1981									
028040	Trent at Stoke on Trent	C.A: 53.2 km ²	68-80	861	416	0.70	15.9	28/01	0.14	19/08	1.4	0.43	0.19			
M.A: STWA	Level: 113m	F.A.F: E	S-full: 45.0 m ³ s ⁻¹													
Comment: Crump profile weir, 4.12m wide, modular throughout range. Liable to collect rubbish. Affected by an impounding reservoir, discharges from three WRWs, plus mine drainage. Substantial flow modification. # Moderate relief catchment, significantly urbanised at Biddulph and Stoke on Trent, draining the Coal Measures; about a quarter of the catchment is covered with Boulder Clay. Responsive.																
1981	996	116	524	126	0.88	14.8	30/12	0.18	01/09	1.7	0.57	0.22				
1982	828	96	390	94	0.66	13.1	25/06	0.16	14/09	1.4	0.43	0.20				
1983	904	105	421	101	0.71	15.9	03/01	0.14	11/08	1.4	0.44	0.16				
1984	779	90	301	72	0.51	8.8	03/11	0.10	25/07	1.1	0.27	0.11				
1985	821	95	321	77	0.54	10.6	21/12	0.13	27/09	1.1	0.33	0.16				
028043	Derwent at Chatsworth	C.A: 335.0 km ²	68-80	1173	553	5.87	175.4	12/04	0.74	07/09	12.2	3.39	1.49			
M.A: STWA	Level: 99m	F.A.F: SRP	B-full: 208.0 m ³ s ⁻¹													
Comment: Velocity-area station approx 36m wide at bankfull. Cableway span 51m. D/s shoal as a control, but shoal and rating are not too stable. All but the highest floods contained. Substantially affected by Derwent reservoirs. # Upland catchment with peat covered moorlands in the headwaters. Some right bank tributaries drain the Carboniferous Limestone. Quite responsive. Important flood forecasting station. Predominantly pasture.																
1981	1436	122	816	148	8.66	79.6	02/01	1.30	05/09	21.2	4.90	1.44				
1982	1135	97	627	113	6.66	71.6	02/01	1.66	18/09	15.8	3.40	1.91				
1983	1257	107	718	130	7.63	66.5	31/01	1.56	30/08	18.6	4.80	1.76				
1984	1175	100														
1985	1003	86	388	70	4.12	33.5	11/04	1.22	26/07	8.1	2.99	1.41				
028044	Poulter at Cuckney	C.A: 65.0 km ²	69-80	691	155	0.32	1.9	08/04	0.08	29/07	0.5	0.27	0.16			
M.A: STWA	Level: 47m	F.A.F: GE														
Comment: Crump profile weir 3.71m broad, modular to bankfull. Designed to measure the flow as the Poulter entered the Bunter Sandstone outcrop. Minimal modifications to flow regime from WRWs. # Catchment of moderate relief draining from the scarp of the Magnesian Limestone eastwards. Subordinate outcrops of Permian Marl. High baseflow component, subdued hydrographs. Some urban development and coal mining spoil heaps.																
1981	787	114	222	143	0.46	1.2	26/04	0.27	23/11	0.7	0.40	0.30				
1982	677	98	160	103	0.33	1.0	22/06	0.22	01/11	0.4	0.31	0.25				
1983	734	106	166	107	0.34	1.1	01/06	0.23	20/11	0.5	0.31	0.25				
1984	705	102														
1985	630	91														
028046	Dove at Izaak Walton	C.A: 83.0 km ²	69-80	1108	709	1.87	20.7	21/11	0.30	09/09	3.4	1.55	0.54			
M.A: STWA	Level: 131m	F.A.F: EN	S-full: 47.0 m ³ s ⁻¹													
Comment: Crump profile Flat V weir, 7.59m wide, modular to bankfull. At high flows may bypass on the lb. Natural catchment. # Long narrow catchment. Upper reaches on Millstone Grit mudstones and sandstones. Lh watershed is formed by a steep Carboniferous Limestone ridge. Passage across limestone characterised by deep gorges (Wolfscoote Dale, Dove Dale). Moorland.																
1981	1306	118	974	137	2.56	12.9	14/01	0.69	09/09	4.3	2.24	0.79				
1982	1089	98	781	110	2.06	12.2	02/01	0.76	19/09	3.5	1.67	0.84				
1983	1223	110	838	118	2.21	13.8	04/01	0.67	30/08	3.9	2.06	0.75				
1984	1053	95	686	97	1.80	18.6	02/02	0.46	30/08	3.6	1.37	0.49				
1985	1062	96	660	93	1.73	8.7	11/04	0.83	26/07	2.6	1.53	0.97				
028048	Amber at Wingfield Park	C.A: 139.0 km ²	71-80	765	289	1.28	15.5	25/02	0.19	26/08	2.7	0.72	0.32			
M.A: STWA	Level: 71m	F.A.F: SRP	B-full: 21.0 m ³ s ⁻¹													
Comment: Crump profile Flat V weir, 5.49m at vee full, in a trapezoidal channel. Higher flows gauged from a bridge u/s. At extreme flows bypassed on rb. Fairly low modular limit. Contains Ogston PWS reservoir; substantial augmentation from mine pumping and sewage. # Upland catchment with moorland headwaters. Upper half of the catchment drains Millstone Grit, partially blanketed with Boulder Clay. Bisects the limestone and tuff inlier of the Ashover Dome. Lower half, Coal Measures.																
1981	946	124	397	137	1.75	15.3	30/12	0.33	08/09	2.6	1.13	0.42				
1982	818	107	316	109	1.39	15.4	22/06	0.33	03/09	3.6	0.88	0.42				
1983	788	103	288	100	1.27	14.3	01/06	0.22	15/08	2.7	0.84	0.32				
1984	781	102	275	95	1.21	14.5	30/01	0.25	14/10	2.1	0.69	0.35				
1985	734	96	249	86	1.10	14.4	06/12	0.33	01/10	2.1	0.73	0.42				
028049	Ryton at Worksop	C.A: 77.0 km ²	70-80	736	184	0.45	10.5	08/04	0.04	22/08	0.9	0.27	0.08			
M.A: STWA	Level: 32m	F.A.F: GE	B-full: 30.0 m ³ s ⁻¹													
Comment: Crump profile Flat V weir, 4.57m at vee full, in trapezoidal channel. Downstream bridge provokes early non-modularity. No adjustments made to high flows to cope with non-modular condition. Significant flow augmentation via groundwater pumping and WRW, and abstractions for canal use. # Catchment of moderate relief on dip slope of Magnesian Limestone outcrop; narrow band of Permian Marl near the gauge. High baseflow component and subdued hydrographs. Extractive industries in the west; mixed farming, forestry.																
1981	755	103	280	152	0.68	8.7	26/04	0.17	06/09	1.3	0.40	0.21				
1982	646	88	204	111	0.50	15.7	01/08	0.16	29/05	0.7	0.35	0.20				
1983	722	98	266	145	0.65	15.4	08/09	0.11	03/12	1.2	0.46	0.20				
1984	688	91														
1985	589	80														
028050	Torne at Auckley	C.A: 141.0 km ²	71-80	611	212	0.95	29.6	17/07	0.16	06/09	1.5	0.63	0.30			
M.A: STWA	Level: 2m	F.A.F: GE	B-full: 76.0 m ³ s ⁻¹													
Comment: Crump profile Flat V weir in trapezoidal channel, 8.9m wide at vee full. Cableway for high flows. Bypassing unlikely; may inundate flanks. Backing up from artificial drainage and/or summer weed growth renders high range unreliable. Substantial modifications to flow regime from imports via WRWs and mine drainage. # The Torne rises on the dip slope of the Magnesian Limestone and Bunter sandstone but soon enters the Trent/Humber ancient floodplain. Tidally drained. Contains mine workings and agriculture.																
1981	728	119	306	144	1.37	21.2	26/04	0.41	03/09	2.4	0.95	0.48				
1982	588	96	230	108	1.03	14.1	23/06	0.43	30/05	1.5	0.80	0.47				
1983	696	114	277	131	1.24	26.2	01/06	0.40	30/08	2.1	0.86	0.49				
1984	637	104														
1985	582	95														
028052	Sow at Great Bridgford	C.A: 163.0 km ²	71-80	734	222	1.15	18.8	11/02	0.12	31/08	2.1	0.86	0.32			
M.A: STWA	Level: 77m	F.A.F: G	B-full: 10.0 m ³ s ⁻¹													
Comment: Crump profile Flat V weir, 9.1m wide, in trapezoidal channel, with floodbanks to contain out of channel flows. Cableway. Rating problems, variable drowning, weed growth. Minimal interference from sewage effluent and groundwater pumping for PWS. # Low relief agricultural catchment, primarily on Keuper Marl, with some Triassic sandstones in the headwaters and glacial gravels in the valleys which maintain baseflows.																
1981	846	115	297	134	1.53	10.7	30/12	0.46	04/09	2.6	1.27	0.51				
1982	773	105	240	108	1.24	8.2	25/06	0.43	18/09	2.3	0.94	0.48				
1983	812	111	235	106	1.22	6.8	04/01	0.41	30/08	2.4	0.92	0.46				
1984	760	104														
1985	776	106														
028054	Sence at Slaby	C.A: 133.0 km ²	71-80	614	255	1.07	23.6	09/03	0.06	07/07	2.4	0.44	0.15			
M.A: STWA	Level: 63m	F.A.F: EI	B-full: 44.0 m ³ s ⁻¹													
Comment: Crump profile Flat V weir, 6.57m wide at vee full, in a trapezoidal channel. High flows gauged from u/s road bridge. Problems with weed growth. Bypassing at high flows. Substantial imports enter river from WRWs. Superseded by South Wigston (28086). # Predominantly rural catchment, gauged in the southern outskirts of Leicester. Flat alluvium filled valleys cut into Lower Lias sediments and widely covered with Boulder Clay.																
1981	652	106	321	126	1.35	20.9	27/04	0.16	02/08	2.8	0.76	0.19				
1982	666	108	286	112	1.21	19.2	02/01	0.18	25/07	2.8	0.67	0.20				
1983	632	103	268	105	1.13	21.5	01/05	0.17	29/08	2.6	0.59	0.20				
1984	630	103														
1985	667	109														
028056	Rothley Brook at Rothley	C.A: 94.0 km ²	73-80	678	264	0.79	18.8	24/02	0.06	21/08	1.8	0.38	0.13			
M.A: STWA	Level: 47m	F.A.F:	B-full: 23.0 m ³ s ⁻¹													
Comment: Crump profile Flat V weir in a trapezoidal channel. Possibility of bypassing on rb. Well rated, but backs up from d/s road bridge at highest flows. Substantial imports enter the river from WRWs. # Predominantly rural, but drains a portion of NW Leicester and contains number of small towns. Mostly Boulder Clay covered, but the ancient Charnwood Forest rocks outcrop to the north.																
1981	711	105	295	112	0.88	14.2	30/12	0.17	03/09	1.7	0.52	0.20				
1982	644	95	239	91	0.71	8.1	15/03	0.18	12/09	1.5	0.44	0.22				
1983	667	98	279	106	0.83	14.8	02/05	0.19	28/08	1.7	0.53	0.23				
1984	664	98														
1985	696	103														
028058	Henmore Brook at Ashbourne	C.A: 42.0 km ²	74-80	841	357	0.48	21.4	30/05	0.02	26/08	1.1	0.24	0.05			
M.A: STWA	Level: 116m	F.A.F:														
Comment: Crump profile Flat V weir, 6.0m wide, within vertical wing walls. Rb approach built up into low floodbank. Modular limit high, but no arrangements to deal with non-modular discharge. Natural catchment. # Catchment of moderate relief in the southern Pennines, draining Drift free Millstone Grit and Carboniferous Limestone. Responsive catchment. Predominantly forest and pasture, some moorland.																

Station ID	Name	C.A.	Period	Rainfall (mm)	Runoff (mm)	Mean flow (m ³ s ⁻¹)	Peak flow (m ³ s ⁻¹)	Date of peak	Min. daily flow (m ³ s ⁻¹)	Date of min.	10 Percentile (m ³ s ⁻¹)	50 Percentile (m ³ s ⁻¹)	95 Percentile (m ³ s ⁻¹)		
028061	Chumet at Eastford Bridge	C.A: 139.0 km ²	75-80	951	460	2.03	29.1	03/01	0.39	18/09	4.6	1.13	0.57		
M.A: STWA	Level: 133m	F.A.F: F.A.F:						1980		1976					
Comment: Crump profile Flat V weir in a trapezoidal channel. Drowns out owing to weed growth. Substantial modification to flow regime by exports from reservoirs and imports via WRWs and industrial usage. Prescribed flow point. Replaced 28042 in 1975. # A catchment of moderate relief with a mixed geology; primarily sandstones and shales of the Millstone Grit and Coal Measures, with some blanketing of Boulder Clay and glacial sands and gravels. Contains Leek, but otherwise low grade agriculture or pasture.															
			1981	1168	123	732	159	3.23	25.3	11/03	0.83	08/07	7.0	1.94	1.01
			1982	927	97	575	125	2.53	21.8	05/01	0.71	30/05	5.4	1.76	0.82
			1983	1034	109	586	127	2.58	25.5	04/01	0.61	13/08	5.6	1.56	0.80
			1984	891	94										
			1985	920	97										
028066	Cole at Coleshill	C.A: 130.0 km ²	73-80	707	235	0.97	24.4	30/05	0.07	22/08	2.1	0.59	0.20		
M.A: STWA	Level: 79m	F.A.F: EI						1979		1976					
Comment: Crump profile Flat V weir in a trapezoidal channel, 10.9m at vee full, with floodbanks to contain out of channel flow. Cableway, 48m wide, extends across floodbanks. Highest flows inundate a narrow floodplain. Minimal modification to flows. # Substantially urbanised catchment. Underlying geology is Keuper Marl with extensive coverings of Boulder Clay and glacial sands and gravels. Responsive.															
			1981	809	114	274	117	1.13	21.2	30/12	0.19	03/08	2.3	0.70	0.23
			1982	781	110	246	105	1.02	17.6	05/08	0.20	13/09	2.1	0.66	0.26
			1983	720	102	222	94	0.92	15.9	06/07	0.18	06/09	1.9	0.57	0.22
			1984	745	105	216	92	0.89	15.8	23/11	0.11	28/07	2.0	0.54	0.18
			1985	720	102	210	89	0.86				1.7	0.57	0.21	
028067	Derwent at Church Wille	C.A: 1177.5 km ²	73-80	885	491	18.34	215.7	25/02	2.76	22/09	37.4	12.17	4.80		
M.A: STWA	Level: 31m	F.A.F: SPEI						1977		1976					
Comment: Large Crump profile Flat V weir, 27m wide, in a trapezoidal channel. No cableway. Very broad floodplain, 20km d/s of Longbridge; substantial abstractions and returns between the two. High flows by extrapolation from Longbridge and gaugings at Draycott. Prescribed flow point. # Large catchment with moorland headwaters on Carboniferous Grits and Lst. Lower reaches on Triassic sandstones and marls. Valley broadens considerably below Derby with extensive sand and gravel terraces. Range of agricultural and industrial activity.															
			1981	1194	121	686	140	25.54	151.5	30/12	5.86	06/09	48.4	19.85	7.19
			1982	1019	103	550	112	20.54	151.5	05/01	6.49	04/09	39.3	14.33	7.53
			1983	1032	105	558	114	20.84	103.7	01/02	5.16	05/08	45.4	15.55	6.22
			1984	971	98	506	103	18.90	202.3	07/02	3.32	08/09	40.1	12.49	4.55
			1985	905	92	412	84	15.33	83.1	06/12	6.80	25/07	27.3	12.23	7.56
028079	Meece at Shallowford	C.A: 86.3 km ²	73-80	724	527	13.36	77.1d	20/12	4.93	09/08	22.4	10.67	7.00		
M.A: STWA	Level: m	F.A.F: EI						1980		1959					
Comment: Crump profile Flat V weir, 5m wide, 1:10 cross-slopes, with crest tapping. Cableway for out of bank flows. Backs up from d/s bridge. Moderate interference from groundwater pumping and sewage effluent. Baseflow maintained by glacial valley gravels. # Low relief, agricultural catchment, draining Bunter sandstone in the headwaters, Keuper Marl otherwise.															
			1981			238		0.65	6.1	05/01	0.14	18/09	1.3	0.48	0.17
			1982			238		0.65	6.2	04/01	0.14	28/08	1.3	0.46	0.18
			1983			196		0.54	6.2	23/11	0.08	30/08	1.0	0.33	0.10
			1984			192		0.52	7.9	22/12	0.19	25/07	0.9	0.39	0.20
			1985												
028080	Tame at Lea Marston Lakes	C.A: 799.0 km ²	57-80	724	527	13.36	77.1d	20/12	4.93	09/08	22.4	10.67	7.00		
M.A: STWA	Level: 66m	F.A.F: EI						1980		1959					
Comment: Unusual twin bay, chevron shaped Crump profile weirs, 21.5m total length, discharging into an inline settlement lagoon. Bypassed at very high flows, poor flow estimation under these conditions. Replaces 28004. Substantial flow modification, large imports. # Substantially urbanised. Solid geology Keuper Marl but subordinate to extensive cover of Boulder Clay and glacial sands and gravel in equal proportion.															
			1981	783	108	621	118	15.73	219.2	30/12	7.43	29/07	24.3	12.02	8.13
			1982	754	104	591	112	14.96	94.8	14/07	7.61	30/05	24.6	11.99	8.31
			1983	714	99	542	103	13.73	90.5	20/04	7.22	29/08	21.0	10.81	7.98
			1984	736	102	541	103	13.70	127.6	23/11	6.60	29/07	23.5	11.06	7.36
			1985	709	98	538	102	13.58	75.3	08/04	7.34	03/11	20.0	11.42	7.94
028082	Soar at Littlethorpe	C.A: 183.9 km ²	71-80	620	253	1.47	18.9d	02/02	0.11	26/08	3.3	0.89	0.29		
M.A: STWA	Level: 61m	F.A.F: E						1979		1976					
Comment: Electromagnetic station in a straight reach. Flood relief channel joins on the r/s just u/s. Prone to weed growth. Very low velocities at lowest flows may yield unreliable data, which are not archived. Substantial imports via WRWs. Replaces Narborough (28051). Records combined. # Predominantly agricultural catchment just south of Leicester. Extensive Boulder Clay and glacial gravel cover; Keuper sediments in some valley flanks. Significant river terraces and alluvium in lower reaches.															
			1981	692	112	322	127	1.88	20.3d	27/04	0.31	02/08	3.9	1.15	0.36
			1982	651	105	301	119	1.75	14.1d	10/12	0.34	18/09	4.2	1.00	0.38
			1983	623	100	262	104	1.53	19.2d	02/05	0.28	29/08	3.5	0.91	0.32
			1984	645	104										
			1985	627	101	201	79	1.17	14.7	21/01	0.21	09/07	2.4	0.77	0.28
054001	Severn at Bowdley	C.A: 4325.0 km ²	21-80	911	451	61.90	637.1d	21/03	5.99	04/09	148.8	37.37	11.41		
M.A: STWA	Level: 17m	F.A.F: SRPGEI						1947		1976					
Comment: Velocity-area station with rock control. Stage monitoring site relocated in 1950 and 1970; lowest flows not reliable in earlier record. US gauge undergoing calibration. Sig. exports for PWS and CEGB; minimum flow maintained by Clywedog releases. Naturalised flow series accommodates major usages. # Diverse catchment; wet western 50% from impermeable Palaeozoic rocks and river gravels; drier northern 50% from Drift covered Carboniferous to Liassic sandstones and marls. Moorland, forestry, mixed farming.															
			1981	991	109	492	109	67.45	355.9	24/03	9.35	05/08	142.5	50.48	10.96
			1982	998	110	525	116	72.07	322.3	06/01	10.16	18/09	183.1	46.91	11.87
			1983	950	104	459	102	62.89	319.1	06/01	8.55	08/08	150.8	45.30	10.62
			1984	954	105	428	95	58.70	362.6	25/11	8.11	31/08	160.9	29.42	9.27
			1985	1066	117	418	93	57.23	263.0	23/12	16.31	02/10	115.5	43.32	19.05
054002	Avon at Evesham	C.A: 2210.0 km ²	36-80	668	211	14.76	371.0	11/07	1.27	09/10	33.2	7.85	2.28		
M.A: STWA	Level: 20m	F.A.F: PGEI						1968		1959					
Comment: Velocity-area station. Recording site, control and gauging site are widely separated; recording at a site where all flows contained. Gauge site can measure out of bank flows. Extensive modification to flow regime from abstractions and returns. # Large catchment of low relief, draining argillaceous rocks almost exclusively. Contains many large towns, but chief land use is agriculture.															
			1981	713	107	296	140	20.73	267.8	30/12	4.51	04/08	41.1	13.80	5.24
			1982	675	101	277	131	19.42	189.6	01/01	4.86	29/07	40.1	12.43	5.40
			1983	622	93	220	104	15.39	154.6	02/05	4.70	29/08	33.9	10.23	5.43
			1984	646	97	214	101	15.00	177.8	24/11	3.81	29/07	29.8	9.06	4.11
			1985	659	99	242	115	16.92	132.9	07/06	5.12	29/09	32.4	11.34	5.56
054003	Vyrnwy at Vyrnwy Reservoir	C.A: 94.3 km ²	20-80	1893	698	2.09	99.0	09/12	0.01	22/07	4.9	0.61	0.52		
M.A: NWWA	Level: 226m	F.A.F: SR						1985		1979					
Comment: Rectangular notch, 24.4m long on the Vyrnwy River; stone sill overflow weirs on the rivers Cowyny and Marchant (whose flows are mostly diverted into the reservoir). Cowyny diversion has Flat V weir. Some records available from 1879, daily record from 1920. Direct supply to Liverpool. Naturalised flow sequence available. # Steep, very wet catchment draining drift free, Silurian and Ordovician slates and shales.															
			1981	2004	106	799	114	2.39	81.1	21/03	0.27	09/11	4.9	1.09	0.32
			1982	2259	119	965	141	2.95	68.6	14/03	0.21	24/06	6.3	0.81	0.28
			1983	2090	110	846	121	2.53	60.9	31/01	0.26	12/11	5.6	1.14	0.51
			1984	1955	103	645	92	1.93	57.4	12/01	0.27	27/03	5.4	0.52	0.31
			1985	1923	102	618	89	1.84	27.8	15/08	0.27	09/03	5.1	0.53	0.28
054004	Soave at Stoneleigh	C.A: 262.0 km ²	52-80	677	350	2.91	54.1	26/03	0.51	30/07	5.2	2.00	0.89		
M.A: STWA	Level: 55m	F.A.F: GE						1955		1961					
Comment: Up to 1979 two humped invert flumes, total width 7.16m, and an overflow weir at 1.45m measured discharge. Rating dubious when overflow weir in operation. Since 1979 compound Crump profile weir with crest tapping. Prone to weed growth. Low flows dominated by Coventry sewage effluent. Groundwater pumping and bulk imports. # Substantially urbanised catchment. Western half on outcrop Coal Measures; east, the Keuper Series overlain by Boulder Clay and glacial sands and gravels.															
			1981	721	106	417	119	3.47	54.7	30/12	1.33	29/07	5.8	2.55	1.49
			1982	672	99	376	107	3.13	28.5	14/07	1.08	04/09	5.5	2.38	1.30
			1983	645	95	365	104	3.03	32.2	21/09	1.42	30/07	5.3	2.34	1.56
			1984	657	97	357	102	2.97	31.6	23/11	1.23	29/07	4.5	2.28	1.37
			1985	687	101	349	100	2.89	23.1	21/01	1.39	24/09	4.5	2.24	1.48
054005	Severn at Montford	C.A: 2025.0 km ²	53-80	1163	637	<									

		Period	Rainfall (mm)	Runoff (mm)	Mean flow (m ³ s ⁻¹)	Peak flow (m ³ s ⁻¹)	Date of peak	Min. daily flow (m ³ s ⁻¹)	Date of min.	10 Percentile (m ³ s ⁻¹)	50 Percentile (m ³ s ⁻¹)	95 Percentile (m ³ s ⁻¹)		
			% of pre-1981	% of pre-1981										
054006	Stour at Kidderminster	C.A: 324.0 km ²	53-80	716	270	2.77	81.6	27/03	0.55	25/08	4.7	2.28	1.29	
M.A: STWA	Level: 31m	F.A.F: GEI												
		B-full: 40.0 m ³ s ⁻¹												
Comment:	Velocity-area station in a formalised trapezoidal channel; variable low flows, out of bank flows estimated owing to scale of inundation. Superseded by Callows Lane site from July 1987. Significant interference from groundwater pumping for PWS and industry, some exports, and industrial and sewage effluents. # Low relief, 20% urbanised. Higher ground on the flanks of the river drain marls and sandstone (Upper Coal Measures) but a faulted trough of Triassic sandstones is the major feature. A little Boulder Clay and valley gravel.													
			1981	769	107	3.36	45.5	31/12	1.55	04/09	5.4	2.64	1.77	
			1982	691	97	2.86	16.2	07/03	1.39	31/05	4.7	2.38	1.53	
			1983	695	97	2.76	16.9	21/04	1.29	29/08	4.5	2.28	1.43	
			1984	723	101	2.83	16.4	23/11	1.24	24/07	5.0	2.37	1.42	
			1985	671	94	2.91	16.8	08/04	1.78	24/10	4.7	2.59	1.95	
054007	Arrow at Broom	C.A: 319.0 km ²	57-80	705	270	2.73	77.9	11/07	0.22	21/08	5.4	1.61	0.73	
M.A: STWA	Level: 30m	F.A.F: GEI												
		B-full: 29.0 m ³ s ⁻¹												
Comment:	Up to 1976 rated section; not rated above-bankfull when extensive inundation. Replaced in 1976 with a Crump profile weir (12m) with a higher containment capacity. Groundwater pumping for PWS significantly augments flow through effluent returns. Contains Redditch and Alcester. # Low relief, predominantly agricultural catchment upon Keuper Marl, with small glacial gravel deposits in the eastern headwaters. Responsive; sewage effluent maintains low flows.													
			1981	752	107	3.76	139	3.80	90.8	30/12	1.03	05/09	6.6	2.47
			1982	693	98	3.11	115	3.14	61.4	07/03	0.94	18/09	6.6	1.95
			1983	683	97	2.84	105	2.67	41.8	01/05	1.03	29/08	5.3	2.02
			1984	663	94									
			1985	680	96									
054008	Teme at Tenbury	C.A: 1134.4 km ²	56-80	859	394	14.18	266.5	04/12	0.65	27/08	33.6	8.69	1.56	
M.A: STWA	Level: 48m	F.A.F: GEI												
		B-full: 200.0 m ³ s ⁻¹												
Comment:	Velocity-area station with a gravel control. Upstream shoaling may render low flow rating variable from year to year. Rarely goes out of bank. Adjustments small and dispersed; natural catchment. # Left bank characterised by high relief hills and broad valleys. Steep and narrow on the right bank. Geology mainly Palaeozoic sediments with Pre-Cambrian crystalline rocks of the Longmynd. Relatively Drift free; some valley gravels and Boulder Clay in the lower reaches. Forestry, grazing.													
			1981	901	105	469	119	16.86	193.7	30/12	1.60	06/09	32.4	12.36
			1982	904	105	502	127	18.04	142.5	15/03	0.81	18/09	42.0	11.71
			1983	839	98	401	102	14.43	116.9	25/04	1.68	30/08	36.1	8.66
			1984	904	105	448	114	16.11	138.4	23/11	1.22	02/09	42.1	6.87
			1985	833	97	426	108	15.27	118.8	22/12	3.15	02/10	30.7	11.41
054011	Salwarpe at Harford Mill	C.A: 184.0 km ²	61-80	661	224	1.31	70.11	01/01	0.15	24/08	2.3	0.94	0.40	
M.A: STWA	Level: 19m	F.A.F: G												
		B-full: 34.0 m ³ s ⁻¹												
Comment:	Velocity-area station with a bed of stone blocks at the gauging station. Prone to weed growth. Gauged to bankfull only. Significant groundwater pumping and effluent discharges. # Generally low relief catchment, draining Cleint and Lickey hills. Contains Bromsgrove and Droitwich. Virtually Drift free, predominant geology is Keuper Marl in the lower reaches. Mainly agricultural.													
			1981	716	108	277	124	1.62	39.0	30/12	0.36	04/09	2.7	0.99
			1982	701	106	244	109	1.43	20.0	15/07	0.33	18/09	2.7	1.01
			1983	650	98	219	98	1.28	23.8	02/05	0.31	07/09	2.2	0.86
			1984	658	100									
			1985	648	98									
054012	Tern at Walcot	C.A: 852.0 km ²	60-80	711	262	7.09	48.7	03/07	0.94	26/08	13.4	5.12	2.38	
M.A: STWA	Level: 45m	F.A.F: G												
		B-full: 260.0 m ³ s ⁻¹												
Comment:	Initially a rated section (1959-76), then a gabion control (1976-1978), both very prone to weed growth leading to unstable S-D relation; now a Flat V weir 15m wide. Regional groundwater pumping for PWS and Severn regulation. Industrial effluent from Wellington and Newport; abstractions for spray irrigation. Net result only moderate. # Predominantly agricultural low relief catchment. Mixed glacial geology overlying Triassic series.													
			1981	763	107	306	117	8.26	55.8	31/12	2.52	04/09	14.5	6.99
			1982	731	103	289	110	7.81	44.4	01/01	2.40	08/09	14.4	6.26
			1983	659	93	234	89	6.32	40.4	02/05	2.19	15/08	11.7	5.15
			1984	706	99	235	90	6.34	44.5	24/11	1.67	29/07	13.5	4.19
			1985	682	96	252	96	6.79	43.9	22/12	2.79	02/10	11.4	5.74
054014	Severn at Abermule	C.A: 580.0 km ²	62-80	1231	733	13.48	419.1	13/12	0.41	20/09	33.2	7.51	1.65	
M.A: STWA	Level: 83m	F.A.F: SR												
		B-full: 225.0 m ³ s ⁻¹												
Comment:	Velocity-area station in a straight reach with a rock/gravel bed. Well rated over the whole range. Flow regime significantly affected by Clywedog releases, particularly at low flows. # High relief headwaters but broad main channels of moderate slope with Boulder Clay and fluvial gravels; solid geology Ordovician slates and shales. Responsive catchment.													
			1981	1339	109	854	117	15.70	182.3	02/02	0.82	20/07	38.1	9.01
			1982	1339	109	810	111	14.89	137.8	19/12	0.85	01/06	41.3	8.42
			1983	1374	112	852	116	15.66	187.8	31/01	1.18	06/07	39.0	9.91
			1984	1308	106	746	102	13.72	207.7	12/01	0.69	14/05	35.9	5.83
			1985	1198	97	757	103	13.86	168.6	21/12	2.64	12/05	29.4	9.79
054015	Bow Brook at Bestford Bridge	C.A: 156.0 km ²	69-80	637	201	0.99	28.4	28/12	0.00	28/08	2.7	0.36	0.07	
M.A: STWA	Level: 13m	F.A.F:												
Comment:	Full-width, 2.44m wide, rectangular sharp-edged weir for low flows, cableway for high. Problems with weedgrowth and siltation. Extensive floodplain plus backing up from d/s bridge. Heavy abstractions for spray irrigation plus sewage imports. # Low lying, agricultural catchment, drift free; draining Keuper Marl in the headwaters, and Lias clays otherwise. Fairly responsive catchment.													
			1981			258	128	1.27	35.1	30/12	0.08	07/09	2.6	0.55
			1982	670	105	227	113	1.12	16.7	07/03	0.12	13/09	2.7	0.41
			1983	623	98	194	97	0.96	21.5	02/05	0.09	06/09	2.3	0.43
			1984	614	96									
			1985	647	102									
054016	Roden at Rodington	C.A: 259.0 km ²	61-80	689	251	2.06	30.6	02/07	0.18	26/08	4.4	1.35	0.48	
M.A: STWA	Level: 48m	F.A.F: N												
Comment:	Model tested trapezoidal flume and flanking broad-crested weirs within vertical sidewalls 7.3m apart. Tapping exists to measure tailwater levels. Original cableway standards still present. Channel prone to troublesome weed growth. Effect of groundwater abstractions and returns moderate. # An unresponsive rural catchment of subdued relief, underlain by sandstone marls and clays of Carboniferous through to Liassic age, blanketed extensively by Boulder Clay and morainic sands and gravels.													
			1981	764	111	279	111	2.29	16.9	30/12	0.44	04/08	4.5	1.69
			1982	756	110	277	110	2.26	14.9	06/01	0.52	16/09	4.9	1.58
			1983	622	90	208	83	1.71	13.4	02/05	0.33	15/08	3.7	1.32
			1984	704	102	212	84	1.74	12.4	24/11	0.27	25/07	4.6	0.87
			1985	652	95	234	93	1.91	11.6	22/12	0.53	02/10	3.9	1.56
054017	Leadon at Wedderburn Bridge	C.A: 293.0 km ²	62-80	706	221	2.05	48.4	10/02	0.07	17/08	5.1	0.98	0.30	
M.A: STWA	Level: 9m	F.A.F: GEN												
		B-full: 14.0 m ³ s ⁻¹												
Comment:	Trapezoidal flume flanked by broad-crested weirs within vertical sidewalls. Model rating includes drowned conditions - when the Severn is high backing up occurs. Weed growth may cause drowning. Cableway for high flows. Minimal augmentation from groundwater pumping. # Low relief, agricultural catchment. Virtually Drift free; predominantly sandstones of Devonian and Keuper age, some Palaeozoic mixed sediments, Keuper Marl in the lower reaches.													
			1981	774	110	248	112	2.30	33.3	30/12	0.30	07/09	5.8	1.23
			1982	752	107	249	113	2.31	22.9	18/01	0.40	12/08	4.6	1.41
			1983	636	90	169	76	1.57	28.8	02/05	0.34	30/08	3.2	1.16
			1984	701	99									
			1985	713	101									
054018	Rea Brook at Hookage	C.A: 178.0 km ²	62-80	742	304	1.72	38.5	09/12	0.08	23/08	4.1	0.94	0.24	
M.A: STWA	Level: 65m	F.A.F: N												
Comment:	Model tested trapezoidal flume and flanking broad-crested weirs within vertical sidewalls 7.3m apart. Original u/s cableway removed. Lb gets inundated at high flows but velocities low and rating extrapolation reasonable. All flows contained by d/s road bridge. # Broad and flat main channel flanked by steeply graded streams. Complex geology of sandstones and shales spanning Pre-Cambrian to Silurian, entirely covered with Boulder Clay and fluvio-glacial sands and gravels. Moorland and low grade agriculture.													
			1981	795	107	335	110							

ANGLIAN WATER



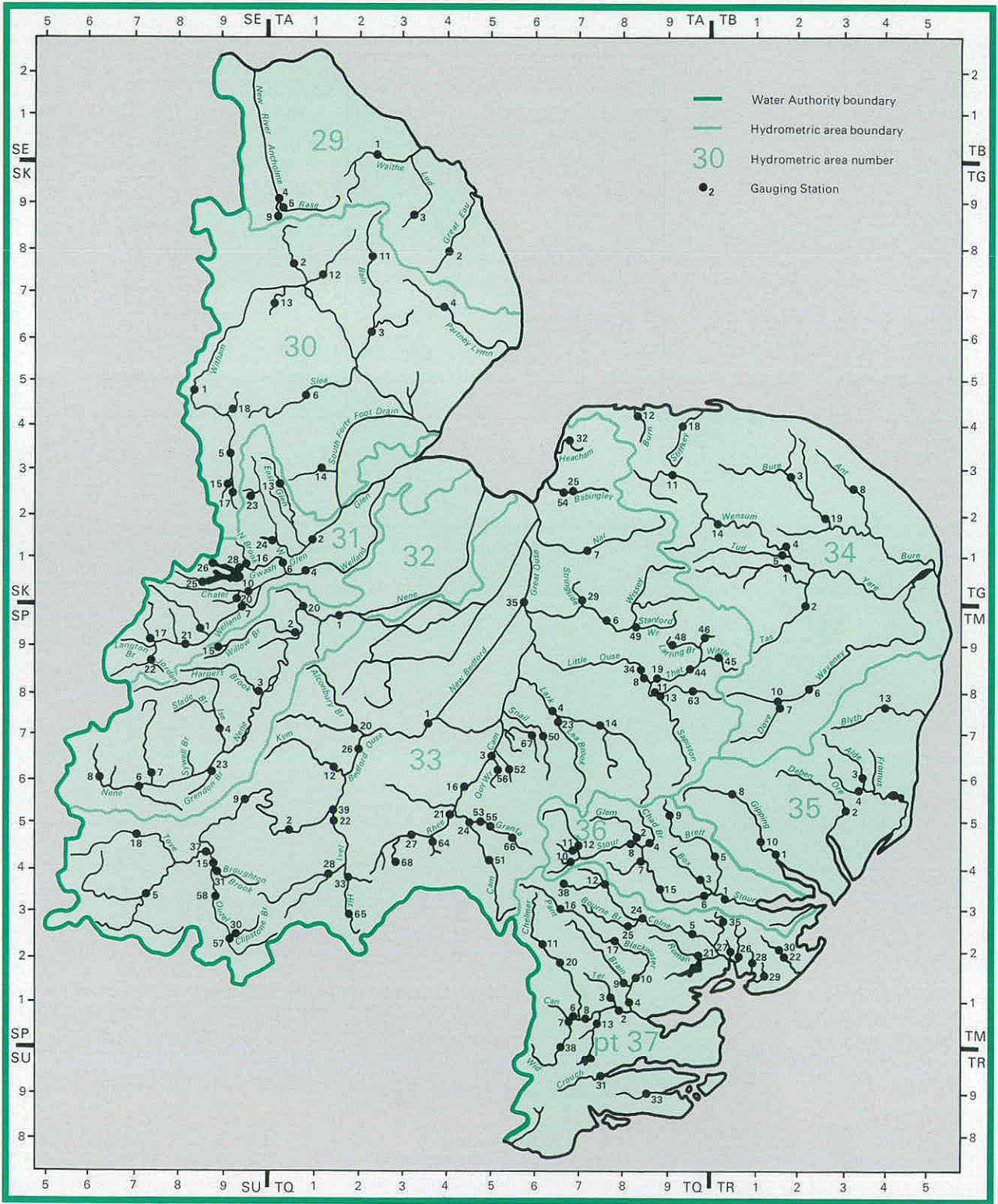
Area: 26,795 km²

Average Rainfall (1941-70): 610 mm

Headquarters of Anglian Water:

Ambury Road
Huntingdon PE18 6NZ

Telephone: Huntingdon (0480) 56181



Gauging Station Register

Station number	River name	Station name	Grid reference	Catchment area (sq km)	Station type	Period of record	Mean ann. rainfall (mm)	Mean ann. runoff (mm)	Max. ann. runoff (mm)	Year of max.	Min. ann. runoff (mm)	Year of min.	Mean flow (m ³ s ⁻¹)	Min. mon. flow (m ³ s ⁻¹)	Month/Year of min.	Mean ann. flood (m ³ s ⁻¹)	Base flow index	10 Percentile (m ³ s ⁻¹)	85 Percentile (m ³ s ⁻¹)	
029001	Waithe Beck	Brigsley	TA 253016	108.3	FL	1960..85	699	94	173	69	30	76	0.32	0.02	07/76	2.5	.84	0.7	0.08	
029002	Great Eau	Claythorpe Mill	TF 416793	77.4	C VA	1962..85	679	275	387	79	123	76	0.68	0.18	08/76	4.1	.88	1.2	0.28	
029003	Lud	Louth	TF 337879	55.2	C	1968-85	697	273	402	69	102	76	0.48	0.10	08/76	3.2	.90	0.9	0.13	
029004	Ancholme	Bishopbridge	TF 032911	54.7	CC	1968-85	644	282	599	79	93	76	0.49	> 0.00	09/70	7.5	.46	1.2	0.01	
029005	Rase	Bishopbridge	TF 032912	66.6	C	1971-85	648	222	380	80	99	76	0.47	> 0.03	08/76	8.6	.54	1.0	0.06	
029009	Ancholme	Toft Newton	TF 033877	27.2	FV	1974-85	624	190	289	80	82	76	0.16	> 0.00	08/76	2.6	.49	0.4	> 0.00	
030001	Witham	Claypole Mill	SK 842480	297.9	B	1959-85	622	184	297	79	63	76	1.74	0.06	07/76	17.9	.87	3.8	0.33	
030002	Barings Eau	Langworth Br	TF 066766	210.1	FV	1960..85	618	194	377	69	70	76	1.29	0.01	08/76	21.3	.49	3.2	0.04	
030003	Bain	Fulby Lock	TF 241611	197.1	B	1962..85	673	212	326	80	77	76	1.32	0.02	07/76	19.2	.58	2.9	0.14	
030004	Partney Lynn	Partney Mill	TF 402676	61.6	C	1962..85	693	265	386	69	149	76	0.52	0.09	07/76	7.8	.65	1.0	0.17	
030005	Witham	Salterford	SK 927335	126.1	MIS	1968-84	644	195	284	79	59	76	0.78	0.05	08/76		.77	1.7	0.11	
030006	Slea	Leasingham Mill	TF 088485	48.4	TP	1974..85	625	381	636	79	1	76	0.58	0.00	09/84	2.2	.89	1.6	0.16	
030011	Bain	Goulceby Bridge	TF 246795	62.5	C VA	1971-85	692	191	304	80	79	76	0.38	0.04	07/76	4.0	.72	0.8	0.10	
030012	Stainfield Bk	Stainfield	TF 127739	37.4	CC	1970..85	628	231	349	79	100	76	0.27	0.01	08/76	12.4	.46	0.6	0.01	
030013	Heigh'ton Bk	Heighington	TF 042696	21.2	C	1976-85	634	219	308	80	176	85	0.15	0.01	08/76	0.7	.75	0.3	0.03	
030014	Pointon Lode	Pointon	TF 128313	11.9	C	1972..85	575	180	315	80	42	76	0.07	0.00	08/76	2.7	.47	0.2		
030015	Cringle Brook	Stoke Rochford	SK 925297	50.5	TP	1976-85	729	206	274	79	174	84	0.33	0.04	09/76	1.7	.89	0.7	0.09	
030017	Witham	Colsterworth	SK 929246	51.3	FV	1978-85	684	180	216	79	148	81	0.29	0.03	10/79	7.6	.50	0.6	0.04	
030018	Honington Bk	Honington	SK 936433	22.3	FV	1983-85	586	188	199	84	189	85	0.13	0.02	07/84		.65	0.2	0.04	
031001	Eye Brook	Eye Brook Res	SP 853941	60.1	C	1937..85	657	113	242	41	12	44	0.21	> 0.00	11/40		.38	0.5	0.03	
031002	Glen	Kates Bridge	TF 106149	341.9	FV	1960-85	622	114	215	79	14	76	1.23	0.00	07/76		.60	2.8	0.04	
031004	Welland	Tallington	TF 095078	717.4	MIS	1967-85	635	193	296	69	57	76	4.40	0.64	08/76		.55	9.4	0.79	
031006	Gwash	Belmesthorpe	TF 038097	150.0	C	1967-85	632	180	300	69	72	76	0.86	0.20	09/76		.75	1.6	0.29	
031007	Welland	Barrowden	SP 948999	411.6	C	1968..85	644	184	281	79	79	76	2.40	0.09	07/72		.44	5.3	0.22	
031010	Chater	Fosters Bridge	SK 961030	68.9	CC	1968-85	662	240	379	77	91	73	0.52	0.02	07/76	10.1	.52	1.2	0.06	
031013	East Glen	Irnham	TF 038273	71.5	C	1969..85	613	56	121	79	22	73	0.13	0.00	08/76		.33	0.3	> 0.00	
031016	North Brook	Empingham	SK 957089	36.5	C	1969-85	625	200	335	79	68	76	0.23	0.00	01/69		.94	0.5	0.06	
031017	Stonton Brk	Welham Rd Br	SP 759918	42.7	C	1970..85	646	100	131	72	114	75	0.14	0.00	07/76		.53	0.6	0.01	
031020	Morcott Brk	South Luttenham	SK 939018	19.6	C	1970..85	628	148	262	74	97	73	0.09	0.01	07/76		.56	0.3	0.01	
031021	Welland	Ashley	SP 819915	250.7	C VA	1970..85	643	162	281	79	87	76	1.29	0.10	07/76	28.4	.41	3.3	0.14	
031022	Jordan	Mkt Harborough	SP 740867	20.8	C	1970..85	641	94	180	74	138	75	0.06	0.00	03/70		.39	0.2	> 0.00	
031023	West Glen	Easton Wood	SK 965258	4.4	FV	1972-85	652	165	237	79	57	73	0.02	0.00	10/85	2.5	.14	0.1		
031024	Holywell Brk	Holywell	TF 026148	22.3	C	1971-85	617	160	293	79	14	76	0.11	0.00	11/76		.93	0.2	0.01	
031025	Gwash S Arm	Manton	SK 875051	24.5	FV	1978-85	695	273	348	79	227	84	0.21	0.01	08/84	12.9	.27	0.5	0.01	
031026	Egleton Brk	Egleton	SK 878073	2.5	FV	1978-85	696	252	315	79	202	83	0.02	0.00	08/84	0.9	.34	0.0	> 0.00	
031028	Gwash	Church Bridge	SK 951082	76.5	CC	1982-85	98	106	84	94	83	0.24	0.07	09/83		.87	0.4	0.07		
032001	Nene	Orton	TL 166972	1634.3	MIS	1939..85	630	178	312	79	54	44	9.25	0.48	08/44		.52	24.4	1.08	
032002	Willow Brook	Fotheringhay	TL 067933	89.6	FL	1938-85	611	273	437	79	85	44	0.78	0.09	08/44	5.5	.72	1.3	0.23	
032003	Harpers Brk	Old Mill Bridge	SP 983799	74.3	CC	1938..85	628	174	287	39	67	44	0.41	0.05	08/44	9.0	.49	0.9	0.07	
032004	Ise Brook	Harrowden Mill	SP 898715	194.0	FV	1943..85	635	222	380	60	69	44	1.36	0.11	08/44	15.5	.55	3.0	0.19	
032006	Nene/Kislingb'	Upton	SP 721592	223.0	FL C	1939-85	678	198	320	79	77	44	1.40	0.13	08/44		.57	3.1	0.25	
032007	Nene/Brampt'	St Andrews	SP 747617	232.8	MIS	1939-85	671	162	315	41	57	76	1.20	0.04	08/44		.55	2.6	0.20	
032008	Kislingbury	Dodford	SP 627607	107.0	C	1945..85	673	176	308	79	76	76	0.60	0.05	09/49	10.2	.57	1.3	0.11	
032015	Willow Brook	Tunwell Loop	SP 898892	7.1	C	1969..85	637	160	204	72	58	69	0.04	0.00	07/69		.04	0.1		
032020	Wittingen Brk	Wansford	TL 089995	46.9	C	1970-85	576	151	229	79	86	73	0.22	0.03	07/76		.86	0.4	0.09	
032023	Grendon Brk	Ryeholmes Br	SP 883633	47.5	C	1970..85	606	87	102	74	74	72	0.10	0.00	09/71		.57	0.4		
033001	Bedford Ouse	Brownhill St'nch	TL 369727	3030.0	MIS	1936..62	616	151	332	37	56	44	14.49	0.78	09/49		.40	35.5	0.99	
033002	Bedford Ouse	Bedford	TL 055495	1460.0	MIS	1933-85	651	214	408	37	52	34	9.90	0.04	08/34	81.8	.51	26.1	0.90	
033003	Cam	Bottisham	TL 508657	803.0	MIS	1936..85	586	142	325	51	42	73	3.62	0.60	08/57		.85	7.0	0.89	
033004	Lark	Iseham	TL 648760	466.2	MIS	1936..85	610	122	260	51	41	73	1.80	0.13	08/76		.64	3.3	0.44	
033005	Bedford Ouse	Thornborough	SP 736353	388.5	MIS	1951-85	662	208	448	51	72	73	2.56	0.04	08/76	20.9	.52	6.1	0.24	
033006	Wissey	Northwood	TL 771965	274.5	FL	1956-85	653	218	317	69	138	76	1.90	0.31	08/76	8.6	.81	3.5	0.58	
033007	Nar	Marham	TF 723119	153.3	FL	1953-85	684	246	342	58	146	64	1.20	0.27	08/76	4.3	.90	2.2	0.53	
033008	Little Ouse	Theford Stanch	TL 860832	699.0	MIS	1958-68	136	179	61	92	64	3.01	0.39	09/64		.72	6.1	0.66		
033009	Bedford Ouse	Harold Mill	SP 951565	1320.0	CB	1955-85	653	225	381	60	82	76	9.40	0.51	09/59	94.1	.52	22.9	1.49	
033011	Little Ouse	Euston	TL 892801	128.7	CB	1948..85	581	100	177	69	37	73	0.41	> 0.00	08/49		3.5	7.2	0.8	0.10
033012	Kym	Meagre Farm	TL 155631	137.5	CB	1960-85	606	144	240	77	24	73	0.83	> 0.00	07/76	18.2	.26	1.5	0.02	
033013	Sapiston	Rectory Bridge	TL 896791	205.9	TP	1949..85	600	102	164	79	34	73	0.66	0.02	07/49	6.2	.64	1.4	0.12	
033014	Lark	Temple	TL 758730	272.0	CB	1960-85	608	150	234	69	72	73	1.30	0.38	08/76	8.9	.78	2.2	0.53	
033015	Ouzel	Willen	SP 882408	277.1	FV	1962-85	650	225	336	79	86	73	1.97	0.19	08/76	18.6	.55	4.3	0.45	
033016	Cam	Jesus Lock	TL 450593	761.5	MIS	1959..83	582	118	184	79	38	73	2.86	0.34	09/64		.64	6.5	0.81	
033018	Tove	Cappenham Br	SP 714488	138.1	CB	1962..85	670	241	360	79	103	76	1.05	0.09	07/76	17.1	.53	2.3	0.19	
033019	Thet	Melford Bridge	TL 880830	316.0	C	1962..85	615	181	293	69	88	73	1.81	0.16	08/76	8.0	.78	3.6	0.47	
033020	Alconbury B	Brampton	TL 208717	201.5	MIS	1963..85	593	123	243	66	17	73	0.78	> 0.00	10/72	19.7	.28	2.1	0.01	
033021	Rhee	Burnt Mill	TL 415523	303.0	C	1962-85	568	130	206	79	31	73	1.25	0.08	08/76	8.2	.73	2.5	0.27	
033022	Ivel	Blunham	TL 153509	541.3	C	1959..85	590	175	253	79	71	73	3.01	0.56	08/76	19.5	.73	5.2	1.09	
033023	Lea Brook	Beck Bridge	TL 662733	101.8	C	1962-85	550	77	153	69	8	73	0.25	> 0.00	10/64	3.2	.72	0.6	0.02	
033024	Cam	Dernford	TL 468506	198.0	TP	1949..85	595	157	240	79	66	73	0.98	0.15	09/49	8.8	.77	1.6	0.36</	

Station number	River name	Station name	Grid reference	Catchment area (sq km)	Station type	Period of record	Mean ann. rainfall (mm)	Mean ann. runoff (mm)	Max. ann. runoff (mm)	Year of max.	Min. ann. runoff (mm)	Year of min.	Mean flow (m ³ s ⁻¹)	Min. mon. flow (m ³ s ⁻¹)	Month/Year of min.	Mean ann. flood (m ³ s ⁻¹)	Base flow index	10 Percentile (m ³ s ⁻¹)	95 Percentile (m ³ s ⁻¹)	
033039	Bedford Ouse	Roxton	TL 160535	1660.0	FV	1972-85	633	211	308	79	76	73	11.12	0.34	08/76		.54	27.2	1.82	
033044	Thet	Bridgham	TL 957855	277.8	C	1967-85	626	183	283	69	82	73	1.61	0.20	08/76	8.6	.74	3.4	0.39	
033045	Wittle	Quidentham	TM 027878	28.3	CB	1967-85	609	153	265	69	47	73	0.14	>0.00	07/76	1.4	.65	0.3	0.02	
033046	Thet	Red Bridge	TL 996923	145.3	C	1967-85	626	192	291	69	81	73	0.88	0.07	08/76	7.8	.64	2.0	0.13	
033048	Larling Brook	Stonebridge	TL 928907	21.4	FL	1969-85	622	77	102	81	29	73	0.05	0.01	08/76		.82	0.1	0.01	
033049	Stanford Wtr	Buckenham Tofts	TL 834953	43.5	B	1967-80		122	270	75	71	71	0.17	0.00	12/71	0.7	.88	0.4		
033050	Snail	Fordham	TL 631703	60.6	MIS	1960-85	576	160	236	83	100	67	0.31	0.08	08/76		.89	0.5	0.12	
033051	Cam	Chesterford	TL 505426	141.0	CB	1964-85	602	133	210	79	43	73	0.60	0.14	07/76		.68	1.1	0.18	
033052	Swaffham	Swaffham B'beck	TL 553628	36.4	C	1963-85	549	141	222	69	50	76	0.16	0.02	08/76		.96	0.3	0.07	
033053	Granta	Stapleford	TL 471515	114.0	MIS	1949-85		59	121	60	4	73	0.21	0.00	09/76		.57	0.5	0.01	
033054	Babingley	Castle Rising	TF 680252	47.7	FV	1976-85	694	366	443	81	294	84	0.55	0.17	08/76		.94	0.8	0.30	
033055	Granta	Babraham	TL 510504	98.7	FV	1963-85	590	79	121	79	45	64	0.25	>0.00	08/76		.58	0.5	0.04	
033056	Quy Water	Lode	TL 531627	76.4	MIS	1965-85	591	69	133	83	9	65	0.17	0.00	10/72		.76	0.5	>0.00	
033057	Ouzel	Leighton Buz'rd	SP 917241	119.0	C	1976-85	644	205	288	79	163	85	0.77	0.14	08/76		.68	1.6	0.24	
033058	Ouzel	Bletchley	SP 883322	215.0	FV	1976-85	687	286	389	79	206	85	1.95	0.50	10/85		.60	4.0	0.56	
033063	Little Ouse	Knettishall	TL 955807	101.0	MIS	1980-85	614	156	179	81	144	82	0.50	0.14	09/82		.69	0.9	0.17	
033064	Whaddon Brk	Whaddon	TL 359466	16.0	FL	1980-85		160	195	83	138	81	0.08	0.04	11/85		.91	0.1	0.05	
033065	Hiz	Hitchin	TL 185290	6.8	CC	1980-85	602	186	278	83	134	84	0.04	0.02	10/85		.85	0.1	0.02	
033066	Granta	Linton	TL 570464	59.8	CC	1981-85	589	108	118	82	91	85	0.20	0.02	09/82		.48	0.4	0.03	
033067	New River	Burwell	TL 608696	19.6	C	1982-85	575	399	497	83	343	85	0.25	0.11	11/85		.96	0.4	0.12	
033068	Cheney Water	Gatley End	TL 296411	5.0	C	1982-85	582	114	158	83	57	84	0.02	0.00	12/85		.97	0.0		
034001	Yare	Colney	TG 182082	231.8	MIS	1959-85	654	196	303	69	105	73	1.44	0.19	07/76	10.4	.66	3.1	0.37	
034002	Tas	Shotesham	TM 226994	146.5	FV	1957-85	611	161	280	69	60	73	0.75	0.12	07/76	10.3	.58	1.6	0.18	
034003	Bure	Ingworth	TG 192296	164.7	MIS	1959-85	676	211	285	69	153	73	1.10	0.49	07/76	6.7	.83	1.7	0.59	
034004	Wensum	Costessey Mill	TG 177128	536.1	CB	1960-85	679	245	339	69	141	73	4.16	0.79	07/76	18.6	.73	7.5	1.54	
034005	Tud	Costessey Park	TG 170113	73.2	FL	1961-85	668	151	236	69	85	73	0.35	0.05	08/76	3.3	.65	0.7	0.10	
034006	Waveney	Needham Mill	TM 229811	370.0	CC	1963-85	604	151	233	69	46	73	1.77	0.26	09/64	32.0	.48	4.1	0.32	
034007	Dove	Oakley Park	TM 174772	133.9	CC	1968-85	570	161	225	81	49	73	0.68	0.13	08/73	14.3	.47	1.5	0.15	
034008	Ant	Honing Lock	TG 331270	49.3	C	1966-85	650	200	243	69	158	76	0.31	0.13	06/76	1.1	.86	0.4	0.18	
034010	Waveney	Billington Br	TM 168782	149.4	MIS	1968-85	605	167	253	69	41	73	0.79	0.04	07/76	13.2	.43	1.7	0.07	
034011	Wensum	Fakenham	TF 919294	127.1	MIS	1967-85	696	225	337	69	109	73	0.91	0.17	07/76	3.8	.82	1.6	0.30	
034012	Burn	Burnham Overy	TG 842428	80.0	CC	1966-85	679	127	203	69	53	73	0.32	0.08	08/76	0.9	.96	0.5	0.12	
034014	Wensum	Swanton Morley	TG 020184	363.0	CC	1969-85	681	232	289	79	144	73	2.67	0.62	07/76		.78	4.7	1.04	
034018	Stiffkey	Warham All Sts	TF 944414	77.1	FV	1972-85	659	236	555	75	137	76	0.58	0.06	07/76		.79	1.1	0.17	
034019	Bure	Horstead Mill	TG 267194	313.0	MIS	1974-85	658	224	272	81	172	76	2.23	0.73	07/76		.79	3.3	1.17	
035001	Gipping	Constantine Wr	TM 154441	310.8	MIS	1964-85	581	126	145	83	99	80	1.24	0.09	08/65	20.3	.41	2.9	0.18	
035002	Deben	Nauton Hall	TM 322534	163.1	CC	1964-85	588	144	205	69	39	73	0.75	0.04	07/76		.36	1.7	0.09	
035003	Aldo	Narham	TM 360601	63.9	MIS	1961-85	591	136	235	69	40	73	0.27	0.03	07/76		.66	0.6	0.05	
035004	Ore	Baversham Br	TM 359583	54.9	CC	1965-85	603	177	273	69	65	73	0.31	0.05	07/76		5.1	.47	0.6	0.07
035008	Gipping	Stowmarket	TM 058578	128.9	CC	1964-85	571	151	209	84	38	73	0.62	0.07	09/64	15.3	.39	1.4	0.09	
035010	Gipping	Bramford	TM 127465	298.0	MIS	1969-85	557	121	168	81	28	73	1.14	0.09	08/76	13.7	.49	2.4	0.18	
035013	Blyth	Holton	TM 406769	92.9	CC	1970-85	578	140	219	81	41	73	0.41	0.06	07/76		.34	0.8	0.07	
036001	Stour	Strat'rd St Mary	TM 042340	844.3	MIS	1928-85	597	111	198	37	37	34	2.98	0.14	07/76	32.8	.48	7.1	0.55	
036002	Glem	Glensford	TL 846472	87.3	FL	1960-85	598	172	238	79	48	73	0.48	0.06	08/76		8.9	4.3	1.1	0.07
036003	Box	Polstead	TL 985378	53.9	FL	1960-85	582	123	163	69	50	73	0.21	0.04	08/76		3.7	6.4	0.4	0.06
036004	Chad Brook	Long Melford	TL 868459	47.4	EW	1965-85	585	156	230	79	35	73	0.24	0.02	09/76		6.5	4.3	0.5	0.03
036005	Brett	Hadleigh	TM 025429	156.0	EW	1962-85	576	136	200	79	27	73	0.67	0.04	08/76		12.0	4.6	1.5	0.09
036006	Stour	Langham	TM 020344	578.0	FL	1962-85	579	154	222	79	78	73	2.83	0.19	07/76	33.4	.51	6.2	0.50	
036007	Belchamp Brk	Bardfield Bridge	TL 848421	58.6	FL	1960-85	555	90	145	79	17	73	0.17	0.01	09/64	4.9	4.1	6.4	0.02	
036008	Stour	Westmill	TL 827463	224.5	FL	1960-85	596	171	249	79	90	64	1.22	0.07	08/76	22.4	.38	2.5	0.12	
036009	Brett	Cockfield	TL 914525	25.7	EW	1968-85	613	160	247	81	16	73	0.13	>0.00	07/76		3.8	3.1	0.3	>0.00
036010	Bumpstead B	Broad Green	TL 689418	28.3	EW	1968-85	603	157	244	79	20	73	0.14	>0.00	08/76		7.4	2.3	0.3	>0.00
036011	Stour Brook	Sturmer	TL 696441	34.5	EW	1968-85	593	205	288	79	56	73	0.22	0.04	10/72		5.7	3.7	0.5	0.04
036012	Stour	Kedington	TL 708450	76.2	EW	1968-85	601	252	449	73	158	85	0.61	0.02	08/76		.41	1.6	0.03	
036015	Stour	Lamarsh	TL 897358	480.7	MIS	1972-85	586	151	208	82	65	73	2.31	0.23	08/76		.47	4.6	0.54	
037002	Chelmer	Rushes Lock	TL 794090	533.9	FV	1932-85	588	106	187	79	25	34	1.80	0.01	09/59		4.5	4.7	0.10	
037003	Ter	Crabbs Bridge	TL 786107	77.8	FL	1932-85	579	103	188	37	17	34	0.25	0.02	08/35		5.5	4.9	0.5	0.03
037005	Colne	Lexden	TL 962261	238.2	FL	1959-85	570	135	229	60	48	73	1.02	0.09	08/65	13.9	.53	2.2	0.20	
037006	Can	Beachs Mill	TL 690072	228.4	FL	1962-85	588	173	246	79	62	73	1.25	0.10	08/76	20.6	.42	2.8	0.19	
037007	Wid	Wittle	TL 686060	136.3	EW	1964-85	610	196	269	79	68	73	0.85	0.09	08/76	15.8	.40	2.0	0.12	
037008	Chelmer	Springfield	TL 713071	190.3	EW	1965-85	585	169	223	79	58	73	1.02	0.18	08/76	15.4	.55	2.0	0.27	
037009	Brain	Guithavon	TL 818147	60.7	EW	1962-85	581	189	244	70	97	73	0.36	0.13	08/76		4.2	6.8	0.6	0.15
037010	Blackwater	Appleford Bridge	TL 845158	247.3	FL	1962-85	573	150	209	79	105	76	1.18	0.16	08/76		12.6	5.5	2.4	0.31
037011	Chelmer	Churchend	TL 629233	72.6	FL	1963-85	585	152	224	79	39	73	0.35	0.02	07/76		8.8	4.3	0.8	0.06
037012	Colne	Poolstreet	TL 771364	65.1	FL	1963-85	573	132	206	79	14	73	0.27	0.00	08/76		10.2	2.7	0.7	>0.00
037013	Sandon Brk	Sandon Bridge	TL 755055	60.6	EW	1963-85	564	151	258	82	37	73	0.29	0.02	06/76		8.9	3.4	0.6	0.04
037016	Pant	Copford Hall	TL 668313	62.5	EW	1965-85	616	171	250	74	110	85	0.34	>0.00	08/76		8.8	3.1	0.9	0.02
037017	Blackwater	Stisted	TL 793243	139.2	EW	1969-85	582	170	223	70	131	85	0.75	0.08	08/76		4.8	1.5	0.16	

Hydrometric Statistics

Period	Rainfall (mm)	Runoff (mm)		Mean flow (m ³ s ⁻¹)	Peak flow (m ³ s ⁻¹)	Date of peak	Min. daily flow (m ³ s ⁻¹)	Date of min.	10 Percentile (m ³ s ⁻¹)	50 Percentile (m ³ s ⁻¹)	95 Percentile (m ³ s ⁻¹)			
		% of pre-1981	% of pre-1981											
029001	Waithe Beck at Briggsley	C.A: 108.3 km ²		60-80	695	93	0.32	4.6	17/03	0.02	23/07	0.7	0.20	0.08
M.A: AWA	Level: 16m	F.A.F: SGI	S-full: 17.0 m ³ s ⁻¹											
Comment: Broad trapezoidal flume (1.83m wide at base) with theoretical rating confirmed to 0.9 m ³ s ⁻¹ . All recorded flows have been contained within the structure. Groundwater extraction near Grimsby has significant effect on low flows. * The catchment is 81% Chalk and largely rural.														
1981	763	110	142	153	0.49	7.2	26/04	0.11	23/09	1.2	0.30	0.12		
1982	708	102	72	77	0.25	1.6	22/06	0.09	05/06	0.4	0.22	0.08		
1983	700	101	94	101	0.32	3.1	01/05	0.07	20/11	0.6	0.29	0.09		
1984	690	99	85	91	0.29	2.0	29/01	0.06	11/09	0.6	0.20	0.07		
1985	720	104	76	82	0.26	3.4	21/01	0.08	29/09	0.4	0.22	0.10		
029002	Great Eau at Claythorpe Mill	C.A: 77.4 km ²		62-80	676	266	0.65	13.3	11/07	0.17	26/08	1.2	0.51	0.27
M.A: AWA	Level: 7m	F.A.F: SGI	B-full: 12.8 m ³ s ⁻¹											
Comment: Simple low flow Crump weir 3.073m wide with flanking broad-crest sections. Total width 9.687m. Crump portion is theoretically rated and upper portion rated theoretically assuming it to be a broad-crested weir. Flows to May 1973 suspect due to error in gauged head and rounding of crest during cleaning. Small amounts of abstraction for irrigation in summer. * The catchment is 81% Chalk and predominantly rural.														
1981	753	111	377	142	0.93	8.6	26/04	0.40	19/12	1.5	0.82	0.43		
1982	692	102	278	105	0.68	2.7	09/12	0.35	01/10	1.0	0.66	0.41		
1983	669	99	325	122	0.80	3.0	01/05	0.36	20/11	1.1	0.81	0.40		
1984	670	99	285	107	0.70	3.2	29/01	0.33	20/10	1.2	0.60	0.36		
1985	688	102	277	104	0.68	5.1	21/01	0.37	01/11	0.9	0.62	0.39		
029003	Lud at Louth	C.A: 55.2 km ²		68-80	689	267	0.47	6.8	02/11	0.09	07/09	0.9	0.32	0.13
M.A: AWA	Level: 15m	F.A.F: PGI	S-full: 20.0 m ³ s ⁻¹											
Comment: Crump weir, 4.569m wide, at upstream end of long culvert. Theoretical rating confirmed by current metering, capacity limited to 20 m ³ s ⁻¹ - not yet exceeded by culvert. Flows recorded 1966-1968 at sharp-crested weir at Bridge Street. No major abstractions or returns, but mill regulation produces short term spikes. 1920 flood estimated at about 140 m ³ s ⁻¹ . * Catchment is 73% Chalk and largely rural.														
1981	781	113	377	141	0.66	5.1	26/04	0.22	19/12	1.3	0.56	0.23		
1982	724	105	237	89	0.42	1.86f	22/06	0.16	01/10	0.6	0.41	0.21		
1983	708	103	296	111	0.52	2.9	01/05	0.16	30/10	0.8	0.54	0.19		
1984	667	97	276	103	0.48	2.52f	27/05	0.12	20/10	0.9	0.41	0.15		
1985	703	102	247	93	0.43	3.7	21/01	0.15	03/11	0.7	0.43	0.18		
029004	Ancholme at Bishopbridge	C.A: 54.7 km ²		68-80	649	273	0.47	9.4	16/07	0.00	30/09	1.4	0.23	0.01
M.A: AWA	Level: 4m	F.A.F: SRGI	S-full: 20.9 m ³ s ⁻¹											
Comment: Compound Crump weir, with central crest 2.448m wide and total width of 9.131m. Theoretical rating confirmed to 5.5 m ³ s ⁻¹ , but structure drowns in high flows and is affected by weed growth in summer. Flows are very heavily augmented in summer from Toft Newton Reservoir. * Catchment is 53% clay, 47% Lincolnshire Limestone, flat and rural.														
1981	680	105	334	122	0.58	23.0	26/04	0.02	22/07	1.1	0.31	0.07		
1982	590	91	361	132	0.63	6.6	06/03	0.08	18/07	1.1	0.54	0.13		
1983	596	92	302	111	0.52	5.5	02/06	0.02	18/11	1.0	0.45	0.03		
1984	628	97	280	103	0.49	6.1	29/01	0.07	06/06	0.8	0.35	0.10		
1985	652	100	258	95	0.45	7.6	21/01	0.04	06/11	0.8	0.33	0.08		
029005	Rase at Bishopbridge	C.A: 66.6 km ²		71-80	629	217	0.46	14.1	07/10	0.02	27/08	1.0	0.23	0.05
M.A: AWA	Level: 4m	F.A.F: PI	S-full: 18.0 m ³ s ⁻¹											
Comment: Crump weir (crest length 3.658m) with theoretical calibration. Station drowns above about 9 m ³ s ⁻¹ , and relationship between upstream and downstream levels depends on weed growth and the disposition of sluices and gates at Harlam Weir downstream. Abstractions for public supply in upper reaches has moderate effect on summer low flows. * Catchment is rural and 89% clay.														
1981	735	117	309	142	0.65	21.4	26/04	0.05	28/09	1.2	0.38	0.10		
1982	646	103	202	93	0.43	6.3	05/01	0.06	16/09	0.9	0.30	0.08		
1983	654	104	216	100	0.46	4.2	01/06	0.04	28/08	1.1	0.32	0.07		
1984	689	110	204	94	0.43	7.5	29/01	0.05	30/08	0.8	0.24	0.06		
1985	722	115	229	106	0.48	13.0	06/12	0.10	05/10	0.9	0.33	0.11		
029009	Anchoime at Toft Newton	C.A: 27.2 km ²		74-80	638	204	0.18	2.8	29/12	0.00	13/09	0.5	0.05	>0.00
M.A: AWA	Level: 8m	F.A.F: GI	S-full: 10.0 m ³ s ⁻¹											
Comment: Flat V weir (3.03m wide) with theoretical calibration confirmed by check gaugings. There is no drowning or bypassing, and the station is immediately upstream of entry point of flows from Toft Newton reservoir. No major abstractions or returns. * The catchment is in Lincolnshire Limestone and clays and is flat and rural.														
1981	678	107	218	107	0.19	7.1	26/04	0.01	30/08	0.4	0.11	0.01		
1982	583	92	176	86	0.15	2.1	05/01	0.01	12/09	0.4	0.08	0.01		
1983	584	92	181	89	0.16	2.5	02/06	0.01	17/09	0.4	0.11	0.01		
1984	594	93	156	76	0.13	1.8	30/01	0.00	12/09	0.3	0.04	>0.00		
1985	615	97	136	67	0.12	2.1	21/01	0.00	01/10	0.3	0.07	0.01		
030001	Witham at Claypole Mill	C.A: 297.9 km ²		59-80	618	179	1.69	37.5	11/02	0.02	24/07	3.8	0.95	0.31
M.A: AWA	Level: 17m	F.A.F: RPGI	S-full: 43.0 m ³ s ⁻¹											
Comment: An old weir at three levels with a total width of 24.99m converted into a standard La designed broad-crested weir. It is rated theoretically and there is no bypassing or drowning. Low flows in summer are moderately influenced by transfer of water from Rutland Water and abstractions for public supply at Salterford. * The catchment is clay (50%) with limestone (40%) and gravel, and is largely rural.														
1981	660	107	215	120	2.03	29.6	26/04	0.45	07/09	3.9	1.36	0.56		
1982	664	107	216	121	2.04	16.2	06/03	0.56	10/06	3.7	1.57	0.65		
1983	617	100	215	120	2.03	20.4	01/06	0.40	12/10	3.8	1.61	0.54		
1984	641	104	197	110	1.86	18.2	29/01	0.41	01/08	3.6	1.34	0.54		
1985	601	97	198	111	1.86	12.7	22/01	0.46	21/10	3.4	1.49	0.58		
030003	Bain at Fulsby Lock	C.A: 197.1 km ²		62-80	665	204	1.27	32.0	10/02	0.00	14/07	2.9	0.66	0.12
M.A: AWA	Level: 10m	F.A.F: SPGI	B-full: 42.0 m ³ s ⁻¹											
Comment: Broad-crested weir 15.08m wide rated by model tests situated in old lock. Small bypass channel upstream feeds original river course and a disused model flume, gauged by sharp-crested weir. Flows over bypass not processed since 1981 and subsequent low flows therefore underestimated. Revestby Reservoir has a very minor influence, and abstractions for irrigation may be significant in dry summers. * Rural catchment, mostly clay with Chalk and sandstone in the headwaters.														
1981	737	111	290	142	1.81	57.0	26/04	0.20	05/08	3.5	0.88	0.26		
1982	699	105	219	107	1.37	12.7	09/12	0.20	01/08	3.0	1.00	0.23		
1983	669	101	232	114	1.45	12.1	01/06	0.21	30/07	3.1	1.25	0.25		
1984	654	98	222	109	1.39	20.7	29/01	0.16	24/07	2.7	0.80	0.20		
1985	706	106	230	113	1.44	26.9	21/01	0.27	26/10	2.8	1.03	0.29		
030004	Partney Lynn at Partney Mill	C.A: 61.6 km ²		62-80	693	258	0.50	13.4	11/07	0.06	07/07	1.0	0.33	0.16
M.A: AWA	Level: 15m	F.A.F: GI	S-full: 18.0 m ³ s ⁻¹											
Comment: Crump weir with 5m crest rated by model tests and confirmed by check gaugings. The weir is probably non-modular at very high flows due to backing up behind struts and a bridge, but is bypassed just before this point. Abstraction for irrigation in upper reaches may have effect on low flows in summer. * Equally divided between sandstone and Boulder Clay and wholly rural.														
1981	726	105	344	133	0.67	13.3	26/04	0.23	04/08	1.0	0.48	0.25		
1982	721	104	296	115	0.58	6.4	09/12	0.20	05/06	1.0	0.46	0.23		
1983	654	94	285	110	0.56	5.0	01/05	0.18	29/07	1.0	0.47	0.21		
1984	679	98	266	103	0.52	7.3	29/01	0.14	31/07	0.9	0.38	0.17		
1985	696	100	268	104	0.52	10.0	21/01	0.19	12/07	0.8	0.40	0.25		
030005	Witham at Salterford	C.A: 126.1 km ²		68-80	637	194	0.78			0.04	16/08	1.7	0.46	0.10
M.A: AWA	Level: 58m	F.A.F: SRPGI												
Comment: Compound weir with round-crested low flow weir (1.83m wide) and broad-crested high flow portion (8.25m wide). Discharge computed from a single stage recorder to 1973, when it was discovered that a trout screen diverted flow over high flow weir. Second recorder installed, which was removed in February 1985 when trout screen was removed. Major abstractions for public supply immediately upstream, with significant effect on low flows. * Catchment is underlain by limestone and clay and is predominantly rural.														
1981	678	106	206	106	0.82	13.16f	27/04	0.15	18/10	1.8	0.62	0.22		
1982	678	106	207	107	0.83	11.06f	26/06	0.23	17/09	1.4	0.66	0.28		
1983	653	103	202	104	0.81	8.02f	01/06	0.13	12/10	1.6	0.71	0.17		
1984	636	100												
1985														
030006	Slea at Leasingham Mill	C.A: 48.4 km ²		74-80	627	369	0.57	5.2	01/03	0.00	03/12	1.8	0.27	
M.A: AWA	Level: 12m	F.A.F: SPGI	S-full: 2.1 m ³ s ⁻¹											
Comment: Rectangular thin-plate weir 1.372m wide set in old gate site														

		Period	Rainfall (mm)	Runoff (mm)	Mean flow (m ³ s ⁻¹)	Peak flow (m ³ s ⁻¹)	Date of peak	Min. daily flow (m ³ s ⁻¹)	Date of min.	10 Percentile (m ³ s ⁻¹)	50 Percentile (m ³ s ⁻¹)	95 Percentile (m ³ s ⁻¹)	
			% of pre-1981	% of pre-1981									
031021	Welland at Ashley	C.A.: 250.7 km ²	70..80	634	162	1.28		0.03	25/08	3.4	0.46	0.14	
M.A.: AWA	Level: 56m F.A.F.: E	B-full: 22.1 m ³ s ⁻¹							1976				
Comment: Crump weir in realigned channel beneath bridge. Weir has crest length of 6.97m and is theoretically calibrated to wing wall height with rated section above. Flows above 22 m ³ s ⁻¹ - including all floods - influenced by bridge silt and are therefore unreliable. Minor abstractions for irrigation and reservoir for maintenance of canal flow. # Largely rural with Market Harborough in headwaters: 85% Boulder Clay.													
1981	690	109	210	130	1.67					3.6	0.97	0.21	
1982	693	109											
1983	637	100	163	101	1.29					3.3	0.68	0.16	
1984	645	102	147	91	1.17					2.5	0.41	0.11	
1985	669	106											
031023	West Glen at Easton Wood	C.A.: 4.4 km ²	72-80	631	158	0.02	7.8	14/08	0.00	09/10	0.1	0.00	
M.A.: AWA	Level: 81m F.A.F.:	S-full: 10.7 m ³ s ⁻¹											
Comment: Flat V weir with crest length of 8.05m theoretically rated to 10.7 m ³ s ⁻¹ . Installed as part of study into recharge of Lincolnshire Limestone. # Rural catchment entirely on Boulder Clay: flows disappear into limestone downstream of gauging station.													
1981	690	109	183	116	0.03	2.2	26/04	0.00	13/05	0.1	0.01		
1982	722	114	215	136	0.03	7.8	25/06	0.00	02/05	0.1	0.01		
1983	684	108	193	122	0.03	3.5	31/05	0.00	27/06	0.1	0.01		
1984	674	107	144	91	0.02	1.3	24/03	0.00	28/04	0.0	0.00		
1985	663	105	164	104	0.02	1.3	21/01	0.00	02/07	0.0	0.00		
031025	Gwash South Arm at Manton	C.A.: 24.5 km ²	78-80	741	304	0.24	11.2	01/02	0.01	17/09	0.6	0.08	0.01
M.A.: AWA	Level: 84m F.A.F.:												
Comment: Flat V weir (crest length 5m) measuring inflows to Rutland Water. Weir is theoretically calibrated and never drowns, although is bypassed at high flows. No abstractions or returns. # Rural catchment on Boulder Clay.													
1981	718	97	290	95	0.22	22.5	02/06	0.01	03/08	0.4	0.08	0.01	
1982	701	95	279	92	0.22	9.9	06/03	0.01	29/07	0.5	0.10	0.02	
1983	631	85	233	77	0.18	10.9	01/06	0.01	02/09	0.5	0.07	0.01	
1984	656	89	227	75	0.18	8.2	24/03	0.00	31/08	0.4	0.04	0.01	
1985	696	94	270	89	0.21	7.3	11/04	0.01	04/11	0.4	0.08	0.01	
031026	Egleton Brook at Egleton	C.A.: 2.5 km ²	78-80	723	278	0.02	1.3	14/08	0.00	06/08	0.1	0.01	>0.00
M.A.: AWA	Level: 84m F.A.F.:	S-full: 3.6 m ³ s ⁻¹											
Comment: Flat V weir 2m wide measuring inflows to Rutland Water. Theoretically rated, but could drown at high flows due to sharp bend downstream and weed growth. No abstractions or returns. # Rural catchment on Boulder Clay.													
1981	721	100	251	90	0.02	1.0	26/04	0.00	03/08	0.0	0.01	>0.00	
1982	692	96	241	87	0.02	0.7	25/06	0.00	02/06	0.0	0.01		
1983	605	84	205	74	0.02	1.1	31/05	0.00	14/08	0.0	0.01	>0.00	
1984	649	90	206	74	0.02	0.6	24/03	0.00	07/07	0.0	0.01		
1985	717	99	254	91	0.02	0.9	20/05	0.00	10/09	0.0	0.01		
032001	Nene at Orton	C.A.: 1634.3 km ²	39..80	629	176	9.11	382.3	18/03	0.08	29/07	24.2	4.45	1.03
M.A.: AWA	Level: 3m F.A.F.: SPEI	S-full: 17.0 m ³ s ⁻¹											
Comment: Series of sluices, weirs and a lock. Ratings revised and historical data altered in 1975 and 1983. Ultrasonic gauge tested in 1976 but abandoned. Flows above 17 m ³ s ⁻¹ measured at Wansford (32010) 12km upstream and corrected for smaller area. Wansford is a rated section, and ratings and data were revised in 1981. Water abstracted at Wansford and sent to Rutland Water, with significant effect on low flows. # Lowest gauging point on Nene. Mostly clay (72%) and rural, but includes some towns and several small reservoirs.													
1981	655	104	241	137	12.47	113.0	27/04	2.93	11/09	28.2	6.66	3.34	
1982	668	106	235	134	12.20	64.9	03/01	1.10	17/09	32.6	6.48	2.61	
1983	584	93	181	103	9.37	61.2	02/05	1.10	16/07	21.4	5.98	2.75	
1984	618	98	171	97	8.84	56.3	08/02	1.10	27/07	17.0	4.72	1.66	
1985	614	98	173	98	8.92	71.3	26/12	1.76	30/11	16.4	5.66	2.27	
032002	Willow Brook at Fotheringhay	C.A.: 89.6 km ²	38-80	611	271	0.77	15.0	17/03	0.06	09/08	1.3	0.63	0.23
M.A.: AWA	Level: 15m F.A.F.: SEI	S-full: 7.4 m ³ s ⁻¹											
Comment: Flume (1.676m wide throat) with rating based on model tests. Bypassing occurs at 6.5 m ³ s ⁻¹ and is not allowed for. Lost 4.66 km ² of catchment to Harpers Brook in 1963. Low flows significantly influenced by extractions for Corby steelworks (including imports from Eye Brook) until 1980. Three small reservoirs continue to have minor influence on low flows. # Underlain by clay (75%) in headwaters and limestone (16.5%). Mostly rural but includes Corby and steelworks.													
1981	635	104	315	116	0.90	8.0	27/04	0.47	09/11	1.3	0.68	0.50	
1982	683	112	328	121	0.93	7.4	07/03	0.49	18/09	1.5	0.75	0.54	
1983	565	92	285	105	0.81	7.0	02/05	0.44	08/08	1.2	0.69	0.46	
1984	592	97	256	94	0.73	5.1	24/11	0.29	19/09	1.0	0.64	0.36	
1985	616	101	270	100	0.77	7.4	25/12	0.39	06/11	1.1	0.63	0.44	
032003	Harpers Brook at Old Mill Bridge	C.A.: 74.3 km ²	38..80	630	173	0.41	20.5	15/08	0.02	26/08	0.9	0.19	0.07
M.A.: AWA	Level: 30m F.A.F.:	S-full: 15.2 m ³ s ⁻¹											
Comment: Compound Crump weir replaced/rated section in 1964. Central weir has 1.219m crest, total width is 3.657m. Calibration confirmed to 4.8 m ³ s ⁻¹ , but weir drowns at about 7 m ³ s ⁻¹ and is bypassed in extreme floods. Catchment area increased by 8% after diversion from Willow Brook in 1963. # Low lying impervious catchment (clay 90%), predominantly agricultural, but with some ironstone mines working until early 1980													
1981	665	106	219	127	0.51	22.0	26/04	0.10	06/09	1.0	0.21	0.11	
1982	688	109	211	122	0.50	14.7	15/03	0.09	16/09	1.2	0.25	0.10	
1983	572	91	169	98	0.40	18.6	01/05	0.08	14/11	0.8	0.22	0.09	
1984	602	96	146	84	0.34	8.8	23/11	0.07	30/08	0.7	0.15	0.07	
1985	618	98	168	97	0.39	17.9	25/12	0.08	03/11	0.7	0.20	0.08	
032004	Ise Brook at Harrowden Old Mill	C.A.: 194.0 km ²	43..80	634	222	1.37	28.4	17/03	0.05	18/08	3.0	0.72	0.19
M.A.: AWA	Level: 45m F.A.F.: SE	S-full: 26.0 m ³ s ⁻¹											
Comment: Flume with low flow notch and side weir to 1965, compound Crump weir to April 1976, and theoretically-rated Flat V weir with 5.94m crest since. Crump weir modular to 15.6 m ³ s ⁻¹ , but bypassed at 14.2. Flat V also bypassed. Two small storage reservoirs with minor influence on low flows. # Underlain by clay (59%) and sandstone (24%), mostly rural but includes Kettering.													
1981	693	109	289	130	1.78	24.0	02/06	0.44	09/09	3.4	1.10	0.50	
1982	698	110	243	109	1.49	14.9	07/03	0.29	13/09	3.4	0.86	0.33	
1983	590	93	201	91	1.24	14.8	01/05	0.25	24/11	2.5	0.87	0.28	
1984	631	100	186	84	1.15	13.2	06/02	0.14	10/10	2.3	0.64	0.19	
1985	638	101	182	82	1.12	14.2	26/12	0.23	02/10	2.1	0.77	0.27	
032006	Nene/Kislingbury at Upton	C.A.: 223.0 km ²	39-80	663	194	1.38	63.25f	18/03	0.06	28/09	3.1	0.73	0.24
M.A.: AWA	Level: 62m F.A.F.: SE												
Comment: Main channel flow measured in 3.2m wide standing wave flume under mill. Flow in bypass channel measured at Crump weir (crest 6.12m) since 1969 and flows summed to produce total. Before 1969 flows through bypass controlled by broad-crested weir with no recorder, and total flows based on average relationship between levels in main channel and bypass. Very high flows bypass both channels. No major abstractions or returns. # Mostly clay (72%) and predominantly rural.													
1981	792	119	288	148	2.04			0.45	04/08	3.6	1.51	0.62	
1982	907	137	241	124	1.70	19.21f	07/03	0.33	27/07	3.6	1.02	0.42	
1983	868	131	207	107	1.47	19.33f	01/05	0.36	04/11	3.0	1.08	0.43	
1984	901	136	192	99	1.36	18.60f	27/01	0.26	31/08	2.4	0.87	0.31	
1985	894	135	197	102	1.39			0.41	06/11	2.4	0.98	0.46	
032007	Nene Brampton at St Andrews	C.A.: 232.8 km ²	39-80	648	159	1.18	24.80f	15/08	0.01	17/08	2.6	0.57	0.20
M.A.: AWA	Level: 59m F.A.F.: SP												
Comment: Main channel flow measured in 2.743m wide standing-wave flume in mill race. Flow in bypass channel measured at 9.11m wide broad-crested weir and flows summed to produce total. No recorder on bypass before 1969, and total flows estimated using average relationship between levels in flume and bypass. Bypassing of both structures commences at about 17 m ³ s ⁻¹ . Three water supply reservoirs have a moderate influence on low flows. # Mostly clay (76%) and predominantly rural.													
1981	715	110	222	140	1.64	22.90f	27/04	0.39	03/08	3.2	1.09	0.46	
1982	697	106	191	120	1.41	20.15f	07/03	0.30	09/09	2.9	0.91	0.36	
1983	620	96	174	109	1.28			0.35	14/11	2.5	0.97	0.37	
1984	662	102	163	103	1.20			0.27	02/09	2.2	0.74	0.30	
1985	637	98	170	107	1.25			0.32	27/09	2.1	0.92	0.34	
032008	Nene/Kislingbury at Dodford	C.A.: 107.0 km ²	45..80	673	171	0.58	11.6	11/07	0.04	11/09	1.3	0.31	0.10
M.A.: AWA	Level: 79m F.A.F.: SE	S-full: 10.0 m ³ s ⁻¹											
Comment: Crump weir with 2.667m crest replaced broad-crested weir with low flow notch in 1967. Weir theoretically calibrated, but bypassing begins at 7 m ³ s ⁻¹ and the weir drowns in high flows. Low flows moderately influenced by returns from sewage treatment works. # Mostly clay (73%) and predominantly rural.													
1981	783	116	280	164	0.95	10.3	06/08	0.19	03/08	1.7	0.68	0.24	
1982	674	100	228	133	0.77	9.2	07/03	0.17	18/09	1.6	0.43	0.19	
1983	645	96	199	116	0.67	11.6	01/05	0.15	23/11	1.4	0.45	0.17	
1984	661	98	183	107	0.62	9.5	23/11	0.12	31/08	1.1	0.32	0.13	
1985	659	98	173	101	0.59	9.4	25/12	0.15	23/09	1.1	0.38	0.18	

	Period	Rainfall (mm)	% of pre-1981	Runoff (mm)	% of pre-1981	Mean flow (m ³ s ⁻¹)	Peak flow (m ³ s ⁻¹)	Date of peak	Min. daily flow (m ³ s ⁻¹)	Date of min.	10 Percentile (m ³ s ⁻¹)	50 Percentile (m ³ s ⁻¹)	95 Percentile (m ³ s ⁻¹)
033002 M.A: AWA Level: 25m F.A.F: SPGEI C.A: 1460.0 km ² S-full: 30.0 m ³ s ⁻¹	33-80	650		209		9.89	278.1d	15/03	0.01	31/08	25.9	4.19	0.83
Comment: 3 broad-crested weirs, 30m, 20m and 12m wide supplemented by 3 vertical sluice gates which are either fully open or shut. High flow rating confirmed by current meter measurements. Records before 1959 based on daily gauge board and state of gate opening. In 1972, station built at Roxton (d/s) - to achieve a better record. Significant surface water and groundwater abstractions in catchment for PWS. # Geology - predominantly clay. Land use agricultural with substantial urban development over last 15 years (Milton Keynes).	1981	709	109	293	140	13.56	119.0	29/04	2.50	04/09	28.4	8.83	3.01
	1982	686	106	294	141	13.62	113.0	17/03	1.00	17/09	36.2	7.40	1.97
	1983	622	96	237	113	10.95	77.6d	04/05	1.82	30/08	25.8	7.09	2.17
	1984	677	104	236	113	10.93	84.5	26/11	1.50	31/07	24.7	6.78	2.03
	1985	622	96	221	106	10.19	94.5	28/12	1.98	29/10	21.5	6.06	2.57
033003 M.A: AWA Level: 2m F.A.F: GEI C.A: 803.0 km ² S-full: 30.0 m ³ s ⁻¹	36..80	583		141		3.60			0.23	06/10	7.0	2.30	0.86
Comment: Triangular profile weir, 7.7m wide, plus two vertical lift gates and a lock. Prior to June 1982 broad-crested weir incorporating a sharp-crested rectangular central notch, 2.4m wide. The lock is opened at high flows. Weir drowns at approx 0.3m head. Two substantial groundwater abstractions for industry; 21 for public water supply. All abstractions returned within the catchment. # Geology - Chalk; overlain by Boulder Clay in the south. Land use - predominantly agricultural.	1981	622	107	125	89	3.19	26.8d	28/04	1.24	25/09	4.9	2.32	1.54
	1982	672	115	153	109	3.89	21.7d	09/12	1.11	29/08	6.8	2.99	1.34
	1983	585	100	165	117	4.21	16.3d	19/04	1.45	25/09	7.7	3.37	1.73
	1984	649	111	151	107	3.84	21.2d	23/11	1.02	27/08	7.0	2.96	1.34
	1985	547	94										
033004 M.A: AWA Level: 2m F.A.F: GEI C.A: 466.2 km ²	36..80	606		122		1.80	19.2d	08/03	0.00	24/08	3.4	1.32	0.43
Comment: Navigation lock with vertical lift gate upstream plus a 16m broad high level weir in bypass channel for flood flows only. Small notch inserted in 1980. 1986 weir was lowered, altered to triangular profile and flows diverted to the bypass channel. The lock is now used during high flows only. Since 1968 major peaks diverted through cutoff channel (10 km upstream) - to the Relief Channel at Denver. Two large groundwater abstractions (Bury St Edmunds). # Geology - Chalk. Land use - arable.	1981	670	111										
	1982	672	111	113	93	1.66	14.0d	10/12	0.25	16/10	3.0	1.36	0.44
	1983	620	102	130	107	1.92	8.4d	15/05	0.26	12/12	3.1	1.84	0.65
	1984	675	111	133	109	1.97	14.7d	27/01	0.53	28/10	3.0	1.57	0.77
	1985	555	92										
033005 M.A: AWA Level: 71m F.A.F: SPGEI C.A: 388.5 km ² S-full: 40.0 m ³ s ⁻¹	51-80	664		205		2.53	38.8d	14/12	0.00	26/08	6.1	1.16	0.23
Comment: Flat V crump weir 10.2m wide and two sluice gates 3.6m broad. Prior to 1976 the weir was broad-crested with centre V notch. A bypass channel exists, but operation of the gates has ensured the highest flows have been recorded. # The catchment is flat and lies mainly on the Great Oolite. One large tributary drains an area of Oxford Clay. There is a water supply reservoir and a number of ornamental lakes in the catchment.	1981	719	108	285	139	3.50	36.4d	27/04	0.40	06/09	7.8	2.15	0.49
	1982	686	103	239	117	2.95	24.1d	10/12	0.29	12/09	7.6	1.52	0.34
	1983	624	94	211	103	2.60	26.7d	01/05	0.34	30/08	5.6	1.74	0.44
	1984	637	96	181	88	2.23	29.6d	24/11	0.14	02/09	5.1	1.02	0.18
	1985	676	102	211	103	2.59	34.0d	24/12	0.37	02/10	5.5	1.38	0.42
033006 M.A: AWA Level: 5m F.A.F: PGEI C.A: 274.5 km ² S-full: 11.5 m ³ s ⁻¹	56-80	653		216		1.88	28.0	18/11	0.20	27/08	3.6	1.52	0.56
Comment: Rectangular critical depth flume, 4.9m wide. In March 1981 some flow diverted to a new side channel just upstream of the gauging station - gauged by a moulded glass reinforced plastic trapezoidal flume; the flow - approx 10% of total - is not added to archived flows. Weed growth causes drowning during summer. Drowning also occurs at high flows; rating corrected for non-modular flow. # Geology - Chalk overlain by Boulder Clay. Land use - predominantly arable.	1981	693	106	275	127	2.39	11.6d	28/04	0.85	06/09	3.9	1.98	1.02
	1982	703	108	225	104	1.95	7.1	24/10	0.56	03/09	3.7	1.62	0.67
	1983	594	91	251	116	2.18	6.2d	12/04	0.86	23/11	3.6	2.03	0.90
	1984	657	101	212	98	1.84	7.7	30/01	0.51	11/09	3.0	1.63	0.60
	1985	610	93	203	94	1.77	8.5	23/01	0.56	02/11	2.9	1.80	0.61
033007 M.A: AWA Level: 5m F.A.F: PGEI C.A: 153.3 km ² S-full: 25.6 m ³ s ⁻¹	53-80	677		244		1.19	7.8	12/02	0.14	27/08	2.2	0.96	0.51
Comment: Critical depth flume, 7.16m wide. Prior to April 1982, flume (7.47m wide) contained low flow notch. Weed growth can be a problem during summer if not cut regularly. Surface water abstraction for PWS immediately upstream of station. # Geology - Chalk catchment overlain by clay in upper reaches. Land use - agricultural.	1981	746	110	304	125	1.48	7.0	27/04	0.81	10/09	2.2	1.33	0.90
	1982	764	113	237	97	1.15	3.8	04/06	0.54	18/09	1.7	1.13	0.59
	1983	631	93	268	110	1.31	3.6	15/05	0.62	23/11	1.9	1.42	0.67
	1984	717	106	235	96	1.14	3.6	29/01	0.61	31/08	1.7	1.06	0.67
	1985	695	103	245	100	1.19	5.0	22/01	0.65	25/10	1.6	1.17	0.69
033009 M.A: AWA Level: 41m F.A.F: SPGEI C.A: 1320.0 km ² S-full: 84.0 m ³ s ⁻¹	55..80	652		222		9.30	143.0	29/12	0.10	05/10	23.1	4.53	1.42
Comment: Compound structure comprising a compound broad-crested weir plus two side spilling broad-crested weirs upstream. Not constructed for flow measurement. Rated by formulae. High flows estimated. Major abstractions in catchment. # Geology - Limestone overlain by Boulder Clay. Land use - mainly agricultural with substantial urban development over last 15 years (Milton Keynes).	1981	713	109	280	126	11.72	127.0	28/04	1.95	03/09	24.6	7.38	2.51
	1982	682	105	267	120	11.19	125.0	17/03	0.64	16/09	26.3	6.31	1.95
	1983	625	96	220	99	9.19	93.9	03/05	1.80	06/11	20.0	6.25	2.18
	1984	672	103	211	95	8.84	82.7	25/11	1.42	30/07	18.7	5.61	1.69
	1985	631	97	208	94	8.69	103.0	27/12	1.80	03/10	16.5	5.26	2.13
033011 M.A: AWA Level: 13m F.A.F: GEI C.A: 128.7 km ² S-full: 30.0 m ³ s ⁻¹	48..80	569		93		0.38	11.0d	10/03	0.00	29/08	0.8	0.26	0.09
Comment: Compound weir with triangular profile centre section, 3.4m broad; broad-crested flanks in trapezoidal channel - 9m. Groundwater abstractions for PWS and spray irrigation. # Geology - predominantly Chalk with some clay. Land use - agricultural.	1981	668	117	168	181	0.69	6.7	28/04	0.23	13/09	1.1	0.47	0.23
	1982	604	106	127	137	0.52	5.6	01/01	0.11	12/09	0.9	0.41	0.16
	1983	577	101	136	146	0.56	4.0	22/05	0.19	30/08	1.0	0.46	0.22
	1984	640	112	131	141	0.54	5.0	28/01	0.12	03/09	0.8	0.44	0.15
	1985	604	106	141	152	0.57	5.5	22/01	0.22	06/11	1.0	0.46	0.24
033012 M.A: AWA Level: 17m F.A.F: EI C.A: 137.5 km ² B-full: 49.0 m ³ s ⁻¹	60-80	602		144		0.63	34.7	21/11	0.00	30/08	1.4	0.10	0.02
Comment: Compound weir with triangular profile centre section and broad-crested flanks in a trapezoidal channel, 8.5m wide; centre section 3m wide. Rating modified to correct for drowning. Surface water abstractions for agriculture. # Geology - predominantly clay catchment - very flashy by Anglian standard. Land use - agricultural.	1981	646	107	158	110	0.69	24.5	26/04	0.02	10/09	1.4	0.20	0.03
	1982	684	114	198	138	0.86	17.7	26/06	0.02	23/08	2.4	0.27	0.04
	1983	569	95	134	93	0.59	15.9	02/05	0.02	29/08	1.5	0.14	0.03
	1984	627	104	130	90	0.57	16.9	23/11	0.01	12/07	1.4	0.13	0.01
	1985	549	91	92	64	0.40	16.1	21/01	0.01	23/09	0.8	0.10	0.02
033013 M.A: AWA Level: 16m F.A.F: GEI C.A: 205.9 km ² S-full: 14.0 m ³ s ⁻¹	49..80	594		98		0.64	10.9	03/02	0.01	14/08	1.4	0.40	0.11
Comment: Rectangular thin-plate weir, 8.8m broad, suppressed end contractions. Minor groundwater abstractions for public water supply and agriculture. # Geology - predominantly Chalk with Boulder Clay cover. Land use - agricultural.	1981	663	112	138	141	0.90	10.4	31/12	0.17	18/09	1.4	0.59	0.26
	1982	623	105	118	120	0.77	9.9	01/01	0.14	17/09	1.5	0.52	0.16
	1983	585	98	127	130	0.83	6.1	22/05	0.24	19/11	1.7	0.62	0.27
	1984	656	110	124	127	0.81	9.6	27/01	0.20	25/08	1.4	0.58	0.23
	1985	573	96	121	123	0.78	8.2	22/01	0.27	05/11	1.5	0.59	0.28
033014 M.A: AWA Level: 9m F.A.F: GEI C.A: 272.0 km ² S-full: 25.0 m ³ s ⁻¹	60-80	600		144		1.24	22.1	17/09	0.28	23/08	2.2	0.95	0.51
Comment: Compound broad-crested weir with rectangular cross-section, 5.8m broad, central notch 3m broad. Full range rating confirmed by current meter measurements. Flows affected by milling upstream of gauging station. Significant groundwater abstractions in catchment for PWS, industry and agriculture. # Geology - predominantly Chalk - 70% overlain by Boulder Clay. Land use - agricultural.	1981	683	114	175	122	1.51	11.2	31/12	0.78	06/09	2.1	1.17	0.87
	1982	664	111	171	119	1.48	11.1	10/12	0.61	12/10	2.4	1.22	0.67
	1983	629	105	197	137	1.70	11.8	22/05	0.73	23/03	2.7	1.49	0.86
	1984	698	116	178	124	1.53	11.3	07/02	0.67	02/09	2.4	1.27	0.76
	1985	568	95	154	107	1.32	10.3	22/01	0.68	29/11	1.9	1.19	0.72

					Period	Rainfall (mm)	Runoff (mm)	Mean flow (m ³ s ⁻¹)	Peak flow (m ³ s ⁻¹)	Date of peak	Min. daily flow (m ³ s ⁻¹)	Date of min.	10 Percentile (m ³ s ⁻¹)	50 Percentile (m ³ s ⁻¹)	95 Percentile (m ³ s ⁻¹)	
						% of pre-1981	% of pre-1981									
033015	Ouzel at Willen	C.A: 277.1 km ²	62-80	646	216	1.90	30.4	28/12	0.03	20/09	4.1	1.06	0.44			
M.A: AWA	Level: 57m	F.A.F: GEI	S-full: 43.0 m ³ s ⁻¹													
Comment: 10m wide Flat V crump weir replaced compound broad-crested weir, 9.2m broad, in 1977 when river realigned. Radial lifting gate immediately u/s of weir diverts very high flows to adjacent balancing reservoir which empties d/s of weir. Annual floods do not bypass. # The river flows across the Greensand and Oxford Clay. Milton Keynes and Leighton Buzzard are the only towns in an otherwise rural catchment.																
1981	703	109	279	129	2.45	32.3	27/04	0.11	14/04	5.3	1.65	0.69				
1982	717	111	293	136	2.58	24.9	10/12	0.57	12/09	6.2	1.62	0.61				
1983	633	98	258	119	2.26	16.5	01/05	0.61	07/09	4.4	1.65	0.70				
1984	676	105	242	112	2.13	25.6	24/11	0.56	12/09	4.5	1.44	0.60				
1985	578	89	212	98	1.86	34.1	26/12	0.34	02/10	3.8	1.13	0.53				
033018	Tove at Cappenham Bridge	C.A: 138.1 km ²	62..80	668	237	1.04	34.0	27/06	0.07	26/08	2.4	0.52	0.18			
M.A: AWA	Level: 81m	F.A.F: EI	B-full: 32.0 m ³ s ⁻¹													
Comment: Compound broad-crested trapezoidal weir, 7.6m broad; central notch, 2.7m broad. Theoretical rating since Aug 1970. Prior to that data hydraulic model derived rating. The weir is subject to drowning at high flows. # Geology - predominantly Chalk overlain with Boulder Clay. Land use - agricultural.																
1981	759	114	315	133	1.38	16.3	30/12	0.29	09/09	2.6	0.95	0.33				
1982	666	100	264	111	1.16	15.9	15/03	0.22	13/09	2.6	0.67	0.24				
1983	616	92	232	98	1.02	20.2	01/05	0.25	22/11	2.2	0.72	0.27				
1984	669	100	223	94	0.98	23.4	23/11	0.18	01/09	2.0	0.57	0.19				
1985	667	100	233	98	1.02	16.7	06/06	0.23	06/11	1.9	0.61	0.28				
033019	Thet at Melford Bridge	C.A: 316.0 km ²	62..80	596	175	1.75	12.5	04/02	0.10	25/08	3.6	1.23	0.45			
M.A: AWA	Level: 11m	F.A.F: GEI	S-full: 14.5 m ³ s ⁻¹													
Comment: Triangular profile weir, 6.2m broad. Theoretical rating modified in April 1968. Weir subject to drowning during summer due to weed growth downstream. # Predominantly Chalk catchment; approx 70% overlain by Boulder Clay. Land use - arable.																
1981	714	120	230	131	2.31	15.3	29/04	0.50	07/09	4.3	1.57	0.60				
1982	675	113	174	99	1.75	8.6	11/12	0.35	18/09	3.2	1.46	0.44				
1983	618	104	187	107	1.88	5.9	12/04	0.39	01/09	3.5	1.64	0.47				
1984	716	120	202	115	2.02	10.1	30/01	0.45	30/08	3.4	1.61	0.55				
1985	685	115	221	126	2.21	10.2	24/01	0.65	15/10	3.9	2.04	0.82				
033020	Alconbury Brook at Brampton	C.A: 201.5 km ²	63..80	586	121	0.77	36.6	20/12	0.00	23/08	2.1	0.12	0.01			
M.A: AWA	Level: 9m	F.A.F: EI	B-full: 42.5 m ³ s ⁻¹													
Comment: Broad-crested weir (in trapezoidal section) with central low flow notch (Crump profile). Theoretical rating but hydraulic model calibration for flanks prior to April 1978. Drowns out at approx. 1m stage; spills at 2m. Rating modified by current meter measurement to correct for drowning. High flows impeded by upstream and downstream bridges. # Predominately impervious catchment. Land use; mainly arable.																
1981	626	107	123	102	0.79	16.3	27/04	0.01	08/09	1.7	0.22	0.01				
1982	673	115	194	160	1.24	13.4	10/12	0.02	16/09	3.7	0.44	0.04				
1983	571	97	135	112	0.86	12.8	01/06	0.01	16/08	2.6	0.18	0.03				
1984	603	103	92	76	0.59	12.1	06/02	0.00	21/08	1.3	0.14	0.01				
1985	585	100	99	82	0.63	12.7	26/12	0.01	21/10	1.8	0.17	0.02				
033021	Rhee at Burnt Mill	C.A: 303.0 km ²	62-80	562	130	1.24	19.4	29/03	0.05	22/08	2.6	0.79	0.26			
M.A: AWA	Level: 9m	F.A.F: GEI	S-full: 14.0 m ³ s ⁻¹													
Comment: Trapezoidal cross-section weir with triangular profile crest, 6.1m broad. Weir drowns out at high flows; rating modified by current meter measurements to correct for drowning. Weir also subject to drowning during summer due to weed growth downstream. Substantial groundwater abstractions for PWS. Augmentation from groundwater sources to regulate river flow. # Predominately Chalk catchment - approx 30% overlain with Boulder Clay. Land use - arable.																
1981	585	104	106	82	1.02	9.6	31/12	0.37	10/09	1.5	0.72	0.46				
1982	642	114	151	116	1.45	9.8	23/10	0.34	18/09	2.9	1.09	0.36				
1983	550	98	150	115	1.45	7.9	01/06	0.44	23/11	2.7	1.27	0.50				
1984	636	113	130	100	1.25	10.8	24/11	0.32	02/09	2.2	0.99	0.37				
1985	522	93	122	94	1.17	6.9	22/01	0.35	03/11	2.3	0.97	0.39				
033022	Ivel at Blunham	C.A: 541.3 km ²	59..80	587	174	2.98	32.6	21/12	0.41	19/08	5.3	2.12	1.03			
M.A: AWA	Level: 19m	F.A.F: GEI	S-full: 35.0 m ³ s ⁻¹													
Comment: Crump weir 7.31m wide. Bypassing though possible is not thought to have occurred. Drowning occurs at a head of 0.91m (theoretical rating includes correction for drowning). Hydrograph reflects u/s mill operation. Effluents from STW has substantial effect on low flows. Large number of surface water abstractions for spray irrigation. Gw abstractions for PWS. # The Ivel rises near Hitchin and Baldock and flows north across the Greensand, Chalk and Gault Clays to meet the Great Ouse south of Bedford. Predominately rural land use.																
1981	617	105	175	101	3.01	23.3	27/04	1.43	06/09	4.5	2.44	1.59				
1982	663	113	205	118	3.52	22.2	22/10	1.30	04/09	6.4	2.85	1.40				
1983	566	96	194	111	3.32	23.8	01/06	1.43	19/08	5.2	2.90	1.58				
1984	652	111	174	100	2.99	22.0	24/11	1.15	01/09	5.0	2.56	1.26				
1985	542	92	158	91	2.70	15.2	22/01	1.20	05/10	4.3	2.19	1.30				
033023	Lea Brook at Beck Bridge	C.A: 101.8 km ²	62-80	533	68	0.22	4.8	14/03	0.00	26/10	0.5	0.12	0.02			
M.A: AWA	Level: 4m	F.A.F: GEI	S-full: 4.2 m ³ s ⁻¹													
Comment: Crump weir 4m wide under an arched bridge. Soffit of bridge 2m above crest. All but the very highest flows are contained. The low flow calibration has been confirmed by current metering. There is some doubt about the high flow calibration owing to two large concrete blocks which spoil the entry condition. Some groundwater abstraction for water supply. # A rural Chalk catchment with approximately 70% Boulder Clay cover.																
1981	633	119	111	163	0.36	4.6	30/12	0.08	29/09	0.6	0.23	0.10				
1982	646	121	119	175	0.38	5.2	10/12	0.04	18/09	0.8	0.27	0.05				
1983	586	110	138	203	0.45	4.3	15/05	0.08	24/11	0.8	0.43	0.09				
1984	664	125	121	178	0.39	5.3	07/02	0.06	12/09	0.7	0.29	0.08				
1985	507	95	79	116	0.25	4.2	21/01	0.02	04/11	0.5	0.20	0.02				
033024	Cam at Darnford	C.A: 198.0 km ²	49..80	593	155	0.97	14.1	02/02	0.03	04/07	1.7	0.75	0.35			
M.A: AWA	Level: 15m	F.A.F: GEI														
Comment: Rectangular thin-plate weir, 5.8m broad. Bridge pier may affect approach velocity at high flows. Weir subject to drowning. Five groundwater abstractions for PWS. Flow regime affected by industrial effluent deriving from groundwater within the catchment. # Predominately pervious catchment (60%). Land use - arable.																
1981	663	112	156	101	0.98	9.9	30/12	0.47	30/08	1.4	0.79	0.52				
1982	624	105	177	114	1.11	12.1	10/12	0.38	28/08	1.8	0.90	0.43				
1983	566	95	183	118	1.15	8.7	18/04	0.43	29/08	1.9	1.01	0.54				
1984	629	106	159	103	1.00	8.2	26/01	0.33	27/08	1.5	0.91	0.46				
1985	528	89	151	97	0.94	10.4	22/01	0.33	07/11	1.3	0.89	0.48				
033026	Bedford Ouse at Offord	C.A: 2570.0 km ²	70-80	596	166	13.49	148.4d	22/11	0.00	14/10	34.1	5.30	1.61			
M.A: AWA	Level: 11m	F.A.F: SPGEI														
Comment: Complex of automatic radial lifting weir, 15.2m broad; triangular profile weir, 14.8m broad; compound broad-crested weir, 22.7m broad. Navigation lock opened at flows above 40 m ³ s ⁻¹ . Abstraction 2 kms upstream for Grafham Water reservoir (approx 2 m ³ s ⁻¹). Substantial surface water abstractions for PWS, industry and agriculture. Significant groundwater abstractions. # Predominately agricultural with substantial urban areas (Milton Keynes). Geology - predominantly Chalk.																
1981	666	112	195	117	15.88	139.7d	27/04	2.00	29/07	35.7	9.61	2.47				
1982	668	112	206	124	16.79	111.7d	02/01	1.70	29/07	49.0	8.68	2.23				
1983	592	99	170	102	13.88	95.5d	02/05	2.30	29/08	30.7	9.12	2.64				
1984	650	109	162	98	13.20	119.7d	24/11	1.54	15/08	29.2	7.42	1.97				
1985	582	98	152	92	12.36	102.7d	26/12	1.46	27/11	27.3	7.25	3.05				
033027	Rhee at Wimpole	C.A: 119.1 km ²	65-80	570	142	0.54	8.9	06/05	0.00	27/08	1.2	0.28	0.06			
M.A: AWA	Level: 18m	F.A.F: GEI	S-full: 6.0 m ³ s ⁻¹													
Comment: Trapezoidal critical depth flume, 6.6m broad; Horizontal crest 3.8m. Subject to drowning at peak levels; correction incorporated into theoretical rating. Spills occasionally - high flows impeded by bridge abutments 20m downstream. Some surface water and groundwater abstractions in catchment. # Predominately Chalk catchment with approx 20% Boulder Clay cover. Land use - agricultural.																
1981	590	104	97	68	0.37	4.4d	27/04	0.10	08/01	0.6	0.22	0.13				
1982	649	114	173	122	0.65	5.5	22/10	0.11	04/09	1.4	0.45	0.13				
1983	537	94	157	111	0.59	4.6	01/06	0.11	24/11	1.1	0.44	0.13				
1984	640	112	131	92	0.50	7.1	24/11	0.08	01/09	1.0	0.31	0.11				
1985	52															

					Period	Rainfall (mm)	Runoff (mm)	Mean flow (m ³ s ⁻¹)	Peak flow (m ³ s ⁻¹)	Date of peak	Min. daily flow (m ³ s ⁻¹)	Date of min.	10 Percentile (m ³ s ⁻¹)	50 Percentile (m ³ s ⁻¹)	95 Percentile (m ³ s ⁻¹)		
						% of pre-1981	% of pre-1981										
033029	Stringside at White Bridge	C.A.: 98.8 km ²	65-80	633	177	0.56	4.6	28/03	0.02	25/08	1.1	0.42	0.09				
M.A.: AWA	Level: 3m	F.A.F.: GI	S-full: 3.9 m ³ s ⁻¹														
Comment:	A trapezoidal critical depth flume, calibrated by model and designed to operate in the non-modular range. High flows should be reliable in periods when the channel has been maintained. Two groundwater abstractions for PWS. # A rural catchment developed mainly on Chalk with some clay. It includes no towns.																
				1981		702	111	212	120	0.66	4.0	27/04	0.19	23/09	1.2	0.53	0.22
				1982		706	112	167	94	0.52	3.7	22/10	0.11	18/09	1.1	0.45	0.12
				1983		591	93	189	107	0.59	4.5	15/05	0.11	13/09	1.1	0.56	0.11
				1984		621	98	151	85	0.47	2.7	27/01	0.08	01/09	0.9	0.41	0.10
				1985		587	93	139	79	0.44	3.0	21/01	0.09	05/11	0.8	0.46	0.11
033031	Broughton Brook at Broughton	C.A.: 66.6 km ²	71-80	614	144	0.30	25.3	15/08	0.02	13/07	0.7	0.11	0.05				
M.A.: AWA	Level: 57m	F.A.F.: GE	B-full: 7.2 m ³ s ⁻¹														
Comment:	Flat V Crump weir 7.0m wide installed in 1977 when river realigned. Prior to 23/6/77 trapezoidal critical depth flume 7.4m wide, horizontal crest 1m wide. Flume subject to drowning - flows corrected. Groundwater abstraction for PWS. # The catchment is largely rural and flat, the edge just impinging on the Chiltern escarpment. It is an entirely clay catchment.																
				1981		671	109	177	123	0.37	20.6	26/04	0.06	26/08	0.7	0.18	0.07
				1982		672	109	183	127	0.39	14.9	15/03	0.04	21/08	1.0	0.16	0.04
				1983		613	100	136	94	0.29	14.9	01/05	0.04	06/09	0.6	0.15	0.05
				1984		663	108	162	113	0.34	19.7	23/11	0.04	27/07	0.8	0.15	0.04
				1985		588	96	117	81	0.25	10.5	24/12	0.04	05/10	0.4	0.09	0.04
033032	Heacham at Heacham	C.A.: 59.0 km ²	65-80	694	112	0.21	1.2	01/08	0.03	25/08	0.4	0.17	0.05				
M.A.: AWA	Level: 9m	F.A.F.: GI	S-full: 5.0 m ³ s ⁻¹														
Comment:	Two Crump profile weirs in parallel, 3m broad. Weirs never drown. Groundwater abstraction for public water supply and irrigation. # Topographical catchment exceeds the true drainage area. Geology - predominantly Chalk (approx 40%); overlain by Boulder Clay. Land use - agricultural.																
				1981		712	103	164	146	0.31	0.8	03/05	0.12	13/11	0.6	0.30	0.12
				1982		731	105	87	78	0.16	0.4	09/12	0.08	29/09	0.2	0.17	0.09
				1983		631	91	138	123	0.26	0.7	31/05	0.11	23/11	0.4	0.28	0.11
				1984		706	102	105	94	0.20	0.4	21/05	0.11	20/10	0.3	0.19	0.11
				1985		705	102	111	99	0.21	0.5	29/01	0.11	05/11	0.3	0.19	0.11
033033	Hiz at Arlesley	C.A.: 108.0 km ²	73-80	601	191	0.65	6.3	18/11	0.20	27/08	1.1	0.55	0.31				
M.A.: AWA	Level: 36m	F.A.F.: GEI	S-full: 12.9 m ³ s ⁻¹														
Comment:	Crump profile weir, 7m broad. Subject to drowning at peak flows. Augmentation by effluent affects diurnal flow pattern. Significant groundwater abstractions for PWS. # Predominantly Chalk catchment. Land use - agricultural with significant urban development (Hitchin).																
				1981		624	104	196	103	0.67	3.3	26/04	0.45	01/09	0.9	0.60	0.48
				1982		686	114	218	114	0.75	3.7	09/12	0.41	28/09	1.1	0.68	0.43
				1983		605	101	233	122	0.80	4.9	01/06	0.48	15/11	1.1	0.77	0.51
				1984		665	111	198	104	0.68	3.4	23/11	0.39	01/09	1.0	0.63	0.42
				1985		524	87	185	97	0.63	2.2	26/12	0.33	05/11	0.9	0.56	0.37
033034	Little Ouse at Abbey Heath	C.A.: 699.3 km ²	66-80	590	172	3.80	23.9	30/03	0.48	28/08	7.3	2.65	1.19				
M.A.: AWA	Level: 7m	F.A.F.: GEI															
Comment:	Rectangular section Crump weir with crest tapping. Replaced 33008 in 1968. Weir subject to drowning and spills on rare occasions. # Geology - Chalk with approx. 85% Boulder Clay cover. Land use - predominately agricultural with large areas of forest and heathland.																
				1981		681	115	208	121	4.61	23.5	28/04	1.47	05/09	7.8	3.49	1.69
				1982		638	108	171	99	3.78	21.4	01/01	1.13	18/09	6.8	3.07	1.30
				1983		577	98	184	107	4.09	14.2	18/04	1.51	07/09	7.5	3.49	1.63
				1984		672	114	178	103	3.96	19.9	29/01	1.20	01/09	6.3	3.20	1.41
				1985		619	105	190	110	4.21	20.6	23/01	1.73	03/11	7.0	3.81	1.86
033037	Bedford Ouse at Newp't Pagnell Wr	C.A.: 800.0 km ²	69-80	643	140	3.56	70.6	28/12	0.05	25/08	9.4	1.11	0.34				
M.A.: AWA	Level: 54m	F.A.F.: PGEI	B-full: 71.0 m ³ s ⁻¹														
Comment:	Compound crump weir, (29.3m broad, with crest tapping and central notch, 3m broad) plus complementary Crump weir (with crest tapping) 3.7m broad, constructed in old mill throttle, 7m upstream of a double arch culvert; subject to drowning at high flows. Abstractions for PWS approx. 25km upstream. # Predominantly pervious catchment (60%). Land use - arable and grassland.																
				1981		720	112	178	127	4.53	68.9	28/04	0.40	09/09	10.5	2.09	0.54
				1982		679	106	165	118	4.18	69.6	16/03	0.27	10/09	11.3	1.50	0.35
				1983		622	97	130	93	3.30	58.6	02/05	0.34	01/11	7.9	1.60	0.43
				1984		670	104	124	89	3.15	50.4	25/11	0.21	29/07	7.5	1.28	0.27
				1985		667	104	134	96	3.38	57.8	26/12	0.39	13/09	7.5	1.46	0.47
033039	Bedford Ouse at Roxton	C.A.: 1660.0 km ²	72-80	621	205	10.79	99.0d	24/11	0.21	25/08	27.8	4.60	1.48				
M.A.: AWA	Level: 16m	F.A.F.: PGEI	S-full: 122.0 m ³ s ⁻¹														
Comment:	Flat V Crump weir with crest tapping, 2.6m broad, situated immediately upstream of confluence with R.Ivel. Subject to drowning at very high flows and can spill on rare occasions. The adjacent lock acts as an overspill in flood conditions. Significant surface water and groundwater abstractions for PWS, industry and agriculture. # Geology - Predominantly Clay. Land use is predominately agricultural with substantial urban development (Milton Keynes).																
				1981		692	111	254	124	13.40	95.5	29/04	2.33	06/09	28.5	8.81	3.01
				1982		680	110	257	125	13.55	93.8	18/03	1.37	18/09	36.3	7.67	2.26
				1983		619	100	213	104	11.19	83.4	04/05	2.28	29/08	24.2	7.83	2.54
				1984		663	107	198	97	10.45	73.1	26/11	1.21	31/08	23.8	6.80	1.87
				1985		614	99	186	91	9.76	90.9	28/12	1.93	03/10	21.1	6.20	2.32
033044	Thet at Bridgham	C.A.: 277.8 km ²	67-80	617	182	1.60	13.8	04/02	0.12	27/08	3.5	1.06	0.40				
M.A.: AWA	Level: 15m	F.A.F.: GEI	S-full: 10.0 m ³ s ⁻¹														
Comment:	Crump profile weir, 6m broad. Prior to Oct 1979, broad-crested weir (crest: 7.4m), situated under double arch bridge. Theoretical rating for original weir confirmed by current meter measurements. Groundwater abstractions in catchment. # Geology - Chalk with approx 90% Boulder Clay cover. Rural catchment with one or two small towns.																
				1981		701	114	213	117	1.87	13.7	28/04	0.34	07/09	3.6	1.22	0.43
				1982		651	106	162	89	1.43	8.2	11/12	0.27	14/09	2.8	1.19	0.31
				1983		571	93	172	95	1.51	5.5	12/04	0.28	29/08	2.9	1.28	0.34
				1984		665	108	185	102	1.63	9.4	29/01	0.26	03/09	2.8	1.28	0.38
				1985		628	102	199	109	1.75	9.9	23/01	0.50	03/11	3.4	1.58	0.57
033045	Wittle at Quidenham	C.A.: 28.3 km ²	67-80	590	152	0.14	3.2d	16/09	0.00	27/08	0.3	0.07	0.02				
M.A.: AWA	Level: 24m	F.A.F.: GI	S-full: 2.2 m ³ s ⁻¹														
Comment:	Compound broad-crested weir, (crest: 3m), with central notch separated by splitter plates; situated under road bridge. Theoretical rating modified by current meter measurements. Weir drowned in 1968 floods. # Geology - predominately Chalk overlain with Boulder Clay. Land use - agricultural.																
				1981		703	119	184	121	0.17	1.8	27/04	0.02	10/09	0.3	0.08	0.03
				1982		644	109	126	83	0.11	1.3d	10/12	0.01	29/08	0.2	0.07	0.01
				1983		565	96	145	95	0.13	0.7	11/04	0.02	02/09	0.3	0.12	0.02
				1984		679	115	143	94	0.13	1.8	27/01	0.01	01/09	0.2	0.08	0.01
				1985		633	107	174	114	0.16	2.3	21/01	0.03	03/11	0.3	0.11	0.04
033046	Thet at Red Bridge	C.A.: 145.3 km ²	67-80	619	188	0.87	18.0d	17/09	0.02	25/08	2.0	0.49	0.13				
M.A.: AWA	Level: 20m	F.A.F.: GI	B-full: 14.6 m ³ s ⁻¹														
Comment:	Crump profile weir, 4m broad. Theoretical rating confirmed by current metering to structure full, thereafter rating allows for drowning and spilling. Groundwater abstractions for public water supply and industry; surface water abstractions for spray irrigation. # Geology - predominately Chalk overlain with Boulder Clay. Land use - agricultural.																
				1981		680	110	240	128	1.10	12.8	27/04	0.13	06/09	2.1	0.61	0.17
				1982		646	104	183	97	0.85	7.6	10/12	0.12	11/08			

	Period	Rainfall (mm)	Runoff (mm)	Mean flow (m ³ s ⁻¹)	Peak flow (m ³ s ⁻¹)	Date of peak	Min. daily flow (m ³ s ⁻¹)	Date of min.	10 Percentile (m ³ s ⁻¹)	50 Percentile (m ³ s ⁻¹)	95 Percentile (m ³ s ⁻¹)		
033050	Snail at Fordham	C.A.: 60.6 km ²	60..80	558	145	0.28	2.2d	06/05	0.06	24/09	0.5	0.25	0.11
M.A.: AWA	Level: 10m	F.A.F.: GI	S-full: 7.8 m ³ s ⁻¹										
Comment: Flat V Crump weir, 4m broad. Prior to 1985 subsidiary Crump profile weir (0.7m) broad, measured bypass channel discharge. Flows combined to produce single series. Weir removed Dec 1984 and the main weir rating adjusted to compensate (flows increased by approx 2%). Significant groundwater abstractions for public water supply and surface water abstractions for spray irrigation. # Geology - Predominantly Chalk; the southern part of the catchment is covered by Boulder Clay. Land use - 50% rural; 50% urbanised (Newmarket).													
1981	620	111	195	134	0.37	1.4d	11/03	0.25	02/10	0.5	0.34	0.26	
1982	657	118	205	141	0.39	1.5d	22/10	0.21	31/07	0.6	0.37	0.23	
1983	579	104	236	163	0.45	1.4d	01/06	0.23	25/10	0.6	0.46	0.27	
1984			204	141	0.39	2.1	06/02	0.20	12/09	0.5	0.38	0.24	
1985			168	117	0.32					0.5	0.32	0.18	
033051	Cam at Chestertord	C.A.: 141.0 km ²	64-80	597	132	0.59	13.0	01/02	0.07	26/07	1.1	0.41	0.16
M.A.: AWA	Level: 35m	F.A.F.: GEI	B-full: 46.0 m ³ s ⁻¹										
Comment: Compound broad - crested weir, 22.3m broad (in trapezoidal section) with central notch 3m broad, 0.23m deep. Significant groundwater abstractions for Public Water Supply. # Geology - predominantly Chalk - approx 70% Boulder Clay cover. Land use - arable.													
1981	655	110	114	86	0.51	8.2	10/03	0.23	29/01	0.7	0.36	0.25	
1982	678	114	142	108	0.64	10.8	09/12	0.21	29/08	1.1	0.46	0.22	
1983	578	97	155	117	0.69	8.4	18/04	0.28	29/10	1.2	0.53	0.29	
1984	658	110	135	102	0.60	8.1	23/11	0.22	02/09	1.1	0.44	0.25	
1985	540	90	129	98	0.58	7.5	21/01	0.18	07/11	0.9	0.48	0.25	
033052	Swaifham Lode at Swaifham Bulbeck	C.A.: 36.4 km ²	63..80	547	143	0.17	0.6	28/01	0.02	09/09	0.3	0.15	0.06
M.A.: AWA	Level: 3m	F.A.F.: GE	S-full: 2.6 m ³ s ⁻¹										
Comment: Crump profile weir, 2.5m broad, situated immediately upstream of road bridge. Prior to 1973 thin-plate weir, 1.45m broad. Significant groundwater abstractions for public water supply. # Geology - predominantly Chalk. Land use - arable.													
1981	576	105	118	83	0.14	0.4	09/07	0.08	01/01	0.2	0.12	0.09	
1982	582	105	130	91	0.15	0.5	03/01	0.06	18/09	0.3	0.15	0.07	
1983	534	98	175	122	0.20	0.4	01/06	0.09	15/11	0.3	0.23	0.10	
1984	579	106	122	85	0.14	0.4	23/11	0.07	02/09	0.2	0.14	0.08	
1985	476	87	136	95	0.16	0.4	10/02	0.07	26/11	0.2	0.16	0.08	
033054	Babingley at Castle Rising	C.A.: 47.7 km ²	76-80	696	387	0.58	2.1	28/03	0.13	14/07	0.9	0.54	0.30
M.A.: AWA	Level: 5m	F.A.F.: GEI	S-full: 11.0 m ³ s ⁻¹										
Comment: Triangular profile Flat V Crump weir, 4.5m broad; level of wingwalls - 1.2m above crest. Subject to drowning. Significant groundwater abstraction for public water supply. # Geology - Chalk catchment. Land use - arable.													
1981	708	102	443	114	0.67	2.1	26/04	0.39	17/10	1.1	0.64	0.41	
1982	729	105	300	78	0.45	1.0	04/06	0.25	17/09	0.6	0.45	0.27	
1983	644	93	386	100	0.58	1.5	15/05	0.27	23/11	0.9	0.64	0.30	
1984	689	99	294	76	0.44	1.0	30/03	0.28	20/10	0.6	0.42	0.30	
1985	694	100	332	86	0.50	1.0	29/01	0.28	14/11	0.7	0.50	0.31	
033055	Granta at Bebraham	C.A.: 98.7 km ²	63..80	555	75	0.24	6.5	06/05	0.00	25/11	0.5	0.14	0.03
M.A.: AWA	Level: 23m	F.A.F.: GEI	S-full: 6.5 m ³ s ⁻¹										
Comment: Triangular profile Flat V weir, 8.3m broad; constructed on an old brick weir. Height of wing walls above crest - 0.6m. Significant groundwater abstractions for public water supply. # Geology - Chalk catchment. Land use - arable.													
1981	638	115	68	91	0.21	4.1	30/12	0.06	13/08	0.4	0.12	0.07	
1982	632	114	94	125	0.29	4.7	10/12	0.04	10/09	0.6	0.18	0.05	
1983	596	107	103	137	0.32	4.4	18/04	0.04	03/12	0.6	0.25	0.07	
1984	667	120	81	108	0.25	3.9	07/02	0.06	15/09	0.5	0.17	0.06	
1985	570	103	81	108	0.25	4.0	22/01	0.05	03/11	0.5	0.20	0.06	
033056	Quy Water at Lode	C.A.: 76.4 km ²	65..80	560	60	0.15			0.00	21/09	0.5	0.07	
M.A.: AWA	Level: 3m	F.A.F.: GEI	S-full: 2.4 m ³ s ⁻¹										
Comment: Compound weir, 4.8m broad, with Crump profile centre section, 1m broad, 0.3m deep. At flows greater than 0.32 m ³ s ⁻¹ flow occurs over broad-crested flanks between vertical side walls. Pre-1975 data imprecise. In dry weather stream leaks through bed into the fen and can dry up. Three large abstractions in catchment for PWS. # Geology - Chalk with Upper Greensand in lower catchment. Land use - mainly agricultural with eastern edge of Cambridge encroaching into catchment.													
1981	628	112	66	110	0.16	2.1	03/12	0.01	22/09	0.3	0.11	0.03	
1982	664	119	78	130	0.19	2.1	18/02	0.00	13/08	0.4	0.17	0.02	
1983	599	107	133	222	0.32	2.3	01/06	0.01	25/11	0.6	0.32	0.04	
1984	641	114	85	142	0.21	2.5	06/02	0.01	30/08	0.4	0.17	0.02	
1985	579	103	106	177	0.26	1.5	21/09	0.01	30/10	0.5	0.21	0.04	
033057	Ouzel at Leighton Buzzard	C.A.: 119.0 km ²	76-80	626	201	0.76	8.6	28/12	0.10	23/08	1.7	0.51	0.23
M.A.: AWA	Level: 81m	F.A.F.: GEI	S-full: 4.2 m ³ s ⁻¹										
Comment: Crump profile weir, 6.0m broad, in trapezoidal section, 7.5m broad. The weir is subject to drowning at flows of approximately 4 m ³ s ⁻¹ . Intake weir (1m broad) to gravel pit, immediately upstream of station - infiltrates into Lower Greensand aquifer. # Geology; predominantly Chalk. A rural catchment draining from the Chiltern escarpment. Land in the lower reaches is gently undulating.													
1981	681	109	225	112	0.85	7.7	26/04	0.29	09/09	1.5	0.63	0.36	
1982	710	113	242	120	0.91	7.4	09/12	0.23	09/09	1.8	0.62	0.26	
1983	640	102	218	108	0.82	8.1	01/06	0.22	20/09	1.5	0.66	0.28	
1984	678	108	195	97	0.73	8.3	23/11	0.20	16/10	1.4	0.51	0.25	
1985	597	95	163	81	0.61	7.5	26/12	0.19	24/10	1.1	0.42	0.20	
033058	Ouzel at Bletchley	C.A.: 215.0 km ²	78-80	685	312	2.13	35.3d	06/05	0.43	23/09	4.8	1.38	0.68
M.A.: AWA	Level: 66m	F.A.F.: GEI	S-full: 96.0 m ³ s ⁻¹										
Comment: Flat V weir, 10m broad. Constructed to measure flows just upstream of urban development (Milton Keynes). Small groundwater abstractions. Flows augmented by effluent from Leighton Buzzard. # Mixed geology Upper Greensand and Oxford Clay. Land use - arable.													
1981	704	103	318	102	2.17	33.7	27/04	0.64	29/07	4.1	1.47	0.71	
1982	715	104	326	104	2.22	22.7	10/12	0.57	17/08	5.1	1.41	0.61	
1983	646	94	294	94	2.01	18.7	01/05	0.64	29/07	3.6	1.52	0.69	
1984			248	79	1.69	22.9	24/11	-0.48	28/07	3.6	1.08	0.50	
1985			207	66	1.41	21.2	26/12	0.41	05/11	2.6	0.91	0.46	
033063	Little Ouse at Knettishall	C.A.: 101.0 km ²	1980				3.4	20/12	0.12	08/09			
M.A.: AWA	Level: 16m	F.A.F.: GEI											
Comment: Compound Crump weir, 4.5m broad. Structure drowns above 3.35 m ³ s ⁻¹ . Minor abstractions and returns. 3 wells constructed in 1987 to augment low flows. # Geology - predominantly Chalk. Land use - arable.													
1981	657	179			0.57	5.6	27/04	0.19	05/09	0.9	0.37	0.20	
1982	607	144			0.46	4.7	10/12	0.06	11/09	0.9	0.33	0.14	
1983		149			0.48	3.9	21/05	0.17	30/08	0.9	0.36	0.19	
1984		154			0.49	4.7	28/01	0.13	02/09	0.8	0.37	0.17	
1985	593	170			0.54	4.3	22/01	0.20	03/11	1.1	0.42	0.21	
033064	Whaddon Brook at Whaddon	C.A.: 16.0 km ²	1980				0.2	16/10	0.04	16/12			
M.A.: AWA	Level: 16m	F.A.F.: G	S-full: 0.5 m ³ s ⁻¹										
Comment: Precast fibreglass flume set in concrete; long-crested flume crest 0.1m broad. Flows affected by effluent from Royston STW upstream of station. # The stream is largely groundwater fed. Geology - Chalk. Land use - rural.													
1981		138			0.07	0.3	30/12	0.03	13/12	0.1	0.06	0.05	
1982		168			0.09	0.4	09/12	0.04	29/08	0.1	0.08	0.04	
1983		196			0.10	0.4	31/05	0.05	22/10	0.1	0.10	0.05	
1984		149			0.08	0.2	22/05	0.04	27/08	0.1	0.08	0.05	
1985		158			0.08	0.2	10/02	0.04	02/11	0.1	0.07	0.04	
033065	Hiz at Hitchin	C.A.: 6.8 km ²	1980				0.1d	16/10	0.02	07/12			
M.A.: AWA	Level: 63m	F.A.F.: GEI											
Comment: Old concrete weir with crest reshaped by steel beam to form compound Crump profile, 6.2m wide; central notch 1m wide, 0.14m deep. Substantial abstractions for PWS. # Small spring fed stream flowing through Hitchin market place. Geology - predominantly Chalk catchment with small amounts of sands, gravels and clay. Land use - 90% arable, 10% urban.													
1981	635	175			0.04	0.1d	26/04	0.02	22/10	0.1	0.03	0.02	
1982	687	166			0.04	0.1d	15/03	0.02	18/08	0.1	0.03	0.02	
1983		277			0.06	0.2d	31/05	0.02	23/10	0.1	0.06	0.03	
1984		135			0.03	0.6	17/06	0.01	17/05	0.0	0.03	0.02	
1985	527	165			0.04	1.8	04/12	0.01	22/07	0.1	0.03	0.02	

		Period	Rainfall (mm)	Runoff (mm)	Mean flow (m ³ s ⁻¹)	Peak flow (m ³ s ⁻¹)	Date of peak	Min. daily flow (m ³ s ⁻¹)	Date of min.	10 Percentile (m ³ s ⁻¹)	50 Percentile (m ³ s ⁻¹)	95 Percentile (m ³ s ⁻¹)			
			% of pre-1981	% of pre-1981											
034001	Yare at Colney	C.A: 231.8 km ²													
M.A: AWA	Level: 8m	F.A.F: GI	B-full: 19.0 m ³ s ⁻¹	59-80	647	194	1.42	21.6	17/09	0.12	12/07	3.2	0.93	0.36	
Comment:	A compound weir 11.9m wide reconstructed in January 1964 from single level broad-crested weir. The present structure has a Crump section 8.9m wide separated by a pier from a broad-crested weir at a lower level. The topographical catchment exceeds the contributing area (groundwater catchment). Mill sluices artificially regulate flow. Groundwater is abstracted for agricultural uses. # A predominantly rural catchment of Boulder Clay overlying Chalk.														
			1981	724	112	246	127	1.81	20.5	27/04	0.41	06/09	3.1	1.18	0.46
			1982	697	108	200	103	1.47	7.7	11/12	0.29	30/07	3.3	1.09	0.39
			1983	612	95	195	101	1.44	7.2	12/04	0.31	16/08	3.0	1.13	0.39
			1984	666	103	184	95	1.35	7.8	29/01	0.34	02/09	2.4	0.97	0.39
			1985	671	104	197	102	1.44	12.4	22/01	0.36	14/10	3.2	1.16	0.48
034002	Tas at Shotesham	C.A: 146.5 km ²													
M.A: AWA	Level: 10m	F.A.F: GI		57-80	608	167	0.78	62.3	16/09	0.08	05/09	1.6	0.44	0.19	
Comment:	Originally a flume set between high rough walls bypassed at 14 m ³ s ⁻¹ . Reconstructed in 1970 as a Flat V Crump and a bypass channel with movable gates added in 1980. Some high flows only partially gauged as water diverts around the station through the bypass channel. # Predominantly Boulder Clay with some valley deposits.														
			1981	687	113										
			1982	604	99	108	65	0.50	6.1d	10/12	0.13	21/06	0.9	0.36	0.14
			1983	579	95	128	77	0.59	5.5	11/04	0.15	29/07	1.4	0.32	0.17
			1984	633	104	128	77	0.59	7.9	27/01	0.17	02/09	1.1	0.35	0.19
			1985	650	107	139	83	0.65	9.3	22/01	0.20	02/10	1.3	0.38	0.23
034003	Bure at Ingworth	C.A: 164.7 km ²													
M.A: AWA	Level: 12m	F.A.F: GI	B-full: 4.3 m ³ s ⁻¹	59-80	667	206	1.08	11.9	07/04	0.38	24/08	1.7	0.92	0.57	
Comment:	Two ogee profile weirs beneath bridge arches bypassed at 4.3 m ³ s ⁻¹ but maintains modularity. Ground and surface water abstractions with some returns from public and agricultural uses. # Rural land use: Catchment comprises of sands, gravels and loams.														
			1981	733	110	250	121	1.30	18.3	26/04	0.66	09/09	1.8	1.10	0.71
			1982	751	113	216	105	1.13	7.5	05/10	0.58	01/08	1.6	0.99	0.63
			1983	635	95	223	108	1.16	5.5	27/11	0.67	07/09	1.6	1.10	0.71
			1984	719	108	232	113	1.21	6.1	27/05	0.72	08/07	1.6	1.06	0.78
			1985	686	103	234	114	1.22	8.3	21/01	0.75	13/07	1.6	1.07	0.82
034004	Wensum at Costessey Mill	C.A: 536.1 km ²													
M.A: AWA	Level: 5m	F.A.F: GI	B-full: 18.8 m ³ s ⁻¹	60-80	673	239	4.06	29.2	13/02	0.51	11/07	7.5	3.09	1.49	
Comment:	The river divides 80m upstream of control. The main channel passes under the disused mill over three broad-crested weirs. When the discharge exceeds 7 m ³ s ⁻¹ , the operation of four flood gates enables the second channel to act as a bypass. Some artificial regulation of flow is caused by sluice action at Taversham. Moderate surface and groundwater abstractions. # Rural catchment of predominantly Boulder Clay with some sands and gravels.														
			1981	705	105	314	131	5.33	36.8d	28/04	1.95	21/08	9.5	3.76	2.22
			1982	746	111	271	113	4.61	22.0	04/10	0.58	29/06	8.7	3.31	1.62
			1983	617	92	246	103	4.18	21.7	27/11	1.51	10/09	7.1	3.77	1.78
			1984	704	105	265	111	4.50	34.0	29/01	1.33	01/09	7.0	3.55	1.59
			1985	677	101	256	107	4.35	22.9	23/01	1.13	23/09	7.5	3.58	1.68
034005	Tud at Costessey Park	C.A: 73.2 km ²													
M.A: AWA	Level: 9m	F.A.F: GI		61-80	660	147	0.34	5.8	28/01	0.02	25/08	0.7	0.23	0.09	
Comment:	Four trapezoidal standing wave flumes under a road bridge have movable dam boards placed across the two outer arches to increase the sensitivity of low flow measurements. The groundwater catchment is smaller than the topographical catchment with consequent losses to adjacent catchments and low annual gauged runoff. # Surface geology is predominantly Boulder Clay with valley gravels. Rural land use.														
			1981	757	115	199	135	0.46	10.4	26/04	0.12	21/08	0.7	0.31	0.15
			1982	760	115	184	125	0.43	3.7	22/10	0.11	11/08	0.8	0.30	0.13
			1983	609	92	149	101	0.35	2.1	11/04	0.12	06/09	0.6	0.29	0.13
			1984	680	103	149	101	0.35	2.5	24/11	0.09	27/07	0.6	0.25	0.11
			1985	657	100	158	107	0.37	5.8	22/01	0.13	02/10	0.7	0.28	0.14
034006	Waveney at Needham Mill	C.A: 370.0 km ²													
M.A: AWA	Level: 17m	F.A.F: RI	B-full: 23.0 m ³ s ⁻¹	63-80	605	147	1.72	113.3	16/09	0.19	23/08	4.1	0.72	0.32	
Comment:	A compound Crump weir 8.5m wide in the main channel with a single crested Crump in the mill bypass. Sluice action at a mill 2.4km upstream is infrequently operated but is evident in flow records. Surface water abstracted and river gravels utilised as an aquifer however, the overall impact is minimal. # Predominantly a Boulder Clay catchment with largely rural land use.														
			1981	674	111	207	141	2.43	61.0	27/04	0.28	30/08	4.6	1.11	0.34
			1982	571	94	148	101	1.73	27.5	10/12	0.28	30/08	3.7	0.88	0.32
			1983	543	90	145	99	1.70	17.9	12/04	0.27	30/08	4.3	0.89	0.32
			1984	633	105	157	107	1.84	27.2	27/01	0.25	27/08	3.8	0.94	0.33
			1985	616	102	172	117	2.02	31.5	22/01	0.31	23/10	4.1	1.09	0.43
034007	Dove at Oakley Park	C.A: 133.9 km ²													
M.A: AWA	Level: 21m	F.A.F: RI	B-full: 23.6 m ³ s ⁻¹	66-80	564	157	0.67	38.5	16/09	0.11	14/09	1.5	0.31	0.15	
Comment:	Compound Crump weir with low flow notch and crest tapping; non-modular at 13 m ³ s ⁻¹ and bypassed at 18 m ³ s ⁻¹ . Groundwater abstractions and effluent returns have a moderate effect on flows. # A rural catchment of Boulder Clay.														
			1981	640	113	225	143	0.96	21.5	27/04	0.13	05/09	1.7	0.41	0.15
			1982	563	100	146	93	0.62	17.3	10/12	0.13	29/08	1.2	0.31	0.14
			1983	546	97	149	95	0.63	9.4	22/05	0.13	20/08	1.5	0.31	0.14
			1984	608	108	164	104	0.70	17.2	27/01	0.12	19/08	1.4	0.30	0.14
			1985	587	104	174	111	0.74	24.0	21/01	0.16	26/10	1.3	0.32	0.17
034008	Ant at Honing Lock	C.A: 49.3 km ²													
M.A: AWA	Level: 2m	F.A.F: GI		66-80	640	199	0.31	1.7	19/11	0.10	04/07	0.4	0.29	0.18	
Comment:	Crump type weir utilising the fall of an old navigation lock. Immediately upstream is a large marshy area with dense weed growth from which some flow bypasses the station. Groundwater abstractions moderately reduce the natural runoff. # Predominantly rural catchment of approximately 50% sands and gravels and 50% loam.														
			1981	671	105	222	112	0.35	2.6d	26/04	0.17	06/09	0.5	0.32	0.20
			1982	709	111										
			1983	618	97										
			1984	701	110	196	98	0.31	1.2	27/05	0.18	08/07	0.4	0.28	0.20
			1985	699	109	196	98	0.31	1.1	21/01	0.21	02/10	0.4	0.28	0.22
034010	Waveney at Billingford Bridge	C.A: 149.4 km ²													
M.A: AWA	Level: 20m	F.A.F: EI	B-full: 7.5 m ³ s ⁻¹	68-80	592	164	0.78	59.5	16/09	0.02	12/07	1.7	0.26	0.07	
Comment:	Two gauging stations are located upstream of two bridge arches. One is a compound Crump with low flow notch, the other, a simple Crump with a lifting gate to retain higher summer levels. Bypassing occurs at 6.4 m ³ s ⁻¹ and drowning can result from sluice action at Hoxne Mill. Surface and groundwater abstracted and effluent returned. # The surface geology is predominantly Boulder Clay supporting arable and mixed agriculture.														
			1981	706	119	229	140	1.09	26.5	27/04	0.07	06/09	2.0	0.46	0.09
			1982	586	99	162	99	0.77	18.9	10/12	0.08	29/08	1.5	0.40	0.09
			1983	555	94	144	88	0.68	7.9	12/04	0.06	22/08	1.9	0.37	0.09
			1984	668	113	178	109	0.84	18.1	27/01	0.06	01/09	1.6	0.40	0.09
			1985	638	108	178	109	0.84				1.8	0.45	0.12	
034011	Wensum at Fakenham	C.A: 127.1 km ²													
M.A: AWA	Level: 34m	F.A.F: GI	B-full: 11.0 m ³ s ⁻¹	67-80	686	223	0.90	9.7	12/02	0.13	25/08	1.6	0.69	0.27	
Comment:	Compound Crump with low flow notch. A lifting gate for retaining summer levels acts as a sharp-crested weir. Groundwater abstractions have a minimal impact on runoff. # A low lying rural catchment of Boulder Clay with large pockets of sands and gravels.														
			1981	751	109	284	127	1.14	7.1	27/04	0.50	10/09	1.8	1.00	0.57
			1982	761	111	196	88	0.79	3.7	23/10	0.30	18/09	1.3	0.72	0.32
			1983	662											

			Period	Rainfall (mm)	Runoff (mm)	Mean flow (m ³ s ⁻¹)	Peak flow (m ³ s ⁻¹)	Date of peak	Min. daily flow (m ³ s ⁻¹)	Date of min.	10 Percentile (m ³ s ⁻¹)	50 Percentile (m ³ s ⁻¹)	95 Percentile (m ³ s ⁻¹)		
				% of pre-1981	% of pre-1981										
034014	Wensum at Swanton Morley	C.A: 363.0 km ²	69..80	666	223	2.57	25.5d	11/02	0.40	19/08	4.6	1.92	0.96		
M.A: AWA	Level: m	F.A.F: GI						1977		1975					
Comment: Two structures 150m apart operate in parallel. Beneath the two arch bridge are two Crump weirs which sometimes display non-modular flow as a result of summer weed growth downstream. Three Crump weirs are sited in arches beneath a second bridge. Groundwater abstractions make a moderate reduction in the natural runoff. # A Boulder Clay catchment of low relief supporting mainly arable agriculture.			1981	283	127	3.26	31.4d	27/04	1.19	31/08	5.1	2.54	1.35		
			1982	250	112	2.88					5.1	2.27	1.16		
			1983												
			1984	727	109	2.46	12.8d	29/01	0.93	01/09	4.6	2.41	1.16		
			1985	687	103	2.48	18.2d	22/01	1.17	05/10	4.6	2.52	1.28		
034018	Stiffkey at Warham All Saints	C.A: 77.1 km ²	72..80	651	246	0.60	12.5	11/02	0.04	29/07	1.6	0.44	0.12		
M.A: AWA	Level: 5m	F.A.F: GI						1977		1976					
Comment: Flat V weir with crest tapping that drowns above 0.8 m ³ s ⁻¹ . Downstream weed growth during summer months may also give rise to complete drowning of gauging structure at lower flows. Large abstractions from the groundwater for public water supply makes a significant reduction in the natural runoff. # The catchment is predominantly Chalk and Boulder Clay and supports rural land use.			1981	699	107	284	115	0.69	10.6	27/04	0.25	05/09	1.1	0.52	0.30
			1982	664	102	178	72	0.44	2.2	22/10	0.15	12/08	0.7	0.42	0.17
			1983	593	91	192	78	0.47	2.4	11/04	0.17	06/09	0.8	0.45	0.19
			1984	709	109	229	93	0.56	2.6	27/05	0.22	02/09	0.9	0.52	0.27
			1985	679	104										
034019	Bure at Horstead Mill	C.A: 313.0 km ²	74-80	646	214	2.12	20.5	14/12	0.43	08/07	3.4	1.89	1.09		
M.A: AWA	Level: 1m	F.A.F: GI						1979		1976					
Comment: A compound Crump weir consisting of 5 Crumps, 4 at fixed levels the narrowest one of which incorporates a fish pass. A vertical lift gate converts the largest to a sharp edge weir. The gate is used to retain upstream water levels during the summer months. Ground and surface water abstractions upstream. # Low lying rural catchment of sands and gravels.			1981	699	108	273	128	2.70	34.8	27/04	1.17	02/09	3.6	2.28	1.46
			1982	715	111	226	106	2.25	10.0	06/10	0.95	10/08	3.2	2.00	1.15
			1983	605	94	231	108	2.29	9.6	27/11	0.77	09/09	3.3	2.21	1.11
			1984	691	107	235	110	2.33	8.4	06/11	1.10	01/08	3.2	2.08	1.41
			1985	668	103	232	108	2.30	11.3	22/01	1.05	13/10	3.0	2.14	1.47
035002	Deben at Naunton Hall	C.A: 163.1 km ²	64..80	583	142	0.74	29.4	17/09	0.01	14/07	1.7	0.28	0.09		
M.A: AWA	Level: 6m	F.A.F: RGI						1968		1976					
Comment: A compound Crump (with crest tapping) and low flow notch. Bypassing occurs at 12 m ³ s ⁻¹ and seasonal weed growth causes drowning. Some groundwater transfers to beyond the catchment boundary and some abstracted from within the catchment. The overall impact of these are to significantly reduce the natural runoff. # The catchment is largely Boulder Clay and sands and gravels. Rural land use.			1981	652	112	186	131	0.96	16.1	30/12	0.10	09/08	1.9	0.38	0.13
			1982	551	95	125	88	0.65	15.2	09/12	0.05	01/05	1.4	0.29	0.09
			1983	553	95	122	86	0.63	9.9	02/04	0.06	13/08	1.6	0.28	0.10
			1984	620	106	155	109	0.80	14.3	27/01	0.06	23/08	2.2	0.28	0.09
			1985	607	104	160	113	0.83	17.9	26/12	0.14	13/07	1.4	0.31	0.18
035003	Aide at Farnham	C.A: 63.9 km ²	61-80	581	133	0.27	15.5	10/12	0.02	08/07	0.6	0.09	0.05		
M.A: AWA	Level: 5m	F.A.F: GI						1965		1976					
Comment: Broad-crested weir of ogee section with low flow notch and steel plate divide walls. Significant groundwater abstractions; some water exported. The groundwater contours show only token relationship to the surface topography. # The catchment comprises of Boulder Clay and sands and has a predominantly rural land use.			1981	698	120	204	153	0.41	10.3	27/04	0.05	02/09	0.8	0.12	0.05
			1982	583	100	119	89	0.24	9.3	09/12	0.05	29/08	0.5	0.09	0.05
			1983	562	97	113	85	0.23	3.9	19/04	0.06	06/09	0.5	0.10	0.05
			1984	663	114	141	106	0.29	9.3	26/01	0.04	01/09	0.7	0.10	0.04
			1985	641	110	156	117	0.31	11.2	26/12	0.05	17/09	0.5	0.11	0.05
035004	Ore at Beversham Bridge	C.A: 54.9 km ²	65-80	603	182	0.32	10.3d	02/02	0.02	26/06	0.6	0.15	0.07		
M.A: AWA	Level: 2m	F.A.F: I						1979		1976					
Comment: A compound Crump weir with low flow notch and crest tapping that occasionally drowns as a result of downstream weedgrowth. The groundwater catchment exceeds the topographic. Groundwater abstractions make a moderate reduction in the natural runoff. # The catchment is 60% Boulder Clay and 40% sands and gravels. Rural land use.			1981	656	109	199	109	0.35	8.2	27/04	0.08	18/08	0.6	0.15	0.08
			1982	541	90	138	76	0.24	6.3	10/12	0.06	02/08	0.5	0.13	0.08
			1983	547	91	131	72	0.23	3.5	18/04	0.05	15/08	0.5	0.14	0.06
			1984	636	105	163	90	0.28	6.9	26/01	0.04	31/08	0.6	0.13	0.06
			1985	606	100	189	104	0.33	11.9	26/12	0.08	26/09	0.4	0.15	0.09
035008	Gipping at Stowmarket	C.A: 128.9 km ²	64..80	562	142	0.58	34.4	01/02	0.05	26/08	1.4	0.20	0.08		
M.A: AWA	Level: 25m	F.A.F: GI						1979		1973					
Comment: A compound Crump weir rebuilt in 1966 from a compound broad-crested weir known as a summer station but which did contain all flows. There is minimal natural storage within the catchment and the Boulder Clay gives a flashy response. Abstractions from the groundwater and effluent returns broadly balance. # Boulder Clay with valley sands and gravels. Predominantly rural land use.			1981	646	115	195	137	0.80	25.5	30/12	0.08	05/09	1.6	0.34	0.10
			1982	596	106	170	120	0.70	20.1	10/12	0.08	29/08	1.5	0.29	0.09
			1983	553	98	151	106	0.62	10.8	11/04	0.08	29/08	1.5	0.31	0.10
			1984	657	117	209	147	0.86	22.3	27/01	0.08	01/09	1.8	0.33	0.10
			1985	570	101	158	111	0.65	28.1	21/01	0.10	01/10	1.3	0.28	0.11
035010	Gipping at Bramford	C.A: 298.0 km ²	69..80	544	112	1.06	42.4	02/02	0.04	06/08	2.3	0.42	0.15		
M.A: AWA	Level: 6m	F.A.F: GI						1979		1976					
Comment: Compound Crump weir with three sections and a gate to convert the largest to a sharp edge weir. Bypassing occurs at 12 m ³ s ⁻¹ and sluice operation on the weir is evident in the daily flow record. Groundwater abstractions have a significant impact on the natural runoff. # The catchment is 90% Boulder Clay with the rest Crag deposits. Predominantly rural land use.			1981	631	116	166	148	1.57	32.4	30/12	0.24	26/08	3.1	0.76	0.30
			1982	578	106	136	121	1.29	28.4	10/12	0.17	31/08	2.8	0.69	0.21
			1983	550	101	128	114	1.21	10.4	12/04	0.12	25/08	2.8	0.59	0.23
			1984	638	117	151	135	1.43	26.9	07/02	0.13	29/07	3.2	0.72	0.24
			1985	562	103	125	112	1.18	20.7	22/01	0.26	24/10	2.3	0.65	0.31
035013	Blyth at Holton	C.A: 92.9 km ²	70-80	562	132	0.39	32.2	01/02	0.04	20/08	0.8	0.12	0.07		
M.A: AWA	Level: 12m	F.A.F: GI						1978		1976					
Comment: An asymmetric compound Crump with a low flow notch. Groundwater abstractions have a significant effect on the natural runoff. The river responds very rapidly to rainfall. # The catchment comprises of 44% Boulder Clay, 42% Crag and 13% alluvium. The land use is predominantly rural.			1981	676	120	219	166	0.64	23.3	26/04	0.06	05/09	1.2	0.17	0.08
			1982	568	101	115	87	0.34	14.5	09/12	0.06	14/09	0.7	0.13	0.07
			1983	542	96	119	90	0.35	10.6	11/04	0.05	07/09	0.8	0.14	0.07
			1984	628	112	150	114	0.44	19.4	26/01	0.06	01/09	1.1	0.13	0.06
			1985	652	116	181	137	0.53	24.4	21/01	0.07	05/10	0.9	0.17	0.07
036002	Glem at Glemsford	C.A: 87.3 km ²	60-80	587	165	0.46	24.1d	16/09	0.05	24/08	1.0	0.16	0.07		
M.A: AWA	Level: 34m	F.A.F: GEI						1988		1965					
Comment: Trapezoidal flume with bypassing at high flows; modest modular limit; downstream water level recorder to allow for drowning. Highest flows unreliably gauged. Naturalised flows from 1960 to September 1976. # Rural catchment in the Upper Stour. Upper Chalk; overlain by glacial sands and gravels, exposed in river valley sides, and semi-pervious Boulder Clay.			1981	688	117	219	133	0.61	10.9	30/12	0.10	31/08	1.3	0.32	0.11
			1982	666	113	227	138	0.63	10.0	10/12	0.09	16/09	1.5	0.34	0.11
			1983	624	106	203	123	0.56	7.6	20/05	0.09	01/11	1.2	0.31	0.10
			1984	680	116	217	132	0.60	11.0	06/02	0.11	01/09	1.5	0.26	0.11
			1985	549	94	148	90	0.41	7.5	21/01	0.06	12/10	0.9	0.25	0.07
036003	Box at Polstead	C.A: 53.9 km ²	60-80	573	119	0.20	9.0	01/02	0.03	26/08	0.4	0.12	0.06		
M.A: AWA	Level: 16m	F.A.F: GEI						1979		1976					
Comment: Trapezoidal flume with high flow rated spillway. Throat tapping; rarely drowns. Naturalised flows from 1961 to 1976. Minimal ground and surface water abstractions for agricultural purposes. # Rural catchment, tributary of the Stour. Predominantly London Clay; Chalk in the north all overlain by superficial deposits.			1981	653	114	146	123	0.25	5.6	30/12	0.06	09/09	0.4	0.17	0.08
			1982	642	112	140	118	0.24	5.1	09/12	0.06	12/08	0.4	0.15	0.07
			1983	573	100	133	112	0.23	2.5	15/05	0.07	15/08	0.4	0.16	0.08
			1984	631	110	130	109	0.22	5.2	07/02	0.06	30/07	0.4	0.15	0.07
			1985	568	99	129	108	0.22	4.4	21/01	0.08	01/10	0.3	0.15	0.09

					Period	Rainfall (mm)	Runoff (mm)	Mean flow (m ³ s ⁻¹)	Peak flow (m ³ s ⁻¹)	Date of peak	Min. daily flow (m ³ s ⁻¹)	Date of min.	10 Percentile (m ³ s ⁻¹)	50 Percentile (m ³ s ⁻¹)	95 Percentile (m ³ s ⁻¹)
						% of pre-1981	% of pre-1981								
036004	Chad Brook at Long Melford	C.A.: 47.4 km ²	65-80	577	148	0.22	15.0	16/09	0.02	09/09	0.5	0.08	0.03		
M.A.: AWA	Level: 35m	F.A.F.: GI	B-full: 11.0 m ³ s ⁻¹												
Comment:	'Essex' profile (modified Flat V Crump) weir with low flow side weir. High flow spillway accurate to 1.1m. Full range. Theoretically rated. Naturalised from 1965 to 1976. # Rural catchment, tributary of the Upper Stour. Boulder Clay over Chalk.														
	1981	678	118	193	130	0.29	7.7	30/12	0.04	17/08	0.5	0.14	0.04		
	1982	646	112	194	131	0.29	7.5	09/12	0.02	16/09	0.6	0.13	0.04		
	1983	587	102	181	122	0.27	7.4	15/05	0.04	26/08	0.6	0.13	0.04		
	1984	628	109	193	130	0.29	8.0	07/02	0.03	26/08	0.7	0.13	0.04		
	1985	517	90	149	101	0.22	7.0	21/01	0.04	15/10	0.4	0.12	0.04		
036005	Brett at Hadleigh	C.A.: 156.0 km ²	62-80	568	128	0.63	25.0	01/02	0.03	26/08	1.5	0.27	0.08		
M.A.: AWA	Level: 18m	F.A.F.: GEI	B-full: 25.0 m ³ s ⁻¹												
Comment:	'Essex' profile (modified Flat V Crump) weir with low flow side weir and high flow rated spillway. Downstream water level recorder to allow for drowning. Naturalised flows from 1962 to 1976. Post '76 adjustments for groundwater abstractions for public water supply and industrial abstraction from surface water, are not made to the gauged daily mean flows. # Predominantly rural catchment underlain by Upper Chalk covered mainly with semi-pervious Boulder Clay.														
	1981	658	116	179	140	0.89	19.5	30/12	0.18	16/10	1.7	0.42	0.23		
	1982	622	110	169	132	0.83	16.5	10/12	0.16	01/10	1.7	0.38	0.20		
	1983	568	100	147	115	0.73	7.8	11/04	0.13	15/11	1.7	0.35	0.14		
	1984	646	114	179	140	0.88	16.5	07/02	0.18	31/07	1.8	0.43	0.22		
	1985	546	96	154	120	0.76	17.1	21/01	0.24	03/11	1.4	0.39	0.27		
036006	Stour at Langham	C.A.: 578.0 km ²	62-80	568	146	2.68	91.0	17/09	0.09	09/07	6.0	1.45	0.47		
M.A.: AWA	Level: 6m	F.A.F.: REI	B-full: 40.0 m ³ s ⁻¹												
Comment:	Double throated trapezoidal flume with throat tapping. Spillway channel with weir constructed Dec 85 takes some flow above 1.45m. Bypassing also occurs over opposite bank above 1.85m. Additional bypassing possible from 0.5km u/s during extreme events. Naturalised flows up to Sept.76. Flow augmented by intermittent pumping from Ely/Ouse Transfer Scheme and occasional SAGS borehole pumping. # Predominantly rural catchment underlain by Chalk - outcropping in N, London Clay in S, all covered by semi-pervious Boulder Clay.														
	1981	647	114	181	124	3.33	43.9	31/12	0.80	27/08	6.1	2.10	1.07		
	1982	657	116	212	145	3.89	42.2	01/01	0.86	13/09	9.2	2.12	1.09		
	1983	588	104	192	132	3.53	28.4	20/04	0.85	07/09	7.9	2.28	1.02		
	1984	650	114	188	129	3.45	41.3	08/02	0.65	27/07	7.6	2.03	0.89		
	1985	545	96	148	101	2.71	34.0	23/01	0.64	23/10	5.0	1.95	0.78		
036007	Belchamp Brook at Bardfield Bridge	C.A.: 58.6 km ²	60-80	552	83	0.15	11.0	01/02	0.00	27/07	0.4	0.05	0.02		
M.A.: AWA	Level: 27m	F.A.F.: GI	B-full: 9.0 m ³ s ⁻¹												
Comment:	Trapezoidal flume with throat tapping. Full range station in winter, occasionally drowns in summer due to weed growth. Naturalised flows from 1965 to 1976, only minimal adjustments needed to flows since then. # Rural. Tributary of the Stour. Mixed geology, mostly glacial deposits overlying the predominant Chalk.														
	1981	619	112	131	158	0.24	9.5	30/12	0.03	07/09	0.4	0.12	0.04		
	1982	620	112	133	160	0.25	9.1	09/12	0.03	15/09	0.5	0.10	0.03		
	1983	578	105	132	159	0.24	5.1	15/05	0.04	19/08	0.6	0.13	0.05		
	1984	597	108	127	153	0.24	8.2	26/01	0.03	26/08	0.6	0.10	0.04		
	1985	510	92	91	110	0.17	4.4	22/01	0.03	15/10	0.3	0.08	0.03		
036008	Stour at Westmill	C.A.: 224.5 km ²	60-80	590	165	1.18	60.0	18/09	0.02	10/09	2.5	0.48	0.11		
M.A.: AWA	Level: 33m	F.A.F.: GEI	B-full: 25.0 m ³ s ⁻¹												
Comment:	Compound trapezoidal critical depth flume with d/s level recorder. Affected by weed growth but rarely drowns out. Above 1.15m some flow passes over a broad-crested weir 100m u/s into a spillway. Since 22/3/71 flow augmented by intermittent pumping from the Ely/Ouse Transfer Scheme, archived flows adjusted for this until 1976. (Naturalised flows 1960 to 1976.) # Rural, agricultural catchment situated on Upper Chalk overlain by sands and gravel with a mantle of semi-pervious Boulder Clay.														
	1981	645	109	198	120	1.41	27.3	30/12	0.29	30/10	2.6	0.68	0.38		
	1982	663	112	229	139	1.63	25.0	10/12	0.22	05/11	3.5	0.77	0.49		
	1983	616	104	198	120	1.41	20.0	19/04	0.24	05/12	2.9	0.70	0.38		
	1984	661	112	197	119	1.40	23.4	07/02	0.18	03/05	3.1	0.61	0.33		
	1985	549	93	153	93	1.09	20.9	22/01	0.17	14/10	2.0	0.64	0.28		
036009	Brett at Cockfield	C.A.: 25.7 km ²	68-80	590	148	0.12	8.1	15/09	0.00	10/11	0.3	0.02	>0.00		
M.A.: AWA	Level: 59m	F.A.F.: N	B-full: 8.0 m ³ s ⁻¹												
Comment:	'Essex' profile (modified Flat V Crump weir). No spillway. Modular limit of 0.66m theoretically derived. No telemetry but planned for future. Naturalised flows from 1969 to 1976, only minimal adjustments needed since. # Small, rural catchment in headwaters of the Brett, a tributary of the R. Stour. Upper Chalk underlies the whole catchment with a mantle of Boulder Clay above.														
	1981	735	125	247	167	0.20	6.3	30/12	0.01	03/09	0.4	0.09	0.01		
	1982	705	119	208	141	0.17	4.8	09/12	0.00	26/09	0.4	0.08	>0.00		
	1983	650	110	141	95	0.12	4.5	15/05	0.00	14/11	0.3	0.04	>0.00		
	1984	697	118	198	134	0.16	5.6	06/02	0.00	01/09	0.4	0.06	>0.00		
	1985	595	101	143	97	0.12	4.4	21/01	0.00	21/10	0.3	0.04	0.01		
036010	Bumpstead Brook at Broad Green	C.A.: 28.3 km ²	68-80	588	156	0.14	21.0	15/09	0.00	09/09	0.3	0.02	>0.00		
M.A.: AWA	Level: 56m	F.A.F.: GI	B-full: 6.0 m ³ s ⁻¹												
Comment:	'Essex' profile (modified Flat V Crump) weir with crest tapping and high flow spillway. Modular limit approx. 6.0 m ³ s ⁻¹ . Approx. limit of gauging is 12.5 m ³ s ⁻¹ . Naturalised flows from 1968 to 1976, only minor adjustments needed to the gauged daily mean flows. # Rural catchment at the head of the R. Stour. Complete cover of Boulder Clay over glacial gravels and Chalk.														
	1981	657	112	167	107	0.15	7.3	30/12	0.00	09/09	0.3	0.04	>0.00		
	1982	647	110	184	118	0.17	9.1	09/12	0.00	27/07	0.4	0.04	>0.00		
	1983	627	107	159	102	0.14	7.9	18/04	0.00	20/08	0.3	0.03	>0.00		
	1984	701	119	161	103	0.14	16.1	20/06	0.00	30/08	0.3	0.03	>0.00		
	1985	563	96	124	79	0.11	4.4	21/01	0.00	22/10	0.3	0.03	>0.00		
036011	Stour Brook at Sturmer	C.A.: 34.5 km ²	68-80	571	202	0.22	25.3	15/09	0.02	18/07	0.5	0.08	0.04		
M.A.: AWA	Level: 55m	F.A.F.: GEI	B-full: 5.7 m ³ s ⁻¹												
Comment:	'Essex' profile (modified Flat V Crump) weir with crest tapping. Immediately d/s of Haverhill - urban runoff causes short, sharp peaks. Modular limit approx. 5.0 m ³ s ⁻¹ . Adjustments were made for industrial and sewage effluent and groundwater abstractions from 1968 to 1976. # Rural, agricultural catchment with the exception of Haverhill, at the head of the R. Stour. Mostly Boulder Clay with some of the underlying sands and gravels and Chalk outcropping.														
	1981	655	115	218	108	0.24	6.1	09/03	0.02	22/09	0.5	0.11	0.06		
	1982	681	119	228	113	0.25	7.6	09/12	0.04	29/08	0.5	0.10	0.05		
	1983	633	111	217	107	0.24	6.9	18/04	0.04	28/08	0.5	0.11	0.04		
	1984	695	122	219	108	0.24	7.5	06/02	0.04	14/08	0.5	0.10	0.05		
	1985	596	104	183	91	0.20	4.8	21/01	0.04	14/10	0.4	0.11	0.05		
036012	Stour at Kedington	C.A.: 76.2 km ²	68-80	587	260	0.63	42.0	16/09	0.01	08/08	1.7	0.31	0.03		
M.A.: AWA	Level: 53m	F.A.F.: RGEI	B-full: 10.0 m ³ s ⁻¹												
Comment:	'Essex' profile (modified Flat V Crump) weir. No spillway. Crest tapping prone to siltation making modular limit uncertain until 1970, when channel improved for Ely/Ouse TS making station full range. Ponding u/s above 11.5 m ³ s ⁻¹ . Structure built on peat, some percolation beneath. Naturalised flows 1968-1976. Post '76 adjustments made for Ely/Ouse TS. # Rural catchment on Upper Stour. Boulder Clay overlying Chalk, some outcropping.														
	1981	651	111	225	87	0.54	12.4	10/03	0.06	18/10	1.0	0.31	0.12		
	1982	672	114	286	110	0.69	13.8	22/10	0.08	02/05	1.4	0.40	0.13		
	1983	617	105	240	92	0.58	14.0	18/04	0.06	04/12	1.0	0.33	0.13		
	1984	679	116	264	102	0.64	14.3	06/02	0.08	03/05	1.3	0.33	0.13		
	1985	585	96	157	80	0.38	11.4	21/01	0.10	07/07	0.6	0.24	0.12		
036015	Stour at Lamarsh	C.A.: 480.7 km ²	72-80	561	135	2.06	61.0	02/02	0.19	28/08	4.2	1.06	0.48		
M.A.: AWA	Level: 18m	F.A.F.: RGEI	B-full: 35.0 m ³ s ⁻¹												
Comment:	Flat V weir with low flow sharp-crested rectangular notch. Flood banks contain approx. 35.0 m ³ s ⁻¹ . No spillway. Breaching u/s may cause bypassing. Naturalised flows 1972-1976, since then adjustments needed for abstractions and discharges. Ely/Ouse Transfer Scheme adjustments already made. # Predominantly rural catchment except for Haverhill. Upper Chalk beneath whole catchment, covered mainly by Boulder Clay and London Clay in S.														
	1981	657	117	177	131	2.69	40.9	31/12	0.69	26/08	5.1	1.45	0.84		
	1982	662	118	208	154	3.17	36.0	10/12	0.79	28/09	6.3	1.52	0.90		
	1983	615	110	183	136</										

		Period	Rainfall (mm)	% of pre-1981	Runoff (mm)	% of pre-1981	Mean flow (m ³ s ⁻¹)	Peak flow (m ³ s ⁻¹)	Date of peak	Min. daily flow (m ³ s ⁻¹)	Date of min.	10 Percentile (m ³ s ⁻¹)	50 Percentile (m ³ s ⁻¹)	95 Percentile (m ³ s ⁻¹)
037003	Ter at Crabbs Bridge	C.A.: 77.8 km ²	32-80	577	98	0.24	10.1	22/11	0.00	06/08	0.5	0.11	0.03	
M.A.: AWA	Level: 15m	F.A.F.: E1	B-full: 8.0 m ³ s ⁻¹											
Comment: Trapezoidal flume with throat tapping replaced the less accurate station of Hatfield Peveler, 900m downstream, in 1964. Theoretically rated. Drowning due to weed growth. Modular limit 0.95m, to date no level has exceeded 1.6m (structure full). Hatfield Peveler record held with this station record from 1932-1964. Naturalised flows from 1964 to 1976. Minor surface water abstractions for spray irrigation and discharge from sewage works. # Rural, agricultural catchment on London Clay overlain by Boulder Clay.														
1981	644	112	155	158	0.38	8.9	30/12	0.05	04/08	0.6	0.25	0.11		
1982	661	115	186	190	0.46	6.6	09/12	0.07	19/08	1.0	0.28	0.11		
1983	536	93	173	177	0.43	6.3	21/05	0.04	25/08	0.8	0.24	0.10		
1984	632	110	134	137	0.33	4.9	05/10	0.04	02/09	0.7	0.21	0.07		
1985	562	97	117	119	0.29	4.5	22/01	0.05	01/10	0.5	0.20	0.08		
037005	Colne at Laxden	C.A.: 238.2 km ²	59-80	567	133	1.00	22.6	02/02	0.03	30/08	2.1	0.52	0.20	
M.A.: AWA	Level: 8m	F.A.F.: RE1	S-full: 20.0 m ³ s ⁻¹											
Comment: Compound trapezoidal flume with downstream level recorder. Spillway flow commences at 17.0 m ³ s ⁻¹ (1.75m), flows above this are estimated. Naturalised flows for period 1969 to 1976. # Rural catchment underlain by Upper Chalk with surface cover of semi-pervious Boulder Clay on which pasture and arable cultivation predominate.														
1981	616	109	155	117	1.17	20.6	31/12	0.26	06/09	2.0	0.70	0.30		
1982	616	109	172	129	1.30	20.3	10/12	0.27	13/07	2.6	0.70	0.33		
1983	529	93	146	110	1.10	12.1	19/04	0.21	07/09	2.3	0.62	0.26		
1984	621	110	136	102	1.03	13.1	27/01	0.16	28/07	2.3	0.61	0.21		
1985	527	93	129	97	0.97	12.4	22/01	0.26	15/10	1.7	0.65	0.29		
037006	Can at Beaches Mill	C.A.: 228.4 km ²	62-80	580	171	1.24	35.0	21/11	0.06	26/08	2.9	0.55	0.18	
M.A.: AWA	Level: 23m	F.A.F.: E1	B-full: 28.0 m ³ s ⁻¹											
Comment: Triple throated compound flume with trapezoidal centre section for low flows, levels recorded in each, used for rating. Limit of gauging station 35 m ³ s ⁻¹ . Spillway flow starts at 2.0m and is very significant part of flow, allowance for this has not been made in the record. Naturalised flows from 1962 to 1976. Adjustments needed for industrial and sewage effluent. # Rural, agricultural catchment just west of Chelmsford 350m d/s of confluence with R. Wid. London Clay overlain with Boulder Clay in N but exposed in S.														
1981	644	111	178	104	1.29	25.4	30/12	0.20	09/09	2.5	0.74	0.24		
1982	692	119	235	137	1.70	26.8	09/12	0.22	16/09	3.8	0.94	0.24		
1983	542	93	175	102	1.27	24.2	18/04	0.16	04/07	2.6	0.56	0.19		
1984	638	110	171	100	1.24	24.0	22/11	0.15	01/08	3.1	0.55	0.19		
1985	560	97	145	85	1.04	25.5	26/12	0.22	02/10	1.8	0.60	0.24		
037007	Wid at Whittle	C.A.: 136.3 km ²	64-80	610	192	0.83	37.1	21/11	0.05	26/08	2.0	0.34	0.12	
M.A.: AWA	Level: 27m	F.A.F.: E1	B-full: 25.0 m ³ s ⁻¹											
Comment: 'Essex' profile (modified Flat V Crump) weir. Rated spillway starts at 1.25m. Full range, modular station. Flow during summer months consists predominantly of sewage work discharge, of which approximately 0.08 m ³ s ⁻¹ is derived from outside the catchment, adjustments needed for this. Flows naturalised from 1964 to 1976. # Low-lying, rural catchment on London Clay with scattered areas of Boulder Clay above. Responsive catchment.														
1981	674	110	211	110	0.91	18.0	29/12	0.14	09/09	1.8	0.48	0.16		
1982	696	114	267	139	1.16	27.0	09/12	0.14	16/09	2.6	0.60	0.17		
1983	526	86	189	98	0.82	17.1	15/05	0.11	12/08	1.8	0.40	0.14		
1984	628	103	198	103	0.85	13.1	23/01	0.15	30/07	2.2	0.37	0.16		
1985	550	90	171	89	0.74	21.9	26/12	0.17	02/10	1.3	0.42	0.18		
037008	Chelmer at Springfield	C.A.: 190.3 km ²	65-80	575	167	1.01	26.6	02/02	0.13	27/08	2.0	0.52	0.25	
M.A.: AWA	Level: 23m	F.A.F.: E1	S-full: 85.0 m ³ s ⁻¹											
Comment: 'Essex' profile (modified Flat V Crump) weir. Full range station, no drowning. Naturalised flows from 1965 to 1976. Surface water abstraction mainly for spray irrigation, some industrial purposes. Groundwater abstractions from confined Chalk aquifer for PWS and industrial activities. # Rural catchment, gauging station in northern suburb of Chelmsford. Boulder Clay over London Clay, all underlain by Upper Chalk.														
1981	621	108	164	98	0.99	20.9	30/12	0.29	07/09	1.7	0.60	0.32		
1982	678	118	222	133	1.34	27.2	10/12	0.32	30/08	2.7	0.83	0.34		
1983	551	96	182	109	1.10	15.4	19/04	0.32	22/11	2.1	0.66	0.38		
1984	644	112	163	98	0.98	12.3	27/01	0.27	30/07	2.1	0.61	0.31		
1985	554	96	151	90	0.91	16.4	26/12	0.30	24/10	1.5	0.66	0.36		
037009	Brain at Guthavon Valley	C.A.: 60.7 km ²	62-80	575	181	0.35	9.6	22/11	0.09	27/07	0.6	0.24	0.14	
M.A.: AWA	Level: 16m	F.A.F.: GE1	B-full: 17.0 m ³ s ⁻¹											
Comment: 'Essex' profile (modified Flat V Crump) weir with throat tapping and high flow spillway. Full range station. Drowning occurs at very low levels but with minimal effect. Station prone to vandalism. Naturalised flows from 1962 to 1976. # Mainly rural catchment, except for Witham and Braintree, a tributary of the R. Blackwater. Boulder Clay over London Clay.														
1981	645	112	206	114	0.40	7.4	30/12	0.16	17/08	0.6	0.30	0.19		
1982	636	111	242	134	0.47	7.5	10/12	0.18	12/08	0.8	0.33	0.19		
1983	548	95	240	133	0.46	4.7	15/05	0.21	16/07	0.8	0.33	0.23		
1984	649	113	208	115	0.40	3.0	24/11	0.17	31/07	0.7	0.31	0.18		
1985	559	97	194	107	0.37	4.5	26/12	0.19	20/10	0.6	0.30	0.19		
037010	Blackwater at Appleford Bridge	C.A.: 247.3 km ²	62-80	571	148	1.16	21.6	02/02	0.09	06/10	2.4	0.67	0.29	
M.A.: AWA	Level: 15m	F.A.F.: RGE1	B-full: 20.0 m ³ s ⁻¹											
Comment: Double throated trapezoidal flume with throat tappings and a high flow rated spillway starting at 1.80m. Drowning starts at 1.2m (13.0 m ³ s ⁻¹), degree of drowning variable. Naturalised flows from 1962-1976. Intermittently affected since 1971 by Ely/Ouse Transfer Scheme pumping. Abstractions from both Chalk and gravel aquifers for PWS. # Rural catchment, Boulder Clay over London Clay, and Chalk in the headwaters.														
1981	626	110	158	107	1.24	19.0	30/12	0.34	02/09	2.2	0.77	0.42		
1982	612	107	180	122	1.41	21.6	11/12	0.27	08/09	2.6	0.85	0.39		
1983	539	94	165	111	1.29	14.0	21/05	0.32	30/07	2.6	0.68	0.40		
1984	630	110	146	99	1.15	10.7	28/01	0.27	30/08	2.4	0.78	0.34		
1985	537	94	138	93	1.08	11.8	27/12	0.29	24/10	1.9	0.72	0.38		
037011	Chelmer at Churchend	C.A.: 72.6 km ²	63-80	575	152	0.35	13.2	01/02	0.01	14/07	0.8	0.13	0.05	
M.A.: AWA	Level: 52m	F.A.F.: E1	B-full: 9.0 m ³ s ⁻¹											
Comment: Trapezoidal flume (with central division wall in stilling basin) with throat recorder and spillway for flows over 1.42m. Measures up to the 1 in 10 year flood (approx 1.69m) above which bypassing occurs. Drowning minimal. Naturalised flows from 1963 to 1976. Minimal adjustments needed. # Rural, upland (for East Anglia) catchment at head of R. Chelmer. Upper quarter of catchment is Chalk, remainder is London Clay, both overlain by Boulder Clay. Responsive catchment.														
1981	637	111	162	107	0.37	11.1	30/12	0.06	31/08	0.7	0.18	0.07		
1982	663	115	199	131	0.46	17.1	10/12	0.05	09/08	1.1	0.21	0.06		
1983	561	98	156	103	0.36	10.6	18/04	0.06	05/09	0.8	0.16	0.07		
1984	630	110	142	93	0.33	8.1	26/01	0.04	01/08	0.8	0.16	0.05		
1985	541	94	123	81	0.28	8.3	26/12	0.06	05/11	0.5	0.15	0.07		
037012	Colne at Poolstreet	C.A.: 65.1 km ²	63-80	568	126	0.26	18.8	13/03	0.00	24/09	0.7	0.05	>0.00	
M.A.: AWA	Level: 43m	F.A.F.: G1	B-full: 7.0 m ³ s ⁻¹											
Comment: Trapezoidal flume with throat tapping. V notch plate installed in summer to measure low flows. High flow spillway (above 1.34m). Above 1.6m flows are estimated as major bypassing occurs. Rarely non-modular. Naturalised flows from 1963-1976. # Rural, upland (for East Anglia) catchment of the R. Colne. Upper Chalk underlies whole catchment, London Clay present in southern half, all overlain with Boulder Clay.														
1981	617	109	172	137	0.36	13.3	30/12	0.00	09/09	0.7	0.14	0.01		
1982	600	106	191	152	0.39	14.7	09/12	0.01	15/06	0.9	0.20	0.02		
1983	571	101	152	121	0.31	14.0	18/04	0.00	27/08	0.8	0.10	0.01		
1984	612	108	142	113	0.29	12.9	26/01	0.00	30/08	0.8	0.07	0.01		
1985	524	92	116	92	0.24	7.6	22/01	0.01	12/10	0.6	0.09	0.01		
037013	Sandon Brook at Sandon Bridge	C.A.: 60.6 km ²	63-80	557	148	0.29	14.0	21/11	0.01	30/06	0.6	0.10	0.03	
M.A.: AWA	Level: 20m	F.A.F.: SR	B-full: 15.0 m ³ s ⁻¹											
Comment: 'Essex' profile (modified Flat V Crump) weir with crest tapping. Low modular limit affected by weed growth. Drainage area to station 60.6 km ² , excludes 13.7 km ² draining to Hanningfield Res. 10km u/s. Naturalised flows (1963-1976) account for 0.011 m ³ s ⁻¹ of compensation water and storm o/f from res. These adjustments, plus minimal additions for industrial effluent, now need to be made. # Rural catchment on tributary of R. Chelmer. Glacial sands and gravel form high ground in NE over London Clay. Patches of Boulder Clay in S.														
1981	602	108	160	108	0.31	9.2	29/12	0.04	17/08	0.5	0.13	0.05		
1982	651	117	258	174	0.50	15.0	09/12	0.03	02/09	1.0	0.18	0.04		
1983	488	88	130	88	0.25	9.3	15/05	0.03	06/09	0.6	0.09	0.04		
1984	608	109	129	87	0.25	5.7	23/01	0.02	29/08	0.7	0.09	0.04		
1985	517	93	123	83	0.24	6.5	25/01	0.03	01/09	0.4	0.11	0.04		
037016	Pant at Copford Hall	C.A.: 62.5 km ²	65-80	612	181	0.36	16.8	16/09	0.00	28/08	1.0	0.10	0.02	
M.A.: AWA	Level: 58m	F.A.F.: RGE1	B-full: 12.0 m ³ s ⁻¹											
Comment: 'Essex' profile (modified Flat V Crump) weir with crest tapping. Measures upto 12.0 m ³ s ⁻¹ , flows above this are estimated because of the spillway. Naturalised flows 1965-1976. Intermittent pumping of the Ely/Ouse Transfer Scheme has a major effect on this station being only 5km d/s of the Great Sampford Outfall. # Rural tributary of the R. Blackwater. Boulder Clay over glacial gravels on Upper Chalk, gravel exposed along the whole river valley.														
1981	665	109	150	83	0.30	10.0	30/12	0.02	13/09	0.7	0.09	0.04		

Naturalised daily and monthly flows

Stn. number	Naturalised daily, and monthly flows	Stn. number	Naturalised daily, and monthly flows	Stn. number	Naturalised daily, and monthly flows
030003	60s -----FF	032020	70s FEEFFF	036011	60s -----CA 70s AAAAAAC
031001	40s FFFF-- 50s --FEEEEE 60s EEFEEBAACA 70s ABFEEFFFE	032023	70s -F-FFF	036012	60s -----CA 70s AAAAAAC
031006	80s CF	033001	50s -FEEEEE	036015	70s --CAAAC
031007	70s FEEFFF	033002	60s --FEEBAAA 70s AAAAAA	037002	30s --CAAAAAA 40s ACCAAAAAA 50s AAAAAAAA 60s AAAAAAAA 70s AAAAAAC
031010	70s --FFF	033003	50s FF-FEEF	037003	30s --CAAAAAA 40s AAAAAAAA 50s AAAAAAAA 60s AC-CAAAA 70s AAAAAAC 60s AAAAAAAA
031013	70s -FEEF	033004	40s -----FFEE 50s EEEFEFF	037005	50s -----C 60s AAAAAAAA 70s AAAAAAC
031016	70s -FEEF	033005	50s -FEEEEE 60s EEEEEEBA	037006	60s --CAAAAAA 70s AAAAAAC 70s AAAAAAC
031017	70s --FFF	033006	50s -FEEF 60s EEEF	037007	60s --CAAAAA 70s AAAAAAC 70s AAAAAAC
031020	70s -FFFF	033007	50s --FEEEEE 60s EEEFECCF	037008	60s --CAAAAA 70s AAAAAAC 70s AAAAAAC
031021	70s -FFFF	033011	60s -FEEF	037009	60s --CAAAAAA 70s AAAAAAC 70s AAAAAAC
031022	70s --FFF	033026	70s -CAAAC	037010	60s --CAAAAAA 70s AAACCAC 70s AAAAAAC
032001	40s FEEEEEEEE 50s EEEEEEEEE 60s EEEEEEEEE 70s FEEF	033035	50s -----CA 60s AAAABAAAA 70s AAAAAAC	037011	60s --CAAAAAA 70s AAAAAAC 70s AAAAAAC
032002	30s -----FF 40s EEEEEEEEE 50s EEEEF-- 60s -FEEEEE	036001	30s --CAAAAAA 40s AAAAAAAA 50s AAAAAAAA 60s AAAAAAAA 70s AAAAAAC	037012	60s --CAAAAAA 70s AAAAAAC 70s AAAAAAC
032003	70s FEEFFF	036002	60s CAAAAAAA 70s AAAAAAC 70s AAAAAAC	037013	60s --CAAAAAA 70s AAAAAAC 70s AAAAAAC
032004	40s --FEEEEE 50s EEEEEEEEE 60s EEEFFEEF 70s FEEF	036003	60s --CAAAAAA 70s AAAAAAC 70s AAAAAAC	037016	60s -----CAAAA 70s AAAAAAC 70s AAAAAAC
032006	30s -----F 40s EEEEEEEEE 50s EEEEEEEEE 60s EEEFEFF	036004	60s -----CAAAA 70s AAAAAAC 70s AAAAAAC	037017	60s -----C 70s AAACAC 70s AAAAAAC
032007	30s -----F 40s EEEEEEEEE 50s EEEEEEEEE 60s EEEFEFF	036005	60s --CAAAAAA 70s AAAAAAC 70s AAAAAAC	037020	70s CAAAAAC
032008	40s --FEEF 50s EEEEEEEEE 60s EEEFEFF 70s EEEF	036006	60s --CAAAAAA 70s AAAAAAC 70s AAAAAAC	037021	70s CAAAAAC
		036007	60s -----CAAAA 70s AAAAAAC 70s AAAAAAC	037022	70s CAAAAAC
		036008	60s CAAAAAAA 70s AAAAAAC 70s AAAAAAC	037024	70s -CAAAC
		036009	60s -----CC 70s AAAAAAC 70s AAAAAAC		
		036010	60s -----CA 70s AAAAAAC		

THAMES WATER



Area: 13,100 km²

Average Rainfall (1941-70): 704 mm

Headquarters of Thames Water:

Nugent House
Vastern Road
Reading RG1 8DB

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Gauging Station Register

Station number	River name	Station name	Grid reference	Catchment area (sq km)	Station type	Period of record	Mean ann. rainfall (mm)	Mean ann. runoff (mm)	Max. ann. runoff (mm)	Year of max. runoff	Min. ann. runoff (mm)	Year of min. runoff	Mean flow (m ³ s ⁻¹)	Min. mon. flow (m ³ s ⁻¹)	Month/Year of min. flow	Mean ann. flood (m ³ s ⁻¹)	Base flow index	10 Percentile (m ³ s ⁻¹)	95 Percentile (m ³ s ⁻¹)
037001	Roding	Redbridge	TO 415884	303.3	EW	1950-85	625	193	292	82	83	73	1.86	0.20	09/59	24.0	.40	4.4	0.27
037014	Roding	High Ongar	TL 561040	95.1	EW	1963-85	605	165	307	74	24	73	0.50	>0.00	07/76	12.9	.33	1.1	0.03
037015	Crispey Brk	Chipping Ongar	TL 548035	62.2	FV	1977-85	646	205	305	82	159	85	0.40	0.03	08/84		.32	1.0	0.03
037018	Ingrebourne	Gaynes Park	TO 553862	47.9	EW	1970-85	599	216	284	79	114	73	0.33	0.07	08/76	7.3	.49	0.7	0.09
037019	Beam	Bretons Farm	TO 515853	49.7	EW	1965-85	607	215	275	68	133	76	0.34	0.04	08/76	8.7	.37	0.8	0.07
037023	Roding	Loughton	TO 442955	269.0	EW	1971-82	598	167	251	79	46	73	1.43	0.08	08/76		.32	3.6	0.09
038001	Lee	Felides Weir	TL 390092	1036.0	MIS	1936-85n	639	119	219	51	26	44	3.92	0.08	07/49	42.7	.57	8.2	0.41
038002	Ash	Mardock	TL 393148	78.7	FV	1980-85	615	113	151	82	90	85	0.28	0.06	10/85	6.6	.53	0.6	0.06
038003	Mimram	Panshanger Park	TL 282133	133.9	FL	1952-85	651	127	181	61	54	73	0.54	0.14	08/76	2.0	.94	0.8	0.24
038004	Rib	Wadesmill	TL 360174	136.5	MIS	1979-85	628	119	155	83	91	85	0.51	0.13	10/85	14.5	.60	0.9	0.14
038005	Ash	Easneye	TL 380138	85.2	TP	1960-81	628	119	161	74	31	73	0.32	0.02	08/76		.54	0.6	0.06
038006	Rib	Herts Train'g Sch	TL 335158	148.1	TP	1956-82	632	133	207	58	41	73	0.63	0.05	08/76		.58	1.1	0.13
038007	Canons Brk	Elizabeth Way	TL 431104	21.4	FL	1965-85	612	289	373	82	140	73	0.20	0.03	08/78	7.4	.42	0.4	0.05
038011	Mimram	Fulling Mill	TL 225169	98.7	C	1957-84	677	66	111	79	12	73	0.21	0.00	11/78	0.6	.96	0.4	0.02
038012	Stevenage Brk	Bragbury Park	TL 274211	36.0	FV	1974-85	633	81	120	79	56	76	0.09	0.01	08/78		.28	0.2	0.01
038013	Upper Lee	Luton Hoo	TL 118185	70.7	MIS	1960-85	674	105	170	67	14	73	0.24	0.00	08/78	3.2	.63	0.5	
038014	Saimon Brk	Edmonton	TQ 343937	20.5	FV	1956-85	668	235	334	58	117	73	0.15	0.01	09/59		.27	0.4	0.01
038016	Stanstead Sp	Mountfitchet	TL 500248	20.5	S	1969-85	619	102	149	75	52	73	0.07	0.02	09/76		.98	0.1	0.03
038017	Mimram	Whitwell	TL 184212	39.1	C	1970-85	640	70	116	79	21	73	0.09	0.02	10/73		.97	0.1	0.02
038018	Upper Lee	Water Hall	TL 299099	150.0	C	1971-85	651	265	358	79	128	73	1.26	0.29	08/76	8.8	.81	2.1	0.48
038019	Salmons Brk	Montague Road	TQ 354932	33.9	FL	1971-76	588	132	163	72	87	73	0.14	0.03	03/73		.28	0.3	0.02
038020	Cobbins Brk	Sewardstone Rd	TQ 387999	38.4	FL	1971-85	596	171	281	79	48	73	0.21	>0.00	08/76	7.2	.25	0.5	0.01
038021	Turkey Brook	Albany Park	TQ 359985	42.2	FV	1971-85	663	155	253	79	43	73	0.21	0.01	08/78	9.2	.21	0.5	0.01
038022	Pymmes Brk	Edmonton	TQ 340925	42.6	C	1972-85	684	304	378	79	168	73	0.41	0.10	03/73	25.4	.41	0.9	0.10
038024	Small R. Lee	Ordnance Road	TQ 370988	41.5	FV	1973-85	626	255	327	82	171	80	0.33	0.05	08/76		.47	0.6	0.07
038025	Pymmes Brk	Alcazar	TQ 340925	41.4	VA	1954-74	401	681	60	231	69	53	0.53	0.09	10/69		.53	1.1	0.11
038026	Pincey Brook	Shearing Hall	TL 495126	54.6	FV	1974-85	634	178	244	82	72	76	0.31	0.01	08/76	8.7	.39	0.7	0.02
038028	Stansted Brk	Gypsy Lane	TL 506241	25.9	FV	1976-85	663	95	139	79	73	80	0.08	0.01	07/77		.44	0.2	0.02
038029	Quin	Griggs Bridge	TL 392248	50.4	FV	1978-85	647	104	163	79	71	85	0.17	0.03	09/82		.45	0.3	0.04
038030	Beane	Hartham	TL 325131	175.1	FV	1979-85	629	113	147	83	90	85	0.63	0.28	10/85		.80	0.9	0.31
039001	Thames	Kingston	TQ 177698	9948.0	MIS	1683-1985n	717	212	380	51	65	34	66.89	0.69	09/76	326.1	.64	162.0	9.17
039002	Thames	Days Weir	SU 568935	3444.7	MIS	1938-85	718	260	470	60	92	73	28.36	0.29	08/78	147.9	.65	68.0	3.29
039003	Wandle	Connollys Mill	TQ 265705	176.1	FL	1962-85	736	282	390	79	145	73	1.58	0.58	02/65	10.1	.84	2.8	0.1
039004	Wandle	Beddington Park	TQ 296655	122.0	C	1936-85	777	42	70	84	8	73	0.16	0.01	08/76	2.9	.78	0.3	0.01
039005	Beverley Brk	Wimbledon Com	TQ 218717	43.8	FL	1935-85	642	389	503	58	210	62	0.54	0.16	06/82	11.6	.83	0.9	0.20
039006	Windrush	Newbridge	SP 402019	362.6	CB	1950-85	765	289	446	60	105	76	3.33	0.19	08/76	11.8	.86	8.6	0.75
039007	Blackwater	Swallowfield	SU 731648	354.8	CC	1952-85	714	258	336	82	130	53	2.90	0.84	09/59	21.2	.66	5.5	0.87
039008	Thames	Eynsham	SP 445087	1616.2	MIS	1951-85n	744	268	457	60	103	76	13.75	0.13	08/76	64.9	.68	31.4	1.35
039009	Thames	Bray Weir	SU 909797	6915.3	MIS	1959-82	721	264	363	77	128	73	57.94	8.36	08/76		.70	126.5	15.72
039010	Colne	Denham	TQ 052864	743.0	B	1952-85	720	167	244	79	68	73	3.94	0.93	08/76	10.2	.66	6.2	1.72
039011	Wey	Tilford	SU 874433	396.3	C	1954-85	859	269	419	60	135	73	3.38	0.88	08/55	33.0	.71	5.6	1.34
039012	Hogsmill	Kingston	TQ 182688	69.1	BP	1956-85	685	436	536	79	298	73	0.95	0.43	10/69	13.2	.73	1.5	0.50
039013	Colne	Berrygrove	TQ 123982	352.2	TP	1934-85	694	70	209	37	9	73	0.78	0.01	11/73		.87	1.8	0.11
039014	Ver	Hansteads	TL 151016	132.0	CC	1956-85	712	102	180	61	23	76	0.43	0.02	08/76	1.6	.88	0.8	0.09
039015	Whitewater	Lodge Farm	SU 731523	44.5	TP	1963-85	800	279	358	75	132	65	0.39	0.12	08/76	1.1	.94	0.6	0.17
039016	Kennet	Theale	SU 649708	1033.4	C	1961-85	779	294	393	66	124	76	9.65	1.38	08/76	37.3	.87	18.6	3.98
039017	Ray	Grandon U.	SP 680211	18.6	FL	1962-85	642	171	300	66	29	73	0.10	0.00	08/84	6.0	.15	0.2	
039019	Lambourn	Shaw	SU 470682	234.1	C	1962-85	740	232	290	67	100	76	1.72	0.49	08/76	3.5	.96	2.8	0.79
039020	Coln	Bibury	SP 122062	106.7	C	1963-85	802	396	523	66	118	76	1.34	0.20	09/76	3.4	.94	2.6	0.38
039021	Cherwell	Enslow Mill	SP 482183	551.7	C	1965-85	690	222	307	79	78	76	3.88	0.13	08/76	22.8	.65	8.9	0.65
039022	Loddon	Sheepbridge	SU 720652	164.5	C	1965-85	761	413	498	67	231	73	2.15	0.59	08/76	16.6	.75	3.6	0.92
039023	Wye	Hedser	SU 896867	137.3	C	1964-85	770	230	314	67	102	76	1.00	0.31	08/76	2.9	.93	1.5	0.45
039024	Gatwick St	Gatwick	TQ 288402	31.1	VA	1952-77	897	459	768	60	281	53	0.45	0.03	08/76	7.2	.56	0.9	0.11
039025	Enbourne	Brimpton	SU 568648	147.6	CC	1967-85	803	270	373	74	140	73	1.27	0.04	08/76	17.5	.54	2.7	0.19
039026	Cherwell	Banbury	SP 458411	199.4	CC	1966-85	693	172	264	69	41	76	1.09	>0.00	07/76	21.2	.40	2.8	0.01
039027	Pang	Pangbourne	SU 634766	170.9	C	1968-85	704	118	162	69	51	76	0.64	0.11	08/76	2.6	.87	1.1	0.23
039028	Dun	Hungerford	SU 321685	101.3	C	1968-85	775	236	285	82	106	76	0.76	0.20	08/76	2.5	.95	1.3	0.32
039029	Tillingbourne	Shalford	TQ 000478	59.0	C	1968-85	812	302	367	69	208	73	0.56	0.33	08/76		.89	0.7	0.38
039030	Gade	Croxley Green	TQ 082952	184.0	MIS	1970-85	706	151	217	83	56	73	0.88	0.09	08/76		.85	1.4	0.28
039031	Lambourn	Welford	SU 411731	176.0	CC	1962-83	762	183	249	67	62	76	1.02	0.23	08/76	2.0	.98	1.7	0.41
039032	Lambourn	East Shefford	SU 3907																

Station number	River name	Station name	Grid reference	Catchment area (sq km)	Station type	Period of record	Mean ann. rainfall (mm)	Mean ann. runoff (mm)	Max. ann. runoff (mm)	Year of max.	Min. ann. runoff (mm)	Year of min.	Mean flow (m ³ s ⁻¹)	Min. mon. flow (m ³ s ⁻¹)	Month/Year of min.	Mean ann. flood (m ³ s ⁻¹)	Base flow index	10 Percentile (m ³ s ⁻¹)	95 Percentile (m ³ s ⁻¹)
039058	Pool	Winsford Road	TQ 371725	38.3	C	1978-85		152	161	79	140	83	0.18	0.08	09/78	3.3	.79	0.3	0.08
039061	Letcombe Brk	Letcombe Bass.	SU 375853	2.7	MIS	1971-85							0.09	0.00	08/76		.96	0.2	>0.00
039065	Ewelme Brk	Ewelme	SU 642916	13.4	FV	1970-85							0.05	0.00	11/73		.97	0.1	0.01
039068	Mole	Castle Mill	TQ 179502	316.0	C	1971-85	773	358	459	74	159	73	3.59	0.87	08/72		.41	8.6	0.71
039069	Mole	Kinnersley Mnr	TQ 262462	142.0	MIS	1972-85	811	433	514	82	211	73	1.95	0.17	08/76		.37	4.2	0.26
039073	Churn	Cirencester	SP 020028	84.0	FV	1979-85		329	403	82	259	84	0.88	0.07	09/84		.68	2.0	0.08
039074	Ampney Brk	Sheepen Bridge	SU 105950	74.4	FV	1980-85		339	393	82	295	84	0.80	0.00	09/84		.78	2.0	
039075	Marston My	Whetstone Br	SU 128964	25.0	FV	1980-85		150	198	82	112	83	0.12	0.00	10/84		.48	0.3	
039076	Windrush	Worsham	SP 299107	296.0	MIS	1976-85		295	348	79	238	84	2.77	0.62	08/84		.84	5.2	0.72
039077	Og	Marlborough	SU 194697	59.2	FV	1980-85		176	206	82	147	84	0.33	0.02	10/84		.97	0.7	0.03
039078	Wey(north)	Farnham	SU 838465	191.1	MIS	1978-85		114	137	79	90	80	0.69	0.17	08/82		.72	1.3	0.18
039081	Ock	Allott Gardens	SU 481966	234.0	CC	1962-85	660	207	296	68	76	76	1.54	0.13	08/76		.65	3.4	0.33
039085	Wandle	Wandle Park	TQ 266703	176.1	FL	1936-60	713	285	431	37	220	57	1.59	0.94	11/56		.81	2.5	0.92
039086	Gatwick St	Gatwick Link	TQ 285417	33.6	C	1975-85	848	628	717	82	481	76	0.67	0.13	08/76		.60	1.3	0.21
039087	Ray	Water Eaton	SU 121935	84.1	C	1974-85	717	484	608	82	297	76	1.29	0.33	08/76		.57	2.4	0.42
039088	Chess	Rickmansworth	TQ 066947	105.0	C	1974-85	778	183	255	83	61	76	0.61	0.08	08/76		.94	0.9	0.21
039089	Gade	Bury Mill	TL 053077	48.2	FL	1975-85		103	158	83	26	76	0.16	0.01	08/76		.28	0.3	0.03
039091	Misbourne	Quarrendon Mill	SU 975963	66.3	MIS	1978-85		59	119	83	34	84	0.12	0.02	09/80		.81	0.3	0.02
039094	Crane	Marsh Farm	TQ 154734	81.0	FL	1977-85		195	292	79	97	83	0.50	0.06	08/83		.32	1.2	0.02
039097	Thames	Buscot	SU 230981	997.0	MIS	1980-85		314	367	82	267	84	9.92	1.20	08/84		.73	22.6	1.44
039099	Ampney Brk	Ampney St Peter	SP 076013	45.3	FV	1983-85		407	467	85	364	84	0.58	0.01	09/84			1.4	0.01
039101	Aldbourne	Ramsbury	SU 288717	53.1	FV	1982-85		133	139	83	109	84	0.22	0.04	11/84			0.5	0.04
040012	Darent	Hawley	TQ 551718	191.4	C	1963-85	737	104	176	68	17	73	0.63	0.00	10/76	6.0	.71	1.3	0.03
040013	Darent	Oxford	TQ 525584	100.5	CC	1969-85	763	173	244	75	80	73	0.55	0.11	07/76		.60	1.0	0.13
040016	Cray	Crayford	TQ 511746	119.7	CC	1969-85	682	131	202	75	33	73	0.50	0.07	08/76		.67	0.9	0.08
040018	Darent	Lullingstone	TQ 530643	118.4	B	1968-85	762	175	251	75	61	73	0.66	0.06	08/76	4.6	.71	1.2	0.14

Hydrometric Statistics

Station number	River name	Station name	Grid reference	Catchment area (sq km)	Station type	Period of record	Rainfall (mm)		Runoff (mm)		Mean flow (m ³ s ⁻¹)	Peak flow (m ³ s ⁻¹)	Date of peak	Min. daily flow (m ³ s ⁻¹)	Date of min.	10 Percentile (m ³ s ⁻¹)	50 Percentile (m ³ s ⁻¹)	95 Percentile (m ³ s ⁻¹)	
							% of pre-1961	% of pre-1981											
037001		Roding at Redbridge	C.A.: 303.3 km ²	50-80			622	190	1.83	62.4	22/11	0.08	29/08	4.4	0.78	0.26			
M.A.: TWA	Level: 6m	F.A.F.: SEI	S-full: 33.5 m ³ s ⁻¹																
Comment: 'Essex' profile (modified Flat V Crump) weir superseded an insensitive broad-crested weir in 1962. Calibration above 35 m ³ s ⁻¹ is based upon model tests. Flows augmented by moderate net import of water; naturalised flows available for period 1951-75. # Low lying, mainly impervious (London Clay and superficial deposits) catchment. Land use: rural with significant urban development close to the gauging station.							1981	657	106	204	107	1.97	25.2	30/12	0.31	07/07	3.9	1.14	0.35
						1982	721	116	292	154	2.81	35.6	09/12	0.32	05/09	7.1	1.53	0.39	
						1983	581	93	210	111	2.02	25.7	19/04	0.27	16/08	4.7	0.98	0.35	
						1984	636	102	210	111	2.02	18.3	23/11	0.30	06/09	5.3	0.97	0.33	
						1985	572	92	164	86	1.58	29.9	26/12	0.18	16/10	3.3	0.89	0.25	
037014		Roding at High Ongar	C.A.: 95.1 km ²	63-60			598	161	0.49	36.1	22/11	0.00	14/07	1.1	0.12	0.02			
M.A.: TWA	Level: 41m	F.A.F.: G	S-full: 21.0 m ³ s ⁻¹																
Comment: 'Essex' profile (modified Flat V Crump) weir in an 11m wide section. Model based calibration. Above 1.7m an overflow operates into a bypass channel. Structure subject to drowning but computed flows assume modularity. Naturalised flows available, 1964-76, minimal net augmentation of runoff. Responsive flow regime. # Low lying, largely impermeable (London Clay/glacial deposits) catchment given over mainly to agriculture.							1981	653	109	163	101	0.49	21.9	30/12	0.01	28/08	0.8	0.21	0.04
						1982	712	119	283	176	0.85	32.8	22/10	0.02	14/05	1.8	0.33	0.05	
						1983	576	96	165	102	0.50	16.2	18/04	0.03	30/07	1.1	0.14	0.04	
						1984	649	109	155	96	0.47	6.3	27/01	0.03	29/08	1.3	0.19	0.04	
						1985	571	95	131	81	0.40	13.0	26/12	0.05	24/10	0.7	0.18	0.07	
037015		Cripsey Brook at Chipping Ongar	C.A.: 62.2 km ²	77-80			643						0.01	28/05					
M.A.: TWA	Level: 42m	F.A.F.: SEI	B-full: 25.0 m ³ s ⁻¹																
Comment: Flat V weir (5.6m broad) installed in 1981 - superseded a compound thin-plate weir of limited capacity (2.5 m ³ s ⁻¹). Modular calibration adopted for the Flat V; some over estimation of flows during periods of drowned flow. Responsive flow regime. # Predominately impermeable catchment (London Clay but with extensive areas of glacial deposits). A rural catchment, agriculture is the primary land use.							1981	669	104			0.60	33.1	22/10	0.03	10/08	1.4	0.22	0.03
						1982	779	121	305		0.40	24.0	18/04	0.02	05/10	0.9	0.14	0.03	
						1983	579	90	202		0.36	9.1	23/01	0.02	29/07	1.1	0.11	0.02	
						1984	625	97	184		0.31	20.0	05/07	0.03	02/10	0.5	0.14	0.04	
						1985	628	98	159		0.31								
037018		Ingrebourne at Gaynes Park	C.A.: 47.9 km ²	70-80			590	212	0.32	34.1	21/11	0.06	27/08	0.7	0.18	0.08			
M.A.: TWA	Level: 7m	F.A.F.: SEI	S-full: 20.0 m ³ s ⁻¹																
Comment: 'Essex' profile (modified Flat V Crump) weir in a 9.5m wide section. All but exceptional floods contained. Model-based calibration assumes modularity; however drowning occurs above about 7 m ³ s ⁻¹ . Naturalised flow available for period 1970-75; significant net augmentation of runoff. # Largely impermeable catchment (London Clay/glacial deposits). Rural headwaters but substantial urban development around lower reaches.							1981	679	115	237	112	0.36	5.3	14/12	0.09	31/08	0.7	0.23	0.11
						1982	711	121	263	124	0.40	17.2	08/12	0.09	11/08	0.8	0.24	0.10	
						1983	544	92	220	104	0.33	9.4	18/04	0.09	26/08	0.6	0.21	0.10	
						1984	637	108	214	101	0.33	5.1	05/10	0.06	24/07	0.7	0.19	0.10	
						1985	539	91	193	91	0.29	8.7	26/12	0.07	23/10	0.5	0.20	0.09	
037019		Beam at Bretons Farm	C.A.: 49.7 km ²	65-80			609	215	0.34	15.8	29/07	0.03	22/08	0.8	0.17	0.06			
M.A.: TWA	Level: 2m	F.A.F.: SEI	S-full: 26.0 m ³ s ⁻¹																
Comment: 'Essex' profile (modified Flat V Crump) weir in a 10.4m wide section. Model-based calibration assumes modularity; drowning is uncommon. Separate spillway accommodates flow greater than about 16 m ³ s ⁻¹ . Naturalised flow available for period 1966-75; very small net diminution in runoff. # A predominantly impermeable catchment (London Clay overlain in places by glacial deposits). Headwaters are mainly rural but substantial - and growing - urban development in the lower reaches.							1981	653	107	230	107	0.36	9.2	06/08	0.08	06/09	0.8	0.20	0.09
						1982	674	111	271	126	0.43	12.2	08/12	0.08	12/09	0.9	0.22	0.09	
						1983	538	88	200	93	0.32	10.2	18/04	0.07	03/09	0.7	0.17	0.08	
						1984	583	96	206	96	0.32	10.4	05/10	0.06	31/08	0.8	0.16	0.07	
						1985	562	92	178	83	0.28	8.6	26/05	0.07	03/11	0.6	0.16	0.07	
038001		Lee at Feildes Weir	C.A.: 1036.0 km ²	36-80			639	117	3.84	118.0d	17/03	0.00	16/10	8.1	2.35	0.37			
M.A.: TWA	Level: 28m	F.A.F.: PGEI																	
Comment: Thin-plate weir (insensitive - 29m wide) plus three vertical-lift sluices; constructed in 1978 to improve the range and precision of flow measurement. Model rated. All flows now contained. Pre-1978: barrage of control gates plus lock (which remains). Gauging instigated by Nathaniel Beardmore in the 1850s. Naturalised flows - based on the New Gauge abstraction only - from 1883. # Feildes weir commands a mainly pervious (Chalk) catchment. Headwaters are predominantly rural; significant urban growth characterises the lower valleys.							1981	640	100	138	118	4.52	54.7	30/12	0.91	03/09	11.2	2.68	1.28
						1982	717	112	159	136	5.22	77.0	10/12	0.82	20/09	10.2	3.74	1.23	
						1983	632	99	164	140	5.38	65.3	01/06	0.77	22/10	9.8	3.66		

	Period	Rainfall (mm)	Runoff (mm)	Mean flow (m ³ s ⁻¹)	Peak flow (m ³ s ⁻¹)	Date of peak	Min. daily flow (m ³ s ⁻¹)	Date of min.	10 Percentile (m ³ s ⁻¹)	50 Percentile (m ³ s ⁻¹)	95 Percentile (m ³ s ⁻¹)		
		% of pre-1981	% of pre-1981										
038002	Ash at Mardock C.A.: 78.7 km ²				0.8	17/12	0.06	04/10					
M.A.: TWA	Level: 36m F.A.F.: GI S-full: 13.0 m ³ s ⁻¹					1980		1980					
Comment: Flat V weir (1:10 cross-slope) 3.9m wide constructed in 1979, replaced a flume which was subject to bypassing and inaccurate at low flows (hence discharges assessed at downstream station - 038005). Current station remains modular and is virtually full range. Upstream lake storage, sluice activity and groundwater abstractions have a minor effect on flows. # A rural, mainly permeable (Chalk), catchment.													
	1981		99	0.25	8.4	30/12	0.05	16/10	0.4	0.11	0.07		
	1982		151	0.38	12.0	10/12	0.06	16/09	0.8	0.19	0.07		
	1983		142	0.35	9.7	01/06	0.09	30/10	0.7	0.24	0.09		
	1984		109	0.27	6.8	26/01	0.06	05/09	0.6	0.15	0.07		
	1985		90	0.22	8.1	26/12	0.05	24/10	0.3	0.14	0.06		
038003	Mimram at Panahanger Park C.A.: 133.9 km ²			0.54	3.5	30/05	0.13	21/08	0.8	0.51	0.23		
M.A.: TWA	Level: 47m F.A.F.: GI S-full: 11.3 m ³ s ⁻¹					1979		1976					
Comment: Critical-depth flume; 5m overall width. Theoretical calibration confirmed by gaugings. All flows contained. Slight diminution of flows due to groundwater abstraction. Very high baseflow component. # A predominantly permeable catchment (Upper Chalk - overlain by glacial deposits near headwaters); mainly rural but some urbanisation in lower valley.													
	1981	670	103	123	98	0.52	2.0	06/08	0.39	02/09	0.6	0.50	0.41
	1982	716	110	129	102	0.55	2.0	27/05	0.32	09/09	0.7	0.57	0.34
	1983	632	97	163	129	0.69	3.4	31/05	0.44	23/11	0.9	0.68	0.45
	1984	695	107	119	94	0.51	1.7	24/03	0.33	31/07	0.6	0.50	0.35
	1985	545	84	119	94	0.51	1.8	05/06	0.27	21/12	0.7	0.50	0.29
038004	Rib at Wedesmill C.A.: 136.5 km ²			0.53	22.8	28/12	0.18	11/09	0.7	0.31	0.19		
M.A.: TWA	Level: 47m F.A.F.: GI S-full: 30.0 m ³ s ⁻¹					1979		1980					
Comment: Trapezoidal flume plus side-spilling Crump weir on the overflow channel. Modular calibration has applied during rare periods of drowned flow. All except highest floods contained. Daily flow data available (1957-83) for downstream limited range station (038006). Flows influenced by significant groundwater abstractions. # Catchment is predominantly rural and pervious (Upper Chalk overlain in places by glacial deposits); substantial gravel tracts in the valley.													
	1981	619	109	104	85	0.45	14.2	30/12	0.16	26/08	0.7	0.24	0.17
	1982	683	120	140	115	0.61	19.1	10/12	0.13	01/10	1.3	0.35	0.15
	1983	626	110	156	128	0.67	19.6	01/06	0.19	24/11	1.2	0.49	0.20
	1984	694	122	105	86	0.45	11.6	26/01	0.13	01/09	0.8	0.32	0.14
	1985	566	99	91	75	0.39	11.3	21/01	0.12	27/10	0.6	0.27	0.13
038007	Canons Brook at Elizabeth Way C.A.: 21.4 km ²			0.19	11.7	30/05	0.02	05/09	0.4	0.10	0.05		
M.A.: TWA	Level: 38m F.A.F.: GI S-full: 11.3 m ³ s ⁻¹					1879		1878					
Comment: Full range critical-depth flume in a rectangular section. Theoretical calibration extends to 11 m ³ s ⁻¹ . Over the period 1965-80 low flows were monitored at a Crump weir in series with the flume. Balancing reservoirs in Harlow (and the New Town development itself) influence the flow pattern. # The catchment is impervious - London Clay. Rural headwaters; heavily urbanised below.													
	1981	631	103	274	95	0.19	6.4	31/07	0.05	06/09	0.4	0.11	0.06
	1982	766	125	373	130	0.25	9.0	24/09	0.06	22/07	0.5	0.14	0.07
	1983	582	95	308	107	0.21	12.2	31/05	0.05	06/10	0.5	0.13	0.06
	1984	624	102	306	107	0.21	10.1	05/10	0.04	01/09	0.4	0.12	0.05
	1985	513	84	234	82	0.16	6.1	26/05	0.04	16/10	0.3	0.10	0.04
038012	Stevenage Brook at Bragbury Park C.A.: 36.0 km ²			0.10	4.7	05/05	0.00	05/09	0.2	0.03	0.01		
M.A.: TWA	Level: m F.A.F.: G S-full: 3.9 m ³ s ⁻¹					1978		1978					
Comment: Flat V weir - 2.75m wide; constructed in 1974 to supersede the original broad-crested weir operated by Stevenage Development Corporation - flow records prior to 1974 are sporadic and of poor quality. The Flat V weir remains modular up to 4.1 m ³ s ⁻¹ ; higher floods uncorrected. Groundwater abstractions and the release of flood storage from the water meadows can influence the flashy flow regime. # A Chalk catchment now largely urbanised.													
	1981	639	101	75	89	0.09	1.9	26/05	0.01	05/09	0.2	0.04	0.02
	1982	703	111	87	104	0.10	3.3	09/12	0.01	21/08	0.2	0.04	0.01
	1983	605	95	74	88	0.09	3.1	01/06	0.01	07/08	0.2	0.04	0.02
	1984	657	103	82	98	0.09	1.8	23/11	0.01	28/07	0.2	0.04	0.02
	1985	514	81	60	71	0.07	1.4	25/01	0.01	29/09	0.1	0.03	0.02
038013	Upper Lee at Luton Hoo C.A.: 70.7 km ²			0.21	6.8	16/09	0.00	03/12	0.5	0.15			
M.A.: TWA	Level: 98m F.A.F.: GI S-full: 4.0 m ³ s ⁻¹					1968		1978					
Comment: Rectangular thin-plate weir (0.92m wide) plus insensitive broad-crested overflow weir for flows > 0.33 m ³ s ⁻¹ . Only very high floods exceed the capacity of the overflow weir. Flows are heavily affected by artificial influences: groundwater abstractions and storage in an ornamental lake upstream. # A Chalk catchment (with Drift) now substantially urbanised.													
	1981	699	108	118	123	0.27	2.3	06/08	0.06	06/09	0.5	0.20	0.09
	1982	741	115	138	144	0.31	3.4	22/10	0.01	18/09	0.6	0.24	0.06
	1983	638	99	160	167	0.36	4.4	31/05	0.08	15/11	0.6	0.33	0.09
	1984	745	116	169	176	0.38	9.1	17/06	0.11	13/09	0.6	0.28	0.15
	1985	557	86	131	136	0.29	2.9	26/12	0.00	06/11	0.6	0.23	0.01
038014	Salmon Brook at Edmonton C.A.: 20.5 km ²			0.15	11.4	30/05	0.01	06/11	0.4	0.06	0.01		
M.A.: TWA	Level: 12m F.A.F.: GI S-full: 15.0 m ³ s ⁻¹					1979		1964					
Comment: Flat V weir (1:10 cross-slope), 5m wide in slightly trapezoidal section - superseded (in 1980) a less effective gauging structure. Backing-up behind the downstream culvert can (rarely) result in drowning during flood conditions. No significant abstractions or discharges. # Impervious (London Clay) catchment. Salmon Brook rises on Enfield Chase, in the lower reaches the catchment is heavily urbanised.													
	1981	786	119	286	125	0.19	6.9	06/08	0.01	03/09	0.5	0.09	0.02
	1982	782	118	315	138	0.21	8.2	14/07	0.02	29/08	0.5	0.09	0.03
	1983	615	93	232	101	0.15	6.8	31/05	0.02	01/09	0.4	0.06	0.02
	1984	715	108	288	126	0.19	6.5	05/10	0.02	10/07	0.4	0.08	0.03
	1985	579	88	210	92	0.14	4.3	25/12	0.02	05/11	0.3	0.07	0.03
038016	Stanstead Springs at Mountfitchet C.A.: 20.5 km ²			0.07	0.4	17/03	0.02	14/07	0.1	0.07	0.02		
M.A.: TWA	Level: 12m F.A.F.: GI S-full: 1.0 m ³ s ⁻¹					1980		1974					
Comment: Two complementary thin-plate weirs (rectangular and 90 degree V notch) measuring spring flow discharging to the River Stort. Very stable discharge but station can be overwhelmed in exceptional floods. Significant local groundwater abstraction. Hydrological catchment cannot be readily determined hence runoff is not representative. # The contributing area to the Chalk springs is mainly rural.													
	1981	665	110	87	84	0.06	0.1	13/05	0.04	01/11	0.1	0.05	0.05
	1982	727	120	99	96	0.06	0.1d	21/12	0.04	20/09	0.1	0.06	0.04
	1983	620	102	122	118	0.08	0.1d	01/03	0.05	21/11	0.1	0.08	0.05
	1984	678	112	95	92	0.06	0.1d	24/04	0.04	19/09	0.1	0.06	0.04
	1985	563	93	97	94	0.06	0.1d	05/03	0.04	01/12	0.1	0.07	0.04
038017	Mimram at Whitwell C.A.: 39.1 km ²			0.08	0.4	29/07	0.01	09/10	0.1	0.08	0.02		
M.A.: TWA	Level: 88m F.A.F.: GI S-full: 0.5 m ³ s ⁻¹					1980		1973					
Comment: Crump weir - 1.0m crest (river section is wider). All flows contained and the weir is not subject to drowning. Low flows occasionally augmented by pumping from local tube wells but diminution due to groundwater abstraction is more characteristic. Discharge sustained from Chalk springs - hydrological catchment divide is uncertain. # A predominantly pervious (Chalk), rural catchment.													
	1981	671	106	72	107	0.09	0.3	16/04	0.07	12/12	0.1	0.09	0.07
	1982	700	111	68	101	0.08	0.2	24/05	0.05	15/10	0.1	0.08	0.06
	1983	642	102	103	154	0.13	0.6	06/07	0.08	01/01	0.2	0.12	0.09
	1984	729	115	68	101	0.08	0.2	24/10	0.06	15/10	0.1	0.09	0.06
	1985	543	86	71	106	0.09	0.1	14/05	0.04	18/12	0.1	0.09	0.05
038018	Upper Lee at Water Hall C.A.: 150.0 km ²			1.17	15.8	30/05	0.24	23/07	2.0	0.97	0.44		
M.A.: TWA	Level: 44m F.A.F.: GEI S-full: 26.6 m ³ s ⁻¹					1979		1976					
Comment: Crump weir, 6.0m wide in an artificial channel. Modular throughout the flow range. All flows contained. Some pre-1971 data (of limited quality) held by TWA for two nearby gauging stations. Moderate net import of water to the catchment. # Catchment is mainly pervious (Chalk) but with glacial Drift in the headwaters. Land use is principally agricultural with some important (and growing) urban centres.													
	1981	689	109	270	110	1.29	7.8	01/06	0.71	06/09	1.8	1.12	0.80
	1982	746	117	302	123	1.44	10.6	09/12	0.57	13/09	2.2	1.33	0.67
	1983	640	101	343	139	1.63	11.4	31/05	0.86	30/10	2.3	1.59	0.97
	1984	730	115	321	130	1.53	8.2	23/11	0.76	28/08	2.1	1.43	0.85
	1985	583	92	266	108	1.26	6.7	26/12	0.52	05/11	1.9	1.19	0.58
038020	Cobbins Brook at Sewardstone Road C.A.: 38.4 km ²			0.21	15.8	05/05	0.00	26/09	0.5	0.04	0.01		
M.A.: TWA	Level: 17m F.A.F.: GI S-full: 19.9 m ³ s ⁻¹					1978		1978					
Comment: Trapezoidal critical-depth flume, overall width 10m. Drowning and damage to the exit transition influence the station's performance; recorded flows may over-estimate the true discharge. Minimal impact of abstractions and discharges on the natural, responsive flow pattern; motorway runoff can however be significant. # Cobbins Brook drains an impervious (London Clay) catchment which includes part of Epping Forest and significant urban development in the vicinity of the gauging station.													
	1981	638	110	181	103	0.22	13.6	14/12	0.01	28/08	0.4	0.08	0.01
	1982	743	128										
	1983	573	99										
	1984	639	110	194	110	0.24	6.1	23/01	0.01	19/08	0.7	0.08	0.01
	1985	555	96	143	81	0.17	7.3	26/12	0.01	24/10	0.3	0.07	0.01

	Period	Rainfall (mm)	Runoff (mm)	Mean flow (m ³ s ⁻¹)	Peak flow (m ³ s ⁻¹)	Date of peak	Min. daily flow (m ³ s ⁻¹)	Date of min.	10 Percentile (m ³ s ⁻¹)	50 Percentile (m ³ s ⁻¹)	95 Percentile (m ³ s ⁻¹)	
		% of pre-1981	% of pre-1981									
038021 M.A.: TWA Comment: Flat V weir, 6m broad in a concrete lined channel. All but extreme floods contained. Structure remains modular. Very responsive. # A largely impervious catchment (Tertiary clays and glacial deposits). The headwaters drain Enfield Chase but there is significant urban development near the gauging station.	Turkey Brook at Albany Park C.A.: 42.2 km ² Level: 17m F.A.F.: G S-full: 16.8 m ³ s ⁻¹	71-80	644	152	0.20	20.7	30/05	0.00	15/09	0.5	0.05	0.01
						1879		1973				
		1981	737 114	172 113	0.23	5.6	20/10	0.01	08/07	0.6	0.08	0.01
		1982	786 122	214 141	0.29	8.6	09/12	0.01	08/09	0.7	0.09	0.02
		1983	629 98	152 100	0.20	15.3	01/06	0.01	23/11	0.5	0.06	0.01
		1984	743 115	171 113	0.23	8.1	05/10	0.01	04/07	0.6	0.07	0.01
		1985	601 93	108 71	0.14	6.1	25/12	0.01	11/09	0.3	0.05	0.01
038022 M.A.: TWA Comment: Crump weir (crest width: 6.16m). No confirmatory gaugings at high flows. Rarely overtopped. Drowns regularly (0.7m stage) - flows corrected since 1982, previous high flows under review. Currently no significant abstractions or discharges. # Impervious (London Clay) catchment. Pymmes Brook rises on Enfield Chase but catchment is now > 80% urban.	Pymmes Brook at Edmonton Silver Street C.A.: 42.6 km ² Level: 11m F.A.F.: S-full: 33.1 m ³ s ⁻¹	72-80	665	281	0.38	34.7	30/05	0.07	28/03	0.8	0.18	0.10
						1979		1973				
		1981	783 118	341 121	0.46	34.0	06/08	0.12	03/01	1.0	0.26	0.15
		1982	785 118	376 134	0.51	41.5	02/06	0.13	11/09	1.0	0.27	0.15
		1983	630 95	311 111	0.42	27.6	31/05	0.13	04/09	0.9	0.25	0.14
		1984	753 113	353 126	0.48	27.2	05/10	0.13	11/09	1.0	0.27	0.15
		1985	637 96	313 111	0.42	14.3	24/06	0.16	24/10	0.8	0.26	0.17
038024 M.A.: TWA Comment: Flat V weir (1:10 cross-slope), 8m wide. Subject to drowning - crest tapping does not operate effectively. Moderate impact of artificial influences on flows, low discharges affected by gravel workings and drainage from the M25 can be important. # A predominantly impervious (clay), responsive, catchment with substantial superficial cover. Suburban in the valley, rural headwaters with considerable woodland.	Small River Lee at Ordnance Road C.A.: 41.5 km ² Level: 15m F.A.F.: G S-full: 21.2 m ³ s ⁻¹	73-80	607	249	0.33	14.5	05/05	0.01	25/08	0.7	0.23	0.06
						1978		1976				
		1981	667 110	227 91	0.30	2.9	14/12	0.05	15/02	0.6	0.21	0.08
		1982	745 123	327 131	0.43	9.5	09/12	0.07	16/05	0.8	0.30	0.11
		1983	598 99	277 111	0.36	18.7	31/05	0.08	16/08	0.7	0.28	0.10
		1984	688 113	277 111	0.36	9.4	05/10	0.08	14/05	0.7	0.25	0.11
		1985	568 94	213 86	0.28	3.8	26/12	0.06	28/11	0.5	0.22	0.12
038026 M.A.: TWA Comment: Flat V weir (1:10.9 cross-slope), width 4.02m. Minor impact of artificial influences. Spray irrigation can be significant. # Pervious (Chalk) headwaters mainly London Clay in the lowest reaches. Land use is mainly agricultural but the Pincey Brook drains Stansted Airport and Hatfield Forest.	Pincey Brook at Sheering Hall C.A.: 54.6 km ² Level: 45m F.A.F.: I S-full: 16.8 m ³ s ⁻¹	74-80	627	184	0.32	12.6	22/11	0.00	27/08	0.7	0.08	0.02
						1974		1976				
		1981	673 107	171 93	0.30	9.1	29/12	0.03	30/07	0.6	0.16	0.04
		1982	738 118	244 133	0.42	13.5	22/10	0.02	13/09	0.9	0.21	0.03
		1983	582 93	162 88	0.28	11.7	18/04	0.02	06/09	0.6	0.12	0.03
		1984	646 103	150 82	0.26	5.3	23/11	0.02	21/08	0.7	0.12	0.02
		1985	569 91	131 71	0.23	12.1	26/12	0.03	02/10	0.4	0.11	0.03
038028 M.A.: TWA Comment: Flat V weir (1:10 cross-slope) in slightly trapezoidal channel (3.5m wide). Modular. All flows contained. Some early data (from 1964) available for a limited range weir which was sited downstream. No significant abstractions or discharges but flows influenced by motorway runoff and upstream storage lagoon. # Mixed geology: Chalk dipping below Eocene clays; overlain by superficial deposits. Largely rural.	Stansted Brook at Gypsy Lane C.A.: 25.9 km ² Level: 61m F.A.F.: G S-full: 5.5 m ³ s ⁻¹	76-80	667	94	0.08	3.7	01/02	0.01	31/07	0.2	0.03	0.01
						1979		1977				
		1981	701 105	90 96	0.07	2.6	30/12	0.02	26/08	0.1	0.04	0.02
		1982	743 111	125 133	0.10	3.3	09/12	0.01	11/09	0.2	0.05	0.02
		1983	620 93	100 106	0.08	2.4	18/04	0.02	26/08	0.2	0.05	0.02
		1984	664 100	99 105	0.08	1.8	26/01	0.01	28/07	0.2	0.04	0.02
		1985	565 85	78 83	0.06	2.1	26/12	0.02	01/10	0.1	0.04	0.02
038029 M.A.: TWA Comment: Flat V weir, 4.5m wide. Shallow depth of approach. Calibration assumes that the station is not subject to drowning. The net impact of artificial influences on runoff is very limited; sewage effluent discharge pattern sometimes detectable. # A mainly impervious catchment (extensive glacial deposits overlying Chalk); agricultural land use predominates.	Quin at Griggs Bridge C.A.: 50.4 km ² Level: 67m F.A.F.: N S-full: 11.5 m ³ s ⁻¹	78-80	651	126	0.20	12.3	05/05	0.04	06/12	0.4	0.09	0.04
						1978		1978				
		1981	653 100	86 68	0.14	7.1	30/12	0.04	16/09	0.2	0.06	0.04
		1982	712 109	114 90	0.18	9.0	09/12	0.03	01/10	0.4	0.07	0.03
		1983	629 97	126 100	0.20	10.0	01/06	0.05	21/11	0.4	0.10	0.05
		1984	690 106	83 66	0.13	5.7	26/01	0.03	20/10	0.3	0.07	0.04
		1985	570 88	72 57	0.11	5.2	21/01	0.03	28/10	0.2	0.07	0.03
038030 M.A.: TWA Comment: Flat V weir, 8m wide. All flows contained. Modular throughout the flow range; theoretical calibration adopted. Significant groundwater abstractions (particularly in the headwaters) and runoff from Stevenage (see 038012) influence river flows. # Chalk with Drift cover predominates. A mainly rural catchment.	Beane at Hartham C.A.: 175.1 km ² Level: 35m F.A.F.: G S-full: 24.4 m ³ s ⁻¹	79-80	561	123	0.68	14.9	28/12	0.36	09/12	0.8	0.58	0.38
						1979		1980				
		1981	638 114	97 79	0.54	6.4	30/12	0.32	01/09	0.7	0.47	0.35
		1982	721 129	121 98	0.67	11.7	10/12	0.31	16/09	1.0	0.55	0.34
		1983	628 112	147 120	0.82	12.8	01/06	0.40	22/11	1.2	0.71	0.44
		1984	687 122	99 80	0.55	5.0	24/11	0.27	31/08	0.8	0.49	0.30
		1985	549 98	91 74	0.50	5.0	26/12	0.25	28/10	0.7	0.48	0.27
039001 M.A.: TWA Comment: Ultrasonic gauging station commissioned in 1974; adapted for multi-path operation in 1986. Full range station. Pre-1974 flows derived from Teddington weir complex (70m in width); a number of significant structural improvements have been made since 1983. Substantial baseflow - sustained from the Chalk and the Oolites. Daily naturalised flows available for POR - allowance is made for major PWS abstractions only. # Diverse topography, geology and land use which has undergone important historical changes.	Thames at Kingston C.A.: 9948.0 km ² Level: 5m F.A.F.: SRPGEI	83-80	717	212	66.93	1059.0d	18/11	0.01	11/10	163.0	41.85	9.14
						1894		1976				
		1981	794 111	235 111	74.20	296.00d	15/12	7.44	10/09	155.9	59.43	13.90
		1982	780 109	258 122	81.30	328.00d	10/12	8.68	22/08	200.3	59.24	11.14
		1983	650 91	185 87	58.41	214.00d	05/01	7.35	30/10	129.3	48.77	9.64
		1984	742 103	175 83	55.28	269.00d	25/03	5.02	29/10	140.1	34.09	7.26
		1985	705 98	196 92	61.76	395.00d	27/12	9.10	06/11	121.8	45.17	12.57
039002 M.A.: TWA Comment: Adjustable thin-plate weir (5.48m) plus 15 radial gates replaced, in 1969, a barrage of radial and buck gates. Rating formulae based upon gaugings - tailwater calibration applies for flows > 70 m ³ s ⁻¹ ; above 100 m ³ s ⁻¹ overspill occurs. Daily naturalised flows available for POR. # Mixed geology (Dolitic Limestone headwaters, Oxford Clay below). Rural with development concentrated along the valley.	Thames at Days Weir C.A.: 3444.7 km ² Level: 46m F.A.F.: PEI	38-80	712	260	28.36	349.0d	19/03	0.05	07/07	68.4	15.66	3.22
						1947		1976				
		1981	784 110	296 114	32.34	155.0d	14/03	4.36	30/08	67.2	24.87	5.92
		1982	737 104	302 116	33.01	160.0d	02/01	2.60	15/09	82.2	17.36	3.55
		1983	631 89	210 81	22.93	118.0d	03/05	3.22	20/09	54.4	17.16	4.28
		1984	699 98	218 84	23.82	134.0d	26/11	2.13	29/07	59.0	12.57	2.71
		1985	946 133	274 105	29.90	158.0d	28/12	6.27	29/09	56.3	21.58	7.70
039003 M.A.: TWA Comment: Rectangular critical-depth flume, (5.5m wide). Theoretical calibration. Drowns (and bypassed) during notable floods. Superseded (following channel improvements) Wandle Park immediately upstream (sporadic data available 1939-60). Very artificial flow pattern; runoff enhanced by sewage effluent. Large baseflow component. Topographic catchment substantially exceeds effective drainage area. # The Wandle is spring-fed (Chalk) but catchment is largely London Clay. Urban/suburban with significant areas of parkland.	Wandle at Connollys Mill C.A.: 176.1 km ² Level: 10m F.A.F.: GE S-full: 28.0 m ³ s ⁻¹	62-80	737	255	1.42	56.0f	16/09	0.22	29/01	2.4	1.47	0.56
						1968		1963				
		1981	769 104	326 128	1.82	21.9	06/08	1.20	08/09	2.4	1.69	1.30
		1982	787 107	375 147	2.10	11.9	24/09	1.36	01/10	2.7	2.00	1.49
		1983	643 87	379 149	2.11	12.7	06/07	1.32	15/11	2.7	2.23	1.39
		1984	780 106	346 136	1.93	13.8	05/10	1.20	19/02	2.4	1.83	1.42
		1985	715 97	388 152	2.16	12.0	25/12	1.31	28/11	2.7	2.12	1.41
039005 M.A.: TWA Comment: Trapezoidal critical-depth flume (overall channel width: 10m). Original station built 1935; flume commissioned in 1940 but no standing-wave formed until invert raised in 1961. Large capacity but bypassed during 1968 flood. Artificial flow pattern; runoff enhanced by sewage effluent. Topographic catchment slightly exceeds effective drainage area. # Chalk headwaters but a largely London Clay catchment of urban/suburban character.	Beverley Brook at Wimbledon Common C.A.: 43.6 km ² Level: 11m F.A.F.: GE S-full: 28.3 m ³ s ⁻¹	35-80	841	386	0.53	22.4	07/04	0.02	03/10	0.9	0.45	0.19
						1960		1970				
		1981	720 112									
		1982	679 106									
		1983	550 86	389 101	0.54	12.5	31/05	0.22	24/08	0.8	0.42	0.28
		1984	662 103	347 90	0.48	3.8	22/11	0.18				

			Period	Rainfall (mm)	Runoff (mm)	Mean flow (m ³ s ⁻¹)	Peak flow (m ³ s ⁻¹)	Date of peak	Min. daily flow (m ³ s ⁻¹)	Date of min.	10 Percentile (m ³ s ⁻¹)	50 Percentile (m ³ s ⁻¹)	95 Percentile (m ³ s ⁻¹)
				% of pre-1981	% of pre-1981								
039006	Windrush at Newbridge	C.A: 362.6 km ²	50-80	766	290	3.33	21.6	08/12	0.11	26/08	6.7	2.53	0.75
M.A: TWA Level: 63m F.A.F: PI								1960		1976			
Comment: Compound broad-crested weir (total crest width 8.3m) with complementary side-spilling weir (14.9m wide) into bypass channel. Subject to drowning. From 1962 a calibration based upon gaugings was adopted. Improvements in the method of water level measurement made in 1969. Runoff diminished by a small net export of water. # A predominantly pervious (Oolitic Limestone) catchment on the dip-slope of the Cotswolds. Mainly rural.			1981	833 109	328 113	3.76	10.9	30/12	0.88	09/09	6.0	3.68	1.14
			1982	758 99	310 107	3.57	11.4	16/03	0.64	13/09	7.3	2.61	0.74
			1983	665 87	254 88	2.92	9.6	02/05	0.94	27/08	5.1	2.81	1.06
			1984	739 96	239 82	2.75	9.6	25/11	0.46	21/08	5.8	1.97	0.56
			1985	797 104	300 103	3.44	9.4	09/02	1.09	28/09	5.6	3.22	1.37
039007	Blackwater at Swallowfield	C.A: 354.8 km ²	52-80	710	251	2.82	41.0	18/09	0.46	18/08	5.4	2.03	0.84
M.A: TWA Level: 42m F.A.F: E S-full: 26.0 m ³ s ⁻¹								1968		1953			
Comment: Two Crump weirs (main 4.6m, side 2.7m wide) superseded original flume, plus side weir, in 1970. Minor bypassing of the side weir in flood conditions. Some net import of water - effluent augments flows. Exact delineation of the hydrological catchment is difficult. # Chalk in the headwaters, clay, sands and siltium in the valley. Substantial and expanding urban development in the catchment.			1981	791 111	317 126	3.56	21.7	14/12	1.34	31/08	6.2	2.95	1.47
			1982	796 112	336 134	3.78	24.9	22/10	1.32	10/08	6.7	3.11	1.41
			1983	645 91	274 109	3.08	20.1	01/06	1.26	07/09	5.1	2.81	1.37
			1984	781 110	301 120	3.39	23.1	24/03	1.22	12/09	6.1	2.74	1.32
			1985	654 92	258 103	2.89	23.3	26/12	1.35	02/10	4.8	2.35	1.41
039008	Thames at Eynsham	C.A: 1616.2 km ²	51-80	739	265	13.59	82.6d	07/12	0.13	30/09	31.3	8.28	1.37
M.A: TWA Level: 60m F.A.F: SE								1960		1976			
Comment: Complex barrage of gates and weirs, total breadth 30m. Some bypassing at extreme discharges. Early flow data derived from once-daily gaugeboard readings. Naturalised flows available for period of record; offtake for Farmoor reservoir is immediately upstream. # Geology is mixed - pervious headwaters (Oolitic Limestone), Oxford Clay in lower reaches. Mainly rural with development concentrated along the valley bottom.			1981	805 109	320 121	16.39	76.0d	14/03	1.58	04/09	32.9	13.54	2.14
			1982	788 107	340 128	17.44	76.8d	17/03	0.80	12/08	43.6	9.62	1.30
			1983	680 92	235 89	12.05	54.5d	02/05	1.49	21/11	29.2	9.63	2.02
			1984	738 100	233 88	11.97	62.3d	27/01	0.67	06/10	31.6	6.33	0.89
			1985	789 107	309 117	15.79	74.7d	27/12	3.47	29/09	29.5	12.33	4.78
039010	Colne at Danham	C.A: 743.0 km ²	52-80	717	163	3.84	14.9	07/05	0.74	26/08	6.1	3.54	1.65
M.A: TWA Level: 34m F.A.F: GEI S-full: 17.5 m ³ s ⁻¹								1978		1976			
Comment: Twin semicircular broad-crested weirs (one section subject to drowning). Insensitive - overall crest length 30m. Few high flow gaugings. All flows contained. Complex water utilisation within the catchment - net diminution in flows. Hydrological and topographical divides do not coincide. # A largely Chalk catchment with clays in the valleys supplemented by extensive gravel tracts. Rural headwaters with considerable suburban development in the lower reaches.			1981	768 107	177 109	4.17	9.1	02/06	2.84	31/08	5.3	3.92	3.09
			1982	826 115	207 127	4.87	13.1	11/12	2.56	20/09	6.7	4.62	2.87
			1983	665 93	222 136	5.23	10.7	01/02	3.01	21/11	7.5	5.42	3.20
			1984	797 111	181 111	4.26	11.8	24/03	2.39	11/09	5.9	3.98	2.62
			1985	649 91	172 106	4.05	10.5	26/12	2.50	23/10	5.4	3.98	2.60
039011	Wey at Tilford	C.A: 396.3 km ²	54-80	858	274	3.44	78.0	18/09	0.57	27/07	5.7	2.62	1.30
M.A: TWA Level: 48m F.A.F: G S-full: 37.5 m ³ s ⁻¹								1966		1956			
Comment: Crump weir (crest: 12m wide) replaced (in 1972) an informal broad-crested structure (incapable of precise flow measurement). Current station is full range but some historical flood discharges are under review. Marginal net import of water. Topographical catchment exceeds the groundwater catchment. # A predominantly pervious catchment (Chalk and Upper Greensand). Mainly rural, mixed woodland in the headwaters.			1981	953 111	255 93	3.21	19.3	02/06	1.51	10/09	5.1	2.65	1.63
			1982	920 107	264 96	3.31	22.5	22/10	1.41	12/08	5.6	2.83	1.49
			1983	774 90	227 83	2.85	17.9	04/01	1.56	06/10	4.4	2.63	1.60
			1984	934 109	242 88	3.04	20.5	24/03	1.39	25/08	5.3	2.47	1.47
			1985	783 91	217 79	2.72	25.1	26/12	1.37	03/11	4.1	2.23	1.49
039013	Colne at Berrygrove	C.A: 352.2 km ²	34..80	689	69	0.77	15.2	28/12	0.00	03/08	1.6	0.52	0.11
M.A: TWA Level: 55m F.A.F: GI S-full: 7.4 m ³ s ⁻¹								1979		1974			
Comment: Compound thin-plate weir (9.0m broad). Structure drowns at low levels and bypassing is significant above medium discharges. Topographical and hydrological catchments not coincident; losses occur (to the Lee system) via swallow holes in the Mimmshall Brook. Flows also diminished by groundwater abstraction. # A largely pervious (Chalk) catchment. Rural headwaters; considerable urban development in the valley which supports extensive gravel workings.			1981	752 109	69 100	0.77	4.3	15/12	0.31	02/09	1.1	0.59	0.38
			1982	822 119	101 146	1.13	12.6	10/12	0.38	12/09	2.1	0.86	0.42
			1983	648 94	92 133	1.02	5.4	01/02	0.20	14/11	1.7	0.88	0.24
			1984	778 113	78 113	0.87	4.6	24/11	0.34	27/08	1.6	0.71	0.36
			1985	629 91	65 94	0.73	4.8	26/01	0.08	13/11	1.1	0.62	0.33
039014	Var at Hansteads	C.A: 132.0 km ²	58-80	706	105	0.44	2.6	27/12	0.01	21/09	0.8	0.40	0.08
M.A: TWA Level: 61m F.A.F: G S-full: 9.8 m ³ s ⁻¹								1979		1976			
Comment: Compound Crump weir - 2 crests, each 2.44m broad - superseded (in 1969) original broad-crested weir (plus bypass channel); the early flow data are of a lesser quality. Topographical catchment area significantly exceeds the hydrological catchment. Flows diminished by substantial groundwater abstractions. # Pervious (Chalk) catchment. Rural headwaters, significant urban development in the lower valley.			1981	756 107	75 71	0.31	1.1	20/10	0.16	07/09	0.4	0.30	0.19
			1982	809 115	101 96	0.42	1.3	09/12	0.15	15/09	0.6	0.42	0.19
			1983	667 94	121 115	0.51	1.4	01/06	0.23	23/11	0.7	0.52	0.26
			1984	796 113	76 72	0.32	1.0	24/03	0.10	06/09	0.5	0.32	0.13
			1985	649 92	65 62	0.27	1.0	25/01	0.06	06/11	0.4	0.28	0.08
039015	Whitewater at Lodge Farm	C.A: 44.5 km ²	63-80	792	275	0.39	1.6	21/11	0.11	24/08	0.6	0.35	0.16
M.A: TWA Level: 72m F.A.F: G S-full: 3.0 m ³ s ⁻¹								1974		1976			
Comment: Crump weir commissioned in 1975 - superseded a rectangular thin-plate weir (operating since 1910 but records very incomplete and of poor accuracy). New weir is full range. Part of the catchment drains into the Basingstoke Canal; a proportion of this runoff returns to the Whitewater catchment. Stable flow regime - baseflow dominant. # Catchment is developed entirely on Chalk. Rural character.			1981	878 111	276 100	0.39	0.9	05/05	0.25	09/09	0.5	0.39	0.28
			1982	884 112	313 114	0.44	1.3	09/12	0.21	20/09	0.6	0.44	0.23
			1983	765 97	304 111	0.43	1.2	23/06	0.26	21/11	0.6	0.44	0.27
			1984	892 113	310 113	0.44	1.4	16/01	0.21	16/09	0.7	0.42	0.22
			1985	742 94	267 97	0.38	1.0	21/01	0.21	04/11	0.6	0.34	0.23
039016	Kennet at Theale	C.A: 1033.4 km ²	61-80	770	290	9.51	70.8	11/06	0.93	21/08	16.5	8.02	3.90
M.A: TWA Level: 43m F.A.F: RGI								1971		1976			
Comment: Crump weir (15.9m broad) equipped with auxiliary crest and downstream level recorders. All but highest flows contained. Net impact of abstractions and discharges is very limited. High baseflow component but responsive contribution from the River Enbourne. # A mainly pervious catchment (80% Chalk) with a significant clay sub-catchment. Rural headwaters; urban development (and growth) concentrated along the valley.			1981	868 113	328 113	10.75	29.4	11/03	4.93	09/09	16.2	9.29	5.92
			1982	850 110	352 121	11.55	36.6	16/03	4.08	17/09	19.3	10.30	4.62
			1983	715 93	292 101	9.58	30.0	04/01	4.03	20/11	14.6	9.07	4.57
			1984	806 105	271 93	8.89	32.0	24/03	3.53	10/09	15.3	7.88	3.76
			1985	783 102	309 107	10.09	33.7	26/12	4.79	07/11	15.9	9.44	5.01
039017	Ray at Grendon Underwood	C.A: 18.6 km ²	62-80	643	173	0.10	16.3	10/07	0.00	05/10	0.2	0.01	
M.A: TWA Level: 66m F.A.F:								1968		1980			
Comment: Trapezoidal critical-depth flume, overall channel width 6.5m. Full range following increase in flume capacity (1964). The Grendon catchment was operated as an experimental basin by IH until 1987. Negligible artificial disturbance to the very responsive flow regime. # Relatively flat, impermeable (Oxford Clay) catchment given over to agriculture.			1981	691 107	213 123	0.13	3.1d	25/05	0.00	16/04	0.3	0.04	
			1982	686 107									
			1983	583 91	137 79	0.08	2.1d	01/05	0.00	07/04	0.2	0.02	
			1984	590 92	122 71	0.07	2.1d	23/11	0.00	06/04	0.2	0.02	
			1985	653 102									
039019	Lambourn at Shaw	C.A: 234.1 km ²	62-80	729	227	1.68	5.0	13/11	0.41	22/08	2.8	1.50	0.74
M.A: TWA Level: 76m F.A.F: RG S-full: 17.0 m ³ s ⁻¹								1974		1976			
Comment: Crump weir (10.67m broad) with auxiliary downstream recorder. Possibility of a small overspill in high floods when storage may be provided by Donnington Lake. Downstream sluices occasionally influence flows, otherwise artificial disturbance is limited; but significant groundwater abstraction (particularly when the Lambourn Groundwater Recharge Scheme has operated). Flow pattern is baseflow dominated. # Pervious (Chalk), rural catchment in the Berkshire Downs.			1981	869 119	278 122	2.06	3.5	26/04	1.35	23/09	2.9	1.84	1.43
			1982	773 106	287 126	2.13	4.0	06/04	1.02	16/09	3.4	1.95	1.10
			1983	680 93	245 108	1.82	3.1	31/01	0.98	13/11	2.6	1.86	1.03
			1984	777 107	209 92	1.55	3.4						

					Period	Rainfall (mm)	Runoff (mm)	Mean flow (m ³ s ⁻¹)	Peak flow (m ³ s ⁻¹)	Date of peak	Min. daily flow (m ³ s ⁻¹)	Date of min.	10 Percentile (m ³ s ⁻¹)	50 Percentile (m ³ s ⁻¹)	95 Percentile (m ³ s ⁻¹)	
						% of pre-1981	% of pre-1981									
039020	Coln at Bibury	C.A.: 106.7 km ²	63-80	805	390	1.32	5.0	22/12	0.19	23/08	2.6	1.04	0.37			
M.A.: TWA	Level: 101m	F.A.F.: G														
Comment:	Crump weir (9.1m broad). Modular throughout the range. Some overspill onto floodplain before design capacity reached. Very limited impact of artificial influences on river flows; baseflow dominated flow regime. # Pervious (Oolitic Limestone) catchment on the dip-slope of the Cotswolds; predominantly rural.															
				1981	855	106	439	113	1.49	3.5	28/03	0.58	09/09	2.3	1.36	0.64
				1982	778	97	474	122	1.60	3.9	20/03	0.47	18/09	3.2	1.21	0.50
				1983	719	89	379	97	1.28	3.1	12/05	0.47	21/11	2.5	1.20	0.51
				1984	783	97	345	88	1.17	3.6	27/11	0.42	08/10	2.4	0.82	0.44
				1985	845	105	462	118	1.56	3.2	08/02	0.74	02/10	2.5	1.44	0.81
039021	Cherwell at Enslow Mill	C.A.: 551.7 km ²	65-80	686	220	3.85	30.2	28/12	0.08	27/08	9.1	2.28	0.63			
M.A.: TWA	Level: 65m	F.A.F.: PE														
Comment:	Asymmetrical compound Crump weir (crest widths: 3.05m and 6.10m) with side-spilling overflow weir - operates when flow exceeds 10 m ³ s ⁻¹ . Bypassing occurs during high flows. Unsuitable for flood analysis. Significant improvements to the method of level measurement made in 1967. Limited impact of artificial influences on the flow regime; marginal net loss. # A largely rural catchment. Geology is mixed with a preponderance of pervious Lias formations.															
				1981	767	112	270	123	4.73	20.5	31/12	1.04	10/09	9.3	3.79	1.21
				1982	721	105	250	114	4.38	20.3	01/01	0.66	19/09	9.8	2.86	0.78
				1983	613	89	197	90	3.45	19.3	03/05	0.72	31/08	7.9	2.72	0.88
				1984	688	100	196	83	3.43	19.4	28/01	0.34	28/08	7.5	2.37	0.58
				1985	724	106	231	105	4.04	17.6	27/12	0.96	30/09	8.1	3.07	1.17
039022	Loddon at Sheepbridge	C.A.: 164.5 km ²	65-80	758	409	2.13	26.4	16/09	0.52	26/08	3.7	1.63	0.89			
M.A.: TWA	Level: 42m	F.A.F.: GEI														
Comment:	Two Crump weirs (2.1m crest, plus complementary 6.9m crest oblique to channel flow). Both structures remain modular and all but extreme flows are contained. Small net import of water into the catchment. # Headwaters are in the Chalk of the North Downs but the catchment is largely impervious. A predominantly rural catchment, containing some important - and growing - urban centres.															
				1981	834	110	416	102	2.17	14.5	14/12	1.00	08/09	3.5	1.80	1.09
				1982	852	112	487	119	2.54	17.8	09/12	0.98	12/08	4.6	2.03	1.03
				1983	682	90	424	104	2.21	15.5	04/01	1.03	07/09	3.5	1.99	1.11
				1984	802	106	415	101	2.17	15.6	24/03	0.92	12/09	3.7	1.74	0.97
				1985	702	93	378	92	1.97	17.3	26/12	0.97	03/11	3.1	1.64	1.03
039023	Wye at Hedsor	C.A.: 137.3 km ²	64-80	764	222	0.96	3.8	16/08	0.25	25/12	1.5	0.94	0.42			
M.A.: TWA	Level: 27m	F.A.F.: GI														
Comment:	Crump weir, 6.1m broad. Modular throughout the flow range. All but extreme floods contained. The flow regime is significantly influenced by abstractions (particularly groundwater) and discharges but remains baseflow dominated. # A mainly pervious (Chalk) catchment with an overburden of glacial deposits on the higher ground. This dip-slope Chiltern valley includes several considerable urban/suburban centres.															
				1981	859	112	266	120	1.16	4.4	25/09	0.81	01/01	1.4	1.16	0.89
				1982	874	114	285	128	1.24	3.5	26/06	0.83	22/09	1.5	1.24	0.89
				1983	693	91	305	137	1.33	4.0	31/05	0.80	18/11	1.6	1.42	0.83
				1984	776	102	205	92	0.89	3.5	20/09	0.62	16/10	1.1	0.88	0.65
				1985	740	97	221	100	0.96	2.6	04/08	0.68	26/11	1.1	0.97	0.74
039025	Enbourne at Brimpton	C.A.: 147.6 km ²	67-80	801	268	1.25	30.6	20/01	0.02	25/08	2.7	0.68	0.19			
M.A.: TWA	Level: 59m	F.A.F.: I														
Comment:	Asymmetrical compound Crump weir (crest widths: 3.0m and 4.6m). Modular range up to 18 m ³ s ⁻¹ . Due to overtopping of the banks, highest flows are under-estimated. Net impact of abstractions and discharges is very limited. # Chalk outcrops in the headwaters but catchment is mainly impervious (Tertiary clays). Land use is principally agricultural.															
				1981	860	107	282	105	1.32	13.0	29/12	0.18	09/09	2.8	0.92	0.22
				1982	877	109	343	128	1.61	15.8	10/12	0.19	29/07	3.4	1.03	0.23
				1983	690	86	227	85	1.06	13.8	04/01	0.18	06/09	2.2	0.83	0.21
				1984	804	100	261	97	1.22	14.1	16/01	0.13	10/09	3.1	0.73	0.16
				1985	788	98	280	104	1.31	16.8	26/12	0.26	02/10	2.5	0.84	0.31
039026	Cherwell at Banbury	C.A.: 199.4 km ²	66-80	692	176	1.11	54.1	28/12	0.00	02/08	2.9	0.39				
M.A.: TWA	Level: 89m	F.A.F.: P														
Comment:	Asymmetrical compound Crump-type weir (crest widths: 3.0m and 4.6m). Modular limit about 22 m ³ s ⁻¹ . Approximately 50 km ² of the catchment drains directly to the Oxford Canal; some of this runoff returns (via an overflow weir) upstream of Banbury. River flows also diminished by a large upstream abstraction (Grimsbury Source Works). Flow regime is relatively responsive. # Catchment consists mainly of Lias formations and is rural in character.															
				1981	777	112	227	129	1.43	24.0	30/12	0.05	09/09	3.1	0.93	0.14
				1982	720	104	161	91	1.02	13.8	16/03	0.02	17/09	2.9	0.44	0.04
				1983	625	90	130	74	0.82	12.6	01/05	0.01	13/08	2.2	0.43	0.02
				1984	670	97	139	79	0.88	15.3	27/01	0.01	26/08	2.1	0.29	0.02
				1985	700	101	151	86	0.95	12.9	07/06	0.02	18/09	2.2	0.46	0.05
039027	Pang at Pangbourne	C.A.: 170.9 km ²	68-80	690	118	0.64	6.5	22/11	0.07	24/08	1.1	0.53	0.22			
M.A.: TWA	Level: 40m	F.A.F.: GI														
Comment:	Crump weir, 4.0m broad with crest tapping. No local bypassing but some overspill occurs into Sulham Brook during extreme floods. Runoff is diminished by groundwater abstractions otherwise few artificial influences on the flow pattern. # Catchment is principally pervious (Chalk) with some superficial deposits. A largely rural catchment.															
				1981	819	119	126	107	0.68	2.1	14/12	0.37	09/09	1.0	0.63	0.42
				1982	773	112	157	133	0.85	2.5	16/03	0.32	18/09	1.3	0.80	0.36
				1983	659	96	122	103	0.66	2.9	14/04	0.30	11/11	1.0	0.67	0.32
				1984	706	102	87	74	0.47	2.1	24/03	0.17	12/09	0.8	0.47	0.19
				1985	723	105	103	87	0.56	3.9	27/12	0.25	06/11	0.8	0.51	0.27
039028	Dun at Hungerford	C.A.: 101.3 km ²	68-80	763	230	0.74	3.5	14/11	0.19	20/09	1.3	0.61	0.30			
M.A.: TWA	Level: 99m	F.A.F.: G														
Comment:	Crump weir, 10.7m broad. Full range and modular. Abstractions and discharges are of minor significance; small net loss from the catchment. Flow regime is dominated by baseflow. # A mainly pervious (Chalk) catchment of rural character (chiefly agricultural but the Dun drains part of Savernake Forest).															
				1981	855	112	268	117	0.86	2.3	30/03	0.42	14/09	1.4	0.73	0.49
				1982	862	113	285	124	0.91	2.8	15/03	0.30	15/09	1.6	0.82	0.35
				1983	697	91	244	106	0.78	1.7	01/02	0.38	27/09	1.3	0.74	0.41
				1984	816	107	223	97	0.72	2.5	27/01	0.29	20/08	1.3	0.65	0.33
				1985	789	103	238	103	0.76	2.6	26/12	0.36	10/11	1.3	0.67	0.38
039029	Tillingbourne at Shalford	C.A.: 59.0 km ²	68-80	797	303	0.57	6.1	15/09	0.28	23/06	0.8	0.52	0.34			
M.A.: TWA	Level: 32m	F.A.F.: GI														
Comment:	Crump weir, 5.5m broad with crest-tapping; drowning may result from backing-up from the Wey. Some artificial flow regulation. Very minor net export of water from the catchment. # Geology - dominated by the Lower Greensand - nominally pervious but catchment is responsive to heavy rainfall. The Tillingbourne drains from the North Downs, land use - primarily agricultural.															
				1981	915	115	303	100	0.57	1.8	26/05	0.40	28/08	0.7	0.54	0.44
				1982	879	110	312	103	0.58	2.4	09/12	0.36	15/09	0.7	0.56	0.41
				1983	787	99	310	102	0.58	1.8	01/06	0.43	19/08	0.7	0.57	0.45
				1984	884	111	295	97	0.55	2.6	24/03	0.35	12/09	0.7	0.53	0.38
				1985	804	101	278	92	0.52	2.0	26/12	0.38	25/09	0.7	0.49	0.39
039030	Gade at Croxley Green	C.A.: 184.0 km ²	70-80	699	138	0.81	4.2	27/12	0.05	03/09	1.4	0.76	0.25			
M.A.: TWA	Level: 50m	F.A.F.: GI														
Comment:	Compound Crump-type weir (three sections, total breadth 10.1m). The negligible inflow from the Grand Union Canal via an overflow weir is no longer monitored. The net effect of abstractions and discharges is to make the runoff rather unrepresentative. # Pervious headwaters (Chalk) with Tertiary deposits (mostly impervious) in the valley. Mixed land use: Rural hills, considerable urban development below.															
				1981	740	106	164	119	0.96	2.6	30/09	0.63	26/12	1.2	0.92	0.72
				1982	810	116	181	131	1.06	2.6	09/12	0.58	03/09	1.4	1.05	0.67
				1983	649	93	217	157	1.27	3.7	01/06	0.66	19/11	1.6	1.37	0.74
				1984	782	112	164	119	0.96	3.1	24/03	0.52	02/09	1.3	0.96	0.60

				Period	Rainfall (mm)	Runoff (mm)	Mean flow (m ³ s ⁻¹)	Peak flow (m ³ s ⁻¹)	Date of peak	Min. daily flow (m ³ s ⁻¹)	Date of min.	10 Percentile (m ³ s ⁻¹)	50 Percentile (m ³ s ⁻¹)	95 Percentile (m ³ s ⁻¹)
					% of pre-1981	% of pre-1981								
039034	Everide at Cassington Mill	C.A.: 430.0 km ²	70-80	719	264	3.60	26.7	28/12	0.12	25/08	8.4	2.09	0.63	
M.A.: TWA	Level: 60m	F.A.F.: EI	S-full: 59.8 m ³ s ⁻¹											
Comment: Complex configuration - compound Crump weir (crests: 4.0m and 3.7m) plus two side-spilling weirs (broad-crested, 7.5m broad and Crump 4.6m broad); the latter discharge to a canal section. Theoretical calibration. Near natural catchment but small net import of water and some limited storage in Blenheim Lake. # Headwaters largely impervious (Lias Series), pervious Oolitic Limestone in lower reaches. Rural.														
1981	789	110	332	126	4.53	20.5	31/12	0.94	06/09	8.7	3.76	1.16		
1982	741	103	316	120	4.31	22.4	16/03	0.58	19/09	9.8	2.70	0.75		
1983	617	86	228	86	3.11	16.2	02/05	0.76	23/11	6.5	2.71	0.81		
1984	707	98	249	94	3.39	20.1	25/11	0.50	13/09	7.9	2.05	0.55		
1985	755	105	310	117	4.22	18.3	25/12	1.17	02/10	7.6	3.52	1.29		
039035	Chum at Cerney Wick	C.A.: 124.3 km ²	89-90	831	207	0.82	4.7	31/01	0.00	13/10	2.1	0.47		
M.A.: TWA	Level: 82m	F.A.F.: GEI	S-full: 15.9 m ³ s ⁻¹											
Comment: Asymmetrical compound Crump weir (crests: 1.8m and 3.7m wide). Full range. Very limited head during periods of low flow. Groundwater abstractions result in significant loss to the catchment. # Primarily a pervious (Oolitic Limestone) catchment but with Oxford Clay in lower reaches. Rural but Cirencester and the Cotswold Wildlife Park close to Cerney Wick.														
1981	940	113	248	120	0.98	3.3	22/03	0.05	09/09	1.8	0.85	0.11		
1982	930	112	305	147	1.20	4.1	15/03	0.01	04/09	2.8	0.82	0.03		
1983	802	97	215	104	0.85	3.0	19/05	0.06	07/09	2.3	0.63	0.12		
1984	865	104	201	97	0.79	3.3	26/11	0.02	12/09	2.1	0.38	0.04		
1985	931	112	278	134	1.09	3.1	08/02	0.28	02/10	2.1	1.01	0.38		
039036	Law Brook at Albury	C.A.: 16.0 km ²	68-80	812	221	0.11	0.7	07/04	0.07	22/09	0.1	0.11	0.08	
M.A.: TWA	Level: 57m	F.A.F.: GI	S-full: 0.9 m ³ s ⁻¹											
Comment: Rectangular thin-plate weir, 2.7m broad. Flood discharges near to weir capacity and bypassing occurs on the right bank. The baseflow dominated runoff is diminished by groundwater abstractions. # Small rural catchment mainly pervious (Lower Greensand) but responsive on occasions, draining from the North Downs.														
1981	901	111	235	106	0.12	0.8	06/08	0.09	20/07	0.1	0.12	0.10		
1982	897	110	245	111	0.12	0.7	09/12	0.10	01/08	0.1	0.12	0.10		
1983	762	94	243	110	0.12	0.7	06/07	0.10	15/08	0.1	0.12	0.11		
1984	891	110	221	100	0.11	0.5	05/10	0.08	13/10	0.1	0.11	0.10		
1985	851	105												
039037	Kennet at Marlborough	C.A.: 142.0 km ²	72-80	774	181	0.82	8.1	25/02	0.00	25/11	2.0	0.48	0.04	
M.A.: TWA	Level: 127m	F.A.F.: PEI	S-full: 36.3 m ³ s ⁻¹											
Comment: Crump weir, 6.1m broad, with crest tapping plus Crump crested side weir for high flows. Full range and not subject to drowning. Runoff is low and baseflow dominated. The hydrological catchment is smaller than the topographical catchment; some diminution in flow also results from groundwater abstraction. # Chalk catchment; predominantly rural.														
1981	923	119	211	117	0.95	2.9	13/03	0.33	16/10	1.9	0.68	0.35		
1982	917	118	254	140	1.14	3.6	16/03	0.20	01/10	2.3	0.93	0.22		
1983	799	103	209	115	0.94	2.9	01/02	0.19	08/12	1.9	0.96	0.21		
1984	903	117	176	97	0.79	3.0	06/02	0.15	12/10	1.8	0.50	0.16		
1985	826	107	211	117	0.95	3.4	22/01	0.23	27/11	2.1	0.70	0.27		
039040	Thames at West Mill Cricklade	C.A.: 185.0 km ²	72-80	756	231	1.38	10.8	09/02	0.01	28/08	3.8	0.44	0.06	
M.A.: TWA	Level: 79m	F.A.F.: PEI	S-full: 20.3 m ³ s ⁻¹											
Comment: Compound Crump weir (crests: 2.5m and 4.5m wide) with crest tapping. Bypassing during extreme floods. Runoff slightly diminished by groundwater abstractions. # Mixed geology - the Thames rises on the Cotswolds (Oolitic Limestone); lower catchment is chiefly Oxford Clay. Land use is primarily agricultural. Extensive gravel workings in the main valley.														
1981	851	113	300	130	1.76	9.4	11/03	0.09	09/09	4.1	1.38	0.16		
1982	863	114	340	147	2.00	8.7	07/03	0.05	02/09	5.5	0.72	0.08		
1983	763	101	242	105	1.42	7.1	31/01	0.10	07/09	3.8	0.89	0.16		
1984	812	107	233	101	1.36	7.5	24/11	0.05	15/10	4.1	0.39	0.07		
1985	896	119	306	132	1.79	7.9	09/02	0.34	02/10	3.8	1.26	0.45		
039042	Leach at Priory Mill Lechlade	C.A.: 76.9 km ²	72-80	703	305	0.74	5.1	30/12	0.04	26/08	1.8	0.38	0.11	
M.A.: TWA	Level: 72m	F.A.F.: S-full: 8.6 m ³ s ⁻¹												
Comment: Crump weir, 4.5m broad with crest tapping - downstream weed growth and backing-up from the Thames can result in drowning. Full range. Effluent derived from outside the catchment results in small net augmentation of runoff; otherwise artificial influences are minimal. # A rural catchment on the dip-slope of the Cotswolds; mainly pervious.														
1981	796	113	379	124	0.92	3.5	13/03	0.15	09/09	1.6	0.86	0.18		
1982	726	103	431	141	1.05	4.7	15/03	0.10	13/09	2.6	0.60	0.12		
1983	637	91	241	79	0.59	2.4	06/05	0.10	30/09	1.4	0.51	0.11		
1984	700	100	281	92	0.69	4.4	26/11	0.04	15/10	1.8	0.32	0.05		
1985	762	108	339	111	0.82	3.1	27/12	0.25	02/10	1.7	0.58	0.27		
039043	Kennet at Knighton	C.A.: 295.0 km ²	62..80	777	273	2.55	13.7	03/06	0.10	21/07	5.2	1.99	0.55	
M.A.: TWA	Level: 105m	F.A.F.: S-full: 12.1 m ³ s ⁻¹												
Comment: Two Crump weirs: 13.7m crest on the main channel plus a 1.7m crest on the Littlecote Stream. Very flat gradient - main river is subject to frequent drowning; very high submergence ratios - nearby station records are sometimes used to assess the daily flow. Some bypassing during floods. Flows slightly diminished by groundwater abstraction. Baseflow dominates the flow regime. # Chalk catchment. Mainly rural (includes part of Savernake Forest) but some urban growth in the valley.														
1981	892	115	301	110	2.82	6.3	21/03	1.30	24/09	5.2	2.21	1.38		
1982	883	114	329	121	3.08	7.6	16/03	0.72	26/10	5.9	2.48	0.87		
1983	750	97	294	108	2.75	6.6	01/02	0.75	23/11	5.0	2.77	0.81		
1984	864	111	244	89	2.28	6.7	07/02	0.59	17/10	5.0	1.55	0.72		
1985	794	102	287	105	2.68	7.5	21/01	0.92	28/11	5.0	2.34	1.08		
039044	Hart at Bramshill House	C.A.: 84.0 km ²	72-80	688	261	0.69	11.7	21/11	0.10	26/08	1.4	0.45	0.19	
M.A.: TWA	Level: 50m	F.A.F.: E	S-full: 12.1 m ³ s ⁻¹											
Comment: Crump weir, 4.0m broad, with crest and downstream tapping. Banks overtopped in extreme floods. Flows augmented by effluent derived from outside the catchment. # A mainly impermeable (Eocene formations with some overburden of glacial deposits) catchment. Mixed land use - largely rural with considerable woodland but includes growing urban development near headwaters.														
1981	780	112	312	120	0.83	9.7	25/05	0.23	06/09	1.5	0.65	0.27		
1982	780	112	339	130	0.90	7.8	22/10	0.20	12/08	1.7	0.74	0.24		
1983	642	92	271	104	0.72	5.7	01/06	0.20	07/09	1.4	0.63	0.24		
1984	637	91	303	116	0.81	7.9	24/03	0.20	30/08	1.6	0.61	0.23		
1985	629	99	259	99	0.69	7.9	26/12	0.23	02/10	1.2	0.53	0.26		
039049	Silk Stream at Colindeep Lane	C.A.: 29.0 km ²	73..80	690	309	0.28	39.8	30/05	0.01	04/06	0.8	0.14	0.03	
M.A.: TWA	Level: 40m	F.A.F.: S-full: 12.1 m ³ s ⁻¹												
Comment: Flat V weir (1:10 cross slope, width: 8.5m). Theoretical rating. Further gaugings needed to establish modular range. Some bypassing during floods. Pre-1973 data (of limited quality) available for two earlier stations on the Silk Stream - significant river improvements undertaken in the 1950s. Responsive regime. # Catchment is largely London Clay. Rural/suburban headwaters, now heavily urbanised below.														
1981	740	107	315	102	0.29	30.5	06/08	0.04	06/09	0.7	0.13	0.04		
1982	809	117	342	111	0.31	32.8	26/06	0.04	18/09	0.7	0.14	0.05		
1983	595	86	234	76	0.22	24.4	31/05	0.03	04/09	0.5	0.09	0.03		
1984	753	109	295	95	0.27					0.6	0.13	0.04		
1985	594	86	193	62	0.18	10.6	25/06	0.04	15/09	0.4	0.08	0.04		
039051	Sor Brook at Adderbury	C.A.: 106.4 km ²	67-80	659	245	0.83	5.8	28/12	0.00	26/08	1.8	0.54	0.17	
M.A.: TWA	Level: 28m	F.A.F.: EI	S-full: 10.0 m ³ s ⁻¹											
Comment: Crump weir, commissioned in 1982, superseded a compound broad-crested weir (3.6m broad) plus sluice gates - monitoring the sluice position complicated the computation of the early flow data. High flow calibration for the Crump weir yet to be fully defined. Some bypassing during floods. # An impervious (Middle Lias), mainly rural catchment.														
1981	769	117	290	118	0.98	5.1	30/12	0.27	09/09	1.8	0.82	0.36		
1982	714	108												
1983	626	95	222	91	0.75	4.9	02/05	0.26	06/09	1.4	0.65	0.29		
1984	710	108	223	91	0.75	5.1	27/01	0.16	30/08	1.4	0.60	0.19		
1985	742	113	279	114	0.94	5.6	07/06	0.31	06/11	1.5	0.80	0.35		
039052	The Cut at Binfield	C.A.: 50.2 km ²	57..80	692	214	0.34	16.4	30/05	0.00	08/12	0.7	0.17	0.04	
M.A.: TWA	Level: 46m	F.A.F.: PEI	S-full: 26.0 m ³ s ⁻¹											
Comment: Broad-crested weir (crest: 13.7m wide) plus adjustable low flow notch (crest: 1.22m wide) at outfall from an ornamental lake. Early flow data less precise (discharge was originally over the insensitive weir only). Significant effluent component during periods of low flow. Small net import of water. # An impermeable catchment (London Clay). Rural headwaters, including considerable woodland but major New Town (Bracknell) development below.														
1981	743	107	273	128	0.43	18.1	01/06	0.06	06/09	0.9	0.29	0.07		
1982	783	113	296	138	0.47	9.3	22/10	0.07	12/08	1.0	0.30	0.09		
1983	584	84	231	108	0.37	5.9	23/08	0.08	06/08	0.7	0.29	0.10		
1984	721	104	256	120	0.41	9.7	23/07	0.07	20/08	0.8	0.27	0.08		
1985														

	Period	Rainfall (mm)		Runoff (mm)		Mean flow (m ³ s ⁻¹)	Peak flow (m ³ s ⁻¹)	Date of peak	Min. daily flow (m ³ s ⁻¹)	Date of min.	Percentile (m ³ s ⁻¹)				
		1981	% of pre-1981	1981	% of pre-1981						10	50	95		
039053 Mole at Horley M.A.: TWA Level: 52m F.A.F.: PE S-full: 26.0 m ³ s ⁻¹ C.A.: 89.9 km ² Comment: Compound broad-crested weir (central notch; 2.44m broad) plus flanking crests; 10.96m broad), rated section at high flows. Primary monitoring site is now downstream (see 039069). Small net import of water (sewage effluent). # Catchment is mainly impermeable (chiefly Weald Clay) with mixed land use - includes Crawley, Gatwick Airport and considerable woodland.	61-80	821	429	1.22	63.3	15/09 1988	0.11	22/08 1976	2.6	0.67	0.22				
	1981	850	104	485	113	1.38	21.4	06/08	0.24	27/08	2.8	0.82	0.31		
	1982	867	106	516	120	1.47	33.5	09/12	0.26	11/09	3.0	0.81	0.31		
	1983	728	89	393	92	1.12	19.4	18/04	0.26	29/08	2.3	0.71	0.29		
	1984	825	100	490	114	1.40	22.9	24/03	0.24	27/08	3.2	0.69	0.29		
	1985	770	94	436	102	1.24	24.0	26/12	0.31	03/11	2.5	0.78	0.35		
039054 Mole at Gatwick Airport M.A.: TWA Level: 57m F.A.F.: E S-full: 12.3 m ³ s ⁻¹ C.A.: 31.8 km ² Comment: Rectangular flume (2.74m broad) in culvert below airport runway (originally measured all flows) plus Crump weir in new overflow channel. Full range station. Very limited disturbance to the responsive, natural flow regime (Gatwick Airport is not in the catchment). # Impervious (Weald Clay) catchment; largely rural.	61-80	832	362	0.37	22.3	15/09 1988	0.01	18/06 1976	0.9	0.12	0.02				
	1981	881	106	401	111	0.40	8.3	02/06	0.02	08/09	1.0	0.19	0.03		
	1982	885	106	403	111	0.41	12.7	09/12	0.01	09/09	1.0	0.15	0.02		
	1983	762	92	286	79	0.29	8.6	18/04	0.01	12/09	0.7	0.12	0.02		
	1984	853	103	330	91	0.33	9.7	23/03	0.00	10/07	1.0	0.07			
	1985	787	95	255	70	0.26	9.3	26/12	0.02	02/10	0.7	0.08	0.02		
039056 Ravensbourne at Catford Hill M.A.: TWA Level: 15m F.A.F.: C.A.: 67.6 km ² Comment: Trapezoidal flume; breadth at the critical section: 4.267m. Full range. Theoretical calibration - confirmatory gaugings required at medium and high flows. # The Ravensbourne rises as Chalk springs (in Holwood Park) but the catchment is mainly impervious Eocene deposits. Below the headwaters the catchment is largely within London - becoming increasingly urban northwards.	77-80		208	0.45	11.61	13/06 1977	0.12	15/09 1978	0.8	0.35	0.17				
	1981		204	98	0.44	10.61	06/08				0.8	0.34	0.17		
	1982		178	86	0.38	7.4	24/09	0.14	01/10	0.6	0.32	0.17			
	1983		207	100	0.44	9.5	06/07	0.16	04/09	0.6	0.32	0.17			
	1984					8.5	05/10	0.12	19/08	0.7	0.36	0.17			
	1985														
039057 Crane at Cranford Park M.A.: TWA Level: 23m F.A.F.: C.A.: 616.5 km ² Comment: Non standard critical depth flume improvised from the invert of a footbridge. Straight reach with banks stabilised by timber revetments. Calibration is theoretical - gaugings needed to verify rating and determine the modular limit. Left bank bypassing occurs above a stage of about 1.3m. Complex water utilisation. Small natural import of water from the Colne catchment. A relatively responsive regime. # A flat, generally impervious (mostly London Clay) catchment of suburban character - includes Northolt Airport.	78..80		29	0.56	18.8	08/04 1979	0.08	15/09 1980	1.5	0.29	0.09				
	1981		30	103	0.59	11.5	02/06	0.08	05/09	1.3	0.32	0.13			
	1982		31	107	0.61	13.2	26/06	0.01	16/08	1.2	0.32	0.13			
	1983		23	79	0.45	10.1	01/06	0.09	30/07	0.9	0.27	0.10			
	1984		28	97	0.55					1.1	0.30	0.11			
	1985														
039058 Pool at Winsford Road M.A.: TWA Level: 17m F.A.F.: C.A.: 38.3 km ² Comment: Trapezoidal flume; breadth at the critical section: 3.05m. Full range. Theoretical calibration - gaugings needed to verify the rating. Some earlier data (1961-71) exists for an upstream site; Selworthy Road (039827). # The Pool River rises as Chalk springs (below Addington Hill) but flows mostly over impervious Eocene deposits. Land use is principally of a suburban/urban character.	78..80		155	0.19	6.7	27/02 1979	0.05	12/09 1978	0.4	0.15	0.06				
	1981		156	101	0.19	3.9	06/08	0.08	05/08	0.3	0.14	0.09			
	1982		140	90	0.17	3.5	06/07	0.08	11/10	0.3	0.14	0.08			
	1983		155	100	0.19	6.1	29/02	0.06	26/07	0.3	0.15	0.07			
	1984														
	1985														
039065 Ewelme Brook at Ewelme M.A.: TWA Level: 66m F.A.F.: C.A.: 13.4 km ² Comment: Flat V weir (width: 2m) superseded - in 1980 - a rectangular thin-plate weir (width: 1.524m). Natural, very stable flow regime; modest fish farming activities in Ewelme. Topographical and true (groundwater) drainage areas may differ significantly. # The Ewelme Brook drains from a dry valley in the Chalk escarpment. Land use is rural/agricultural. Ewelme village is the only settlement.	70..80		101	0.04	0.3	14/08 1980	0.00	07/01 1974	0.1	0.04	>0.00				
	1981		140	139	0.06	0.1	02/06	0.04	15/10	0.1	0.05	0.04			
	1982														
	1983		93	92	0.04	0.1d	21/05	0.02	21/12	0.1	0.04	0.02			
	1984		101	100	0.04	0.1	05/06	0.02	01/01	0.1	0.05	0.02			
	1985														
039068 Mole at Castle Mill M.A.: TWA Level: 39m F.A.F.: C.A.: 316.0 km ² Comment: Crump weir (15.0m broad) superseded original mill weir (velocity-area rated) in 1978. Crump weir is modular to structurefull. All but very high flows contained. Small net import of water (sewage effluent). # Impervious (mostly Weald Clay) catchment. Mixed land use.	71..80	761	326	3.27	100.0	28/12 1979	0.45	04/09 1972	7.9	1.63	0.64				
	1981	814	107	415	127	4.16	56.5	14/12	0.69	06/09	9.1	2.36	0.85		
	1982	871	114	455	140	4.56	85.0	09/12	0.80	13/09	10.3	2.34	0.88		
	1983	709	93	347	106	3.48	37.0	18/04	0.78	07/10	7.5	2.21	0.87		
	1984	814	100	421	129	4.22	59.2	24/03	0.77	20/08	10.3	1.87	0.86		
	1985	750	99	383	117	3.83	84.1	26/12	0.94	01/11	8.3	2.10	1.02		
039069 Mole at Kinnersley Manor M.A.: TWA Level: 48m F.A.F.: C.A.: 142.0 km ² Comment: Rectangular flume, 7m wide at throat, plus 1.86m rectangular side sluice. Calibration based on current meter gaugings which extend beyond bankfull. Net import of water (sewage effluent) but very moderate overall impact of artificial influences. # A largely impervious catchment (mostly Weald Clay). Very mixed land use - rural tracts and urban centres; Gatwick Airport is in the catchment.	72..80	815	419	1.89	68.5	28/12 1979	0.12	01/09 1976	4.0	0.82	0.23				
	1981	845	104	478	114	2.15	30.0	14/12	0.27	09/09	4.4	1.17	0.33		
	1982	880	108	514	123	2.31	55.1	09/12	0.21	29/07	5.1	1.12	0.28		
	1983	734	90	382	91	1.72	22.5	18/04	0.27	30/10	3.5	0.96	0.31		
	1984	814	100	461	110	2.07	27.6	23/11	0.22	08/07	4.9	0.84	0.28		
	1985	750	92	434	104	1.95	41.9	26/12	0.36	29/09	4.0	1.06	0.40		
039073 Chum at Cirencester M.A.: TWA Level: 111m F.A.F.: S-full: 9.4 m ³ s ⁻¹ C.A.: 84.0 km ² Comment: Flat V weir (1:10 cross-slope, 4.5m broad). Auxiliary downstream water level recorder. Full range station. Predominantly natural catchment; some diminution of flow due to groundwater abstractions. # Pervious (Oolitic Limestone) catchment on the dip-slope of the Cotswolds. Primarily rural.	79-80		332	0.88	2.9	28/12 1979	0.07	13/11 1979	2.1	0.59	0.09				
	1981		333	100	0.89	2.8	25/03	0.08	09/09	1.6	0.75	0.13			
	1982		403	121	1.07	2.9	19/03	0.05	18/09	2.5	0.76	0.07			
	1983		289	87	0.77	2.7	19/05	0.09	12/10	2.0	0.60	0.11			
	1984		259	78	0.69	2.6	27/11	0.05	12/09	1.8	0.35	0.06			
	1985		377	114	1.00	2.4	08/02	0.29	02/10	1.8	0.97	0.32			
039074 Ampney Brook at Sheepen Bridge M.A.: TWA Level: 78m F.A.F.: S-full: 9.4 m ³ s ⁻¹ C.A.: 74.4 km ² Comment: Flat V weir (1:10 cross-slope, 4.5m broad); auxiliary downstream recorder installed. Small diminution of flow due to groundwater abstraction, otherwise a naturally responding catchment. # The Ampney Brook rises in the pervious Great Oolite series but the lower catchment is principally Oxford Clay. A rural catchment.	1980		337	0.79	4.8	08/02 1980	0.00	15/09 1980	1.8	0.62	0.02				
	1981		359	107	0.85	5.1	29/12	0.02	10/09	1.7	0.78	0.05			
	1982		392	116	0.93	7.2	15/03	0.00	20/08	2.3	0.69				
	1983		310	92	0.73	7.6	01/05	0.02	12/09	1.8	0.49	0.03			
	1984		295	88	0.70	5.5	24/11	0.00	21/07	2.1	0.26				
	1985		344	102	0.81	5.2	08/02	0.19	05/10	1.5	0.55	0.28			
039075 Marston Meysey Bk at Whetstone Bridge M.A.: TWA Level: 76m F.A.F.: S-full: 1.5 m ³ s ⁻¹ C.A.: 25.0 km ² Comment: Flat V weir (1:10 cross-slope, 3.0m broad). Unreliable for high flow measurement - weir overwhelmed. No significant abstractions or discharges but occasional direct augmentation from groundwater (e.g. during pumping tests throughout August 1983). # The Marston Mersey Brook rises in the Great Oolite Series (pervious) but is predominantly impervious (Oxford Clay). Rural.	1980					0.8	16/10 1980	0.00	15/09 1980						
	1981		179	0.14	2.2	29/12	0.00	25/08	0.3	0.09					
	1982		196	0.16	2.4	15/03	0.00	11/07	0.4	0.07					
	1983		112	0.09	0.7	12/05	0.00	06/09	0.2	0.06	>0.00				
	1984		117	0.09	2.1	12/11	0.00	25/06	0.3	0.01					
	1985		169	0.13	3.5	24/12	0.01	24/07	0.3	0.05	0.01				

			Period	Rainfall (mm)	Runoff (mm)	Mean flow (m ³ s ⁻¹)	Peak flow (m ³ s ⁻¹)	Date of peak	Min. daily flow (m ³ s ⁻¹)	Date of min.	10 Percentile (m ³ s ⁻¹)	50 Percentile (m ³ s ⁻¹)	95 Percentile (m ³ s ⁻¹)
				% of pre-1981	% of pre-1981								
039076	Windrush at Worsham	C.A: 296.0 km ²	76-80										
M.A: TWA	Level: m	F.A.F:											
Comment: Twin, adjustable radial gate (sharp-crested) weirs. Calibration allows for nine separate gate settings. Drowning is very rare. Some early (from 1942) data held by TWA for the original rhymer weir. Negligible disturbance to the natural flow regime. # A pervious (Oolitic Limestone) catchment on the dip-slope of the Cotswolds. Predominately rural - Witney is the largest settlement.													
1981				315	101	2.96	18.9	28/12	0.61	27/11	5.4	2.34	0.82
1982								1979		1978			
1983				319	98	3.00	10.0	29/12	0.93	09/09	5.2	2.66	1.07
1984				309	98	2.90	11.2	16/03	0.58	12/09	5.8	2.04	0.74
1985				238	76	2.24	12.0	23/11	0.51	02/09	4.9	1.57	0.57
				293	93	2.74	14.6	24/12	0.97	01/10	4.3	2.56	1.08
039077	Og at Marlborough Pouton Fm	C.A: 59.2 km ²	1980										
M.A: TWA	Level: 125m	F.A.F: S-full: 3.3 m ³ s ⁻¹											
Comment: Flat V weir (width: 3.0m) with auxiliary downstream recorder - seasonal weed growth causes drowning. The flow regime is natural and dominated by baseflow. # The Og is a Chalk stream draining from the Marlborough Downs. A rural catchment.													
1981				176	0.33	0.8	0.8	10/04	0.11	13/10	0.6	0.23	0.12
1982				206	0.39	1.1	1.1	15/03	0.03	19/10	0.8	0.29	0.04
1983				190	0.36	1.0	1.0	31/01	0.03	13/12	0.8	0.40	0.04
1984				147	0.28	1.2	1.2	06/02	0.01	01/11	0.7	0.17	0.01
1985				175	0.33	1.0	1.0	08/02	0.05	28/11	0.7	0.24	0.06
039078	Wey(north) at Farnham	C.A: 191.1 km ²	78-80										
M.A: TWA	Level: 64m	F.A.F:											
Comment: Crump weir (width: 9.14m) with thin-plate along the crest line. Calibration is theoretically based - a few confirmatory gaugings. Modular. Possible high flow bypassing via culvert immediately upstream. Minor disturbance to the natural flow regime. # A mainly Chalk catchment with Gault Clay in the lower reaches. Predominately rural, some urban development on the watershed.													
1981				116	100	0.70	11.6	28/12	0.14	30/11	1.3	0.52	0.20
1982								1979		1978			
1983				118	102	0.71	4.9	29/12	0.21	25/08	1.2	0.57	0.24
1984				112	97	0.68	5.9	09/12	0.13	29/08	1.4	0.62	0.16
1985				92	79	0.55	5.6	03/01	0.17	19/11	1.2	0.65	0.22
							5.3	24/03	0.12	28/08	1.4	0.53	0.17
							8.7	26/12	0.14	29/09	1.0	0.42	0.17
039081	Ock at Allott Gardens	C.A: 234.0 km ²	62..80	655	199	1.48	15.8	06/03	0.11	23/08	3.4	0.76	0.31
M.A: TWA	Level: 51m	F.A.F: S-full: 22.7 m ³ s ⁻¹						1972		1976			
Comment: Crump weir (width: 7.79m) with crest tapping superseded original compound structure in 1979. Weir drowns during floods and overspill occurs into Sandford Brook - rarely but more common pre-1979. Substantial channel improvements during POR. Flow regime is sensibly natural. Contributing area exceeds the topographical catchment. # The Ock drains a flat, rural valley in the Vale of the White Horse. Mixed geology - 50% pervious; Chalk downland forms the southern watershed, remainder is mostly Tertiary clays.													
1981				732	112	2.83	15.0	15/12	0.51	09/09	4.4	1.43	0.61
1982				676	103	2.83	15.6	16/03	0.36	18/09	4.6	1.21	0.43
1983				192	96	1.42	12.9	01/05	0.40	29/08	2.9	0.99	0.44
1984				181	91	1.34	12.5	27/01	0.29	06/09	2.7	0.88	0.31
1985				225	113	1.67	11.7	26/12	0.44	06/11	3.2	1.09	0.49
039086	Gatwick Stream at Gatwick Link	C.A: 33.6 km ²	75-80	833	599	0.64	25.9	12/11	0.11	15/08	1.3	0.44	0.18
M.A: TWA	Level: 55m	F.A.F: E						1976		1976			
Comment: Crump weir (4.6m broad) with crest tapping; located at the end of a culvert. Modular apart from exceptional discharges. Flow pattern affected by sewage effluent and urban runoff. # Mixed geology but mainly impervious (Weald Clay). Mixed land use with significant urban and forested areas.													
1981				889	107	699	10.2	06/08	0.25	30/08	1.4	0.56	0.27
1982				909	109	717	14.7	08/12	0.25	11/08	1.4	0.55	0.28
1983				577	96	0.61	5.9	05/06	0.23	26/08	1.2	0.48	0.25
1984				872	105	689	8.6	23/01	0.24	26/08	1.6	0.47	0.26
1985				813	98	619	9.6	20/05	0.27	01/11	1.2	0.51	0.30
039087	Ray at Water Eston	C.A: 84.1 km ²	74-80	707	453	1.21	32.2	27/09	0.26	28/08	2.3	0.71	0.39
M.A: TWA	Level: 76m	F.A.F:						1974		1976			
Comment: Crump weir (width: 5.195m) with auxiliary crest and downstream recorders. Close to confluence with the Thames - frequent drowning; very high submergence ratios - high flow data is of limited precision. Flow pattern is heavily influenced by the runoff from Swindon (sewage effluent, balancing ponds etc.); net import of water. # A relatively flat impervious clay catchment. Largely agricultural land use; growing urbanisation in the headwaters.													
1981				771	109	580	13.8	07/03	0.43	05/09	3.0	1.00	0.51
1982				788	111	608	17.7	15/03	0.48	04/09	3.4	1.02	0.51
1983				655	93	440	9.0	01/06	0.46	29/08	2.1	0.89	0.51
1984				718	102	521	12.4	23/11	0.42	27/08	3.0	0.86	0.45
1985				731	103	491	17.1	24/12	0.36	07/07	2.3	0.93	0.45
039088	Chess at Rickmansworth	C.A: 105.0 km ²	74-80	778	171	0.57	1.5	18/08	0.05	28/08	0.9	0.56	0.15
M.A: TWA	Level: 47m	F.A.F: G						1977		1976			
Comment: Crump weir (6.0m broad) with auxiliary downstream recorder. Full range station. The baseflow dominated flow regime is influenced by sewage effluent and groundwater abstractions; net export from the catchment. # The Chess is a Chalk stream draining the dip-slope of the Chilterns. Headwaters are rural; significant urban growth in the lower valley.													
1981				786	101	189	1.1	06/08	0.42	03/01	0.8	0.62	0.47
1982				858	110	210	1.2	02/06	0.43	16/09	0.9	0.70	0.49
1983				703	90	255	1.4	16/05	0.49	18/11	1.1	0.91	0.51
1984				822	106	170	1.1	24/03	0.32	11/11	0.7	0.57	0.37
1985				709	91	171	1.6	11/02	0.33	22/11	0.8	0.54	0.35
039094	Crane at Marsh Farm	C.A: 81.0 km ²	77-80		220	0.56	13.4	28/12	0.00	06/12	1.4	0.29	0.03
M.A: TWA	Level: m	F.A.F:						1979		1978			
Comment: Rectangular critical depth flume in a straight concrete channel. Theoretical rating; modular limit to be determined. Capacity approx. 30 m ³ s ⁻¹ ; yet to be exceeded. Substantial artificial influence on flow pattern; automatic weir u/s diverts flow into the Duke's River, considerable area of gravel workings; some runoff gain from the Colne catchment. # A very flat catchment - drainage network is difficult to delineate in parts. Mainly urban; catchment contains Heathrow Airport and several pumped storage res. (abstracting from the Thames).													
1981					225	102	8.4	02/06	0.01	19/07	1.3	0.35	0.03
1982					183	83	6.1	03/02	0.00	05/12	1.0	0.27	0.01
1983					97	44	11.4	01/06	0.00	01/01	0.7	0.05	0.01
1984					223	101	0.57				1.2	0.34	0.07
1985													
039097	Thames at Buscot	C.A: 997.0 km ²	1980										
M.A: TWA	Level: m	F.A.F:											
Comment: A complex weir - radial gates and overfall weirs embracing two channels. Two upstream and two downstream head recorders. Calibrated using current meter measurements. All but highest flows contained. # Mixed geology; runoff from the Cotswolds (Oolitic Limestone) provides a significant baseflow but the Oxford Clay valley is much more responsive. Land use is rural/agricultural with settlements concentrated in the valley where gravel extraction is significant.													
1981					332	10.48	39.9d	10/03	1.62	09/09	21.3	9.15	2.00
1982					367	11.61	57.7d	02/01	1.31	11/08	26.5	6.51	1.46
1983					275	8.70	34.8d	04/01	1.21	19/11	21.5	6.56	1.92
1984					267	8.44	35.2d	27/12	0.94	02/09	21.8	4.38	1.04
1985					341	10.74	49.3d	22/01	2.85	02/10	21.5	7.94	3.51
039101	Aldboune at Ramsbury	C.A: 53.1 km ²											
M.A: TWA	Level: m	F.A.F:											
Comment: Two Flat V weirs - 1:10 cross-slopes (one is located on a bypass stream). Theoretical calibration. All flows contained. Sensibly natural flow regime. # The Aldboune drains a Chalk downland catchment. Land use is predominately agricultural - Aldboune is the only significant settlement.													
1981					139	0.23	0.7	31/01	0.04	12/12	0.5	0.24	0.04
1982					109	0.18	0.7	20/02	0.04	18/11	0.5	0.08	0.04
1983													
1984					120	0.20	0.6	03/03	0.05	28/11	0.5	0.17	0.05
1985													
040012	Darent at Hawley	C.A: 191.4 km ²	83-80	741	105	0.64	49.0f	16/09	0.00	27/11	1.3	0.51	
M.A: TWA	Level: 11m	F.A.F:						1988		1976			
Comment: Crump weir (7.62m broad). Crest width is restricted during periods of low flow to increase sensitivity. Station is bypassed in exceptional floods. Discharges are reduced by groundwater abstractions; the Darent is also influent above Hawley. Flow pattern affected by upstream sluice activity. # A mainly pervious (Chalk) catchment; predominately rural with some expanding urban centres.													
1981				742	100	89	2.4	30/12	0.12	10/09	0.9	0.48	0.19
1982				776	105	120	13.1	15/05	0.06	18/09	1.3	0.65	0.10
1983				675	91	125	3.1	18/06	0.15	18/11	1.4	0.71	0.24
1984				754	102	98	2.6	24/11	0.07	19/09	1.2	0.54	0.09
1985				670	90	83	4.4	28/12	0.10	05/11	1.0	0.44	0.12

SOUTHERN WATER



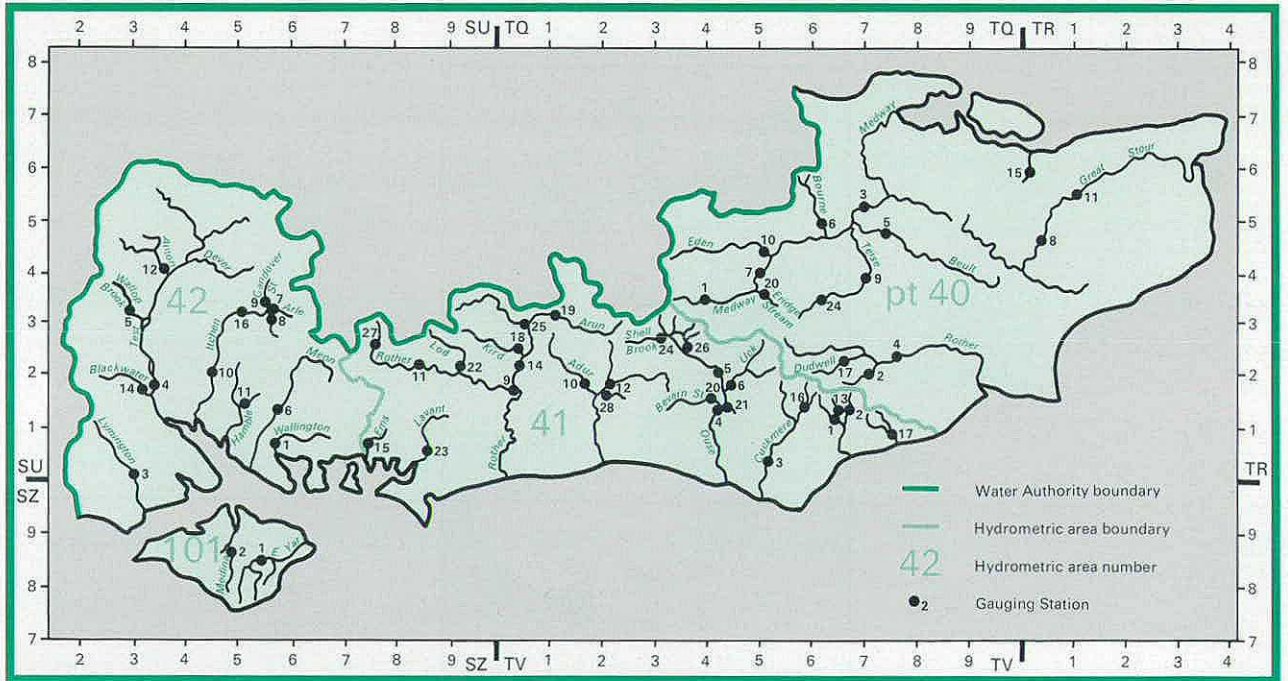
Area: 10,552 km²

Average Rainfall (1941-70): 794 mm

Headquarters of Southern Water:

Guildbourne House
Worthing
Sussex BN11 1LD

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Gauging Station Register

Station number	River name	Station name	Grid reference	Catchment area (sq km)	Station type	Period of record	Mean ann. rainfall (mm)	Mean ann. runoff (mm)	Max. ann. runoff (mm)	Year of max.	Min. ann. runoff (mm)	Year of min.	Mean flow (m ³ s ⁻¹)	Min. mon. flow (m ³ s ⁻¹)	Monthly/Year of min.	Mean ann. flood (m ³ s ⁻¹)	Base flow index	10 Percentile (m ³ s ⁻¹)	95 Percentile (m ³ s ⁻¹)
040001	Medway	Weir Wood Res	TQ 407353	26.9	MIS	1953-67	906	195	312	58	88	65	0.17	0.04	03/62		.43	0.4	0.04
040002	Darwell	Darwell Res	TQ 722213	9.6	MIS	1956..75	943	66	342	60	20	71	0.02	>0.00	12/71		.41	0.0	>0.00
040003	Medway	Teston	TQ 708530	1256.1	MIS	1956..85	759	278	485	60	190	62	11.08	0.58	08/76	139.6	.41	25.1	1.45
040004	Rother	Udiam	TQ 773245	206.0	VA	1962..85	867	322	509	66	116	73	2.10	0.18	10/69	37.4	.40	5.0	0.24
040005	Buft	Stile Bridge	TQ 758478	277.1	MIS	1958..85	698	238	448	60	127	62	2.09	>0.00	08/76	38.0	.24	5.9	0.07
040006	Bourne	Hadlow	TQ 632497	50.3	FL	1959..82	734	241	322	60	167	72	0.38	0.12	07/74	9.2	.62	0.7	0.15
040007	Medway	Chafford Weir	TQ 517405	255.1	B	1960..85	867	372	570	74	173	73	3.01	0.00	02/68	51.5	.50	5.8	0.56
040008	Great Stour	Wye	TR 049470	230.0	C VA	1962..85	737	295	475	66	166	73	2.15	0.31	08/76	19.3	.57	4.8	0.51
040009	Teise	Stone Bridge	TQ 718399	136.2	B VA	1961-85	800	313	486	66	129	73	1.35	0.10	08/76	28.3	.45	2.8	0.19
040010	Eden	Penshurst	TQ 520437	224.3	C	1961..85	786	268	369	66	116	73	1.91	0.18	07/76	30.8	.35	4.1	0.23
040011	Great Stour	Horton	TR 116554	345.0	B VA	1964..85	755	298	431	66	165	73	3.26	0.88	08/76	21.3	.69	6.1	1.24
040015	White Drain	Fairbrook Farm	TR 055606	31.8	FL	1969..84	664	55	73	75	20	73	0.05	0.01	08/76		.46	0.1	0.01
040017	Dudwell	Burwash	TQ 679240	27.5	C	1971..85	691	369	425	77	158	73	0.32	0.04	08/76		.44	0.5	0.05
040020	Eridge Stream	Hendal Bridge	TQ 522367	53.7	VA	1973..85	883	458	534	75	439	82	0.78	0.06	08/76		.44	1.7	0.10
040024	Bartley St	Bartley Mill	TQ 633357	25.1	B	1974..81	908	452	456	79	386	78	0.38	0.03	08/76		.44	0.7	0.05
041001	Nunningham	Tilley Bridge	TQ 662129	16.9	MIS	1950..85	849	343	571	51	99	73	0.18	0.01	08/76		.36	0.4	0.01
041002	Ash Bourne	Hammer Wd Br	TQ 684141	18.4	MIS	1951..85	871	413	632	60	168	73	0.24	0.04	08/59		.51	0.8	0.04
041003	Cuckmere	Sherman Bridge	TQ 533051	134.7	CBVA	1959..85	831	344	691	60	105	73	1.47	0.02	08/76	31.5	.27	3.4	0.08
041004	Ouse	Barcombe Mills	TQ 433148	395.7	MIS	1956..85	850	371	652	60	123	73	4.66	0.14	08/76		.43	10.5	0.40
041005	Ouse	Gold Bridge	TQ 429214	180.9	CBVA	1960..85	876	391	568	74	163	73	2.24	0.16	08/76	38.1	.49	5.0	0.28
041006	Uck	Isfield	TQ 459190	87.8	C	1964-85	834	405	699	74	172	73	1.13	0.11	08/76	36.7	.42	2.3	0.18
041009	Rother	Hardham	TQ 034178	345.8	B	1959-76	912	444	750	60	226	73	4.87	1.15	08/76		.62	9.8	1.73
041010	Adur West	Hatterell Bridge	TQ 178197	109.1	FL	1961..85	800	280	384	79	230	85	0.97	0.01	08/76		.24	2.6	0.03
041011	Rother	Iping Mill	SU 852229	154.0	CC	1966..85	931	437	583	68	204	73	2.13	0.42	08/76	43.0	.63	4.3	0.65
041012	Adur East	Sakeham	TQ 219190	93.3	CC	1967..85	830	393	580	74	162	73	1.16	0.08	08/76	22.9	.36	2.7	0.15
041013	Huggletts St	Henley Bridge	TQ 671138	14.2	MIS	1950..85	843	335	557	60	100	73	0.15	0.01	10/72		.36	0.3	0.02
041014	Arun	Pallingham Quay	TQ 047229	379.0	B VA	1970..85	777	302	501	74	111	73	3.63	0.21	08/76	63.3	.32	8.5	0.31
041015	Ems	Westbourne	SU 755074	58.3	CC	1967..85	918	220	360	83	48	76	0.41	0.01	07/76	1.9	.92	1.0	0.02
041016	Cuckmere	Cowbeech	TQ 611150	18.7	CC	1939..85	891	218	469	74	84	73	0.13	0.01	08/76	9.7	.38	0.3	0.01
041017	Combehaven	Crowhurst	TQ 765102	30.5	CC	1969..85	779	305	424	80	101	73	0.30	0.02	08/82		.45	0.7	0.02
041018	Kird	Tanyards	TQ 044256	66.8	C	1969..85	785	369	592	74	89	73	0.78	0.00	08/76	19.8	.18	1.9	
041019	Arun	Alfoldean	TQ 117331	139.0	CC	1970..85	807	383	645	74	134	73	1.69	0.08	08/76		.30	4.0	0.14
041020	Bevern St	Clappers Bridge	TQ 423161	34.6	C	1969..85	857	421	666	74	156	73	0.46	0.02	08/76	12.9	.28	1.2	0.03
041021	Clayhill St	Old Ship	TQ 448153	7.1	C	1959..85	781	360	591	74	107	73	0.08	0.00	08/84		3.7	1.8	0.2
041022	Lod	Halfway Bridge	SU 931223	52.0	C	1970..85	868	353	516	74	148	73	0.58	0.01	08/76	20.0	.35	1.4	0.05
041023	Lavant	Graylingwell	SU 871064	87.2	FV	1970..85	937	94	151	77	73	73	0.26	0.00	12/85	1.5	.66	0.8	
041024	Shell Brook	Shell Brook P S	TQ 335286	22.6	C	1971-85	861	335	544	74	181	76	0.24	0.02	08/79		.52	0.5	0.02
041025	Loxwood St	Drungewick	TQ 060309	91.6	CC	1971..85	821	387	520	81	107	73	1.13	0.02	08/76	39.0	.22	2.7	0.04
041026	Cockhalse Bk	Holywell	TQ 376262	36.1	C VA	1971..85	849	342	511	74	136	73	0.39	0.03	08/76	9.0	.53	0.9	0.05
041027	Rother	Princes Marsh	SU 772270	37.2	C	1972-85	880	427	590	74	244	73	0.50	0.11	08/76	11.3	.80	1.0	0.16
041028	Chess Stream	Chess Bridge	TQ 217173	24.0	MIS	1964..85	846	367	671	74	113	73	0.28	0.01	08/73	7.7	.38	0.6	0.02
042001	Wallington	North Fareham	SU 587075	111.0	FL	1951..85	841	180	376	60	50	73	0.63	0.02	08/76	14.0	.41	1.6	0.04
042003	Lymington	Brockenhurst Pk	SU 318019	98.9	VN	1960..85	840	324	427	67	130	73	1.02	0.01	07/82		.36	2.6	0.06
042004	Test	Broadlands	SU 354188	1040.0	VA	1957..85	815	344	487	61	200	76	11.33	3.71	07/76		.94	16.8	5.94
042005	Wallop Brook	Broughton	SU 311330	53.6	TP	1955..85	814	229	482	60	63	76	0.39	0.00	09/76	1.1	.93	0.8	0.03
042006	Meon	Mislingford	SU 589141	72.8	FL	1958-85	921	429	786	60	145	73	0.99	0.07	08/76	2.9	.93	2.0	0.22
042007	Aire	Alresford	SU 574326	57.0	C	1970..85	877	873	998	83	614	76	1.58	0.17	08/76		.98	2.1	0.98
042008	Cheriton St	Sewards Bridge	SU 574323	75.1	C	1970-85	891	267	322	79	171	73	0.64	0.17	08/76	1.4	.97	1.0	0.30
042009	Candover St	Borough Bridge	SU 588323	71.2	C	1970-85	836	243	290	83	158	73	0.55	0.25	10/73	1.0	.96	0.8	0.30
042010	Itchen	Highbridge	SU 467213	360.0	MIS	1958-85	851	471	578	60	325	73	5.37	2.33	08/76		.97	7.8	3.10
042011	Hamble	Frog Mill	SU 523149	56.6	C	1972-85	878	238	309	77	80	73	0.43	0.05	08/76	7.7	.67	0.8	0.11
042012	Anton	Fullerton	SU 379393	185.0	C	1975-85	774	322	382	82	172	76	1.89	0.55	08/76	3.6	.96	2.8	0.96
042014	Blackwater	Ower	SU 328174	104.7	C VA	1976..85	925	306	343	78	218	85	1.02	0.17	08/84	16.5	.41	2.2	0.19
042016	Itchen	Easton	SU 512325	236.8	VA	1975..83	582	639	82	442	76	47	4.37	2.46	08/76		.98	5.9	2.90
101001	Eastern Yar	Alverstone Mill	SZ 577857	57.5	TP	1961-76	867	268	311	75	164	73	0.49	0.09	08/76		.59	0.9	0.13
101002	Medina	Upper Shide	SZ 503874	29.8	FL	1965..85	945	274	355	81	129	73	0.26	0.04	08/76		.64	0.4	0.07

Hydrometric Statistics

			Period	Rainfall (mm)	Runoff (mm)	Mean flow (m ³ s ⁻¹)	Peak flow (m ³ s ⁻¹)	Date of peak	Min. daily flow (m ³ s ⁻¹)	Date of min.	10 Percentile (m ³ s ⁻¹)	50 Percentile (m ³ s ⁻¹)	95 Percentile (m ³ s ⁻¹)			
				% of pre-1981	% of pre-1981											
040003	Medway at Teston	C.A.: 1256.1 km ²	56.80	757	279	11.10	294.5	04/11	0.22	04/09	25.4	4.90	1.40			
M.A.: SWA	Level: 7m	F.A.F.: SPG						1960		1973						
Comment: Crump weir plus a sharp-crested weir (the top of a flood gate) - superseded an insensitive broad-crested weir. Flows in excess of about 27 m ³ s ⁻¹ are measured at a well calibrated velocity-area section 2km d/s (East Farleigh). The Teston calibration makes an allowance for lock spills. Some monthly naturalised flows available (1956-68; accounting for the operation of Weir Wood reservoir). # A predominately impervious (Hastings Beds) catchment; very responsive to rainfall. Mixed land use with significant areas of woodland and orchard.				1981	786	104	281	101	11.19	113.0d	14/12	1.85	08/09	24.2	6.58	2.40
			1982	811	107	320	115	12.75	149.5d	10/12	1.77	12/08	28.2	5.72	2.13	
			1983	698	92	253	91	10.07	80.8	18/04	1.80	14/11	23.5	6.14	2.15	
			1984	797	105	275	99	10.94	119.6	27/01	1.47	12/09	26.1	4.67	1.85	
			1985	734	97	259	93	10.29	198.7	27/12	1.61	14/10	20.5	5.91	2.34	
040004	Rother at Udlam	C.A.: 206.0 km ²	62.80	859	316	2.07	51.8	09/12	0.11	02/11	4.9	0.90	0.23			
M.A.: SWA	Level: 2m	F.A.F.: SGE						1965		1969						
Comment: Broad-crested weir, high flows monitored at associated velocity-area section - rating is imprecise due to backwater effects and, for certain periods, the influence of d/s land drainage works. Flow is confined to the measuring reach (at Udlam) except in extreme flows. Darwell pumped storage reservoir controls about 5% of the catchment. Small net export of water from the catchment. # A responsive catchment developed mainly on Hastings Beds (60% impervious clays). Rural (no substantial settlements) - significant expanses of woodland.				1981	899	105	343	109	2.24	21.0	11/12	0.27	21/07	5.3	1.31	0.35
			1982	921	107	363	115	2.37	41.0	25/11	0.30	29/06	5.5	1.14	0.35	
			1983	798	93	281	89	1.84	18.1	04/01	0.18	23/11	4.1	1.12	0.29	
			1984	978	114	372	118	2.43	47.8	23/11	0.22	01/08	6.7	0.81	0.27	
			1985	887	103											
040005	Bewl at Stile Bridge	C.A.: 277.1 km ²	58.80	701	241	2.11	81.0	04/11	0.00	20/08	5.8	0.52	0.07			
M.A.: SWA	Level: 12m	F.A.F.: EI						1960		1976						
Comment: Compound structure - central flume separated, by short divide piers, from broad-crested flanking sections with a rated section for high flows. Calibration is based upon model tests and current metering. Flood banking confines flows. Small net impact of artificial influences on the flow regime. # Geology: principally Weald Clay (but includes some pervious sandstones) - baseflow is very low for a Kent catchment. Predominately rural with scattered settlements.				1981	676	96	223	93	1.95	36.3	14/12	0.08	10/09	5.7	0.67	0.10
			1982	712	102	274	114	2.41	47.5	25/11	0.04	01/08	6.7	0.49	0.09	
			1983	625	89	201	83	1.77	22.8	06/04	0.05	17/08	5.6	0.55	0.10	
			1984	709	101	235	98	2.07	35.9	23/01	0.05	22/08	7.6	0.36	0.07	
			1985	675	96											
040007	Medway at Chafford Weir	C.A.: 255.1 km ²	60.80	866	381	3.09	127.4	03/11	0.00	21/03	5.9	1.52	0.56			
M.A.: SWA	Level: 31m	F.A.F.: SE						1960		1968						
Comment: Humped trapezoidal flume (capacity 8.5 m ³ s ⁻¹) for low flows plus a rated section - 0.8km d/s - at Colliers Land Bridge; gaugings above bankfull included in the calibration. Channel subject to erosion during floods. Catchment includes Weir Wood Res. Sluices u/s can influence levels. Quite a responsive regime despite significant baseflow. # Geology: mixed but mainly Ashdown Sands and Wadhurst Clay. The Medway drains from Ashdown Forest, lower catchment is rural in character.				1981	900	104										
			1982	901	104	319	84	2.58	11.1	07/12	0.00	22/10	5.7	1.69	0.52	
			1983	784	91	318	83	2.57	35.2	20/12	0.00	04/01	5.3	1.95	0.63	
			1984	885	102	304	80	2.46	11.1	25/10	0.00	26/01	6.5	1.44	0.52	
			1985	863	100	340	89	2.74	44.0	26/12	0.75	03/11	5.7	1.91	0.82	
040009	Teise at Stone Bridge	C.A.: 136.2 km ²	61.80	791	309	1.33	48.3	28/12	0.07	20/08	2.8	0.73	0.18			
M.A.: SWA	Level: 25m	F.A.F.: PGE						1979		1976						
Comment: Broad-crested weir (crest width: 5.95m; weir capacity: approx. 3 m ³ s ⁻¹) in trapezoidal section with velocity-area section immediately upstream. Well calibrated throughout the flow range. Overtake for Bewl Bridge reservoir is about 1km upstream - flows are slightly diminished in the winter and augmented during periods of low flow. # A rural catchment developed on sands and clays of the Wealden Series - predominately pervious.				1981	864	109	335	108	1.45	21.2	30/03	0.31	20/07	2.9	0.95	0.62
			1982	925	117	394	128	1.70	19.8	10/12	0.36	10/10	3.4	1.08	0.66	
			1983	766	97	323	105	1.39	15.0	04/01	0.37	25/08	2.5	0.97	0.58	
			1984	868	110	299	97	1.29	19.8	16/01	0.16	29/10	2.7	0.75	0.32	
			1985	822	104	293	95	1.26	19.6	26/12	0.23	04/01	2.5	0.79	0.35	
040011	Great Stour at Horton	C.A.: 345.0 km ²	64.80	762	306	3.35	38.3	09/04	0.73	27/08	6.3	2.43	1.25			
M.A.: SWA	Level: 13m	F.A.F.: GE						1979		1976						
Comment: Broad-crested weir (crest width: 10.7m) in a trapezoidal section with an associated velocity-area section for flows in excess of 20 m ³ s ⁻¹ . The net impact of artificial influences on overall runoff is minor but regulation at a mill 1km upstream is evident on the water level hydrograph. A very limited amount of naturalised data is available (1960s). # The East and West branches of the Stour flow over the impermeable Weald Clay; below the confluence (at Ashford) the geology is principally Chalk. A rural catchment with mixed land use.				1981	726	95	261	85	2.85	16.5	14/12	1.15	06/09	4.8	2.42	1.28
			1982	771	101											
			1983	687	90	306	100	3.35								
			1984	779	102	271	89	2.96	20.5	24/01	1.00	24/08	6.3	2.21	1.10	
			1985	713	94	257	84	2.80	26.6	27/12	1.00	03/11	4.6	2.11	1.19	
041001	Nunningham Stream at Tilley Bridge	C.A.: 16.9 km ²	50.80	852	334	0.18	11.9	17/11	0.01	28/08	0.4	0.07	0.01			
M.A.: SWA	Level: 4m	F.A.F.: N						1983		1976						
Comment: Compound critical depth flume with penstocks - these are lowered (creating sharp-crested weirs) to retain water levels for irrigation purposes in the summer. Early flow records unreliable. Frequency of drowning reduced following downstream channel improvements - under non-modular conditions flows are estimated using data from 041002. # Varied topography developed on Hastings Beds - some permeable strata but catchment is responsive. Essentially arable with considerable woodland.				1981	830	97	398	119	0.21			0.01	05/09	0.6	0.10	0.02
			1982	842	99	427	128	0.23			0.01	16/09	0.5	0.09	0.01	
			1983	738	87	347	104	0.19	7.8	03/01	0.01	08/09	0.4	0.09	0.02	
			1984	910	107	501	150	0.27			0.01	04/09	0.9	0.05	0.01	
			1985	799	94	283	85	0.15			0.02	27/10	0.3	0.07	0.02	
041005	Ouse at Gold Bridge	C.A.: 189.9 km ²	60.80	878	387	2.22	86.9	22/11	0.12	21/08	4.8	1.21	0.27			
M.A.: SWA	Level: 11m	F.A.F.: SRPGE						1974		1976						
Comment: Compound broad-crested weir (10.7m wide) for low flows; velocity-area station for higher flows. All but exceptional floods contained - 2 subsidiary culverts accommodate overflow. Abstractions and discharges have a limited net impact on river flows. # A mainly pervious catchment; Hastings Beds predominate - particularly Tunbridge Wells Sands. Land use is mixed - chiefly rural with significant woodland but some urban centres.				1981	929	106	484	125	2.78	32.4	14/12	0.48	02/09	6.0	1.87	0.51
			1982	891	101	429	111	2.46								
			1983	785	89											
			1984	881	100	410	106	2.35	32.7	23/01	0.40	20/08	6.0	1.21	0.46	
			1985	834	95	381	98	2.18	31.2	21/01	0.45	04/11	5.0	1.52	0.55	
041006	Uck at Isfield	C.A.: 87.8 km ²	64.80	831	386	1.07	75.6	13/02	0.07	03/09	2.2	0.52	0.17			
M.A.: SWA	Level: 11m	F.A.F.: E						1974		1976						
Comment: Crump weir (7.62m wide) with crest tapping. Modular capacity is 51 m ³ s ⁻¹ but structure is subject to drowning in the medium flow range. No substantial abstractions. # Catchment geology is very mixed; Hastings Beds predominate. Above Isfield the catchment is rural with significant areas of woodland.				1981	868	104	493	128	1.37	47.5	14/12	0.18	09/09	3.0	0.76	0.28
			1982	871	105	524	136	1.46	51.0	25/11	0.16	03/08	2.7	0.66	0.20	
			1983	775	93	381	99	1.06	38.9	04/01	0.14	11/11	2.2	0.67	0.19	
			1984	889	107	495	128	1.38	49.2	23/11	0.18	20/08	3.2	0.52	0.20	
			1985	845	102	446	116	1.24	52.1	21/01	0.19	25/10	2.4	0.67	0.26	
041011	Rother at Iping Mill	C.A.: 154.0 km ²	66.80	919	426	2.08	65.5	27/12	0.37	24/08	4.1	1.34	0.63			
M.A.: SWA	Level: 27m	F.A.F.: GE						1979		1976						
Comment: Compound Crump weir (crests: 3.05m and 2 x 5.03m broad). Modular except in exceptional floods - when bypassing also occurs. Large baseflow component in river flows. Limited impact of abstractions and discharges on the flow regime. The Rother is influent above Iping Mill. # Mixed geology; 60% pervious - large tracts of Lower Greensand. A mainly rural catchment with some urban development.				1981	1024	111										
			1982	1056	115	550	129	2.68	39.0	09/12	0.67	18/09	5.4	1.87	0.71	
			1983	877	95											
			1984	1015	110	492	115	2.40	28.5	16/01	0.59	11/09	5.3	1.40	0.65	
			1985	906	99	447	105	2.18	35.1	21/01	0.74	26/07	4.3	1.55	0.85	
041014	Arun at Pallingham Quay	C.A.: 379.0 km ²	70.80	753	296	3.56	93.6	12/01	0.12	13/09	8.4	1.33	0.28			
M.A.: SWA	Level: 4m	F.A.F.: E						1972		1973						
Comment: Broad-crested weir - 15m wide (rather insensitive) - velocity-area section for high flows. All but exceptional floods contained. Tidal influence can cause drowning. Relatively natural catchment. # A predominantly impervious (largely Weald Clay) catchment. Land use is mixed - basically rural (woodland > 20%) with a growing urban fraction.				1981	909	121	385	130	4.62	69.9	14/04	0.50	26/08	9.1	2.41	0.56
			1982	880	114											

				Period	Rainfall (mm)	Runoff (mm)	Mean flow (m ³ s ⁻¹)	Peak flow (m ³ s ⁻¹)	Date of peak	Min. daily flow (m ³ s ⁻¹)	Date of min.	10 Percentile (m ³ s ⁻¹)	50 Percentile (m ³ s ⁻¹)	95 Percentile (m ³ s ⁻¹)
041015	Ems at Westbourne	C.A: 58.3 km ²	67-80	893	194	0.36	4.5	07/08	0.00	18/10	1.0	0.19	0.01	
M.A: SWA	Level: 10m	F.A.F: G	S-full: 4.5 m ³ s ⁻¹											
Comment: Asymmetrical compound Crump weir (crests: 0.61m and 4.12m broad). Modular throughout flow range. All flows contained. Differential drawdown can affect river level measurement. Significant net export of water from the catchment (groundwater abstractions) but low flows augmented by compensation water. # The Ems - which is ephemeral over much of its length - is a Chalk stream draining from the South Downs. Largely rural. Significant woodland.														
			1981	1072	120									
			1982	1046	117	288	148	0.53	3.1	09/12	0.02	30/09	1.1	0.41
			1983	876	98	360	186	0.67	2.7	04/01	0.01	10/11	1.6	0.68
			1984	1032	116	194	100	0.36	1.7	26/03	0.02	11/10	1.1	0.15
			1985	879	98	260	134	0.48	2.3	21/01	0.03	28/11	1.2	0.28
041016	Cuckmere at Cowbeech	C.A: 18.7 km ²	39-80	893	197	0.12	18.1	04/11	0.00	21/06	0.2	0.07	0.01	
M.A: SWA	Level: 30m	F.A.F: PG	S-full: 10.0 m ³ s ⁻¹											
Comment: Asymmetrical compound Crump weir (crests: 2.13m and 2.97m broad) with crest tapping - not currently used. Structure capacity exceeded in large floods. Some low flow data back to 1939 held by SWA. Catchment is substantially natural but flows are diminished by water supply offtake upstream of the gauging station. # A rural catchment developed on mixed geology (Hastings Beds predominate).														
			1981	865	97	340	173	0.20	5.0	03/10	0.01	30/08	0.5	0.11
			1982	901	101	422	214	0.25	17.2	24/11	0.01	10/08	0.6	0.10
			1983	809	91	323	164	0.19	4.5	02/01	0.02	01/09	0.4	0.13
			1984	933	104	427	217	0.25	10.6	23/11	0.02	07/09	0.7	0.10
			1985	846	95	379	192	0.22	16.8	26/12	0.03	25/10	0.4	0.12
041017	Combehaven at Crowhurst	C.A: 30.5 km ²	69-80	771	301	0.29	7.5	21/11	0.01	24/10	0.7	0.14	0.02	
M.A: SWA	Level: 2m	F.A.F: G	S-full: 21.8 m ³ s ⁻¹											
Comment: Compound Crump weir (crests: 2.44m and 2 x 4.26m broad) subject to drowning. Full range station. Earliest data less reliable due to subsidence of the weir. # The catchment is 85% impervious (chiefly Wadhurst Clay) and predominantly rural with some urban centres.														
			1981	793	103	351	117	0.34	6.5	13/12	0.02	11/09	0.7	0.22
			1982	781	101	306	102	0.30	6.1	09/12	0.01	29/08	0.7	0.14
			1983	712	92	248	82	0.24	5.7	05/04	0.01	26/08	0.5	0.17
			1984	951	123	372	124	0.36	7.0	16/12	0.02	08/11	0.9	0.13
			1985	794	103	297	99	0.29	7.2	21/01	0.02	30/10	0.6	0.18
041019	Arun at Attoledean	C.A: 139.0 km ²	70-80	801	361	1.59	77.6	27/12	0.07	27/08	3.8	0.54	0.13	
M.A: SWA	Level: 21m	F.A.F: E	S-full: 84.5 m ³ s ⁻¹											
Comment: Asymmetrical compound Crump weir (crests: 4.0m and 6.0m broad) with crest tapping - not currently used. Structure drowns frequently. Stilling well leakage can influence water levels. Limited net impact of artificial influences on river flow. # Principally an impervious (Weald Clay) catchment given over to agriculture.														
			1981	887	111	490	136	2.16	77.0	14/04	0.13	02/09	4.6	1.07
			1982	850	106	491	136	2.16	76.0	09/12	0.09	20/09	4.7	0.77
			1983	752	94									
			1984	849	106	471	130	2.08	54.4	24/03	0.14	22/08	5.1	0.60
			1985	748	93	362	100	1.59	67.0	26/12	0.18	22/10	3.3	0.67
041020	Bevern Stream at Clappers Bridge	C.A: 34.6 km ²	69-80	846	397	0.44	20.7	22/11	0.01	09/09	1.1	0.14	0.03	
M.A: SWA	Level: 10m	F.A.F: E	S-full: 25.0 m ³ s ⁻¹											
Comment: Crump weir (crest: 6.0m broad) with crest tapping - not currently used. Modular limit is about 8 m ³ s ⁻¹ . All flows contained. Very limited impact of artificial influences on river flow. # Primarily an impervious (Weald Clay) catchment but northward flowing tributaries from the South Downs provide a significant baseflow. A rural catchment with considerable woodland.														
			1981	929	110	527	133	0.58	14.9	26/09	0.04	06/09	1.5	0.25
			1982	932	110	506	127	0.55	14.9	09/12	0.02	10/09	1.2	0.17
			1983	823	97									
			1984	913	108	480	121	0.53	15.4	23/01	0.02	21/08	1.7	0.10
			1985	844	100	409	103	0.45	17.1	21/01	0.04	08/07	1.1	0.17
041021	Clayhill Stream at Old Ship	C.A: 7.1 km ²	69-80	761	346	0.08	6.0	21/11	0.00	04/06	0.2	0.02		
M.A: SWA	Level: 6m	F.A.F: N	S-full: 13.9 m ³ s ⁻¹											
Comment: Crump weir (crest: 3.0m broad) with crest tapping - structure has proved to be modular throughout the flow range. Some (sporadic) early flow data available (at SWA) from 1955. # The Clayhill stream is ephemeral and drains an impervious (Weald Clay) catchment. Land use is almost exclusively rural with considerable woodland.														
			1981	861	113	421	122	0.09	3.9	03/10	0.00	06/07	0.3	0.03
			1982	871	114	492	142	0.11	6.1	24/11	0.00	29/05	0.2	0.01
			1983	747	98	296	86	0.07	2.7	03/01	0.00	29/06	0.2	0.02
			1984	844	111	429	124	0.10	4.5	23/11	0.00	01/05	0.3	0.01
			1985	811	107	337	97	0.08	5.2	21/01	0.00	01/06	0.2	0.01
041022	Lod at Halfway Bridge	C.A: 52.0 km ²	70-80	850	342	0.56	41.4	27/12	0.01	03/09	1.3	0.23	0.05	
M.A: SWA	Level: 14m	F.A.F: N	S-full: 41.0 m ³ s ⁻¹											
Comment: Crump weir (crest: 7.0m broad) with crest tapping - all but highest flows modular. Some bypassing in exceptional floods. Minor flow regulation associated with upstream mill. Flows are sensibly natural. # Primarily an impervious (Weald Clay) catchment with pervious (Lower Greensand) headwaters. Rural with considerable woodland.														
			1981	944	111	416	122	0.69	12.6	13/12	0.02	18/08	1.5	0.39
			1982	976	115	437	128	0.72	28.4	13/10	0.04	12/08	1.6	0.33
			1983	810	95	316	92	0.52	15.6	23/06	0.05	11/09	1.2	0.32
			1984	973	114	395	115	0.65	10.9	16/01	0.03	08/07	1.8	0.24
			1985	821	97	322	94	0.53	17.6	26/12	0.05	10/07	1.4	0.23
041023	Lavant at Graylingwell	C.A: 87.2 km ²	70-80	915	83	0.23	5.1	24/02	0.00	26/11	0.8			
M.A: SWA	Level: 21m	F.A.F: G												
Comment: Flat V weir; crest breadth 5m. Cross-slope 1:10. # The Lavant is an ephemeral stream draining the dip-slope of the South Downs (Chalk). A permeable catchment - sparsely populated in the headwaters. Land use is agricultural with some urban development close to Graylingwell.														
			1981	1036	113	140	169	0.39	1.8	01/04	0.00	26/08	1.3	0.25
			1982	1046	114									
			1983	855	93	128	154	0.35	1.8	03/01	0.00	16/08	1.2	0.22
			1984	1049	115									
			1985	909	99	115	139	0.32	1.5	08/02	0.00	23/07	1.0	0.04
041024	Shell Brook at Shell Brook P S	C.A: 22.6 km ²	71-80	853	324	0.23	11.3	21/11	0.00	14/02	0.5	0.13	0.04	
M.A: SWA	Level: 38m	F.A.F: SRP	S-full: 23.3 m ³ s ⁻¹											
Comment: Crump weir (crest: 4.0m broad). Runoff pattern changed fundamentally following the construction of Ardingly reservoir immediately upstream. # Catchment is mainly permeable Hastings Beds with Wadhurst Clay in the valley. A rural, heavily wooded basin.														
			1981	940	110	395	122	0.28	2.0	11/03	0.02	23/09	0.6	0.20
			1982	935	110	400	123	0.29	5.0	09/12	0.02	23/04	0.6	0.20
			1983	782	92	291	90	0.21	2.1	16/03	0.02	10/12	0.5	0.17
			1984	911	107	363	112	0.26	2.3	23/01	0.02	17/04	0.6	0.15
			1985	846	99	340	105	0.24	3.2	26/12	0.02	09/07	0.6	0.17
041025	Loxwood Stream at Drungewick	C.A: 91.6 km ²	71-80	805	378	1.10	58.8	27/12	0.01	27/08	2.5	0.22	0.04	
M.A: SWA	Level: 13m	F.A.F: N	S-full: 56.8 m ³ s ⁻¹											
Comment: Asymmetrical compound Crump weir (crests: 2.0m and 4.0m broad) with crest tapping. Full range; all flows contained. Abstractions and discharges have a negligible impact on river flow. # An impervious (Weald Clay), rural catchment.														
			1981	899	112	520	138	1.51	36.9	02/06	0.07	07/09	3.0	0.55
			1982	887	110	437	116	1.27	36.5	22/10	0.06	11/08	3.2	0.40
			1983	793	99	293	78	0.85	21.6	04/01	0.04	17/08	1.9	0.37
			1984	895	111	400	106	1.16	26.1	16/01	0.04	14/08	2.9	0.29
			1985	769	96									
041026	Cockhaise Brook at Holywell	C.A: 36.1 km ²	71-80	832	328	0.37	17.11	22/11	0.02	29/06	0.8	0.19	0.04	
M.A: SWA	Level: 29m	F.A.F: PG	S-full: 8.0 m ³ s ⁻¹											
Comment: Crump weir (crest: 3.50m broad) for low and medium range flows. The velocity-area calibration for high flows is incomplete. Limited impact of abstractions and discharges on river flow; small net loss. # Geology is mixed - 50% permeable (chiefly Hastings Beds). A rural catchment with considerable areas of woodland.														
			1981	929	112	404	124	0.46	5.3	10/03	0.06	09/09	1.0	0.33
			1982	916	110	401	123	0.46	8.1	09/12	0.05	17/09	1.1	0.27
			1983	788	95									
			1984	918	110	364	112	0.42	8.1	23/01	0.04	20/08	1.1	0.21
			1985	871	105	360	110	0.41	7.9	21/01	0.09	24/10	0.9	0.28

		Period	Rainfall (mm)	Runoff (mm)	Mean flow (m ³ s ⁻¹)	Peak flow (m ³ s ⁻¹)	Date of peak	Min. daily flow (m ³ s ⁻¹)	Date of min.	10 Percentile (m ³ s ⁻¹)	50 Percentile (m ³ s ⁻¹)	95 Percentile (m ³ s ⁻¹)
			% of pre-1981	% of pre-1981								
041027	Rother at Princes Marsh	C.A: 37.2 km ²										
M.A: SWA	Level: 56m	F.A.F: GE										
		S-full: 43.5 m ³ s ⁻¹										
Comment:	Crump weir (crest: 5.0m broad) with crest tapping - not currently used. Additional flow data available for prototype electromagnetic gauging station (1974-79) immediately downstream. # Mixed geology 50% permeable; Chalk predominates in the headwaters. A rural catchment with large woodland tracts.											
		72-80	638	416	0.49	23.0f	27/12	0.08	29/06	0.9	0.31	0.15
							1979		1978			
		1981	1015	121	483	116	0.57	8.7	25/09	0.18	06/09	1.1
		1982	1038	124	521	125	0.61	12.9	09/12	0.17	14/09	1.2
		1983	845	101	396	95	0.47	8.3	07/11	0.17	01/09	0.8
		1984	986	118	442	106	0.52	9.1	23/11	0.15	31/08	1.1
		1985	848	101	382	92	0.45	11.1	26/12	0.14	03/11	0.8
										0.32	0.16	0.16
										0.32	0.16	0.16
042001	Wallington at North Fareham	C.A: 111.0 km ²										
M.A: SWA	Level: 4m	F.A.F: G										
		B-full: 10.0 m ³ s ⁻¹										
Comment:	Compound critical depth flume (total width: 4.8m). Theoretical rating. Bypassed at 9.8 m ³ s ⁻¹ . Flashy response and zero flow in dry summers. Missing data estimated using the record for 042003. Overall, artificial influences on the runoff pattern are limited but spray irrigation can significantly reduce summer flows. Groundwater catchment smaller than the topographical catchment area. # Permeable headwaters (Chalk) with impervious Eocene clays dominating the valley. A largely rural catchment.											
		51..80	849	178	0.63	10.9d	20/01	0.00	03/07	1.6	0.27	0.04
		1981	870	102								
		1982	850	100								
		1983	705	83	187	105	0.66	9.3	31/01	0.04	30/07	1.8
		1984	854	101	191	107	0.67	9.2	05/12	0.03	20/07	2.0
		1985	745	88	164	92	0.58	9.1	21/01	0.05	13/07	1.3
										0.35	0.08	0.08
										0.35	0.08	0.08
042003	Lymington at Brockenhurst Park	C.A: 98.9 km ²										
M.A: SWA	Level: 6m	F.A.F: N										
		B-full: 7.9 m ³ s ⁻¹										
Comment:	Thin-plate weir with central Flat V notch (no divide piers) total breadth 8.48m. Theoretical rating. By-passing occurs above the weir capacity of 7 m ³ s ⁻¹ ; weir is also subject to drowning. Artificial influences have a negligible impact on flows. # Principally an impervious catchment (Tertiary clays; sands and gravels also) with large tracts of heathland and forest - some valley bogs in the New Forest.											
		60..80	841	327	1.02	14.9	10/12	0.01	26/08	2.6	0.45	0.06
		1981	869	103	371	113	1.16		0.03	27/08	2.7	0.76
		1982	986	117	388	119	1.22		0.06	29/07	3.3	0.72
		1983	729	87	256	78	0.80		0.04	16/08	1.9	0.47
		1984	846	101	294	90	0.92		0.02	21/08	2.8	0.40
		1985	746	89	255	78	0.80		0.05	26/07	2.0	0.41
										0.41	0.09	0.09
										0.41	0.09	0.09
042004	Test at Broadlands	C.A: 1040.0 km ²										
M.A: SWA	Level: 10m	F.A.F: N										
		B-full: 26.5 m ³ s ⁻¹										
Comment:	A velocity-area station, difficult to calibrate due to severe weed growth and an uneven velocity distribution. Discharge is primarily baseflow but some rapid runoff can derive from the lower reaches of the River Dun. Topographic catchment slightly exceeds the drainage area. The impact of artificial influences is very minor. # A highly permeable catchment (90% Chalk) but with some tertiary deposits (alluvium in the lower valley). Chalk downland given over to agriculture - a few urban centres. *Electromagnetic GS (Highbridge) nearby											
		57..80	815	351	11.56	36.8d	11/01	3.17	07/07	17.5	10.49	5.95
		1981	869	107	319	91	10.53		5.94	10/09	13.8	10.05
		1982	877	108	349	99	11.50		6.08	19/09	16.3	11.34
		1983	725	89	320	91	10.55		5.90	01/09	15.1	9.74
		1984	850	104	281	80	9.26		4.84	02/09	13.7	9.22
		1985	768	94	295	84	9.71		5.76	28/11	14.0	8.90
										8.90	5.92	5.92
										8.90	5.92	5.92
042005	Wallop Brook at Broughton	C.A: 53.6 km ²										
M.A: SWA	Level: 36m	F.A.F: G										
		B-full: 3.1 m ³ s ⁻¹										
Comment:	Rectangular thin-plate weir (crest: 4.87m broad). Theoretical rating. Downstream weed growth can raise tailwater levels. Upper limit of the chart recorder has been exceeded on two occasions. The flow pattern is baseflow dominated. The topographical catchment exceeds the groundwater catchment - may be only 36 km ² . # The Wallop Brook drains a permeable (100% Chalk) catchment - typical open downland of a rural character - 'the Wallops' are the only significant settlements.											
		55..80	817	233	0.40	1.8d	03/03	0.00	05/10	0.8	0.30	0.03
		1981	863	106	210	80	0.36		0.7d	25/04	0.04	10/09
		1982	859	105	281	121	0.48		1.2d	25/03	0.03	17/09
		1983	685	84	206	88	0.35		1.1d	17/01	0.04	18/08
		1984	809	99	154	66	0.26		0.8d	08/02	0.00	02/09
		1985	769	94	208	89	0.35		0.9d	09/02	0.06	31/10
										0.22	0.09	0.09
										0.22	0.09	0.09
042006	Meon at Mistingford	C.A: 72.8 km ²										
M.A: SWA	Level: 29m	F.A.F: G										
		B-full: 4.1 m ³ s ⁻¹										
Comment:	Rectangular critical depth flume (breadth: 3.66m) upstream of a small three-arch bridge. Theoretical rating. Some local bypassing during flood flows. Abstractions and discharges have a significant impact on the flow regime; small net export of water from the catchment. # Predominantly a permeable catchment (Chalk - but considerable outcrops of the less permeable Lower and Middle Chalk); some superficial cover. Impervious Reading Beds in the south. A rural catchment with some uncultivated downland.											
		58-80	920	429	0.99	5.3d	04/12	0.05	07/08	2.0	0.72	0.20
		1981	1024	111	482	112	1.11		2.8	01/04	0.36	09/09
		1982	994	108	484	113	1.12		3.8	09/12	0.18	20/09
		1983	834	91	418	97	0.97		3.5	03/01	0.28	19/11
		1984	975	106	381	89	0.88		2.7	30/01	0.21	15/10
		1985	862	94	391	91	0.90		2.5	28/01	0.28	03/12
										1.8	0.67	0.31
										1.8	0.67	0.31
042007	Alre at Dove Lane Alresford	C.A: 57.0 km ²										
M.A: SWA	Level: 57m	F.A.F: G										
Comment:	A Crump weir (crest: 2.5m broad) on the main channel plus a second Crump weir (crest: 1.5m broad) on a side channel. Pre-1969 monthly current metering results are available. Baseflow dominates the flow regime. The groundwater catchment (estimated at 114 km ²) substantially exceeds the topographical catchment. # Principally a permeable catchment (Upper Chalk overlain in patches of clay- with-flints) of rural character - rolling downland given over to mixed farming; some woodland.											
		70..80	877	845	1.53	2.9	31/07	0.74	28/08	2.1	1.41	0.91
		1981			918	109	1.66					
		1982	981	112	972	115	1.76		2.4d	19/12	1.15	18/09
		1983	842	96	908	118	1.80		2.5d	14/01	1.26	21/11
		1984	978	112	902	107	1.63		2.4d	24/03	1.12	14/10
		1985	856	98	873	103	1.57		2.2d	21/01	1.17	05/11
										2.0	1.52	1.19
										2.0	1.52	1.19
042008	Cheriton Stream at Swards Bridge	C.A: 75.1 km ²										
M.A: SWA	Level: 56m	F.A.F: N										
		B-full: 2.8 m ³ s ⁻¹										
Comment:	Crump weir (breadth: 3.0m). Theoretical rating extends to 7 m ³ s ⁻¹ . Flows affected by River Itchen augmentation scheme. A monthly series of gaugings prior to the installation of the weir is available (SWA). # The Cheriton stream is ephemeral in its upper reaches and drains a very permeable (Upper Chalk) catchment - isolated patches of clay-with-flints occur on high ground. Rural land use with considerable downland and wooded areas.											
		70-80	872	261	0.62	2.0	13/08	0.15	26/08	1.0	0.55	0.27
		1981	1005	115	283	108	0.67		1.3	26/04	0.38	09/09
		1982	1002	115	304	116	0.72		1.9	08/12	0.32	18/09
		1983	838	96	295	113	0.70		1.7	04/01	0.40	22/11
		1984	975	112	265	102	0.63		1.3	10/02	0.30	12/09
		1985	852	98	252	97	0.60		1.4	21/01	0.35	04/11
										0.9	0.62	0.36
										0.9	0.62	0.36
042009	Candover Stream at Borough Bridge	C.A: 71.2 km ²										
M.A: SWA	Level: 54m	F.A.F: RG										
		B-full: 4.6 m ³ s ⁻¹										
Comment:	Crump weir (crest: 3m broad). Limited fall downstream to culvert. Monthly gaugings available from 1956. Flows reduced by surface and groundwater abstractions (rarely, recharge augments flow); spray irrigation can be important. The groundwater and topographical divides are not coincident. # An unresponsive catchment (Chalk with some patches of superficial deposits). Many perennial springs - often supporting cress beds. Predominantly rural land use with some woodland.											
		70-80	827	234	0.53	1.4d	27/01	0.24	14/12	0.8	0.47	0.29
		1981	914	111	243	104	0.55		1.1	08/10	0.36	06/09
		1982	941	114	286	122	0.65		1.2	19/12	0.31	31/08
		1983	764	92	290	124	0.65	</				

				Period	Rainfall (mm)	Runoff (mm)	Mean flow (m ³ s ⁻¹)	Peak flow (m ³ s ⁻¹)	Date of peak	Min. daily flow (m ³ s ⁻¹)	Date of min.	10 Percentile (m ³ s ⁻¹)	50 Percentile (m ³ s ⁻¹)	95 Percentile (m ³ s ⁻¹)	
					% of pre-1981	% of pre-1981									
042012	Anton at Fullerton			C.A: 185.0 km ²	75-80	750	314	1.84	4.0d	01/02	0.43	24/08	2.9	1.69	0.75
M.A: SWA	Level: 41m	F.A.F: N	S-full: 8.5 m ³ s ⁻¹												
Comment: Crump weir (crest: 4.75m broad) with a complementary Crump weir (crest: 1.0m broad) on a bypass channel. Water levels influenced by local mill sluice operation and in the summer, by eel-traps. The groundwater catchment exceeds the topographical catchment area. * An unresponsive (Chalk) catchment of rolling downland - the upper reaches of the Anton are ephemeral. Land use is rural with some urban centres.				1981	875 117	328 104	1.92	2.7d	26/04	1.31	06/09	2.4	1.90	1.42	
				1982	866 115	382 122	2.24	3.8d	15/03	1.32	16/09	3.1	2.09	1.41	
				1983	663 92	341 109	2.00	3.5d	04/01	1.18	06/09	2.9	1.89	1.25	
				1984	820 109	278 89	1.63	2.7d	06/02	0.93	12/09	2.4	1.65	0.98	
				1985	769 103	324 103	1.89	3.1d	08/02	1.27	27/09	2.5	1.83	1.31	
042014	Blackwater at Ower			C.A: 104.7 km ²	76-80	902	350	1.16	53.1	27/01	0.13	04/08	2.3	0.56	0.22
M.A: SWA	Level: 8m	F.A.F: N	B-full: 10.0 m ³ s ⁻¹												
Comment: Crump weir (crest: 6.0m broad); drowns at approximately 0.4m of stage and bypassed during flood flows. The crest tapping does not operate satisfactorily. Above modular limit current meter rating used. Negligible net impact of artificial influences on the flow pattern but spray irrigation may modestly reduce summer flows. * A catchment of meadows, woodland and heath underlain by Tertiary sands, gravels and clays (mainly impervious).				1981	973 108	306 87	1.01			0.13	06/09	2.7	0.61	0.16	
				1982	973 108	337 96	1.12			0.19	08/09	2.9	0.61	0.21	
				1983		235 67	0.78			0.16	06/09	1.6	0.57	0.19	
				1984		267 76	0.89			0.13	21/06	2.3	0.47	0.15	
				1985		219 63	0.72			0.15	02/07	1.5	0.42	0.21	
101002	Medina at Upper Shide			C.A: 29.8 km ²	65-80	928	273	0.26	8.6	21/11	0.03	02/09	0.4	0.13	0.06
M.A: SWA	Level: 10m	F.A.F: N	B-full: 17.8 m ³ s ⁻¹												
Comment: Trapezoidal critical depth flume, width 2.4m (theoretically rated) with broad-crested current meter rated overflow weir for stages > 0.6 m (1.14 m ³ s ⁻¹). Small abstractions for irrigation. Flow reduced in 1985 by groundwater pumping tests. * Entirely rural catchment. Agriculture is mainly arable. Fairly steep slopes in the southern headwaters. Geology is predominantly Lower Greensand with some Gault Clay and Chalk.				1981	975 105	355 130	0.34	7.3	02/03	0.10	03/09	0.6	0.25	0.13	
				1982	914 98										
				1983	705 76	224 82	0.21	3.5	31/01	0.08	18/08	0.3	0.18	0.09	
				1984	896 97	268 98	0.25	7.0	16/05	0.07	21/08	0.5	0.18	0.08	
				1985	761 82	212 78	0.20	1.8	06/12	0.08	11/07	0.3	0.17	0.10	

Summary of Archived Data

Gauged daily flows, monthly peaks and monthly rainfall

Stn. number	Gauged daily flows, monthly peaks and rainfall	Stn. number	Gauged daily flows, monthly peaks and rainfall	Stn. number	Gauged daily flows, monthly peaks and rainfall
040001	50s --EAAAAA 70s †††††††††† 80s ††††††††††	041004	50s ---eAAA 70s ABBBBAAAAA 80s ††††††††††	041025	70s -EAAAADDDA 80s DAAAAAde
040002	50s -----eAAA 70s BBAAe-††† 80s ††††††††††	041005	60s eAAAAA 70s AAAAAA 80s ††††††††††	041026	70s -EAAAADAAA 80s AAADAAe
040003	50s -----eAAA 70s FFCFCCCCC 80s BBAACf	041006	60s ---eBAAA 70s AAAAAA 80s ††††††††††	041027	70s -eAAAAAD 80s DAAAAAe
040004	60s -eAAAAEEB 80s AAAAAAde	041009	50s -----F 70s CCCCCCF††† 80s ††††††††††	041028	60s ---eEAAA 70s AAAAAAAD
040005	50s -----eA 70s AAEEAEAAE 80s ††††††††††	041010	60s -eAEADDA 80s DDDADAAe	042001	50s -ICCCCCC 70s CCCCCBAAA 80s CCCCCC
040006	50s -----e 70s ABEEAEEEE 80s EEE†††	041011	60s -----EAAA 80s DDADAAe	042003	60s ICCCCCC 80s DAAAAAe
040007	60s eAAAAEEBA 80s DEAAAAe 90s ††††††††††	041012	60s ---†EAD 80s DDAADDAe	042004	50s ---ICC 70s CCCCCCCCC 80s CCCCCC
040008	60s -eEAAAABA 80s AADDDDe 90s ††††††††††	041013	50s eAAAAA 70s AAAAAA 80s ††††††††††	042005	50s ---ICCC 70s CCCCCCFFF 80s CCCCCC
040009	60s -eBBBAABA 80s AAAAAAde 90s ††††††††††	041014	60s eADAAADAD 80s AAADDAe	042006	50s -----fC 70s CCCCCBAAA 80s AAAAAAe
040010	60s -eAAAAAEA 80s DDDDDDe 90s ††††††††††	041015	60s -----EAD 80s DDAADDAe	042007	70s ICCEBA 80s AAAAAAe
040011	60s ---eABAA 80s BADAde 90s ††††††††††	041016	30s -----F 50s CCCCCCCCC 70s AAAAAAAD	042008	70s FCCCCBAAA 80s AAAAAAe
040015	60s -----E 80s EDEE††††††††††	041017	60s -----e 80s AAAAAAe	042009	70s ICCEBA 80s AAAAAAe
040017	70s -BEAEBBDE 80s EEDE††††††††††	041018	60s -----e 80s AAAAAAe	042010	50s -----fC 70s ccCCCBaaa 80s AAAAAAe
040020	70s -eAEEDE 80s EEAE††††††††††	041019	70s eAAAAA 80s AAAAAA	042011	70s -fCCBAAA 80s AAAAAAe
040024	70s -eEEEA 80s EF††††††††††	041020	60s -----e 80s AAADAde	042012	70s -††BBBC 80s CCCCCCf
041001	50s eaAaAAAA 70s AAAAAADA 80s ††††††††††	041021	60s -----e 80s ABBBAbe	042014	60s ---††††††††††
041002	50s -eAAAAA 70s AAABAAAA 80s ††††††††††	041022	70s eAAAAADDD 80s AAAAAAe	042016	70s ---fCf††††††††††
041003	50s -----e 70s AAAAAA 80s ††††††††††	041023	70s fBCCBBBB 80s BBEBEbe	101001	60s -fCfFFCfFF 70s FcCCfC††††††††††
		041024	70s -EAAAAABA 80s DAAAAAde	101002	60s ---eef††††††††††

Naturalised daily and monthly flows

Stn. number	Naturalised daily and monthly flows	Stn. number	Naturalised daily and monthly flows	Stn. number	Naturalised daily and monthly flows
040001	50s --FEEEF-	040005	60s ---FEE	040009	60s ---FEE
040002	50s -----FEEF	040006	60s ---FEF	040010	60s ---FEE
040003	50s -----FEE	040007	60s FEEEEFF	040011	60s ---FEEF
040004	60s --FEEEF	040008	60s ---FEE		

WESSEX WATER



Area: 9,918 km²

Average Rainfall (1941-70): 869 mm

Headquarters of Wessex Water:

Wessex House
Passage Street
Bristol
Avon BS2 0JQ

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Gauging Station Register

Station number	River name	Station name	Grid reference	Catchment area (sq km)	Station type	Period of record	Mean ann. rainfall (mm)	Mean ann. runoff (mm)	Max. ann. runoff (mm)	Year of max.	Min. ann. runoff (mm)	Year of min.	Mean flow (m ³ s ⁻¹)	Min. mon. flow (m ³ s ⁻¹)	Month/Year of min.	Mean ann. flood (m ³ s ⁻¹)	Base flow index	10 Percentile (m ³ s ⁻¹)	95 Percentile (m ³ s ⁻¹)
043001	Avon	Ringwood	SU 142054	1649.8	VA	1960-65	809	383	496	61	244	64	20.06	5.89	11/84	65.6	.87	33.0	5.70
043003	Avon	East Mills	SU 158154	1477.8	MIS	1965-.85	825	335	439	77	178	76	15.69	3.05	08/76	.91	.91	28.8	5.98
043004	Bourne	Laverstock Mill	SU 157304	163.6	C	1965-.85	788	147	214	66	59	76	0.76	0.07	08/76	2.4	.92	1.4	0.23
043005	Avon	Amesbury	SU 151413	323.7	C	1965-85	775	334	436	77	139	76	3.43	0.37	08/76	12.3	.91	6.6	1.15
043006	Nadder	Wilton Park	SU 098308	220.6	C	1966-85	914	412	546	77	219	73	2.88	0.60	08/76	18.2	.82	5.7	0.94
043007	Stour	Throop Mill	SZ 113958	1073.0	CC	1973-85	861	389	511	77	180	73	13.22	1.36	08/76	.66	.66	29.5	2.62
043008	Wylfe	South Newton	SU 086343	445.4	C	1967-85	851	289	429	77	130	76	4.09	0.66	08/76	12.0	.92	8.4	1.21
043009	Stour	Hammon	ST 820147	523.1	CC	1968-85	860	414	581	82	154	73	6.86	0.35	08/76	111.3	.33	18.2	0.63
043010	Alben	Loverley Mill	SU 006085	94.0	C	1970-81	884	334	494	74	173	73	1.00	0.12	09/76	3.5	.89	2.5	0.18
043011	Ebble	Bodenham	SU 162263	109.0	C VA	1970-.78	889	223	292	72	198	73	0.77	0.06	09/70	.84	1.6	0.40	
043012	Wylfe	Norton Bavant	ST 909428	112.4	C	1971-.85	940	297	382	77	183	76	1.06	0.28	07/78	.86	2.1	0.42	
043013	Mude	Somerford	SZ 184936	12.4	C	1971-.83	791	254	368	82	158	73	0.10	0.00	08/76	.56	0.2	0.01	
043014	East Avon	Upavon	SU 133559	86.2	C	1971-85	778	293	346	82	181	76	0.80	0.35	08/76	.89	1.2	0.47	
043017	West Avon	Upavon	SU 133559	76.0	C	1971-85	777	278	410	77	124	73	0.67	0.05	08/76	.71	1.5	0.12	
043018	Allen	Walford Mill	SU 008007	176.5	C	1974-85	868	344	484	82	192	76	1.93	0.10	08/76	.93	4.5	0.31	
043019	Shreen Water	Colebrook	ST 807278	29.1	C	1973-85	887	605	752	77	451	76	0.56	0.15	08/76	.66	1.0	0.19	
043021	Avon	Knapp Mill	SZ 155943	1706.0	US	1975-85	828	361	456	77	173	76	19.55	2.69	08/76	.88	.88	38.8	5.69
044001	Frome	East Stoke	SY 866867	414.4	MIS	1966-85	963	510	695	66	300	73	6.70	1.26	08/76	.84	12.3	2.45	
044002	Piddle	Baggs Mill	SY 913876	183.1	FL	1963-.85	966	407	557	66	229	73	2.36	0.43	08/76	8.3	.89	4.8	0.76
044003	Asker	Bridport	SY 470928	49.1	C	1966-80	994	374	493	79	197	73	0.58	0.13	08/76	12.6	.64	1.1	0.20
044004	Frome	Dorchester	SY 708903	206.0	C	1971-85	1008	461	564	79	249	73	3.01	0.35	08/76	.82	5.9	0.84	
044006	Sydling Water	Sydling St Nich's	SY 632997	12.4	C	1969-85	1048	465	572	79	262	73	0.18	0.05	08/76	.86	0.4	0.06	
044009	Wey	Broadway	SY 866839	7.0	FV	1975-85	898	1433	1847	77	865	76	0.32	0.07	10/84	.94	0.7	0.10	
051001	Doniford St	Swill Bridge	ST 088428	75.8	VA	1967-.85	921	427	577	82	188	73	1.03	0.10	08/76	25.1	.61	2.4	0.20
051002	Hornor Water	West Luccombe	SS 898458	20.8	C	1973-.85	629	831	74	447	75	0.42	0.03	08/76	.62	0.9	0.04		
051003	Washford	Beggearn Huish	ST 040395	36.3	VA	1966-.85	605	804	70	335	73	0.70	0.03	10/78	.65	1.5	0.12		
052001	Axe	Wookeny	ST 527458	18.2	FL	1956-68	1176	986	1260	60	688	59	0.57	0.08	10/59	.69	1.1	0.12	
052002	Yeo	Sutton B' Res	ST 556116	30.3	MIS	1956-68	998	411	752	60	146	64	0.39	0.02	07/65	.18	1.3		
052003	Halse Water	Bishops Hull	ST 206253	87.8	VA	1961-.85	872	398	511	77	182	73	1.11	0.18	08/76	12.4	.74	2.2	0.30
052004	Isle	Ashford Mill	ST 361188	90.1	C VA	1962-85	891	458	659	74	176	64	1.31	0.15	08/76	25.1	.48	2.8	0.26
052005	Tone	Bishops Hull	ST 206250	202.0	C VA	1961-85	981	481	638	74	250	64	3.08	0.26	08/76	63.3	.58	6.7	0.84
052006	Yeo	Pen Mill	ST 573162	213.1	C VA	1963-85	892	374	532	74	182	73	2.53	0.17	08/76	63.5	.40	6.4	0.34
052007	Parrett	Chiselborough	ST 461144	74.8	C	1966-85	924	474	647	82	238	73	1.13	0.09	08/76	24.3	.45	2.2	0.19
052008	Tone	Clatworthy Res	ST 044313	18.1	MIS	1960-68	1275	559	671	66	204	64	0.32	0.06	08/67	.45	0.9	0.06	
052009	Sheppey	Fanny Castle	ST 498439	59.6	C VA	1964-.85	965	573	764	79	337	84	1.08	0.17	09/64	7.2	.68	2.2	0.26
052010	Brue	Longvinton	ST 590318	135.2	C VA	1964-85	895	442	568	77	269	73	1.89	0.13	08/76	50.7	.47	4.4	0.26
052011	Cary	Somerton	ST 498291	82.4	CCVA	1965-.85	746	312	450	82	180	75	0.82	0.01	08/76	10.0	.37	2.1	0.05
052014	Tone	Greenham	ST 078202	57.2	FVVA	1967-.85	1097	611	964	70	407	73	1.11	0.01	10/75	13.6	.59	2.4	0.18
052015	Land Yeo	Wraxall Bridge	ST 483718	23.3	C	1971-.85	885	314	397	74	215	73	0.23	0.03	08/76	.71	0.5	0.05	
052016	Currypool St	Currypool Farm	ST 221382	15.7	C	1971-85	929	430	550	82	225	73	0.21	0.04	08/76	.71	0.4	0.06	
052020	Gallica St	Gallica Bridge	ST 571100	16.4	MIS	1966-78	892	465	623	67	263	75	0.24	>0.00	08/76	.26	0.5	0.01	
053001	Avon	Melksham	ST 903641	665.6	VA	1953-80	779	316	528	60	118	73	6.67	0.55	10/55	84.7	.54	15.1	0.98
053002	Semington B	Semington	ST 907605	157.7	VA	1953-85	749	272	445	77	130	73	1.36	0.19	08/76	.57	2.7	0.26	
053003	Avon	Bath St James	ST 753645	1595.0	VA	1939-.69	837	396	605	66	221	42	20.01	0.00	11/51	159.6	.63	44.0	1.42
053004	Chew	Compton Dando	ST 648647	129.5	FL	1958-.85	1013	256	430	60	132	64	1.05	0.19	08/76	37.4	.63	2.1	0.31
053005	Midford Brk	Midford	ST 783611	147.4	FL	1961-85	984	466	610	82	284	73	2.18	0.22	08/76	30.8	.62	4.8	0.40
053006	Frome(Brist'l)	Frenchay	ST 637772	148.9	FL	1961-85	801	361	478	74	170	73	1.70	0.12	07/76	35.6	.40	4.1	0.20
053007	Frome	Tellisford	ST 805584	261.6	FL	1961-85	964	454	587	66	281	64	3.77	0.29	08/76	62.9	.52	8.4	0.65
053008	Avon	Great Somerford	ST 966832	303.0	CC	1964-85	831	346	440	79	140	73	3.32	0.15	08/76	41.2	.58	8.0	0.36
053009	Wellow Brk	Wellow	ST 741581	72.6	FL	1966-85	1024	555	681	67	331	73	1.26	0.12	08/76	15.3	.62	2.8	0.24
053013	Marden	Stanley	ST 955729	99.2	FL	1970-85	767	385	526	77	199	73	1.21	0.13	08/76	.64	2.5	0.26	
053017	Boyd	Bitton	ST 681698	48.0	FV	1973-85	802	373	466	74	266	76	0.57	0.02	08/76	.46	1.4	0.05	
053018	Avon	Bathford	ST 786671	1552.0	VA	1969-85	843	351	447	77	210	73	17.26	1.72	08/76	.61	.61	36.3	3.47
053019	Woodbr' Brk	Crab Mill	ST 949866	46.6	TP	1969-85	782	390	698	71	130	73	0.58	>0.00	08/76	25.2	.34	1.1	0.02
053020	Gauze Brook	Rodbourne	ST 937840	28.2	TP	1968-85	815	323	424	77	116	73	0.29	>0.00	08/76	4.8	.53	0.7	0.02
053022	Avon	Bath ultrasonic	ST 738651	1605.0	US	1976-84	903	436	492	82	366	78	22.21	4.03	07/84	.58	.49	2.4	4.50
053023	Sh'rston Avon	Fosseway	ST 891870	89.7	FV	1976-.85	874	359	438	82	328	83	1.02	0.09	10/79	.67	2.4	0.12	
053024	Tatbury Avon	Brokenborough	ST 914893	73.6	FV	1978-85	873	334	427	83	278	78	0.78	0.04	10/79	.66	2.0	0.06	
053025	Mells	Vallis	ST 757491	119.0	C	1980-85	1110	445	491	81	405	84	1.68	0.19	08/84	.59	3.7	0.21	
053026	Frome(Brist'l)	Frampton Cott'll	ST 667822	78.5	C	1978-85	831	429	525	82	291	78	1.07	0.09	10/78	.42	2.5	0.12	
053028	By Brook	Middlehill	ST 815688	102.0	FV	1982-85		482	517	85	451	83	1.56	0.25	08/84	.75	4.0	0.25	
054068	Little Avon	Berkeley Kennels	ST 683988	134.0	VA	1978-85		256	292	81	227	80	1.09	0.26	11/78	.61	2.1	0.27	

Hydrometric Statistics

	Period	Rainfall (mm)	Runoff (mm)	Mean flow (m ³ s ⁻¹)	Peak flow (m ³ s ⁻¹)	Date of peak	Min. daily flow (m ³ s ⁻¹)	Date of min.	10 Percentile (m ³ s ⁻¹)	50 Percentile (m ³ s ⁻¹)	95 Percentile (m ³ s ⁻¹)
		% of pre-1981	% of pre-1981								
043003 M.A.: WWA Level: m F.A.F.: N C.A.: 1477.8 km ²	65-80	824	340	15.91	56.3d	17/02 1974	2.53	26/08 1978	29.3	12.79	5.96
Comment: Critical depth rectangular flume with complementary compound Crump weir incorporating central notch for passage of fish. A small irrigation carrier is fed from the river Avon 3 km upstream at Burgate and bypasses the gauging station (normally less than 3% of the total flow). Low-medium flow range station. High flows are channelled along the carrier and generally the peak at East Mills is unrepresentative. Pre-September 1965 flows are for flume only. # Predominantly permeable (Chalk) catchment. Land use - rural.	1981	906 110	337 99	15.79	38.9d	23/03	6.83	09/09	26.5	13.73	7.94
	1982	903 110	372 109	17.44	46.0d	17/03	5.81	18/09	31.6	14.16	6.24
	1983		287 84	13.46	31.1d	01/02	6.30	23/11	20.6	12.75	6.81
	1984	854 104	294 86	13.79	41.6d	27/01	4.51	01/09	27.0	12.29	4.72
	1985	798 97	313 92	14.65	42.7d	09/02	6.35	28/11	27.7	11.93	6.58
043005 M.A.: WWA Level: 67m F.A.F.: N S-full: 31.0 m ³ s ⁻¹ C.A.: 323.7 km ²	65-80	778	330	3.38	17.3	28/12 1979	0.18	22/08 1976	6.5	2.77	1.12
Comment: Compound structure. Crump crest (9.14m broad) flanked by broad-crested weirs. Small bypass channel approx. 2m upstream of weir - included in rating. Full range station. Bankfull - 1.37m. During the summer flows are naturally augmented from groundwater draining from the northern half of the river Bourne catchment. Topographical and groundwater catchment areas do not coincide. # Predominantly permeable (Chalk) catchment with a small inlier of Upper Greensand and Gault. Land use - rural.	1981	819 105	343 104	3.52	11.0	30/12	1.44	11/09	6.1	2.98	1.61
	1982	814 105	425 129	4.36	17.3	16/03	1.21	18/09	8.2	3.42	1.33
	1983	674 87	332 101	3.41	9.6	01/02	1.38	23/11	6.0	3.25	1.48
	1984	793 102	303 92	3.11	11.5	27/01	1.01	13/09	6.3	2.76	1.08
	1985	751 97	340 103	3.49	14.1	22/01	1.42	28/11	6.5	2.80	1.58
043006 M.A.: WWA Level: 51m F.A.F.: N C.A.: 220.6 km ²	66-80	905	413	2.89	47.9	28/12 1979	0.49	24/08 1976	5.7	2.18	0.91
Comment: Crump weir, crest 18.3m broad. Crest tapping in operation for first few months and then abandoned - modular limit (0.6m) seldom reached. Flows greater than 18.3m ³ s ⁻¹ measured upstream of weir at Bulls Bridge. Sluices and hatches can regulate flow for short periods. Some groundwater pumping in catchment. # Mixed geology - predominantly Chalk with clays in upper catchment. Land use - rural.	1981	1010 112	412 100	2.88	14.9	10/03	1.17	06/09	5.4	2.39	1.22
	1982	1009 111	496 120	3.47	18.8	16/03	0.91	17/09	6.3	2.65	1.13
	1983	838 93	380 92	2.65	14.4	01/02	1.01	06/10	4.5	2.59	1.13
	1984	970 107	380 92	2.66	16.3	26/01	0.84	08/10	5.6	2.00	0.89
	1985	864 95	374 91	2.61	19.0	26/12	1.02	05/10	4.8	2.09	1.12
043007 M.A.: WWA Level: 4m F.A.F.: I S-full: 128.0 m ³ s ⁻¹ C.A.: 1073.0 km ²	73-80	863	394	13.39	190.7	28/12 1979	1.12	13/08 1976	31.2	7.30	2.44
Comment: Compound Crump weir with centre crest 5m broad and 2 higher flanking crests 18.0m broad. The site is unapproachable in flood conditions and high flows are measured at Blackwater Bridge (SZ134959). Prior to 1977 high flows measured at Ensbury (3kms downstream of station). Rating incorporates flow through two bypass channels just upstream of station; mill channel and Loden Stour. Minor groundwater abstractions in catchment. # Mixed geology - predominantly Chalk with some clay. Land use - rural.	1981	892 103	408 104	13.88	91.7	15/12	2.88	30/08	25.1	10.59	3.63
	1982	989 115	498 126	16.96	110.2	17/03	3.31	14/09	36.0	13.01	4.01
	1983	755 87	329 84	11.19	83.9	02/02	3.02	15/08	20.8	9.36	3.38
	1984	857 99	342 87	11.63	98.0	27/01	1.92	06/09	28.0	6.89	2.29
	1985	798 92	329 84	11.15	137.0	07/06	3.23	07/11	22.5	6.25	3.38
043008 M.A.: WWA Level: 56m F.A.F.: G C.A.: 445.4 km ²	67-80	854	288	4.07	20.4	15/02 1974	0.56	26/08 1976	8.3	3.08	1.15
Comment: Crump weir, crest 10.7m broad. Full range station. Subject to drowning at high discharges. Heavy weed growth during summer months. Sluice control upstream for river regulation. Minor groundwater and surface water abstractions in catchment. # Predominantly Chalk with Upper Greensand and Gault in higher parts of catchment. Land use - rural.	1981	892 104	284 99	4.01	12.0	22/03	1.73	09/09	7.9	3.47	1.83
	1982	919 108	360 125	5.09	14.5	16/03	1.19	03/09	9.9	3.78	1.44
	1983	775 91	294 102	4.15	12.8	01/02	1.41	10/11	8.1	4.01	
	1984	853 100	254 88	3.59	12.4	06/02	1.15	11/09	7.3	3.00	1.22
	1985	802 94	272 94	3.83	12.1	21/01	1.29	06/11	7.9	3.01	1.36
043009 M.A.: WWA Level: 41m F.A.F.: N S-full: 60.0 m ³ s ⁻¹ C.A.: 523.1 km ²	68-80	860	403	6.69	231.4	27/12 1979	0.21	02/11 1975	17.8	2.20	0.62
Comment: Compound Crump weir with low flow crest 6.1m broad, total breadth 18.3m. Structure is situated under road bridge - high flows calibrated up to 3.1m stage. A water meadow system operates in the catchment and the area floods during high discharges; bypassing of the station occurs and gaugings are made downstream at Haywoods Bridge (ST824120). # Predominantly impermeable (clay) catchment. Rural land use.	1981	890 103	491 122	8.14	105.3	14/12	0.62	26/08	20.9	3.72	0.74
	1982	978 114	581 144	9.64	116.4	15/03	0.55	16/05	28.7	4.00	0.86
	1983	763 89	353 88	5.85	101.9	01/02	0.57	26/10	13.8	2.75	0.78
	1984	885 103	430 107	7.14	149.7	07/02	0.50	22/08	23.3	1.84	0.56
	1985	803 93	360 89	5.95	124.5	26/12	0.59	22/09	12.9	1.67	0.74
043012 M.A.: WWA Level: 97m F.A.F.: G S-full: 13.0 m ³ s ⁻¹ C.A.: 112.4 km ²	71-80	940	290	1.03	6.7	30/05 1979	0.23	10/07 1976	2.1	0.76	0.40
Comment: Crump weir, crest 6.09m broad. Full range station. Out of bank flow may occur just upstream before bankfull at gauging station. Hatches upstream can affect flows. Minor groundwater pumping in catchment. # Geology - Chalk with Upper Greensand and Gault in higher parts of catchment. Land use - rural.	1981	967 103	304 105	1.08	4.6	10/03	0.43	03/09	1.9	0.94	0.52
	1982	1018 108	364 126	1.30	5.2	15/03	0.46	16/09	2.3	0.98	0.54
	1983	874 93									
	1984	949 101	289 100	1.03	3.8	25/01	0.37	29/08	2.1	0.78	0.41
	1985	887 94	291 100	1.03	4.8	26/12	0.48	15/11	1.9	0.78	0.53
043014 M.A.: WWA Level: 92m F.A.F.: N S-full: 6.0 m ³ s ⁻¹ C.A.: 86.2 km ²	71-80	772	286	0.78	6.2	27/12 1979	0.30	26/08 1976	1.2	0.68	0.44
Comment: Crump weir, crest 3.05m broad. Station adjacent to 43017 - West Avon; the two Crump weirs gauge the two branches of the Avon immediately upstream of their confluence at Upavon. Full range station. Occasional upstream hatch action. # Predominantly Upper Greensand and Lower Chalk; some Gault. Upper Chalk and clay forms the northern and extreme southern borders of the catchment. Land use - predominantly pastoral.	1981	850 110	300 105	0.82	4.3	03/04	0.51	04/09	1.2	0.73	0.54
	1982	830 108	346 121	0.95	4.9	15/03	0.47	18/09	1.4	0.84	0.54
	1983	707 92	294 103	0.80	2.3	20/12	0.54	07/09	1.1	0.76	0.56
	1984	804 104	283 99	0.77	5.2	09/12	0.44	12/08	1.2	0.72	0.47
	1985	774 100	302 106	0.82	5.0	05/06	0.53	02/10	1.1	0.74	0.55
043017 M.A.: WWA Level: 92m F.A.F.: I S-full: 9.2 m ³ s ⁻¹ C.A.: 76.0 km ²	71-80	764	267	0.64	10.5	27/12 1979	0.02	28/08 1976	1.5	0.36	0.10
Comment: Crump weir, crest 4.57m broad. Station adjacent to 43014 - East Avon; the two Crump weirs gauge the two branches of the Avon immediately upstream of their confluence at Upavon. Full range station. Minor groundwater abstractions in catchment. # Predominantly Upper Greensand and Lower Chalk; some Gault. Upper Chalk and clay forms the northern and extreme southern borders of the catchment. Land use - rural.	1981	819 107	315 118	0.76	5.1	29/12	0.14	07/09	1.6	0.58	0.18
	1982	839 110	363 136	0.87	6.8	10/12	0.13	18/09	2.0	0.54	0.15
	1983	724 95	260 97	0.63	4.8	01/05	0.17	31/08	1.2	0.58	0.19
	1984	826 108	278 104	0.67	4.9	27/01	0.10	21/08	1.5	0.42	0.11
	1985	764 100	276 103	0.66	5.9	21/01	0.20	03/11	1.3	0.44	0.21
043018 M.A.: WWA Level: 19m F.A.F.: I B-full: 14.1 m ³ s ⁻¹ C.A.: 176.5 km ²	74-80	870	361	2.02	9.0	27/12 1979	0.07	23/08 1976	4.8	1.15	0.29
Comment: Two Crump weirs - on main channel crest 6.1m broad, secondary Crump in mill stream adjacent to main channel - 0.9m broad. Rating includes mill channel. Weed growth occasionally causes structure to drown out. Hatch activity upstream of station. Surface water abstractions in catchment. Compensation discharge maintains low flows. # Upper catchment - Chalk, lower catchment - sands, gravels and clays. Land use - predominantly rural.	1981	952 109	344 95	1.93	6.0	29/12	0.43	06/09	4.0	1.77	0.51
	1982	1020 117	464 129	2.60	7.5	15/03	0.58	12/09	5.0	2.63	0.65
	1983	717 82	277 77	1.55	7.3	03/01	0.41	12/09	3.4	1.33	0.45
	1984	825 95	261 72	1.46	6.4	29/01	0.22	21/08	3.7	0.92	0.24
	1985	830 95	274 76	1.53	6.6	21/01	0.37	13/08	3.6	0.92	0.47
043019 M.A.: WWA Level: 72m F.A.F.: G B-full: 6.8 m ³ s ⁻¹ C.A.: 29.1 km ²	73-80	900	600	0.55			0.13	22/08 1976	1.0	0.38	0.18
Comment: Crump weir, crest 3m broad. All flows above bankfull recorded as 6.8 m ³ s ⁻¹ . Significant groundwater pumping in catchment. Runoff figures suggest topographical and hydrological catchment areas do not coincide. # Predominantly Kimmeridge Clay. Some Chalk and Upper Greensand in the north of the catchment. Land use - agricultural.	1981	878 98	615 103	0.57			0.22	13/08	0.9	0.41	0.25
	1982	972 108	693 116	0.64			0.17	24/07	1.2	0.44	0.22
	1983	796 88	645 108	0.60			0.20	18/11	1.2	0.48	0.21
	1984	903 100	564 94	0.52			0.17	16/10	1.1	0.37	0.18
	1985	807 90	543 91	0.50			0.19	27/11	0.9	0.36	0.20

Station ID	Name	C.A.	Period	Rainfall (mm)	Runoff (mm)	Mean flow (m ³ s ⁻¹)	Peak flow (m ³ s ⁻¹)	Date of peak	Min. daily flow (m ³ s ⁻¹)	Date of min.	10 Percentile (m ³ s ⁻¹)	50 Percentile (m ³ s ⁻¹)	95 Percentile (m ³ s ⁻¹)
				% of pre-1981	% of pre-1981								
043021	Avon at Knapp Mill	C.A: 1706.0 km ²	75-80	819	355	19.19	99.5	19/09	2.40	02/02	39.2	14.20	3.70
M.A: WWA	Level: 1m	F.A.F: N						1978		1978			
Comment: Ultrasonic station, Harwell single path. The station level refers to mean bed level - 0.875AOD. Both banks are piled and the bed is dredged to form a rectangular cross-section. Very limited number of flow readings logged per day. Review of replacing ultrasonic equipment in process. Minor groundwater pumping in catchment. # Mixed geology - predominantly Chalk; lower catchment composed of sands, gravels and clays. Land use - rural.													
044001	Frome at East Stoke	C.A: 414.4 km ²	66-80	1087	511	6.72	24.1d	26/02	0.85	27/08	12.6	5.56	2.41
M.A: WWA	Level: m	F.A.F: N						1986		1976			
Comment: Rectangular critical depth flume, 3.05m broad, bounded by two broad-crested weirs. Complementary Crump weir on bypass channel, 3.565m broad. Low floodbank constructed on left hand bank to confine all flows within designed measuring range of flume - 21.5 m ³ s ⁻¹ . Structure limit of weir 4.36 m ³ s ⁻¹ . Significant groundwater abstractions in catchment. Flows prior to 1966 are for flume only. # Geology - Mainly Chalk; Upper Greensand and Gault, Lias and Oolites in headwaters; sands, gravels and clays in lower catchment.													
044002	Piddle at Baggs Mill	C.A: 183.1 km ²	83..80	961	408	2.37	11.9	08/01	0.36	23/08	4.8	1.82	0.75
M.A: WWA	Level: 2m	F.A.F: I						1968		1976			
Comment: Rectangular critical depth 'humped' flume situated in left-hand bend of river. At high flow river goes out of bank upstream of station - estimates of flows made through arches of railway bridge. Complex water meadow system 2.3km upstream can result in minor short period fluctuations in the river flow. Minor groundwater abstractions in catchment. # Upper catchment - Chalk; lower - sands, gravels and clays. Predominantly agriculture.													
044004	Frome at Dorchester	C.A: 206.0 km ²	71-80	1106	450	2.94	13.5d	15/02	0.27	27/08	6.0	2.22	0.77
M.A: WWA	Level: m	F.A.F: N						1974		1976			
Comment: Two Crump weirs, crest 10.66m broad and 1.52m broad (on side channel). Rating for Louds Mill (main channel) includes side channel. Complementary Crump weir at Stinsford, crest 3.04m broad. Louds Mill - modular limit 10 m ³ s ⁻¹ ; Stinsford 4.6 m ³ s ⁻¹ . Stinsford subject to drowning during summer months due to weed growth downstream. Flows exist prior to Oct 1971 for Louds Mill only. # Geology - predominantly Chalk with Upper Greensand and Gault, Lias and Oolites in headwaters. Land use - rural.													
044006	Sydling Water at Sydling St Nicholas	C.A: 12.4 km ²	69-80	1034	465	0.16	1.6	30/05	0.04	19/08	0.4	0.13	0.06
M.A: WWA	Level: 110m	F.A.F: N						1979		1976			
Comment: Crump weir, crest 1.95m broad. Modular under all flow conditions. # Predominantly Lower Chalk with small outcrops of Middle and Upper Chalk forming the higher ground flanking the catchment. Mainly pastoral with some arable agriculture on flatter ground.													
044009	Wey at Broadway	C.A: 7.0 km ²	75-80	902	1482	0.33	3.3	30/05	0.08	08/02	0.7	0.25	0.10
M.A: WWA	Level: 18m	F.A.F: N						1979		1976			
Comment: Flat V Crump profile weir, crest 4.5m broad. Full range station. Structure capacity 3.3m ³ s ⁻¹ . Some hatch activity upstream, but this does not affect mean daily flow. Runoff figures suggest topographical and hydrological catchment areas do not coincide. # Predominantly a limestone catchment. Land use - mainly pastoral.													
051001	Doniford Stream at Swill Bridge	C.A: 75.8 km ²	67-80	899	425	1.02	62.3	27/12	0.08	27/08	2.4	0.80	0.20
M.A: WWA	Level: 9m	F.A.F: N						1979		1976			
Comment: Flat V weir. Prior to 1982 velocity-area station with rock control. High flows measured from bridge downstream. # Drains Devonian/Triassic sandstones between Quantock and Brendon Hills. Land use rural.													
052003	Haise Water at Bishops Hull	C.A: 87.8 km ²	61-80	877	392	1.09	28.3	10/07	0.13	23/08	2.2	0.76	0.31
M.A: WWA	Level: 16m	F.A.F: N						1968		1976			
Comment: Flat V weir, 0.5km upstream of confluence with River Tone. Velocity-area station prior to July 1981. Flows in excess of 7m ³ s ⁻¹ result in out of bank flow approx 180m upstream of station and bypassing occurs. Above 18.7m AOD flows are affected by backwater from the River Tone. # Catchment - mixed geology; predominantly Jurassic Limestone, sandstones and marl. Land use - predominantly rural.													
052004	Iste at Ashford Mill	C.A: 90.1 km ²	62-80	892	448	1.28	28.3	02/12	0.09	28/06	2.8	0.88	0.25
M.A: WWA	Level: 15m	F.A.F: S						1972		1964			
Comment: Crump weir for low flows, crest 6.71m broad. Modular limit of weir 0.6m stage. Velocity-area station for higher flows (downstream weed growth affects the stability of the stage-discharge relationship). Flood plain storage in catchment. Bankfull- 2.438m stage. Bypassing of station occurs at high flows. Minor groundwater abstractions in catchment. # Impermeable catchment - predominantly Lower Lias clays. Very responsive. Land use - rural.													
052005	Tone at Bishops Hull	C.A: 202.0 km ²	61-80	962	466	2.88	112.7	11/07	0.16	22/08	6.5	1.73	0.62
M.A: WWA	Level: 16m	F.A.F: S						1968		1976			
Comment: Crump weir (breadth 12.2m) with crest tapping. Full range station. Pre-March 1968: velocity-area station; flows inaccurate below 1.42 m ³ s ⁻¹ . Clatworthy and smaller Luxhay Reservoir in headwaters. Compensation flow maintains low flows. Reservoirs not large enough to influence fairly rapid response to rainfall. Minor surface water and groundwater abstractions. # Catchment geology - predominantly sandstones and Marl. Land use - rural.													
052006	Yeo at Pen Mill	C.A: 213.1 km ²	63-80	888	378	2.55	138.9	27/12	0.05	06/11	6.8	1.05	0.34
M.A: WWA	Level: 24m	F.A.F: S						1979		1971			
Comment: Low flows measured by Crump type triangular cross-section weir. Flows > 1.55m ³ s ⁻¹ measured by rated river section (downstream summer weed growth affects the stability of the stage-discharge relationship). Deeply incised channel, all but highest floods contained. Sutton Bingham reservoir in headwaters. Medium/low flows show influence of variable abstraction and compensation operations. # Geology - Oxford Clay and Great Oolite in upper catchment; Yeovil Sands and Inferior Oolite in lower catchment. Land use - predominantly rural.													

				Period	Rainfall (mm)	Runoff (mm)	Mean flow (m ³ s ⁻¹)	Peak flow (m ³ s ⁻¹)	Date of peak	Min. daily flow (m ³ s ⁻¹)	Date of min.	10 Percentile (m ³ s ⁻¹)	50 Percentile (m ³ s ⁻¹)	95 Percentile (m ³ s ⁻¹)
					% of pre-1981	% of pre-1981								
052007	Parrett at Chiselborough	C.A.: 74.8 km ²	66-80	922	464	1.10	44.9	27/12	0.08	23/08	2.2	0.52	0.19	
M.A.: WWA	Level: 21m	F.A.F.: N	B-full: 11.6 m ³ s ⁻¹											
Comment:	Crump weir (breadth: 7.87m) with crest tapping, situated in bridge culvert. Full range station. Throttling of high flows occurs in high range and flow hydrograph exhibits hysteresis. Weir drowning more frequent prior to downstream channel improvements in 1966. Flows calculated from crest tapping prior to 1/4/67 are erroneous due to leak in float well. Minor surface water and groundwater abstractions. # Geology - predominantly Oxford Clay with a small band of Upper Greensand and Gault in the headwaters. Land use - rural.													
	1981	984	107	525	113	1.25	30.1	20/12	0.21	05/09	2.3	0.66	0.25	
	1982	1049	114	647	139	1.53	29.1	12/11	0.27	18/09	2.8	0.78	0.29	
	1983	783	85	430	93	1.02	17.9	31/01	0.26	18/08	2.0	0.64	0.28	
	1984	928	101	484	104	1.15	22.9	27/01	0.12	18/09	2.4	0.47	0.14	
	1985	912	99	448	97	1.06	38.5	26/12	0.23	25/07	1.8	0.46	0.25	
052009	Sheppey at Fenny Castle	C.A.: 59.6 km ²	64-80	955	553	1.05	9.3	10/07	0.10	13/09	2.1	0.77	0.25	
M.A.: WWA	Level: 6m	F.A.F.: G	B-full: 12.0 m ³ s ⁻¹											
Comment:	Crump weir for low flows, crest 5.18m broad. Velocity-area station for flows greater than 1.84 m ³ s ⁻¹ (downstream summer weed growth affects the stability of the stage-discharge relationship). Full range station. Banks adequately contain all flows at site. Minor groundwater abstractions in catchment. # Mixed geology: Upper catchment - Carboniferous Limestone, Lower catchment - sandstones. Land use - rural.													
	1981	1078	113	752	136	1.42	8.3	09/03	0.31	02/09	2.4	1.19	0.41	
	1982	992	104	681	123	1.29	7.6	12/07	0.30	18/09	2.5	1.10	0.36	
	1983	965	101	632	114	1.19	7.3	07/01	0.30	29/08	2.1	1.01	0.35	
	1984	957	100	530	96	1.00	6.1	27/01	0.23	06/07	2.3	0.70	0.24	
	1985	961	101											
052010	Brue at Lovington	C.A.: 135.2 km ²	64-80	911	442	1.89	95.5	30/05	0.06	01/10	4.4	1.00	0.25	
M.A.: WWA	Level: 20m	F.A.F.: N	B-full: 90.0 m ³ s ⁻¹											
Comment:	Crump weir for low flows, crest 6.71m broad. Velocity-area station for flows >2.2 m ³ s ⁻¹ (downstream summer weed growth affects the stability of the stage-discharge relationship). Reliable extension of rating to bankfull. Channel section is deep and contains all but very exceptional floods. # Headwaters fed by Mendip and Salisbury Plain springs. Geology - Oxford Clay and Great Oolite in upper catchment; Yeovil Sands and Inferior Oolite in lower catchment. Very pronounced hydrograph peaks. Land use - predominantly rural.													
	1981	904	99	488	110	2.09	41.1	09/03	0.29	06/09	4.1	1.32	0.43	
	1982	965	106	532	120	2.28	83.0	12/07	0.30	18/09	5.1	1.28	0.36	
	1983	769	84	390	88	1.67	35.5	07/01	0.25	19/08	3.4	1.15	0.29	
	1984	827	91	401	91	1.72	33.5	25/01	0.17	05/09	4.9	0.68	0.21	
	1985	801	88	408	92	1.74	57.8	26/12	0.36	25/07	3.4	1.03	0.41	
052011	Cary at Somerton	C.A.: 82.4 km ²	65-80	766	321	0.84	13.7	31/05	0.00	28/08	2.2	0.27	0.05	
M.A.: WWA	Level: 9m	F.A.F.: N	B-full: 10.0 m ³ s ⁻¹											
Comment:	Compound Crump weir, approx. 330m upstream of Cary Bridge. Centre section - 3.05m broad, two side sections 1.22m broad. Velocity area station for flows greater than 4.4m ³ s ⁻¹ (downstream summer weed growth affects the stability of stage-discharge relationship). Full range station. Banks contain all but exceptional floods. # Geology - predominantly Lower Lias and Oolitic Limestone. Land use - rural.													
	1981	747	98	286	89	0.75	10.4	31/12	0.03	05/09	1.6	0.34	0.04	
	1982	789	103	450	140	1.18	10.2	16/03	0.04	20/09	3.2	0.55	0.06	
	1983	619	81	228	71	0.59	7.5	20/12	0.05	27/08	1.5	0.31	0.06	
	1984	666	87											
	1985	636	83	207	64	0.54	11.3	26/12	0.04	27/09	1.2	0.14	0.05	
052014	Tone at Greenham	C.A.: 57.2 km ²	67-80	1073	638	1.16			0.01	30/10	2.5	0.81	0.42	
M.A.: WWA	Level: 77m	F.A.F.: S	B-full: 19.0 m ³ s ⁻¹											
Comment:	Compound Flat V Crump profile weir. Prior to August 1979 velocity-area station with unstable bed. At high flows estimates made from debris marks as surrounding land floods. Since 1981 flows above 9.66 m ³ s ⁻¹ are truncated. Low flows maintained by Clatworthy Reservoir. Abstractions for supply. # The upper part of the catchment drains the Brendon Hills. Geology - predominantly Old Red Sandstone. Land use - rural.													
	1981	1283	120											
	1982	1216	113											
	1983			548	86	0.99			0.13	26/08	2.5	0.59	0.15	
	1984			632	99	1.15			0.12	02/09	2.6	0.43	0.13	
	1985			415	65	0.75			0.15	04/07	1.5	0.44	0.17	
052016	Currypool Stream at Currypool Farm	C.A.: 15.7 km ²	71-80	903	422	0.21	7.9	01/12	0.03	28/08	0.4	0.14	0.06	
M.A.: WWA	Level: 49m	F.A.F.: N												
Comment:	Crump weir, crest 4m broad. Velocity-area station for flows > 1.654 m ³ s ⁻¹ . Minor surface water abstractions in catchment. # Headwaters drain the Quantocks. Geology - predominantly Old Red Sandstone and Marl. Land use - agricultural.													
	1981	998	111	433	103	0.22	2.7	13/12	0.06	05/09	0.4	0.18	0.07	
	1982	1099	122	550	130	0.27	7.0	11/11	0.05	18/09	0.6	0.18	0.06	
	1983	947	105	441	105	0.22	5.2	07/01	0.08	15/11	0.4	0.15	0.08	
	1984			453	107	0.23	3.6	16/01	0.05	20/08	0.5	0.13	0.06	
	1985			368	87	0.18	5.1	23/12	0.06	01/10	0.3	0.12	0.07	
053002	Semington Brook at Semington	C.A.: 157.7 km ²	53-80	747	264	1.32			0.06	03/08	2.7	0.82	0.25	
M.A.: WWA	Level: 33m	F.A.F.: G												
Comment:	Formalised trapezoidal section with cableway, replacing velocity-area station downstream (superseded due to low banks and backwater from River Avon at high flows). Flood records for period prior to April 1970 are therefore poor. Station rated up to 19.83 m ³ s ⁻¹ . Some groundwater pumping and surface water abstractions. Mill operation upstream. # Catchment flat and low lying, mainly clay with steeper Chalk eastern boundaries. Land use - predominantly rural.													
	1981	781	105	322	122	1.61			0.42	03/09	2.5	1.04	0.55	
	1982	819	110	357	135	1.79			0.39	20/08	3.1	1.02	0.50	
	1983			296	112	1.48			0.45	09/11	2.4	1.14	0.59	
	1984			307	116	1.53			0.38	14/10	2.9	0.85	0.48	
	1985			286	108	1.43			0.33	15/11	2.1	0.87	0.50	
053004	Chew at Compton Dando	C.A.: 129.5 km ²	58-80	992	243	1.00	67.5	30/05	0.14	03/08	2.0	0.63	0.30	
M.A.: WWA	Level: 17m	F.A.F.: SPGI	S-full: 85.0 m ³ s ⁻¹											
Comment:	Trapezoidal critical depth flume. Full range station. Flow record unreliable for approximately a year after July 1968 flood due to bank collapse and accumulated debris. Large storage reservoir in headwaters - Chew Valley Lake. Seasonal compensation flow. Significant surface water abstractions for public supply and industry. Monthly naturalised flow series available to 1980. # Mixed geology - predominantly clay, some Coal Measures. Land use - rural.													
	1981	1184	119	305	126	1.25	63.8	30/12	0.39	31/08	2.1	0.84	0.43	
	1982	1162	117	374	154	1.53	50.0	09/03	0.36	21/09	3.1	0.88	0.44	
	1983	1031	104	302	124	1.24	17.9	31/01	0.36	26/08	2.5	0.81	0.38	
	1984	1090	110	302	124	1.24	32.5	02/01	0.31	29/08	2.5	0.66	0.32	
	1985	1049	106	292	120	1.20	59.0	23/12	0.43	01/08	1.9	0.83	0.48	
053005	Midford Brook at Midford	C.A.: 147.4 km ²	61-80	973	446	2.09	55.7	10/07	0.16	19/08	4.6	1.37	0.39	
M.A.: WWA	Level: 27m	F.A.F.: G	S-full: 56.0 m ³ s ⁻¹											
Comment:	Trapezoidal critical depth flume 2.4km upstream of confluence with River Avon. Full range station. Algae growth affects sensitivity at low flows. Bypassing may occur on left-hand bank above 3m stage. Minor groundwater abstractions in catchment. # Predominantly impermeable catchment - Lias with Coal Measures. Deep steep sided valleys in catchment, responds rapidly to rainfall. Land use - rural.													
	1981	1084	111	541	121	2.53	26.7	30/12	0.47	09/09	4.6	1.91	0.55	
	1982	1075	110	610	137	2.85	30.3	15/03	0.38	10/09	6.6	1.79	0.53	
	1983	973	100	528	118	2.47	26.5	31/01	0.47	29/08	5.0	1.86	0.53	
	1984	1027	106	528	118	2.47	34.7	16/01	0.30	02/09	5.9	1.40	0.37	
	1985	986	101	524	117	2.44	49.9	25/12	0.71	10/07	4.5	1.67	0.79	
053006	Frome(Bristol) at Frenchay	C.A.: 148.9 km ²	61-80	789	351	1.66	70.8	10/07	0.07	10/08	4.1	0.75	0.20	
M.A.: WWA	Level: 20m	F.A.F.: GEI	S-full: 56.0 m ³ s ⁻¹											
Comment:	Trapezoidal critical depth flume. Full range station. Flume designed on basis of pre-urbanised estimates - site swamped in storms of 1965 and 1968. Extra retaining walls have been installed. Flows affected by mill operation upstream. Minor groundwater abstractions and effluent returns. # Impermeable catchment - predominantly Coal Measures on eastern side of catchment and Lias on western side. Substantial urbanisation in catchment.													
	1981	902	114	435	124	2.05	37.2	30/12	0.16	04/09	4.5	1.05	0.19	
	1982	871	110	449	128	2.12	33.8	15/03	0.16	18/09	5.6	0.98	0.20	
	1983	782	99	362	103	1.71	31.2	01/05	0.15	30/08	3.7	0.83	0.22	
	1984	845	107	374	107	1.77	31.9	02/01	0.14	27/07	4.4	0.69	0.17	
	1985	837	106	387	110	1.82	35.5	24/12	0.34	03/06	3.8	0.95	0.39	
053007	Frome(Somerset) at Telford	C.A.: 261.6 km ²	61-80	959	443	3.67	108.1	10/07	0.20	27/08	8.3	2.18	0.64	
M.A.: WWA	Level: 35m	F.A.F.: PGI												
Comment:	Trapezoidal critical depth flume. Full range station. Deeply incised channel at station - all but extreme floods contained (although some overbank upstream storage). Pumping station upstream of gauging station. Substantial groundwater and surface water abstractions in catchment. # Mixed geology - predominantly limestone with impermeable clays in Frome Gap and Coal Measures in Mells Valley. Responsive catchment but detention lakes 5 to 6km upstream may truncate peaks. Land use - predominantly rural.													
	1981	1060	111	526	119	4.37	68.8	09/03	0.56	09/09	8.7	2.93	0.79	
	1982	1061	111	551	124	4.57	58.1	15/03	0.61	15/09	10.6	2.69	0.78	
	1983	947	99</											

					Period	Rainfall (mm)	Runoff (mm)	Mean flow (m ³ s ⁻¹)	Peak flow (m ³ s ⁻¹)	Date of peak	Min. daily flow (m ³ s ⁻¹)	Date of min.	10 Percentile (m ³ s ⁻¹)	50 Percentile (m ³ s ⁻¹)	85 Percentile (m ³ s ⁻¹)		
						% of pre-1981	% of pre-1981										
053008	Avon at Great Somerford	C.A: 303.0 km ²	64-80	811	335	3.22	107.7	11/07	0.11	08/09	7.8	1.77	0.35				
M.A: WWA	Level: 58m	F.A.F: G															
Comment:	Compound Crump weir - low flow crest between two flanking sections. Situated 90m downstream of Great Somerford road bridge. Full range station. All except extreme flows (e.g. July 1968) contained. Flows augmented by groundwater scheme in catchment. # Geology - mainly Oolitic Limestone with left bank tributaries draining off clays. Land use - predominantly rural.																
				1981		922	114	404	121	3.88	32.9	29/12	0.38	07/09	7.6	2.93	0.49
				1982		929	115	425	127	4.08	48.0	15/03	0.26	25/09	10.4	2.34	0.39
				1983		827	102	336	101	3.24	33.4	01/05	0.30	21/11	8.0	2.10	0.46
				1984		876	106	343	102	3.29	34.0	02/01	0.21	02/08	8.7	1.40	0.32
				1985		927	114	416	124	3.98	64.7	24/12	0.83	03/06	8.0	2.80	1.08
053009	Wellow Brook at Wellow	C.A: 72.6 km ²	66-80	1009	535	1.23	29.5	10/07	0.09	26/08	2.7	0.83	0.23				
M.A: WWA	Level: 44m	F.A.F: N															
Comment:	Trapezoidal critical depth flume. Full range station. Slight bypassing on right-hand bank and backing up from bridge downstream occurred during July 1968 flood. MAF gauged adequately. # Mixed geology - Lias and Oolitic Limestone. Land use - predominantly rural.																
				1981		1142	113	620	116	1.43	13.7	10/03	0.23	09/09	2.6	1.14	0.30
				1982		1109	110	669	125	1.54	13.5	19/12	0.27	18/09	3.6	1.03	0.30
				1983		1007	100	596	111	1.37	11.9	31/01	0.24	30/08	2.7	1.08	0.27
				1984		1067	106	593	111	1.37	17.7	16/01	0.16	30/08	3.3	0.80	0.20
				1985		1036	103	586	110	1.35	22.9	23/12	0.41	01/10	2.6	1.01	0.45
053013	Marden at Stanley	C.A: 99.2 km ²	70-80	744	373	1.17	34.2	11/06	0.10	26/08	2.4	0.74	0.25				
M.A: WWA	Level: 47m	F.A.F: G1															
Comment:	Trapezoidal critical depth flume. Full range station. Prior to July 1969 level only station. Bridge 100-150m upstream causes throttling at high flows. Minor groundwater and surface water abstractions in catchment. # Predominantly clay catchment, Chalk outcrop in headwaters. Land use - rural.																
				1981		852	115	446	120	1.40	14.0	12/03	0.34	17/09	2.6	1.03	0.39
				1982		885	119	454	122	1.43	13.5	10/12	0.24	18/09	3.1	1.04	0.31
				1983		755	101	386	103	1.21	12.4	23/03	0.35	23/11	2.3	1.01	0.37
				1984		823	111	397	106	1.25	14.4	16/01	0.19	02/09	2.9	0.80	0.22
				1985		783	105	379	102	1.19	40.1	20/01	0.33	27/11	2.1	0.82	0.36
053017	Boyd at Bitton	C.A: 48.0 km ²	73-80	774	351	0.54	27.2	30/05	0.01	28/08	1.3	0.26	0.05				
M.A: WWA	Level: 16m	F.A.F: E1															
Comment:	Flat V Crump profile weir, crest 8m broad. Situated in rectangular sheet-piled section; 4m deep. Full range station. Maintenance difficult. # Predominantly clay catchment. Land use - mainly rural with some urbanisation.																
				1981		854	110	462	132	0.70	14.1	30/12	0.04	04/09	1.7	0.41	0.07
				1982		842	109	446	127	0.68	15.3	15/03	0.04	14/09	1.7	0.29	0.06
				1983		789	102	353	101	0.54	7.6	01/05	0.04	31/08	1.2	0.30	0.07
				1984		882	114	365	104	0.56	18.6	02/01	0.04	29/07	1.4	0.23	0.06
				1985		869	112	413	118	0.63	26.2	23/12	0.12	25/07	1.4	0.34	0.14
053018	Avon at Bathford	C.A: 1552.0 km ²	69-80	817	343	16.88	300.5	28/12	1.09	29/08	35.8	10.78	3.44				
M.A: WWA	Level: 18m	F.A.F: RG															
Comment:	Velocity-area station with cableway. (Replacement station for Bath St James). Situated immediately downstream of confluence with Bybrook. Section by railway bridge; area widely inundated in flood conditions, but all flows contained through bridge. Flows augmented by groundwater scheme in catchment. # Mixed geology - predominantly clays and limestone with eastern tributaries rising from Chalk. Land use - mainly rural, some urbanisation.																
				1981		950	116	389	113	19.17	171.0	11/03	2.57	09/09	35.8	14.28	3.49
				1982		942	115	417	122	20.50	193.3	16/03	3.18	12/08	48.6	12.00	3.61
				1983		848	104	343	100	16.89	158.9	31/01	3.62	29/08	33.9	12.78	4.08
				1984		879	108	346	101	17.05	166.9	16/01	2.07	02/09	41.1	9.59	2.60
				1985		864	106	350	102	17.20	249.7	26/12	4.37	25/07	31.7	11.74	5.09
053019	Woodbridge Brook at Crab Mill	C.A: 46.6 km ²	69-80	723	382	0.56					0.00	23/09	1.0	0.19	0.02		
M.A: WWA	Level: 66m	F.A.F: RPGE1															
Comment:	Compound rectangular thin-plate weir (no divide piers). 1.52m broad centre section and two 0.76m broad wings. Measuring capacity of weir 1.4 m ³ s ⁻¹ . Low flow station only. The rating above the capacity of the weir is usable only to estimate flows. Substantial groundwater and surface water abstractions in catchment. # Impermeable clay catchment. Land use - predominantly rural.																
				1981		817	113	377	99	0.56		0.06	08/09	1.1	0.32	0.07	
				1982		870	120	469	123	0.69		0.02	31/08	1.5	0.21	0.04	
				1983		716	99	335	88	0.49		0.03	23/11	0.8	0.26	0.05	
				1984				349	91	0.52		0.02	05/09	1.0	0.15	0.02	
				1985				523	137	0.77		0.11	26/10	1.2	0.29	0.14	
053020	Gauze Brook at Rodbourne	C.A: 28.2 km ²	68-80	775	327	0.29					0.00	18/08	0.7	0.15	0.01		
M.A: WWA	Level: 66m	F.A.F: RGE1															
Comment:	Rectangular thin-plate weir. Measuring capacity of weir 0.566 m ³ s ⁻¹ . Primarily a low flow station; monitors the impact of groundwater abstraction/recharge on river flow. Discharges which exceed 0.57 m ³ s ⁻¹ are estimates only. # Predominantly limestone catchment. Land use - rural.																
				1981		838	108	371	113	0.33		0.02	19/08	0.7	0.24	0.02	
				1982		831	107	356	109	0.32		0.01	04/08	0.9	0.12	0.02	
				1983				276	84	0.25		0.02	23/11	0.6	0.14	0.03	
				1984				283	87	0.25		0.01	26/07	0.7	0.09	0.01	
				1985				307	94	0.27		0.02	06/11	0.7	0.16	0.03	
053022	Avon at Bath ultrasonic	C.A: 1605.0 km ²	76-80	911	444	22.62	275.9	28/12	0.79	19/09	49.7	12.85	4.44				
M.A: WWA	Level: m	F.A.F: RG															
Comment:	Harwell single path ultrasonic in sheet piled channel. Some problems with high flow measurement owing to sediment entrapment. Flows not processed since December 1984. Flows augmented from groundwater scheme in catchment. # Mixed geology - predominantly clays and Oolitic Limestone with eastern tributaries rising from Chalk. Land use - predominantly rural with some urbanisation.																
				1981		941	103	446	100	22.68	172.6	11/03	2.93	04/09	44.0	16.21	4.53
				1982		948	104	492	111	25.05	185.7	16/03	2.62	16/09	60.1	13.22	4.63
				1983		828	91	399	90	20.30	162.2	31/01	3.55	18/08	42.9	14.45	4.88
				1984		890	98										
				1985		871	96										
053023	Sherston Avon at Fosseway	C.A: 89.7 km ²	76-80	849	350	1.00	11.6	30/05	0.05	27/11	2.2	0.58	0.10				
M.A: WWA	Level: m	F.A.F: G															
Comment:	Flat V Crump profile weir, crest 7.0m broad. Full range station. Flows augmented by groundwater scheme in catchment. Gate activity upstream may affect flows. # Geology - predominantly Oolitic Limestone. Land use - rural.																
				1981		933	110	380	109	1.08	8.8	30/12	0.10	03/09	2.0	0.85	0.12
				1982		929	109	438	125	1.24	8.3	14/03	0.09	13/09	3.3	0.76	0.12
				1983		839	99	328	94	0.93	5.2	01/05	0.12	24/08	3.3	0.51	0.14
				1984		874	103	330	94	0.94	7.1	02/01	0.10	27/07	2.5	0.40	0.12
				1985		909	107	384	110	1.09	10.3	26/12	0.27	02/06	2.2	0.82	0.31
053025	Mells at Vallis	C.A: 119.0 km ²	1980	1081	407	1.54	15.4	04/02	0.22	03/09	3.5	1.02	0.27				
M.A: WWA	Level: m	F.A.F: I															
Comment:	Crump weir, crest 6.0m broad. Full range station. Minor groundwater and surface water abstractions in catchment. # Geology - predominantly Carboniferous Limestone with Coal Measures. Land use - rural.																
				1981		1190	110	491	121	1.85	28.0	09/03	0.18	09/09	3.4	1.40	0.26
				1982		1154	107	488	120	1.84	19.8	15/03	0.18	18/09	4.2	1.22	0.25
				1983		1083	100	465	114	1.75	33.2	31/01	0.17	02/09	3.7	1.40	0.23
				1984		1096	101	405	100	1.53	18.7	16/01	0.11	30/08	4.2	0.70	0.14
				1985		1048	97	416	102	1.56	33.1	25/12	0.33	03/06	3.0	1.11	0.40
053026</																	

054088 Little Avon at Berkeley Kennels C.A.: 134.0 km ² 78-80		Period	Rainfall (mm)	Runoff (mm)	Mean flow (m ³ s ⁻¹)	Peak flow (m ³ s ⁻¹)	Date of peak	Min. daily flow (m ³ s ⁻¹)	Date of min.	10 Percentile (m ³ s ⁻¹)	50 Percentile (m ³ s ⁻¹)	95 Percentile (m ³ s ⁻¹)	
M.A: WWA Level: m F.A.F: PGEI			% of pre-1981	% of pre-1981									
Comment: Velocity-area station in a rectangular concrete channel; gauged from the road bridge. Flood gates d/s to cope with coincidence of large tidal range of Severn and extreme events. Moderate influence from PWS abstractions and spray irrigation. Built by STWA, run by WWA. # Steep headwaters drain complex sequence of limestones, sandstones and clays of the Lower and Middle Jurassic; the flat Vale of Berkeley is flooded by a Cambrian inlier, Keuper Marl and Lias clays. Agricultural catchment, quite responsive.		1981	230	0.98	38.7	30/05	0.20	05/12	2.1	0.69	0.25		
		1979			1979		1978						
		1982	292	1.24	26.1	30/12	0.25	16/08	2.0	0.87	0.28		
		1983	257	1.09	18.6	15/03	0.25	18/09	2.1	0.89	0.28		
		1984	257	1.09	44.6	01/05	0.29	23/11	2.0	0.82	0.35		
		1985	249	1.06	32.8	23/11	0.21	29/07	2.0	0.79	0.26		
			288	1.22	29.3	24/12	0.37	05/06	2.1	0.91	0.47		

Summary of Archived Data

Gauged daily flows, monthly peaks and monthly rainfall

Stn. number	Gauged daily flows, monthly peaks and rainfall	Stn. number	Gauged daily flows, monthly peaks and rainfall	Stn. number	Gauged daily flows, monthly peaks and rainfall
043001	60s eAAAAE↑↑↑↑ 70s ↑↑↑↑↑↑↑↑	044006	60s ----↑↑↑↑ 70s AAAAAA	053001	50s --eAAAAA 60s AAAAAAAA
043003	60s ----↑CFCFC 70s CCCCCCccc	044009	60s AAAAAABbe 70s --eAAAA	053002	50s --eAAAAA 60s AAAAAAAA
043004	60s ----EAEAA 70s AAADAEAAAA	051001	60s ----AAA 70s AAAAAAAA	053003	50s ----↑ 60s bbabAAAAA
043005	60s ----EAAAA 70s AAAAAAAA	051002	60s AAEEaae 70s --eaaae	053004	50s ----↑ 60s AAAAAAAA
043006	60s ----AAAA 70s AAAAAADAAA	051003	60s ----febb 70s bbbbaabfee	053005	50s ----EA 60s AAAAAAAA
043007	60s --↑AAAAAA 80s AAAAAAae	052001	50s ----eaaa 60s aaaaabAAE↑	053006	50s AAAAAAAA 60s AAAAAAAA
043008	60s ----AAA 70s ABAAAAAAA	052002	50s ----eAAB 60s BBBBBAae-	053007	50s AAAAAAAA 60s AAAAAAAA
043009	60s ----eA 70s AAAAAAAA	052003	60s eBAAAAAA 70s AAAAAAAA	053008	50s AAAAAAAA 60s AAAAAAAA
043010	60s ----↑ 70s EAAAAABAA	052004	60s --eAAAAA 70s AAAAAAAA	053009	50s ----AAA 60s AAAAAAAA
043011	60s Eeccc↑↑↑↑ 70s ↑EAAAAABAA	052005	60s --EAAAAA 70s AAAAAAAA	053013	50s AAAAAAAA 60s AAAAAAAA
043012	60s ----↑↑↑↑ 70s ↑EAAAAABAA	052006	60s --eAAAAA 70s AAAAAAAA	053017	50s --EAAAAA 60s AAAAAAAA
043013	60s ----↑ 70s ↑EBABBBAAA	052007	60s ----eAAA 70s AAAAAA	053018	50s AAAAAAAA 60s AAAAAAAA
043014	60s AEBE↑↑ 70s ↑EAAAAAAA	052008	60s AAAAAAae 70s ↑↑↑↑↑↑↑↑	053019	50s ----e 60s aaaaaaaa
043017	60s ----↑↑↑↑ 70s ↑EAAAAAAA	052009	60s --eAAAAA 70s AAAAAAAA	053020	50s AAAAAAAA 60s AAAAAAAA
043018	60s AABABbe 70s AAAAAAae	052010	60s AAAAAAae 70s AAAAAAAA	053022	50s ----eAAA 60s AAAAAAAA
043019	60s --eAAAAA 70s ABAABae	052011	60s --eAAAAA 70s ABAAAAAAA	053023	50s --eADE 60s AAAAAAAA
043021	60s ----BBBAB 70s BBBCCCcf	052014	60s ----↑EAA 70s BAAEEEE↑	053024	50s ----AA 60s AAAAAAAA
044001	60s ----cccC 70s CCCCCCccc	052015	60s ↑EEaaae· 70s EAAAAAAA	053025	50s AAAAAAAA 60s AAAAAAAA
044002	60s --eAAAADD 70s AAAAAAAA	052016	60s ----EAAA 70s AAAAAAAA	053026	50s ----AA 60s AAAAAAAA
044003	60s AAAAAAae 70s AAAAAABAAA	052020	60s ----↑ccf 70s ↑↑FEAAA↑	053028	50s --aaaaa 60s AAAAAAAA
044004	60s e 70s --↑CCCCccc 80s ccccCC			054088	60s ----ea 70s aaaaaaa

Naturalised daily and monthly flows

Stn. number	Naturalised daily, and monthly flows	Stn. number	Naturalised daily, and monthly flows	Stn. number	Naturalised daily, and monthly flows
043005	60s ----FEEEF 70s EF	052002	50s ----FEE 60s EEEEEBEF	052014	60s ----FEE 70s FEEFFFF
051002	70s --FEEEF	052005	60s --FEEEBEEE 70s EEEEEEF	053004	50s ----FE 60s EEEEEEEF
		052006	60s --FEEEEE 70s EEEEEEF		70s FEEEEEAAA 80s A
		052008	60s FEEEBEEF		

SOUTH WEST WATER



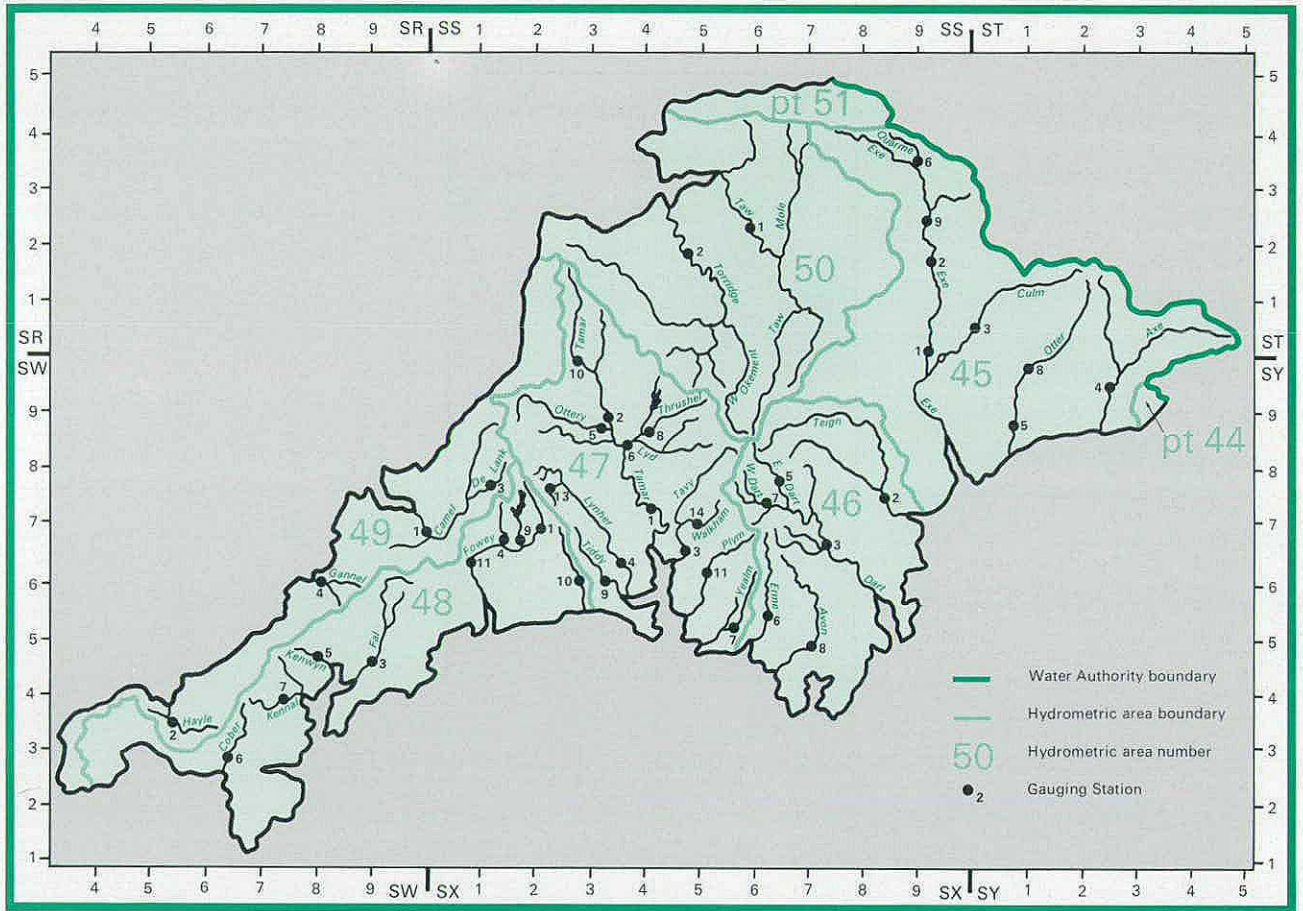
Area: 10,884 km²

Average Rainfall (1941-70): 1194 mm

Headquarters of South West Water:

Peninsula House
Rydon Lane
Exeter EX2 7HR

Telephone: Exeter (0392) 219666



Gauging Station Register

Station number	River name	Station name	Grid reference	Catchment area (sq km)	Station type	Period of record	Mean ann. rainfall (mm)	Mean ann. runoff (mm)	Max. ann. runoff (mm)	Year of max.	Min. ann. runoff (mm)	Year of min.	Mean flow (m ³ s ⁻¹)	Min. mon. flow (m ³ s ⁻¹)	Month/year of min.	Mean ann. flood (m ³ s ⁻¹)	Base flow index	10 Percentile (m ³ s ⁻¹)	95 Percentile (m ³ s ⁻¹)
045001	Exe	Thorverton	SS 936016	600.9	VA	1956-85	1269	832	1186	60	509	64	15.85	0.69	08/76	185.2	.51	37.5	1.87
045002	Exe	Stoodleigh	SS 943178	421.7	VA	1961-85	1356	927	1150	74	844	64	12.39	0.62	08/76	151.6	.51	28.3	1.45
045003	Culm	Wood Mill	ST 021058	226.1	VA	1962-85	972	523	675	74	318	64	3.75	0.57	08/76	81.6	.52	7.8	1.03
045004	Axe	Whitford	SY 262953	288.5	CC	1964-85	1007	541	701	74	292	73	4.95	0.55	08/76	107.9	.49	10.3	1.21
045005	Otter	Dotton	SY 087885	202.5	VA	1963-85	987	497	615	74	323	73	3.19	0.54	08/76	82.0	.53	6.2	0.99
045006	Quarmer	Enterwell	SS 919356	20.4	CB	1964-67	1750	1073	1178	65	1043	66	0.69	0.12	08/67	9.9	.58	1.5	0.19
045008	Otter	Fenny Bridges	SY 115986	104.2	VA	1974-85	1046	638	765	81	439	75	2.11	0.28	08/76	65.8	.49	4.4	0.50
045009	Exe	Pixton	SS 935260	147.6	VA	1981-85	1536	1018	1158	81	850	85	4.77	0.52	08/84	.50	11.4	0.62	
046002	Teign	Preston	SX 856746	380.0	VA	1956-85	1279	776	1301	60	433	75	9.35	0.47	08/76	175.3	.55	22.6	1.16
046003	Dart	Austins Bridge	SX 751659	247.6	VA	1958-85	1824	1405	1986	74	930	75	11.03	0.71	08/76	229.5	.52	24.4	1.40
046005	East Dart	Bellever	SX 657775	21.5	VA	1964-85	2016	1766	2604	74	1187	76	1.20	0.10	08/76	43.6	.42	2.6	0.18
046006	Erme	Ermington	SX 842532	43.5	VA	1974-85	1705	1308	1671	74	867	75	1.80	0.11	08/76	42.3	.50	4.0	0.21
046007	West Dart	Dunnabridge	SX 843742	47.9	VA	1972-81	2000	1564	2324	74	1078	73	2.38	0.20	08/76	.42	5.4	0.28	
046008	Avon	Loddiswell	SX 719476	102.3	VA	1971-81	1761	974	1391	74	625	73	3.18	0.21	08/76	56.5	.51	7.5	0.39
047001	Tamar	Gunnistake	SX 426725	916.9	VA	1956-85	1236	780	1200	74	431	64	22.68	0.76	08/76	309.1	.46	55.4	1.81
047002	Tamar	Werrington	SX 343886	232.1	VA	1956-61	1143	793	1119	60	587	57	5.84	0.04	09/59	.33	15.6	0.13	
047003	Tavy	Lopwell	SX 474650	205.9	MIS	1957-80	1563	898	1125	58	853	78	5.87	0.26	08/76	.46	15.2	0.54	
047004	Lynher	Pillaton Mill	SX 368624	135.5	VA	1963-85	1433	1015	1575	74	679	64	4.36	0.34	08/76	42.8	.57	9.9	0.63
047005	Ottery	Werrington Park	SX 336866	120.7	VA	1963-81	1203	674	830	65	374	64	2.58	0.02	09/71	46.9	.39	6.4	0.20
047006	Lyd	Lifton Park	SX 388842	218.1	FLVA	1963-81	1267	721	1035	65	494	64	4.99	0.21	08/76	131.1	.49	11.9	0.44
047007	Yealm	Puslinch	SX 574511	54.9	FLVA	1963-85	1444	937	1269	74	604	71	1.63	0.06	08/76	21.5	.56	3.7	0.19
047008	Thrushel	Tinhay	SX 398856	112.7	CC	1969-85	1183	672	1049	74	459	75	2.40	0.02	08/76	52.7	.38	6.3	0.08
047009	Tiddy	Tideford	SX 343595	37.2	C	1969-85	1258	740	1038	74	501	73	0.87	0.08	08/76	5.9	6.0	2.1	0.12
047010	Tamar	Crowford Bridge	SX 290991	76.7	CC	1972-85	1183	1014	1599	74	733	75	2.47	0.05	07/75	.27	5.0	0.08	
047011	Phym	Carn Wood	SX 522613	79.2	CC	1971-81	1552	909	1312	74	521	73	2.28	0.16	08/76	.48	5.4	0.30	
047013	Withey Brook	Bastreet	SX 244763	16.2	CC	1973-85	1732	1133	1937	74	905	83	0.58	0.07	08/84	12.7	.57	1.3	0.10
047014	Walkham	Horrabridge	SX 513699	43.2	MIS	1981-85	1298	1458	81	1049	83	1.78	0.23	08/84	.59	3.9	0.26		
048001	Fowey	Trekalvesteps	SX 227698	36.8	CC	1961-85	1666	1163	1641	74	808	76	1.36	0.12	09/59	.84	2.9	0.25	
048003	Fal	Tregony	SW 921447	87.0	FLVA	1981-85	1213	704	876	82	552	83	1.94	0.37	07/84	12.0	.70	4.2	0.40
048004	Warleggan	Trengoffe	SX 159674	25.3	CC	1969-85	1474	1006	1531	74	778	83	0.81	0.12	08/76	9.3	.72	1.7	0.18
048005	Kanwyn	Truro	SW 820450	19.1	CC	1968-85	1131	624	898	74	436	71	0.38	0.03	08/76	5.9	.66	0.9	0.05
048006	Cober	Helston	SW 654273	40.1	VA	1968-85	1269	785	1055	79	580	83	1.00	0.09	08/84	5.9	.73	2.2	0.16
048007	Kennall	Ponsanooth	SW 762377	26.6	C	1968-85	1324	600	790	74	411	76	0.51	0.06	08/76	3.9	.68	1.2	0.08
048009	St Neot	Craigshill Wood	SX 184662	22.7	CC	1971-80	1570	1117	1645	74	879	75	0.80	0.08	08/76	9.8	.63	1.7	0.14
048010	Seaton	Trebrownbridge	SX 299596	38.1	CC	1957-85	1345	837	1175	74	540	71	1.01	0.15	08/76	6.7	.72	2.2	0.21
048011	Fowey	Restormel	SX 098624	169.1	CC	1961-85	1510	933	1388	74	651	64	5.00	0.34	08/76	77.7	.62	10.8	0.74
049001	Camel	Denby	SX 017682	208.8	VA	1964-85	1403	868	1233	74	616	71	5.74	0.42	08/76	60.5	.61	12.9	0.80
049002	Hayle	St Erth	SW 549342	48.9	CC	1957-85	1127	630	811	82	421	71	0.98	0.17	08/76	5.7	.83	2.1	0.22
049003	De Lank	De Lank	SX 132765	21.7	CC	1967-85	1653	1089	1401	81	788	75	0.75	0.03	08/76	.57	1.6	0.07	
049004	Gannel	Gwiltis	SW 829593	41.0	C	1969-85	1060	534	728	74	386	73	0.69	0.07	08/76	14.6	.68	1.6	0.10
050001	Taw	Umbertleigh	SS 608237	826.2	VA	1958-85	1148	687	1053	60	432	64	17.99	0.42	08/76	247.0	.42	48.7	1.17
050002	Torrridge	Torrington	SS 500185	663.0	VA	1962-85	1155	731	1001	74	427	64	15.36	0.25	08/76	275.9	.39	38.6	0.89

Hydrometric Statistics

Station	Period	Rainfall (mm)	Runoff (mm)	Mean flow (m ³ s ⁻¹)	Peak flow (m ³ s ⁻¹)	Date of peak	Min. daily flow (m ³ s ⁻¹)	Date of min.	10 Percentile (m ³ s ⁻¹)	50 Percentile (m ³ s ⁻¹)	95 Percentile (m ³ s ⁻¹)	
045001 M.A: SWWA Level: 26m F.A.F: PGEI B-full: 185.0 m ³ s ⁻¹ C.A: 600.9 km ² Comment: Velocity-area station with cableway. Flat V Crump weir constructed in 1973 due to unstable bed condition. Minor culvert flow through mill u/s of station included in rating. Significant abstractions for PWS Control point for Wimbleball Reservoir operational releases. #Headwaters drain Exmoor. Geology predominantly Devonian sandstones and Carboniferous Culm Measures, with subordinate Permian sandstones in the east. Moorland, forestry and a range of agriculture.	56-80	1256	818	15.58	492.5	04/12 1960	0.44	28/08 1976	36.7	9.59	1.88	
1981	1449	115	1047	128	19.95	265.6	10/03	1.68	05/09	40.5	14.82	2.21
1982	1333	106	935	114	17.82	240.2	19/12	1.85	09/06	47.7	10.23	2.20
1983	1340	107	891	109	16.98	202.9	31/01	1.40	11/08	39.6	9.91	1.61
1984	1349	107	889	109	16.94	198.8	27/01	1.20	29/08	45.8	6.75	1.36
1985	1206	96	746	91	14.17	203.3	26/12	2.70	05/06	30.5	7.76	3.31
045002 M.A: SWWA Level: 75m F.A.F: PGEI B-full: 150.0 m ³ s ⁻¹ C.A: 421.7 km ² Comment: Velocity-area station with cableway sited on a straight, stable length of river. Low flow controlled by a stone ledge some 50m d/s of the gauge. Full range, calibrated to above bankfull. Liable to backing up at bridge immediately u/s in highest floods. Flood relief culvert under road on rd. Bypassing included in rating. Significantly affected by Wimbleball regulation. #Headwaters drain Exmoor. Devonian sandstones and Culm Measures. Relatively impermeable catchment; moorland headwaters, grazing and forestry.	61-80	1335	913	12.21	232.2	19/12 1965	0.42	28/08 1976	27.5	8.02	1.49	
1981	1512	113	1123	123	15.02	197.5	09/03	1.38	09/09	31.5	11.63	1.76
1982	1425	107	1008	110	13.47	182.8	19/12	1.37	17/06	36.1	8.05	1.71
1983	1450	109	990	108	13.23	158.8	31/01	1.08	11/08	30.5	6.30	1.22
1984	1466	110	966	106	12.91	138.2	13/01	0.85	28/08	35.1	5.51	1.05
1985	1300	97	819	90	10.93	109.7d	26/12	2.08	05/06	22.9	6.28	2.65
045003 M.A: SWWA Level: 44m F.A.F: PGEI B-full: 42.0 m ³ s ⁻¹ C.A: 226.1 km ² Comment: Velocity-area station with cableway. Flat V weir constructed in 1972. Channel control when structure drowned. Full range. In August 1965 river regraded and d/s obstructions removed. Widespread u/s inundation during floods. Data unreliable prior to 1/10/62. Significant surface and groundwater abstractions. #Rises in the Blackdown Hills. Headwaters drain Greensand and Gault Clay. Predominantly Permo-Triassic sandstones, breccias and marls. Extensive valley gravels and alluvium. Subdued relief. Agricultural catchment.	62-80	967	513	3.68	202.2	11/07 1968	0.45	27/08 1976	7.7	2.25	1.00	
1981	1109	115	615	120	4.41	114.5	30/12	0.68	06/09	8.4	2.77	1.13
1982	1010	104	601	117	4.31	69.3	12/11	1.00	17/09	9.4	2.59	1.14
1983	964	100	524	102	3.76	64.0	31/01	0.96	19/08	7.5	2.46	1.15
1984	1013	105	572	112	4.10	110.7	27/01	0.95	20/08	8.5	2.13	1.08
1985	878	91	484	94	3.46	130.2	26/12	1.34	27/09	6.2	2.16	1.39
045004 M.A: SWWA Level: 7m F.A.F: PGEI S-full: 75.0 m ³ s ⁻¹ C.A: 288.5 km ² Comment: Compound Crump profile weir, total width 21.3m, low flow section 7.6m broad. Cableway on site. Structure limit 2m stage. Unique rating above modular limit.												

		Period	Rainfall (mm)	Runoff (mm)	Mean flow (m ³ s ⁻¹)	Peak flow (m ³ s ⁻¹)	Date of peak	Min. daily flow (m ³ s ⁻¹)	Date of min.	10 Percentile (m ³ s ⁻¹)	50 Percentile (m ³ s ⁻¹)	95 Percentile (m ³ s ⁻¹)			
			% of pre-1981	% of pre-1981											
045005	Otter at Dotton	C.A.: 202.5 km ²	63-80	996	501	3.22	346.9	11/07	0.44	27/08	6.3	1.93	0.99		
M.A.: SWWA Level: 15m F.A.F.: SRPGEI B-full: 88.0 m ³ s ⁻¹															
Comment: Velocity-area station with cableway. Station rebuilt after 1968 flood. Flat V Crump profile weir installed 1971. Full range station. Gabions stabilise bed and banks. Low embankments at field level extend containment. Some surface and groundwater abstractions in catchment. # Rises in Greensand and Gault Clay of the Blackdown Hills. Predominantly Keuper sandstones and marls. Extensive alluvium and valley gravels lower down. Some heathland, woodland and pasture, and a wide range of agriculture.															
			1981	1090	109	584	117	3.75	97.8	30/12	1.00	06/09	7.3	2.16	1.13
			1982	997	100	529	106	3.40	63.0	08/11	0.94	16/09	6.6	2.23	1.08
			1983	904	91	461	92	2.96	68.6	20/12	0.92	29/08	5.3	2.03	1.01
			1984	959	96	447	89	2.87	72.7	26/01	0.79	20/08	6.2	1.59	0.89
			1985	852	86	402	80	2.57	76.4	26/12	0.97	09/07	4.8	1.60	1.02
045008	Otter at Fenny Bridges	C.A.: 104.2 km ²	74-80	1044	643	2.13	100.3	28/01	0.22	27/08	4.5	1.09	0.45		
M.A.: SWWA Level: 55m F.A.F.: SRPGEI B-full: 73.0 m ³ s ⁻¹															
Comment: Velocity-area station with low level bed control and cableway, situated just u/s of road bridge. Bridge invert acts as control at high levels. Rb likely to be over topped at 1.6m stage when bypassing likely. Minor surface water abstractions in catchment. # Rises in the Greensand and Gault Clay of the Blackdown Hills. Keuper Marl in the lower reaches. Contains Honiton. Heathland, pasture and a range of agriculture.															
			1981	1207	116	765	119	2.53	131.7	31/05	0.54	06/09	5.2	1.41	0.62
			1982	1096	105	670	104	2.21	42.9	12/11	0.49	16/09	4.5	1.35	0.58
			1983	994	95	608	95	2.01	52.9	20/12	0.50	29/08	3.8	1.33	0.56
			1984	1033	99	589	92	1.94	53.3	26/01	0.43	20/08	4.6	0.98	0.48
			1985	931	89	532	83	1.75	65.6	25/12	0.50	09/07	3.5	1.01	0.58
045009	Exe at Pixton	C.A.: 147.6 km ²	63-80	1574	1158	5.42	57.0	09/03	0.69	04/09	11.0	3.90	0.87		
M.A.: SWWA Level: 128m F.A.F.:															
Comment: Full range velocity-area station. Shallow rock bar d/s of station is a natural low flow control. Bankfull 90 m ³ s ⁻¹ . Influence of bridge soffit upstream of station is unestablished, although the rating is reliably extrapolated to bankfull. Minor surface water abstractions in catchment. # Headwaters rise on Exmoor. Predominantly Devonian sandstones. Land use moorland, rough grazing, forestry.															
			1981	1496	1048	4.90	71.6	19/12	0.59	17/06	13.5	2.68	0.69		
			1982	1038	4.86	46.2	04/01	0.45	10/08	11.8	3.01	0.55			
			1983	1000	4.68	50.4	16/01	0.35	27/08	13.6	1.62	0.48			
			1984	852	3.98	64.0	26/12	0.89	04/06	9.2	2.17	1.09			
046002	Teign at Preston	C.A.: 380.0 km ²	56-80	1273	772	9.30	312.8	30/09	0.34	28/08	22.3	5.12	1.16		
M.A.: SWWA Level: 4m F.A.F.: SRPGEI B-full: 86.0 m ³ s ⁻¹															
Comment: Velocity-area station, channel width approximately 15m. Cableway and steel footbridge. Bypassing on the rb occurs above 2.4m, some accommodation for this in rating. Low flow control is a d/s gravel shoal. Substantial flow modification from 4 reservoirs and various WRWs. # The bulk of the river system rises on the Dartmoor Granite moorland; it traverses a complex of Devonian and Carboniferous shales, sandstones and cherts before its wide alluvial valley crosses Tertiary sands and clays. Low grade agriculture and woodland.															
			1981	1472	116	884	115	10.65	168.7	20/12	1.00	06/09	22.5	7.41	1.23
			1982	1358	107	896	116	10.80	153.4	08/11	1.07	18/09	25.7	6.74	1.33
			1983	1192	94	713	92	8.59	167.3	19/12	1.05	30/08	19.5	4.81	1.28
			1984	1309	103	830	108	10.01	163.9	16/01	0.72	20/08	26.4	4.57	0.94
			1985	1174	92	670	87	8.05	143.1	21/01	1.52	25/07	21.0	4.31	1.80
046003	Dart at Austins Bridge	C.A.: 247.6 km ²	58-80	1805	1406	11.04	549.7	27/12	0.59	28/08	24.2	7.24	1.43		
M.A.: SWWA Level: 22m F.A.F.: SRPGEI B-full: 418.0 m ³ s ⁻¹															
Comment: Velocity-area station, main channel approximately 30m wide. Rock step forms d/s control. Channel contains the mean annual flood. Bypassing occurs on rb above 4.2m. Well rated. Moderate modification to flows by PWS extraction. Short period of naturalised flows available. # Upper two thirds of the catchment drains moorland associated with the Dartmoor Granite; the lower third is Carboniferous shales and sandstones. The relief is steep in the headwaters and at the Granite boundary. Responsive. Low grade agriculture and woodland.															
			1981	2069	115	1528	109	11.99	192.6	22/03	1.12	06/09	23.7	8.70	1.33
			1982	1984	110	1532	109	12.03	317.8	12/11	1.56	17/09	27.9	8.42	1.74
			1983	1802	100	1281	91	10.06	189.5	04/01	1.15	29/08	21.2	6.38	1.36
			1984	1848	102	1333	95	10.47	269.8	16/01	0.79	20/08	27.2	4.55	1.03
			1985	1817	101	1339	95	10.49	223.7	21/01	2.05	19/06	24.2	6.33	2.41
046005	East Dart at Believer	C.A.: 21.5 km ²	64-80	1969	1741	1.19	67.1	27/12	0.10	09/09	2.8	0.84	0.18		
M.A.: SWWA Level: 309m F.A.F.: N B-full: 50.0 m ³ s ⁻¹															
Comment: Velocity-area station, channel width approximately 11.5m; cableway approximately 24m. A natural rock step provides the control, with a containment berm on lb. Not bypassed, well rated. Natural catchment. # Steep, very wet upland catchment, draining peat covered Dartmoor Granite moorland. Responsive catchment, flood warning station.															
			1981	2398	122	2096	120	1.43	50.5	19/09	0.12	06/09	3.0	0.91	0.15
			1982	2236	114	1965	113	1.34	53.8	12/11	0.16	09/06	2.7	0.86	0.19
			1983	2067	105	1701	98	1.16	28.7	04/01	0.10	29/08	2.3	0.70	0.13
			1984	2076	105	1757	101	1.20	41.4	16/01	0.11	20/08	2.7	0.59	0.14
			1985	2077	105	1730	99	1.18	29.0	21/01	0.27	19/06	2.5	0.66	0.31
046006	Erme at Ermington	C.A.: 43.5 km ²	74-80	1645	1268	1.75	64.3	27/12	0.08	24/08	3.9	1.07	0.20		
M.A.: SWWA Level: 8m F.A.F.: PGEI B-full: 50.0 m ³ s ⁻¹															
Comment: Velocity-area station, with low level bed control. Well rated. Significant flow modifications by abstractions and diversions for PWS, and sewage from Ivybridge. # Narrow, linear N-S trending catchment draining southern flank of the Dartmoor Granite. Headwaters in plateau like moorland; main river section in steep, deeply incised valley with short tributaries. When off the granite, Devonian slates are widely blanketed with river gravel and alluvium. Responsive.															
			1981	1990	121	1549	122	2.14	45.4	10/03	0.19	02/09	4.5	1.40	0.22
			1982	1879	114	1501	118	2.07	57.1	12/11	0.27	12/08	4.4	1.39	0.32
			1983	1658	101	1176	93	1.62	32.3	04/01	0.19	30/08	3.4	1.03	0.22
			1984	1680	102	1251	99	1.73	36.5	16/01	0.14	19/08	4.7	0.67	0.17
			1985	1725	105	1350	106	1.86	47.5	21/01	0.35	19/06	4.0	1.07	0.45
047001	Tamar at Gunnistake	C.A.: 916.9 km ²	56-80	1228	780	22.69	714.6	28/12	0.58	23/08	55.5	12.43	1.88		
M.A.: SWWA Level: 8m F.A.F.: SRPGEI B-full: 550.0 m ³ s ⁻¹															
Comment: Velocity-area station, wide, shallow channel. Cableway span 46.9m. Low flows measured at another, narrower, site. High flow gaugings difficult owing to standing waves. Some gaps in the record. Moderate influence from PWS and diversions. # Rural catchment of moderate relief, draining very disturbed lower Carboniferous slates, shales, grits and volcanics. Significant alluvial flats in middle reaches, Devonian slates low down. Fairly responsive. A range of agriculture, grazing and forestry as land use.															
			1981	1459	119	983	126	28.58	411.7	10/03	2.05	06/09	59.4	18.58	2.89
			1982	1357	111	863	111	25.09	245.9	12/11	1.83	18/09	60.5	15.65	2.29
			1983	1116	91	628	81	18.26	308.1	04/01	1.10	30/08	43.5	8.57	1.41
			1984	1299	106	760	97	22.10	263.8	27/01	0.92	20/08	62.5	7.66	1.17
			1985	1154	94	657	84	19.05	249.1	24/12	2.67	26/07	42.5	11.41	3.32
047004	Lynher at Pillaton Mill	C.A.: 135.5 km ²	63-80	1428	1008	4.33	150.1	04/11	0.25	27/08	9.7	2.48	0.87		
M.A.: SWWA Level: 9m F.A.F.: PGEI B-full: 67.0 m ³ s ⁻¹															
Comment: Velocity-area station, channel approximately 10.6m wide, cableway span 16.9m. D/s shoal as control. Limited confidence to upper range rating. Exports for PWS from Bastreel have a moderate influence upon the flow regime. # Headwaters rise on Bodmin peat covered granite moorland; thence Devonian slates and volcanics; middle reach crosses a Carboniferous shale and sandstone inlier. Drift restricted to alluvium. Generally low grade land gives rise to a variety of agriculture, grazing and forestry.															
			1981	1644	115	1199	119	5.15	64.4	20/12	0.57	06/09	10.5	3.92	0.68
			1982	1526	107	1173	116	5.04	42.1	12/11	0.58	16/09	11.8	3.80	0.69
			1983	1263	88	839	83	3.61	48.4	04/01	0.44	30/08	8.5	2.15	0.52
			1984	1466	103	1015	101	4.36	42.0	27/01	0.34	20/08	11.8	1.90	0.41
			1985	1358	95	970	96	4.16	26.9	06/04	0.81	19/06	8.6	2.99	1.07
047007	Yealm at Puslinch	C.A.: 54.9 km ²	63-80	1421	939	1.63	26.6	29/11	0.03	28/08	3.7	1.08	0.20		
M.A.: SWWA Level: 6m F.A.F.: PGEI B-full: 26.0 m ³ s ⁻¹															
Comment: Up to Oct 1967, velocity-area station with a formalised trapezoidal channel. Variable low flow rating. Superseded by a low flow rectangular flume, (4.7m throat width) - side and bottom contractions. Bankfull is approximately MAFL level. Moderate influence from abstractions and imports. # Headwaters drain Dartmoor Granite and metamorphosed Devonian slates. Most of the catchment is underlain by Devonian shales and tuffs with subordinate limestone. Land use - meadowland, arable and lower grade agriculture.															
			1981	1726	121	1091	116	1.90	24.1	11/03	0.14	06/09	3.9	1.39	0.18
			1982	1664	117	1053	112	1.83	22.2	06/03	0.18	11/08	4.5	1.31	0.24
			1983												

		Period	Rainfall (mm)	Runoff (mm)	Mean flow (m ³ s ⁻¹)	Peak flow (m ³ s ⁻¹)	Date of peak	Min. daily flow (m ³ s ⁻¹)	Date of min.	10 Percentile (m ³ s ⁻¹)	50 Percentile (m ³ s ⁻¹)	95 Percentile (m ³ s ⁻¹)	
			% of pre-1981	% of pre-1981									
047009	Tiddy at Tideford	C.A: 37.2 km ²	69-80	1225	725	0.86	10.2	27/12	0.06	27/08	2.0	0.51	0.13
M.A: SWWA	Level: 4m	F.A.F: GE	S-full: 50.0 m ³ s ⁻¹										
<p>Comment: Crump profile weir 5.5m wide, wing walls 2.3m high. Subsidiary floodbanks. Thought to be fully modular. Natural catchment. # Elongated, linear catchment, headwaters rise from the southernmost outcrop of the Bodmin granite. Great bulk of the catchment on Devonian shales and slates interspersed with tufts and lavas. Moderate relief, low grade agriculture, grazing and forestry.</p>													
1981	1491	122	897	124	1.06	6.9	11/03	0.12	05/09	2.2	0.81	0.14	
1982	1456	119	930	128	1.10	4.8	10/03	0.13	17/09	2.7	0.82	0.16	
1983	1172	96	632	87	0.75	5.9	20/12	0.10	26/06	1.7	0.50	0.12	
1984	1316	107	714	98	0.84	6.0	27/01	0.07	20/08	2.4	0.31	0.08	
1985	1268	104	719	99	0.85	4.9	08/04	0.16	25/07	2.0	0.56	0.19	
047010	Tamar at Crowford Bridge	C.A: 76.7 km ²	72-80	1139	961	2.34	68.8	21/09	0.01	04/08	4.4	0.84	0.08
M.A: SWWA	Level: 84m	F.A.F: SRPGE	S-full: 56.0 m ³ s ⁻¹										
<p>Comment: Compound Crump profile weir, total crest length 11m. Above 1.65m piers submerge (42 m³s⁻¹). Rating used above this extrapolated from the within pier version. Flows substantially modified by the impoundment of the Tamar Lakes. # The river drains the coastal hills of west Cornwall, the relief is quite subdued, and the rocks outcropping are shales and sandstones of the Carboniferous Culm Measures. Wholly rural, moorland and low grade agriculture.</p>													
1981	1474	129	1504	157	3.66	68.2	09/03	0.12	02/09	7.8	1.31	0.18	
1982	1355	119	1223	127	2.97	55.1	10/12	0.11	08/06	6.9	1.04	0.13	
1983	1070	94	850	88	2.07	51.5	03/01	0.05	07/09	3.7	0.52	0.07	
1984	1224	107											
1985	1111	98											
047013	Withey Brook at Bastreet	C.A: 16.2 km ²	73-80	1696	1135	0.58	22.0	27/12	0.03	11/06	1.3	0.38	0.11
M.A: SWWA	Level: 229m	F.A.F: P	S-full: 8.7 m ³ s ⁻¹										
<p>Comment: Three-bay compound Crump profile weir, crest lengths 0.91m and 2.54m (total). Residual flow gauge for associated substantial PWS abstraction. Diversions into the catchment from Sibleyback Reservoir. Associated climate station. # Moorland catchment of moderate relief entirely upon the granite of Bodmin Moor; widespread peat; main valley broad and marshy.</p>													
1981	2031	120	1375	121	0.71	21.0	20/12	0.11	30/08	1.3	0.54	0.12	
1982	1893	112	1239	109	0.64	9.3	06/11	0.08	08/08	1.4	0.51	0.09	
1983	1535	91	905	80	0.46	10.5	04/01	0.05	12/08	1.0	0.28	0.09	
1984	1786	105	1069	94	0.55	6.7	16/01	0.04	15/09	1.4	0.24	0.06	
1985	1732	102	1060	93	0.54	7.3	11/08	0.09	03/06	1.1	0.42	0.14	
047014	Walkham at Horrabridge	C.A: 43.2 km ²											
M.A: SWWA	Level: 82m	F.A.F: PGE	S-full: 40.0 m ³ s ⁻¹										
<p>Comment: Three-bay compound structure with 2.47m thin-plate weir, 9.48m triangular profile weir and an 8.53m broad-crested weir, theoretically rated. Limited range calibration, high flows unreliable. # Substantially moorland catchment draining western Dartmoor Granite. Steep, afforested valley flanks as the river leaves the granite and drains Devonian shales, limestones and volcanics.</p>													
1981			1458		2.00	38.2	19/09	0.24	06/09	4.1	1.55	0.32	
1982			1421		1.95	42.2	12/11	0.30	17/09	4.3	1.52	0.34	
1983			1049		1.44	31.5	14/12	0.23	28/08	2.9	1.03	0.28	
1984			1164		1.59	32.8	16/01	0.16	20/08	4.0	0.79	0.21	
1985													
048001	Fowey at Trekeivesteps	C.A: 36.8 km ²	57..80	1660	1169	1.36	38.8	27/12	0.11	05/10	2.9	1.00	0.25
M.A: SWWA	Level: 188m	F.A.F: SRPG	S-full: 53.0 m ³ s ⁻¹										
<p>Comment: Up to 3/10/68 a broad-crested weir with a central notch; limited accuracy, flows overestimated. Replaced by a three-bay compound Crump profile weir, crest lengths 1.52m and 5.49m (total). Flood embankments ensure the full range is gauged. Substantial flow modification from associated PWS abstraction, Sibleyback Reservoir operation and exports. # Moderate relief, wet moorland catchment on the Bodmin Moor Granite. Extensive hill and valley peat deposits. Kaolinised granite moderates direct runoff response.</p>													
1981	1989	120	1423	122	1.66	35.6	20/12	0.29	04/09	3.2	1.33	0.34	
1982	1750	105	1273	109	1.49	15.6	10/03	0.23	18/05	3.1	1.24	0.28	
1983	1490	90	940	80	1.10	17.1	04/01	0.20	26/09	2.2	0.71	0.28	
1984	1660	100	999	85	1.17	10.3	16/01	0.15	10/07	2.9	0.59	0.18	
1985	1617	97	1077	92	1.25	10.1	27/01	0.25	04/06	2.4	0.99	0.49	
048003	Fal at Tregony	C.A: 87.0 km ²											
M.A: SWWA	Level: 7m	F.A.F: GEI	S-full: 3.2 m ³ s ⁻¹										
<p>Comment: Originally a velocity-area station in a formalised trapezoidal channel; augmented by a low flow, side contracted flume 2.8m wide in August 1967. Site not ideal for high flows. Data available from June 1978. Earlier data unreliable due to silting of inlet pipes. Moderate modification to flows owing to industrial abstractions and returns. # Moderate to low relief catchment draining Devonian shales, shales and grits. Upper reaches plateau-like alluvial flats. Traverses the kaolinised St Austell Granite. Low grade agriculture and grazing.</p>													
1981	1358		825		2.28	13.7	17/12	0.36	03/09	4.5	1.85	0.50	
1982	1381		876		2.42	25.5	08/11	0.35	18/09	5.3	1.89	0.49	
1983	1015		552		1.52	8.8	20/12	0.32	09/08	3.2	1.22	0.39	
1984	1171		638		1.76	11.2	25/01	0.21	08/09	4.4	1.11	0.28	
1985	1140		633		1.74	9.7	21/01	0.44	26/07	3.6	1.27	0.56	
048004	Warleggan at Trengoffe	C.A: 25.3 km ²	69..80	1463	1025	0.82	23.7	27/12	0.10	27/08	1.7	0.59	0.19
M.A: SWWA	Level: 70m	F.A.F: G	S-full: 43.0 m ³ s ⁻¹										
<p>Comment: Three-bay compound Crump profile weir, crest lengths 1.52m and 8.53m (total). Wing walls at 1.67m. Flood banks contain flows up to wing wall height. Structure never overtopped. The only gauged natural catchment on Bodmin Moor. # The upper 70% drains the kaolinised granite of Bodmin Moor. The relief is moderate to steep. The lower 30% traverses metamorphosed Devonian shales. Baseflow high for an upland catchment owing to storage in the granite.</p>													
1981	1727	118	1148	112	0.92	8.4	20/12	0.18	06/09	1.6	0.86	0.23	
1982	1568	107	1064	104	0.85	5.7	06/11	0.17	13/09	1.8	0.77	0.20	
1983	1267	87	778	76	0.62	4.2	04/01	0.14	30/08	1.3	0.47	0.16	
1984	1437	98	845	82	0.68	3.3	26/01	0.11	20/08	1.7	0.41	0.12	
1985	1471	101	994	97	0.80	3.8	27/01	0.25	19/06	1.4	0.70	0.30	
048005	Kenwyn at Truro	C.A: 19.1 km ²	68-80	1132	641	0.39	13.4	27/12	0.02	27/08	0.9	0.22	0.05
M.A: SWWA	Level: 7m	F.A.F: G	S-full: 27.6 m ³ s ⁻¹										
<p>Comment: Three-bay compound Crump profile weir, crest lengths 1.22m and 3.05 (total). Pier and wing wall height 1.98m. Contains all flows; potential for non-modularity at the highest flows. Variable shoaling affects low flow precision. Substantially natural catchment. High baseflow, low percentage runoff catchment. # Catchment of moderate relief, with wooded, incised valleys. Geology is Devonian grits and shales.</p>													
1981	1218	108	662	103	0.40	7.2	27/02	0.05	06/09	0.8	0.33	0.06	
1982	1308	116	788	123	0.48	9.7	07/11	0.05	13/09	1.1	0.36	0.06	
1983	933	82	444	69	0.27	3.5	20/12	0.05	29/08	0.6	0.19	0.05	
1984	1100	97	537	84	0.33	3.7	08/11	0.03	19/08	0.9	0.17	0.04	
1985	1017	90	514	80	0.31	2.5	22/12	0.07	20/07	0.8	0.19	0.08	
048006	Cober at Helston	C.A: 40.1 km ²	68-80	1254	814	1.03	16.9	28/12	0.03	09/09	2.2	0.74	0.18
M.A: SWWA	Level: 5m	F.A.F: PGI	S-full: 16.0 m ³ s ⁻¹										
<p>Comment: Velocity-area station, originally with formalised rectangular channel 4.0m wide. Informal broad-crested weir and sluice to power a water wheel, installed in 1975, 3.0 m downstream. May back up from Loe Pool. Moderate influence from PWS, industrial abstractions and mine pumping. # 70% of the catchment drains the Carnmenellis Granite, the rest, grits, shales and slates of Devonian age. Subdued response to rainfall.</p>													
1981	1397	111	818	100	1.04	5.6	11/03	0.16	08/09	2.0	0.88	0.22	
1982	1460	116	890	109	1.13	4.7	19/12	0.15	17/09	2.6	0.91	0.20	
1983	1146	91	580	71	0.74	3.9	04/01	0.10	30/08	1.4	0.64	0.14	
1984	1243	99	633	78	0.81	6.7	01/12	0.05	10/09	2.1	0.37	0.07	
1985	1271	101	656	81	0.83	4.2	21/01	0.12	26/07	1.7	0.61	0.16	
048007	Kennall at Ponsanooth	C.A: 26.6 km ²	68-80	1329	614	0.52	6.3	27/12	0.05	09/09	1.2	0.33	0.08
M.A: SWWA	Level: 14m	F.A.F: SRPGI	S-full: m ³ s ⁻¹										
<p>Comment: Crump profile weir 4.88m crest length, height of wing walls and floodbanks: 2.05m. Modular at all recorded stages. Substantial modification to flows owing to exports from Stithians Reservoir. Some industrial usage produces unpredictable hydrographs. # Moderate to steep catchment draining the Carnmenellis Granite, with small area of metamorphosed shales and grits. Granite well weathered, giving high baseflow. Responsive to heavy rain.</p>													
1981	1395	105	636	104	0.54	4.5	13/12	0.09	08/09	1.1	0.45	0.11	
1982	1514	114	723	118	0.61	3.8	12/11	0.11	17/09	1.4	0.48	0.12	
1983	1115	84	458	75	0.39	2.9	04/01	0.09	29/08	0.7	0.33	0.10	
1984	1250	94	441	72	0.37	3.9	19/01	0.05	10/09	0.9	0.21	0.05	
1985	1261	95	581	95	0.49	3.2	11/04	0.12	25/07	1.1	0.36	0.13	
048010	Seaton at Trebrowbridge	C.A: 38.1 km ²	57..80	1340	821	0.99	14.1	27/12	0.13	26/08	2.2	0.63	0.22
M.A: SWWA	Level: 27m	F.A.F: GI	S-full: 37.5 m ³ s ⁻¹										
<p>Comment: Three-bay compound Crump profile weir, crest lengths 3m and two of 4m. Wing walls and floodbanks at 2.05m. Thought to be fully modular. U/s subject to siltation. Natural catchment. # Elongated, linear catchment springing from the southernmost outcrop of the Bodmin Granite. Great bulk of the catchment on Devonian shales and slates interspersed with tufts and lavas. Moderate relief, low grade agriculture, grazing and forestry.</p>													
1981	1524	114	1043	127	1.26	7.7	20/12	0.21	06/09	2.3	1.10	0.24	
1982	1457	109	1044	127	1.26	5.8	12/11	0.21	17/09	2.9	1.09	0.26	
1983	1188	89	720	86	0.87	5.3	20/12	0.19	29/08	1.8	0.65	0.22	
1984	1332	99	803	98	0.97	6.0	27/01	0.13	10/09				

Station	Level	F.A.F.	SRPGEI	S-full	Period	Rainfall (mm)	% of pre-1981	Runoff (mm)	% of pre-1981	Mean flow (m ³ s ⁻¹)	Peak flow (m ³ s ⁻¹)	Date of peak	Min. daily flow (m ³ s ⁻¹)	Date of min.	10 Percentile (m ³ s ⁻¹)	50 Percentile (m ³ s ⁻¹)	95 Percentile (m ³ s ⁻¹)	
048011	Fowey at Restormel	C.A: 169.1 km ²			61-80	1509		943		5.06	223.7	03/11	0.26	28/08	10.7	3.51	0.84	
M.A: SWWA	Level: 9m	F.A.F: SRPGEI	S-full: 74.4 m ³ s ⁻¹															
<p>Comment: Compound Crump profile weir, crest lengths 3.5m and 13.0m (total). Piers at 1.75m, wing walls at 2.5m. Flood banks contain flows up to wing wall height. Upstream cableway, fish counter. Substantial modifications to flow from associated PWS abstraction, Colliford and Sibleyback reservoirs and other PWS exports. # Moderate relief catchment whose headwaters drain the kaolinised granite of Bodmin Moor. Middle and low reaches drain Devonian slates and grits. Some valley storage in gravels. Low grade agriculture, grazing and forestry.</p>																		
1981						1716	114	1125	119	6.03	84.9	20/12	0.50	06/09	12.2	4.81	0.77	
1982						1614	107	1111	118	5.96	61.6	06/11	0.63	15/09	14.5	4.52	0.77	
1983						1276	85	706	75	3.78	33.6	04/01	0.34	29/08	8.4	2.42	0.46	
1984						1470	97	759	80	4.07	25.4	25/01	0.30	10/09	11.0	1.85	0.37	
1985						1473	98	787	83	4.21	23.2	29/01	0.83	19/06	8.6	3.17	1.07	
049001	Camel at Denby	C.A: 208.8 km ²			64-80	1415		852		5.64	227.9	27/12	0.36	28/08	12.6	3.79	0.81	
M.A: SWWA	Level: 5m	F.A.F: PGE	B-full: 43.0 m ³ s ⁻¹															
<p>Comment: Velocity-area station with a low flow control. Replaced an unreliable station at Grogley, 1km d/s. Rating shifts regularly, but is generally sound. Flows significantly modified by PWS and sewage from Bodmin. # The upper catchment drains Devonian slates, variously affected by the granite, and the Bodmin Moor Granite. Lower catchment drains Devonian slates and grits. Moorland and low grade agriculture and grazing.</p>																		
1981						1589	112	1190	140	7.88	118.2	20/12	0.95	06/09	15.5	5.80	1.35	
1982						1465	104	1084	127	7.18	76.7	06/11	0.88	18/09	16.6	5.35	1.04	
1983						1181	83	739	87	4.90	67.7	04/01	0.71	31/08	10.6	3.10	0.79	
1984						1301	92	802	94	5.31	39.6	25/01	0.63	20/08	13.7	2.72	0.67	
1985						1272	90	802	94	5.30	30.9	26/01	1.13	19/06	10.2	4.23	1.44	
049002	Hayle at St Erth	C.A: 48.9 km ²			57..80	1122		623		0.97	6.7	14/02	0.14	29/08	2.1	0.64	0.22	
M.A: SWWA	Level: 7m	F.A.F: G	S-full: 22.8 m ³ s ⁻¹															
<p>Comment: Up to 1967 an unsatisfactory velocity-area station seriously affected by weed growth; subsequently a compound Crump profile weir; crest lengths: 1.22m and 3.35m (total). Piers and wing walls at 1.83m; floodbanks at 3.8m. Mine drainage may affect the flows moderately. Slow responding catchment; much storage. # Headwaters drain two moorland granite outcrops; majority of the catchment is underlain by grits and shales of Devonian age, crossed by dyke swarms. Mining spoil in the floodplain. Generally low grade agricultural use.</p>																		
1981						1204	107	694	111	1.08	4.1	13/12	0.27	08/09	2.4	0.93	0.31	
1982						1277	114	811	130	1.26	4.1	19/12	0.24	18/09	2.8	1.03	0.26	
1983						1028	92	575	92	0.89	3.6	04/01	0.26	11/09	1.8	0.77	0.27	
1984						1053	94	549	88	0.85	4.9	26/01	0.17	10/09	1.8	0.45	0.18	
1985						1121	100	622	100	0.96	3.6	28/01	0.31	01/08	2.1	0.61	0.35	
049003	De Lank at De Lank	C.A: 21.7 km ²			67..80	1622		1087		0.75	26.5	27/09	0.01	06/07	1.5	0.48	0.07	
M.A: SWWA	Level: 226m	F.A.F: PG	B-full: 32.0 m ³ s ⁻¹															
<p>Comment: Three-bay compound Crump profile weir, crest lengths 1.22m and 6.4m (total). Divide piers at 1.01m, wing walls 1.62m. Unusually small difference between crest elevations (0.095m). Very seldom drowned or outflanked. Flows substantially modified by associated PWS works. # Moderate relief, wet catchment on the Bodmin Moor Granite. The river occupies marshy alluvial flats in the headwaters. Responsive.</p>																		
1981						2093	129	1401	129	0.96	18.8	09/03	0.08	08/09	2.0	0.71	0.15	
1982						1805	111	1182	109	0.81	12.8	06/11	0.05	08/06	1.7	0.62	0.10	
1983						1490	92	897	83	0.62	12.9	04/01	0.05	28/07	1.3	0.40	0.07	
1984						1672	103	982	90	0.68	7.1	16/01	0.02	07/08	1.8	0.34	0.05	
1985						1645	101	1041	96	0.71	9.1	27/01	0.12	19/06	1.4	0.53	0.18	
049004	Gannel at Gwills	C.A: 41.0 km ²			69-80	1074		541		0.70	25.6	06/10	0.06	26/08	1.6	0.41	0.10	
M.A: SWWA	Level: 9m	F.A.F: GE	S-full: 40.8 m ³ s ⁻¹															
<p>Comment: Crump profile weir, crest length 6.0m, wing walls 1.9m, modular throughout its range. Flood banks contain flow up to 2.78m; they may be treated as weirs for higher stages. Insensitive at low flows. Valley inundates u/s of the road bridge. Natural catchment, but mine drainage may affect low flows. # Moderately steep catchment draining calcareous slates and thin limestones of the lower Devonian. Low grade agriculture, pasture, Subdued response.</p>																		
1981						1152	107	644	119	0.84	18.3	20/12	0.12	08/09	1.5	0.65	0.16	
1982						1189	111	653	121	0.85	24.5	07/11	0.11	12/08	1.9	0.64	0.12	
1983						876	82	394	73	0.51	9.9	20/12	0.11	29/08	1.1	0.35	0.12	
1984						1011	94	450	83	0.58	13.2	25/01	0.05	19/09	1.5	0.30	0.07	
1985						942	88	448	83	0.58	5.2	27/01	0.13	25/07	1.2	0.36	0.16	
050001	Taw at Umberleigh	C.A: 826.2 km ²			58-80	1139		675		17.69	644.9	04/12	0.20	28/08	45.7	9.24	1.24	
M.A: SWWA	Level: 14m	F.A.F: SPE	B-full: 170.0 m ³ s ⁻¹															
<p>Comment: Velocity-area station, main channel 34m wide, cableway span 54.9m. Rock step d/s forms the control. Bypassing begins at about 3.7m on the rb, but a good rating accommodates this. Significant modification to flows owing to PWS abstraction. Some naturalised flow data available. # Large rural catchment - drains both Dartmoor (granite) to the south and Devonian shales and sandstones of Exmoor to the north. Central area is underlain mainly by Culm shales and sandstones (Carboniferous). Agriculture is conditioned by the grade 3 and 4 soils.</p>																		
1981						1288	113	859	127	22.52	339.9	10/03	1.08	06/09	53.1	15.79	1.57	
1982						1239	109	833	123	21.81	241.1	19/12	1.16	17/06	59.7	12.03	1.61	
1983						1156	101	705	104	18.48	266.4	31/01	0.64	19/08	46.8	8.30	0.79	
1984						1224	107	722	107	18.92	187.1	13/01	0.45	20/08	56.1	5.85	0.61	
1985						1051	92	580	86	15.15	289.8	24/12	1.68	04/06	36.6	8.04	2.39	
050002	Torrige at Torrington	C.A: 663.0 km ²			62-80	1131		699		14.69	730.0	28/12	0.12	25/08	36.1	7.71	0.93	
M.A: SWWA	Level: 14m	F.A.F: SRPGEI	B-full: 187.0 m ³ s ⁻¹															
<p>Comment: Velocity-area station, main channel 28m wide, cableway span 32.5m. Overspilling begins on lb at about 3.3m. Reconstructed in 1977. Well calibrated throughout range. Records prior to October 1962 unreliable. Moderate modification to flows owing to PWS and WRWs. # Large rural catchment draining coastal hills to the west and Dartmoor Granite to the south. Great bulk of the geology is Carboniferous shales and sandstones of the Culm. Moorland, rough grazing and generally low grade agricultural land.</p>																		
1981						1387	123	951	136	19.99	535.6	10/03	0.82	06/09	47.0	11.67	1.36	
1982						1362	120	942	135	19.80	265.8	20/12	0.98	09/06	49.1	10.04	1.37	
1983						1139	101	775	111	16.29	391.1	04/01	0.43	30/08	43.8	5.65	0.64	
1984						1259	111	883	126	18.56	278.4	16/01	0.26	20/08	55.3	4.77	0.44	
1985						1110	98	704	101	14.75	407.7	24/12	1.57	26/07	37.0	6.63	1.86	

Summary of Archived Data

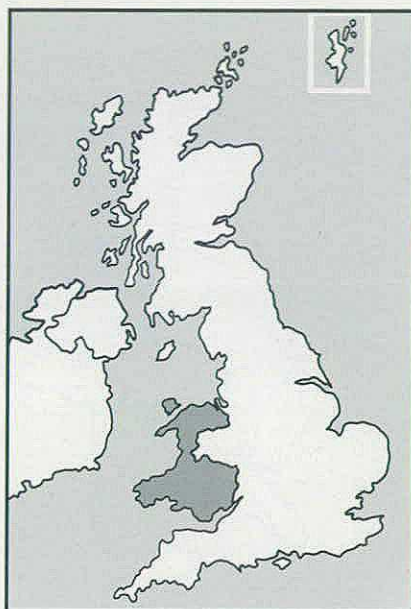
Gauged daily flows, monthly peaks and monthly rainfall

Stn. number	Gauged daily flows, monthly peaks and rainfall	Stn. number	Gauged daily flows, monthly peaks and rainfall	Stn. number	Gauged daily flows, monthly peaks and rainfall
045001	50s -----eAAA 70s AAAAABAAAA 80s AAAAABAAAA	047002	50s -----eaaa 70s tttttttttt 80s aEtttttttt	048005	60s -----EA 70s AAAAAAAAAA 80s AAAAAAAC
045002	60s -eAAAAAAB 80s AAAAAAAC	047003	50s -----eBE 70s ttttEEEAEE 80s Ettttt	048006	60s -----EA 70s AAAAAABc 80s AAAAAAAC
045003	60s -eAAAAAAA 80s AAAAAAAC	047004	60s --eAAEA 80s AAAAAAAC	048007	60s -----EA 80s AAAAAAAC
045004	60s --eAAAAA 80s AAAAAAAC	047005	60s --eAAAAA 80s AF	048009	70s tEAAAAAAA 80s AAAAAAAC
045005	60s --eAAAAA 80s AAAAAAAC	047006	60s --eAAEAE 80s AF	048010	50s -----f 70s cCBAAAAAAA 80s -FcBAAAAAB
045006	60s --eAEtt 80s AAAAAAAC	047007	60s --eAAABAA 80s AAAAAAAC	048011	60s AAAAAAAC 70s AAAAAAAC
045008	70s -tTEAAAA 80s AAAAAAAC	047008	60s -----e 80s AAAAAAAC	049001	60s --eAAAAA 80s AAAAAAAC
045009	80s -AAaac	047009	60s -----E 80s AAAAAAAC	049002	50s -----EEt 70s AAAAAABAAAA
046002	50s -----eAAA 70s AAAAAAABAAAA 80s AAAAAAAC	047010	70s -tEAAAAAAA 80s AAAAAAAC	049003	60s -----eEB 80s AAAAAAAC
046003	50s -----eA 70s AAAAAAABAAAA 80s AAAAAAAC	047011	70s -EAAAAAAA 80s AF	049004	60s -----E 80s AAAAAABf
046005	60s --EAAAAA 80s AAAAAAAC	047013	70s -tDAAAAA 80s -aaaac	050001	50s -----eA 70s AAAAAAABAAAA 80s AAAAAAAC
046006	70s --AAAAAA 80s AAAAAAAC	048001	50s -----eAA 70s AAAAAAABAAAA 80s AAAAAAAC	050002	60s -----A 70s -FEEBBBA 80s AAAAAAAC
046007	70s -eAAAAAA 80s AF	048003	80s -AABAAc		
046008	70s -eaaaaaaa 80s AF	048004	60s -----e 80s AAAAAAAC		
047001	50s -----eAAA 70s AAAAAAABAAAA 80s AAAAAAAC				

Naturalised daily and monthly flows

Stn. number	Naturalised daily, and monthly flows	Stn. number	Naturalised daily, and monthly flows	Stn. number	Naturalised daily, and monthly flows
045003	60s -FEEEEF	047004	60s --FBCEFF	049003	60s -----CC
045004	60s -----CA 70s C	047005	60s -----C	050001	60s -----A 70s C
045005	60s --FEFFCA 70s C			050002	60s -FEEBBBA 70s C
046002	60s FEEEEEF				
046003	60s -----CA 70s C				

WELSH WATER



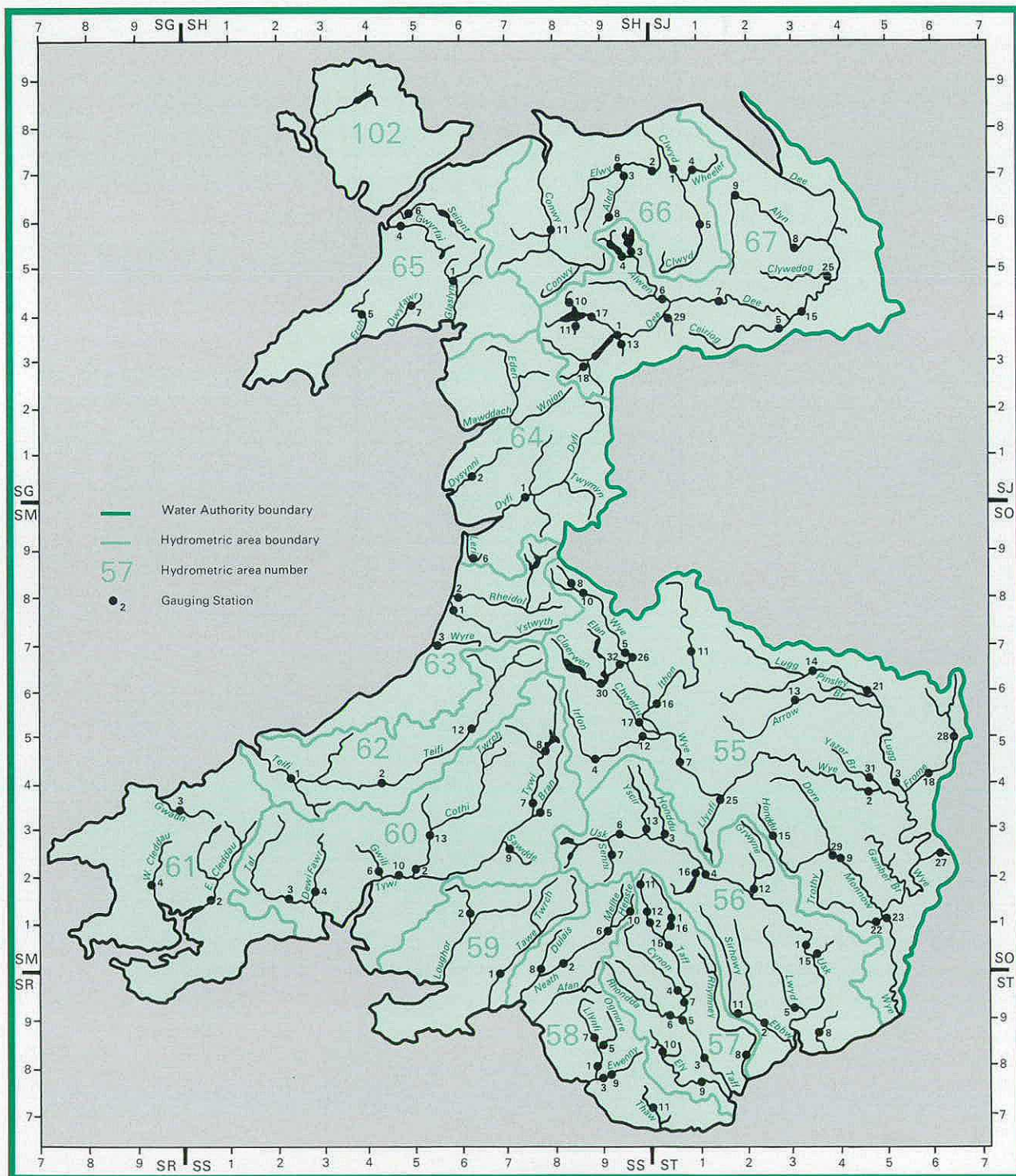
Area: 21,262 km²

Average Rainfall (1941-70): 1334 mm

Headquarters of Welsh Water:

Plas-y-ffynnon
Cambrian Way
Brecon
Powys LD3 7HP

Telephone: Brecon (0874) 3181



Gauging Station Register

Station number	River name	Station name	Grid reference	Catchment area (sq km)	Station type	Period of record	Mean ann. rainfall (mm)	Mean ann. runoff (mm)	Max. ann. runoff (mm)	Year of max.	Min. ann. runoff (mm)	Year of min.	Mean flow (m ³ s ⁻¹)	Min. mon. flow (m ³ s ⁻¹)	Month/Year of min.	Mean ann. flood (m ³ s ⁻¹)	Base flow index	10 Percentile (m ³ s ⁻¹)	95 Percentile (m ³ s ⁻¹)	
055002	Wye	Belmont	SO 485388	1895.9	VA	1935..85n	1225	758	1141	46	453	76	45.59	3.34	08/76	436.1	.48	109.3	6.06	
055003	Lugg	Lugwardine	SO 548405	885.8	VA	1939-81	639	378	691	60	175	64	10.63	0.57	08/76	50.2	.83	25.1	1.43	
055004	Irton	Abernant	SN 892450	72.8	VA	1937..82	1815	1387	1917	66	927	76	3.20	0.15	09/59	59.9	.37	7.6	0.31	
055005	Wye	Rhayader	SN 969676	166.8	VA	1937..69	1627	1169	1613	54	909	45	6.18	0.29	09/59	137.0	.37	14.9	0.63	
055007	Wye	Erwood	SO 078445	1282.1	VA	1937..85n	1380	883	1238	46	536	64	35.88	2.82	08/76	560.4	.41	90.5	4.42	
055008	Wye	Cefn Brwyn	SN 829838	10.6	CC	1951..85	2418	2051	2971	54	1336	76	0.69	0.04	08/76	18.2	.32	1.6	0.07	
055009	Monnow	Kentchurch	SO 419251	357.4	VA	1948..72	1028	521	962	60	274	64	5.90	0.60	09/61	121.2		12.9	0.77	
055010	Wye	Pant Mawr	SN 843825	27.2	FVVA	1955..82	2365	1908	2439	74	1351	76	1.65	0.10	08/76	59.6	.31	3.9	0.17	
055011	Ithon	Llandewi	SO 105683	111.4	VA	1959..82	1188	739	995	60	480	64	2.61	0.02	08/76	54.4	.38	6.5	0.14	
055012	Irton	Cilmeri	SN 995507	244.2	FVVA	1966..85	1641	1315	1812	83	795	76	10.18	0.25	08/76	185.5	.39	25.1	0.77	
055013	Arrow	Titley Mill	SO 328585	126.4	VA	1966-85	1001	610	853	82	327	73	2.44	0.15	08/76	31.1	.56	5.6	0.32	
055014	Lugg	Byton	SO 364647	203.3	FVVA	1966-85	1028	609	768	77	360	73	3.93	0.41	08/76	26.4	.67	8.5	0.72	
055015	Honddu	Tafolog	SO 277294	25.1	FVVA	1966..82	1402	905	1092	72	513	73	0.72	0.04	05/82	22.6	.52	1.5	0.11	
055016	Ithon	Dalserth	SO 024578	358.0	FVVA	1968..85	1080	788	1367	84	444	71	8.95	0.09	08/76	102.4	.38	27.1	0.31	
055017	Chwefru	Carreg-y-wen	SN 998531	29.0	FVVA	1968..81	1407	958	1238	77	661	76	0.88	0.01	08/76	23.2	.34	2.1	0.04	
055018	Frome	Yarkhill	SO 615428	144.0	VA	1968..85	723	274	357	77	147	73	1.25	0.06	08/76	21.0	.50	2.8	0.16	
055021	Lugg	Butta Bridge	SO 502589	371.0	VA	1969..85	913	495	683	77	263	73	5.82	0.51	08/76			65	13.1	1.00
055022	Trothy	Mitchel Troy	SO 503112	142.0	FVVA	1969..82	870	352	458	74	129	73	1.58	0.08	08/76			49	3.5	0.13
055023	Wye	Redbrook	SO 528110	4010.0	VA	1936-85n	1023	560	982	60	314	64	71.20	5.18	08/76	484.8	.55	166.5	11.73	
055025	Lynfi	Three Cocks	SO 166373	132.0	VA	1970-85	973	532	747	82	283	73	2.23	0.07	08/76			5.2	0.19	
055026	Wye	Ddol Farm	SN 976676	174.0	FVVA	1969-85	1591	1224	1492	74	780	76	6.75	0.18	08/76	121.7	.36	16.4	0.43	
055027	Rudhall Brk	Sandford Bridge	SO 641257	13.2	FV	1971-78	680	239	358	77	100	73	0.10	0.01	08/76			.81	0.2	0.01
055028	Frome	Bishops Frome	SO 667489	77.7	FVVA	1971..85	718	310	463	81	174	73	0.76	0.06	08/76			.50	1.6	0.11
055029	Monnow	Grosmont	SO 415249	354.0	VA	1972..85	993	526	701	82	244	73	5.91	0.38	08/76			.59	13.6	0.61
055030	Clasnew	Dol-y-mynach	SN 910620	95.3	TP	1926..50		1327	1648	30	847	33	4.01	0.21	07/49	90.4	.28	10.2	0.33	
055031	Yazor Brook	Three Elms	SO 492415	42.3	FV	1973-85	689	186	242	82	82	76	0.22	0.03	07/76			.55	0.4	0.05
055032	Elan	Caban Coch	SN 934653	184.0	FVVA	1908-85	1826	872	1563	23	239	76	5.09	0.56	10/84			.29	13.8	1.41
055001	Usk	Chain Bridge	SO 345056	911.7	VA	1957-85	1389	957	1524	60	515	73	27.67	2.70	08/76	411.1	.51	63.5	4.34	
056002	Ebbw	Rhwederyn	ST 259889	216.5	FVVA	1957..85	1490	1056	1541	82	509	73	7.25	1.26	07/62	105.0	.59	16.2	1.55	
056003	Honddu	The Forge Brecon	SO 051297	62.1	CC	1963-81	1153	745	1050	74	446	64	1.47	0.06	08/76	24.1	.52	3.3	0.16	
056004	Usk	Llandetty	SO 127203	543.9	VA	1965-80	1494	977	1359	74	589	73	16.85	1.82	08/76	343.7	.47	38.5	2.35	
056005	Lwyd	Pontrill	ST 330924	98.1	CC	1966-85	1429	989	1289	82	513	73	3.08	0.48	07/76	49.0	.55	6.8	0.65	
056006	Usk	Tallion	SN 947295	183.8	VA	1963-81	1675	1102	1598	74	692	73	6.42	0.98	05/80	163.0	.45	14.4	1.01	
056007	Senni	Pont Hen Hafod	SN 928255	19.9	C	1967..85	1914	1544	1997	74	930	73	0.97	0.07	08/76	26.2	.37	2.2	0.10	
056008	Monks Ditch	Llanwern	ST 372885	15.4	FL	1970..76	891	432	514	71	252	73	0.21	0.05	10/72			.60	0.4	0.05
056011	Sirhowy	Wattsville	ST 206912	76.1	FVVA	1970-81	1444	857	1092	81	457	73	2.07	0.20	08/76	40.4	.50	4.7	0.34	
056012	Gwynne	Millbrook	SO 241176	82.2	C	1971-81	1251	771	963	79	431	73	2.01	0.20	08/76	24.1	.59	4.4	0.34	
056013	Yscir	Pontaryscir	SO 003304	62.8	C	1972-85	1428	950	1238	74	646	73	1.89	0.10	08/76	38.4	.47	4.5	0.18	
056015	Olway Brook	Olway Inn	SO 384010	105.1	C	1975-81	963	427	562	81	369	76	1.42	0.06	08/76	17.2	.50	3.8	0.10	
056016	Caerfanell O/f	Talybont Res	SO 104206	32.4	TP	1979-85		794	942	82	692	84	0.62	0.05	08/84			.46	1.9	0.13
057001	Taf Fechan	Taf Fechan Res	SO 060117	33.7	MIS	1936..73	1976	708	1348	39	185	73	0.76	0.11	12/73			.48	1.8	0.22
057002	Taf Fawr	Llwynon Res	SO 012111	43.0	MIS	1931..73	1992	937	1459	54	400	73	1.28	0.11	05/56			.29	3.2	0.14
057003	Taff	Tongwynlais	ST 132818	486.9	VA	1965-72	1663	1365	1570	67	989	69	21.08	4.36	08/68	342.4	.44	48.4	4.03	
057004	Cynon	Abercynon	ST 079956	106.0	FVVA	1957..85	1799	1214	1688	82	644	73	4.08	0.39	08/76	72.0	.42	10.2	0.55	
057005	Taff	Pontypridd	ST 079897	454.8	FVVA	1970-85	1834	1255	1620	82	713	73	18.10	2.29	08/76	293.3	.48	36.8	3.46	
057006	Rhondda	Trehafod	ST 054909	100.5	VA	1970..85	2125	1598	2134	74	1045	73	5.09	0.39	07/84	99.2	.43	11.9	0.67	
057007	Taff	Fiddlers Elbow	ST 089951	194.5	FVVA	1973-85	1708	1030	1305	74	690	76	6.35	0.79	08/76	126.8	.48	15.1	1.22	
057008	Rhymney	Llanedeyrn	ST 225821	178.7	FVVA	1973-85	1378	933	1282	82	512	73	5.29	0.57	08/76	90.8	.51	12.1	0.79	
057009	Ely	St Fagans	ST 121770	145.0	FVVA	1975-85	1330	917	1123	81	588	75	4.22	0.46	08/76	51.1	.49	9.7	0.53	
057010	Ely	Lanelay	ST 034827	39.4	VA	1974..85	1607	1127	1409	81	760	75	1.41	0.12	08/76	40.8	.44	3.2	0.15	
057011	Taf Fawr	Beacons Res	SN 987193	5.1	TP	1976..80		2026	2387	77	1886	78	0.33	0.03	08/76			.35	0.8	0.03
057012	Garnwnt	Llwynon Res	SO 004129	43.1	TP	1976..80		162	172	77	147	78	0.22	0.01	08/76			.22	0.6	0.01
057015	Taff	Merthyr Tydfil	SO 043068	104.1	FVVA	1978-85	2030	1003	1140	82	935	84	3.31	0.34	08/84	78.9	.38	8.6	0.76	
057016	Taf Fechan	Pontsticill	SO 060115	33.8	FVVA	1979-85	2232	645	820	82	512	85	0.69	0.02	09/84			.40	1.3	0.13
058001	Ogmore	Bridgend	SS 904794	158.0	FVVA	1963-85	1740	1245	1644	67	789	73	6.24	0.52	07/84	107.5	.49	13.8	0.87	
058002	Neath	Resolven	SN 815017	190.9	FVVA	1975..85	2003	1452	1781	82	845	76	8.79	0.40	08/76	186.9	.34	22.3	0.53	
058003	Ewenny	Ewenny Priory	SS 914780	62.9	VA	1962-65	1185	802	787	63	553	64	1.80	0.26	09/84	19.3	.59	2.9	0.26	
058005	Ogmore	Brynmenyn	SS 904844	74.3	FVVA	1970..85	1928	1445	1888	81	985	76	3.40	0.28	07/84	45.5	.50	7.5	0.52	
058006	Melite	Pontnedfechan	SN 915082	65.8	FVVA	1971..85	2031	1411	1828	74	951	73	2.94	0.21	08/84			.35	7.2	0.33
058007	Lynfi	Coytrahen	SS 891855	50.2	FVVA	1970..85	1814	1333	1677	81	908	73	2.12	0.24	07/84			.50	4.7	0.32
058008	Dulais	Ciltrew	SN 778008	43.0	FVVA	1971..85	1749	1334	1623	74	904	76	1.82	0.16	08/84			.39	4.3	0.23
058009	Ewenny	Keepers Lodge	SS 920782	82.5	FVVA	1971..85	1333	877	1179	81	523	73	1.74	0.22	08/76			.58	3.6	0.35
058010	Hepste	Esgrig Carnau	SN 969134	11.0	FVVA	1975..81	2398	1451	1689	79	1081	76	0.51	0.04	08/76			.24	1.5	0.03
058011	Thaw	Gigman Bridge	ST 017716	49.2	VA	1976-85	1167	648	729	81	505	77	1.01	0.09	08/84			.70	2.3	0.13
059001	Tawe	Ynystanglws	SS 865998	227.7	VA	1957..85	1860	1573	2099	60	1054	76	11.36	0.57	09/59	229.2	.34	27.6	1.30	
059002	Loughor	Tir-y-dail	SN 623127	46.4	VA	1967..85	1501	1288	1783	74	833	76	1.89	0.20	08/					

Station number	River name	Station name	Grid reference	Catchment area (sq km)	Station type	Period of record	Mean ann. rainfall (mm)	Mean ann. runoff (mm)	Max. ann. runoff (mm)	Year of max.	Min. ann. runoff (mm)	Year of min.	Mean flow (m ³ s ⁻¹)	Min. mon. flow (m ³ s ⁻¹)	Month/Year of min.	Mean ann. flood (m ³ s ⁻¹)	Base flow index	10 Percentile (m ³ s ⁻¹)	95 Percentile (m ³ s ⁻¹)	
062001	Teifi	Glan Teifi	SN 244416	893.6	VA	1959..85	1344	996	1349	74	666	84	28.21	1.07	09/59	197.3	.53	63.1	3.04	
062002	Teifi	Llanfair	SN 433406	510.0	VA	1971..81	1446	988	1367	74	641	76	15.98	0.63	08/76	142.0	.49	32.7	1.20	
063001	Ystwyth	Pont Llwlwyn	SN 591774	169.6	VA	1963..85	1467	1091	1446	81	703	76	5.87	0.18	08/76	98.4	.41	13.9	0.58	
063002	Rheidol	Llanbadarn Fwr	SN 601804	182.1	VA	1965..84	1790	1544	1933	81	1079	76	8.91	1.21	07/84	82.8	.51	18.2	1.90	
063003	Wyre	Llanrhystyd	SN 542698	40.6	VA	1970..79	1085	760	1060	74	597	75	0.98	0.04	07/78	30.5	.40	2.5	0.05	
064001	Dyfi	Dyfi Bridge	SH 745019	471.3	VA	1962..85	1897	1506	1720	82	1227	84	22.51	0.82	07/84	304.2	.36	52.4	2.06	
064002	Dysynni	Pont-y-garth	SH 632066	75.1	VA	1966..85	2201	1820	2274	81	1517	84	4.34	0.28	07/84	65.7	.49	8.9	0.41	
064006	Leri	Dolybont	SN 635882	47.2	C	1960..85	1441	689	1268	79	165	69	1.00	0.03	06/70		.44	2.7	0.04	
065001	Glaslyn	Beddgelert	SH 592478	68.6	VA	1961..85	3089	2608	3191	80	1924	68	5.67	0.31	08/76	85.5	.32	12.9	0.53	
065004	Gwyrtaf	Bontnewydd	SH 484599	47.9	C	1970..85	2136	1516	1862	74	1166	76	2.30	0.14	08/76		.43	5.2	0.26	
065005	Erch	Pencaenewydd	SH 400404	18.1	C	1973-85	1368	1051	1279	81	749	73	0.60	0.06	08/76		.53	1.3	0.09	
065006	Seiont	Pebblig Mill	SH 493623	74.4	VA	1976-85	2458	1930	2114	77	1642	84	4.55	0.41	08/76		.39	10.5	0.56	
065007	Dwyfawr	Garndolbenmaen	SH 499429	52.4	CC	1975-85	2070	1485	1762	80	1097	76	2.47	0.10	07/84		.38	5.6	0.21	
066001	Chwyd	Pant-y-cambwll	SJ 069709	404.0	VA	1959..80	910	473	670	60	225	64	6.06	0.51	08/76	51.9	.59	13.6	0.93	
066002	Elwy	Pant yr Onen	SJ 021704	220.0	VA	1961-74	1119	642	777	67	393	64	4.48	0.33	07/82	80.5	.45	10.1	0.45	
066003	Aled	Bryn Aled	SH 957703	70.0	CC	1963..85	1190	643	787	81	383	64	1.43	0.16	09/64	28.8	.51	3.5	0.20	
066004	Wheeler	Bodfari	SJ 105714	62.9	C	1970-76	823	362	449	70	270	75	0.72	0.19	08/76		.83	1.3	0.25	
066005	Clwyd	Ruthin Weir	SJ 122592	95.3	MIS	1971..76	897	392	517	74	286	75	1.19	0.01	08/76		.58	3.0	0.05	
068006	Elwy	Pont-y-gwyddel	SH 952718	194.0	VA	1973-85	1232	687	828	74	473	75	4.22	0.24	08/84		.46	10.6	0.34	
068008	Aled	Aled Isaf Res	SH 915598	11.6	TP	1977-85		443	593	83	364	77	0.16	0.02	03/81		.87	0.3	0.02	
066011	Conwy	Cwm Llanerch	SH 802581	344.5	VA	1964..85	2215	1613	1967	70	1216	71	17.62	0.65	07/84	374.8	.29	42.8	1.20	
067001	Dee	Bala	SH 942357	261.6	MIS	1957-85	1844	1510	1924	74	1084	76	12.53	1.06	08/61		.49	29.3	2.10	
067003	Brenig	Llyn Brenig O/f	SH 974539	20.2	TP	1922..85	1316	840	1274	80	169	77	0.54	0.03	09/59	11.7	.40	1.3	0.05	
067004	Alwen	Llwyn Reservoir	SH 957528	25.5	TP	1959..80	1346	417	653	36	119	56	0.34	0.05	09/82		.49	0.7	0.08	
067005	Cairiog	Brynkinalt Weir	SJ 295373	113.7	CB	1956-76	1264	830	1276	60	470	64	2.99	0.18	08/76	34.0	.54	6.8	0.44	
067006	Alwen	Druid	SJ 042436	184.7	VA	1960-85	1321	835	1092	74	581	64	4.89	0.39	08/76	79.8	.46	11.2	0.60	
067007	Dee	Glyndyfrdwy	SJ 155428	728.0	VA	1964-69	1563	1070	1208	67	1088	68	24.70	4.73	06/64	237.1	.49	57.8	6.07	
067008	Alyn	Pont-y-capel	SJ 336541	227.1	CC	1965-85	925	340	420	59	176	75	2.45	0.29	08/76	25.8	.56	5.7	0.48	
067009	Alyn	Rhydymwyn	SJ 206667	77.8	FL	1965..85	990	345	396	79	74	75	0.85	0.00	08/80		.89	.39	2.0	
067010	Gelyn	Cynefall	SH 843420	13.1	CC	1966-75	2279	1500	1952	74	1201	69	0.62	0.06	06/75	16.8	.26	1.6	0.06	
067011	Aberderfel	Nant Aberderfel	SH 851392	3.7	CB	1967..81		835	1602	67	324	75	0.10	>0.00	08/76		.14	0.2	>0.00	
067013	Hirnant	Plas Rhiwedog	SH 946349	33.9	VA	1967..86		1775	1152	1405	74	742	76	1.24	0.04	08/76	27.5	.40	2.8	0.11
067015	Dee	Manley Hall	SJ 348415	1019.3	CC	1937-85	1391	956	1380	54	633	64	30.90	3.05	09/49		.52	70.5	4.93	
067017	Tryweryn	Llyn Celyn O/f	SH 880399	59.9	CB	1969-85	2125	1845	2306	74	1350	71	3.51	0.35	11/76		.41	9.8	0.39	
067018	Dee	New Inn	SH 874308	53.9	VA	1969-85	1893	1797	2461	74	1249	76	3.07	0.14	07/84	65.6	.27	7.9	0.21	
067025	Chwydog	Bowling Bank	SJ 396483	98.6	C	1976-84	879	472	546	79	408	76	1.48	0.36	08/76		.63	3.0	0.50	
067029	Trystion	Pen-y-ŷtein Fawr	SJ 066405	12.3	TP	1977..85		823	887	79	836	78	0.32	0.01	08/83		.44	0.8	0.02	

Hydrometric Statistics

	Period	Rainfall (mm)	Runoff (mm)	Mean flow (m ³ s ⁻¹)	Peak flow (m ³ s ⁻¹)	Date of peak	Min. daily flow (m ³ s ⁻¹)	Date of min.	10 Percentile (m ³ s ⁻¹)	50 Percentile (m ³ s ⁻¹)	95 Percentile (m ³ s ⁻¹)	
		% of pre-1981	% of pre-1981									
055002	Wye at Belmont M.A.: WELS Level: 46m F.A.F.: S B-full: 522.0 m ³ s ⁻¹ C.A.: 1895.9 km ²	35..80	1216	749	45.00	948.6	04/12	2.41	27/08	107.8	25.57	5.99
	Comment: Channel control velocity-area station, width at bankfull approx 49m; cableway span 62m. Embankment built on the lb extends flood containment. Severe weed growth problems. Originally, stages taken from 1908 at Hereford, 1.2km d/s; flows were measured at current site. Prior to 1932, data unreliable. Moderate flow modification. #Above Erwood (55007) are wet uplands draining Palaeozoic rocks; the lower third is a narrow corridor draining Old Red Sandstone marls and subordinate glacial gravels, which supports arable farming.		1981 1350 111 882 118 53.06 520.1 22/03 4.73 06/09 110.3 36.20 7.10	1982 1406 116 934 125 56.16 446.7 15/03 5.90 02/06 142.7 34.83 7.51	1983 1354 111 837 112 50.34 284.80 01/02 4.83 17/08 116.6 31.83 6.83	1984 1270 104 766 102 46.06 361.80 13/01 2.14 01/09 128.9 19.42 4.26	1985 1238 102 809 108 48.49 378.90 22/12 12.07 12/05 101.0 32.13 14.86					
055007	Wye at Erwood M.A.: WELS Level: 106m F.A.F.: S B-full: 650.0 m ³ s ⁻¹ C.A.: 1282.1 km ²	37..80	1369	869	35.34	801.6	08/02	1.60	28/08	88.6	18.55	4.53
	Comment: Velocity-area station with a massive rock bar as a control. Bankfull width approx 64m, cableway span 81m. All but the highest flows contained. Substantial flow modification from regulation and abstraction from the Etan, PWS and sewage. Some naturalised sequences available. #Large wet upland catchment draining metamorphosed Palaeozoic sediments and an igneous complex. Summit levels exceed 600m OD. Moorland, forestry and sheep grazing.		1981 1542 113 1108 128 45.07 777.0 21/03 3.54 06/09 108.7 28.11 4.36	1982 1537 112 1067 123 43.38 512.7 15/03 3.99 01/06 116.7 23.93 4.61	1983 1454 106 1003 115 40.79 299.90 31/01 3.21 15/08 99.7 23.20 3.54	1984 1419 104 936 108 38.07 324.80 23/11 1.41 29/08 110.1 15.16 2.97	1985 1369 100 885 102 35.88 331.70 21/12 6.01 12/05 87.3 21.70 7.18					
055008	Wye at Cefn Bryn M.A.: IH Level: 341m F.A.F.: N S-full: 66.0 m ³ s ⁻¹ C.A.: 10.6 km ²	51..80	2394	2048	0.69	48.9	06/08	0.02	11/06	1.6	0.36	0.07
	Comment: Initially a prototype 3-bay Crump profile weir (no divide piers). Divide plates installed 1962; normal compound design with concrete piers built 1969, low crest 2.43m broad, high crests total 9.13m broad. Very steep channel, u/s accretion needs regular clearing. Early record needs treating with care. Natural regime. Operated as an IH experimental basin since 1968 (see also 54022). # Small, high relief, very wet (>2000mm) catchment, grassland on peat overlying weather resistant Silurian slates and shales. Very responsive.		1981 2768 116 2313 113 0.77 20.2 18/11 0.07 22/04 1.8 0.43 0.09	1982 2286 95 1961 96 0.66 14.7 19/12 0.05 17/05 1.6 0.36 0.06	1983 2671 112 2275 111 0.76 23.5 31/01 0.03 14/08 2.1 0.37 0.06	1984 2189 91 1759 86 0.59 11.2 05/01 0.03 29/07 1.6 0.24 0.04	1985 2649 111 2043 100 0.68 18.9 12/12 0.07 27/02 1.6 0.39 0.11					
055012	Irfon at Cilmerly M.A.: WELS Level: 136m F.A.F.: B-full: 185.0 m ³ s ⁻¹ C.A.: 244.2 km ²	66..80	1595	1186	9.19	256.9	27/12	0.15	27/08	21.4	5.17	0.71
	Comment: Velocity-area station, initially with a gravel shoal control, improved in 1979 by installing a 25m wide Crump profile Flat V weir. Cableway spans 44m. Above about 3m the rb floodplain is inundated. Natural catchment. #Headwaters drain the very wet Tywi Forest area on indurated, Ordovician sediments. The middle and lower reaches are on relatively more permeable Silurian rocks. Responsive.		1981 1848 116 1418 120 10.98 211.5 21/03 0.41 06/09 27.3 6.45 0.65	1982 1874 117 1613 136 12.49 148.9 21/11 0.76 30/07 31.6 8.04 0.95	1983 1765 111 1812 153 14.03 198.8 15/10 0.97 15/08 29.9 9.38 1.32	1984 1716 108 1651 139 12.78 210.0 12/01 1.00 29/07 33.0 6.33 1.29	1985 1675 105 1772 149 13.68 264.6 21/12 3.37 12/05 28.4 8.86 3.95					
055013	Arrow at Tittle Mill M.A.: WELS Level: 129m F.A.F.: P B-full: 27.5 m ³ s ⁻¹ C.A.: 126.4 km ²	66-80	965	592	2.37	63.3	27/12	0.13	26/08	5.4	1.48	0.33
	Comment: Velocity-area station. Low flow control is a stable riffle; otherwise a three-bay road bridge 50m d/s is the control. Gets out of bank but not bypassed. Natural catchment. #Headwaters of moderate relief, draining durable Silurian slates and shales; otherwise, the catchment is underlain by Old Red Sandstone marls. Station is in a transition zone between upland plateau supporting sheep grazing and the more productive lowlands.		1981 1086 113 655 111 2.62 34.5 21/03 0.30 05/09 4.8 2.07 0.36	1982 1272 132 853 144 3.42 64.0 02/01 0.54 01/06 7.6 2.05 0.62	1983 1069 111 614 104 2.46 24.8 20/12 0.31 15/08 6.1 1.61 0.35	1984 1100 114 600 101 2.41 29.0 23/11 0.17 02/09 6.7 0.94 0.19	1985 1009 105 581 98 2.32 31.7 06/10 0.46 02/08 4.8 1.71 0.63					

	Period	Rainfall (mm)	Runoff (mm)	Mean flow (m ³ s ⁻¹)	Peak flow (m ³ s ⁻¹)	Date of peak	Min. daily flow (m ³ s ⁻¹)	Date of min.	10 Percentile (m ³ s ⁻¹)	50 Percentile (m ³ s ⁻¹)	85 Percentile (m ³ s ⁻¹)		
055014 M.A.: WELS Level: 124m F.A.F.: C.A.: 203.3 km ² B-full: 45.0 m ³ s ⁻¹	66-80	1020	597	3.85	54.3	14/01 1968	0.35	27/08 1978	8.3	2.63	0.71		
Comment: Flat V Crump profile weir, 1:20 cross-slopes, 12.5m wide. Cableway span 21m. Before 1970 a stable riffle was the control. Above 2m to overtopped. Flow moderately modified by abstractions for PWS. # Headwaters drain Silurian rocks of the Radnor Forest. Impermeable bedrock is covered by extensive deposits of gravel in the valleys. This aquifer provides significant baseflow and moderates flood peaks. Mostly forestry and grazing.	1981	1057	104	675	113	4.35	33.2	22/03	0.74	06/09	7.0	3.70	0.82
	1982	1167	114	752	126	4.85	30.8	03/01	0.86	17/09	10.2	3.61	1.00
	1983	1005	99	601	101	3.88	25.7	20/12	0.71	07/09	9.4	2.71	0.76
	1984	1073	105	-625	105	4.03	27.2	23/11	0.51	01/09	10.6	1.72	0.53
	1985	969	95	576	96	3.70	18.8	07/04	1.15	01/10	6.9	2.86	1.31
055018 M.A.: WELS Level: 55m F.A.F.: E C.A.: 144.0 km ² B-full: 20.0 m ³ s ⁻¹	68-80	712	268	1.22	25.9	26/05 1969	0.02	26/08 1978	2.7	0.59	0.15		
Comment: Velocity-area station using a road bridge with a flat, insensitive invert and an adjacent box culvert as low and medium range controls. Broad floodplains operate above 2m when the Lodon tributary may bypass station. Natural catchment. # D/s of 55026 (Bishops Frome) lithology changes from Old Red Sandstone to ORS marls. Subdued relief, lowish rainfall. Entirely rural, predominantly arable farming with livestock on higher ground.	1981	789	111	334	125	1.53	25.1	30/12	0.20	05/09	3.4	0.75	0.23
	1982	836	117	355	132	1.62	23.5	05/01	0.19	20/09	3.8	0.85	0.27
	1983	669	94	241	90	1.10	23.8	02/05	0.17	30/09	2.7	0.58	0.19
	1984	743	104	243	91	1.11	18.5	24/11	0.12	01/09	3.0	0.59	0.13
	1985	718	101	271	101	1.23	13.4	08/02	0.18	06/11	2.8	0.72	0.20
055023 M.A.: WELS Level: 9m F.A.F.: SPE C.A.: 4010.0 km ² B-full: 612.0 m ³ s ⁻¹	36-80	1015	553	70.27	905.4	20/03 1947	3.43	28/08 1978	163.9	42.99	11.75		
Comment: Channel control velocity-area station replacing Cadora 1937-71; catchment area - 4040km ² which was tidally affected. All but extreme floods contained. Severe summer weed growth problems. Flow regime moderately modified by exports and regulation. Some naturalised data available. # Very large catchment of mixed Palaeozoic geology, Ordovician to Carboniferous, wet in the west, dry in the east and south. Moorland, forestry and grazing on the higher ground; arable in lower reaches. Little industrial development.	1981	1137	112	641	116	81.49	671.3	23/03	9.20	07/09	152.6	62.12	12.37
	1982	1188	117	716	129	91.00	497.3	16/03	13.68	03/06	219.5	60.99	15.75
	1983	1039	102	561	101	71.40	423.3	01/02	8.88	15/08	161.7	48.60	11.48
	1984	1039	102	576	104	73.19	498.8	24/11	4.79	02/09	194.3	31.95	6.46
	1985	1092	108	634	115	80.38	459.6	23/12	17.38	06/11	163.5	58.40	24.91
055025 M.A.: WELS Level: 88m F.A.F.: C.A.: 132.0 km ² B-full: 30.0 m ³ s ⁻¹	70-80	946	504	2.11	160.1	27/12 1979	0.04	27/08 1978	4.9	1.24	0.19		
Comment: Velocity-area station with an informal broad-crested, asymmetrical Flat V weir enhancing the natural rock bar control. Cableway section formalised within the abutments of a former railway bridge. Natural catchment. # Headwaters drain the Old Red Sandstone of the Black Mountains; lower reaches expose ORS marls which have lower relief and support arable farming. Contains Llangorse Lake.	1981	1008	107	634	126	2.66	49.9	21/03	0.17	06/09	5.1	2.10	0.24
	1982	1192	126	747	148	3.13	59.6	05/01	0.23	03/08	7.5	2.18	0.37
	1983	946	100	551	109	2.31	54.8	15/10	0.18	15/08	5.1	1.43	0.25
	1984	1015	107	514	102	2.15	59.6	27/01	0.09	21/08	5.5	0.84	0.11
	1985	995	105	513	102	2.14	50.0	04/06	0.43	03/08	4.5	1.47	0.58
055026 M.A.: WELS Level: 193m F.A.F.: P C.A.: 174.0 km ² B-full: 235.0 m ³ s ⁻¹	69-80	1565	1182	6.52	252.2	05/08 1973	0.10	28/08 1978	15.9	3.71	0.47		
Comment: Initially, gauged nearby at Rhayader (055005 1937-69); rested as a velocity-area station with a rock bar as control. Informal Flat V control installed 1972. Bankfull width approx. 30m. Cableway span 54m. All but exceptional floods contained. Lowest extent of natural gauging on the Wye. # Wet, upland catchment draining impermeable, metamorphosed Silurian sediments. High relief, headwaters reach over 600m, and feature steep sided and high gradient streams. Moorland and forestry.	1981	1715	110	1451	123	8.01	125.8	09/10	0.32	06/09	19.0	4.44	0.55
	1982	1624	104	1322	112	7.30	89.6	19/12	0.40	08/08	18.5	4.17	0.46
	1983	1822	116	1412	119	7.79	110.7	31/01	0.08	15/08	21.9	4.10	0.21
	1984	1590	102	1215	103	6.71	108.0	12/01	0.15	29/07	18.4	2.61	0.24
	1985	1509	96	1205	102	6.63	81.4	21/12	1.13	12/05	15.0	4.11	1.44
055028 M.A.: WELS Level: 76m F.A.F.: C.A.: 77.7 km ² B-full: 12.0 m ³ s ⁻¹	71-80	701	289	0.71	64.3	27/12 1979	0.05	19/08 1978	1.6	0.35	0.11		
Comment: Up to 1975, velocity-area station; latterly, Flat V Crump profile weir, 5m wide. Cableway span 10m. Steep banks do not contain the flood flows. Some throttling by d/s road bridge whose silt is below bankfull. Natural catchment. # Linear, rural catchment, headwaters cutting into the Old Red Sandstone of the Bromyard plateau, the north eastern and drier area of the Wye catchment. Superficials confined to the valleys. Livestock farming in the hills, arable otherwise.	1981	784	112	463	160	1.14	139.5	30/12	0.12	06/09	1.7	0.51	0.15
	1982	835	119	425	147	1.05	59.8	06/03	0.10	15/09	1.9	0.56	0.15
	1983	678	97	281	97	0.69	78.7	01/05	0.13	06/10	1.2	0.42	0.14
	1984	748	107	276	96	0.68	28.6	23/11	0.07	21/08	1.6	0.32	0.08
	1985	729	104	303	105	0.74	125.1	14/10	0.11	05/11	1.4	0.47	0.13
055029 M.A.: WELS Level: m F.A.F.: C.A.: 354.0 km ² B-full: 160.0 m ³ s ⁻¹	72-80	964	497	5.58	200.3	27/12 1979	0.28	28/08 1978	13.7	2.49	0.59		
Comment: Velocity-area station with an informal Flat V weir enhancing the natural rock step control. Approx 30m wide at bankfull. Cableway spans 42m. Replaced Kentchurch, 450m u/s (55009, 1948-72) which suffered from shoaling. Natural catchment. # Five parallel tributaries drain SE down the deeply dissected Old Red Sandstone plateau of the Black Mountains, the northernmost exposing the ORS marls. Moorland headwaters, arable lower reaches.	1981	1026	106	567	114	6.37	176.3	30/12	0.63	06/09	11.5	3.94	0.80
	1982	1186	123	701	141	7.87	155.0	15/03	0.93	18/09	17.0	5.02	1.05
	1983	987	102	504	101	5.65	151.6	20/12	0.63	18/08	12.9	3.16	0.83
	1984	991	103	485	98	5.45	176.0	26/01	0.37	02/09	12.9	2.22	0.44
	1985	1026	106	613	123	6.86	114.3	25/12	1.36	01/10	12.9	4.00	1.56
055031 M.A.: WELS Level: 58m F.A.F.: C.A.: 42.3 km ²	73-80	648	142	0.19	3.0	28/12 1979	0.00	25/07 1978	0.4	0.15	0.04		
Comment: Flat V Crump profile weir, 1.5 cross-slopes, 2.5m wide. Gravel accretion causes rating variability, checked by current metering. Floods contained. Flows moderately affected by industrial abstractions from groundwater. # Low relief catchment containing urban development of western Hereford. Solid geology: Old Red Sandstone marls; extensively covered with glacial sands and gravel, which maintain baseflow and are developed as an aquifer. Arable agriculture and light industry.	1981	771	119	173	122	0.23	3.5	30/12	0.05	06/09	0.4	0.17	0.07
	1982	804	124	243	171	0.33	2.5	19/01	0.05	19/09	0.6	0.25	0.08
	1983	682	105	200	141	0.27	2.6	02/05	0.07	04/12	0.4	0.21	0.09
	1984	746	115	196	138	0.26	2.4	27/01	0.04	29/07	0.6	0.16	0.06
	1985	773	119	200	141	0.27	2.4	08/02	0.07	02/11	0.4	0.22	0.10
055032 M.A.: WELS Level: m F.A.F.: S C.A.: 184.0 km ² B-full: 7.0 m ³ s ⁻¹	08-80	1823	889	5.07	141.0d	03/12 1960	0.50	24/10 1928	13.7	1.59	1.41		
Comment: Flat V Crump profile weir 23m wide, 350m d/s of Caban dam; cableway spans 40m. Replaced Caban Coch gauge (55006, 1908-84). Entirely regulated apart from overspill. 5 u/s reservoirs. Circa 4 m ³ s ⁻¹ to STWA. Releases for compensation (1.5 m ³ s ⁻¹), regulation and freshets. Monthly naturalised flows available for certain periods from older station. # Very wet (> 1800mm), high relief catchment draining predominantly Silurian shales and slates. Forestry/moorland.	1981	2048	112	1114	128	6.50	137.6	11/03	1.28	16/05	17.5	1.84	1.44
	1982	1905	104	968	111	5.65	100.7	19/12	1.20	15/05	18.2	1.53	1.42
	1983	1819	100	1013	117	5.91	97.9	31/01	0.78	22/09	16.1	1.55	1.16
	1984	1819	100	803	92	4.68	94.9	12/01	0.52	15/09	12.8	1.48	0.55
	1985	1819	100	731	84	4.25	121.8	21/12	0.79	11/05	12.9	1.46	
056001 M.A.: WELS Level: 23m F.A.F.: S C.A.: 911.7 km ² B-full: 700.0 m ³ s ⁻¹	57-80	1370	938	27.12	945.0	27/12 1979	1.61	27/08 1978	62.5	16.17	4.42		
Comment: Velocity-area station; permanent cableway. Low flows measured at complementary station downstream (056010 - Trostrely weir). There is a partial impact on flows resulting from three large existing public water supply reservoirs in upper catchment. Intake to canal upstream of gauge. Some naturalised flows available. # Geology - mainly Old Red Sandstone. Hill farming in upper areas, with dairy or livestock farming below; forest 3%. Peaty soils in uplands, seasonally wet.	1981	1492	109	1097	117	31.72	623.0	3.74	06/09	61.1	24.10	4.28	
	1982	1621	118	1240	132	35.84	429.2	15/03	4.19	02/08	85.0	23.59	5.07
	1983	1433	105	977	104	28.24	415.8	15/10	3.38	17/08	60.6	18.39	4.13
	1984	1367	100	947	101	27.37	346.9	02/01	2.20	22/08	70.0	12.04	2.81
	1985	1448	106	989	105	28.50	431.7	06/10	7.47	26/07	64.0	17.35	8.57
056002 M.A.: WELS Level: 31m F.A.F.: SG C.A.: 216.5 km ² B-full: 242.0 m ³ s ⁻¹	57-80	1450	1012	6.95	246.5	27/12 1979	0.99	08/09 1961	15.5	4.58	1.57		
Comment: Velocity-area station. Low flow Flat V weir (width: 14.5m, cross-slope 1:20) installed in 1976. Discharges up to MAF contained. Small water supply reservoirs in uplands. Some groundwater abstractions in valley. Drainage water from old coalmines can also influence flows. # Geology - mainly Coal Measures. Livestock farming on hills. Forest: 7%. Soils mainly have permeable substrates.	1981	1696	117	1243	123	8.54	123.9	19/09	1.26	02/09	15.2	6.25	1.60
	1982	1858	128	1541	152	10.58	125.9	11/11	1.62	09/08	25.6	6.93	1.82
	1983	1571	108	1223	121	8.39	170.6	15/10	1.44	30/08	18.0	5.27	1.80
	1984	1495	103	1037	102	7.12	100.9	23/11	1.05	22/09	17.7	3.29	1.15
	1985	1620	112	1158	114	7.93	94.0	11/08	2.85	25/07	15.9	5.25	3.18

					Period	Rainfall (mm)	Runoff (mm)	Mean flow (m ³ s ⁻¹)	Peak flow (m ³ s ⁻¹)	Date of peak	Min. daily flow (m ³ s ⁻¹)	Date of min.	10 Percentile (m ³ s ⁻¹)	50 Percentile (m ³ s ⁻¹)	95 Percentile (m ³ s ⁻¹)
						% of pre-1981	% of pre-1981								
058005	Ogmore at Brynmynyn	C.A.: 74.3 km ²	70-80	1866	1367	3.22	69.1	01/11	0.25	28/08	6.8	2.22	0.52		
M.A: WELS	Level: 43m	F.A.F: E	B-full: 365.0 m ³ s ⁻¹												
Comment:	Flat V weir; velocity-area station for high flows. All flows contained. Effluent discharge to river upstream. # Geology - Coal Measures. Livestock farming in upland area with urban and industrial development in the valleys. Forest 21%. Peaty soils in upper areas, seasonally wet. Soils in lower areas have permeable substrate.														
	1981	2277	122	1888	138	4.45	97.9	10/03	0.32	04/09	9.0	2.92	0.38		
	1982	2144	115	1649	121	3.88	35.6	19/12	0.42	04/06	8.8	2.58	0.50		
	1983	1959	105												
	1984	1884	101												
	1985	2007	108	1747	128	4.12	31.8	08/10	0.57	05/06	9.3	2.66	0.82		
058006	Melite at Pontneddfechan	C.A.: 65.8 km ²	71..80	1913	1330	2.77	127.6	27/12	0.20	27/08	6.9	1.41	0.34		
M.A: WELS	Level: 90m	F.A.F: SP	B-full: 325.0 m ³ s ⁻¹												
Comment:	Flat V weir (crest damaged by vandals) and velocity-area station; channel width 15m. Steep section with heavy bed load. Public water supply reservoir in catchment has partial effect on flows. # Geology - from south to north- Millstone Grit, Carboniferous Limestone and Old Red Sandstone. Mainly an upland, pasture catchment.														
	1981	2347	123	1678	126	3.50	72.9	10/03	0.26	06/09	7.6	2.09	0.32		
	1982	2497	131	1649	124	3.44	82.3	02/01	0.33	09/06	8.3	1.71	0.37		
	1983	2261	118	1567	118	3.27	96.8	15/10	0.27	14/08	7.5	1.61	0.32		
	1984	1977	103	1315	99	2.74	76.5	12/01	0.17	21/08	7.4	0.96	0.19		
	1985	2292	120	1594	120	3.32	77.2	06/10	0.48	19/05	8.2	1.53	0.61		
058007	Llymfi at Coytrahen	C.A.: 50.2 km ²	70..80	1775	1268	2.02	59.4	01/11	0.20	03/09	4.1	1.34	0.36		
M.A: WELS	Level: 90m	F.A.F: EI	B-full: 180.0 m ³ s ⁻¹												
Comment:	Flat V weir and velocity-area station. Industrial abstractions and effluent returns. Channel width 15m. Full range; maximum gauging 91 m ³ s ⁻¹ . # Geology - Coal Measures. Upland area with livestock farming. Forest: 16%. Mainly peaty soils, seasonally wet.														
	1981	2097	118	1677	132	2.67	54.7	10/03	0.24	06/09	5.4	1.83	0.30		
	1982	1923	108	1518	120	2.42	37.0	06/03	0.30	03/08	5.6	1.50	0.34		
	1983	1831	103	1365	108	2.17	35.8	31/01	0.22	30/08	4.8	1.38	0.33		
	1984	1725	97	1256	99	2.00	47.4	21/10	0.18	26/08	5.1	0.69	0.20		
	1985	1899	107	1549	122	2.46	27.3	12/08	0.41	05/06	5.4	1.57	0.54		
058009	Ewenny at Keepers Lodge	C.A.: 62.5 km ²	71-80	1303	780	1.55	35.9	09/12	0.16	23/08	3.1	1.13	0.33		
M.A: WELS	Level: 8m	F.A.F: SP	B-full: 85.0 m ³ s ⁻¹												
Comment:	Flat V weir (1:15 cross-slope - terminating in a 1:2 sloping revetment); velocity-area calibration for high flows. All flows contained. Channel width 12.25m. Some earlier data available for upstream station (58003). # Geology - in the north Coal Measures. To the south a mixture of Millstone Grit, Carboniferous Limestone, Trias, Lias and alluvial deposits. Lowland area with urban and industrial development and dairy and livestock farming. Soils have permeable substrate.														
	1981	1505	116	1179	151	2.34	44.9	11/03	0.35	04/09	4.2	1.68	0.43		
	1982	1374	105	1051	135	2.08	35.5	09/12	0.34	04/08	4.8	1.40	0.39		
	1983	1347	103	1019	131	2.02					4.1	1.41	0.46		
	1984	1321	101	956	123	1.89	50.8	23/11	0.19	21/08	4.8	0.85	0.27		
	1985	1413	108	1063	136	2.10	53.0	04/08	0.61	05/06	4.0	1.54	0.71		
058011	Thaw at Gigan Bridge	C.A.: 49.2 km ²	76-80	1117	615	0.96				0.07	09/09	2.1	0.69	0.13	
M.A: WELS	Level: 7m	F.A.F: GE													
Comment:	Flat V type low flow control; velocity-area calibration based on gaugings from bridge upstream. Flows affected by effluent discharges and groundwater abstractions. # Mixed geology: Lias, Trias, Carboniferous Limestone and Old Red Sandstone. Lowland area in the Vale of Glamorgan with dairy and livestock farming. Soils have permeable substrate.														
	1981	1279	115	729	119	1.14				0.15	27/08	2.2	1.00	0.21	
	1982	1238	111	696	113	1.09				0.11	18/09	2.6	0.81	0.14	
	1983	1181	106	664	108	1.04				0.17	30/08	2.2	0.82	0.20	
	1984	1186	106	647	105	1.01				0.06	27/07	2.7	0.41	0.08	
	1985	1220	109	693	113	1.08				0.28	19/08	1.9	0.89	0.36	
059001	Tawe at Ynystanglwys	C.A.: 227.7 km ²	57..80	1820	1536	11.09	461.3	27/12	0.45	08/10	26.9	5.44	1.32		
M.A: WELS	Level: 9m	F.A.F: GEI	B-full: 460.0 m ³ s ⁻¹												
Comment:	Velocity-area station. Gravel bed - unstable control. All but extreme floods contained since construction of floodbanks (1959). Limestone outcrop at north of catchment has partial effect on baseflow. Groundwater and industrial abstractions also. # Geology - principally Coal Measures. Mainly upland area with livestock farming. Urban and industrial development at lower levels. Forest: 8%. 30% in National Park.														
	1981	2175	120	1811	118	13.08	270.2	10/03	1.04	06/09	27.0	6.39	1.44		
	1982	2204	121	1756	114	12.68	233.5	19/12	1.06	08/08	31.7	6.10	1.31		
	1983	1909	105	1652	108	11.93	277.0	15/10	0.89	14/08	27.2	6.54	1.16		
	1984	1799	99	1502	98	10.84	183.1	22/10	0.77	29/07	29.5	4.03	0.89		
	1985	2138	117	2035	132	14.65	289.9	06/10	2.66	19/05	33.5	8.48	3.36		
059002	Loughor at Tir-y-dail	C.A.: 46.4 km ²	67..80	1470	1225	1.80	143.6	05/08	0.08	20/06	4.5	1.01	0.31		
M.A: WELS	Level: 31m	F.A.F: PGEI	B-full: 121.0 m ³ s ⁻¹												
Comment:	Velocity-area station with bed control built over sewer crossing. Right bank overtopped on rare occasions. Public water supply abstraction from main spring source. Groundwater and industrial abstractions and effluent returns. # Geology - mainly Coal Measures, with Millstone Grit, Carboniferous Limestone and Old Red Sandstone in northern half of catchment. Mainly dairy farming. Soils generally have permeable substrate.														
	1981	1671	114	1249	102	1.84	60.8	19/09	0.22	06/09	4.0	0.99	0.26		
	1982	1760	120	1655	135	2.44	90.6	20/09	0.31	11/08	5.6	1.50	0.33		
	1983	1387	94	1333	109	1.96	54.5	15/10	0.25	18/08	3.8	1.31	0.31		
	1984	1457	99	1369	112	2.01	44.2	16/01	0.15	27/07	5.0	0.73	0.17		
	1985	1695	115	1638	134	2.40	112.2	06/10	0.42	05/06	5.2	1.41	0.61		
060002	Cothi at Felin Mynachdy	C.A.: 297.8 km ²	61..80	1574	1173	11.08	274.7	12/12	0.25	28/08	25.0	6.75	1.01		
M.A: WELS	Level: 16m	F.A.F: PE	B-full: 160.0 m ³ s ⁻¹												
Comment:	Velocity-area station. Straight reach and natural rock control. Channel width: 20m. Stable section. Effectively a natural catchment. # Geology - mainly Silurian with Ordovician along south eastern boundary. Soils have permeable substrate. Hill farming in uplands, dairying below. Significant forest cover (17%).														
	1981	1947	124	1363	116	12.87	220.9	21/03	0.37	03/09	25.6	7.82	0.65		
	1982	1927	122	1347	115	12.72	107.2	12/02	0.79	01/06	32.5	7.70	0.97		
	1983	1646	105												
	1984	1690	107	1107	94	10.45	101.9	16/01	0.22	31/07	29.4	2.95	0.29		
	1985	1748	111	1282	109	12.07	139.9	21/12	2.13	01/10	27.5	7.03	2.49		
060003	Taf at Clog-y-tfan	C.A.: 217.3 km ²	65..80	1398	1044	7.20	80.8	01/11	0.27	09/09	16.2	4.84	0.85		
M.A: WELS	Level: 7m	F.A.F: N	B-full: 50.0 m ³ s ⁻¹												
Comment:	Velocity-area station. Overspills during flood discharges. Channel width 13.9m. Natural catchment. # Geology - Ordovician with some narrow bands of igneous rock. Old Red Sandstone and alluvium deposits in southern area. Mainly rural - predominantly dairy farming. Soils have permeable substrate.														
	1981	1650	118	1267	121	8.73	85.7	11/03	0.59	05/09	18.0	5.44	0.80		
	1982	1681	120	1272	122	8.77	77.3	01/10	0.54	21/06	22.1	6.28	0.76		
	1983	1380	99	940	90	6.47	49.7	14/12	0.52	19/08	13.6	5.25	0.69		
	1984	1359	97	942	90	6.49	60.6	24/10	0.18	21/08	16.9	2.81	0.28		
	1985	1462	105	1103	106	7.58	59.8	30/12	1.21	19/06	15.6	5.29	1.59		
060005	Bren at Llandoverly	C.A.: 66.8 km ²	68..80	1422	1020	2.16	86.0	14/02	0.02	03/07	5.3	1.12	0.12		
M.A: WELS	Level: 64m	F.A.F: I	B-full: 65.0 m ³ s ⁻¹												
Comment:	Velocity-area station. Records from 1968, bed control installed 1972. Channel width: 7.5m. Agricultural abstractions have a minimal impact on flow records. # Geology - Ordovician with alluvium deposits in valley floor. Forest: 38%. Hill farming in upland areas. Dairy farming in valley area. Peaty soils, seasonally wet, in hill area. Soils have permeable substrate in lower areas.														
	1981	1689	119	1250	123	2.65	44.4	11/03	0.04	06/09	5.8	1.43	0.07		
	1982	1722	121	1179	116	2.50	35.6	20/10	0.05	08/08	6.2	1.38	0.10		
	1983	1544	109	1094	107	2.32	49.9	15/10	0.03	16/08	5.3	1.31	0.04		
	1984	1524	107	966	95	2.05	34.4	12/01	0.02	21/08	5.4	0.73	0.04		
	1985	1512	106	1063	104	2.25	63.5	06/10	0.31	12/05	5.1	1.14	0.39		
060006	Gwili at Glangwili	C.A.: 129.5 km ²	68-80	1510	1139	4.68	155.9	27/12	0.15	28/08	10.9	2.86	0.44		
M.A: WELS	Level: 8m	F.A.F: SPEI	B-full: 370.0 m ³ s ⁻¹												
Comment:	Velocity-area station; stable section. Channel width: 15.5m. Public water supply and agricultural abstractions and effluent returns have minimal impact on flows records. # Geology - Ordovician and Silurian. Mainly dairy farming, rural area. Forest: 18%. Soils generally have permeable substrate.														
	1981	1922	127	1530	134	6.28	152.4	21/03	0.27	06/09	11.8	4.03	0.57		
	1982	1950	129	1419	125	5.83	99.4	01/10	0.44	02/06	14.2	3.74	0.38		

Period	Rainfall (mm)	Runoff (mm)	Mean flow (m ³ s ⁻¹)	Peak flow (m ³ s ⁻¹)	Date of peak	Min. daily flow (m ³ s ⁻¹)	Date of min.	10 Percentile (m ³ s ⁻¹)	50 Percentile (m ³ s ⁻¹)	95 Percentile (m ³ s ⁻¹)			
060007	Tywi at Dolau Hirion	C.A.: 231.8 km ²	68-80	1620	1253	9.21	533.8	27/12	0.40	25/09	21.3	5.19	1.63
M.A.: WELS	Level: 69m	F.A.F.: SREI	B-full: 670.0 m ³ s ⁻¹										
Comment:	Velocity-area station. Stable section with natural control. Channel width: 38m. Regulated river with large impounding reservoir in upper catchment. # Geology - principally Ordovician. Upland areas of Cambrian Hills. Mostly hill farming with some livestock at lower levels. Forest: 17%. Mainly peaty soils, seasonally wet.												
1981	2003	124	1701	136	12.51	300.3	21/03	1.49	02/08	26.1	7.60	2.32	
1982	1881	116	1474	118	10.83	358.5	09/02	0.65	22/07	26.4	5.86	2.01	
1983	1947	120	1328	106	9.76	135.9	27/11	1.32	22/06	20.9	6.31	2.17	
1984	1658	102	1296	103	9.52	241.4	10/01	1.99	05/04	24.2	4.43	2.57	
1985	1653	102	1409	112	10.33	262.7	21/12	1.69	16/01	22.9	6.25	2.61	
060010	Tywi at Nantgaredig	C.A.: 1090.4 km ²	58-80	1556	1088	37.61	578.8	03/02	1.19	08/10	86.7	23.97	4.01
M.A.: WELS	Level: 8m	F.A.F.:											
Comment:	Flat V weir (1:20 cross slope) set in Crump profile flanking section. Shoaling downstream may influence modular range. Channel width: 43m. High flows derived using 060001 record. Large impounding reservoir in upper catchment regulates flow down to major abstraction upstream of station. # Geology - Ordovician and Silurian with Old Red Sandstone on southern boundary. Peaty soils in headwaters. Alluvium deposits in valleys. Upper catchment mostly hill farming with some livestock farming and dairying at lower levels. Forest 17%.												
1981			1345	124	46.50	702.3	21/03	1.77	04/09	96.3	29.42	4.28	
1982			1255	115	43.39	234.4	20/10	2.06	29/07	114.4	25.18	3.30	
1983			1068	98	36.93	260.4	15/10	1.81	21/07	83.6	23.39	3.20	
1984			1030	95	35.62	227.2	23/11	1.21	16/08	101.3	11.80	1.90	
1985			1172	108	40.42	405.0	22/12	6.03	19/05	96.4	22.60	8.54	
061002	Eastern Cleddau at Canaston Bridge	C.A.: 183.1 km ²	60-80	1433	1015	5.90	199.4	12/12	0.59	22/07	12.9	3.69	0.98
M.A.: WELS	Level: 5m	F.A.F.: SRPE	B-full: 85.0 m ³ s ⁻¹										
Comment:	Velocity-area station; artificial control installed in 1974. Channel width: 17.4m. Impounding reservoir for public water supply in upper catchment regulates the river down to the gauging station. # Geology - mainly Ordovician with bands of igneous rock in the northern half of the catchment. Some Old Red Sandstone on the southern boundary. Mainly dairy farming in hilly rural area. Soils mainly have permeable substrate.												
1981	1641	115	1184	117	6.88	85.6	11/03	0.98	04/08	16.0	4.19	1.21	
1982	1664	116	1168	115	6.78	71.9	11/11	1.01	21/08	16.7	4.86	1.12	
1983	1337	93	913	90	5.30	66.9	14/12	1.01	29/08	10.5	4.20	1.22	
1984	1332	93	960	95	5.57	55.5	24/10	0.65	27/07	13.8	2.55	0.73	
1985	1453	101											
061003	Gwaun at Cilrhedyn Bridge	C.A.: 31.3 km ²	69-80	1505	1111	1.10	23.5	05/08	0.06	27/08	2.4	0.77	0.15
M.A.: WELS	Level: 70m	F.A.F.:	B-full: 25.0 m ³ s ⁻¹										
Comment:	Velocity-area station in straight reach (width: 7.0m). Natural steep-sided catchment very responsive. # Geology - Ordovician with intrusions of igneous rock. Mainly dairy farming in lower areas. Livestock on hills. Forest: 7%. 100% in National Park. Peaty soils on hills, seasonally wet. In lower areas, soils have permeable substrate.												
1981	1739	116	1290	116	1.28	16.7	11/03	0.12	06/09	2.7	0.82	0.17	
1982	1748	116	1260	113	1.25	15.3	01/10	0.12	09/06	2.8	1.04	0.17	
1983	1383	92	1089	98	1.08	19.3	14/12	0.10	14/08	2.2	0.83	0.14	
1984	1380	92	1028	93	1.02	8.2	01/12	0.07	20/08	2.5	0.53	0.10	
1985	1556	103	1202	108	1.19	12.9	30/12	0.25	05/06	2.3	0.87	0.35	
061004	Western Cleddau at Redhill	C.A.: 197.6 km ²	65-80	1287	848	5.31	64.9	01/02	0.30	09/09	11.4	3.67	0.71
M.A.: WELS	Level: 6m	F.A.F.:											
Comment:	Velocity-area station. Channel width: 10.5m. Supersedes Prendergast Mill (061001 - subject to tidal influence); Redhill has no gauging facilities hence ratings developed at Prendergast Mill are used - suitably adjusted. # Geology - Ordovician with igneous intrusions. Natural catchment in rural area. Mainly dairy farming, some arable farming in lower areas. Soils in northern hills have impermeable substrate - seasonally wet. Soils in the lower, southern, area have permeable substrates.												
1981			1102	130	6.90	61.2	11/03	0.58	02/09	15.4	4.45	0.82	
1982			1095	129	6.86	50.0	05/11	0.55	18/09	15.1	6.41	0.71	
1983			733	86	4.59	45.7	14/12	0.56	15/08	9.6	3.87	0.75	
1984			776	92	4.86	23.9d	03/12	0.42	29/07	13.0	2.12	0.47	
1985													
062001	Telfi at Glan Telfi	C.A.: 893.6 km ²	59-80	1327	990	28.05	303.3	27/12	0.73	29/08	61.6	19.11	3.27
M.A.: WELS	Level: 5m	F.A.F.: SP	B-full: 210.0 m ³ s ⁻¹										
Comment:	Velocity-area station. Straight reach (width: 35m), natural control. Flood flows spill over right bank. Public water supply impounding reservoirs in upland area where there is mostly hill farming. 10km ² Tregaron bog has partial effect on flows: sensibly natural regime. # Geology - mainly Ordovician and Silurian deposits. Mainly dairy farming in southern area. Forest: 5%. Peaty soils on hills, seasonally wet. Apart from Tregaron bog, most of the lower areas have soils with permeable substrate.												
1981	1601	121	1260	127	35.61	279.1	22/03	2.45	07/09	75.7	22.47	2.94	
1982	1502	113	1087	110	30.81	184.8	01/10	2.57	31/07	77.1	20.35	2.99	
1983	1363	103	905	91	25.65	172.2	14/12	1.82	15/08	55.2	18.71	3.03	
1984	1305	98	905	91	25.64	183.1	25/10	0.98	01/09	65.7	11.19	1.50	
1985	1317	99	953	96	26.94	166.0	21/12	5.91	05/06	61.0	18.01	8.20	
063001	Yatwyth at Pont Llolwyn	C.A.: 169.6 km ²	63-80	1435	1066	5.73	210.4	12/12	0.11	22/08	13.4	3.29	0.62
M.A.: WELS	Level: 12m	F.A.F.:	B-full: 71.0 m ³ s ⁻¹										
Comment:	Velocity-area station (channel width: 16 m). Records from 1963, with bed control installed in 1973. Floods spill over right bank. Discharges from lead mines. # Geology - Silurian deposits. Mainly upland area with hill farming. Some livestock at lower levels. Forest 18%. Peaty soils in eastern hills, seasonally wet. Most of the western part of the catchment has soils with permeable substrate.												
1981	1763	123	1446	136	7.77	126.7	11/03	0.55	16/07	17.6	4.38	0.81	
1982	1556	108	1128	106	6.07	63.2	24/09	0.36	08/06	14.4	3.86	0.47	
1983	1658	116	1226	115	6.59	81.8	14/01	0.37	15/08	16.0	3.92	0.61	
1984	1452	101	1004	94	5.40	44.8	23/11	0.27	01/08	14.8	2.90	0.36	
1985	1488	104	1081	101	5.80	61.4	21/12	0.99	05/06	12.7	3.55	1.38	
063002	Rheidol at Llanbadam Fawr	C.A.: 182.1 km ²	65-80	1757	1539	8.89	145.3	17/12	0.28	07/09	17.7	6.16	1.98
M.A.: WELS	Level: 4m	F.A.F.: SPH	B-full: 215.0 m ³ s ⁻¹										
Comment:	Velocity-area station. Shoaling affects gauged section (channel width: 20m). Public water supply abstractions from river gravels. Impounding reservoir for hydro-electric station at Cwm Rheidol have major effects on flows. Drainage water from old mineral mines in upper catchment. Station closed in 1984. # Geology - mainly Silurian with some Ordovician on the northern catchment boundary. Mostly hill farming in upland areas. Forest: 20%. Soils mainly have permeable substrate.												
1981	2079	118	1933	126	11.16	126.5	11/03	1.49	21/04	24.4	7.19	1.99	
1982	1854	106	1362	88	7.87	56.4	14/12	1.15	19/05	16.2	5.73	1.50	
1983	2065	118	1651	107	9.53	78.0	09/10	1.62	02/06	20.9	6.52	1.93	
1984	1717	98											
1985	1854	106											
064001	Dyfi at Dyfi Bridge	C.A.: 471.3 km ²	62-80	1833	1464	21.88	500.0f	12/12	1.19	29/06	47.7	11.76	3.17
M.A.: WELS	Level: 6m	F.A.F.: N	B-full: 500.0 m ³ s ⁻¹										
Comment:	A 40m wide river section controlled by the invert and arches of the historical Dyfi road bridge downstream. A good stable section although records in early years are marred by substantial engineering works carried out on the bridge. # A natural, largely moorland catchment on Silurian rocks. River alluvium deposits in the floodplain.												
1981	2185	119	1853	127	27.69						60.1	14.59	1.83
1982	2111	115	1720	117	25.70	319.0	19/12	1.80	31/07	62.6	16.31	2.25	
1983	2172	118	1680	115	25.10	311.0	03/01	0.95	15/08	60.1	14.24	1.55	
1984	1703	93	1227	84	18.34	245.0	12/01	0.58	30/07	45.9	6.81	0.83	
1985	2035	111	1464	100	21.82	288.6	13/12	2.52	12/05	48.4	15.06	3.34	
064002	Dysynni at Pont-y-garth	C.A.: 75.1 km ²	66-80	2130	1761	4.19	121.3	21/11	0.03	12/06	8.2	3.07	0.45
M.A.: WELS	Level: 2m	F.A.F.: N	B-full: 170.0 m ³ s ⁻¹										
Comment:	A 40m wide section (between floodbanks) controlled by sheet piling downstream in a straight channel dredged prior to station construction. Insensitive at low flows and difficult to gauge at high flows due to flashy response. # Natural flow regime arising from volcanic rocks with much outcropping. Tal-y-Llyn, the southernmost ribbon lake in Britain, lies within the catchment.												
1981	2500	117	2274	129	5.42	98.7	10/03	0.89	22/04	10.9	3.10	1.13	
1982	2315	109	1849	105	4.40	49.3	19/10	0.17	08/08	11.1	2.96	0.48	
1983	2499	117	2069	117	4.93	79.4	08/12	0.22	15/08	10.7	2.94	0.70	
1984	2079	98	1517	86	3.61	51.5	10/01	0.24	29/07	9.6	1.34	0.28	
1985	2686	126	2161	123	5.13	56.6	12/12	0.91	04/06	10.5	3.58	1.23	
064006	Leri at Dolybont	C.A.: 47.2 km ²	60-80	1338	571	0.85	24.1	05/12	0.02	21/06	2.3	0.39	0.03
M.A.: WELS	Level: 15m	F.A.F.: S	B-full: 126.0 m ³ s ⁻¹										
Comment:	A 10m wide single crest Crump weir in a straight floodbanked reach. Wing walls contain flows to high levels although rating has not been checked beyond medium flows. A small abstraction from Craig-y-Pistyll reservoir. # The catchment is predominantly moorland on impervious Silurian rocks.												
1981	1743	130	1250	219	1.87	17.2	11/03	0.28	15/07	3.1	1.15	0.34	
1982	1608	120	1032	181	1.54	14.1	24/09	0.14	07/08	4.7	1.04	0.19	
1983	16												

Station ID	Name	C.A.	Period	Rainfall (mm)	Runoff (mm)	Mean flow (m ³ s ⁻¹)	Peak flow (m ³ s ⁻¹)	Date of peak	Min. daily flow (m ³ s ⁻¹)	Date of min.	10 Percentile (m ³ s ⁻¹)	50 Percentile (m ³ s ⁻¹)	95 Percentile (m ³ s ⁻¹)
				% of pre-1981	% of pre-1981								
065001	Glaslyn at Beddgelert	C.A: 68.6 km ²	61..80	3085	2604	5.66	130.2	16/07	0.06	07/09	12.6	3.16	0.59
M.A: WELS	Level: 33m F.A.F: H	B-full: 100.0 m ³ s ⁻¹						1973		1976			
Comment: A 20m wide river section rated by current meter and, in the past, by dilution gauging. Rating tends to be insensitive at low flows due to subtle movements in the natural bed control downstream. High flow gauging restricted to peaks and troughs because of rapid water level changes. Station bypassed at high flows. Lakes (Dinas and Gwynant) and HEP discharge from the higher Llyn Llydaw marginally affect records. # Catchment drains the southern flanks of Snowdonia with much bare rock exposure (impermeable Ordovician volcanics).													
1981	3546	115	2982	115	6.49	121.5	21/03	0.28	22/04	15.4	3.56	0.61	
1982	3239	105	2614	100	5.69	85.6	19/12	0.34	18/05	14.7	3.24	0.53	
1983	3044	99	2597	100	5.65	103.5	02/09	0.23	10/08	13.7	2.96	0.36	
1984	2550	83	2128	82	4.63	78.9	11/01	0.25	30/05	11.5	2.04	0.30	
1985	3107	101	2907	106	6.09	76.0	21/12	0.67	28/10	14.8	3.65	1.02	
065004	Gwyrfai at Bontnewydd	C.A: 47.9 km ²	70..80	2107	1516	2.30	30.1	10/02	0.06	07/10	5.2	1.60	0.26
M.A: WELS	Level: 31m F.A.F: P	S-full: 126.0 m ³ s ⁻¹						1977		1972			
Comment: A 10m wide single crest Crump weir containing flows to high levels. Check gauging suggests some (constant) loss due to inadequate cutoffs; hence low flows affected. Significant abstraction from Llyn Cwellyn reservoir upstream. # A steep and typically Snowdonian catchment; Lower Palaeozoic geology.													
1981	2449	116	1729	114	2.63	47.3	21/03	0.47	06/09	5.6	1.64	0.56	
1982	2430	115	1616	107	2.45	22.0	03/01	0.21	03/08	6.2	1.47	0.25	
1983	2160	103	1438	95	2.18	19.7	09/12	0.20	14/08	5.0	1.34	0.28	
1984	1865	89	1235	81	1.88	14.8	22/10	0.15	21/08	4.9	0.96	0.19	
1985	2075	98	1584	104	2.40	25.8	21/12	0.43	10/07	5.2	1.56	0.63	
065005	Erch at Pencaeenydd	C.A: 18.1 km ²	73-80	1247	1007	0.58	15.4	10/02	0.04	27/08	1.3	0.39	0.09
M.A: WELS	Level: 56m F.A.F: N	S-full: 75.8 m ³ s ⁻¹						1977		1976			
Comment: A 6m wide Crump weir with high wing walls containing wide range of flows. Check gauged up to medium flows. # A typical impervious lowland catchment on the Lleyn peninsula covered with Boulder Clay.													
1981	1624	130	1279	127	0.73	19.8	21/03	0.10	03/09	1.5	0.49	0.12	
1982	1749	140	1161	115	0.67	16.9	11/11	0.08	07/08	1.6	0.46	0.09	
1983	1425	114	954	95	0.55	7.6	03/01	0.09	13/08	1.1	0.37	0.10	
1984	1358	109	961	95	0.55	8.9	24/10	0.07	22/08	1.4	0.25	0.08	
1985	1661	133	1256	125	0.72	11.0	11/04	0.17	25/07	1.4	0.51	0.24	
065006	Selont at Pablig Mill	C.A: 74.4 km ²	76-80	2472	1979	4.67	53.7	31/10	0.16	24/08	10.7	3.22	0.61
M.A: WELS	Level: 19m F.A.F: H							1977		1976			
Comment: A rated river section in a straight reach which has not yet been bypassed. Control provided by a roughly Crump shaped structure originally built as part of investigations prior to construction of the Dinorwic pumped storage scheme, which very marginally affects the record. # A steep catchment with much bare rock surface. Contains two large ribbon lakes, Padarn and Peris, the latter acting as the lower reservoir of the Dinorwic scheme.													
1981	2598	105	2045	103	4.82	57.9	21/03	0.50	06/09	10.2	2.86	0.66	
1982	2617	106	1999	101	4.72	34.3	12/11	0.45	09/06	11.4	2.85	0.56	
1983	2481	100	1871	95	4.41	45.5	02/09	0.25	14/08	10.5	2.84	0.46	
1984	2185	88	1641	83	3.87	32.9	22/10	0.27	14/05	9.9	2.02	0.36	
1985	2369	96	1922	97	4.52	52.9	21/12	0.74	01/11	10.0	2.80	1.07	
065007	Dwyfawr at Garndolbenmaen	C.A: 52.4 km ²	75-80	1991	1480	2.46	56.2	20/04	0.05	26/08	5.4	1.54	0.22
M.A: WELS	Level: 86m F.A.F: P							1975		1976			
Comment: A compound Crump weir with dividing walls separating the 6.5m wide lower crest from two flanking crests each 5m wide. Station built as the control point for the Cwmystadlyn Reservoir/Afon Dwyfawr regulation scheme. Consequently not intended for high flow gauging and in fact bypassed at flows > 10 year return period. # The catchment is mainly steep and with much bare rock of Lower Palaeozoic age.													
1981	2397	120	1738	117	2.89	57.2	21/03	0.35	22/04	6.2	1.76	0.49	
1982	2231	112	1466	99	2.44	33.5	09/03	0.16	09/06	6.0	1.52	0.24	
1983	2079	104	1367	92	2.27	34.6	09/12	0.10	10/08	5.5	1.38	0.23	
1984	1858	93	1192	81	1.98	31.0	29/10	0.01	21/08	5.3	0.88	0.06	
1985	2267	114	1708	115	2.83	36.5	12/12	0.42	10/07	6.1	1.91	0.59	
066006	Elwy at Pont-y-gwyddel	C.A: 194.0 km ²	73-80	1243	673	4.14	143.0	15/10	0.16	06/09	10.7	2.44	0.32
M.A: WELS	Level: 88m F.A.F: SRP							1976		1976			
Comment: A twin arch bridge provides the control at medium flow. A castellated 1m wide Crump weir is set in each 10m arch to give the low flow control. Rating is continually checked. Some bypassing at levels > 2m. Low flows affected > 10% by maintained residual flow of 0.2 m ³ s ⁻¹ in Afon Aled from reservoirs which drain 6% of catchment. # Impermeable Silurian strata with shallow soil cover. Mainly sheep pastures. < 10% forestry in valleys.													
1981	1336	107	809	120	4.98	101.6	18/11	0.31	05/09	12.1	2.92	0.43	
1982	1383	111	816	121	5.02	69.6	14/03	0.52	02/06	12.8	2.71	0.58	
1983	1163	94	685	102	4.21	48.0	05/01	0.30	14/08	9.4	2.84	0.33	
1984	1131	91	631	94	3.88	63.1	12/01	0.17	29/07	10.8	1.95	0.20	
1985	1054	85	592	88	3.63	50.8	11/04	0.50	27/07	7.5	2.37	0.65	
066011	Conwy at Cwm Llanerch	C.A: 344.5 km ²	64..80	2203	1568	17.13	509.7	12/12	0.44	07/10	39.9	8.63	1.30
M.A: WELS	Level: 7m F.A.F: P	B-full: 390.0 m ³ s ⁻¹						1964		1972			
Comment: A 50m wide river section requiring frequent recalibration (current meter) due to shifting bed control. Record is very important in Conwy valley flood forecasting so much effort to ensure rating is kept accurate. Some bypassing and upstream overbank storage at very high flows. At such times water is diverted by means of leats into Llyn Conwy. # The catchment is mainly mountainous and composed of volcanic rocks.													
1981	2448	111	1959	125	21.40	414.9	02/02	0.97	06/09	50.7	10.12	1.44	
1982	2492	113	1896	121	20.71	393.6	19/12	1.18	08/08	54.1	9.65	1.47	
1983	2233	101	1742	111	19.02	403.4	02/09	0.57	15/08	43.8	9.37	0.99	
1984	1968	89	1407	90	15.37	343.4	12/01	0.31	30/07	40.8	5.91	0.52	
1985	2115	96	1701	108	18.53	427.5	21/12	1.65	10/07	45.5	9.18	2.56	
067001	Dee at Bala	C.A: 261.6 km ²	57-80	1830	1488	12.34	198.2	04/12	0.80	16/03	29.2	7.38	1.94
M.A: WELS	Level: 159m F.A.F: SR	B-full: 186.0 m ³ s ⁻¹						1960		1962			
Comment: Original broad-crested weir modified in 1968 to triangular profile 1:1 u/s and 1:3.5 d/s. Gauged by wading and cableway with some hydraulic model tests also. May drown at about bankfull flows. Low flows controlled by Bala sluices about 750m upstream. These control flow from Llyn Tegid. Llyn Celyn also in catchment. # Thin soil cover over mostly Lower Ordovician rocks. The rapid response to rainfall is modified by the natural storage of Llyn Tegid. Mainly open moorland and sheep pastures with < 10% forest.													
1981	1969	108	1789	120	14.84	111.7	22/03	2.24	14/04	30.8	8.84	3.20	
1982	2135	117	1844	124	15.29	83.2	20/12	2.53	29/03	35.6	9.45	3.27	
1983	2006	110	1685	113	13.97	80.1d	05/01	2.59	18/04	29.7	8.65	3.48	
1984	1678	92	1311	88	10.88	56.7d	07/02	2.03	01/08	25.0	6.52	2.58	
1985	1774	97	1491	100	12.33	48.1d	22/12	0.93	06/01	27.9	9.39	2.79	
067006	Atwen at Druid	C.A: 184.7 km ²	60-80	1305	822	4.81	175.6	12/12	0.33	07/07	11.1	2.86	0.57
M.A: WELS	Level: 146m F.A.F: SRPI	B-full: 100.0 m ³ s ⁻¹						1964		1975			
Comment: Natural river section about 20m wide. Stable since last major flood in 1964. Some minor revisions of rating from time to time. Bypassed during floods. Reservoirs control 15% of catchment. Llyn Brenig holds nearly four times annual average runoff. # Catchment area changed in 1976 to exclude Llyn Bran (0.8 km ²). Peat cover (thick in places) over Boulder Clay on Ordovician/Silurian geology.													
1981	1462	112	919	112	5.38	78.1	21/03	0.46	06/09	11.8	3.18	0.56	
1982	1527	117	1034	126	6.05	94.4	22/11	0.65	11/08	14.3	3.27	0.72	
1983	1363	104	904	110	5.30	59.1	31/01	0.71	15/08	11.2	3.56	0.87	
1984	1320	101	878	107	5.14	60.2	12/01	0.70	14/05	11.4	3.57	0.81	
1985	1229	94	704	86	4.11	44.6	06/10	0.98	10/07	8.7	2.68	1.22	
067008	Alyn at Pont-y-capel	C.A: 227.1 km ²	65-80	926	343	2.47	59.1	25/09	0.24	24/08	5.8	1.41	0.48
M.A: WELS	Level: 37m F.A.F: EI							1976		1976			
Comment: The central divide wall of this (two part) compound Crump weir was lowered in 1986 as debris regularly blocked the lower part. Model test of new configuration; current meter checks before and after. # Ill defined catchment boundary to NE and SE. 25% Carboniferous Limestone. Major loss of water from over 70 km ² in limestone and mine drainage tunnels. Extensive glacial deposits over Coal Measures.													
1981	1040	112	366	107	2.64	18.5	14/01	0.45	04/09	6.1	1.79	0.51	
1982	918	99	341	99	2.45	27.5	02/01	0.45	18/09	5.8	1.45	0.55	
1983	913	99	347	101	2.50	26.0	20/12	0.54	23/11	5.8	1.51	0.59	
1984	915	99	322	94	2.32	22.2	03/11	0.34	29/07	6.5	1.01	0.39	
1985	825	89	271	79	1.95	10.1	11/04	0.45	24/09	4.1	1.60	0.50	
067015	Dee at Manley Hall	C.A: 1019.3 km ²	37-80	1387	953	30.80	665.4	14/12	1.93	30/07	70.7	18.25	4.53
M.A: WELS	Level: 25m F.A.F: SRPI	S-full: 121.0 m ³ s ⁻¹						1964		1949			
Comment: Two part compound Cr													

067018		Dee at New Inn		C.A.: 53.9 km ²		69-80	1820	1768	3.02	96.3	26/10	0.04	24/08	7.8	1.48	0.21	
M.A.: WELS		Level: 164m		F.A.F.: N		B-full: 38.0 m ³ s ⁻¹											
Period	Rainfall (mm)	Runoff (mm)	Mean flow (m ³ s ⁻¹)	Peak flow (m ³ s ⁻¹)	Date of peak	Min. daily flow (m ³ s ⁻¹)	Date of min.	10 Percentile (m ³ s ⁻¹)	50 Percentile (m ³ s ⁻¹)	95 Percentile (m ³ s ⁻¹)							
	% of pre-1981	% of pre-1981															
1981	2211	121	2026	115	3.46	77.3	02/02	0.16	06/09	8.2	1.56	0.30					
1982	2239	123	2051	116	3.51	75.2	19/12	0.22	30/07	9.2	1.78	0.28					
1983	2111	116	1995	113	3.41	85.1	02/09	0.13	14/08	8.4	1.66	0.22					
1984	1802	99	1462	83	2.50	69.5	12/01	0.08	29/07	6.8	0.98	0.11					
1985	1982	109	1785	101	3.04	70.8	06/10	0.33	12/05	7.4	1.67	0.48					

Summary of Archived Data

Gauged daily flows, monthly peaks and monthly rainfall

Stn. number	Gauged daily flows, monthly peaks and rainfall	Stn. number	Gauged daily flows, monthly peaks and rainfall	Stn. number	Gauged daily flows, monthly peaks and rainfall
055002	30s -----eEAA 50s AAAAAAAAAA 70s CCCBAAAAAA 80s -----e	056006	60s -----eEAAA 80s AATTTT 80s -----TEAE 80s AAAAAAa	061004	60s -----eEAAE 80s eaaacfa
055003	40s AAAAAAAAAA 50s AAAAAAAAAA 70s AAAAAAa 80s -----eA	056007	60s AAAAAAAAAA 80s AAAAAAa 80s -----TEAE 80s AAAAAAa	062001	50s -----E 60s EAAAAAAAAA 70s -----eaaAAEAE
055004	40s AAAAAAAAAA 50s AAAAAAAAAA 70s AAAAAAa 80s -----eA	056008	60s AAAAAAAAAA 80s ebaAAEETTT 80s obaAAAAAA 80s -----AAAAAABB 80s -----eAAAAA 80s -----TTEAAAE 80s -----a	062002	50s -----E 60s EAAAAAAAAA 70s -----eaaAAEAE
055005	40s AAAAAAAAAA 50s AAAAAAAAAA 70s AAAAAAa 80s -----eA	056009	60s AAAAAAAAAA 80s AAAAAAa 80s -----TEAE 80s AAAAAAa	063001	60s -----eAAAAA 80s EAAAAA 60s -----eEAA 80s AAADT 70s eaaEAAEAE
055007	40s AAAAAAAAAA 50s AAAAAAAAAA 70s CCCCCCCCCC 80s -----eA	056010	60s AAAAAAAAAA 80s AAAAAAa 80s -----TEAE 80s AAAAAAa	063002	60s -----eAAAAA 80s EAAAAA 60s -----eEAA 80s AAADT 70s eaaEAAEAE
055008	40s AAAAAAAAAA 50s AAAAAAAAAA 70s AAAAAAa 80s -----eA	056011	60s AAAAAAAAAA 80s AAAAAAa 80s -----TEAE 80s AAAAAAa	063003	60s -----eAAAAA 80s EAAAAA 60s -----eEAA 80s AAADT 70s eaaEAAEAE
055009	40s AAAAAAAAAA 50s AAAAAAAAAA 70s AAAAAAa 80s -----eA	056012	60s AAAAAAAAAA 80s AAAAAAa 80s -----TEAE 80s AAAAAAa	064001	60s -----eAAAAA 80s EAAAAA 60s -----eEAA 80s AAADT 70s eaaEAAEAE
055010	40s AAAAAAAAAA 50s AAAAAAAAAA 70s AAAAAAa 80s -----eA	056013	60s AAAAAAAAAA 80s AAAAAAa 80s -----TEAE 80s AAAAAAa	064002	60s -----eAAAAA 80s EAAAAA 60s -----eEAA 80s AAADT 70s eaaEAAEAE
055011	40s AAAAAAAAAA 50s AAAAAAAAAA 70s AAAAAAa 80s -----eA	056014	60s AAAAAAAAAA 80s AAAAAAa 80s -----TEAE 80s AAAAAAa	064006	60s -----eAAAAA 80s EAAAAA 60s -----eEAA 80s AAADT 70s eaaEAAEAE
055012	40s AAAAAAAAAA 50s AAAAAAAAAA 70s AAAAAAa 80s -----eA	056015	60s AAAAAAAAAA 80s AAAAAAa 80s -----TEAE 80s AAAAAAa	065001	60s -----eAAAAA 80s EAAAAA 60s -----eEAA 80s AAADT 70s eaaEAAEAE
055013	40s AAAAAAAAAA 50s AAAAAAAAAA 70s AAAAAAa 80s -----eA	056016	60s AAAAAAAAAA 80s AAAAAAa 80s -----TEAE 80s AAAAAAa	065004	60s -----eAAAAA 80s EAAAAA 60s -----eEAA 80s AAADT 70s eaaEAAEAE
055014	40s AAAAAAAAAA 50s AAAAAAAAAA 70s AAAAAAa 80s -----eA	057001	60s AAAAAAAAAA 80s AAAAAAa 80s -----TEAE 80s AAAAAAa	065007	60s -----eAAAAA 80s EAAAAA 60s -----eEAA 80s AAADT 70s eaaEAAEAE
055015	40s AAAAAAAAAA 50s AAAAAAAAAA 70s AAAAAAa 80s -----eA	057002	60s AAAAAAAAAA 80s AAAAAAa 80s -----TEAE 80s AAAAAAa	066001	60s -----eAAAAA 80s EAAAAA 60s -----eEAA 80s AAADT 70s eaaEAAEAE
055016	40s AAAAAAAAAA 50s AAAAAAAAAA 70s AAAAAAa 80s -----eA	057003	60s AAAAAAAAAA 80s AAAAAAa 80s -----TEAE 80s AAAAAAa	066002	60s -----eAAAAA 80s EAAAAA 60s -----eEAA 80s AAADT 70s eaaEAAEAE
055017	40s AAAAAAAAAA 50s AAAAAAAAAA 70s AAAAAAa 80s -----eA	057004	60s AAAAAAAAAA 80s AAAAAAa 80s -----TEAE 80s AAAAAAa	066003	60s -----eAAAAA 80s EAAAAA 60s -----eEAA 80s AAADT 70s eaaEAAEAE
055018	40s AAAAAAAAAA 50s AAAAAAAAAA 70s AAAAAAa 80s -----eA	057005	60s AAAAAAAAAA 80s AAAAAAa 80s -----TEAE 80s AAAAAAa	066004	60s -----eAAAAA 80s EAAAAA 60s -----eEAA 80s AAADT 70s eaaEAAEAE
055021	40s AAAAAAAAAA 50s AAAAAAAAAA 70s AAAAAAa 80s -----eA	057006	60s AAAAAAAAAA 80s AAAAAAa 80s -----TEAE 80s AAAAAAa	066005	60s -----eAAAAA 80s EAAAAA 60s -----eEAA 80s AAADT 70s eaaEAAEAE
055022	40s AAAAAAAAAA 50s AAAAAAAAAA 70s AAAAAAa 80s -----eA	057007	60s AAAAAAAAAA 80s AAAAAAa 80s -----TEAE 80s AAAAAAa	066006	60s -----eAAAAA 80s EAAAAA 60s -----eEAA 80s AAADT 70s eaaEAAEAE
055023	40s AAAAAAAAAA 50s AAAAAAAAAA 70s AAAAAAa 80s -----eA	057008	60s AAAAAAAAAA 80s AAAAAAa 80s -----TEAE 80s AAAAAAa	066007	60s -----eAAAAA 80s EAAAAA 60s -----eEAA 80s AAADT 70s eaaEAAEAE
055025	40s AAAAAAAAAA 50s AAAAAAAAAA 70s AAAAAAa 80s -----eA	057009	60s AAAAAAAAAA 80s AAAAAAa 80s -----TEAE 80s AAAAAAa	066008	60s -----eAAAAA 80s EAAAAA 60s -----eEAA 80s AAADT 70s eaaEAAEAE
055026	40s AAAAAAAAAA 50s AAAAAAAAAA 70s AAAAAAa 80s -----eA	057010	60s AAAAAAAAAA 80s AAAAAAa 80s -----TEAE 80s AAAAAAa	066009	60s -----eAAAAA 80s EAAAAA 60s -----eEAA 80s AAADT 70s eaaEAAEAE
055027	40s AAAAAAAAAA 50s AAAAAAAAAA 70s AAAAAAa 80s -----eA	057011	60s AAAAAAAAAA 80s AAAAAAa 80s -----TEAE 80s AAAAAAa	066010	60s -----eAAAAA 80s EAAAAA 60s -----eEAA 80s AAADT 70s eaaEAAEAE
055028	40s AAAAAAAAAA 50s AAAAAAAAAA 70s AAAAAAa 80s -----eA	057012	60s AAAAAAAAAA 80s AAAAAAa 80s -----TEAE 80s AAAAAAa	066011	60s -----eAAAAA 80s EAAAAA 60s -----eEAA 80s AAADT 70s eaaEAAEAE
055029	40s AAAAAAAAAA 50s AAAAAAAAAA 70s AAAAAAa 80s -----eA	057013	60s AAAAAAAAAA 80s AAAAAAa 80s -----TEAE 80s AAAAAAa	067001	60s -----eAAAAA 80s EAAAAA 60s -----eEAA 80s AAADT 70s eaaEAAEAE
055030	40s AAAAAAAAAA 50s AAAAAAAAAA 70s AAAAAAa 80s -----eA	057014	60s AAAAAAAAAA 80s AAAAAAa 80s -----TEAE 80s AAAAAAa	067003	60s -----eAAAAA 80s EAAAAA 60s -----eEAA 80s AAADT 70s eaaEAAEAE
055031	40s AAAAAAAAAA 50s AAAAAAAAAA 70s AAAAAAa 80s -----eA	057015	60s AAAAAAAAAA 80s AAAAAAa 80s -----TEAE 80s AAAAAAa	067004	60s -----eAAAAA 80s EAAAAA 60s -----eEAA 80s AAADT 70s eaaEAAEAE
055032	40s AAAAAAAAAA 50s AAAAAAAAAA 70s AAAAAAa 80s -----eA	057016	60s AAAAAAAAAA 80s AAAAAAa 80s -----TEAE 80s AAAAAAa	067005	60s -----eAAAAA 80s EAAAAA 60s -----eEAA 80s AAADT 70s eaaEAAEAE
056001	40s AAAAAAAAAA 50s AAAAAAAAAA 70s AAAAAAa 80s -----eA	058001	60s AAAAAAAAAA 80s AAAAAAa 80s -----TEAE 80s AAAAAAa	067006	60s -----eAAAAA 80s EAAAAA 60s -----eEAA 80s AAADT 70s eaaEAAEAE
056002	40s AAAAAAAAAA 50s AAAAAAAAAA 70s AAAAAAa 80s -----eA	058002	60s AAAAAAAAAA 80s AAAAAAa 80s -----TEAE 80s AAAAAAa	067007	60s -----eAAAAA 80s EAAAAA 60s -----eEAA 80s AAADT 70s eaaEAAEAE
056003	40s AAAAAAAAAA 50s AAAAAAAAAA 70s AAAAAAa 80s -----eA	058003	60s AAAAAAAAAA 80s AAAAAAa 80s -----TEAE 80s AAAAAAa	067008	60s -----eAAAAA 80s EAAAAA 60s -----eEAA 80s AAADT 70s eaaEAAEAE
056004	40s AAAAAAAAAA 50s AAAAAAAAAA 70s AAAAAAa 80s -----eA	058004	60s AAAAAAAAAA 80s AAAAAAa 80s -----TEAE 80s AAAAAAa	067009	60s -----eAAAAA 80s EAAAAA 60s -----eEAA 80s AAADT 70s eaaEAAEAE
056005	40s AAAAAAAAAA 50s AAAAAAAAAA 70s AAAAAAa 80s -----eA	058005	60s AAAAAAAAAA 80s AAAAAAa 80s -----TEAE 80s AAAAAAa	067010	60s -----eAAAAA 80s EAAAAA 60s -----eEAA 80s AAADT 70s eaaEAAEAE
		058006	60s AAAAAAAAAA 80s AAAAAAa 80s -----TEAE 80s AAAAAAa	067011	60s -----eAAAAA 80s EAAAAA 60s -----eEAA 80s AAADT 70s eaaEAAEAE
		058007	60s AAAAAAAAAA 80s AAAAAAa 80s -----TEAE 80s AAAAAAa	067013	60s -----eAAAAA 80s EAAAAA 60s -----eEAA 80s AAADT 70s eaaEAAEAE
		058008	60s AAAAAAAAAA 80s AAAAAAa 80s -----TEAE 80s AAAAAAa	067017	60s -----eAAAAA 80s EAAAAA 60s -----eEAA 80s AAADT 70s eaaEAAEAE
		058009	60s AAAAAAAAAA 80s AAAAAAa 80s -----TEAE 80s AAAAAAa	067018	60s -----eAAAAA 80s EAAAAA 60s -----eEAA 80s AAADT 70s eaaEAAEAE
		058010	60s AAAAAAAAAA 80s AAAAAAa 80s -----TEAE 80s AAAAAAa	067025	60s -----eAAAAA 80s EAAAAA 60s -----eEAA 80s AAADT 70s eaaEAAEAE
		058011	60s AAAAAAAAAA 80s AAAAAAa 80s -----TEAE 80s AAAAAAa	067029	60s -----eAAAAA 80s EAAAAA 60s -----eEAA 80s AAADT 70s eaaEAAEAE
		059001	60s AAAAAAAAAA 80s AAAAAAa 80s -----TEAE 80s AAAAAAa		
		059002	60s AAAAAAAAAA 80s AAAAAAa 80s -----TEAE 80s AAAAAAa		
		060002	60s AAAAAAAAAA 80s AAAAAAa 80s -----TEAE 80s AAAAAAa		
		060003	60s AAAAAAAAAA 80s AAAAAAa 80s -----TEAE 80s AAAAAAa		
		060004	60s AAAAAAAAAA 80s AAAAAAa 80s -----TEAE 80s AAAAAAa		
		060005	60s AAAAAAAAAA 80s AAAAAAa 80s -----TEAE 80s AAAAAAa		
		060006	60s AAAAAAAAAA 80s AAAAAAa 80s -----TEAE 80s AAAAAAa		
		060007	60s AAAAAAAAAA 80s AAAAAAa 80s -----TEAE 80s AAAAAAa		
		060008	60s AAAAAAAAAA 80s AAAAAAa 80s -----TEAE 80s AAAAAAa		
		060009	60s AAAAAAAAAA 80s AAAAAAa 80s -----TEAE 80s AAAAAAa		
		060010	60s AAAAAAAAAA 80s AAAAAAa 80s -----TEAE 80s AAAAAAa		
		060012	60s AAAAAAAAAA 80s AAAAAAa 80s -----TEAE 80s AAAAAAa		
		060013	60s AAAAAAAAAA 80s AAAAAAa 80s -----TEAE 80s AAAAAAa		
		061002	60s AAAAAAAAAA 80s AAAAAAa 80s -----TEAE 80s AAAAAAa		
		061003	60s AAAAAAAAAA 80s AAAAAAa 80s -----TEAE 80s AAAAAAa		

Naturalised daily and monthly flows

Stn. number	Naturalised daily, and monthly flows	Stn. number	Naturalised daily, and monthly flows	Stn. number	Naturalised daily, and monthly flows
055002	30s -----FEE 50s EEEEEEEEE 70s AAAAAAAAAA 80s -----FE	056012	50s -----EEEEF 70s -----FEE 80s -----FE	064001	60s -----FF
055007	30s EEEEEEEEE 50s AAAAAAAAAA 70s -----FE 80s EEEEEEEEE	057001	50s -----FEEEEE 70s -----FEE 80s -----FE	066002	60s -----FEEEEE 80s -----FEEFE 60s -----CA
055023	40s AAAAAAAAAA 50s -----F 80s AAA	057002	50s -----FEEEEE 70s -----FEE 80s -----FE	066011	60s -----FEEEEE 80s -----FEEFE 60s -----CA
056001	50s -----FEE 70s FEEEEEFF 80s -----FEE	057003	50s -----FEEEEE 70s -----FEE 80s -----FE	067001	50s -----FEE 70s FEE 80s -----FEE 60s -----FEE 70s FEE
056002	50s -----FEE 70s FEEEEEFF 80s -----FEE	057004	50s -----FEEEEE 70s -----FEE 80s -----FE	067003	50s -----FEE 70s FEE 80s -----FEE 60s -----FEE 70s FEE
056003	50s -----FEE 70s FEEEEEFF 80s -----FEE	058001	50s -----FEEEEE 70s -----FEE 80s -----FE	067004	50s -----FEE 70s FEE 80s -----FEE 60s -----FEE 70s FEE
056004	50s -----FEE 70s FEEEEEFF 80s -----FEE	058003	50s -----FEEEEE 70s -----FEE 80s -----FE	067007	50s -----FEE 70s FEE 80s -----FEE 60s -----FEE 70s FEE
056005	50s -----FEE 70s FEEEEEFF 80s -----FEE	059001	50s -----FEEEEE 70s -----FEE 80s -----FE	067017	50s -----FEE 70s FEE 80s -----FEE 60s -----FEE 70s FEE
056006	50s -----FEE 70s FEEEEEFF 80s -----FEE	061002	50s -----FEEEEE 70s -----FEE 80s -----FE	067018	50s -----FEE 70s FEE 80s -----FEE 60s -----FEE 70s FEE
056011	50s -----FEE 70s FEEEEEFF 80s -----FEE	062001	50s -----FEEEEE 70s -----FEE 80s -----FE	067019	50s -----FEE 70s FEE 80s -----FEE 60s -----FEE 70s FEE

NORTH WEST WATER



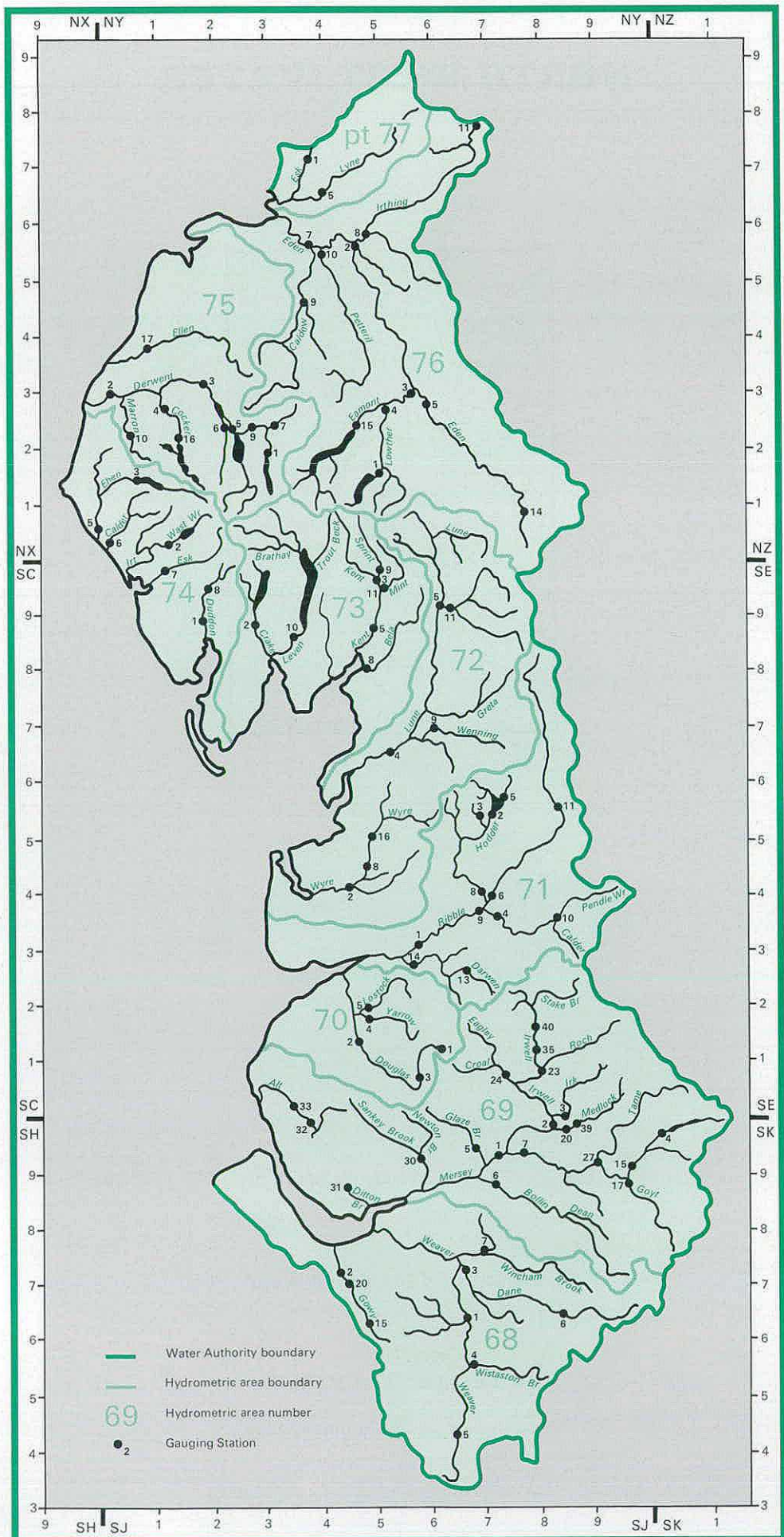
Area: 14,445 km²

Average Rainfall (1941-70): 1217 mm

Headquarters of North West Water:

Dawson House
Great Sankey
Warrington WA5 3LW

Telephone: Penketh (092 572) 4321



Gauging Station Register

Station number	River name	Station name	Grid reference	Catchment area (sq km)	Station type	Period of record	Mean ann. rainfall (mm)	Mean ann. runoff (mm)	Max. ann. runoff (mm)	Year of max.	Min. ann. runoff (mm)	Year of min.	Mean flow (m ³ s ⁻¹)	Min. mon. flow (m ³ s ⁻¹)	Month/Year of min.	Mean ann. flood (m ³ s ⁻¹)	Base flow Index	10 Percentile (m ³ s ⁻¹)	95 Percentile (m ³ s ⁻¹)
068001	Weaver	Ashbrook	SJ 670633	622.0	VA	1937..85	756	288	467	54	140	64	5.68	0.64	08/76	56.7	.53	12.4	1.12
068002	Gow	Picton	SJ 443714	156.2	VA	1949..76	748	247	401	74	101	64	1.23	0.22	01/84	16.4	.51	2.5	0.25
068003	Dane	Rudheath	SJ 668718	407.1	VA	1949..85	880	358	671	54	181	59	4.62	0.63	09/59	69.4	.52	10.2	0.91
068004	Wistaston B	Marshfield Br	SJ 674552	92.7	VA	1957..85	752	379	572	66	223	85	1.11	0.24	08/77	10.4	.62	2.0	0.31
068005	Weaver	Audlem	SJ 653431	207.0	TPVA	1953..85	747	251	400	54	108	64	1.65	0.08	08/76	23.1	.50	3.7	0.28
068006	Dane	Hutme Watfield	SJ 845644	150.0	VA	1953..84	1043	500	941	54	289	74	2.38	0.23	06/75	61.0	.48	5.4	0.45
068007	Wincham Brk	Lostock Galtram	SJ 697757	148.0	MIS	1962..84	848	447	678	81	251	64	2.10	0.14	07/84	28.0	.54	4.2	0.32
068015	Gow	Huxley	SJ 497624	49.0	VA	1981-85	263	378	81	216	85	0.41	0.08	07/84		.51	0.9	0.10	
068020	Gow	Bridge Trafford	SJ 448711	156.0	FV	1981-85	711	254	402	81	195	85	1.26	0.25	07/84		.47	2.5	0.28
069001	Mersey	Inram Weir	SJ 728936	679.0	CB	1934..85	1113	624	985	44	154	82	13.44	1.24	07/84	160.1	.56	27.0	2.82
069002	Irwell	Adephi Weir	SJ 824987	559.4	B	1949..85	1275	1031	1718	54	590	76	18.29	2.75	06/51	234.6	.48	38.2	4.58
069003	Irk	Scotland Weir	SJ 841992	72.5	CB	1937..85	1049	849	1345	70	363	59	1.95	0.30	09/59	40.7	.53	3.6	0.48
069004	Etherow	Bottoms Res	SK 023971	78.2	TP	1945..81	1480	529	934	80	230	76	1.31	0.15	10/76		.40	2.9	0.29
069005	Glaze Brook	Little Woodlen	SJ 685939	152.0	VA	1954..83	975	681	982	58	383	62	3.28	0.50	06/62		.52	6.7	0.74
069006	Bollin	Dunham Massey	SJ 727875	256.0	VA	1955..85	891	495	777	81	336	59	4.02	0.46	08/76	40.9	.57	8.1	1.05
069007	Mersey	Ashton Weir	SJ 772936	660.0	CB	1981-85	1158	558	759	81	403	85	11.64	2.45	07/84	197.8	.52	23.8	2.92
069015	Etherow	Compstall	SJ 962908	156.0	C	1977..85	1414	679	843	80	493	85	3.36	0.54	05/82	43.0	.48	7.6	0.60
069017	Gow	Marple Bridge	SJ 964898	183.0	CC	1977..85	1151	669	905	81	480	85	3.88	0.69	08/84	58.1	.50	6.7	0.78
069020	Medlock	London Road	SJ 849875	57.5	MIS	1976-85	1050	487	611	80	386	76	0.89	0.23	08/76	12.0	.54	1.8	0.28
069023	Roch	Blackford Bridge	SD 807077	186.0	VA	1978..85	1259	928	1143	81	706	85	5.47	1.36	07/84	74.8	.50	10.9	1.58
069024	Croal	Farnworth Weir	SD 743068	145.0	B	1981-85	1353	657	924	81	540	85	3.02	0.48	07/84	60.9	.38	7.2	0.62
069027	Tame	Portwood	SJ 906918	150.0	MIS	1978..85	1201	872	1100	81	793	82	4.15	1.23	07/84	85.6	.56	8.3	1.42
069030	Sankey Brook	Causey Bridge	SJ 588922	154.0	VA	1976..85	889	816	723	81	450	85	3.98	0.65	07/83		.54	5.6	0.80
069031	Ditton Brook	Greens Bridge	SJ 457865	49.1	VA	1981..85	736	877	81	654	82	1.12	0.51	07/83		.56	2.1	0.44	
069032	Alt	Kirkby	SJ 392983	90.1	VA	1979-85	880	529	664	81	414	85	1.51	0.56	07/84		.52	3.0	0.52
069033	Alt	Sefton	SD 359012	100.0	VA	1954..75	881	727	865	74	480	55	2.31	0.82	08/80		.66	3.6	1.02
069035	Irwell	Bury Bridge	SD 797109	155.0	VA	1977..84	1353	1227	1710	81	1155	83	6.03	0.07	05/84		.38	14.7	0.85
069039	Medlock	New Viaduct St	SJ 863987	55.9	B	1949..76	1113	626	739	58	397	76	1.11	0.14	09/59		.41	2.5	0.17
069040	Irwell	Stubbins	SD 793188	105.0	FV	1983-84	1053	1072	83	1036	84	3.51	0.49	07/84		.41	8.4	0.52	
070001	Douglas	Rivington Res	SD 631119	39.4	MIS	1951..73	1276	307	800	67	118	53	0.38	0.10	07/56		.66	0.4	0.13
070002	Douglas	Wanes Blades Br	SD 476126	198.0	VA	1980-85	1112	619	871	81	504	83	3.89	0.00	07/83	34.7	.54	7.2	0.82
070003	Douglas	Wigan	SD 587061	55.3	VA	1977..84	677	842	83	499	77	1.19	0.32	08/84		.55	2.5	0.32	
070004	Yarrow	Croston Mill	SD 498180	74.4	MIS	1976-85	1056	813	1200	81	530	76	1.92	0.38	08/76		.42	4.2	0.47
070005	Lostock	Littlewood Br	SD 497197	56.0	VA	1978..84	759	1091	81	534	84	1.35	0.30	07/84		.54	2.9	0.29	
071001	Ribble	Samsbury	SD 589304	1145.0	MIS	1960-85	1346	919	1240	67	607	71	33.36	2.64	07/84	619.4	.32	81.5	4.41
071002	Hodder	Stocks Reservoir	SD 719546	37.0	B	1936..80	1737	519	891	67	238	73	0.81	0.00	09/80		.31	0.6	
071003	Croasdale	Croasdale flume	SD 706546	10.4	FL	1957-74	1864	1198	1568	67	873	59	0.39	0.05	09/59	14.1	.35	0.9	0.07
071004	Calder	Whalley Weir	SD 729380	316.0	FV	1963..85	1235	852	1148	81	621	76	8.54	1.56	08/76	176.3	.42	19.8	1.89
071005	Bottoms Beck	Bottoms Bk	SD 745585	10.6	FL	1960-74	1548	1032	1118	67	735	69	0.35	0.03	06/70	16.3	.21	0.9	0.03
071006	Ribble	Henthorn	SD 722392	456.0	CB	1968..85	1363	920	1253	81	657	69	13.30	0.80	07/84		.29	33.6	1.07
071008	Hodder	Hodder Place	SD 704399	261.0	FV	1977..85	1691	1057	1354	81	893	77	8.74	0.84	07/84	222.0	.31	22.4	0.95
071009	Ribble	Jumbles Rock	SD 702376	1053.0	FV	1980-85	1074	1274	81	927	85	35.87	3.49	07/84		.30	87.4	4.20	
071010	Pendle Water	Barden Lane	SD 837351	108.0	FV	1971..85	1268	763	1064	81	528	75	2.61	0.61	06/75		.43	6.0	0.59
071011	Ribble	Arnold	SD 839556	204.0	FV	1966..85	1531	1184	1438	81	752	69	7.66	0.39	07/84	119.1	.25	19.1	0.47
071013	Darwen	Erwood Bridge	SD 677262	39.5	VA	1980..84	1143	1292	81	1029	83	1.43	0.32	07/84		.42	3.3	0.35	
071014	Darwen	Blue Bridge	SD 565278	128.0	VA	1977..85	979	1294	81	877	77	3.97	1.27	07/84		.48	6.0	1.30	
072002	Wyre	St Michaels	SD 463411	275.0	FV	1963..85	1268	756	1184	81	365	76	6.59	0.25	08/76	147.3	.32	15.3	0.55
072004	Lune	Caton	SD 529653	983.0	CB	1959..85	1459	1109	1492	67	792	76	34.58	1.88	07/84		.32	83.5	3.05
072005	Lune	Killington Br	SD 622907	219.0	CB	1969..85	1557	1207	1463	72	938	73	8.39	0.54	07/84	207.1	.34	20.9	0.74
072008	Wyre	Garstang	SD 488447	114.0	FV	1967..85	1391	939	1334	81	571	71	3.40	0.20	08/76		.31	8.3	0.33
072009	Wenning	Wennington Br	SD 615701	142.0	FV	1981-85	1369	910	1093	81	815	85	4.10	0.23	07/84		.30	9.8	0.29
072011	Rawthey	Brigg Flatts	SD 639911	200.0	VA	1968..85	1795	1378	1775	79	970	89	8.74	0.54	07/84	264.4	.23	22.2	0.67
072016	Wyre	Scorton Weir	SD 501500	88.8	MIS	1981-85	1202	1479	81	1048	84	3.39	0.07	07/84		.38	7.9	0.22	
073002	Crake	Low Nibthwaite	SD 294882	73.0	VA	1963-85	2143	1728	2155	81	1208	73	4.00	0.12	08/83	19.8	.57	8.6	0.49
073003	Kent	Burnside	SD 507956	73.6	VA	1981-85	1588	1887	81	1319	84	3.70	0.16	08/84		.30	9.1	0.21	
073005	Kent	Sedgwick	SD 509874	209.0	CBVA	1968-85	1720	1256	1557	80	905	71	8.32	0.68	07/84		.45	19.1	1.18
073008	Bela	Beetham	SD 496806	131.0	FV	1969..85	1285	805	1138	81	528	71	3.35	0.37	07/84		.50	8.1	0.48
073009	Sprint	Sprint Mill	SD 514961	34.6	FV	1981-85	2197	1647	1786	82	1387	84	1.81	0.09	07/84		.36	4.3	0.13
073010	Leven	Newby Bridge	SD 367863	247.0	CC	1939-85	2135	1761	2788	54	1179	73	13.79	0.55	06/78		.50	30.5	1.22
073011	Mint	Mint Bridge	SD 524944	65.8	FV	1970..85	1576	1111	1388	81	776	71	2.32	0.10	07/84		.38	5.7	0.17
074001	Duddon																		

Station number	River name	Station name	Grid reference	Catchment area (sq km)	Station type	Period of record	Mean ann. rainfall (mm)	Mean ann. runoff (mm)	Max. ann. runoff (mm)	Year of max.	Min. ann. runoff (mm)	Year of min.	Mean flow (m ³ s ⁻¹)	Min. mon. flow (m ³ s ⁻¹)	Month/Year of min.	Mean ann. flood (m ³ s ⁻¹)	Base flow index	10 Percentile (m ³ s ⁻¹)	95 Percentile (m ³ s ⁻¹)
076003	Eamont	Udford	NY 578306	396.2	VA	1961..85	1809	1181	1741	80	550	73	14.84	1.05	08/84	166.7	.53	31.6	2.48
076004	Lowther	Eamont Bridge	NY 527287	158.5	VA	1962..85	1818	685	992	66	384	76	3.44	0.51	08/76	120.9	.42	7.6	0.66
076005	Eden	Temple Sowerby	NY 605283	816.4	VA	1964-85	1156	726	968	79	444	73	14.19	1.18	07/84	258.1	.37	31.9	1.99
076007	Eden	Sheepmount	NY 390571	2286.5	VA	1967..85	1172	674	836	82	389	73	48.88	7.03	08/76	538.0	.50	103.1	9.52
076008	Irthing	Greenholme	NY 486581	334.6	VA	1967..85	1029	646	932	85	413	73	6.85	0.78	08/76	170.4	.32	16.5	0.96
076009	Caldew	Holm Hill	NY 378469	147.2	VA	1968..85	1400	954	1243	82	557	73	4.45	0.69	08/76	87.5	.49	10.3	0.80
076010	Pettaril	Harraby Green	NY 412545	160.0	MIS	1970..85	895	396	527	82	210	73	2.01	0.25	08/76		.46	5.0	0.29
076011	Coal Burn	Coalburn	NY 693777	1.5	CC	1967..83		967	1282	79	673	71	0.05	>0.00	08/76	2.1	.18	0.1	>0.00
076014	Eden	Kirkby Stephen	NY 773097	69.4	B VA	1971..85	1340	1106	1400	82	792	73	2.43	0.06	07/84		.24	6.2	0.13
076015	Eamont	Pooley Bridge	NY 472249	145.0	CC	1970-85	2179	1673	2152	82	861	73	7.69	0.60	06/78		.53	17.6	0.88
077001	Esk	Netherby	NY 390718	841.7	VA	1963..85	1417	910	1244	85	587	73	24.29	2.26	07/84	736.1	.36	57.4	3.00
077005	Lyne	Cliff Bridge	NY 412662	191.0	FV	1977..85		843	1104	85	693	84	5.11	0.43	08/83		.29	13.3	0.38

Hydrometric Statistics

	Period	Rainfall (mm)	Runoff (mm)	Mean flow (m ³ s ⁻¹)	Peak flow (m ³ s ⁻¹)	Date of peak	Min. daily flow (m ³ s ⁻¹)	Date of min.	10 Percentile (m ³ s ⁻¹)	50 Percentile (m ³ s ⁻¹)	95 Percentile (m ³ s ⁻¹)		
068001 M.A: NWWA Level: 16m F.A.F: PGE B-full: 120.0 m ³ s ⁻¹ C.A: 622.0 km ² Comment: Natural river section with records from May 1937. Accuracy of early rating curves not known and gaugings lost. However, calibration came under suspicion in 1972 and previous records, particularly low flows, deemed to be of little value. Low flow rating then changed several times before station moved 400m downstream and shallow vee bed control constructed in August 1978. High flow rating (above 40 m ³ s ⁻¹) has yet to be defined. # Flat catchment includes western half of Crewe. Post glacial deposits over (mostly) Keuper Marl.	37..80	762	288	5.68	212.4	08/02 1946	0.39	17/08 1976	12.3	3.22	1.11		
	1981	837	110	384	133	7.59	52.4	30/12	1.42	06/09	16.4	4.75	1.74
	1982	715	94	283	98	5.58	40.9	05/01	1.23	18/09	12.4	3.26	1.39
	1983	721	95	282	98	5.56	46.4	02/05	1.09	30/08	12.4	3.47	1.37
	1984	694	91	245	85	4.83	36.9	27/01	0.75	02/09	11.7	2.40	0.95
	1985	666	87	241	84	4.73	35.9	21/12	1.29	22/10	10.1	3.10	1.49
068003 M.A: NWWA Level: 13m F.A.F: SPGEI B-full: 63.0 m ³ s ⁻¹ C.A: 407.1 km ² Comment: Originally a velocity-area station; chart records from May 1949 but low flow data poor before June 1957, when bed was lowered. Problems of variable control recurred until January 1979 when Flat V weir completed. Complicated transfers in headwaters particularly to Rudyard and Bosley reservoirs for canal usage. # Headwaters in the southern Pennines but, for the most part, the river meanders over the Cheshire plain with varying depths of post glacial drift overlying Triassic sandstones and marls.	49..80	885	344	4.45	92.8	13/12 1964	0.43	17/10 1949	10.0	2.77	0.89		
	1981	1011	114										
	1982	804	91	372	108	4.81	84.6	05/01	0.98	30/07	9.9	3.41	1.20
	1983	902	102	460	134	5.94	134.5	04/01	0.85	28/08	12.2	4.06	1.20
	1984	773	87	353	103	4.55	103.9	03/11	0.52	26/08	10.3	2.68	0.62
	1985	763	86	336	98	4.32	88.0	22/12	1.13	26/07	8.3	2.89	1.33
068004 M.A: NWWA Level: 30m F.A.F: PGEI B-full: 14.0 m ³ s ⁻¹ C.A: 92.7 km ² Comment: 6m wide section in meandering stream with chart records from 1955, reliable only from 1964. Variable bed control caused measuring section to be moved upstream in Sept. 1972 and a shallow vee shaped trench piled weir to be built in May 1980. Silt accumulates behind weir in times of low flow. High flow rating is poorly defined. # Headwaters are in farmland but central and southern parts of Crewe dominate the lower half of the catchment. Otherwise, post glacial deposits over Keuper Marl.	57..80	761	406	1.19	16.2	14/01 1968	0.17	13/08 1977	2.2	0.88	0.36		
	1981	834	110	352	87	1.03	13.3	11/03	0.25	06/09	1.7	0.79	0.31
	1982	691	91	264	65	0.78	11.3	26/06	0.20	26/05	1.4	0.62	0.25
	1983	723	95	280	69	0.82	12.5	04/01	0.21	20/08	1.4	0.66	0.27
	1984	645	85	246	61	0.72	7.0	27/01	0.15	02/09	1.3	0.53	0.21
	1985	665	87	223	55	0.66	7.3	22/12	0.15	02/10	1.1	0.52	0.27
068005 M.A: NWWA Level: 45m F.A.F: PGE B-full: 18.0 m ³ s ⁻¹ C.A: 207.0 km ² Comment: Some level measurement at site since 1936 but continuous records from 1951 when rectangular thin - plate weir was installed to control low flows. Current meter calibration for medium flows. New recorder house in 1969 and modern rating assumed to apply from then. More gaugings needed at higher flows. Only minor groundwater abstractions and returns. # The (very flat) catchment is covered by post glacial deposits over marls, clays and sands. Mainly mixed farmland with only a few villages.	53..80	751	252	1.65	28.3	17/04 1959	0.05	25/08 1976	3.8	0.90	0.29		
	1981	826	110	317	126	2.08	21.1	30/12	0.28	05/09	4.2	1.36	0.35
	1982	739	98	254	101	1.66	19.3	05/01	0.25	13/09	3.9	0.96	0.28
	1983	675	90	224	89	1.47	18.9	02/05	0.24	12/08	3.3	0.91	
	1984	711	95	212	84	1.39	15.4	23/11	0.11	27/07	3.5	0.54	0.16
	1985	647	86	204	81	1.34	11.1	29/01	0.16	20/11	3.0	0.87	0.27
068020 M.A: NWWA Level: 4m F.A.F: PG C.A: 156.0 km ² Comment: A Flat V weir built in 1979 to replace the station at Picton (68002) - just downstream, records since 1950 - which had been badly affected by weed growth (but alright at high flows). Same problem affects new station but to lesser extent and rating quite well defined to about 5 m ³ s ⁻¹ . Higher flows over-estimated by rating in current use. # The catchment is, like 68015 upstream, wholly on the Cheshire plain. The extra area, below 68015, is over Bunter Sandstone.		840	402	1.99	38.4	06/08	0.33	08/07	3.7	0.96	0.41		
	1982	641	211	1.04	15.1	07/12	0.25	16/06	2.3	0.65	0.29		
	1983	742	257	1.27	32.6	02/05	0.27	30/08	2.6	0.73	0.30		
	1984	698	207	1.02	21.6	09/11	0.21	25/07	2.3	0.49	0.24		
	1985	634	195	0.96	18.6	13/12	0.24	28/09	2.0	0.65	0.28		
069001 M.A: NWWA Level: 10m F.A.F: SPGEI C.A: 679.0 km ² Comment: Original 1934 calibration of this rather insensitive broad-crested weir was by formula but, in 1938, a model based rating led to significant increases in estimates of high flows. Current meter gaugings 1975-85 suggest that flows above 10 m ³ s ⁻¹ should be higher still. Longendale reservoirs control 10% of the catchment. # The tributary streams rise mainly on the western slopes of the Pennines (Millstone Grit). Lower part of the catchment, including much of Greater Manchester, lies on post glacial deposits over Triassic sandstones and marls.	34..80	1106	661	14.23	266.1	03/01 1944	0.65	26/08 1955	28.0	9.90	3.80		
	1981	1347	122	214	32	4.61	78.3	05/08	0.93	16/08	8.7	3.14	1.29
	1982	1073	97	154	23	3.32	37.3	25/06	0.86	08/06	6.5	2.61	1.13
	1983	1249	113	193	29	4.15	115.7	09/12	0.89	28/08	8.2	2.85	1.11
	1984												
	1985												
069002 M.A: NWWA Level: 24m F.A.F: SPGEI C.A: 559.4 km ² Comment: A 40m wide broad-crested weir with some problems of drowning at high flow. Some records from 1935 but routine data acquisition began in 1949. The rating relationship has been investigated with a model and by current metering upstream at Manchester racecourse. Many abstractions and storage reservoirs. # Most of the catchment comprises post glacial drift over heavily faulted Carboniferous gnts, shales and sandstones; it includes the urban/industrial areas of Bolton, Bury and Rochdale.	49..80	1272	1036	18.37	485.1	27/10 1980	0.87	31/01 1976	38.6	11.68	4.48		
	1981	1550	122	1246	120	22.11	295.6	21/03	5.10	04/08	44.9	13.36	5.81
	1982	1254	99	966	93	17.14	267.6	14/03	5.30	25/07	37.1	11.71	5.93
	1983	1331	105	1058	102	18.78	337.0	09/12	4.77	28/08	35.7	12.55	5.71
	1984	1180	93	908	88	16.11	223.7	03/11	3.70	26/08	35.1	9.13	4.34
	1985	1135	89	865	83	15.30	200.6	21/12	5.53	10/07	28.6	10.31	6.34
069003 M.A: NWWA Level: 26m F.A.F: SPGEI C.A: 72.5 km ² Comment: An old weir, diagonal to flow and on a bend in a heavily polluted river where siltation and debris are recurrent problems. Ratings by model (1936) and current meter gauging. The siltation problem throws particular doubt on low flow records before 1976. The weir was damaged by a flood in December 1983. Many industrial abstractions and effluent discharges. # The catchment is largely developed and lies on post glacial Boulder Clay, mostly over Carboniferous shales, sandstones and coals.	37..80	1058	819	1.88	72.9	11/06 1970	0.14	30/06 1981	3.5	1.28	0.43		
	1981	1219	115	1146	140	2.63	37.1	18/11	0.51	13/08	4.8	1.85	1.17
	1982	987	93	1018	124	2.34	29.5	17/08	1.10	24/07	4.0	1.78	1.20
	1983	1082	102	1106	135	2.54	65.0	09/12	1.02	12/08	4.3	1.81	1.11
	1984	916	87	958	117	2.20	23.8	12/01	0.93	26/08	3.9	1.63	1.03
	1985	821	78	919	112	2.11	28.3	11/04	1.15	19/06	3.2	1.72	1.29

Period	Rainfall (mm)	Runoff (mm)	Mean flow (m³ s⁻¹)	Peak flow (m³ s⁻¹)	Date of peak	Min. daily flow (m³ s⁻¹)	Date of min.	10 Percentile (m³ s⁻¹)	50 Percentile (m³ s⁻¹)	95 Percentile (m³ s⁻¹)		
	% of pre-1981	% of pre-1981										
072008 Wyre at Garstang C.A.: 114.0 km²												
M.A: NWWA Level: 11m F.A.F: PG B-fall: 117.0 m³ s⁻¹												
Comment: A non-standard Flat V weir sited only 8km upstream from station 72002 but with less than half the catchment area. Records started 1967 (natural section, gravel control); weir built 1969. Flows affected by Garstang intake immediately above weir, by diversions from the Lune (see 72002), by Garstang overspill flood basin during high flows and possibly by bankside gravel workings upstream. # Agricultural catchment with moorland-fed headwaters. Geology almost entirely Millstone Grit.												
1981	1766	131	1337	149	4.82	109.6	21/03	0.49	25/06	12.5	2.21	0.82
1982	1475	109	995	111	3.60	108.8	02/01	0.33	30/07	9.0	1.60	0.44
1983	1455	108	994	110	3.59	142.0	08/12	0.29	14/08	8.9	1.66	0.38
1984	1361	101	888	99	3.21	93.5	10/01	0.15	21/08	8.6	1.33	0.23
1985	1385	103	980	109	3.53	112.8	21/09	0.46	07/07	7.9	1.84	0.69
072009 Wenning at Wennington Road Bridge C.A.: 142.0 km²												
M.A: NWWA Level: 39m F.A.F: G												
Comment: Flat V Crump profile weir. River well contained, stable rating. No permanent cableway. Groundwater abstraction for agriculture from the Millstone Grit aquifer. # Coal Measures and Millstone Grit faulted against Carboniferous Limestone, small area of impervious Silurian slate in extreme east. Boulder Clay over most of catchment with some alluvium and hill peat. Rural; agricultural with heather moor in south.												
1981	1587		1093		4.92	132.8	01/10	0.38	07/09	11.9	2.35	0.54
1982	1339		895		4.03	118.3	02/01	0.26	03/08	10.1	1.98	0.33
1983	1317		878		3.95	104.8	08/12	0.18	14/08	9.6	1.83	0.27
1984	1313		869		3.91	103.7	03/11	0.16	25/08	11.3	1.65	0.20
1985	1284		818		3.67	105.8	26/07	0.34	07/07	8.2	1.76	0.51
072016 Wyre at Scorton Weir C.A.: 88.8 km²												
M.A: NWWA Level: 32m F.A.F:												
Comment: Non-standard weir with small fish pass (flow ignored). Rated by current meter. Original (1967) tube mounted recorder replaced by well in 1987. 8km u/s from 72008; Scorton records are used to study the Lune transfer (and because of the major geological fault d/s). Lune transfer effect (see 72002) and gravel workings (adjacent) effect high flow regime. # Agricultural catchment with moorland-fed headwaters. Geology almost entirely Millstone Grit.												
1981			1479		4.16	109.1	07/03	0.40	06/09	10.6	2.07	0.68
1982			1122		3.16	79.2	02/01	0.13	02/08	7.3	1.86	0.37
1983			1141		3.21	90.0	08/12	0.19	29/08	7.3	1.86	0.29
1984			1046		2.94	69.0	10/01	0.00	25/07	7.6	1.53	0.03
1985			1228		3.45	76.1	21/09	0.39	25/04	7.7	2.14	0.71
073002 Crake at Low Nibthwaite C.A.: 73.0 km²												
M.A: NWWA Level: 39m F.A.F: SP B-fall: 37.0 m³ s⁻¹												
Comment: Open stone walled channel with informal Flat V triangular weir control. Stable rating, full range of flows contained. Permanent cableway. Minimal weed growth. Headwater abstractions for PWS. Approx. 2km d/s of Lake Conistone - hence subdued hydrograph variation. # Predominantly impervious Silurian Ludlow slates with thin Carboniferous Coal Measures. Band of Boulder Clay over centre of catchment. Mountains in N supporting rough pasture and moorland, remainder grassland.												
1981	2459	116	2155	127	4.99	25.6	02/01	0.69	09/09	11.4	3.33	1.00
1982	2405	113	2025	120	4.69	32.5	03/01	0.43	20/05	10.9	3.34	0.61
1983	2115	100	1684	100	3.90	19.9	12/10	0.02	14/08	8.8	2.61	0.13
1984	1987	94	1579	93	3.65	18.2	25/10	0.09	31/05	9.1	1.91	0.22
1985	2151	101	1848	109	4.27	13.6	25/08	0.86	10/07	8.9	3.19	1.10
073003 Kent at Burneside C.A.: 73.6 km²												
M.A: NWWA Level: m F.A.F:												
Comment: Natural channel, no permanent cableway. gauging by wading up to 0.8m. Full range of flows contained. # Impervious Lower Palaeozoic slates, flagstones and shales covered in middle reaches of valleys by Boulder Clay which supports permanent grassland, remainder for grazing. Rises in the mountainous Lake District - steep descent to Kendal.												
1981			1887		4.40	106.4	08/10	0.38	09/09	10.4	1.93	0.51
1982			1712		4.00	134.8	03/01	0.26	20/05	9.2	1.75	0.33
1983			1409		3.29	71.1	12/10	0.13	13/08	7.8	1.48	0.18
1984			1319		3.08	79.1	13/01	0.08	25/08	9.4	0.78	0.13
1985			1618		3.77	132.3	21/12	0.34	10/07	9.1	1.76	0.46
073005 Kent at Sedgwick C.A.: 209.0 km²												
M.A: NWWA Level: 19m F.A.F: N S-fall: 85.0 m³ s⁻¹												
Comment: Basin type compound broad-crested weir, 27m wide with low crest 3m broad. Permanent cableway for medium to high flows. Flashy, widely fluctuating flows. Severe summer weed growth. Paper mill u/s has affected river levels. Minor industrial abstraction in Kendal. # High relief catchment drains impervious Pre-Cambrian to Silurian rocks where heather moorland and peat predominate. Carboniferous Limestone provides good grazing especially south of Kendal on Drift cover.												
1981	1982	118	1263	122	9.70	166.1	10/03	1.19	09/09	21.6	5.41	1.81
1982	1928	114	1478	123	9.80	197.7	03/01	1.12	30/05	21.6	6.34	1.58
1983	1702	101	1340	111	8.88	100.7	12/10	0.64	14/08	20.4	5.41	0.85
1984	1594	95	1181	98	7.83	110.7	13/01	0.39	25/08	21.5	3.34	0.52
1985	1843	109	1447	120	9.56	231.4	21/12	1.51	10/07	21.1	6.16	2.16
073008 Bela at Beetham C.A.: 131.0 km²												
M.A: NWWA Level: 11m F.A.F: SG S-fall: 22.2 m³ s⁻¹												
Comment: Flat V Crump profile 1:20 weir. Top of wing walls 0.917m. Velocity area for medium/high flows, no permanent cableway. Bankfull 1.188m, no bypassing. Minor compensation discharge from headwater reservoirs. Groundwater abstractions. # Predominantly Silurian slates with Carboniferous Limestone in lower reaches. Boulder Clay covers 70% catchment, giving rise to arable farming and permanent grassland. Rest is rough grazing.												
1981	1578	132	1136	160	4.72	55.5	21/03	0.71	09/09	10.7	2.68	0.86
1982	1450	121	901	127	3.74	51.7	03/01	0.52	07/08	8.1	2.51	0.62
1983	1359	114	856	121	3.55	28.6	24/12	0.45	13/08	9.3	1.93	0.49
1984	1248	105	785	111	3.26	30.1	11/01	0.30	20/08	9.2	1.31	0.33
1985	1400	117	932	131	3.86	42.2	21/12	0.57	10/07	8.4	2.69	0.67
073009 Sprint at Sprint Mill C.A.: 34.6 km²												
M.A: NWWA Level: 58m F.A.F: N S-fall: 8.6 m³ s⁻¹												
Comment: Flat V Crump profile weir for low and medium flows (up to 0.62m). Portable cableway for medium/high flows; well gauged. Flow influenced by mill sluice operation and discharges from Garnett Bridge Straining Plant 4km u/s. Flood warning station for Kendal. # High relief, very wet catchment drains an area of peat moss growing on Borrowdale Volcanics in extreme N, through grazing lands on Silurian and Ordovician slates, flags and shales to Boulder Clay covered lower reaches.												
1981	2327		1738		1.91	31.6	10/03	0.16	09/09	4.7	1.01	0.25
1982	2369		1785		1.96	50.7	02/01	0.17	20/05	4.6	1.16	0.21
1983	2065		1567		1.72	24.1	12/10	0.07	14/08	4.0	0.99	0.10
1984	1922		1387		1.52	27.1	12/01	0.06	26/08	4.2	0.65	0.08
1985	2303		1764		1.93	58.9	20/12	0.26	13/05	4.5	1.16	0.31
073010 Levan at Newby Bridge C.A.: 247.0 km²												
M.A: NWWA Level: 37m F.A.F: SPE S-fall: 140.0 m³ s⁻¹												
Comment: Level record since 1939 from four different sites at Newby Bridge. All flow records from 1939 to 1974 combined into a single sequence. Since 5/5/71 compound Crump weir - increased sensitivity at low flows. Full range. Just d/s of Lake Windermere - highly regulated, compensation flow. Major abstractions for PWS, sewage effluent from Ambleside. # Predominantly impervious, Borrowdale Volcanics in north and Silurian slates in south. Boulder Clay along river valleys. Mainly grassland, very wooded in lower reaches.												
1981	2423	114	2025	116	15.86	71.1	10/10	1.24	09/09	39.0	10.60	1.91
1982	2478	117	2042	117	16.00	114.9	04/01	1.17	30/04	40.2	11.77	1.59
1983	2059	97	1733	99	13.57	78.9	16/10	0.69	02/09	31.5	8.61	0.74
1984	1969	93	1539	88	12.05	63.5	22/10	0.45	30/08	33.8	6.18	0.52
1985	2308	109	1898	108	14.82	68.9	21/12	1.58	28/03	33.5	10.43	2.29
073011 Mint at Mint Bridge C.A.: 65.8 km²												
M.A: NWWA Level: 50m F.A.F: N												
Comment: Flat V Crump profile weir, 0.837m weir full. Stable rating. Flow slightly affected by Meal Bank mill sluice operation from 21/7/67 to 3/1/69 and periodic releases from sludge disposal works. Natural catchment. # Steep, very wet catchment. Predominantly impervious Silurian slates with bands of flags and shales, small patches of Carboniferous Limestone and basal conglomerate, patchy Boulder Clay cover in middle and lower reaches. Sheep grazing with peat moorland in extreme north.												
1981	1825	121	1368	135	2.85	84.5	10/03	0.20	09/09	6.6	1.41	0.34
1982	1754	116	1273	125	2.66	48.4	02/01	0.19	20/05	6.1	1.66	0.27
1983	1600	106	1200	118	2.50	30.2	12/10	0.11	30/08	6.3	1.40	0.17
1984	1477	98	1028	101	2.14	33.6	13/01	0.05	26/08	6.5	0.73	0.07
1985	1674	111										
074001 Duddon at Duddon Hall C.A.: 85.7 km²												
M.A: NWWA Level: 15m F.A.F: SP B-fall: 160.0 m³ s⁻¹												
Comment: Compound broad-crested weir, 22.9m overall, centre crest 7m, contains all flows. Drowning improbable. High flows theoretically rated. Low flows gauged by wading. Extremely flashy runoff. Abstractions for Barrow PWS from Alpha pumping station u/s. Variable compensation flow from Seathwaite-Tam. # Rises at Wrynose Pass, flows through sparsely populated agricultural land. Geology entirely impervious Ordovician Borrowdale Volcanics, andesitic lavas with small patches of Boulder Clay. Thin soils. Peat moss in northwest.												
1981	2742	131	2134	121	5.78	135.4	02/01	0.39	20/04	13.5	3.02	0.53
1982	2601	124	2092	118	5.68	150.8	02/01	0.31	31/07	14.3	2.40	0.40
1983	2178	104	1743	99	4.73	118.7	12/10	0.24	14/08	12.6	2.28	0.30
1984	2118	101	1657	94	4.50	68.7	21/11	0.27	31/05	12.1	2.09	0.31
1985	2260	108	1943	110	5.26	168.7	23/08	0.56	07/06	12.9	2.65	0.75

Stn. number	Location	C.A.	71..80	1282	1009	2.22	189.4	02/01	0.07	26/08	5.7	0.93	0.15	
		Level:	F.A.F.:	B-full:										
				% of pre-1981	Runoff (mm)	% of pre-1981	Mean flow (m ³ s ⁻¹)	Peak flow (m ³ s ⁻¹)	Date of peak	Min. daily flow (m ³ s ⁻¹)	Date of min.	10 Percentile (m ³ s ⁻¹)	50 Percentile (m ³ s ⁻¹)	95 Percentile (m ³ s ⁻¹)
076014	Eden at Kirkby Stephen	158m	F.A.F.:	69.4 km ²										
M.A.:	NWVA	Level:	F.A.F.:	N	B-full:	120.0 m ³ s ⁻¹								
Comment: Non-standard compound broad-crested weir, built to stabilise the bed and act as a low flow control. Insensitive at low flows. Cableway measures full range. Natural catchment, the highest on the Eden. # High relief catchment draining Carboniferous Limestone which forms most of the watershed, Middle reaches floored by Permian sandstone. Hill peat and moorland, variable Boulder Clay cover.														
1981	1549	121	1332	132	2.93	168.9	02/02	0.10	09/09	7.1	0.99	0.17		
1982	1558	122	1400	139	3.08	196.7	02/01	0.11	07/08	7.1	1.10	0.15		
1983	1383	108	1255	124	2.76	91.6	15/10	0.07	14/08	7.5	1.07	0.11		
1984	1303	102	1072	106	2.36	95.1	12/01	0.04	26/08	6.0	0.85	0.05		
1985	1412	110												
076015	Eamont at Pooley Bridge	144m	F.A.F.:	145.0 km ²										
M.A.:	NWVA	Level:	F.A.F.:	SP	B-full:	46.9 m ³ s ⁻¹								
Comment: Compound Crump profile weir 29.3m wide with low crest 9.1m wide. Crest tapping installed as drowning was expected, but rarely drowns, crest tapping not used. Just d/s of Ullswater - variable compensation releases from here and Haweswater. # Lower Palaeozoic shales and grits forming core of the Lake District dome where sheep grazing on rough pasture predominates. Some arable in lower reaches, moorland on high ground. Some Boulder Clay cover.														
1981	2332	109	1981	124	9.08	56.6	02/10	0.89	09/09	22.1	6.09	1.43		
1982	2601	121	2152	135	9.89	63.2	04/01	1.27	29/04	22.1	6.31	1.52		
1983	2142	100	1704	107	7.83	56.9	16/10	0.45	31/08	17.7	5.34	0.60		
1984	1971	92	1494	94	6.87	33.1	05/02	0.42	30/07	19.6	2.96	0.56		
1985	2243	105	1918	120	8.79	72.1	21/12	0.87	19/02	18.2	5.88	2.06		
077001	Esk at Netherby	14m	F.A.F.:	841.7 km ²										
M.A.:	NWVA	Level:	F.A.F.:	N	B-full:	620.0 m ³ s ⁻¹								
Comment: Velocity-area station. Permanent cableway. Full range. Regrading of natural control after high flows and gravel abstractions d/s affect rating. High flow gauging difficult because flashy. Black Esk Reservoir 47km u/s. Natural catchment. # NWVA jurisdiction extends 9km u/s to the Scottish border, otherwise Solway RPB area. Rural. Silurian rocks with igneous intrusions in north. Carboniferous Limestone in centre and Permo-Triassic succession in south. Widely blanketed by Boulder Clay. Heavily forested in north, arable in south.														
1981	1493	109	1011	117	26.99	581.3	23/11	3.02	04/09	64.2	14.86	3.61		
1982	1748	127	1171	135	31.27	768.7	19/12	3.35	10/06	72.5	18.45	3.96		
1983	1399	102	908	105	24.24	335.5	03/03	3.10	31/08	58.5	14.52	3.41		
1984	1319	96	849	98	22.87	492.5	12/01	1.85	25/07	60.2	8.36	2.00		
1985	1727	126	1248	144	33.21	761.0	21/09	4.81	07/07	75.8	18.20	5.81		

Summary of Archived Data

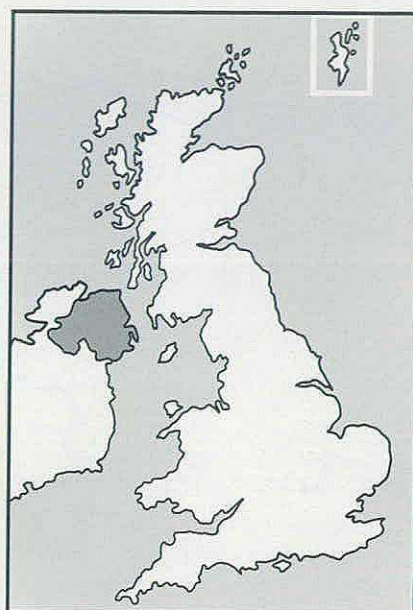
Gauged daily flows, monthly peaks and monthly rainfall

Stn. number	Gauged daily flows, monthly peaks and rainfall	Stn. number	Gauged daily flows, monthly peaks and rainfall	Stn. number	Gauged daily flows, monthly peaks and rainfall		
068001	30s -----eAB 50s BAAAAAAAAA 60s AAAAAEAAAt 70s -----e 80s AAAAAAEAA 90s AAAAAAEt	070002	80s BAABAAa 70s -----a- 80s -----AAAA 90s -----e	070003	80s --aa 80s AAAAAA 80s aaaa	074003	70s --eEADAA 80s --tBAAAA 90s --tBAAAA 70s -----ICCFCC
068002	40s -----e 50s AAAAAAEAA 60s AAAAAAEt	070004	70s -----AAAA	070005	80s aaaa	074007	80s AABAAE 70s --tEt
068003	40s -----e 50s AAAAAAEAA 60s AAAAAAEt	071001	60s ICCBAAAAA 80s AAAAAA 90s -----	071002	70s BCBBAAAAA 80s AAAAAA 90s -----	074008	70s -----ea
068004	50s -----eAA 60s AAAAAADAA 70s AAAAAEAAAt	071003	70s AAABEtBBB 80s Bt	071004	60s AAAAAA 70s AAAAAA 80s AAAAAA 90s AAAAAA	075001	30s +tEtEAEt 40s AAAAAA 50s AAAAAA 60s AAAAAA 70s AAAAAA 80s AAAAAA 90s AAAAAA
068005	50s -----eAAAAA 60s AAAAAEAA 70s AAAAAEAA	071005	70s AAABEt 80s AAAAAA 90s AAAAAA	071006	70s AAAAAA 80s AAAAAA 90s AAAAAA	075002	50s AAAAAA 60s AAAAAA 70s AAAAAA 80s AAAAAA 90s AAAAAA
068006	50s -----eAAAAA 60s AAAAAEAA 70s AAAAAEAA	071008	80s DAABAAa 90s AAAAAA	071009	80s AAAAAA 90s AAAAAA	075003	60s AAAAAA 70s AAAAAA 80s AAAAAA 90s AAAAAA
068007	80s AAAAAEAA 90s AAAAAEAA	071010	70s AAAAAA 80s AAAAAA 90s AAAAAA	071011	80s AAAAAA 90s AAAAAA	075004	60s AAAAAA 70s AAAAAA 80s AAAAAA 90s AAAAAA
068015	80s -----aaaa	071012	70s AAAAAA 80s AAAAAA 90s AAAAAA	071013	80s AAAAAA 90s AAAAAA	075005	70s AAAAAA 80s AAAAAA 90s AAAAAA
068020	80s -----AAAAAa	071014	70s AAAAAA 80s AAAAAA 90s AAAAAA	071015	80s AAAAAA 90s AAAAAA	075006	60s AAAAAA 70s AAAAAA 80s AAAAAA 90s AAAAAA
069001	30s -----ebabBB 50s AAAAAAABA 60s AAAAAAABA	072002	60s -----eAAAAA 70s AAAAAA 80s AAAAAA 90s AAAAAA	072003	70s AAAAAA 80s AAAAAA 90s AAAAAA	075007	60s AAAAAA 70s AAAAAA 80s AAAAAA 90s AAAAAA
069002	40s -----e 50s AAAAAAEAA 60s AAAAAAEt	072004	50s -----e 60s CCCCt 70s CCCCt	072005	60s AAAAAA 70s AAAAAA 80s AAAAAA 90s AAAAAA	075008	70s AAAAAA 80s AAAAAA 90s AAAAAA 90s AAAAAA
069003	30s -----eEt 40s AAAAAA 50s AAAAAA 60s AAAAAA 70s AAAAAA 80s AAAAAA 90s AAAAAA	072006	60s AAAAAA 70s AAAAAA 80s AAAAAA 90s AAAAAA	072007	60s AAAAAA 70s AAAAAA 80s AAAAAA 90s AAAAAA	075009	70s AAAAAA 80s AAAAAA 90s AAAAAA 90s AAAAAA
069004	40s -----tBBB 50s AAAAAAEt 60s AAAAAAEt 70s Cct 80s AAAAAA 90s AAAAAA	072008	60s AAAAAA 70s AAAAAA 80s AAAAAA 90s AAAAAA	072009	70s AAAAAA 80s AAAAAA 90s AAAAAA	075010	70s AAAAAA 80s AAAAAA 90s AAAAAA 90s AAAAAA
069005	50s -----eAAAA 60s AAAAAEAA 70s AAAAAEAA 80s AAAAAEAA 90s AAAAAEAA	072010	80s AAAAAA 90s AAAAAA	072011	80s AAAAAA 90s AAAAAA	075011	70s AAAAAA 80s AAAAAA 90s AAAAAA 90s AAAAAA
069006	70s AAAAAEAA 80s AAAAAEAA 90s AAAAAEAA	072012	80s AAAAAA 90s AAAAAA	072013	80s AAAAAA 90s AAAAAA	075012	70s AAAAAA 80s AAAAAA 90s AAAAAA 90s AAAAAA
069007	70s AAAAAEAA 80s AAAAAEAA 90s AAAAAEAA	072014	80s AAAAAA 90s AAAAAA	072015	80s AAAAAA 90s AAAAAA	075013	70s AAAAAA 80s AAAAAA 90s AAAAAA 90s AAAAAA
069015	70s -----AEE 80s AAAAAA 90s AAAAAA	072016	80s AAAAAA 90s AAAAAA	072017	80s AAAAAA 90s AAAAAA	075014	70s AAAAAA 80s AAAAAA 90s AAAAAA 90s AAAAAA
069017	70s -----AA 80s AAAAAA 90s AAAAAA	073002	60s -----EAAAAA 70s AAAAAA 80s AAAAAA 90s AAAAAA	073003	60s AAAAAA 70s AAAAAA 80s AAAAAA 90s AAAAAA	075015	70s AAAAAA 80s AAAAAA 90s AAAAAA 90s AAAAAA
069020	70s -----AAAA 80s AAAAAA 90s AAAAAA	073004	60s AAAAAA 70s AAAAAA 80s AAAAAA 90s AAAAAA	073005	60s AAAAAA 70s AAAAAA 80s AAAAAA 90s AAAAAA	075016	70s AAAAAA 80s AAAAAA 90s AAAAAA 90s AAAAAA
069023	70s -----EA 80s AAAAAA 90s AAAAAA	073006	60s AAAAAA 70s AAAAAA 80s AAAAAA 90s AAAAAA	073007	60s AAAAAA 70s AAAAAA 80s AAAAAA 90s AAAAAA	075017	80s AAAAAA 90s AAAAAA 90s AAAAAA 90s AAAAAA
069024	80s AAAAAA 90s AAAAAA	073008	60s AAAAAA 70s AAAAAA 80s AAAAAA 90s AAAAAA	073009	60s AAAAAA 70s AAAAAA 80s AAAAAA 90s AAAAAA	075018	80s AAAAAA 90s AAAAAA 90s AAAAAA 90s AAAAAA
069027	70s -----D 80s AAAAAA 90s AAAAAA	073010	60s AAAAAA 70s AAAAAA 80s AAAAAA 90s AAAAAA	073011	60s AAAAAA 70s AAAAAA 80s AAAAAA 90s AAAAAA	075019	80s AAAAAA 90s AAAAAA 90s AAAAAA 90s AAAAAA
069030	70s -----eDA 80s AAAAAA 90s AAAAAA	073012	60s AAAAAA 70s AAAAAA 80s AAAAAA 90s AAAAAA	073013	60s AAAAAA 70s AAAAAA 80s AAAAAA 90s AAAAAA	075020	80s AAAAAA 90s AAAAAA 90s AAAAAA 90s AAAAAA
069031	80s -----a 90s AAAAAA 90s AAAAAA	073014	60s AAAAAA 70s AAAAAA 80s AAAAAA 90s AAAAAA	073015	60s AAAAAA 70s AAAAAA 80s AAAAAA 90s AAAAAA	075021	80s AAAAAA 90s AAAAAA 90s AAAAAA 90s AAAAAA
069032	70s -----A 80s AAAAAA 90s AAAAAA	073016	60s AAAAAA 70s AAAAAA 80s AAAAAA 90s AAAAAA	073017	60s AAAAAA 70s AAAAAA 80s AAAAAA 90s AAAAAA	075022	80s AAAAAA 90s AAAAAA 90s AAAAAA 90s AAAAAA
069033	50s -----eAAEe 60s AAAAAA 70s AAAAAA 80s AAAAAA 90s AAAAAA	073018	60s AAAAAA 70s AAAAAA 80s AAAAAA 90s AAAAAA	073019	60s AAAAAA 70s AAAAAA 80s AAAAAA 90s AAAAAA	075023	80s AAAAAA 90s AAAAAA 90s AAAAAA 90s AAAAAA
069035	70s -----AE 80s AAAAAA 90s AAAAAA	073020	60s AAAAAA 70s AAAAAA 80s AAAAAA 90s AAAAAA	073021	60s AAAAAA 70s AAAAAA 80s AAAAAA 90s AAAAAA	075024	80s AAAAAA 90s AAAAAA 90s AAAAAA 90s AAAAAA
069039	40s -----e 50s AAAAAA 60s AAAAAA 70s AAAAAA 80s AAAAAA	073022	60s AAAAAA 70s AAAAAA 80s AAAAAA 90s AAAAAA	073023	60s AAAAAA 70s AAAAAA 80s AAAAAA 90s AAAAAA	075025	80s AAAAAA 90s AAAAAA 90s AAAAAA 90s AAAAAA
069040	80s -----aa 90s AAAAAA 90s AAAAAA	073024	60s AAAAAA 70s AAAAAA 80s AAAAAA 90s AAAAAA	073025	60s AAAAAA 70s AAAAAA 80s AAAAAA 90s AAAAAA	075026	80s AAAAAA 90s AAAAAA 90s AAAAAA 90s AAAAAA
070001	50s -eBCBBABA 70s FBAEt	074001	60s -----EC 70s AAAAAA 80s AAAAAA 90s AAAAAA	074002	60s -----EB 70s AAAAAA 80s AAAAAA 90s AAAAAA	077001	60s --eDAEAE 70s AAAAAA 80s AAAAAA 90s AAAAAA
						077005	70s -----a- 80s -----eaae

Naturalised daily and monthly flows

Stn. number	Naturalised daily, and monthly flows	Stn. number	Naturalised daily, and monthly flows	Stn. number	Naturalised daily, and monthly flows
068001	60s -FEFEFEFEF	069004	40s -----FEEEEE 50s EEEEEEEEEEE	075001	60s --FEF
068003	40s -----F- 60s EEEEF- 70s -----FEEEEE 80s -----FEFEEF 90s -----FEFEEF	070001	50s -FEFEF- 70s CC	075002	60s -FEFEF
068004	60s -FEFEFEFEF	071001	60s -----CC	076001	50s --FEFEF- 70s F
068005	60s -FEFEFEFEF	071002	60s -----FBAAAA	076003	60s -FEFEF
068006	60s -FEFEFEFEF			076004	60s -FEF

NORTHERN IRELAND



Area: 14,133 km²

Average Rainfall (1941-70): 1095 mm

Headquarters of the Department of the Environment (Northern Ireland):

Water Services Department
3-5A Frederick Street
Belfast BT1 2NS

Telephone: Belfast (0232) 344711

Gauging Station Register

Station number	River name	Station name	Grid reference	Catchment area (sq km)	Station type	Period of record	Mean ann. rainfall (mm)	Mean ann. runoff (mm)	Max. ann. runoff (mm)	Year of max.	Min. ann. runoff (mm)	Year of min.	Mean flow (m ³ s ⁻¹)	Min. mon. flow (m ³ s ⁻¹)	Month/Year of min.	Mean ann. flood (m ³ s ⁻¹)	Base flow index	10 Percentile (m ³ s ⁻¹)	95 Percentile (m ³ s ⁻¹)
201002	Fairy Water	Dudgeon Bridge	SH 406758	161.2	VA	1972-84	1175	962	1286	80	616	75	4.91	0.19	08/76		.26	13.0	0.30
201005	Camowen	Camowen Terrace	SH 460730	274.6	VA	1972-85	1117	705	878	78	471	75	6.14	0.85	08/83		.43	13.5	0.99
201006	Drumragh	Campsie Bridge	SH 458722	324.6	VA	1972-84	1150	771	921	79	495	75	7.93	0.31	09/72	15.5	.35	20.5	0.49
201007	Burn Dennet	Burdennet Br	SC 372047	145.3	VA	1975-85	1120	787	1088	81	572	76	3.63	0.58	08/76		.49	7.9	0.79
201008	Derg	Castlederg	SH 265842	337.3	VA	1979-84	1676	1462	1597	81	1218	84	15.64	0.22	06/83		.25	40.5	0.39
203010	Blackwater	Maydown Bridge	SH 820519	951.4	VA	1970-85	956	692	654	82	322	75	20.88	0.56	08/75		.52	43.3	0.88
203011	Main	Dromona	SD 052086	228.8	VA	1970-80		800	1006	79	588	75	5.81	0.72	08/76		.45	13.9	0.72
203012	Ballinderry	Ballinderry Br	SH 926799	419.5	VA	1970-85	1144	862	811	79	407	75	8.81	1.06	08/75		.50	19.0	1.48
203013	Main	Andraid	SJ 092973	646.8	VA	1970-85	1209	737	1005	81	489	75	15.11	1.38	08/83			35.4	1.87
203017	Upper Bann	Dynes Bridge	SJ 043509	335.6	VA	1970-85	1184	497	618	81	335	83	5.29	0.33	07/77		.34	12.7	0.46
203018	Six Mile Wtr	Antrim	SJ 146867	277.3	VA	1970-85	1043	653	859	81	409	75	5.74	0.53	08/83		.53	12.1	0.76
203019	Claudy	Glenone Bridge	SC 962037	130.1	VA	1976-85		681	796	78	450	83	2.81	0.05	08/83			6.7	0.14
203020	Moyola	Moyola New Br	SH 955905	306.5	VA	1971-85	1266	724	993	81	510	75	7.04	0.19	08/84		.38	17.0	0.57
203021	Kells Water	Currys Bridge	SJ 106971	127.0	VA	1971-85	1198	786	1132	81	516	75	3.16	0.12	08/83		.31	7.9	0.20
203025	Callan	Callan New Br	SH 893524	164.1	VA	1971-85	953	515	725	82	284	75	2.68	0.18	07/75		.43	6.3	0.30
203026	Glenavy	Glenavy	SJ 149725	44.6	TPVA	1971-85	959	531	839	72	250	75	0.75	0.05	07/84			1.5	0.08
203027	Braid	Baltee	SD 097014	177.2	VA	1972-85	1187	626	1037	81	431	75	3.52	0.31	07/84		.49	7.5	0.49
203028	Agivey	White Hill	SC 883193	98.9	VA	1972-85	1177	897	1137	81	690	83	2.81	0.19	07/84		.33	6.5	0.27
203033	Upper Bann	Bannfield	SJ 233341	100.9	VA	1975-85	1438	904	1100	81	643	83	2.89	0.15	07/75		.34	7.1	0.23
205003	Lagan	Dunmurry	SJ 299679	444.7	VA	1971-84		502	671	81	297	75	7.09	0.05	05/84		.39	17.8	0.46
205004	Lagan	Newforge	SJ 329693	490.4	VA	1972-84	999	588	801	81	338	75	9.15	0.67	08/76		.46	21.7	0.94
205005	Ravernet	Ravernet	SJ 267613	69.5	FV	1972-84	892	566	996	85	329	75	1.25	0.01	07/84		.48	3.0	0.02
205008	Lagan	Drummillier	SJ 236525	85.2	VA	1974-84	955	714	1134	81	351	75	1.93	0.03	07/75		.39	4.6	0.05
205010	Lagan	Banoge	SJ 123540	189.8	VA	1974-85	937	499	797	78	217	83	3.00	0.02	07/84			6.1	0.04
206001	* Clannye	Mount Mill Br	SJ 086309	132.7	VA	1974-80		545	613	79	474	77	2.29	0.08	08/76			5.2	0.13
206002	* Jerretspass	Jerretspass(river)	SJ 064332	32.4	VA	1976-80		1053	1160	79	959	76	1.08	0.03	08/76			2.6	0.03

Hydrometric Statistics

Station number	River name	Station name	Grid reference	C.A.	Period	Rainfall (mm)	Runoff (mm)	Mean flow (m ³ s ⁻¹)	Peak flow (m ³ s ⁻¹)	Date of peak	Min. daily flow (m ³ s ⁻¹)	Date of min.	10 Percentile (m ³ s ⁻¹)	50 Percentile (m ³ s ⁻¹)	95 Percentile (m ³ s ⁻¹)
						% of pre-1981	% of pre-1981								
201002	Fairy Water at Dudgeon Bridge		C.A.: 161.2 km ²	72-80	1128	926	4.73	110.0	25/11	0.09	11/08	12.1	2.13	0.32	
M.A.: DOEN	Level: 61m	F.A.F.: E													
Comment:	Velocity-area station with cableway. No water abstractions or significant returns. # Catchment geology is 50% Carboniferous Limestone some exposed, with extensive areas of till and alluvium drift deposits on both banks of the river. Predominantly agricultural grassland with some upland heath and coniferous forest.														
1981	1203	107				1134	122	5.80	67.7	02/02	0.29	06/04	16.1	2.96	0.60
1982	1296	115				1071	116	5.47	75.4	08/12	0.25	28/07	14.4	2.57	0.31
1983	1228	109				975	105	4.96	74.4	14/12	0.30	28/08	12.8	1.60	0.34
1984	1291	114				989	107	5.06	79.4	13/01	0.11	07/07	15.8	1.33	0.17
1985	1368	121													
201005	Camowen at Camowen Terrace		C.A.: 274.6 km ²	72-80	1103	706	6.15	128.4	01/12	0.57	02/10	13.8	4.07	1.07	
M.A.: DOEN	Level: 66m	F.A.F.: PE													
Comment:	Velocity-area station with cableway and weir control - informal broad-crested structure (for angling enhancement), dimensions not known. The net effect of abstractions for public water supply and augmentations from effluent returns is minor. # Catchment geology: mixed impermeable rocks (granite, schist and gneiss, and sandstone) overlain by substantial deposits of till, sand and gravel. Largely upland given over mainly to grassland or heath.														
1981	1223	111				768	109	6.67	58.7	02/02	0.83	02/09	14.0	4.99	1.28
1982	1158	105				696	99	6.06	69.5	03/01	0.87	27/07	13.1	4.05	1.04
1983	1042	94				601	85	5.23	46.6	04/02	0.71	08/08	11.4	3.33	0.82
1984	1095	99				695	98	6.05	82.8	23/03	0.41	23/08	14.1	3.36	0.60
1985	1184	107				759	108	6.59	101.0	20/09	1.11	07/06	12.0	4.72	1.55
201006	Drumragh at Campsie Bridge		C.A.: 324.6 km ²	72-80	1154	728	7.48	145.0	22/10	0.13	08/10	19.2	4.20	0.48	
M.A.: DOEN	Level: 63m	F.A.F.: E													
Comment:	Velocity-area station with cableway. No water abstractions or significant returns. # Catchment geology is approx 70% lower Old Red Sandstone with some conglomerates overlain with alluvium till and some peat. Approx 50% agricultural grassland and 50% upland heath.														
1981	1237	107				910	125	9.36	109.2	23/09	0.55	03/09	25.1	5.58	0.90
1982	1202	104				872	120	8.97	115.6	08/12	0.32	12/08	23.9	4.31	0.53
1983	1065	92				768	105	7.91	106.4	31/01	0.29	01/09	20.4	3.42	0.42
1984	1185	103				886	122	9.12	122.8	23/03	0.39	27/06	27.0	3.59	0.50
1985	1142	99													
201007	Burn Dennet at Burdennet Bridge		C.A.: 145.3 km ²	75-80	1059	733	3.38	64.5	14/11	0.41	28/08	7.4	2.55	0.77	
M.A.: DOEN	Level: 2m	F.A.F.: E													
Comment:	Velocity-area station with cableway and natural control; discharge through the underlying gravels may be substantial. No water abstractions or significant returns. # Geology is schist, limestone and quartzite curtailed at Burdennet Bridge by a major fault drop. Extensive sand and gravel deposits either side of the river, remainder, till and limited peat. About 70% of the catchment is upland heath rising to above 500 mOD; remainder agricultural grassland.														
1981	1238	117				1091	149	5.01	47.5	04/09	1.22	03/09	9.0	4.05	1.63
1982	1109	105				821	112	3.78	34.8	07/12	0.65	11/08	7.9	2.79	0.72
1983	1133	107				755	103	3.48	36.4	13/12	0.76	16/07	8.0	2.32	0.89
1984	1164	110				709	97	3.27	30.5	12/01	0.44	31/08	8.0	1.95	0.62
1985	1334	126				872	119	4.01	47.1	20/09	1.08	07/06	7.5	2.87	1.33
201008	Derg at Castlederg		C.A.: 337.3 km ²	79-80	1540	1531	16.38	410.0	25/11	0.16	26/05	39.5	7.71	0.97	
M.A.: DOEN	Level: 43m	F.A.F.: E													
Comment:	Velocity-area station with cableway. Headwaters contain Lough Derg and Lough Mourne but there are no significant water abstractions or effluent returns upstream of the station. # Geology is heavily faulted strata in Upper and Middle Dalradian Quartzite series. Erratic overburden of till, peat and alluvium, with considerable rock dominance. Approx. 50% upland heath, 40% agricultural grassland, 10% coniferous forest. Town of Castlederg (pop. 2,000). Wettest river basin in N.Ireland.														
1981	1781	116				1597	104	17.08	364.9	02/02	0.90	03/09	43.1	8.71	1.42
1982	1811	118				1438	94	15.38	364.5	18/12	0.13	05/08	40.3	7.47	0.51
1983	1694	110				1459	95	15.60	274.3	12/10	0.08	15/08	42.3	5.32	0.22
1984	1591	103				1218	80	13.03	378.4	12/01	0.06	27/08	39.7	4.47	0.25
1985	1794	116													
203010	Blackwater at Maydown Bridge		C.A.: 951.4 km ²	70-80	948	731	22.05				0.03	05/09	40.8	9.35	0.94
M.A.: DOEN	Level: 15m	F.A.F.: N													
Comment:	Velocity-area station with cableway and natural control. A substantial portion of the catchment area is in the Irish Republic where some groundwater may be abstracted but its hydrological significance is uncertain. # Geology: Carboniferous Limestone and Millstone Grit with sandstones overlain by substantial amounts of till. A predominantly rural catchment with limited afforestation. Monaghan Town (pop. 5,000) - in the Irish Republic - is the only significant urban centre.														
1981	1046	110				653	89	19.66	75.6	21/03	0.88	04/09	48.4	14.04	1.53
1982	1044	110				654	89	19.72	103.3	05/01	0.40	10/08	54.7	9.60	0.66
1983	889	94				531	73	16.01	76.4	02/02	0.39	15/08	43.0	8.97	0.69
1984	949	100				597	82	18.01	101.5	18/01	0.29	27/08	53.5	7.17	0.58
1985	969	102				587									

			Period	Rainfall (mm)	Runoff (mm)	Mean flow (m ³ s ⁻¹)	Peak flow (m ³ s ⁻¹)	Date of peak	Min. daily flow (m ³ s ⁻¹)	Date of min.	10 Percentile (m ³ s ⁻¹)	50 Percentile (m ³ s ⁻¹)	95 Percentile (m ³ s ⁻¹)
				% of pre-1981	% of pre-1981								
203012	Ballinderry at Ballinderry Bridge	C.A: 419.5 km ²	70-80	1161	627	6.34	175.9	22/10	0.61	14/08	17.9	5.19	1.37
M.A: DOEN	Level: 16m	F.A.F: S											
Comment: Velocity-area station with cableway and natural control. Reservoir storage in catchment but the net effect is thought to be minor. # The geology is very mixed comprising of granite, schist, shale and some Carboniferous Limestone overlain with substantial amounts of till and gravel. Mainly rural catchment (grassland or heath) with significant upland area. Cookstown (pop. 8,000) has cement manufacturing works nearby.													
1981	1161	100	781	125	10.39	135.0	02/10	1.41	09/09	21.3	7.55	2.13	
1982	1210	104	759	121	10.09	165.2	03/01	1.43	31/07	20.9	5.98	1.76	
1983	992	85	644	103	8.56	129.5	31/01	1.54	30/08	19.5	5.31	1.79	
1984	1050	90	687	110	9.13	114.6	05/02	1.17	26/07	22.3	4.47	1.36	
1985	1127	97	810	129	10.74	161.7	21/09	2.07	03/07	20.6	6.70	2.58	
203013	Main at Andraid	C.A: 646.8 km ²	70-80	1198	702	14.40	258.9	22/10	1.09	30/08	33.3	8.16	2.07
M.A: DOEN	Level: 30m	F.A.F: SPGEI											
Comment: Velocity-area station with natural control, no cableway. Unstable bed. Reservoir storage in catchment with abstractions for industrial use and public water supply, also groundwater augmentation and abstraction. However, the net effect of these is minor. # Geology almost entirely basalt overlain by till (covering >50% of the catchment). Significant upland areas, predominantly grassland or heath with limited afforestation. Urban area: Ballymena (pop. 28,000) with substantial light industry.													
1981	1391	116	1005	143	20.61	297.7	02/10	2.05	21/04	45.9	11.96	3.16	
1982	1248	104	870	124	17.85	218.0	03/01	1.70	15/08	43.0	9.10	2.21	
1983	995	83	529	75	10.85	128.3	08/12	1.30	13/09	29.5	5.05	1.36	
1984	1201	100	770	110	15.79	232.6	21/02	1.08	27/08	41.3	7.05	1.18	
1985	1338	112	884	126	18.08	308.7	07/09	3.04	07/06	33.8	10.25	3.62	
203017	Upper Bann at Dynes Bridge	C.A: 335.6 km ²	70-80	1014	496	5.28	159.9	28/12	0.16	13/07	12.1	2.33	0.45
M.A: DOEN	Level: 13m	F.A.F: SPEI											
Comment: Velocity-area station with cableway, natural control. Channel capacity is large. Main road bridge 100m downstream gives partial control at medium and high stages. Upper one third of the drainage area is regulated with a minimum prescribed flow of 18Ml/d. # Geology is impermeable (quartzite and granite) overlain by superficial deposits (mainly till). Significant upland, predominantly grassland or heath, limited afforestation. Urban area at Banbridge (pop. 10,000), no major industry.													
1981	1217	120	618	125	6.58	103.7	02/10	0.46	09/09	15.2	2.96	0.66	
1982	1174	116	582	117	6.20	99.4	08/11	0.23	18/09	16.5	2.37	0.44	
1983	894	88	335	68	3.57	48.7	05/05	0.35	30/08	8.9	1.98	0.44	
1984	1209	119	468	94	4.98	81.8	16/01	0.24	22/08	14.9	1.65	0.40	
1985	994	98	501	101	5.32	55.9	14/08	1.29	30/10	12.0	3.07	1.45	
203018	Six Mile Water at Antrim	C.A: 277.3 km ²	70-80	1178	628	5.52	124.7	23/10	0.17	01/09	11.6	3.64	0.75
M.A: DOEN	Level: 13m	F.A.F: EI											
Comment: Velocity-area station with cableway and natural control. The net effect of industrial abstractions and effluent returns is minor. # The geology is almost entirely basalt with considerable superficial deposits (till). Significant proportion of upland - predominantly grassland or heath, limited afforestation. Urban area: Antrim (pop. 23,000) has substantial light industry.													
1981	1272	108	859	137	7.55	132.7	02/10	0.86	04/09	13.4	5.85	1.56	
1982	1190	101	755	120	6.64	62.4	08/11	0.72	06/06	14.8	4.59	1.11	
1983	899	76	518	82	4.55	41.0	31/01	0.34	15/08	10.3	3.22	0.54	
1984	1019	87	676	108	5.94	88.4	21/02	0.42	22/07	14.1	2.89	0.61	
1985	1077	91	720	115	6.32	108.5	07/09	1.32	07/07	11.8	4.56	1.68	
203019	Claudy at Glenone Bridge	C.A: 130.1 km ²	76-80	1090	734	3.03	53.8	23/10	0.06	18/08	7.7	1.70	0.24
M.A: DOEN	Level: 14m	F.A.F: I											
Comment: Velocity-area station with cableway and natural control. Rock bar with boulders 8m downstream of gauge gives low flow control. Three arch-road bridge 50m downstream gives medium and high flow control. # Geology is basalt overlain with till and some peat. Catchment is predominantly grassland with no urban areas or major industry.													
1981	1228	113	759	103	3.13	34.3	03/10	0.20	01/09	6.8	2.11	0.34	
1982	1193	109	708	96	2.92	36.9	03/01	0.00	10/08	7.4	1.38	0.06	
1983	962	88	450	61	1.86	24.9	02/01	0.02	31/08	4.8	0.80	0.05	
1984	1036	95	654	89	2.70	33.8	02/02	0.08	01/07	6.4	1.02	0.16	
1985	1161	107	568	77	2.34	24.5	07/09	0.05	04/07	5.4	1.47	0.11	
203020	Moyola at Moyola New Bridge	C.A: 306.5 km ²	71-80	1249	741	7.20	154.6	04/12	0.17	11/08	17.1	4.22	0.91
M.A: DOEN	Level: 16m	F.A.F: S											
Comment: Velocity-area station with cableway and un-riveted weir control. Multi-arched bridge just downstream of station, area between piers revetted with generally rounded profile, crests horizontal at same level across river. Reservoir storage in catchment. # Mixed geology - some basalt, Carboniferous Limestone, schist and shale overlain with till, sand and gravel. Predominantly grassland and heath with limited afforestation. Urban areas at Magherafelt (pop. 5,000) and Maghera (pop. 2,000) but no major industry.													
1981	1517	121	993	134	9.65	114.1	14/05	1.10	03/09	21.4	6.66	1.76	
1982	1389	111	694	94	6.74	112.8	03/01	0.09	03/08	17.8	3.34	0.16	
1983	1103	88	538	73	5.23	64.7	24/12	0.19	30/08	14.7	2.31	0.35	
1984	1169	94	572	77	5.56	85.3	05/02	0.06	20/08	16.8	1.84	0.09	
1985	1316	105	666	90	6.46	104.2	21/09	0.43	03/07	14.6	3.11	0.73	
203021	Kells Water at Currys Bridge	C.A: 127.0 km ²	71-80	1197	745	3.00	91.1	14/10	0.07	23/08	7.7	1.52	0.20
M.A: DOEN	Level: 35m	F.A.F: SP											
Comment: Velocity-area station with cableway and natural control. Reservoir storage in catchment and abstractions for public water supply but net effect is minor. Gauging station is 1.5km upstream of confluence with R. Main and there is some backing-up at high flows. # Catchment geology: basalt overlain by till and rock. Predominantly upland area - mostly heath, some upland grass pasture, limited afforestation.													
1981	1352	113	1132	152	4.56	95.8	07/10	0.19	03/09	10.8	2.24	0.32	
1982	1356	113	876	118	3.53	69.9	03/01	0.09	08/06	9.2	1.58	0.14	
1983	977	82	635	85	2.56	42.7	08/12	0.06	11/08	7.5	1.15	0.13	
1984	1097	92	818	110	3.30	81.9	21/02	0.18	27/08	7.8	1.44	0.29	
1985	1223	102	872	117	3.50	96.5	07/09	0.46	07/07	7.4	2.01	0.66	
203025	Callan at Callan New Bridge	C.A: 164.1 km ²	71-80	963	464	2.41	50.1	19/01	0.12	03/08	5.7	1.23	0.26
M.A: DOEN	Level: 16m	F.A.F: SPEI											
Comment: Velocity-area station with cableway; natural control. Reservoir storage in catchment with abstractions for public water supply and industrial use; minor net effect. # Geology: mixed shale (Carboniferous) and quartzite (Ordovician), overlain by till. Predominantly grassland and heath, limited arable use. Small amount of upland with limited afforestation. Urban area Armagh (pop. 13,000) with some light industry.													
1981	1032	107	673	145	3.50	50.0	03/10	0.52	21/04	7.5	2.07	0.80	
1982	992	103	726	156	3.78	42.9	12/03	0.55	12/09	9.2	1.80	0.63	
1983	813	84	506	109	2.64	34.9	08/12	0.61	29/08	6.2	1.37	0.70	
1984	938	97	602	130	3.13	46.1	16/01	0.56	23/07	7.9	1.34	0.68	
1985	887	92	560	121	2.91	42.1	18/09	0.93	03/11	5.3	1.90	1.05	
203026	Glenavy at Glenavy	C.A: 44.6 km ²	71..80	959	561	0.79	29.6	28/12	0.01	16/10	1.5	0.37	0.09
M.A: DOEN	Level: 55m	F.A.F: S											
Comment: Velocity-area station, no cableway, thin-plate weir control. Reservoir storage in catchment with abstractions for public water supply - minor net effect. # Geology: mainly basalt overlain with till. Catchment is largely upland - predominantly grassland and heath.													
1981	1071	112	570	102	0.81	18.3	26/09	0.05	09/09	1.7	0.56	0.11	
1982	1007	105	496	88	0.70	17.5	05/01	0.05	27/07	1.7	0.31	0.06	
1983	832	87	366	65	0.52	10.5	08/12	0.03	19/08	1.4	0.22	0.06	
1984	935	97	466	83	0.66	20.2	23/03	0.03	22/07	1.7	0.23	0.04	
1985	953	99	509	91	0.72	15.8	18/09	0.07	04/07	1.5	0.44	0.10	
203027	Braid at Ballee	C.A: 177.2 km ²	72-80	1188	577	3.24	163.4	27/12	0.15	09/09	7.0	2.00	0.54
M.A: DOEN	Level: 35m	F.A.F: SPEI											
Comment: Velocity-area station with cableway. Two small impounding reservoirs (capacity 409 Ml combined) for a public water extraction of 5 Ml/d. Town effluent returned to river; heavy weed growth in river at Ballee due to effluent conditions. # Geology entirely Upper and Lower Basalt extensively exposed with thin covering of till. Some alluvium, sand and gravel near to the river. Approx 50% upland heath rising to 400 mOD. 50% agricultural grassland. Some intensive pig and poultry units. Ballymena is the major settlement (pop. 28,000).													
1981	1446	122	1037	180	5.83	176.4	02/10	1.14	22/04	10.7	3.77	1.65	
1982	1294	109	814	141	4.58	73.3	03/01	0.64	18/09	8.9	2.84	0.87	
1983	943	79	439	76	2.47	31.2	25/03	0.23	29/08	5.6	1.48	0.28	
1984	1087	91	548	95	3.08	74.7	02/02	0.16	27/08	7.5	1.26	0.21	
1985	1150	97	698	121	3.91	153.3	07/09	0.79	07/06	7.0	2.22	0.93	
203028	Agivay at White Hill	C.A: 98.9 km ²	72-80	1134	879	2.76	113.5	19/01	0.08	07/09	6.3	1.60	0.31
M.A: DOEN	Level: 17m	F.A.F: N											
Comment: Velocity-area station, no cableway. # Geology: mainly basalt overlain by till with some peat. Significant proportion of upland, predominantly grassland or heath. No urban areas or major industry.													
1981	1359	120	1137	129	3.57	96.6	02/10	0.36	01/09	7.1	2.21	0.43	
1982	1304	115	1047	119	3.28	85.6	03/01	0.28	03/08	8.7	1.70	0.33	
1983	1053	93	690	78	2.16	48.6	24/12	0.13	31/08	5.7	1.18	0.20	
1984	1177	104	828	94	2.60	63.4	01/02	0.08	27/07				

			Period	Rainfall (mm)	% of pre-1981	Runoff (mm)	% of pre-1981	Mean flow (m ³ s ⁻¹)	Peak flow (m ³ s ⁻¹)	Date of peak	Min. daily flow (m ³ s ⁻¹)	Date of min.	10 Percentile (m ³ s ⁻¹)	50 Percentile (m ³ s ⁻¹)	95 Percentile (m ³ s ⁻¹)
203033	Upper Bann at Bannfield	C.A: 100.9 km ²	75-80	1454		875		2.80	83.8	27/12 1978	0.08	18/09 1976	8.7	1.39	0.25
M.A: DOEN	Level: 77m F.A.F: SP														
Comment: Velocity-area station with cableway and natural control. Reservoir storage in catchment with abstractions for public water supply the net effect of which is minor. # The Upper Bann drains the Mourne Mountains. The catchment is predominantly upland heath. Geology: impermeable (granite and quartzite) overlain with substantial amounts of superficial deposits (till).			1981	1417	97	1100	126	3.52	56.6	26/12	0.20	08/09	8.7	1.84	0.35
			1982	1635	112	1059	126	3.52	74.1	08/11	0.18	04/06	8.8	1.95	0.22
			1983	1128	77	643	73	2.06	52.9	05/05	0.22	03/08	4.7	1.12	0.25
			1984	1257	86	908	104	2.91	56.4	23/03	0.14	14/07	7.9	1.21	0.19
			1985	1278	87										
205004	Lagan at Newforge	C.A: 490.4 km ²	72-80	1004		556		8.64	127.6	26/12 1978	0.48	07/09 1978	20.6	4.91	0.87
M.A: DOEN	Level: 2m F.A.F: PGEI B-fall: 104.1 m ³ s ⁻¹														
Comment: Velocity-area station with cableway. Numerous PWS boreholes in the Sherwood Sandstone - pumping capacity total of approaching 30 Ml/d. All effluents return to the river. # Geology - 60% Silurian; remainder - Sherwood Sandstone with some breccia, Chalk, Hibernian Greensand and Lower Basalts. Heavily overlain with till and extensive sand and gravel deposits in lower reaches of river. Mainly arable - some upland heath. Urbanisation - Lisburn and south western areas of Belfast.			1981	1220	122	803	144	12.45	111.0	02/10	1.04	02/09	26.5	9.64	1.45
			1982	1044	104	704	127	10.95	83.5	08/11	0.83	14/08	25.0	6.94	1.12
			1983	783	78	489	88	7.61	45.2	09/12	0.48	09/08	18.5	4.23	1.04
			1984	913	91	631	113	9.81	64.5	17/01	0.52	16/08	25.3	4.00	1.01
			1985	945	94	644	116								
205005	Ravernet at Ravernet	C.A: 69.5 km ²	72-80	858		500		1.10	52.1	28/12 1978	0.00	04/09 1978	2.8	0.54	0.02
M.A: DOEN	Level: 31m F.A.F: I														
Comment: Flat V weir installed autumn 1977, width 8.64m, crest not well defined. Height of wing walls 2.1m. Theoretical rating applies up to bankfull; exceedance very unlikely. Previous to weir installation rating based on current meterings. Natural flow regime; significant storage in several loughs in the headwaters - their influence on the flow regime is partly counterbalanced by the minimal soil cover in many areas. # Geology: quartzite overlain with 'till and rock'. Predominantly a grassland catchment, some limited arable use.			1981	1045	120	729	146	1.60	30.1	02/10	0.04	09/09	3.3	1.01	0.07
			1982	969	112	632	126	1.39	24.3	08/11	0.02	14/08	3.4	0.85	0.04
			1983	766	88	369	74	0.81	8.5	08/12	0.01	06/08	2.2	0.38	0.01
			1984	941	108	673	135	1.48	40.1	21/02	0.00	26/07	3.9	0.30	
			1985	954	110										
205008	Lagan at Drummiller	C.A: 85.2 km ²	74-80	832		641		1.73	36.3	27/12 1978	0.01	23/08 1978	4.1	0.94	0.04
M.A: DOEN	Level: 81m F.A.F: E														
Comment: Velocity-area station with calibration by wading. No water abstractions or significant effluent returns. # Geology: entirely Silurian overlain with till. Predominantly upland heath rising to over 500 mOD, some grassland used for sheep grazing. Contains one large village.			1981	1052	113	1134	177	3.06	27.0	02/10	0.14	09/09	6.7	2.00	0.33
			1982	968	104	826	129	2.23	24.5	08/11	0.06	09/06	5.5	1.42	0.08
			1983	881	95	655	102	1.77	11.8	20/05	0.05	11/08	4.1	1.33	0.08
			1984	1050	113	728	114	1.97	27.3	23/03	0.02	25/07	5.0	0.99	0.03
			1985	1093	117										
205010	Lagan at Banoge	C.A: 189.8 km ²	74..80	832		519		3.13	246.7	28/12 1978	0.02	06/08 1975	8.1	0.88	0.04
M.A: DOEN	Level: 39m F.A.F: EI														
Comment: Velocity-area station, once with cableway, but now calibrated by wading. No water abstractions, Dromore effluent returns to river. # Geology: entirely Silurian overlain with till. 35% upland heath rising to over 500 mOD; remainder agricultural grassland except for the town of Dromore (pop. 3,000).			1981	1052	113	666	128	4.00	128.0	02/10	0.05	02/09	7.4	1.09	0.07
			1982	968	104	495	95	2.98	116.2	08/11	0.03	09/06	7.3	0.87	0.05
			1983	744	80	217	42	1.30	29.3	09/12	0.03	11/08	3.6	0.42	0.04
			1984	1050	113	413	80	2.48	123.3	23/03	0.02	26/07	6.3	0.50	0.03
			1985	903	97	487	94								

Summary of Archived Data

Gauged daily flows, monthly peaks and monthly rainfall

Stn. number	Gauged daily flows, monthly peaks and rainfall	Stn. number	Gauged daily flows, monthly peaks and rainfall	Stn. number	Gauged daily flows, monthly peaks and rainfall
201002	70s -aaaaaeaa 80s aaaaA†	203013	70s eaaaaaaaaa 80s aaaaaaa	203033	70s -----eaaaa 80s aAaAAE
201005	70s -†EAAAAAAAA 80s AAAAAAe	203017	70s eAAAAAAAAAA 80s AAAAAAa	205003	70s -cbaaaaaaaa 80s aaaaa
201006	70s -eaaaaAAA 80s AAAAA†	203018	70s eaaaaaaAAA 80s AAAAAAa	205004	70s -eaaaaaaa 80s aaaaA†
201007	70s †††††EAEAA 80s AAAAAAa	203019	70s -----aae 80s aaaaaaa	205005	70s -EAAAAAAAA 80s AAAAAAa
201008	70s -----a 80s aaaaA†	203020	70s -eaaaaaaaa 80s aaaaAAA	205008	70s -----eaaaaa 80s aaaaA†
203010	60s -††††††††† 70s EAAAAAAAAAA	203021	70s -eaaaaaaaa 80s aaaaAAA	205010	70s -----eaeaaa 80s aaaaae
	80s AAAAAAa	203025	70s -eaaaaaaaa 80s aaaaAAA		
203011	70s eaaaaaaaaa 80s e-†††	203026	70s -eaeaaaaaa 80s aaaaa	206001	70s -----aaaa 80s a
203012	70s eaaaaaaaaa 80s aaaaAAa	203027	70s -†EAAAAAAAA 80s AAAAAAa	206002	70s -----aaaa 80s a
		203028	70s -†EAAAAAAAA 80s AAAAAAa		

GROUNDWATER - REGISTER AND STATISTICS

Background

Groundwater may be obtained from almost any stratum in the sedimentary succession in the United Kingdom, as well as from metamorphic and igneous rocks. In those strata not generally recognised as aquifers, well-yields tend to be small (of the order of a few cubic metres per day). In the more important aquifers, such as the Chalk and the Permo-Triassic sandstones, well-yields of the order of 3000 to 4000 cubic metres per day are not unusual.

The groundwater resources of an aquifer, upon which the long-term yields of wells depend, are naturally replenished by rainfall. The normal recharge takes place during the winter months when the potential evapotranspiration is low and the soil moisture deficits are negligible. During the summer months, with high potential evapotranspiration and appreciable soil moisture deficits, infiltration is limited or negligible. Accordingly, groundwater levels tend to rise from autumn through winter into spring, and then to fall from spring through summer into autumn. This pattern is not, however, constant, since rainfall varies seasonally, while the distribution of rainfall from month to month and from area to area is equally variable. Infiltration is also affected by the nature of the deposits through which water must pass to reach the saturated zone of an aquifer and where the deposits have low permeabilities there will be a consequent reduction in the amount of replenishment and an increase in the time before the water levels begin to rise. The fluctuation of water levels within an aquifer will be affected by the value of the specific yield (which is the volume of the voids in the rock which may store usable groundwater expressed as a fraction of the total volume of rock); where the specific yield is small, the addition of a given volume of water will result in a greater rise in water levels than would be the case where the specific yield is larger and the capacity for storage greater. Finally, where the natural drainage of groundwater (appearing as springs, seepage lines or 'risings') is rapid, water levels rise more slowly during recharge periods because significantly large quantities are simultaneously being discharged.

The Observation Borehole Network

Groundwater level observation wells (in this context, a well includes both shafts - constructed by hand-digging - and boreholes - constructed by machinery) are generally used for one of two purposes, either to monitor levels regionally and thus to estimate groundwater resource fluctuations, or to monitor the effects locally of groundwater abstractions. The number of observation wells required in different areas for regional monitoring varies widely.

Over the last two decades, a target density was sought of one well to 25 to 35 km². During the last few years, it has become apparent in some districts that satisfactory information can be obtained with fewer wells, while in others the densities may need to be substantially increased.

The observation well network was reviewed in 1981 by the British Geological Survey (then the Institute of Geological Sciences) with the aim of selecting 200 to 300 sites from the National Groundwater Archive (then maintained by the Water Data Unit), to be used for periodical assessment of the national groundwater situation¹. The selection was based upon the hydrogeological units identified in an investigation of the groundwater resources of the United Kingdom²; one site was to be chosen for each aquifer present in each unit. For Scotland and Northern Ireland this was not possible due to the very limited number of observation wells available. In England and Wales, the total number finally selected was 175.

Since that date, a number of changes have been made to the list of selected wells. At some locations, observations could no longer be continued, and new sites have been added from time to time. Up to date lists of the sites in the national network are published in each Yearbook in the Hydrological data UK series.

Measurement and Recording of Groundwater Levels

The majority of observation wells are measured manually either weekly or monthly. The usual instrument is an electric probe suspended upon a graduated cable or tape, contact being made by the water to complete a circuit which gives either an audible or visual signal at the surface. Measurements are normally made to the nearest 10 millimetres.

Some observation wells are equipped with continuous water level recorders, almost invariably actuated by a float on the water surface. These recorders may be driven by clockwork or by electrical power, and are capable of running unattended for periods of one to six months. Levels are usually recorded on paper charts or on punched paper tapes, and experiments have been made recording directly onto magnetic tapes. Water levels are generally recorded to the nearest 10 millimetres, although instruments may be accurate to 1 millimetre.

Pressure transducers have also been considered for water level measurement. However, available transducers will measure accurately over only a narrow range of fluctuation (up to 2 or 3 metres), or much less accurately over a wide range. They are not in general use.

TABLE 1 GENERALISED LIST OF AQUIFERS IN THE UNITED KINGDOM

Era	System	Subsystem	Aquifer	Importance
CAINOZOIC	Quaternary	Holocene	Superficial deposits	*
		Pleistocene	Upper and Middle Pleistocene Crag	* **
	Tertiary	Pliocene	Coralline Crag	**
		Oligocene		
		Eocene	Bagshot Beds	
			Lower London Tertiaries Blackheath & Oldhaven Beds Woolwich & Reading Beds Thanet Beds	* **
	Cretaceous	Upper Cretaceous	Chalk and Upper Greensand	****
		Lower Cretaceous	Lower Greensand	***
			Hastings Beds	**
	MESOZOIC	Jurassic	Upper Jurassic	Portland & Purbeck Beds (Spilsby Sandstone)
			Corallian	**
Middle Jurassic		Great & Inferior Oolitic limestones (Lincolnshire Limestone)	** (****)	
Lower Jurassic		Bridport & Yeovil Sands	**	
		Marlstone Rock	*	
UPPER PALAEOZOIC	Triassic	Keuper		
		Bunter		
	Permian		Permo-Triassic sandstones	****
			Magnesian Limestone	***
	Carboniferous	Upper Carboniferous	Coal Measures	**
			Millstone Grit	**
		Lower Carboniferous	Carboniferous Limestone	**
	Devonian		Old Red Sandstone	*

Key to aquifer importance:

- * aquifer of minor importance only
- ** aquifer producing small, but useful, local supplies
- *** aquifer of local importance, often providing public supplies
- **** aquifer of major importance

Some wells and boreholes are - or have been - seriously affected by pumping to the point where no useful estimates of the annual fluctuations or the mean annual range can be made. Such sites are of questionable value as observation wells save possibly for the monitoring of pumping wells, and even then the availability of unaffected control wells can be advantageous. Where the aquifer is confined, and the site is located at some distance from the outcrop, the seasonal fluctuation may be so small as to be undetectable. Where the seasonal fluctuations are very small, it is not unusual for the well hydrograph to be affected by changes in atmospheric pressure; where the measurement of levels through the year is at weekly or shorter intervals, it is usually possible to eliminate the atmospheric effects by constructing a smoothed curve through the plotted data points.

Scope of the Register and Statistical Tabulations

Groundwater data are presented in two parts. The first provides a register of reference details relating to the individual borehole alongside a statistical summary of the fluctuations in groundwater levels over the featured period. In the second part these data are used to assess recharge and groundwater resources changes for the major aquifers in the United Kingdom over the period 1981-5.

The sites listed in the borehole register were selected so as to give a reasonably representative cover throughout England and Wales, together with some sites in Scotland and Northern Ireland where there are, as yet, very few observation wells. The sites are grouped according to the aquifers to which the water level variations are attributed. A generalised list of aquifers is given in Table 1; while the aquifers are tabulated in stratigraphical order, the local names for individual strata are mostly omitted, and the intervening aquicludes are not shown. The location of wells featured in the register, and the outcrop areas of the principal aquifers, are shown in Figure 1.

BOREHOLE REGISTER AND STATISTICS

The following explanatory notes will assist in the interpretation of particular items in the tabular material.

Well Number

The well numbering system is based on the National Grid. Each 100 kilometre square is designated by prefix letters, (e.g. SE; a complete set of prefix letters for the UK is shown on the Frontispiece) and is divided into 100 lesser squares of 10 kilometre sides numbered from 00 to 99. Thus a site whose

number is given as SE94005 is located within the 10 kilometre square SE94, while the following digits indicate that it is the fifth accessed in that square. A suffix such as A or B defines a particular well when there are several at the same site.

Site

The location name, e.g. Dalton Holme, is used for convenient reference by the measuring authority in particular, being more easily memorised than the well number.

Hydrometric Area - H.A.

The Hydrometric Area is either an integral river catchment having one or more outlets to the sea or tidal estuary, or, for convenience, it may include several contiguous river catchments having topographic similarity with separate tidal outlets - see page 4.

Grid Reference - NGR

The National Grid Reference comprises a six or eight figure number that locates a site precisely within the 100 kilometre square indicated by the prefix letters in the Well Number. A brief summary of the use of grid references may be found in the legend of the standard Ordnance Survey 1:50,000 sheets or in the Ordnance Survey gazetteers.

Measuring Authority - M.A.

The measuring authority refers to the body that is responsible for taking readings at the particular site. In England and Wales, this is normally the relevant Water Authority.

EEC Unit

The United Kingdom is divided into areas for each of which the responsibility for water management is the concern of bodies such as the Water Authorities, and River Purification Boards. Each of these areas is subdivided into Units (EEC Units) which are defined in a report² prepared for the European Economic Community.

Level

The level is the altitude of the ground surface at a particular site, given in metres above Ordnance Datum.

Comment

A short commentary relating to important characteristics of the borehole and its associated record of groundwater levels; in particular reference may be

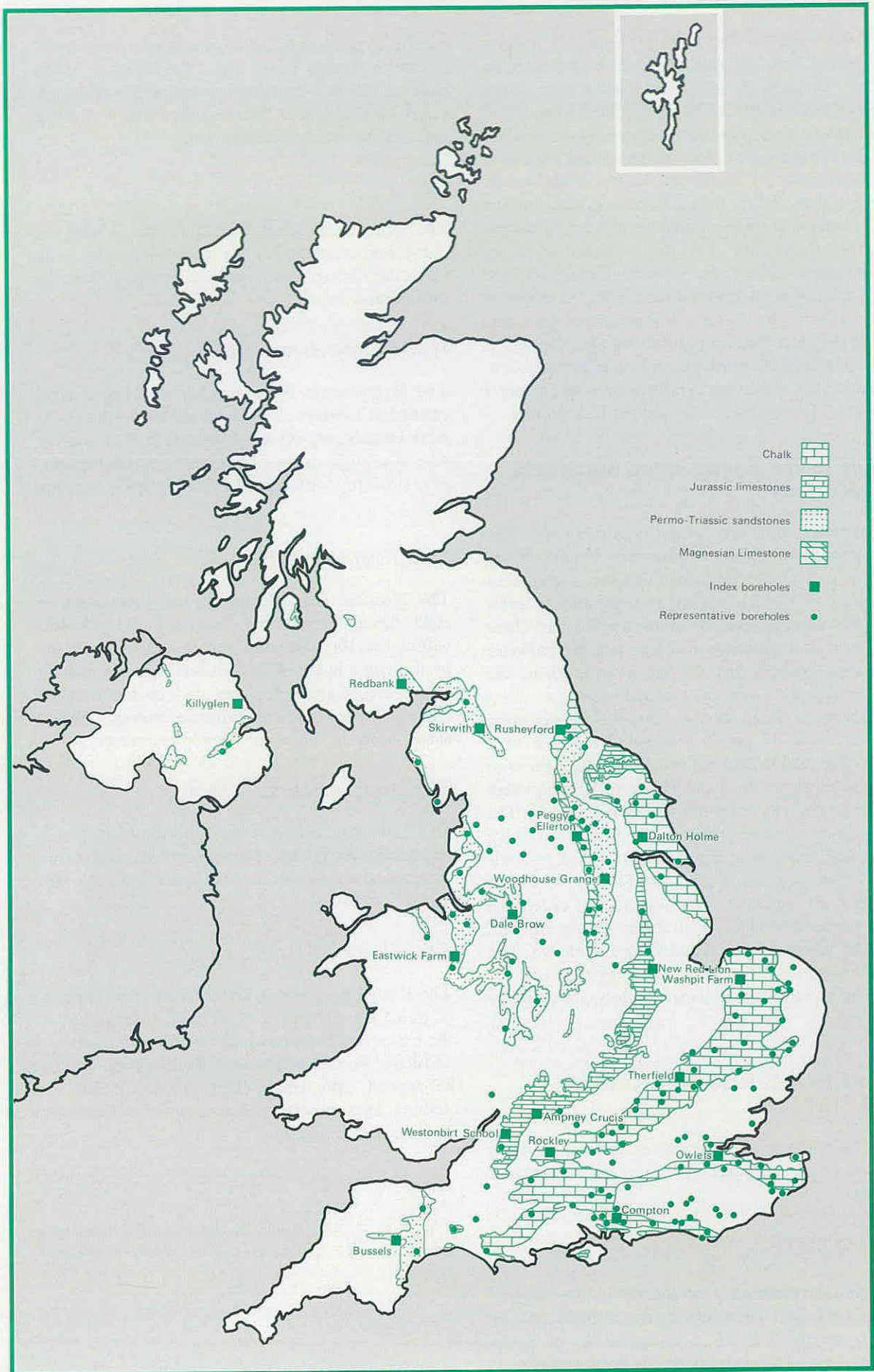


Figure 1. Principal aquifers and representative borehole locations.

made to the effect of local or regional pumping on the water levels at the observation site. A lack of comment generally indicates a satisfactory observation well.

Certain sites are updated at frequent intervals, usually monthly, and these are used when an immediate assessment of the groundwater levels are required; these are known as *index sites*.

Period

The period of record indicates the first and last years for which groundwater levels are stored on the national archive. For various reasons, this may not be the period over which the statistical analysis has been carried out (see below).

Mean Maximum Level

The average of the peak groundwater levels for each year in the period of record; determined only where at least ten years of archived data are available.

Mean Minimum Level

The average of the trough groundwater levels for each year in the period of record; determined only where at least ten years of archived data are available. Where levels fall below the base of the well or borehole – as may happen in extended droughts – the level corresponding to the base is used.

Mean Annual Range

The difference between the mean maximum and mean minimum levels.

Note: The mean maximum and mean minimum levels and the mean annual range may not have been determined from the full record of archived groundwater levels. Data of dubious quality, or data considered unrepresentative of current conditions will normally have been discounted (see 'Comment').

1980–85 Data

Trough Level

The low groundwater level reached at the end of the summer recession.

Peak Level

The high groundwater level attained at the end of the winter recharge period.

Note: Because recharge is most effectively assessed from the low point of groundwater levels in one year to the corresponding point in the following year, the data are not presented on a calendar year basis. Peak and trough values relate to each annual recharge cycle – in some circumstances the response of the water table may continue a number of months after infiltration at the surface has ceased. Sites showing such effects are often referred to as 'lag' wells.

Fluctuation as a Percentage of the Mean Range

The computation of the mean range is explained in the article concerning recharge estimation – see page 167. The fluctuation may be considered to be equivalent to the percentage of the mean annual recharge to the aquifer in the vicinity of the well. It has been omitted where, because of data limitations, the impact of pumping or artificial recharge, the percentage fluctuation is considered to be of doubtful value.

References

1. Monkhouse, R.A., and Murti, P.K. 1981. The Rationalisation of Groundwater Observation Well Networks in England and Wales. Institute of Geological Sciences, Open-file Report WD/81/1, 18pp.
2. Monkhouse, R.A., and Richards, H.J. 1982. Groundwater Resources of the United Kingdom. Prepared for the Commission of the European Communities, published by Th. Schaeffer Druckerei GmbH, Hannover, 252pp.

Borehole Register and Statistics

Aquifer: Chalk and Upper Greensand

ID	Location	H.A.	M.A.	Level	Period	1980-81	1981-82	1982-83	1983-84	1984-85	Trough level (m)	Peak level (m)	Fluctuations as a % of the mean range
ID30001 NGR: ID 36800300 EEC Unit: NI06 Comment: Insufficient data for analysis.	Killyglen	205	Geological Survey of NI	140.0m	1985-1987							118.82	
SE93004 NGR: SE 92123634 EEC Unit: YO34 Comment: A number of aberrations in the recorded level values necessitated estimation of mean maximum and minimum values.	Dale Plantation	26	Yorkshire Water Authority	63.4m	1971-1987	49.47m	47.27m	48.36	48.23	49.91	48.26	50.73	112
SE94005 NGR: SE 96514530 EEC Unit: YO32 Comment: Indicator site.	Dalton Holme	26	Yorkshire Water Authority	33.5m	1889-1987	21.08m	13.98m	14.15	13.21	11.88	15.52	22.99	105
SE97031 NGR: SE 93457079 EEC Unit: YO30 Comment:	Green Lane	26	Yorkshire Water Authority	93.0m	1971-1987	69.57m	57.61m	57.60	58.72	57.99	59.37	74.45	126
SP90026 NGR: SP 94700875 EEC Unit: TH17 Comment:	Champneys	39	Thames Water Authority	186.4m	1962-1987	132.49m	123.62m	126.10	126.58	123.63	125.42	134.96	108
SP91059 NGR: SP 93801570 EEC Unit: AN09 Comment: A shaft of 4.6m depth; levels fluctuate irregularly and probably controlled by rainfall. Data useless for estimating infiltration.	Pitstone Green Farm	39	Anglian Water Authority	111.3m	1970-1987	109.70m	109.29m	0.41m					
ST30007 NGR: ST 37630667 EEC Unit: SW01 Comment: Possible depression due to pumping reducing apparent recharge in 1984-85.	Lime Kiln Way	45	South West Water Authority	130.2m	1969-1987	125.72m	124.80m	0.92m			125.11	125.41	32
SU01005B NGR: SU 01601960 EEC Unit: WE04 Comment:	West Woodyates Manor	43	Wessex Water Authority	110.9m	1942-1987	98.68m	72.01m	26.67m			72.48	102.21	111
SU04002 NGR: SU 03104883 EEC Unit: WE02 Comment: Peak level for 1982-83 estimated due to missing levels.	Tilshead.	43	Wessex Water Authority	99.9m	1966-1987	97.22m	80.56m	16.66m			81.06	97.78	100
SU17057 NGR: SU 16557174 EEC Unit: TH12 Comment: Indicator site.	Rockley	39	Thames Water Authority	146.4m	1933-1987	140.81m	129.90m	10.91m			129.88	140.50	97
SU32003 NGR: SU 38162745 EEC Unit: SO33 Comment: Absent data in 1983-84, 1984-85 may have caused underestimate of percentage annual fluctuations for these years.	Baileys Down Farm	42	Southern Water Authority	88.6m	1964-1987	48.35m	35.34m	13.01m			37.20	47.09	76
SU35014 NGR: SU 33185647 EEC Unit: SO34 Comment:	Woodside	42	Southern Water Authority	135.1m	1959-1987	112.07m	99.63m	12.44m			97.99	114.01	129
SU51010 NGR: SU 58771654 EEC Unit: SO30 Comment: Peak level for 1981-82 estimated.	Hill Place Farm	42	Southern Water Authority	80.8m	1965-1987	44.45m	41.40m	3.05m			42.09	43.81	56
SU53094 NGR: SU 55893497 EEC Unit: SO31 Comment: Mean maximum and minimum levels defined. Data for 1980-81 suspect and omitted.	Abbotstone	42	Southern Water Authority	94.0m	1976-1987	67.84m	66.54m	1.20m			65.43	66.69	105
SU57159 NGR: SU 56287530 EEC Unit: TH13 Comment: No levels taken 1984.	Calversleys Farm	39	Thames Water Authority	122.3m	1974-1987	74.02m	67.85m	6.17m			68.50	73.07	74

			Period	Trough level (m)	Peak level (m)	Fluctuations as a % of the mean range
TF72011	Off Farm, Little Massingham	H.A.: 33				
NGR: TF 77102330		M.A.: Anglian Water Authority	Period: 1971-1987	1980-81	29.76	38.58
EEC Unit: AN18	Level: 83.8m		Mean max. level: 35.39m	1981-82		110
Comment: Essentially no data from 1981 to end 1982.			Mean min. level: 29.16m	1982-83		
			Mean ann. range: 6.23m	1983-84	27.72	33.02
				1984-85	28.12	34.53
						85
						103
TF80033	Houghton Common	H.A.: 33				
NGR: TF 87300526		M.A.: Anglian Water Authority	Period: 1971-1987	1980-81	32.70	37.27
EEC Unit: AN15	Level: 70.1m		Mean max. level: 36.71m	1981-82	34.34	36.45
Comment: Long term record lacks continuous data; mean annual range probably too great. Readings for 1981-82 doubtful.			Mean min. level: 33.55m	1982-83	34.15	37.00
			Mean ann. range: 3.16m	1983-84	34.25	36.52
				1984-85	34.09	35.99
						60
TF94001	Cuckoo Lodge	H.A.: 34				
NGR: TF 91604135		M.A.: Anglian Water Authority	Period: 1952-1986	1980-81	10.18	14.33
EEC Unit: AN21	Level: 47.1m		Mean max. level: 11.64m	1981-82	10.09	10.09
Comment: Levels for 1981-82 suspect and omitted.			Mean min. level: 9.37m	1982-83	9.06	11.93
			Mean ann. range: 2.27m	1983-84	9.76	11.83
				1984-85	10.37	12.21
						182
						127
						91
						107
TG00092	High Elm Farm	H.A.: 33				
NGR: TG 04400020		M.A.: Anglian Water Authority	Period: 1971-1987	1980-81	46.97	55.85
EEC Unit: AN30	Level: 59.9m		Mean max. level: 51.86m	1981-82	47.19	52.05
Comment: Peak levels doubtful for 1980-81 and for 1984-85.			Mean min. level: 46.85m	1982-83	46.61	51.58
			Mean ann. range: 5.01m	1983-84	46.98	52.84
				1984-85	47.57	55.22
						177
						97
						99
						117
						153
TG03025B	Brinton Hall	H.A.: 34				
NGR: TG 03823583		M.A.: Anglian Water Authority	Period: 1952-1986	1980-81	42.19	43.51
EEC Unit: AN22	Level: 43.2m		Mean max. level: 43.07m	1981-82	42.17	42.17
Comment: Insufficient data to determine peak level in 1981-82. Data for 1983-84 probably affected by pumping.			Mean min. level: 41.89m	1982-83	42.10	43.07
			Mean ann. range: 1.18m	1983-84	41.17	42.01
				1984-85	41.52	42.09
						82
						71
						48
TG11005	The Spinney, Costessey	H.A.: 34				
NGR: TG 16911101		M.A.: Anglian Water Authority	Period: 1952-1987	1980-81	9.02	10.76
EEC Unit: AN29	Level: 17.9m		Mean max. level: 10.01m	1981-82		
Comment: Data for 1981-82 and 1984-85 doubtful and omitted; probably affected by pumping.			Mean min. level: 8.87m	1982-83	8.98	10.06
			Mean ann. range: 1.14m	1983-84	9.00	10.05
				1984-85		
						152
						95
						92
TG12007	Heydon Pumping Station	H.A.: 34				
NGR: TG 11262722		M.A.: Anglian Water Authority	Period: 1974-1986	1980-81	41.21	42.36
EEC Unit: AN24	Level: 45.0m		Mean max. level: 41.92m	1981-82	41.18	41.69
Comment: Data possibly affected by pumping; mean annual range probably too great.			Mean min. level: 41.11m	1982-83	41.17	42.23
			Mean ann. range: 0.81m	1983-84	41.37	41.82
				1984-85	41.43	41.98
						142
						63
						131
						56
						68
TG21009	Frettenham Depot	H.A.: 34				
NGR: TG 24001657		M.A.: Anglian Water Authority	Period: 1952-1986	1980-81	5.18	6.63
EEC Unit: AN25	Level: 7.3m		Mean max. level: 6.19m	1981-82	5.34	5.74
Comment: Data for 1981-82 doubtful, but no estimates possible; possibly affected by pumping.			Mean min. level: 5.02m	1982-83	4.93	6.15
			Mean ann. range: 1.17m	1983-84	4.62	5.62
				1984-85	4.42	5.56
						124
						34
						104
						86
						98
TG21010	Grange Farm	H.A.: 34				
NGR: TG 26991140		M.A.: Anglian Water Authority	Period: 1952-1987	1980-81	18.07	18.29
EEC Unit: AN32	Level: 35.0m		Mean max. level: 18.56m	1981-82	18.22	18.37
Comment: Well hydrograph shows frequent and rather irregular fluctuations. Regional fall in levels in late 1979. Mean annual range estimated to match neighbouring sites.			Mean min. level: 18.36m	1982-83	18.04	18.29
			Mean ann. range: 0.20m	1983-84	18.19	18.28
				1984-85	18.08	18.18
						110
						75
						120
						45
						50
TG23021	Melbourne House	H.A.: 34				
NGR: TG 29323101		M.A.: Anglian Water Authority	Period: 1974-1987	1980-81	17.57	18.12
EEC Unit: AN26	Level: 21.8m		Mean max. level: 18.11m	1981-82	17.62	17.65
Comment: Incomplete data for 1981-82.			Mean min. level: 17.60m	1982-83	17.23	17.80
			Mean ann. range: 0.51m	1983-84	17.37	17.71
				1984-85	17.39	17.76
						109
						6
						113
						67
						73
TL11004	Mackerye End House	H.A.: 38				
NGR: TL 15601555		M.A.: Thames Water Authority	Period: 1963-1987	1980-81	83.29	84.00
EEC Unit: TH01	Level: 121.6m		Mean max. level: 84.10m	1981-82	83.65	84.12
Comment:			Mean min. level: 83.41m	1982-83	83.57	84.54
			Mean ann. range: 0.69m	1983-84	83.72	84.05
				1984-85	83.56	84.23
						102
						68
						140
						48
						96
TL11009	The Holt	H.A.: 38				
NGR: TL 16921965		M.A.: Thames Water Authority	Period: 1964-1987	1980-81	86.97	88.29
EEC Unit: TH02	Level: 140.2m		Mean max. level: 88.53m	1981-82	87.12	88.45
Comment: An apparently unusually low recharge in 1983-84.			Mean min. level: 86.11m	1982-83	86.68	89.95
			Mean ann. range: 2.42m	1983-84	87.23	87.83
				1984-85	86.99	89.07
						54
						55
						135
						25
						86
TL13024	West Hitchin	H.A.: 33				
NGR: TL 12003026		M.A.: Anglian Water Authority	Period: 1970-1987	1980-81	74.39	75.14
EEC Unit: AN10	Level: 82.3m		Mean max. level: 75.27m	1981-82	74.14	75.23
Comment: Well hydrograph indicates a number of sharp and irregular fluctuations; mean annual range probably overestimated.			Mean min. level: 73.88m	1982-83	73.89	75.63
			Mean ann. range: 1.39m	1983-84	74.22	74.86
				1984-85	74.03	74.95
						54
						78
						124
						46
						66
TL22010	Box Hall	H.A.: 38				
NGR: TL 29782433		M.A.: Thames Water Authority	Period: 1964-1987	1980-81	72.82	73.08
EEC Unit: TH03	Level: 123.4m		Mean max. level: 73.73m	1981-82	72.12	73.40
Comment: Trough level for 1983-84 estimated.			Mean min. level: 71.81m	1982-83	71.67	74.93
			Mean ann. range: 1.92m	1983-84	72.20	73.12
				1984-85	71.34	73.36
						65
						119
						169
						48
						105
TL33004	Therfield Rectory, Therfield	H.A.: 38				
NGR: TL 33303720		M.A.: Thames Water Authority	Period: 1983-1987	1980-81	77.75	80.80
EEC Unit: TH04	Level: 154.8m		Mean max. level: 82.84m	1981-82	77.33	82.81
Comment: Indicator site.			Mean min. level: 76.31m	1982-83	77.82	89.10
			Mean ann. range: 6.53m	1983-84	79.67	81.45
				1984-85	77.81	84.80
						47
						84
						173
						27
						101
TL42006	Hixham Hall	H.A.: 38				
NGR: TL 45362676		M.A.: Thames Water Authority	Period: 1964-1987	1980-81	72.01	73.30
EEC Unit: TH05	Level: 111.3m		Mean max. level: 74.27m	1981-82	71.58	73.71
Comment:			Mean min. level: 71.65m	1982-83	71.49	75.54
			Mean ann. range: 2.62m	1983-84	72.84	73.94
				1984-85	71.68	73.79
						49
						81
						155
						42
						81

				Period	Trough level (m)	Peak level (m)	Fluctuations as a % of the mean range	
TL42008	Berden Hall	H.A: 38						
NGR: TL 46692955		M.A: Thames Water Authority		Period: 1964-1987	1980-81	69.11	70.60	58
EEC Unit: TH06	Level: 107.9m			Mean max. level: 71.90m	1981-82	69.03	71.40	92
Comment: Trough level for 1984-85 estimated.				Mean min. level: 69.32m	1982-83	69.55	72.93	131
				Mean ann. range: 2.58m	1983-84	70.51	71.99	57
					1984-85	69.70	72.05	75
TL44012	Redlands Hall, Ickleton	H.A: 33						
NGR: TL 45224182		M.A: Anglian Water Authority		Period: 1963-1987	1980-81	38.59	45.24	73
EEC Unit: AN12	Level: 76.2m			Mean max. level: 47.22m	1981-82	38.81	45.93	81
Comment:				Mean min. level: 38.14m	1982-83	37.64	48.89	124
				Mean ann. range: 9.08m	1983-84	39.32	44.61	58
					1984-85	37.33	46.22	98
TL66002	Hall Farm	H.A: 33						
NGR: TL 61916013		M.A: Anglian Water Authority		Period: 1964-1987	1980-81	21.99	28.58	77
EEC Unit: AN16	Level: 70.1m			Mean max. level: 28.39m	1981-82	23.17		
Comment: No data for trough level 1981-82. Trough level for 1982-83 estimated as no data for August to October.				Mean min. level: 19.81m	1982-83	23.48	31.98	99
				Mean ann. range: 8.58m	1983-84	24.04	27.72	43
					1984-85	23.26	29.08	68
TL72054	Rectory Road	H.A: 37						
NGR: TL 79822516		M.A: Anglian Water Authority		Period: 1968-1987	1980-81			
EEC Unit: AN46	Level: 67.1m			Mean max. level: 17.92m	1981-82			
Comment: There appears to have been a regional rise from 1980 to 1984; data for 1984-85 probably realistic.				Mean min. level: 16.01m	1982-83			
				Mean ann. range: 1.91m	1983-84			
					1984-85	24.68	26.44	102
TL84006	Smeetham Hall Cottages	H.A: 36						
NGR: TL 84654106		M.A: Anglian Water Authority		Period: 1963-1987	1980-81	25.95	27.06	80
EEC Unit: AN44	Level: 54.7m			Mean max. level: 27.25m	1981-82	26.19	27.10	66
Comment: Peak value for 1981-82 uncertain but cannot estimate more closely.				Mean min. level: 25.86m	1982-83	25.96	27.70	125
				Mean ann. range: 1.39m	1983-84	26.22	27.67	105
					1984-85	26.06	27.27	87
TL86110	Cattishall Farm	H.A: 33						
NGR: TL 88506470		M.A: Anglian Water Authority		Period: 1969-1987	1980-81	32.05	35.47	125
EEC Unit: AN13	Level: 61.6m			Mean max. level: 35.01m	1981-82	32.83	34.54	62
Comment:				Mean min. level: 32.28m	1982-83	32.47	35.61	115
				Mean ann. range: 2.73m	1983-84	33.42	35.11	62
					1984-85	32.93	34.85	70
TL89037	Grimes Graves	H.A: 33						
NGR: TL 81319001		M.A: Anglian Water Authority		Period: 1971-1987	1980-81	8.05	12.28	138
EEC Unit: AN15	Level: 17.0m			Mean max. level: 10.78m	1981-82	8.50	10.09	52
Comment: Trough level for 1981-82 estimated.				Mean min. level: 7.72m	1982-83	8.22	11.95	122
				Mean ann. range: 3.06m	1983-84	8.37	11.08	88
					1984-85	8.27	11.19	95
TL92001	Lexden Pumping Station	H.A: 37						
NGR: TL 96572562		M.A: Anglian Water Authority		Period: 1961-1987	1980-81	0.73	3.86	126
EEC Unit: AN45	Level: 15.0m			Mean max. level: 1.17m	1981-82	1.40	4.36	120
Comment: Values affected by pumping, but estimates of mean annual fluctuation may be of the right order.				Mean min. level: -1.30m	1982-83	-0.76	1.53	93
				Mean ann. range: 2.47m	1983-84	-2.84	-0.36	100
					1984-85	-1.94	0.55	101
TM15112	Dial Farm	H.A: 35						
NGR: TM 12015618		M.A: Anglian Water Authority		Period: 1968-1986	1980-81	25.45	25.99	132
EEC Unit: AN43	Level: 64.6m			Mean max. level: 25.91m	1981-82	25.69	25.83	34
Comment: Trough level for 1982-83 estimated.				Mean min. level: 25.50m	1982-83	25.18	26.00	200
				Mean ann. range: 0.41m	1983-84	25.44	25.83	96
					1984-85	25.34	25.61	115
TM18002	Pulham Market	H.A: 34						
NGR: TM 19838600		M.A: Anglian Water Authority		Period: 1952-1986	1980-81			
EEC Unit: AN35	Level: 43.0m			Mean max. level: 35.94m	1981-82	34.61	35.14	89
Comment: Levels appear to have been regionally depressed since early 1975, so mean annual range estimated.				Mean min. level: 35.17m	1982-83	32.24	35.22	127
				Mean ann. range: 0.77m	1983-84	34.38	35.12	96
					1984-85	34.36	35.19	108
TM19002	Hill Farm, Fornsett St Peter	H.A: 34						
NGR: TM 18119272		M.A: Anglian Water Authority		Period: 1952-1985	1980-81	35.96	36.89	116
EEC Unit: AN31	Level: 52.5m			Mean max. level: 36.42m	1981-82	35.99	36.62	79
Comment: A large number of aberrant levels necessitated estimation of mean maximum and minimum levels as well as of peak and trough levels. Site to be replaced.				Mean min. level: 35.62m	1982-83	36.00	36.64	80
				Mean ann. range: 0.80m	1983-84	35.98	36.52	67
					1984-85	35.90	36.68	97
TM26046	Fairfields	H.A: 35						
NGR: TM 24616109		M.A: Anglian Water Authority		Period: 1974-1987	1980-81	22.57	23.73	134
EEC Unit: AN34	Level: 45.0m			Mean max. level: 23.57m	1981-82	22.82	23.58	88
Comment:				Mean min. level: 22.71m	1982-83	22.88	23.74	100
				Mean ann. range: 0.86m	1983-84	22.87	23.62	87
					1984-85	22.97	23.70	85
TM26095	Strawberry Hill	H.A: 35						
NGR: TM 27866397		M.A: Anglian Water Authority		Period: 1974-1986	1980-81	26.68	26.99	93
EEC Unit: AN39	Level: 48.5m			Mean max. level: 27.02m	1981-82	26.77	27.09	96
Comment: Annual fluctuation for 1983-84 probably too great; not possible to estimate alternative.				Mean min. level: 26.69m	1982-83	26.59	26.97	114
				Mean ann. range: 0.33m	1983-84	26.60	27.14	162
					1984-85	26.77	27.03	78
TQ01133	Chantry Post	H.A: 41						
NGR: TQ 08501170		M.A: Southern Water Authority		Period: 1977-1987	1980-81	95.64	106.00	93
EEC Unit: SO24	Level: 166.2m			Mean max. level: 106.40m	1981-82	97.28	107.80	95
Comment: Mean maximum and minimum estimated. Some aberrant levels, all peak levels and the trough level for 1984-85 estimated.				Mean min. level: 95.29m	1982-83	94.20	105.90	105
				Mean ann. range: 11.11m	1983-84	94.66	104.00	84
					1984-85	94.15	106.60	112
TQ21011	Old Rectory, Pyecombe	H.A: 41						
NGR: TQ 28501289		M.A: Southern Water Authority		Period: 1958-1987	1980-81	71.18	74.45	85
EEC Unit: SO23	Level: 106.4m			Mean max. level: 74.94m	1981-82			
Comment: Data for 1981-82 and 1982-83 doubtful and omitted.				Mean min. level: 71.08m	1982-83			
				Mean ann. range: 3.86m	1983-84	71.08	73.08	52
					1984-85	71.06	73.38	60
TQ28119B	National Gallery, Trafalgar Square	H.A: 39						
NGR: TQ 22968051		M.A: Thames Water Authority		Period: 1801-1986	1980-81	-65.80	-65.19	
EEC Unit: TH20	Level: 12.6m			Mean max. level: -72.44m	1981-82	-65.24	-64.21	
Comment: Aquifer confined. No seasonal fluctuations, evidence of slow long term rise in levels following historical decline. No useful mean annual range calculation possible.				Mean min. level: -75.43m	1982-83	-63.90	-63.29	
					1983-84	-63.36	-62.26	
					1984-85	-62.42	-61.60	

			Period	Trough level (m)	Peak level (m)	Fluctuations as a % of the mean range
TQ31050	North Bottom	H.A.: 41				
NGR: TQ 32201180		M.A: Southern Water Authority	Period: 1979-1987	1980-81	68.55	74.35
EEC Unit: SO22	Level: 120.1m		Mean max. level: 80.69m	1981-82		73.04
Comment: Defined maximum and minimum levels. No data for trough level 1981-82. Mean annual range probably overestimated.			Mean min. level: 66.76m	1982-83	66.67	75.55
			Mean ann. range: 13.93m	1983-84	58.59	72.49
				1984-85	66.25	74.83
						62
						100
						62
TQ35005	Rose And Crown Inn, Riddlesdown	H.A.: 39				
NGR: TQ 33635924		M.A: Thames Water Authority	Period: 1876-1987	1980-81	74.16	84.55
EEC Unit: TH22	Level: 88.1m		Mean max. level: 82.48m	1981-82		85.10
Comment: No data for 1981-82, no readings for 1984 or 1985 that are usable.			Mean min. level: 69.95m	1982-83	73.15	85.10
			Mean ann. range: 12.53m	1983-84	75.67	
				1984-85		
						95
TQ50007	The Old Rectory, Folkington	H.A.: 41				
NGR: TQ 55920380		M.A: Southern Water Authority	Period: 1965-1987	1980-81	32.76	36.10
EEC Unit: SO20	Level: 66.0m		Mean max. level: 37.52m	1981-82	32.00	38.05
Comment: Part of record missing, some doubtful values; mean maximum and minimum levels, many of trough and peak levels estimated.			Mean min. level: 32.07m	1982-83	31.95	37.96
			Mean ann. range: 5.45m	1983-84	31.14	37.00
				1984-85	30.71	37.70
						128
TQ56019	West Kingsdown	H.A.: 40				
NGR: TQ 56486124		M.A: Thames Water Authority	Period: 1961-1987	1980-81		
EEC Unit: TH23	Level: 130.0m		Mean max. level: 87.20m	1981-82		
Comment: No data available for 1985. Data for 1980-81 and 1981-82 doubtful.			Mean min. level: 83.64m	1982-83	84.21	87.70
			Mean ann. range: 3.56m	1983-84	84.08	85.93
				1984-85	83.74	
						98
						52
TQ57118	Thurrock A13	H.A.: 37				
NGR: TQ 58807943		M.A: Anglian Water Authority	Period: 1908-1987	1980-81	-2.59	-0.74
EEC Unit: AN48	Level: 21.5m		Mean max. level: -0.61m	1981-82	-1.58	-0.65
Comment: Defined maximum and minimum levels. Possibly affected by dewatering in region.			Mean min. level: -1.77m	1982-83	-1.60	-0.15
			Mean ann. range: 1.16m	1983-84	-1.72	-0.73
				1984-85	-1.24	-0.65
						153
						77
						120
						82
						49
TQ58002B	Bush Farm Pit	H.A.: 37				
NGR: TQ 56228408		M.A: Thames Water Authority	Period: 1967-1987	1980-81	-17.27	-16.04
EEC Unit: TH08	Level: 21.3m		Mean max. level: -17.23m	1981-82	-16.90	-16.50
Comment: Unit entirely confined; replenishment comes from adjacent units.			Mean min. level: -17.79m	1982-83	-17.60	-16.40
			Mean ann. range: 0.56m	1983-84	-16.85	-16.27
				1984-85	-16.60	-16.02
						104
						104
TQ66048	Owletts	H.A.: 40				
NGR: TQ 66496873		M.A: Southern Water Authority	Period: 1968-1987	1980-81	24.89	26.26
EEC Unit: SO01	Level: 92.4m		Mean max. level: 25.43m	1981-82	24.91	25.62
Comment: Indicator site. Well hydrograph indicates virtually no recharge for 1983-84; levels in 1984-85 depressed below mean; possibly pumping effects in play.			Mean min. level: 24.49m	1982-83	24.69	25.64
			Mean ann. range: 0.94m	1983-84	24.97	24.98
				1984-85	24.28	24.64
						146
						76
						101
						1
						60
TQ86055	Stockbury Valley	H.A.: 40				
NGR: TQ 85286185		M.A: Southern Water Authority	Period: 1965-1985	1980-81		
EEC Unit: SO07	Level: 63.2m		Mean max. level: 33.35m	1981-82		
Comment: Data post 1978 virtually non-existent. Previous data irregular. No longer used as an observation site.			Mean min. level: 29.15m	1982-83		
			Mean ann. range: 4.20m	1983-84		
				1984-85		
TQ99011	Burnham-On-Crouch	H.A.: 37				
NGR: TQ 94709710		M.A: Anglian Water Authority	Period: 1975-1987	1980-81	-24.49	-27.67
EEC Unit: AN47	Level: 15.3m		Mean max. level: -28.14m	1981-82	-27.58	-26.64
Comment: Aquifer confined, no significant seasonal variations in water level. Evidence of long term fluctuation - mean annual range certainly too great.			Mean min. level: -29.16m	1982-83	-26.43	-25.60
			Mean ann. range: 1.02m	1983-84	-25.49	-24.65
				1984-85	-24.60	-23.87
						81
						92
						82
						83
						72
TR05006	Step Cottage	H.A.: 40				
NGR: TR 02395995		M.A: Southern Water Authority	Period: 1970-1982	1980-81		
EEC Unit: SO08	Level: 37.8m		Mean max. level: 7.37m	1981-82		
Comment: Levels measured at sparse and irregular intervals from 1977; no data recorded after January 1982. No longer in use.			Mean min. level: 5.16m	1982-83		
			Mean ann. range: 2.21m	1983-84		
				1984-85		
TR14042	Kingsmill Down	H.A.: 40				
NGR: TR 10654395		M.A: Southern Water Authority	Period: 1971-1986	1980-81	90.31	99.86
EEC Unit: SO11	Level: 169.6m		Mean max. level: 101.82m	1981-82	90.40	99.34
Comment: No data available from April 1985 on.			Mean min. level: 90.75m	1982-83	98.68	106.02
			Mean ann. range: 11.07m	1983-84	92.12	97.83
				1984-85		
						86
						81
						148
						52
TR15058	Cotterell Court	H.A.: 40				
NGR: TR 12815148		M.A: Southern Water Authority	Period: 1970-1987	1980-81	43.88	49.25
EEC Unit: SO10	Level: 56.3m		Mean max. level: 51.34m	1981-82	43.32	51.30
Comment: Peak value for 1981-82 estimated. Insufficient data for 1983-84 and 1984-85.			Mean min. level: 44.03m	1982-83	41.34	53.54
			Mean ann. range: 7.31m	1983-84		
				1984-85		
						73
						109
						164
TR34081	Church Farm	H.A.: 40				
NGR: TR 31734725		M.A: Southern Water Authority	Period: 1971-1986	1980-81	18.30	19.05
EEC Unit: SO14	Level: 81.1m		Mean max. level: 20.94m	1981-82	18.20	19.50
Comment: Regional fall in water level apparent over last 10 years; well frequently goes dry. All figures above estimated over period 1977 to 1985.			Mean min. level: 19.52m	1982-83	18.35	20.45
			Mean ann. range: 1.42m	1983-84	18.45	19.70
				1984-85	18.00	19.20
						89
						85
TR36062	Alland Grange	H.A.: 40				
NGR: TR 32086634		M.A: Southern Water Authority	Period: 1969-1987	1980-81	2.74	3.21
EEC Unit: SO13	Level: 40.9m		Mean max. level: 4.80m	1981-82	2.61	4.07
Comment: Missing data make 1983-84 figures doubtful. Levels in 1980 and 1981 seem unusually low.			Mean min. level: 2.92m	1982-83	2.16	4.91
			Mean ann. range: 1.88m	1983-84	3.25	3.64
				1984-85	2.53	4.35
						25
						78
						146
						21
						97
TV59007C	West Dean No.3	H.A.: 41				
NGR: TV 52909920		M.A: Southern Water Authority	Period: 1940-1987	1980-81	1.61	2.53
EEC Unit: SO19	Level: 12.9m		Mean max. level: 2.86m	1981-82	1.50	3.39
Comment:			Mean min. level: 1.32m	1982-83	1.32	2.93
			Mean ann. range: 1.54m	1983-84	1.35	2.26
				1984-85	1.26	2.64
						60
						123
						105
						59
						90

				Period	Trough level (m)	Peak level (m)	Fluctuations as a % of the mean range
Aquifer: Lower Greensand							
SU72047	West Mark Farm	H.A: 41					
NGR: SU 76972414		M.A: Southern Water Authority	Period: 1970-1985	1980-81	53.08	53.85	93
EEC Unit: SO26	Level: 58.0m		Mean max. level: 53.85m	1981-82	53.40	53.75	42
Comment: Doubtful values for cycle 1981-82. Site now disused, last measurement June 1985.				1982-83	53.05	54.05	120
			Mean min. level: 53.02m	1983-84	53.10	53.88	84
			Mean ann. range: 0.83m	1984-85	52.85	53.82	117
SU84008A	Tilford Pumping Station	H.A: 39					
NGR: SU 87164087		M.A: Thames Water Authority	Period: 1971-1987	1980-81	56.21	56.59	67
EEC Unit: TH21	Level: 67.9m		Mean max. level: 56.87m	1981-82	55.99	56.35	63
Comment: Mean maximum and minimum levels estimated. Declining levels since 1979.				1982-83	55.61	56.55	165
			Mean min. level: 56.30m	1983-84	55.41	55.96	96
			Mean ann. range: 0.57m	1984-85	55.34	55.89	96
TL45019	River Farm	H.A: 33					
NGR: TL 41105204		M.A: Anglian Water Authority	Period: 1973-1987	1980-81	8.77	9.39	94
EEC Unit: AN12	Level: 13.6m		Mean max. level: 9.42m	1981-82	8.84	9.71	132
Comment: Extraneous effects invalidate pre-1980 data. Mean maximum and minimum estimated from data 1980 on.				1982-83	9.05	9.82	117
			Mean min. level: 8.76m	1983-84	9.12	9.58	70
			Mean ann. range: 0.66m	1984-85	8.50	8.96	70
TQ41082	Lower Barn Cottage	H.A: 41					
NGR: TQ 43701320		M.A: Southern Water Authority	Period: 1975-1986	1980-81	10.95	11.43	73
EEC Unit: SO21	Level: 18.0m		Mean max. level: 11.44m	1981-82	11.07	11.53	70
Comment:				1982-83	10.90	11.66	115
			Mean min. level: 10.78m	1983-84	10.86	11.35	74
			Mean ann. range: 0.66m	1984-85	10.70	11.48	118
TQ75086	Kiln Barn Farm Ditton	H.A: 40					
NGR: TQ 71355682		M.A: Southern Water Authority	Period: 1973-1981	1980-81	40.25	40.56	124
EEC Unit: SO01	Level: 41.7m		Mean max. level: 40.63m	1981-82			
Comment: Much of hydrograph anomalous, so mean annual range estimated. Readings discontinued in 1981; site to be replaced.				1982-83			
			Mean min. level: 40.38m	1983-84			
			Mean ann. range: 0.25m	1984-85			
TR13021	Ashley House	H.A: 40					
NGR: TR 11323881		M.A: Southern Water Authority	Period: 1972-1987	1980-81	73.63	75.84	100
EEC Unit: SO11	Level: 82.1m		Mean max. level: 75.57m	1981-82	73.47	74.56	49
Comment: Hydrograph generally anomalous; mean maximum and minimum values estimated. Single annual readings only 1984 onwards.				1982-83	72.86	76.30	158
			Mean min. level: 73.35m	1983-84	73.09		
			Mean ann. range: 2.21m	1984-85			
TR23032	Morehall Depot	H.A: 40					
NGR: TR 20753650		M.A: Southern Water Authority	Period: 1972-1987	1980-81			
EEC Unit: SO15	Level: 51.2m		Mean max. level: 40.48m	1981-82			
Comment: Hydrograph anomalous. Mean maximum and minimum values estimated. Insufficient data to calculate percentage annual fluctuations 1980 to 1985.				1982-83			
			Mean min. level: 39.50m	1983-84			
			Mean ann. range: 0.49m	1984-85			
Aquifer: Hastings Beds							
TQ22001	The Bungalow, Lower Beeding	H.A: 41					
NGR: TQ 23482770		M.A: Southern Water Authority	Period: 1964-1987	1980-81	88.81	88.86	
EEC Unit: SO25	Level: 89.8m		Mean max. level: 88.86m	1981-82		88.14	
Comment: Readings taken only at 6-month intervals and interpretation doubtful. Trough value for 1982 not available. Percentage annual fluctuations not meaningful and omitted.				1982-83	87.64	89.13	
			Mean min. level: 87.66m	1983-84	87.05	88.86	
			Mean ann. range: 1.20m	1984-85	87.19	88.76	
TQ32019	Horsted Keynes	H.A: 41					
NGR: TQ 37602890		M.A: Southern Water Authority	Period: 1968-1986	1980-81		74.34	
EEC Unit: SO21	Level: 74.6m		Mean max. level: 73.74m	1981-82	69.79	73.76	94
Comment: Data not available late 1980. Mean annual range may be underestimated.				1982-83	68.87	74.07	124
			Mean min. level: 69.54m	1983-84	69.00	73.48	107
			Mean ann. range: 4.20m	1984-85	68.45	74.12	135
TQ43016	Garde Wych Cross	H.A: 40					
NGR: TQ 42453145		M.A: Southern Water Authority	Period: 1973-1983	1980-81	169.23	174.76	84
EEC Unit: SO04	Level: 184.7m		Mean max. level: 175.12m	1981-82	168.47	174.99	99
Comment: Not in use from 1983 onwards.				1982-83	167.94		
			Mean min. level: 168.51m	1983-84			
			Mean ann. range: 6.81m	1984-85			
TQ61044	Dallington Herrings Farm	H.A: 41					
NGR: TQ 66581803		M.A: Southern Water Authority	Period: 1984-1987	1980-81			
EEC Unit: SO18	Level: 119.5m		Mean max. level: 119.05m	1981-82			
Comment: In years prior to 1983, only 4 to 5 readings per annum. Mean maximum and minimum levels estimated. Peak level for 1984-85 estimated.				1982-83			
			Mean min. level: 115.05m	1983-84	115.39	118.72	83
			Mean ann. range: 4.00m	1984-85	114.77	118.17	101
TQ82089	Rose Lodge	H.A: 40					
NGR: TQ 62822348		M.A: Southern Water Authority	Period: 1973-1977	1980-81			
EEC Unit: SO17	Level: 91.0m			1981-82			
Comment: Data available only to 1977; site to be replaced by water authority. No analysis made of data.				1982-83			
				1983-84			
				1984-85			
TQ71123	Red House	H.A: 40					
NGR: TQ 79691659		M.A: Southern Water Authority	Period: 1974-1983	1980-81	25.76	29.43	91
EEC Unit: SO16	Level: 40.0m		Mean max. level: 28.58m	1981-82	25.08	28.15	78
Comment: Only 4 readings annually before 1977. Mean maximum and minimum values estimated. No data recorded after mid-1983. To be replaced.				1982-83	23.53	28.26	117
			Mean min. level: 24.55m	1983-84			
			Mean ann. range: 4.03m	1984-85			

Aquifer: Permo-Triassic Sandstone

				Period	Trough level (m)	Peak level (m)	Fluctuations as a % of the mean range
IJ26001	Dunmurry	H.A: 205					
NGR: IJ 29106940		M.A: Geological Survey Of (NI)	Period: 1985-1987	1980-81			
EEC Unit: NI06	Level: 32.0m			1981-82			
Comment: Insufficient data for analysis.				1982-83			
				1983-84			
				1984-85		28.44	
NX97001	Redbank	H.A: 79					
NGR: NX 96677432		M.A: Dumfries And Galloway	Period: 1981-1987	1980-81			
EEC Unit: SC14	Level: 10.0m			1981-82	4.43	5.52	94
Comment: Indicator well. Values estimated from hydrograph. Well possibly affected by barometric fluctuations.				1982-83	4.28	5.90	140
				1983-84	4.40	5.21	70
				1984-85	4.00	5.08	93
NY00328	Brownbank Layby (West Cumbria Ob 15A)	H.A: 74					
NGR: NY 05110247		M.A: North West Water Authority	Period: 1974-1985	1980-81	24.69	25.22	118
EEC Unit: NW17	Level: 30.5m			1981-82	24.81	25.33	116
Comment: Spasmodic readings before 1978. All values estimated from hydrograph for 1978-79 onwards.				1982-83	24.74	25.28	120
				1983-84	24.72	24.97	56
				1984-85	24.26	24.75	109
NY45016	Corby Hill	H.A: 76					
NGR: NY 49475667		M.A: North West Water Authority	Period: 1977-1985	1980-81	49.78	50.76	136
EEC Unit: NW20	Level: 51.5m			1981-82	50.04	50.69	90
Comment: Data unusable pre-1980. Mean maximum and minimum levels estimated. Peak and trough values taken from well hydrograph.				1982-83	49.82	50.75	129
				1983-84	49.92	50.34	58
				1984-85	49.75	50.37	86
NY63002	Skirwith	H.A: 76					
NGR: NY 61303250		M.A: North West Water Authority	Period: 1978-1988	1980-81	130.08	130.85	86
EEC Unit: NW20	Level: 133.2m			1981-82	130.00	130.92	103
Comment: Indicator well. Mean maximum and minimum levels estimated.				1982-83	129.78	130.85	120
				1983-84	129.95	130.58	71
				1984-85	129.72	130.44	81
NZ41034	Northern Dairies	H.A: 25					
NGR: NZ 48611835		M.A: Northumbrian Water Authority	Period: 1974-1987	1980-81	-1.39	-0.90	109
EEC Unit: NR10	Level: 9.1m			1981-82	-1.34	-1.00	76
Comment: Long term variations in water levels. Hydrograph irregular. All values estimated from period 1980 to 1985.				1982-83	-0.60	-0.03	127
				1983-84	-0.58	-0.18	89
				1984-85	-0.44	0.00	98
SD27008	Furness Abbey	H.A: 74					
NGR: SD 21727171		M.A: North West Water Authority	Period: 1972-1985	1980-81	10.52	14.11	118
EEC Unit: NW16	Level: 20.2m			1981-82	10.87	13.51	85
Comment:				1982-83	10.52	13.37	110
				1983-84	10.50	13.75	92
				1984-85	8.91	12.26	108
SD41032	Yew Tree Farm	H.A: 70					
NGR: SD 44001164		M.A: North West Water Authority	Period: 1972-1985	1980-81	13.44	13.86	94
EEC Unit: NW10	Level: 23.4m			1981-82	13.58	14.00	94
Comment: Mean maximum and minimum levels estimated. Peak and trough levels taken from well hydrograph.				1982-83	13.45	13.88	96
				1983-84	13.25	13.79	121
				1984-85	13.24	13.68	99
SD44015	Moss Edge Farm	H.A: 72					
NGR: SD 43964928		M.A: North West Water Authority	Period: 1961-1985	1980-81	4.46	4.99	85
EEC Unit: NW13	Level: 5.2m			1981-82			
Comment: Long term fluctuation results in mean annual range being too large. Means estimated over years 1978 to 1985. Insufficient data for cycle 1981-82.				1982-83	4.31	4.99	110
				1983-84	3.99	4.61	100
				1984-85	3.67	4.38	114
SE36047	Kelly's Cafe	H.A: 27					
NGR: SE 39456575		M.A: Yorkshire Water Authority	Period: 1981-1988	1980-81		20.57	
EEC Unit: YO21	Level: 24.8m			1981-82	20.13	20.51	87
Comment: Mean maximum and minimum levels estimated. Trough level for 1982-83 estimated.				1982-83	20.11	20.72	140
				1983-84	20.21	20.58	85
				1984-85	20.02	20.33	71
SE39020B	Scruton Village	H.A: 27					
NGR: SE 30049244		M.A: Yorkshire Water Authority	Period: 1969-1988	1980-81	28.14	28.36	63
EEC Unit: YO23	Level: 35.0m			1981-82	27.96	28.17	80
Comment: Long term fluctuations produced overestimate of mean annual range. Mean maximum and minimum values estimated.				1982-83	27.86	28.40	154
				1983-84	27.91	28.17	74
				1984-85	27.82	28.06	69
SE44004B	Healaugh Pumping Station	H.A: 27					
NGR: SE 48604850		M.A: Yorkshire Water Authority	Period: 1968-1981	1980-81	14.08	14.50	127
EEC Unit: YO20	Level: 27.0m			1981-82	14.21		
Comment: Mean maximum and minimum levels estimated since many readings affected by pumping. No levels recorded after 1981; site to be replaced.				1982-83			
				1983-84			
				1984-85			
SE45003	Cattal Maltings	H.A: 27					
NGR: SE 44705580		M.A: Yorkshire Water Authority	Period: 1969-1986	1980-81	25.96	27.28	180
EEC Unit: YO21	Level: 30.0m			1981-82	26.12	28.81	94
Comment:				1982-83	26.33	27.22	121
				1983-84	26.65	27.04	53
				1984-85	26.23	28.67	60
SE52004	Southfield Lane	H.A: 27					
NGR: SE 54732363		M.A: Yorkshire Water Authority	Period: 1955-1986	1980-81	8.85	10.85	
EEC Unit: YO18	Level: 18.1m			1981-82	9.40	9.96	
Comment: Readings of water level too greatly affected by pumping for the mean annual range to be realistic.				1982-83	9.66	9.65	
				1983-84	9.81	10.29	
				1984-85	9.46	9.51	
SE55004	Clifton Hospital, Clifton	H.A: 27					
NGR: SE 58295383		M.A: Yorkshire Water Authority	Period: 1967-1986	1980-81	7.54	8.54	85
EEC Unit: YO24	Level: 12.3m			1981-82	7.49	8.19	59
Comment: Data spasmodically recorded; insufficient for analysis post-1982. Affected by pumping. Mean annual range probably overestimated.				1982-83	7.39		
				1983-84			
				1984-85			

		Period	Trough level (m)	Peak level (m)	Fluctuations as a % of the mean range
SE60076	Woodhouse Grange	H.A: 28			
NGR: SE 67840709	M.A: Severn Trent Water Authority	Period: 1980-1985	1980-81 0.70	1.28	116
EEC Unit: ST03	Level: 4.4m	Mean max. level: 1.01m	1981-82 0.67	1.06	78
Comment: Indicator well. Mean maximum and minimum levels estimated.		Mean min. level: 0.51m	1982-83 0.50	1.19	138
		Mean ann. range: 0.50m	1983-84 0.48	1.00	104
			1984-85 0.40	0.70	60
SE64001	Wheldrake Station	H.A: 27			
NGR: SE 67514463	M.A: Yorkshire Water Authority	Period: 1971-1986	1980-81 5.34	5.91	84
EEC Unit: YO28	Level: 12.0m	Mean max. level: 5.89m	1981-82		
Comment: Data generally too spasmodic to permit effective analysis. Mean annual range may be overestimated.		Mean min. level: 5.21m	1982-83		
		Mean ann. range: 0.68m	1983-84		
			1984-85		
SE72003B	Rawcliffe Bridge	H.A: 27			
NGR: SE 70472149	M.A: Yorkshire Water Authority	Period: 1971-1986	1980-81		
EEC Unit: YO09	Level: 3.0m	Mean max. level: 0.30m	1981-82		
Comment: Site probably affected by pumping; well hydrograph irregular. Annual fluctuations for 1983-84 and 1984-85 may be of the right order.		Mean min. level: -1.03m	1982-83		
		Mean ann. range: 1.33m	1983-84 -2.47	-1.14	100
			1984-85 -2.71	-1.38	100
SJ15015	Llanfair Dc	H.A: 66			
NGR: SJ 13745556	M.A: Welsh Water Authority	Period: 1972-1986	1980-81 79.78	80.55	105
EEC Unit: WL13	Level: 82.0m	Mean max. level: 80.25m	1981-82 79.67	80.63	131
Comment:		Mean min. level: 79.51m	1982-83 79.72	80.34	85
		Mean ann. range: 0.74m	1983-84 79.89	80.57	93
			1984-85 79.62	80.15	72
SJ33038	Hordley Wharf	H.A: 28			
NGR: SJ 38093112	M.A: Severn Trent Water Authority	Period: 1975-1986	1980-81 79.06	79.39	70
EEC Unit: ST08	Level: 80.5m	Mean max. level: 79.12m	1981-82 78.67	79.34	143
Comment: Probably affected by pumping. Mean maximum and minimum values estimated. No usable data for 1984-85 cycle.		Mean min. level: 78.65m	1982-83 78.95	79.33	81
		Mean ann. range: 0.47m	1983-84 79.00	79.23	49
			1984-85		
SJ33039	Eastwick Farm	H.A: 67			
NGR: SJ 38143831	M.A: Welsh Water Authority	Period: 1974-1986	1980-81 68.20	68.49	138
EEC Unit: WL14	Level: 73.0m	Mean max. level: 68.41m	1981-82 68.24	68.44	95
Comment: Indicator well. Slow fall through period of record. Well hydrograph irregular, probably due to atmospheric pressure variations.		Mean min. level: 68.20m	1982-83 68.38	68.49	95
		Mean ann. range: 0.21m	1983-84 68.26	68.46	95
			1984-85 67.96	68.20	114
SJ37002H	Bowaters No.6	H.A: 68			
NGR: SJ 38057676	M.A: North West Water Authority	Period: 1971-1985	1980-81		
EEC Unit: NW05	Level: 17.2m		1981-82		
Comment: Levels drastically affected by pumping. Impossible to analyse data.			1982-83		
			1983-84		
			1984-85		
SJ56045E	Ashton No.4	H.A: 68			
NGR: SJ 50426953	M.A: North West Water Authority	Period: 1970-1985	1980-81		
EEC Unit: NW04	Level: 40.2m		1981-82		
Comment: Few data recorded in 1984 and 1985. Data for previous years apparently affected by pumping. Analysis not possible.			1982-83		
			1983-84		
			1984-85		
SJ69138	Kenyon Lane	H.A: 69			
NGR: SJ 63119620	M.A: North West Water Authority	Period: 1968-1985	1980-81		
EEC Unit: NW09	Level: 40.2m		1981-82		
Comment: This site shows a steady decline in levels from 1971 to 1985; no pattern of seasonal fluctuation is discernible. Not possible to analyse data.			1982-83		
			1983-84		
			1984-85		
SJ83001A	Stone	H.A: 28			
NGR: SJ 89893474	M.A: Severn Trent Water Authority	Period: 1974-1986	1980-81 90.13	91.66	162
EEC Unit: ST09	Level: 102.8m	Mean max. level: 90.77m	1981-82 90.29	91.05	80
Comment:		Mean min. level: 89.82m	1982-83 90.17	91.06	84
		Mean ann. range: 0.95m	1983-84 89.86	90.87	107
			1984-85 89.91	90.33	44
SJ87032	Dale Brow	H.A: 68			
NGR: SJ 89697598	M.A: North West Water Authority	Period: 1973-1987	1980-81 97.79	98.54	123
EEC Unit: NW08	Level: 138.4m	Mean max. level: 98.52m	1981-82 98.40	98.72	52
Comment: Indicator well. Well hydrograph irregular; mean maximum and minimum values estimated. Missing data prevent any analysis for 1983-84 and 1984-85.		Mean min. level: 97.86m	1982-83 97.94	98.80	141
		Mean ann. range: 0.64m	1983-84		
			1984-85		
SJ88093	Brunwood Hall	H.A: 69			
NGR: SJ 86118645	M.A: North West Water Authority	Period: 1972-1985	1980-81 48.10	48.76	
EEC Unit: NW08	Level: 62.6m		1981-82 48.20	48.51	
Comment: Well hydrograph very irregular and suggests levels influenced by pumping. Not possible to estimate mean maximum and minimum levels.			1982-83 48.02	48.44	
			1983-84 48.17	48.45	
			1984-85 48.20	49.38	
SJ96041	Rushton Spencer No.1	H.A: 68			
NGR: SJ 93106301	M.A: North West Water Authority	Period: 1976-1985	1980-81 128.10	136.03	
EEC Unit: NW02	Level: 147.0m		1981-82 133.10	138.30	
Comment: Levels affected by pumping; not possible to estimate mean minimum and maximum levels.			1982-83 122.40	130.30	
			1983-84 123.40	131.00	
			1984-85 122.10	127.50	
SK00041	Nuttalls Farm	H.A: 28			
NGR: SK 06700120	M.A: Severn Trent Water Authority	Period: 1974-1986	1980-81 129.48	130.55	141
EEC Unit: ST10	Level: 141.8m	Mean max. level: 129.93m	1981-82 130.23	130.50	36
Comment: Values estimated. No apparent replenishment in 1983-84.		Mean min. level: 129.17m	1982-83 130.10	131.47	180
		Mean ann. range: 0.76m	1983-84		
			1984-85 129.44	129.84	53
SK21111	Grangewood	H.A: 28			
NGR: SK 27311419	M.A: Severn Trent Water Authority	Period: 1967-1986	1980-81 90.43	92.27	119
EEC Unit: ST08	Level: 102.8m	Mean max. level: 91.04m	1981-82 90.90	91.94	67
Comment: The annual fluctuations for 1983-84 and 1984-85 are unexpectedly low.		Mean min. level: 89.50m	1982-83 90.70	92.31	104
		Mean ann. range: 1.54m	1983-84 90.65	90.95	19
			1984-85 89.81	90.88	69
SK24022	Burtonshuts Farm	H.A: 28			
NGR: SK 25394431	M.A: Severn Trent Water Authority	Period: 1972-1986	1980-81 137.16	137.98	100
EEC Unit: ST02	Level: 154.8m	Mean max. level: 137.24m	1981-82 137.17	137.98	100
Comment: Annual values estimated. Zero recharge indicated for 1984-85.		Mean min. level: 136.42m	1982-83 137.41	137.74	40
		Mean ann. range: 0.82m	1983-84 136.09	137.63	188
			1984-85		

				Period	Trough level (m)	Peak level (m)	Fluctuations as a % of the mean range	
SK56053	Pearfield Lane	H.A: 28						
NGR: SK 56326440		M.A: Severn Trent Water Authority		Period: 1969-1986	1980-81			
EEC Unit: ST05	Level: 112.9m			Mean max. level: 79.95m	1981-82			
Comment: Not possible to estimate annual values.				Mean min. level: 78.91m	1982-83			
				Mean ann. range: 1.04m	1983-84			
					1984-85			
SK68021	Crossley Hill Wood	H.A: 28						
NGR: SK 61008374		M.A: Severn Trent Water Authority		Period: 1969-1986	1980-81			
EEC Unit: ST04	Level: 52.3m			Mean max. level: 27.12m	1981-82			
Comment: Not possible to estimate annual values.				Mean min. level: 26.69m	1982-83			
				Mean ann. range: 0.43m	1983-84			
					1984-85			
SK73050	Woodland Farm	H.A: 28						
NGR: SK 76933228		M.A: Severn Trent Water Authority		Period: 1980-1986	1980-81	15.48	15.83	87
EEC Unit: ST06	Level: 56.7m			Mean max. level: 15.53m	1981-82	14.96	15.54	145
Comment: Long term fluctuation, probably due to pumping. Maximum, minimum levels and all data estimated from hydrograph.				Mean min. level: 15.13m	1982-83	14.75	15.19	110
				Mean ann. range: 0.40m	1983-84	14.18	14.48	70
					1984-85	13.96	14.31	87
SO71018	Stores Cottage	H.A: 54						
NGR: SO 71701970		M.A: Severn Trent Water Authority		Period: 1973-1986	1980-81	61.64	65.72	112
EEC Unit: ST16	Level: 66.4m			Mean max. level: 65.37m	1981-82	62.13	65.41	90
Comment:				Mean min. level: 61.72m	1982-83	61.80	65.58	104
				Mean ann. range: 3.65m	1983-84	61.93	64.79	78
					1984-85	61.38	65.15	103
SO87028	Hillfields	H.A: 54						
NGR: SO 81607970		M.A: Severn Trent Water Authority		Period: 1961-1986	1980-81	73.28	74.05	107
EEC Unit: ST14	Level: 97.6m			Mean max. level: 73.81m	1981-82	73.56	74.25	96
Comment: Mean maximum and minimum levels estimated over last 6 years of record. This is a 'lag well' with trough levels reached in the spring rather than the autumn.				Mean min. level: 73.09m	1982-83	73.31	73.94	87
				Mean ann. range: 0.72m	1983-84	73.25	73.56	43
					1984-85	73.18	73.97	110
ST12048	Milverton Bypass	H.A: 52						
NGR: ST 11102700		M.A: Wessex Water Authority		Period: 1971-1987	1980-81			
EEC Unit: WE06	Level: 72.4m			Mean max. level: 83.99m	1981-82			
Comment: No level readings 1980-85 but monitoring has recommenced.				Mean min. level: 78.11m	1982-83			
				Mean ann. range: 5.88m	1983-84			
					1984-85			
SX99037B	Bussels No.7A	H.A: 45						
NGR: SX 95289872		M.A: South West Water Authority		Period: 1971-1987	1980-81	23.50	24.21	61
EEC Unit: SW01	Level: 26.1m			Mean max. level: 24.60m	1981-82	23.59	25.04	124
Comment: Indicator site.				Mean min. level: 23.43m	1982-83	23.61	24.54	79
				Mean ann. range: 1.17m	1983-84	23.45	24.59	97
					1984-85	23.29	24.23	80
SY09021A	Heathlands	H.A: 45						
NGR: SY 06659235		M.A: South West Water Authority		Period: 1968-1986	1980-81			
EEC Unit: SW01	Level: 102.8m			Mean max. level: 93.03m	1981-82			
Comment: No access available to site 1981-1983.				Mean min. level: 91.65m	1982-83			
				Mean ann. range: 1.38m	1983-84		91.99	
					1984-85	91.33	92.77	105

Aquifer: Magnesian Limestone

NZ22022	Rushyford North East, Great Chilton	H.A: 25						
NGR: NZ 28752896		M.A: Northumbrian Water Authority		Period: 1967-1987	1980-81	75.80	76.26	64
EEC Unit: NR10	Level: 92.5m			Mean max. level: 76.27m	1981-82	75.83	76.32	68
Comment: Indicator site. Regional rise due to cessation of pumping; pre-1980 data discarded. Mean maximum and minimum levels estimated.				Mean min. level: 75.55m	1982-83	75.26	76.25	137
				Mean ann. range: 0.72m	1983-84	75.74	76.25	71
					1984-85	75.49	76.18	100
NZ32019	Nwak Heley House	H.A: 25						
NGR: NZ 35752650		M.A: Northumbrian Water Authority		Period: 1968-1987	1980-81			
EEC Unit: NR10	Level: 81.5m			Mean max. level: 35.05m	1981-82			
Comment: Pre-1982 data discarded due to pumping effects. Mean maximum and minimum levels estimated from data 1982 onwards; accuracy is uncertain.				Mean min. level: 34.05m	1982-83	33.28	34.17	90
				Mean ann. range: 1.00m	1983-84	34.10	34.66	57
					1984-85	34.04	35.30	127
NZ33020	Germondsway	H.A: 24						
NGR: NZ 33493501		M.A: Northumbrian Water Authority		Period: 1974-1987	1980-81	78.13	80.82	72
EEC Unit: NR07	Level: 102.3m			Mean max. level: 79.24m	1981-82	75.80	81.97	95
Comment:				Mean min. level: 72.75m	1982-83	75.19	82.98	120
				Mean ann. range: 6.49m	1983-84	75.86	80.88	77
					1984-85	74.86	80.60	88
SE28028	Bedale	H.A: 27						
NGR: SE 24608520		M.A: Yorkshire Water Authority		Period: 1973-1986	1980-81	66.98	71.09	107
EEC Unit: YO23	Level: 74.2m			Mean max. level: 70.11m	1981-82	66.87	69.80	76
Comment: Data for 1983-84 estimated due to aberrant values.				Mean min. level: 66.27m	1982-83	65.93	70.52	120
				Mean ann. range: 3.84m	1983-84	66.23	69.09	86
					1984-85	66.23	69.09	75
SE35004	Castle Farm	H.A: 27						
NGR: SE 38305830		M.A: Yorkshire Water Authority		Period: 1970-1986	1980-81	36.85	37.44	75
EEC Unit: YO21	Level: 43.0m			Mean max. level: 37.05m	1981-82			
Comment: Rise in water levels from 1977 to 1979. Values for 1981-82 and 1984-85 doubtful, possibly affected by pumping.				Mean min. level: 36.26m	1982-83	36.76	37.52	96
				Mean ann. range: 0.79m	1983-84	36.76	37.49	92
					1984-85			
SE43009	Peggy Ellerton Farm, Hazlewood	H.A: 27						
NGR: SE 45353964		M.A: Yorkshire Water Authority		Period: 1968-1987	1980-81	35.14	36.17	73
EEC Unit: YO20	Level: 51.4m			Mean max. level: 35.26m	1981-82			
Comment: Indicator site. Missing data in 1981-82; cannot estimate values. Not possible to account for low recharge in 1984-85.				Mean min. level: 33.88m	1982-83	34.34	36.34	103
				Mean ann. range: 1.40m	1983-84	34.97	36.10	80
					1984-85	34.91	35.18	19
SE43014	Coldhill Farm No.35	H.A: 27						
NGR: SE 46603550		M.A: Yorkshire Water Authority		Period: 1971-1986	1980-81	33.88	34.31	71
EEC Unit: YO24	Level: 37.9m			Mean max. level: 34.28m	1981-82	33.86	34.25	64
Comment: Peak levels for 1982-83 and 1983-84 estimated.				Mean min. level: 33.67m	1982-83	33.82	34.30	79
				Mean ann. range: 0.61m	1983-84	33.77	34.26	81
					1984-85	33.70	34.24	89

			Period	Trough level (m)	Peak level (m)	Fluctuations as a % of the mean range
SE51002	Westfield Farm	H.A: 27				
NGR: SE 52101530		M.A: Yorkshire Water Authority	Period: 1971-1985	1980-81		
EEC Unit: YO09	Level: 28.0m		Mean max. level: 13.42m	1981-82	13.28	13.98
Comment: Significant variations in water level from one year to next. Impossible to estimate values for 1980-81 and 1984-85. Values for intervening years not accurate but may be of the right order.			Mean min. level: 12.56m	1982-83	13.10	13.97
			Mean ann. range: 0.86m	1983-84	12.76	13.58
				1984-85		96
SK46071	Stanton Hill	H.A: 28				
NGR: SK 48006030		M.A: Severn Trent Water Authority	Period: 1973-1986	1980-81	168.23	169.53
EEC Unit: ST05	Level: 176.3m		Mean max. level: 169.42m	1981-82	168.12	169.48
Comment: Site responds rapidly to recharge. Annual values estimated.			Mean min. level: 168.02m	1982-83	168.12	169.23
			Mean ann. range: 1.40m	1983-84	167.72	169.07
				1984-85	167.92	169.10
						84
SK58043	Southards Lane	H.A: 28				
NGR: SK 52488018		M.A: Severn Trent Water Authority	Period: 1973-1986	1980-81	82.86	92.54
EEC Unit: ST04	Level: 98.4m		Mean max. level: 89.92m	1981-82	82.73	87.27
Comment: Site responds rapidly to recharge. Annual values estimated. Mean annual range may be too large.			Mean min. level: 82.77m	1982-83	84.06	87.58
			Mean ann. range: 7.15m	1983-84	83.58	89.40
				1984-85	83.33	86.77
						48
Aquifer: Coal Measures						
SD62035	Lion Brewery	H.A: 71				
NGR: SD 69252945		M.A: North West Water Authority	Period: 1974-1983	1980-81	123.35	123.36
EEC Unit: NW11	Level: 124.3m		Mean max. level: 123.37m	1981-82		
Comment: Readings temporarily discontinued while well produces methane. Data for 1980-81 uncertain.			Mean min. level: 123.25m	1982-83		
			Mean ann. range: 0.12m	1983-84		
				1984-85		
SE23004	Silver Blades Ice Rink	H.A: 27				
NGR: SE 28503414		M.A: Yorkshire Water Authority	Period: 1971-1986	1980-81	26.84	27.24
EEC Unit: YO17	Level: 30.0m		Mean max. level: 27.00m	1981-82	26.86	27.89
Comment: Long term fluctuations prevent accurate estimate of mean annual range; annual percentage fluctuations inaccurate.			Mean min. level: 26.51m	1982-83	27.89	28.00
			Mean ann. range: 0.49m	1983-84	27.87	28.42
				1984-85	27.91	28.42
						105
SJ98006	Chadkirk Marple	H.A: 69				
NGR: SJ 93948950		M.A: North West Water Authority	Period: 1971-1986	1980-81		
EEC Unit: NW06	Level: 59.4m			1981-82		
Comment: No water levels have been measured since the well produces methane and has not yet been made safe. Site will be discontinued.				1982-83		
				1983-84		
				1984-85		
Aquifer: Millstone Grit						
SD55005	Abbeystead	H.A: 72				
NGR: SD 58205350		M.A: North West Water Authority	Period: 1972-1983	1980-81		
EEC Unit: NW14	Level: 148.3m		Mean max. level: 147.96m	1981-82		
Comment: Well producing methane; readings discontinued until site made safe.			Mean min. level: 147.56m	1982-83		
			Mean ann. range: 0.40m	1983-84		
				1984-85		
SD83111	Red Scar Mill	H.A: 71				
NGR: SD 88033949		M.A: North West Water Authority	Period: 1974-1983	1980-81	132.60	133.44
EEC Unit: NW11	Level: 136.2m		Mean max. level: 132.82m	1981-82		
Comment: Spasmodic readings in 1982; site is producing methane, so measurements have been discontinued until well made safe.			Mean min. level: 132.09m	1982-83		
			Mean ann. range: 0.73m	1983-84		
				1984-85		
SD92008	Horsehold Farm	H.A: 27				
NGR: SD 98332660		M.A: Yorkshire Water Authority	Period: 1971-1986	1980-81	199.40	210.72
EEC Unit: YO12	Level: 232.0m		Mean max. level: 209.55m	1981-82	200.13	210.64
Comment: Spasmodic readings; probable that the mean annual range is underestimated. Trough level for 1980-81, peak levels 1982-83 and 1984-85 estimated.			Mean min. level: 201.14m	1982-83	201.35	211.00
			Mean ann. range: 8.41m	1983-84	200.82	211.22
				1984-85	200.34	208.80
						101
SE04007	Lower Heights Farm	H.A: 27				
NGR: SE 02954792		M.A: Yorkshire Water Authority	Period: 1971-1986	1980-81	254.36	254.55
EEC Unit: YO15	Level: 254.0m		Mean max. level: 255.71m	1981-82	254.95	255.32
Comment: Frequent and irregular fluctuations prevent estimation of annual fluctuations. Peak and trough levels may occur at any time during the year.			Mean min. level: 254.01m	1982-83	254.90	255.05
			Mean ann. range: 1.70m	1983-84	252.88	255.04
				1984-85	253.24	254.75
SE24002B	Green Lane Dye Works	H.A: 27				
NGR: SE 20674053		M.A: Yorkshire Water Authority	Period: 1971-1986	1980-81	129.56	130.09
EEC Unit: YO16	Level: 158.0m		Mean max. level: 127.99m	1981-82	129.05	129.80
Comment: Not possible to determine from hydrograph the periods of recharge and recession. Mean annual range probably overestimated.			Mean min. level: 124.00m	1982-83	129.03	130.68
			Mean ann. range: 3.99m	1983-84	129.06	130.59
				1984-85	128.76	131.20
SE27008	Kirby Moor Farm	H.A: 27				
NGR: SE 21207380		M.A: Yorkshire Water Authority	Period: 1971-1986	1980-81	153.08	154.44
EEC Unit: YO22	Level: 174.0m		Mean max. level: 153.42m	1981-82	153.22	153.78
Comment: Not possible to determine from hydrograph the periods of recharge and recession. Mean annual range probably overestimated.			Mean min. level: 152.02m	1982-83	153.31	153.63
			Mean ann. range: 1.40m	1983-84	153.25	153.76
				1984-85	153.47	153.63

				Period	Trough level (m)	Peak level (m)	Fluctuations as a % of the mean range	
Aquifer: Carboniferous Limestone								
NT95021	Middle Ord	H.A: 21						
NGR: NT 96955055		M.A: Northumbrian Water Authority		Period: 1969-1987	1980-81	31.97	32.57	154
EEC Unit: NR01	Level: 65.0m			Mean max. level: 32.31m	1981-82	32.12	32.28	41
Comment: Mean maximum and minimum estimated over period 1980-1985; long term fluctuations produce over-estimates of mean annual range.				Mean min. level: 31.92m	1982-83	31.71	31.94	59
				Mean ann. range: 0.39m	1983-84	31.94	32.36	108
					1984-85	31.87	32.40	136
SE06001	Jerry Laith Farm	H.A: 27						
NGR: SE 02416183		M.A: Yorkshire Water Authority		Period: 1971-1986	1980-81	170.54	175.98	152
EEC Unit: YO19	Level: 178.0m			Mean max. level: 173.36m	1981-82	172.89	175.64	77
Comment: Pumping effects may mask real values. Mean maximum and minimum values estimated over period 1977-1985.				Mean min. level: 169.79m	1982-83	169.50	171.95	69
				Mean ann. range: 3.57m	1983-84	169.13	173.96	135
					1984-85	168.05	171.62	100
SK15016	Astonfield	H.A: 28						
NGR: SK 12925547		M.A: Severn Trent Water Authority		Period: 1974-1986	1980-81	175.30	210.36	111
EEC Unit: ST02	Level: 280.2m			Mean max. level: 206.98m	1981-82	175.62	211.69	114
Comment:				Mean min. level: 175.43m	1982-83	175.98	208.14	102
				Mean ann. range: 31.55m	1983-84	175.69	206.92	97
					1984-85	174.95	201.39	84
SK17013	Hucklow South	H.A: 28						
NGR: SK 17787762		M.A: Severn Trent Water Authority		Period: 1969-1986	1980-81	254.62	275.83	75
EEC Unit: ST01	Level: 301.8m			Mean max. level: 277.39m	1981-82	254.39	273.94	69
Comment:				Mean min. level: 249.18m	1982-83	258.27	273.64	54
				Mean ann. range: 28.21m	1983-84	256.00	275.94	71
					1984-85	252.11	275.92	84
ST64036	Waterlip Quarry	H.A: 53						
NGR: ST 65104460		M.A: Wessex Water Authority		Period: 1975-1986	1980-81	202.94	207.94	108
EEC Unit: WE07	Level: 228.6m			Mean max. level: 208.31m	1981-82	204.54	211.04	141
Comment:				Mean min. level: 203.69m	1982-83	205.04	211.04	130
				Mean ann. range: 4.62m	1983-84	206.14	210.24	89
					1984-85	203.10	208.50	117

The analysis of data from the following wells in the Chalk and Upper Greensand aquifer was completed after the initial compilation of the Borehole Register:

TF81002A	Washpit Farm	H.A: 33						
NGR: TF 81381960		M.A: Anglian Water Authority		Period: 1950-1987	1980-81	43.50	48.27	162
EEC Unit: AN17	Level: 80.7m			Mean max. level: 45.83m	1981-82	44.15	44.54	13
Comment: Indicator site. The well hydrograph shows no extraneous effects that would account for the low fluctuation in 1981-82.				Mean min. level: 42.88m	1982-83	42.85	46.78	133
				Mean ann. range: 2.95m	1983-84	43.73	45.32	54
					1984-85	43.30	45.84	86
TQ38009A	Hackney Public Baths	H.A: 38						
NGR: TQ 35098536		M.A: Thames Water Authority		Period: 1953-1987	1980-81	-26.57	-26.25	72
EEC Unit: TH07	Level: 18.4m			Mean max. level: -27.56m	1981-82	-26.57	-26.31	59
Comment: Confined aquifer, distant from outcrop. Shows a slow regional rise of about 0.4m over this 5-year period. Percentage fluctuation values do not accurately reflect annual recharge.				Mean min. level: -28.00m	1982-83	-26.43	-26.16	61
				Mean ann. range: 0.44m	1983-84	-26.28	-25.82	104
					1984-85	-26.10	-25.89	47

GROUNDWATER FLUCTUATIONS AND THE AREAL ESTIMATION OF RECHARGE

R.A. MONKHOUSE

British Geological Survey

Recharge Estimation

The archive of groundwater levels maintained and continually updated by the British Geological Survey comprises at present 170 sites. Of these, 81 are in the Chalk and Upper Greensand and 39 in the Permo-Triassic sandstones, the two most important aquifers in the United Kingdom.

The primary purpose of groundwater level observation wells is to monitor fluctuations in level. The analysis and interpretation of the data measured in these wells is not easy since direct comparison of levels is not possible. When, for example, an observation well in the Chalk shows a rise of, say, 5 metres from autumn to spring in a given recharge cycle, another well in the same aquifer but a little distance away may show a rise of 30 metres or more. Nevertheless, meaningful interpretation and comparison between wells on a regional basis is a principal objective of observation well networks. For this reason, a methodology has been developed to compare and to use data about changes in water levels.

The procedure is as follows. A statistical distribution is calculated for all levels recorded during the period of record for each observation well. For all wells where the period of record is 10 years or more, a statistical distribution is calculated first for the maximum level in each year and then for the minimum. From these a mean maximum and a mean minimum level is determined, and the difference between these two is defined as the mean annual range for that well. The assumption is made that the mean annual range is directly related to the mean annual replenishment.

This method becomes unsatisfactory when there are long-term fluctuations in groundwater levels due to extraneous factors such as pumping. While the annual fluctuations observed may still be representative of the replenishment for particular years, the range of levels may not be representative of natural conditions; the calculated mean maximum and mean minimum levels are likely to give rise to a mean annual range that is too large. In such circumstances, a subjective analysis of the well hydrograph may be required to estimate a more realistic value, using trough to peak measurements (for selected years if necessary) rather than calculating distributions of maxima and minima. Similar procedures were followed to avoid the over-estimation of the mean

annual range associated with relatively short records including for instance, the winters of 1975-76 (when recharge was almost non-existent) and 1976-77 (when recharge rates were unusually high). The mean annual range values determined by subjective assessment of the hydrographs were compared with adjacent sites and adjusted if necessary to provide reasonably similar percentage annual fluctuations.

Particularly for those sites with less than 10 years of record, errors arising from data entry or data measurement can substantially affect the calculation of mean maximum and mean minimum values. Gross errors can be avoided by the use of 'traps' to detect anomalous values during the data input procedures, but such procedures may not be able to detect all suspect sequences of water levels especially where the natural range is large. It was found, therefore, to be more efficacious to scrutinise the well hydrographs for the period 1975 to 1985 (depending upon the length of record available) for all the observation sites. Anomalous levels are easily seen on these hydrographs and can be corrected.

In certain areas, summer replenishment of aquifers does take place, for example, in the Vale of Eden in Cumbria. However, even in this district, the well hydrographs for the two available sites (Corby Hill - NY45/16 and Skirwith - NY63/2) still show the annual cyclic pattern of recharge and recession. Accordingly, for the purposes of this analysis, it is assumed that the mean annual range will still reflect the mean annual infiltration.

In fissured aquifers, the density of fissuring tends to decrease with depth, with a corresponding decrease in specific yield. In some locations, groundwater levels may fall below the more highly fissured zones during the summer recession. Under such circumstances, a given volume of infiltration will result in a greater rise in water level when the latter is generally low than when it is high. In such a case, the relationship between the water level rise and infiltration will not be linear. However, since there is no simple method of allowing for this with the available data, it is assumed for the time being that the relationship remains linear.

It has been pointed out that, particularly in heavily fissured aquifers, the rate of natural discharge may be closely related with the head of water as measured in an observation well, the more so when the well and the discharge point are only a short distance apart. There would then be a failure of

peak groundwater levels to reach the heights that would otherwise be attained. The result is that again the relationship between infiltration and water level rise would not be linear. A particular case by way of example is Site No. SP00062 (Ampney Crucis) where the natural discharge is through springs some 400 m distant. The well hydrograph shows frequent irregularities which may reflect the rapidity with which water level rises due to infiltration; these irregularities may be reduced by the outflow at the springs. Nonetheless, in the absence of any readily available method for correction, such sites are here assessed as though the relationship remained linear.

Areal Assessments of Recharge

By plotting the percentage annual fluctuations for each observation site on a map of an aquifer outcrop, it is possible to delimit zones of high or low recharge for that aquifer for a particular year. This has been done for the Chalk and Upper Greensand aquifer (Figure 2). Due to the rather sparse distribution of the observation sites, these maps are necessarily generalised, but they do give a picture of the areal and annual distribution of recharge.

As part of a comprehensive assessment of groundwater resources in the European Communities, a report was published on the groundwater resources of the United Kingdom. In this, the country was divided areally into administrative provinces, each of which was subdivided into Units (see page 151) within each of which the mean annual groundwater replenishment was assessed for each aquifer. The data from which these assessments were made were provided, in England and Wales, by the Water Authorities.

When the original selection of groundwater level observation wells was made for the present groundwater archive, one of the criteria for selection was that there should be one observation well for each aquifer within each of the Units to which reference has been made in the previous paragraph.

If it is assumed that the percentage annual fluctuation in an observation well is a direct reflection of the percentage of the mean annual infiltration to the aquifer in which that well is located, then it is possible to calculate the actual replenishment to each aquifer in each unit. This has been done for four of the more important aquifers in England and Wales, viz. Chalk and Upper Greensand, Lincolnshire Limestone, Permo-Triassic sandstones, and Magnesian Limestone. The results, summed for each Water Authority, are shown in Table 2. Given the nature of the data on which these estimates are based, the results can be only general, but they are at least an attempt to quantify actual replenishments. If this approach can be continued over a number of years into the future, and can be correlated with annual rainfall figures, then there exists the possibility that a system of groundwater

resource assessment may emerge that will be independent of calculations of soil moisture deficit and evapotranspiration.

Yearbooks published in the Hydrological data UK series have reported that, since 1980, groundwater levels have generally been at, or above, mean values for part at least of each year. The current study suggests that the annual replenishment figures have often been less than average. It is, of course, possible that, in some cases, such discrepancy may be due to inadequacies in the data. However, the previous years (1976-77, 1977-78 and 1978-79) had particularly high infiltration; if an aquifer is considered as a tank with a permanent and near-constant outflow and a variable inflow, then a period of high inflows will maintain high levels which may take some time (in this case years) to fall even with reduced inputs. It is also the case that although winter rainfall over the years 1980 to 1985 has generally been rather higher than the mean, the distribution through the winter months has been erratic, some months being nearly dry, others extremely wet. For certain aquifers, the consequent irregular pattern of recharge - together with significant summer infiltration in some years - can complicate any recharge assessment procedure based simply on the overall fluctuation through the annual recharge cycle. In any case, the calculation of recharge is dependent upon the percentage annual fluctuation and not on the sum of winter rainfall.

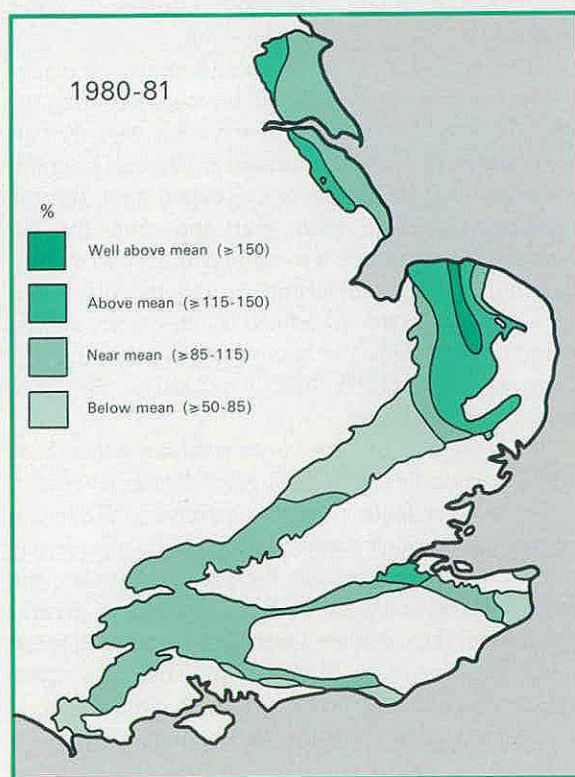


Figure 2. Yearly fluctuations in groundwater levels as a percentage of the mean range - Chalk and U. Greensand aquifer.

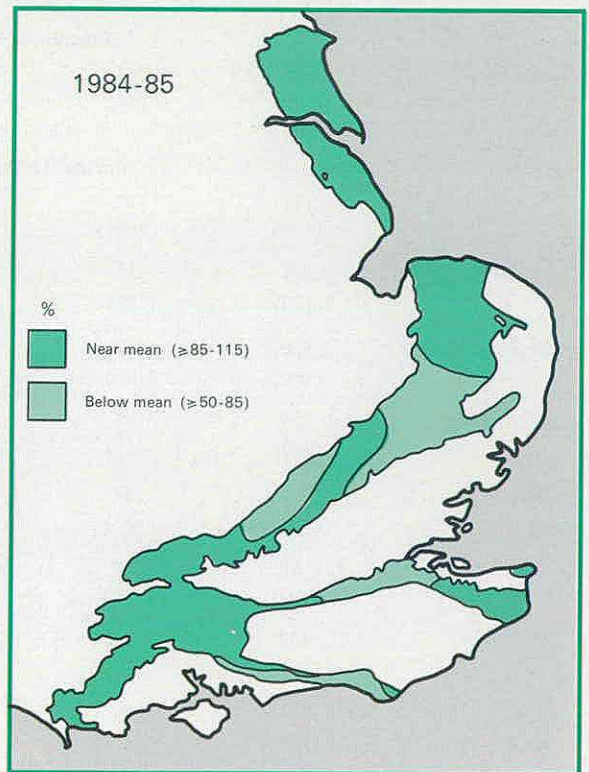
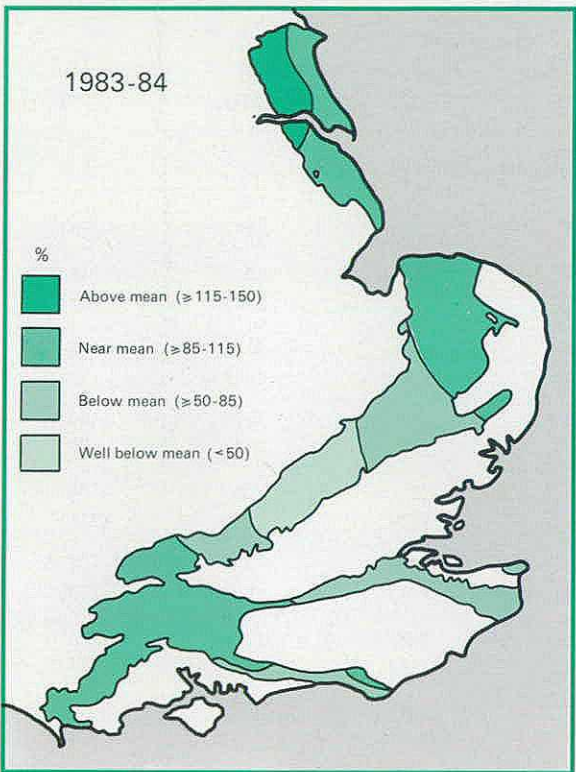
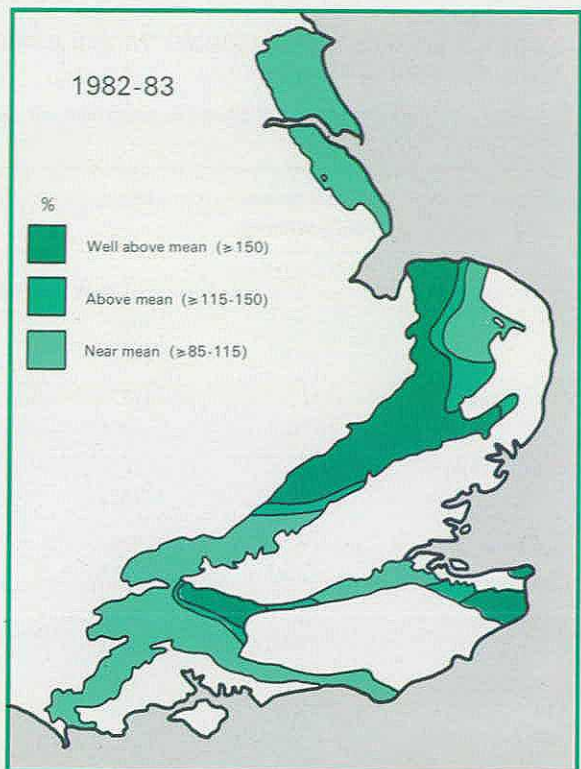
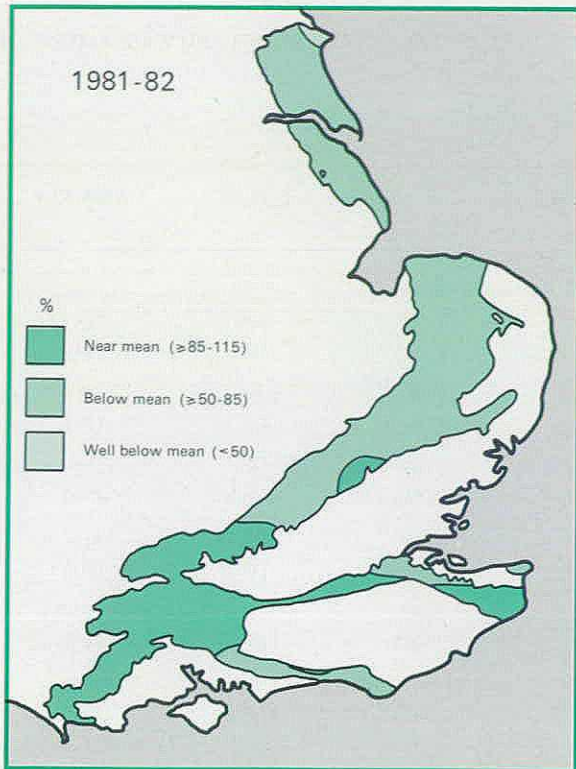


Figure 2 - (continued).

TABLE 2 ANNUAL REPLENISHMENT TO THE MORE IMPORTANT AQUIFERS IN ENGLAND AND WALES OVER THE PERIOD 1980 - 1985

Units are $m^3 \times 10^6$; figures in parentheses are percentages of the annual mean.

Water Authority	Mean Annual Replenishment	1980-81	1981-82	1982-83	1983-84	1984-85
Chalk and Upper Greensand aquifer						
Anglian	953 (100)	1098 (115)	635 (67)	1126 (118)	745 (78)	788 (83)
Southern	1231 (100)	1187 (96)	1109 (90)	1470 (119)	1050 (85)	1101 (89)
South West	202 (100)	65 (32)	194 (96)	107 (53)	164 (81)	109 (54)
Thames	975 (100)	915 (94)	921 (94)	1111 (114)	640 (66)	813 (83)
Wessex	947 (100)	951 (100)	938 (99)	982 (104)	978 (103)	977 (103)
Yorkshire	322 (100)	351 (109)	230 (71)	295 (92)	396 (123)	305 (95)
Totals	4630 (100)	4567 (99)	4027 (87)	5091 (110)	3973 (86)	4093 (88)
Lincolnshire Limestone aquifer						
Anglian	86 (100)	64 (74)	54 (63)	62 (72)	95 (110)	63 (73)
Permo-Triassic sandstones aquifer						
Northumbrian	123 (100)	134 (109)	93 (76)	156 (127)	109 (89)	120 (98)
North West	331 (100)	357 (108)	300 (91)	368 (111)	303 (92)	316 (95)
Severn-Trent	528 (100)	567 (107)	548 (104)	487 (92)	413 (78)	412 (78)
South West	205 (100)	125 (61)	255 (124)	162 (79)	199 (97)	164 (80)
Welsh	27 (100)	37 (137)	26 (96)	26 (96)	26 (96)	30 (111)
Wessex	39 (100)	24 (62)	48 (123)	30 (77)	37 (95)	31 (79)
Yorkshire	301 (100)	265 (88)	195 (65)	348 (116)	213 (71)	205 (68)
Totals	1554 (100)	1509 (97)	1465 (94)	1577 (101)	1300 (84)	1278 (82)
Magnesian Limestone aquifer						
Northumbrian	80 (100)	55 (69)	68 (85)	101 (126)	60 (75)	74 (92)
Severn-Trent	40 (100)	37 (92)	39 (97)	32 (79)	39 (96)	34 (84)
Yorkshire	127 (100)	106 (83)	90 (71)	126 (99)	110 (87)	108 (85)
Totals	247 (100)	198 (80)	197 (80)	259 (105)	209 (85)	216 (87)

THE SURFACE WATER AND GROUNDWATER DATA RETRIEVAL SERVICES

In order that the contents of the national archives of river flow data and groundwater level data may be readily accessible a suite of programs has been developed to provide a selection of retrieval options from each data base. An outline of the data retrieval facilities is given below; further details – together with examples of each of the standard options – are provided in each of the Yearbooks in the Hydrological data UK series (see page 173).

Cost of Service

To cover the computing and handling costs, a moderate charge will be made depending on the output options selected. Estimates of these charges may be obtained on request; the right to amend or waive charges is reserved.

Surface Water Data Retrieval

The surface water archive comprises some 22000 station-years of daily river flows and incorporates data from over 1000 gauging stations throughout the United Kingdom. In addition to gauged flow data, naturalised data have been derived from the records of a small number of gauging stations. Catchment areal rainfall and the highest instantaneous flow, when available, are also archived on a monthly basis.

Before finalising a data request it is recommended that the Table of Hydrometric Statistics (see pages 10 to 147) be consulted as a guideline to the suitability of the river flow data for particular applications. Details of the availability of data – on a yearly basis – are provided in the 'Summary of Archived Data' which appears at the end of the Hydrometric Statistics section for each of the measuring authorities.

In response to user requirements the data retrieval facilities are being continually extended. A wide range of specialist analyses and presentations is now available. Individuals having data requirements not catered for in the standard retrieval suite are invited to discuss their particular needs – address overleaf.

Retrievals are normally available on lineprinter listings, magnetic tape, or as hydrograph plots. A short description of each retrieval option is given

overleaf. The retrieval programs have been designed to allow considerable flexibility in the presentation of the options, particularly those producing graphical output.

Hydrological Data at the Institute of Hydrology

The surface water archive is one of several major sources of hydrological data held at Wallingford. Others include an archive of flood peaks from over 600 catchments and a flood event archive comprising rainfall and river flows at short time intervals for over 3000 individual events. Data may be retrieved from these sources in a variety of formats. Enquiries concerning the availability and use of such data should be directed to the address overleaf.

Groundwater Level Data Retrieval

The groundwater archive holds borehole level data – and site details – for 170 representative wells and boreholes throughout the United Kingdom. Some characteristics of individual wells, and well records, are given in the Borehole Register and Statistics section but it is recommended that data users contact the Hydrogeological Research Group before finalising any data request.

Six options are available for retrieving data. A description of each option is given overleaf. Options 1 to 4 give details of the well site, the period of record available, and maximum and minimum recorded levels in addition to the output specific to each option. Data may be retrieved for a specific well or for groups of wells by well reference numbers, by area (using National Grid References), by aquifer, by hydrometric area, by water authority, or by any combination of these parameters.

At the present time not all the data contained within the archive have been validated.

Other National Archives maintained by the British Geological Survey

The British Geological Survey maintains the national well records collection. This includes site details and hydrogeological characteristics of wells, springs and boreholes throughout Great Britain.

Surface Water Data Retrieval Options

OPTION NUMBER	TITLE
1	Table of daily mean gauged discharges
2	Table of daily mean naturalised discharges
3	Yearbook data tabulation (daily)
4	Table of monthly mean gauged discharges
5	Table of monthly mean naturalised discharges
6	Yearbook data tabulation (monthly)
7	Table of monthly extreme flows
8	Table of catchment monthly rainfall
9	Table of catchment monthly areal rainfall and runoff
10	Hydrographs of daily mean flows
11	Hydrographs of monthly mean flows
12	Flow duration statistics
13	Table of gauging station reference information
14	Table of hydrometric statistics
15	Gauging station descriptions
16	River flow pattern plots

Groundwater Data Retrieval Options

OPTION NUMBER	TITLE
1	Table of groundwater levels
2	Table of annual maximum and minimum groundwater levels
	Table of monthly maximum, minimum and mean groundwater levels
4	Hydrographs of groundwater levels
5	Site details
6	Site details and statistics - as presented in the 'Borehole Register and Statistics' section

Requests for Retrieval Options

Requests for data should include: the name and address to which the output should be directed, the sites, or areas, for which data are required together with the period of record of interest (where appropriate) and the title of the required option. Where possible, a daytime telephone number should be given.

Requests for retrieval options should be addressed to:-

Surface Water Data:

Institute of Hydrology
Surface Water Archive Office
Maclean Building
Crowmarsh Gifford
WALLINGFORD
OXFORDSHIRE OX10 8BB

Groundwater Data:

The British Geological Survey
Hydrogeological Research Group
Maclean Building
Crowmarsh Gifford
WALLINGFORD
OXFORDSHIRE OX10 8BB

Telephone: Wallingford (0491) 38800

PUBLICATIONS - in the Hydrological data UK series

Title	Published	Price (inclusive of second class postage within the UK)	
		Loose Leaf	Bound
Yearbooks:			
Yearbook 1981	1985	£10	£12
Yearbook 1982	1985	£10	£12
Yearbook 1983*	1986	£12	£15
Yearbook 1984*	1986	£12	£15
Yearbook 1985	1987	£12	£15
Reports:			
The 1984 Drought	1985	--	£12
Hydrometric Register and Statistics 1981-5	1987	£12	£15

The Yearbooks are available as bound volumes or as sets of pre-punched sheets for insertion in a ring binder designed to hold the five yearbooks in each publication cycle plus the corresponding Hydrometric Register and Statistics volume. The ring binder may be purchased for £50 to include the 1981, 1982, 1983, 1984 and 1985 Yearbooks. Organisations and

individuals purchasing the ring binder will be entitled to receive free updates of the data sheets for individual Yearbooks when a significant revision to the published data is made.

All Hydrological data UK publications and the ring binder may be obtained from:-

Institute of Hydrology
 Maclean Building
 Crowmarsh Gifford
 WALLINGFORD
 OXFORDSHIRE OX10 8BB

Telephone: Wallingford (0491) 38800

Enquiries or comments regarding the series, or individual publications are welcomed and should be directed to the Surface Water Archive Office at the above address.

* Bound editions of these Yearbooks are in very limited supply.

GLOSSARY

This glossary of terms is intended primarily to help explain some of the technical vocabulary used in the Comment section of the gauging station register. Where possible, the definitions given below are based upon those developed by the International Standards Organisation¹.

Surface Water

Afflux	The rise in water level immediately upstream of, and due to, an obstruction.
Backwater (curve)	The profile of the water surface upstream when its surface slope is generally less than the bed slope. The backwater curve generally occurs upstream of an obstruction or confluence.
Broad-crested weir	A weir of sufficient breadth (in the direction of the flow) such that critical flow occurs on the crest of the weir. The term long-crested is sometimes also applied to such structures.
Cableway (system)	An assembly of winches and ropes and a carrier for placing the current meter at any desired point in the cross section.
Calibration (Rating)	The establishment of a discharge relationship with the measured variable. Sometimes used as a synonym for the stage-discharge relation.
Compensation flow	A minimum flow which a water authority, or similar body, is under an obligation to discharge into a watercourse as a condition of carrying out their undertaking. Commonly the obligation relates to the maintenance of a discharge rate below a reservoir. The term 'residual flow' is preferred by some authorities.
Compound weir	A weir containing two or more sections, which may be of different types, each section normally having a different height.
Control	The physical properties of a channel, natural or artificial, which determine the relationship between stage and discharge at a location in the channel.
Critical flow	The flow in which the total energy head* is a minimum for a given discharge; critical flow conditions are created by the installation of most standard weirs and flumes (as well as by natural obstructions and constrictions).
Depth of approach	The depth of the upstream bed – at the tapping point – below the lowest point of a weir crest.
Drawdown curve	The profile of the water surface where its surface slope exceeds the bed slope, for instance, immediately upstream of a weir or flume.
Drowned (or submerged) weir Flume	A weir in which the upstream water level is affected by the downstream water level (and the 'modular' stage-discharge relation no longer applies). An artificial channel with clearly specified shape and dimensions which may be used for the measurement of flow. A standing-wave flume, for instance, contains a constriction which causes the flow to change from sub-critical* to super-critical* and in which the measurement of upstream water level (alone) allows the discharge to be computed.
Freshets	The periodical release of discharge rates over and above the basic compensation flow. These artificial floods are intended to benefit the aquatic environment – particularly fisheries.
Gaugeboard	A device with a graduated scale installed at a gauging station for measuring the level of water relative to a datum. Gaugeboards can be either vertical or inclined.
Hydraulic jump	The sudden change of flow from super-critical* flow to sub-critical flow*. The transition is marked by a standing-wave.
Hysteresis	The effect on the stage-discharge relation at a gauging station subject to variable water surface slope where, for the same gauge height, the discharge on a rising stage differs from that on a falling stage.
Influent stream	One which flows above the water table and contributes to it by natural leakage through the bed of the channel.
Invert	The lowest part of the cross-section of a natural or artificial channel.
Modular limit (point of submergence)	The submergence ratio (see over) when the flow just begins to be affected by the downstream water level.
Nappe	The jet formed by the flow over a weir. A clinging nappe is one held in contact with the downstream face of a weir.
Rhymer weir	A simple form of variable geometry weir consisting of fixed horizontal beams which support vertical timber posts to form a series of rectangular openings – these may be closed by means of timber gates.

Sensitivity	The increase in stage associated with a given change – say a 1 per cent increase – in flow; the greater the increase in stage, the greater the sensitivity. A sensitive record of stage can be converted more accurately into a record of discharge than a non-sensitive one.
Stage	The elevation of the free surface of a stream relative to a datum; sometimes also referred to as the gauge height.
Stage-discharge relation	An equation, table or formula which expresses the relation between the stage and the discharge in an open channel at a given cross-section.
Stilling well	A well connected with the main stream in such a way as to permit the measurement of stage in relatively still liquid.
Submergence	The ratio of the downstream total head (measured head plus velocity head) to the upstream total head over a weir.
Suppressed weir	A weir whose sides are in the same plane as the open channel – thus eliminating (suppressing) side contractions of the stream.
Thin-plate weir	A weir constructed of a vertical thin plate with a thin crest shaped in such a manner that the nappe springs clear of the crest.
Triangular-profile weir	A weir having a triangular profile in a vertical direction in the direction of flow. The 'Crump' and 'Flat V' weirs are examples of such structures.
Unstable channel	A channel in which there are frequent and significant changes in control.
Velocity of approach	The mean velocity in an open channel at a specified distance upstream of a measuring device.
Velocity head	The head obtained by dividing the square of the mean velocity (in the measuring section) by twice the acceleration due to gravity.

* For definitions of these terms see reference 1.

Groundwater

Aquifer	A rock formation containing groundwater that can be abstracted economically in useful quantities.
Artesian well	A shaft, or more commonly a borehole, within which, when the aquifer is penetrated, water rises within the well to a level above the top of the aquifer, i.e. above the base of a confining layer. The term is usually reserved for wells that naturally overflow at the ground surface; where the water level rises, but does not reach the ground surface, the term sub-artesian has sometimes been used.
Borehole	A well constructed by machinery, usually less than one metre in diameter. Usually constructed vertically, but inclined boreholes are occasionally constructed.
Confined aquifer	An aquifer in which groundwater is held under pressure by a confining layer (see also artesian well).
Confining layer	An impermeable rock formation that immediately overlies an aquifer, and which may contain water in the latter under pressure.
Groundwater	Sub-surface water contained within the saturated zone.
Observation well	A shaft or borehole used for observing groundwater head or quality.
Permeability	The ability of a material to allow the passage of a fluid.
Piezometric surface	The surface that represents the static head of groundwater in a confined aquifer; in practice, the static head is taken to be the water level measured in a well penetrating a confined aquifer.
Potentiometric surface	The surface that represents the static head of groundwater in both confined aquifers and water table aquifers. This term includes piezometric surface and water table.
Rising	A term used particularly in south west England for a continuous outflow of subterranean water of such dimensions as to be regarded as the emergence of a river rather than a spring; characteristic of Karstic aquifers such as the Carboniferous Limestone in the Mendip Hills.
Saturated zone	That part of an aquifer, normally beneath the deepest water table, in which ideally all voids are filled with water under pressure greater than atmospheric.
Shaft	A well constructed by hand and generally greater than one metre in diameter.
Unsaturated zone	That part of an aquifer between the ground surface and the deepest water table.
Water level	In this context, the altitude (or depth) of the water surface, relative to a datum, as measured in a well.
Water table	The surface of a groundwater body at which the water pressure is atmospheric. Unless the water table is coincident with the ground surface, an unsaturated zone will be present.
Well	A term used to include both shafts and boreholes although occasionally used for shafts only.

ABBREVIATIONS

Note: The following abbreviations do not purport to represent any standardised usage; they have been developed for use in the Hydrological data UK series of publications only. Where space constraints have required alternative forms of these conventional abbreviations to be used, the meaning should be evident from the context.

Measuring authorities*Water Authorities*

AWA	Anglian Water
NWA	Northumbrian Water
NWWA	North West Water
STWA	Severn Trent Water
SWA	Southern Water
SWWA	South West Water
TWA	Thames Water
WELS	Welsh Water
WWA	Wessex Water
YWA	Yorkshire Water

River Purification Boards

CRPB	Clyde River Purification Board
FRPB	Forth River Purification Board
HRPB	Highland River Purification Board
NERPB	North East River Purification Board
SRPB	Solway River Purification Board
TRPB	Tay River Purification Board
TWRPB	Tweed River Purification Board

Other measuring authorities

GRWD	Grampians Regional Council
CDWC	Corby and District Water Company
DOEN	Department of the Environment (Northern Ireland)
IH	Institute of Hydrology
SDD	Scottish Development Department

General

AOD	Above Ordnance Datum
Bk	Beck
Blk	Black
Br	Bridge
Brk or B	Brook
Brn	Burn
Ch	Channel
C/m	Current meter(ing)
Com	Common
Dc	District council
Dk	Dike
Dr or D	Drain
D/s	Downstream
E	East
Frm	Farm
G/s	Gauging station
Gw	Groundwater

HEP	Hydro-electric power
Ho	House
Hosp	Hospital
L	Loch or lake
Lb	Left hand river bank (looking downstream)
Ln	Lane
Lst	Limestone
Ltl	Little
MAF	Mean annual flood
Mkt	Market
MI/d	Megalitres per day
Mnr	Manor
N	North
NI	Northern Ireland
NSHEB	North of Scotland Hydro-Electricity Board
Ntch	Notch
NW	North West
O/f	Outfall or outflow
ORS	Old Red Sandstone
Pk	Park
Pop	Population
POR	Period of record
PS	Pumping station
Pt	Pont
PWS	Public water supply
RAFT	Rising Air Float Technique
Rb	Right hand river bank (looking downstream)
R/c	Racecourse
RCS	Regional communications system
Rd	Road
Res	Reservoir
Rh	Right hand
S	South
Sch	School
S-D	Stage-discharge relation
SDD	Scottish Development Department
SE	South East
Sl	Sluice
Sp	Spring
St	Stream
STW	Sewage Treatment Works
SW	South West
TS	Transfer scheme
US	Ultrasonic gauging station
U/s	Upstream
W	West
W'course	Watercourse
Wd	Wood
Wht	White
Wr	Weir
WRW	Water reclamation works
Wtr	Water
WTW	Water treatment works

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The following selection of references is provided to assist readers and data users to obtain background information relating both to the national archives of surface water and groundwater level data and to the practices and procedures necessary to maintain data accuracy at a standard to suit it for a wide range of applications. Some rather more general references are also included.

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ISO 555/3-1982	Liquid flow measurement in open channels - Dilution methods for measurement of steady flow - Part 3: Constant rate injection method and integration method using radioactive tracers
ISO 748-1979	Liquid flow measurement in open channels - Velocity-area methods
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