



National River  
Flow Archive



UK Centre for  
Ecology & Hydrology

# National River Flow Archive

UK Centre for Ecology & Hydrology

---

## NRFA PEAK FLOW DATASET VERSION 11

Note on changes from v10

VERSION: 1.0

STATUS: FINAL

DATE: SEPTEMBER 2022

AUTHOR: STEVE TURNER, CATHERINE SEFTON, ALANNAH KILLEEN, OLIVER SWAIN, NATHAN RICKARDS,  
RAFAEL BARBEDO

## DOCUMENT VERSION CONTROL

---

Version	Date	Author	Description
1.0	SEPTEMBER 2022	STEVE TURNER, CATHERINE SEFTON, ALANNAH KILLEEN, OLIVER SWAIN, NATHAN RICKARDS, RAFAEL BARBEDO	Final release note detailing changes of NRFA Peak Flow dataset from version 10 to version 11.

## TABLE OF CONTENTS

---

<b>1</b>	<b>INTRODUCTION</b>	<b>1</b>
<b>2</b>	<b>NETWORK CHANGES</b>	<b>2</b>
2.1	REMOVAL OF GAUGING STATIONS	2
2.2	ADDITION OF GAUGING STATIONS	2
2.3	RE-OPENING OF GAUGING STATIONS	3
2.4	CLOSURE OF GAUGING STATIONS	3
2.5	CHANGES TO STATION NUMBERS	3
2.6	CHANGES TO FEH INDICATIVE SUITABILITIES	3
2.7	COMBINED PEAK FLOW TIME SERIES FROM MULTIPLE STATIONS	3
2.8	COMPONENT STATIONS	4
2.9	STATIONS WHERE NO POT DATA ARE PRESENTED	4
<b>3</b>	<b>ANNUAL UPDATE</b>	<b>5</b>
3.1	ADDITION OF WATER YEAR 2020/2021	5
3.2	NEW AMAX 1 RECORDS	5
<b>4</b>	<b>PERIOD OF RECORD REVIEW</b>	<b>6</b>
4.1	STATIONS INCLUDED	6
<b>5</b>	<b>MODIFICATIONS TO EXISTING TIME SERIES</b>	<b>9</b>
5.1	POT INDEPENDENCE	9
5.2	POT THRESHOLDS	9
5.3	MINOR CHANGES TO AMAX AND POT RECORDS	9
5.4	CHANGES TO STAGE-DISCHARGE RATINGS AND REPROCESSED DATA	10
5.5	UNREPRESENTATIVE DATA PERIODS	11
5.6	REJECTED DATA	12
5.7	DATUM CHANGES	13
<b>6</b>	<b>IMPACT OF DATA CHANGES</b>	<b>14</b>
6.1	IMPACT OF ANNUAL UPDATE	14
6.2	IMPACT OF RE-PROCESSED HISTORICAL DATA	17
<b>ANNEX 1</b>	<b>POT EXCLUDED STATIONS</b>	<b>19</b>
<b>ANNEX 2</b>	<b>POT INDEPENDENCE CHANGES</b>	<b>22</b>
<b>ANNEX 3</b>	<b>STATIONS WITH CHANGES TO DATUM HISTORY</b>	<b>34</b>

# 1 INTRODUCTION

---

Version 11 of the NRFA Peak Flows Dataset contains AMAX and POT data for 939 gauging stations, of which 638 are in England, 166 are in Scotland, 94 are in Wales and 41 are in Northern Ireland. A total of 544 stations are recommended for use in pooling groups ('Suitable for Pooling'), 344 stations are 'Suitable for QMED' and 51 stations are 'Suitable for Neither'.

Version 11 contains:

- Network changes (see Section 2)
- An additional water year of data (updated to 30<sup>th</sup> September 2021) for all active peak flow stations in the UK (see section 3)
- Full period of record Data Review for a subset of stations in the dataset (100 stations, see section 4)
- Modifications to existing time series (see section 5).

## 2 NETWORK CHANGES

A number of changes have been made to the gauging stations for which peak flow data are held on the NRFA since the release of version 10. Key changes are noted in this section.

### 2.1 Removal of Gauging Stations

Seven stations have been removed from the dataset, listed in Table 1. Daily flows are still held on the NRFA where indicated.

**Table 1:** Stations removed from the dataset in version 11.

Station Number	Station Name	Measuring Authority	NRFA daily flow station	Comment
27008	Swale at Leckby Topcliffe	EA-Y	NO	Site combined with 27071 – see section 2.7.
27050	Esk at Sleights	EA-Y	NO	Site combined with 27092 – see section 2.7.
28010	Derwent at Longbridge Weir	EA-EM	NO	Site combined with 28085 – see section 2.7.
30015	Cringle Brook at Stoke Rochford	EA-LN	YES	Site classed as ‘OK for Neither’ with short record (pre-Rutland Water) and no prospect of improvement in FEH Suitability.
31006	Gwash at Belmesthorpe	EA-LN	YES	Site classed as ‘OK for Neither’ and multiple AMAX events sit on spikes in daily flow caused by possible road runoff, sluice movement and non-modularity.
40013	Darent at Otford	EA-KSL	YES	Site classed as ‘OK for Neither’ with no prospect of improvement in FEH Suitability.
40017	Dudwell at Burwash	EA-KSL	YES	Site classed as ‘OK for Neither’ with no prospect of improvement in FEH Suitability.

### 2.2 Addition of Gauging Stations

Six stations have been added to the dataset in version 11, listed in Table 2.

**Table 2:** Stations added to the dataset in version 11. A \* denotes stations that are completely new to the NRFA (i.e. were not existing daily flow stations).

Station Number	Station Name	Measuring Authority	Suitability	NRFA daily flow station
26017*	Ings Beck at South Newbald	EA-Y	Pooling	NO
39054	Mole at Gatwick Airport	EA-KSL	QMED	YES
39104	Mole at Esher	EA-KSL	Pooling	YES
40021	Hexden Channel at Hopemill	EA-KSL	QMED	YES
40035*	Old Mill Stream at Aylesford	EA-KSL	QMED	NO
60016*	Tywi at Manorafon	NRW	QMED	YES

## 2.3 Re-opening of Gauging Stations

One station has been re-opened in version 11, listed in Table 3. Previously these stations were closed in the Peak Flow Dataset, but a full review and improvements have allowed them to be reopened.

**Table 3:** Stations that have been reopened in the dataset in version 11.

Station Number	Station Name	Measuring Authority	Suitability	Comment
28007	Trent at Shardlow	EA-EM	Pooling	Closed in version 9. Full review of the flow record and calibration of instruments following 2021 flood gaugings.

## 2.4 Closure of Gauging Stations

Two stations have been closed in version 11, listed in Table 4. Previously recorded flow data for these stations are still contained in the dataset and shown on the NRFA website, but there will be no further updates in future.

**Table 4:** Stations closed in version 11.

Station Number	Station Name	Measuring Authority	NRFA daily flow station	Comment
22002	Coquet at Bygate	EA-NE	YES	Although station re-opened April 2000, this was as a level only site for flood warning purposes.
68007	Wincham Brook at Lostock Gralam	EA-GMMC	YES	Station downgraded to level only site.

## 2.5 Changes to Station Numbers

No station numbers have changed in version 11.

## 2.6 Changes to FEH Indicative Suitabilities

Indicative suitabilities have changed at one station in England, one station in Wales (a temporary downgrade pending rating review) and one station in Scotland, listed in Table 5.

**Table 5:** Stations with changes to indicative suitability in version 11.

NRFA Station	Station Name	Measuring Authority	V10 Suitability		V11 Suitability	
			QMED	POOLING	QMED	POOLING
27087	Derwent at Low Marishes	EA-Y	YES	YES	YES	NO
65001	Glaslyn at Beddgelert	NRW	YES	NO	NO	NO
78004	Kinnel Water at Redhall	SEPA-SW	YES	YES	YES	NO

## 2.7 Combined Peak Flow Time Series from Multiple Stations

At some gauging stations, the peak flow record shown is combined data from more than one gauging station. Typically this is the case where one station has closed and been replaced by a nearby gauge.

Records have been merged at three pairs of gauging stations in version 11, listed in Table 6 .

**Table 6:** Stations that have been combined in version 11.

<b>Station 1</b>	<b>Station Name</b>	<b>Station 2</b>	<b>Station Name</b>	<b>Combined Series Presented Under Station Number</b>
<b>27008</b>	Swale at Leckby Topcliffe	<b>27071</b>	Swale at Crakehill	<b>27071</b>
<b>27050</b>	Esk at Sleights	<b>27092</b>	Esk at Briggswath	<b>27092</b>
<b>28010</b>	Derwent at Longbridge Weir	<b>28085</b>	Derwent at St Mary's Bridge	<b>28085</b>

## **2.8 Component Stations**

At a number of gauging stations, flows are derived from measurements taken at more than one location (for example low flows may be measured at a weir and high flows measured at a gauged section a short distance up/downstream). There are a number of such stations around the UK that the NRFA and/or Measuring Authority treat as a combined station.

No changes have been made to these time series since v4.1.

## **2.9 Stations Where No POT Data are Presented**

No POT data are presented on the NRFA website or given in the dataset for stations listed in Annex 1. Two stations were added to the list in version 11, marked with a \* in Annex 1.

Stations are usually listed as 'POT excluded' because the gauged catchment response does not lend itself to POT analysis. Such catchments are usually, but not exclusively, those dominated by baseflow and are therefore concentrated on the large chalk aquifers of southern and eastern England.

### 3 ANNUAL UPDATE

As part of the stewardship arrangements for the national Peak Flows Dataset by UKCEH through the NRFA, a programme of annual updates has been implemented. It is intended that all currently operating NRFA Peak Flow stations are updated each year with the addition of one water year of data.

#### 3.1 Addition of water year 2020/2021

The version 11 files contain AMAX and POT time-series data updated to 30<sup>th</sup> September 2021 for all currently operational peak flow gauging stations in England, Wales and Northern Ireland.

#### 3.2 New AMAX 1 records

New AMAX 1 records were set at 29 stations in water year 2020/2021, listed in Table 7 with the percentage of the previous AMAX 1.

**Table 7:** New AMAX 1 records set in water year 2020/2021.

Station Number	Station Name	Measuring Authority	% of previous AMAX 1
25029	Leven at Foxton Bridge	EA-NE	102%
26014	Water Forlornes at Driffield	EA-Y	119%
27043	Wharfe at Addingham	EA-Y	108%
27096	Wharfe at Netherside Hall	EA-Y	110%
27099	Derwent at Malton A64 Road Bridge	EA-Y	107%
30006	Slea at Leasingham Mill	EA-LN	104%
32002	Willow Brook at Fotheringhay	EA-LN	108%
33011	Little Ouse at County Bridge Euston	EA-EA	115%
33019	Thet at Melford Bridge	EA-EA	105%
33045	Wittle at Quidenham	EA-EA	106%
33054	Babingley at Castle Rising	EA-EA	168%
33057	Ouzel at Leighton Buzzard	EA-EA	103%
33058	Ouzel at Bletchley	EA-EA	108%
34001	Yare at Colney	EA-EA	132%
37031	Crouch at Wickford	EA-EA	114%
42011	Hamble at Frogmill	EA-SSD	280%
47004	Lynher at Pillaton Mill	EA-DC	110%
54016	Roden at Rodington	EA-WM	103%
54028	Vyrnwy at Llanymynech	NRW	102%
66004	Wheeler at Bodfari	NRW	104%
67005	Ceiriog at Brynkinalt Weir	NRW	102%
67015	Dee at Manley Hall	NRW	126%
67018	Dee at New Inn	NRW	126%
68003	Dane at Rudheath	EA-GMMC	106%
68005	Weaver at Audlem	EA-GMMC	105%
68020	Gowy at Bridge Trafford	EA-GMMC	118%
69005	Glaze Brook at Little Woolden Hall	EA-GMMC	129%
69007	Mersey at Ashton Weir	EA-GMMC	106%
71011	Ribble at Arnford	EA-CL	103%

## 4 PERIOD OF RECORD REVIEW

A programme of period of record reviews is undertaken as part of the stewardship arrangements for the national Peak Flows Dataset by UKCEH. It is intended that a subset of the NRFA Peak Flow stations are subject to a Period of Record Review each year and released in the next scheduled release of files for use in WINFAP.

The Period of Record Review is extensive and covers a full period of record review of:

- Flow and stage data (including extension of recent and where applicable, early records)
- Gaugings and ratings
- Missing data periods
- FEH Suitability
- Metadata (station descriptions, station type, datum history, POT threshold, bankfull stage)
- Unrepresentative data periods and rejected data

This section lists the stations and time periods included in the Period of Record Review published in version 11. Major changes to the use of the data – POT thresholds, unrepresentative periods and rejected data – are detailed in Section 5.

### 4.1 Stations Included

The Period of Record Review covered 29 stations in Scotland, 70 stations in England, and 1 station in Wales, listed in Table 8. At 20 existing peak flow stations in Scotland, the period of record has been extended by 15 water years to end with water year 2020/2021.

The Period of Record Review process in Wales for version 11 also involved the following activities:

- A review of metadata, gaugings and ratings for 31 peak flow stations, comprising loading of period of record gaugings, sense checks of datum histories, historical continuity of data, gaugings and rating histories, and review of AMAX rejection, station descriptions and FEH suitability categories and comments;
- Assessment of POT data in the transition from pre-digital charts to digitised data, and removal of duplicate events. 16 duplicate POTs were removed.

**Table 8:** Stations included in the Period of Record Review in version 11. New stations to the dataset are shown with a \*. Reopened stations in the dataset are shown with a ^.

Station Number	Station Name	Measuring Authority	Start date	End date
17004	Ore at Balfour Mains	SEPA-SE	1992/1993	2018/2019
17005	Avon at Polmonthill	SEPA-SE	1970/1971	2020/2021
18003	Teith at Bridge of Teith	SEPA-SE	1970/1971	2020/2021
18014	Bannock Burn at Bannockburn	SEPA-SE	1992/1993	2020/2021
19007	Esk at Musselburgh	SEPA-SE	1961/1962	2020/2021
20001	Tyne at East Linton	SEPA-SE	1959/1960	2020/2021
21005	Tweed at Lyne Ford	SEPA-SE	1961/1962	2020/2021
21006	Tweed at Boleside	SEPA-SE	1960/1961	2020/2021
21007	Ettrick Water at Lindean	SEPA-SE	1961/1962	2020/2021
21008	Teviot at Ormiston Mill	SEPA-SE	1959/1960	2020/2021
21009	Tweed at Norham	SEPA-SE	1959/1960	2020/2021
21011	Yarrow Water at Philiphaugh	SEPA-SE	1961/1962	2020/2021
21012	Teviot at Hawick	SEPA-SE	1963/1964	2020/2021
21013	Gala Water at Galashiels	SEPA-SE	1963/1964	2020/2021
21015	Leader Water at Earlston	SEPA-SE	1966/1967	2020/2021
21016	Eye Water at Eyemouth Mill	SEPA-SE	1966/1967	2020/2021
21017	Ettrick Water at Brockhoperig	SEPA-SE	1965/1966	2020/2021

Station Number	Station Name	Measuring Authority	Start date	End date
21025	Ale Water at Ancrum	SEPA-SE	1973/1974	2020/2021
21027	Blackadder Water at Mouth Bridge	SEPA-SE	1974/1975	2020/2021
21032	Glen at Kirknewton	EA-NE	1961/1962	2009/2010
22002	Coquet at Bygate	EA-NE	1965/1966	1980/1981
23003	North Tyne at Reaverhill	EA-NE	1959/1960	2020/2021
23007	Derwent at Rowlands Gill	EA-NE	1962/1963	2020/2021
23017	Team at Team Valley	EA-NE	1975/1976	2020/2021
25020	Skerne at Preston le Skerne	EA-NE	1972/1973	2020/2021
25021	Skerne at Bradbury	EA-NE	1973/1974	2020/2021
26017*	Ings Beck at South Newbald	EA-Y	1999/2000	2020/2021
27010	Hodge Beck at Bransdale Weir	EA-Y	1935/1936	1977/1978
27032	Hebden Beck at Hebden	EA-Y	1965/1966	2020/2021
27035	Aire at Kildwick Bridge	EA-Y	1970/1971	2020/2021
27079	Calder at Methley	EA-Y	1987/1988	2020/2021
27084	Eastburn Beck at Crosshills	EA-Y	1987/1988	2020/2021
27087	Derwent at Low Marishes	EA-Y	1988/1989	2020/2021
28007^	Trent at Shardlow	EA-EM	1991/1992	2020/2021
28052	Sow at Great Bridgeford	EA-SWWM	1970/1971	2020/2021
28061	Churnet at Basford Bridge	EA-SWWM	1974/1975	2020/2021
28066	Cole at Coleshill	EA-SWWM	1973/1974	2020/2021
28067	Derwent at Church Wilne	EA-EM	1973/1974	2020/2021
28085	Derwent at St. Mary's Bridge	EA-EM	1936/1937	2020/2021
30006	Slea at Leasingham Mill	EA-LN	1973/1974	2020/2021
30015	Cringle Brook at Stoke Rochford	EA-LN	1974/1975	2020/2021
32004	Ise Brook at Harrowden	EA-LN	1944/1945	2020/2021
36008	Stour at Westmill	EA-EA	1959/1960	2020/2021
36011	Stour Brook at Sturmer	EA-EA	1967/1968	2020/2021
36012	Stour at Kedington	EA-EA	1967/1968	2020/2021
36015	Stour at Lamarsh	EA-EA	1971/1972	2020/2021
37001	Roding at Redbridge	EA-HNL	1950/1951	2020/2021
38004	Rib at Wadesmill	EA-HNL	1959/1960	2020/2021
38011	Mimram at Fulling Mill	EA-HNL	1957/1958	2020/2021
39011	Wey at Tilford	EA-T	1954/1955	2020/2021
39020	Coln at Bibury	EA-T	1963/1964	2020/2021
39042	Leach at Priory Mill Lechlade	EA-T	1972/1973	2020/2021
39054*	Mole at Gatwick Airport	EA-KSL	1961/1962	2020/2021
39104*	Mole at Esher	EA-KSL	1998/1999	2020/2021
40021*	Hexden Channel at Hopemill	EA-KSL	1973/1974	2020/2021
40035*	Old Mill Stream at Aylesford	EA-KSL	2002/2003	2020/2021
44008	South Winterbourne at Winterbourne Steepleton	EA-WX	1974/1975	2020/2021
44009	Wey at Broadway	EA-WX	1975/1976	2020/2021
44014	Piddle at Briantspuddle	EA-WX	1992/1993	2020/2021
45816	Haddeo at Upton	EA-DC	1993/1994	2020/2021
45817	Unnamed Stream at Upton	EA-DC	1993/1994	2020/2021
45818	Withiel Florey Stream at Bessom Bridge	EA-DC	1992/1993	2020/2021
47022	Tory Brook at Newnham Park	EA-DC	1979/1980	2020/2021

Station Number	Station Name	Measuring Authority	Start date	End date
48005	Kenwyn at Truro	EA-DC	1968/1969	2020/2021
49003	De Lank at De Lank	EA-DC	1966/1967	2020/2021
49005	Bolingey Stream at Bolingey Cocks Bridge	EA-DC	2010/2011	2020/2021
52016	Currypool Stream at Currypool Farm	EA-WX	1970/1971	2020/2021
52025	Hillfarrance Brook at Milverton	EA-WX	1991/1992	2020/2021
53009	Wellow Brook at Wellow	EA-WX	1965/1966	2020/2021
53025	Mells at Vallis	EA-WX	1979/1980	2020/2021
54008	Teme at Tenbury	EA-WM	1956/1957	2020/2021
54023	Badsey Brook at Offenham	EA-WM	1968/1969	2020/2021
54024	Worfe at Burcote	EA-WM	1968/1969	2020/2021
55013	Arrow at Titley Mill	EA-WM	1966/1967	2020/2021
60016*	Tywi at Manorafon	NRW	1967/1968	2020/2021
68010	Fender at Ford Lane	EA-GMMC	1973/1974	1980/1981
68011	Arley Brook at Gore Farm	EA-GMMC	1973/1974	1981/1982
68021	Arrowe Brook at Acton Lane	EA-GMMC	2007/2008	2020/2021
69019	Worsley Brook at Eccles	EA-GMMC	1970/1971	2000/2001
69027	Tame at Portwood	EA-GMMC	1969/1970	2020/2021
69046	Bradshaw Brook at Bradshaw Tennis Club	EA-GMMC	2001/2022	2020/2021
69048	Tame at Uppermill	EA-GMMC	1999/2000	2020/2021
69803	Roch at Rochdale	EA-GMMC	1993/1994	2020/2021
71014	Darwen at Blue Bridge	EA-CL	1975/1976	2020/2021
72011	Rawthey at Brigflatts	EA-CL	1968/1969	2020/2021
73017	Kent at Bowston	EA-CL	1999/2000	2020/2021
74008	Duddon at Ulpha	EA-CL	1973/1974	2020/2021
75004	Cocker at Southwaite Bridge	EA-CL	1966/1967	2020/2021
76004	Lowther at Eamont Bridge	EA-CL	1962/1963	2020/2021
76017	Eden at Great Corby	EA-CL	1996/1997	2020/2021
78003	Annan at Brydekirk	SEPA-SW	1966/1967	2020/2021
78004	Kinnel Water at Redhall	SEPA-SW	1966/1967	2020/2021
78005	Kinnel Water at Bridgemuir	SEPA-SW	1979/1980	2020/2021
79002	Nith at Friars Carse	SEPA-SW	1956/1957	2020/2021
79004	Scar Water at Capenoch	SEPA-SW	1962/1963	2020/2021
79005	Cluden Water at Fiddlers Ford	SEPA-SW	1963/1964	2020/2021
79006	Nith at Drumlanrig	SEPA-SW	1966/1967	2020/2021
81003	Luce at Airyhemming	SEPA-SW	1966/1967	2020/2021
82001	Girvan at Robstone	SEPA-SW	1962/1963	2020/2021
105001	Snizort at Skeabost	SEPA-NW	2000/2001	2020/2021

## 5 MODIFICATIONS TO EXISTING TIME SERIES

### 5.1 POT Independence

For stations in England operated by the Environment Agency and in Wales operated by Natural Resources Wales, the rules for independence between POT events have been clarified such that the minimum discharge in the trough between the two peaks must be less than two-thirds of the discharge of **both peaks** (FEH guidelines states the first peak, but this requires subsequent manual re-processing to remove spurious peaks). Previous Environment Agency data updates by the NRFA and under the HiFlows-UK initiative may also have utilised the 'both peaks rule'.

These rules apply at all Environment Agency and Natural Resources Wales operated stations to POT events for water years 2014/2015 onwards. Additionally, for the stations listed in Annex 2, due to changes to stage-discharge relationships or other re-processing, the new independence rules apply from the date shown to the end of the period of record. Users should therefore be aware that at these stations the independence criteria used to generate the POT series updates may therefore vary throughout the flow record.

No changes have been made to the independence extraction criteria for POT data in Scotland or Northern Ireland.

### 5.2 POT Thresholds

The POT Threshold has changed at 11 stations, listed in Table 9.

**Table 9:** Stations with changes to POT Thresholds in version 11.

NRFA Station	Station Name	Measuring Authority	V10 POT Threshold	V11 POT Threshold
23003	North Tyne at Reaverhill	EA-NE	133	235
27010	Hodge Beck at Bransdale Weir	EA-Y	5	5.25
27071	Swale at Crakehill	EA-Y	104	130.858
27079	Calder at Methley	EA-Y	90.099	118
27092	Esk at Briggswath	EA-Y	57.784	59.986
28060	Dover Beck at Lowdham	EA-EM	1.13	0.993
28085	Derwent at St Mary's Bridge	EA-EM	69.256	105.667
38004	Rib at Wadesmill	EA-HNL	3.699	6.5
48004	Warleggan at Trengoffe	EA-DC	5.985	5.194
48005	Kenwyn at Truro	EA-DC	2.8	2.9
53018	Avon at Bathford	EA-WX	119.543	95

### 5.3 Minor Changes to AMAX and POT Records

Major changes to time series can be made through the Period of Record Review (see Section 4) or through rating changes submitted as part of the Annual Update process (see Section 5.4).

Other minor changes to individual events can be made outside of these processes. Six stations had edits to the historical time series in version 11, listed in Table 10.

**Table 10:** Stations with minor changes to time series in version 11.

Station Number	Station Name	Measuring Authority	Details of change
23002	Derwent at Eddy's Bridge	EA-NE	Addition of nine AMAX values between WY1969/1970 and WY1980/1981 which were previously missing.

Station Number	Station Name	Measuring Authority	Details of change
25019	Leven at Easby	EA-NE	Addition of seven AMAX values between WY1996/1997 and WY2002/2003 which were previously missing.
26013	Driffield Trout Stream at Driffield	EA-Y	Corrected WY2015/2016 AMAX following Ultrasonic gauge configuration update following channel change during 2015/2016 floods.
71001	Ribble at Samlesbury	EA-CL	Correction of historical processing error. Reduced pre-1973 stage values by 0.4m and re-calculated flows for this period.
72017	Wenning at Hornby	EA-CL	Correction of historical processing error. Moved WY1989/1990 AMAX from 19/01/1990 to 19/02/1990.
73015	Keer at High Keer Weir	EA-CL	Infill of WY1995/1996 AMAX.

## 5.4 Changes to Stage-Discharge Ratings and Reprocessed Data

For stations included in the Period of Record Review (see Table 8), ratings have been reviewed and data re-processed as required. Stage-discharge ratings have changed at an additional 24 stations as part of the routine Annual Update of the dataset. The time period of re-processed flow data for these additional stations is listed in Table 11, all stations have been re-processed to the end of the record (water year 2020/2021).

**Table 11:** Stations with rating changes and re-processed data in version 11.

Station Number	Station Name	Measuring Authority	Start date of re-processed data
22001	Coquet at Morwick	EA-NE	04/01/1982
23009	South Tyne at Alston	EA-NE	21/09/2018
24008	Wear at Witton Park	EA-NE	24/01/1975
27002	Wharfe at Wetherby Flint Mill	EA-Y	30/11/2009
28053	Penk at Penkridge	EA-WM	12/09/2015
28058	Henmore Brook at Ashbourne	EA-WM	Period of Record
34006	Waveney at Needham Mill	EA-EA	09/02/1980
46006	Erme at Ermington	EA-DC	Period of Record
54007	Arrow at Broom	EA-WM	Period of Record
54014	Severn at Abermule	NRW	05/10/2008
54028	Vyrnwy at Llanymynech	NRW	Period of Record
55002	Wye at Belmont	EA-SWHG	01/05/1985
55012	Irfon at Cilmerly	NRW	Period of Record
55014	Lugg at Byton	EA-SWHG	01/10/1981
55021	Lugg at Butts Bridge	EA-SWHG	01/10/1988
57010	Ely at Lanelay	NRW	Period of Record
58005	Ogmore at Brynmenyn	NRW	Period of Record
58006	Mellte at Pontneddfechan	NRW	01/09/1971
58007	Llynfi at Coytrahan	NRW	01/08/1982
60007	Tywi at Dolau Hirion	NRW	01/11/1982
60009	Sawdde at Felin-y-cym	NRW	01/10/2009
66011	Conwy at Cwmlanerch	NRW	01/02/1991
67018	Dee at New Inn	NRW	01/01/1982
76015	Eamont at Pooley Bridge	EA-CL	Period of Record

## 5.5 Unrepresentative Data Periods

Some periods of data are unsuitable for use in WINFAP because they are unrepresentative of the hydrological behaviour of the catchment. These are shown on the NRFA website by pink shading on the AMAX and POT graphs. The unrepresentative periods occur in two main situations:

1. Where there is a clear change in the catchment during the period of record. The most common example is where a large reservoir has been built and therefore caused a change in the FARL (Flood Attenuation by Reservoirs and Lakes) value.
2. Where data quality has changed significantly during the period of record, the indicative suitability has been based on the better data, providing the length of record is reasonable. In these cases, the years of poorer quality have been rejected.

New unrepresentative periods have been added at 15 stations (Table 12) and removed at four stations (Table 13). The end dates for ongoing unrepresentative periods at a further 13 were extended to the end of water year 2020/2021.

**Table 12:** Unrepresentative periods added in version 11.

NRFA Station	Station Name	Measuring Authority	Start Date	End Date	Comments
17005	Avon at Polmonthill	SEPA-NE	01/10/1970	01/10/1999	Poor confidence in flood estimates before gabion weir was built due to tidal influence.
20003	Tyne at Spilmersford	SEPA-SE	01/09/1962	01/10/1975	Low confidence in datum and flows.
21032	Glen at Kirknewton	EA-NE	05/09/2008	13/08/2010	Three breaches in upstream floodbank during this period. Breach was repaired twice but some of the flow was bypassing the weir from July 2009 to the end of the record.
23017	Team at Team Valley	EA-NE	01/06/1986	30/09/1986	Low confidence in flows.
27092	Esk at Briggswath	EA-Y	01/10/1951	01/10/1975	Rejected period previously held against 27050 prior to station merger.
28052	Sow at Great Bridgeford	EA-WM	08/06/2016	30/09/2016	Flows influenced by downstream weed growth.
28061	Churnet at Basford Bridge	EA-WM	12/07/2011	25/09/2011	Downstream weed growth and sedimentation in section.
			03/04/2012	30/05/2012	
28061	Churnet at Basford Bridge	EA-WM	20/08/2015	14/10/2015	Discrepancies between internal and external level measurements.
28066	Cole at Coleshill	EA-WM	14/07/2012	16/10/2012	Stilling well blocked.
39054	Gatwick Airport	EA-KSL	24/09/2019	24/01/2019	Commissioning issue with the ultrasonics, which meant high and low flows were exaggerated.
44008	South Winterbourne at	EA-WX	01/10/1974	01/10/1986	Low confidence in flows in the pre-digital period.

NRFA Station	Station Name	Measuring Authority	Start Date	End Date	Comments
	Winterbourne Steepleton				
54024	Worfe at Burcote	EA-WM	05/01/1984	01/04/1984	No digital level data.
57006	Rhondda at Trehafod	NRW	05/09/2019	01/10/2021	Well needs to be flushed, data suspect.
60016	Tywi at Manorafon	NRW	01/10/1967	01/10/1997	Uncertainty in rating.
76017	Eden at Great Corby	EA-CL	17/04/1997	01/08/2002	Data marked as suspect due to concerns over excessive surge in the well.

**Table 13:** Unrepresentative periods removed in version 11.

NRFA Station	Station Name	Measuring Authority	Start Date	End Date	Comments
20001	Tyne at East Linton	SEPA-SE	01/10/1981	01/10/2019	Period now has useable flood estimates following review.
27050	Esk at Sleights*	EA-Y	01/10/1992	07/10/1998	Data for this period now provided by station 27092 following merger.
27050	Esk at Sleights*	EA-Y	01/10/1951	01/10/1976	Rejected period transferred to 27092 following merger.
55012	Irfon at Cilmerly	NRW	01/12/1989	01/10/1995	Period now has useable flood estimates following review.

\*See section 2.7 for more information on station mergers.

## 5.6 Rejected Data

AMAX and POT data that are unsuitable for use in flood estimation are marked as rejected in the dataset and not included in flood estimation calculations. These are shown by red bars (for AMAX) and red crosses (for POTs) on the AMAX and POT graphs respectively. All data falling within unrepresentative periods (see section 5.5 Unrepresentative Data Periods) are rejected.

In addition, where periods of missing data are likely to have included the true AMAX, any AMAX recorded during that water year is rejected. Where the true AMAX is recorded, the event is not rejected.

Rejected periods have been added at 21 stations (Table 14) and removed at 5 stations (Table 15).

**Table 14:** AMAX data now classed as rejected in version 11.

NRFA Station	Station Name	Measuring Authority	Rejected water year(s)
21032	Glen at Kirknewton	EA-NE	1983, 1996
23012	East Allen at Wide Eals	EA-NE	1976
27032	Hebden Beck at Hebden	EA-Y	1974, 1975
35010	Gipping at Bramford	EA-EA	2018
36011	Stour Brook at Sturmer	EA-EA	2000, 2009, 2014
36015	Stour at Lamarsh	EA-EA	1971
39016	Kennet at Theale	EA-T	2018

NRFA Station	Station Name	Measuring Authority	Rejected water year(s)
39054	Mole at Gatwick Airport	EA-KSL	1985, 2005, 2007, 2008, 2016, 2017
39104	Mole at Esher	EA-KSL	1998, 2009
40021	Hexden Channel at Hopemill	EA-KSL	1980
40035	Old Mill Stream at Aylesford	EA-KSL	2005, 2012
44009	Wey at Broadwey	EA-WX	1991
47022	Tory Brook at Newnham Park	EA-DC	2006
55013	Arrow at Titley Mill	EA-WM	1977
57006	Rhondda at Trehafod	NRW	1980
60007	Tywi at Dolau Hirion	NRW	1978
68010	Fender at Ford Lane	EA-GMMC	1972, 1973
68021	Arrowe Brook at Acton Lane	EA-GMMC	2005
69048	Tame at Uppermill	EA-GMMC	1997, 2017
72011	Rawthey at Brigflatts	EA-CL	1980
75004	Cocker at Southwaite Bridge	EA-CL	1966

Table 15: AMAX data no longer classed as rejected in version 11.

NRFA Station	Station Name	Measuring Authority	Water year re-instated
27050	Esk at Sleights	EA-Y	1951, 1997
27071	Swale at Crakehill	EA-Y	1979
28085	Derwent at St Mary's Bridge	EA-EM	1982, 1983, 1984
57006	Rhondda at Trehafod	NRW	1981
69027	Tame at Portwood	EA-GMMC	1973

## 5.7 Datum Changes

A short table is provided on the NRFA website for each station, which details the datum and control history over the period of record, with dates of applicability. The datum history has been updated at 47 stations listed in Annex 3.

## 6 IMPACT OF DATA CHANGES

As part of the NRFA's quality control procedures, the new data submitted within each data release cycle are assessed in terms of the impact they make on key flood estimation parameters – QMED, 50-year and 100-year return period flows.

Substantial changes to these parameters can occur due to:

- Extension or shortening of flow records
- Extreme high or low flows in one water year
- Rating changes causing reprocessed flows.

Any stations with a >10% change (in either direction) of any of the key flood estimation parameters are listed below in Sections 6.1 and 6.2, along with a comment explaining the change.

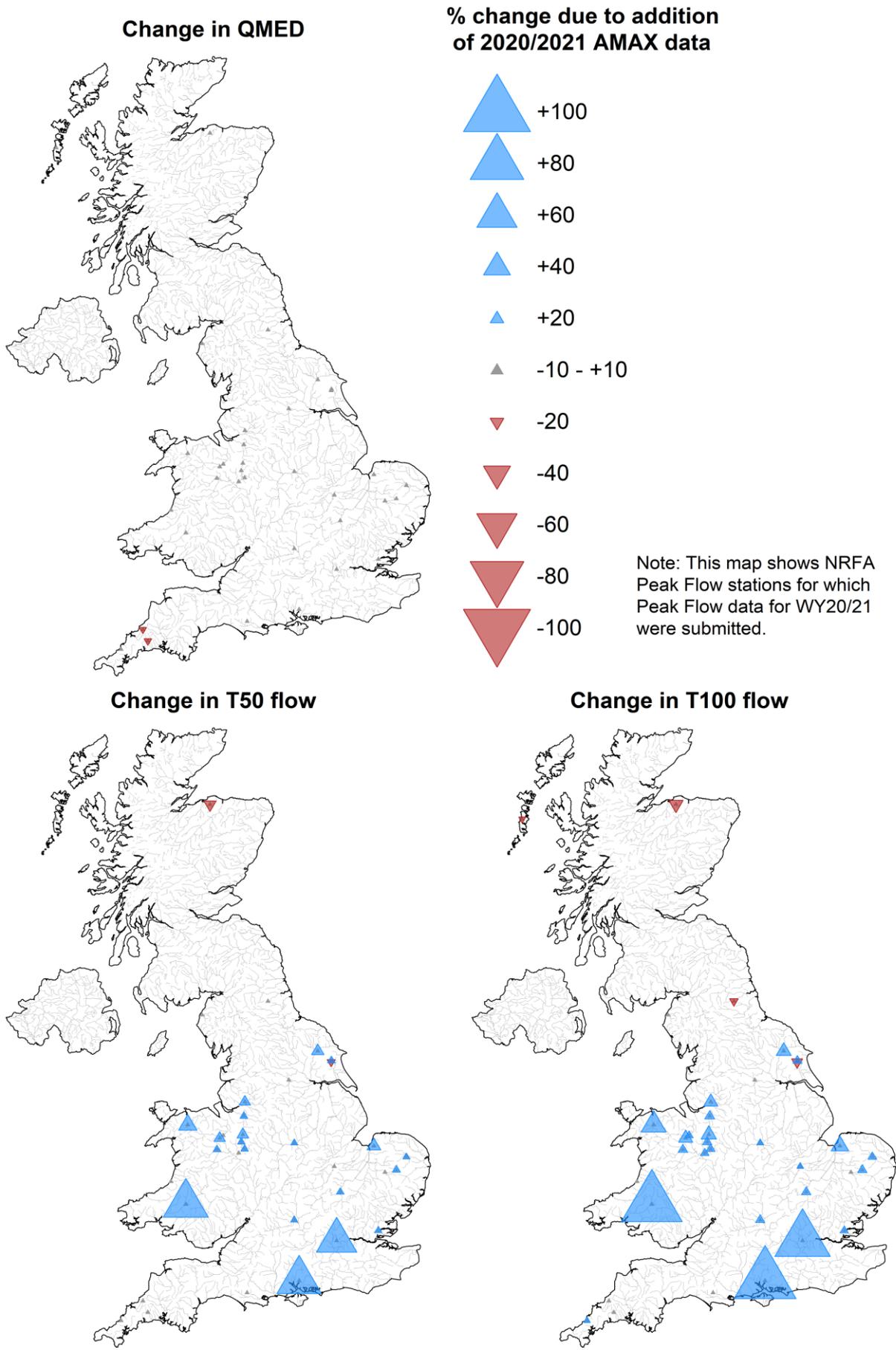
### 6.1 Impact of annual update

The addition of water year 2020/2021 has resulted in >10% changes in one or more flood estimation parameters at 34 stations, listed in Table 16 and mapped in Figure 1.

**Table 16:** Changes in QMED, 50- and 100-year return periods resulting from the addition of water year 2020/2021. Increased >10% are shaded in blue, decreases <10% are shaded in red.

NRFA Station	Station Name	Measuring Authority	% change in:			Comment
			QMED	50-yr	100-yr	
7011	Black Burn at Pluscarden Abbey	SEPA-NW	0%	-18%	-21%	Short record and 2020/2021 is a low ranking AMAX.
23002	Derwent at Eddys Bridge	EA-NE	-3%	-10%	-13%	2020/2021 is a low ranking AMAX.
26013	Driffield Trout Stream at Driffield	EA-Y	1%	-12%	-16%	Short record.
26014	Water Forlornes at Driffield	EA-Y	2%	12%	14%	WY20/21 is AMAX1.
27081	Oulton Beck at Oulton Farrer Lane	EA-Y	2%	8%	10%	WY20/21 is AMAX2.
27099	Derwent at Malton A64 Road Bridge	EA-Y	5%	19%	22%	WY20/21 is AMAX1.
28007	Trent at Shardlow	EA-EM	10%	10%	10%	WY20/21 is AMAX3.
32002	Willow Brook at Fotheringhay	EA-LN	1%	8%	10%	WY20/21 is AMAX1.
33034	Little Ouse at Abbey Heath	EA-EA	2%	8%	10%	WY20/21 is AMAX2.
33039	Bedford Ouse at Roxton	EA-EA	1%	11%	14%	WY20/21 is AMAX2.
33045	Wittle at Quidenham	EA-EA	4%	12%	14%	WY20/21 is AMAX1.
33054	Babingley at Castle Rising	EA-EA	1%	21%	26%	WY20/21 is AMAX1.
34001	Yare at Colney	EA-EA	0%	10%	13%	WY20/21 is AMAX1.
37031	Crouch at Wickford	EA-EA	5%	11%	12%	WY20/21 is AMAX1.
39034	Evenlode at Cassington Mill	EA-T	1%	11%	14%	WY20/21 is AMAX2.
39057	Crane at Cranford Park	EA-HNL	3%	60%	83%	WY20/21 is AMAX3.
42011	Hamble at Frogmill	EA-SSD	1%	66%	92%	WY20/21 is AMAX1.
44013	Piddle at Little Puddle	EA-WX	10%	6%	6%	WY20/21 is AMAX9

NRFA Station	Station Name	Measuring Authority	% change in:			Comment
			QMED	50-yr	100-yr	
48009	St Neot at Craigshill Wood	EA-DC	-11%	-4%	-7%	New AMAX at lower end of regime
49005	Bolingey Stream at Bolingey Cocks Bridge	EA-DC	-3%	7%	10%	Short record.
49006	Camel at Camelford	EA-DC	-11%	-6%	-5%	Short record
54016	Roden at Rodington	EA-WM	0%	10%	13%	WY20/21 is AMAX1.
54028	Vyrnwy at Llanymynech	NRW	1%	11%	14%	WY20/21 is AMAX1.
54040	Meese at Tibberton	EA-WM	2%	11%	13%	WY20/21 is AMAX2.
54052	Bailey Brook at Ternhill	EA-WM	0%	11%	14%	WY20/21 is AMAX2.
60005	Bran at Llandoverly	NRW	2%	67%	91%	WY20/21 is AMAX1.
66011	Conwy at Cwmlanerch	NRW	0%	27%	37%	WY20/21 is AMAX5.
67005	Ceiriog at Brynkinalt Weir	NRW	3%	17%	21%	WY20/21 is AMAX1.
67015	Dee at Manley Hall	NRW	0%	9%	12%	WY20/21 is AMAX1.
68003	Dane at Rudheath	EA-GMMC	1%	11%	15%	WY20/21 is AMAX1.
68005	Weaver at Audlem	EA-GMMC	0%	18%	23%	WY20/21 is AMAX1.
69005	Glaze Brook at Little Woollen Hall	EA-GMMC	0%	17%	21%	WY20/21 is AMAX1.
75018	Derwent at Seaton Mill	EA-CL	-5%	-10%	-10%	Short record and 2020/2021 is a low ranking AMAX.
106003	Abhainn Roag at Mill Croft	SEPA-NW	0%	-9%	-10%	Short record and 2020/2021 is a low ranking AMAX.



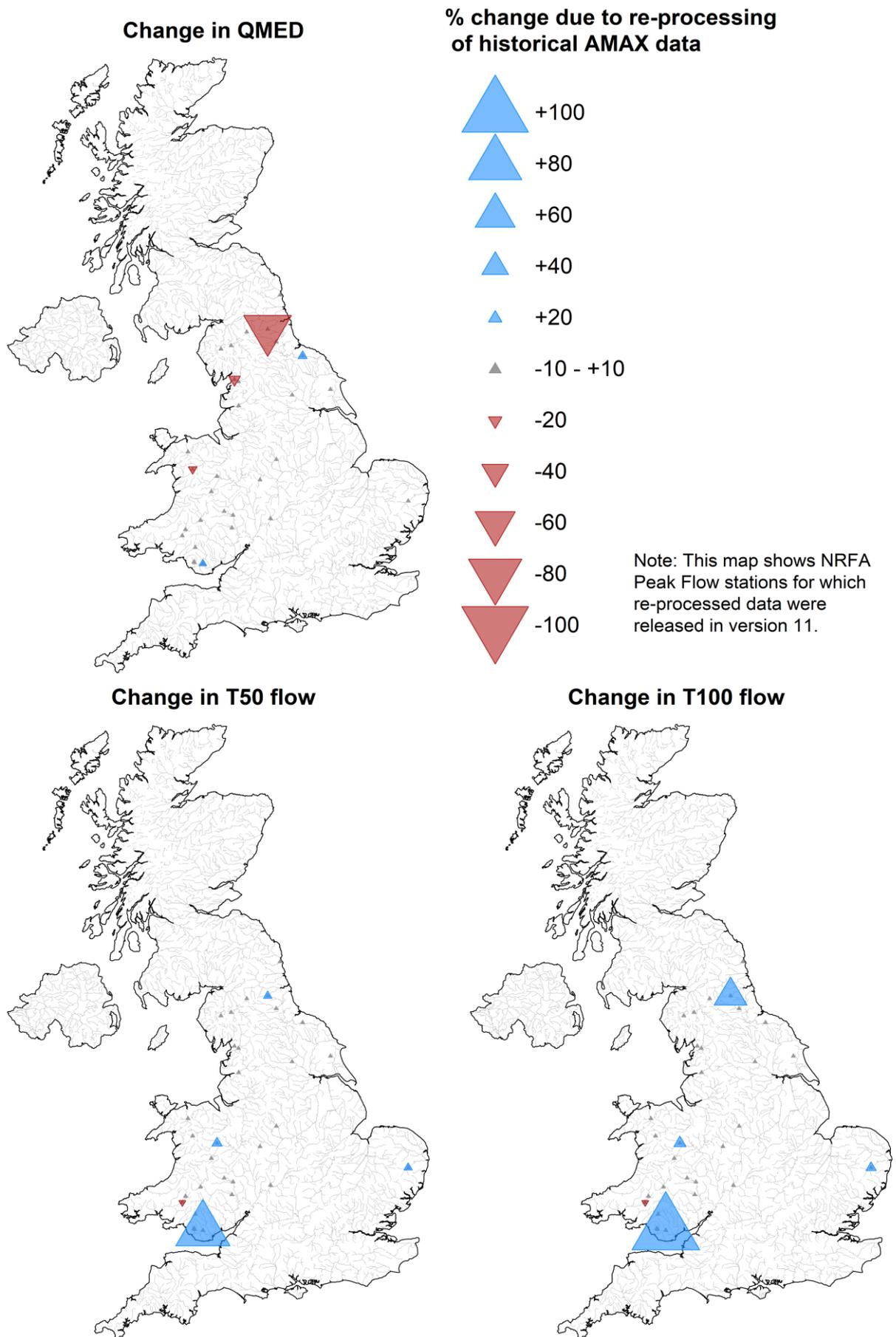
**Figure 1** Changes in QMED, 50- and 100-year return periods due to the addition of 2020/2021 AMAX data

## 6.2 Impact of re-processed historical data

The re-processing of historical data has resulted in >10% changes in one or more flood estimation parameters at 8 stations, listed in Table 17 and mapped in Figure 2.

**Table 17:** Changes in QMED, 50- and 100-year return periods resulting from re-processing of historical data in version 11.

NRFA Station	Station Name	Measuring Authority	% change in:			Comment
			QMED	50-yr	100-yr	
22001	Coquet at Morwick	EA-NE	-71%	13%	49%	Addition of nine AMAX between WY1969/1970 and WY1980/1981 which were previously missing.
25019	Leven at Easby	EA-NE	14%	10%	9%	Addition of seven AMAX between WY1996/1997 and WY2002/2003 which were previously missing.
34006	Waveney at Needham Mill	EA-EA	2%	13%	15%	Increase in flows post-1980 due to rating change.
54028	Vyrnwy at Llanymynech	NRW	1%	16%	18%	Increase in lowest flows and decrease in highest flows post-2010 due to rating change.
57010	Ely at Lanelay	NRW	11%	81%	101%	Increase in flows 1981-2002 and slight decrease in flows 2003-present due to rating changes.
60009	Sawdde at Felin-y-cwm	NRW	-10%	-10%	-10%	Increase in flows post-2009 due to rating change.
67018	Dee at New Inn	NRW	-13%	1%	5%	Decrease in flows 1983-2008 due to rating change.
73015	Keer at High Keer Weir	EA-CL	-17%	-9%	-9%	Infill of WY1995/1996 AMAX which is 3rd lowest in the record.



**Figure 2:** Changes in QMED, 50- and 100-year return periods due to the reprocessing of historical data in Version 11.

## ANNEX 1 POT EXCLUDED STATIONS

NRFA Station	Station Name	Measuring Authority
23002	Derwent at Eddy's Bridge	EA-NE
26003	Foston Beck at Foston Mill	EA-Y
26009	West Beck at Snakeholme Lock	EA-Y
26010	Driffield Canal at Snakeholme Lock	EA-Y
26013	Driffield Trout Stream at Driffield	EA-Y
26014	Water Forlornes at Driffield	EA-Y
26016	Gypsy Race at Kirby Grindalythe	EA-Y
26017*	Ings Beck at South Newbald	EA-Y
27038	Costa Beck at Gatehouses	EA-Y
27073	Brompton Beck at Snainton Ings	EA-Y
28033	Dove at Hollinsclough	EA-WM
29005	Rase at Bishopbridge	EA-LN
30005	Witham at Saltersford Total	EA-LN
30006	Slea at Leasingham Mill	EA-LN
30013	Heighington Beck at Heighington	EA-LN
30015	Cringle Brook at Stoke Rochford	EA-LN
31004	Welland at Tallington Total	EA-LN
32006	Nene/Kislingbury at Upton Total	EA-LN
33005	Bedford Ouse at Thornborough Mill	EA-EA
33007	Nar at Marham	EA-EA
33012	Kym at Meagre Farm	EA-EA
33032	Heacham at Heacham	EA-EA
33049	Stanford Water at Buckenham Tofts	EA-EA
33052	Swaffham Lode at Swaffham Bulbeck	EA-EA
33054	Babingley at Castle Rising	EA-EA
33057	Ouzel at Leighton Buzzard	EA-EA
34007	Dove at Oakley Park	EA-EA
34008	Ant at Honing Lock	EA-EA
34011	Wensum at Fakenham	EA-EA
34012	Burn at Burnham Overy	EA-EA
34018	Stiffkey at Warham	EA-EA
35001	Gipping at Constantine Weir	EA-EA
35003	Alde at Farnham	EA-EA
35004	Ore at Beversham	EA-EA
35010	Gipping at Bramford	EA-EA
36001	Stour at Stratford St Mary	ESW
36002	Glem at Glemsford	EA-EA
36003	Box at Polstead	EA-EA
36004	Chad Brook at Long Melford	EA-EA
36005	Brett at Hadleigh	EA-EA
36006	Stour at Langham	EA-EA
36007	Belchamp Brook at Bardfield Bridge	EA-EA
36008	Stour at Westmill	EA-EA
36009	Brett at Cockfield	EA-EA
36010	Bumpstead Brook at Broad Green	EA-EA

<b>NRFA Station</b>	<b>Station Name</b>	<b>Measuring Authority</b>
36011	Stour Brook at Sturmer	EA-EA
36012	Stour at Kedington	EA-EA
36015	Stour at Lamarsh	EA-EA
37003	Ter at Crabbs Bridge	EA-EA
37005	Colne at Lexden	EA-EA
37007	Wid at Writtle	EA-EA
37008	Chelmer at Springfield	EA-EA
37009	Brain at Guithavon Valley	EA-EA
37010	Blackwater at Appleford Bridge	EA-EA
37012	Colne at Poolstreet	EA-EA
37013	Sandon Brook at Sandon Bridge	EA-EA
37016	Pant at Copford Hall	EA-EA
37017	Blackwater at Stisted	EA-EA
37031	Crouch at Wickford	EA-EA
37033	Eastwood Brook at Eastwood	EA-EA
38011	Mimram at Fulling Mill	EA-HNL
39010	Colne at Denham	EA-HNL
39020	Coln at Bibury	EA-T
39021	Cherwell at Enslow Mill	EA-T
39033	Winterbourne Stream at Bagnor	EA-T
39034	Evenlode at Cassington Mill	EA-T
39037	Kennet at Marlborough	EA-T
39088	Chess at Rickmansworth	EA-HNL
39089	Gade at Bury Mill	EA-HNL
39095	Quaggy at Manor House Gardens	EA-KSL
40033	Dour at Crabble Mill	EA-KSL
41015	Ems at Westbourne	EA-SSD
41023	Lavant at Graylingwell	EA-SSD
42005	Wallop Brook at Broughton	EA-SSD
42006	Meon at Misingford	EA-SSD
42007	Alre at Drove Lane Alresford	EA-SSD
42008	Cheriton Stream at Swards Bridge	EA-SSD
42009	Candover Stream at Borough Bridge	EA-SSD
42010	Itchen at Highbridge & Allbrook Total	EA-SSD
42012	Anton at Fullerton	EA-SSD
42017	Hermitage Stream at Havant	EA-SSD
43003	Avon at East Mills Total	EA-WX
43004	Bourne at Laverstock	EA-WX
43005	Avon at Amesbury	EA-WX
43008	Wylfe at South Newton	EA-WX
43010	Allen at Loverley Farm	EA-WX
43012	Wylfe at Norton Bavant	EA-WX
43018	Allen at Walford Mill	EA-WX
43028	Chitterne Brook at Codford	EA-WX
43029	Wylfe at Brixton Deverill	EA-WX
44002	Piddle at Baggs Mill	EA-WX

<b>NRFA Station</b>	<b>Station Name</b>	<b>Measuring Authority</b>
44004	Frome at Dorchester Total	EA-WX
44006	Sydling Water at Sydling St Nicholas	EA-WX
44008	South Winterbourne at Winterbourne Steepleton	EA-WX
44009	Wey at Broadwey	EA-WX
44013	Piddle at Little Puddle	EA-WX
44014	Piddle at Briantspuddle	EA-WX
54003	Vyrnwy at Vyrnwy Reservoir	NRW
54027	Frome at Ebley Mill	EA-WM
54061	Hodnet Brook at Hodnet	EA-WM
54062	Stoke Brook at Stoke on Tern	EA-WM
55030	Claerwen at Dol-y-mynach	NRW
55035	Iago at Iago flume	CEHW
68007	Wincham Brook at Lostock Gralam	EA-GMMC
68010*	Fender at Ford Lane	EA-GMMC
69002	Irwell at Adelphi Weir	EA-GMMC
71003	Croasdale Beck at Croasdale Flume	EA-CL
84013	Clyde at Daldowie	SEPA-SW
85001	Leven at Linnbrane	SEPA-SW
205034	Woodburn at Control	DfIR
206006	Annalong at Recorder	BCDWC

## ANNEX 2 POT INDEPENDENCE CHANGES

Station Number	Station Name	Measuring Authority	Start date of POT independence change	Released in
21032	Glen at Kirknewton	EA-NE	04/01/1982	V11
21035	Till at Heaton Mill	EA-NE	Full period of record	V7
22001	Coquet at Morwick	EA-NE	04/01/1982	V8, V11
22006	Blyth at Hartford Bridge	EA-NE	04/01/1982	V8
22007	Wansbeck at Mitford	EA-NE	04/01/1982	V9
22009	Coquet at Rothbury	EA-NE	04/01/1982	V8
22003	Usway Burn at Shillmoor	EA-NE	Full period of record	V7
23001	Tyne at Bywell	EA-NE	01/12/1992	V6
23001	Tyne at Bywell	EA-NE	04/01/1982	V7
23002	Derwent at Eddys Bridge	EA-NE	28/04/1983	V9
23003	North Tyne at Reaverhill	EA-NE	Full period of record	V11
23004	South Tyne at Haydon Bridge	EA-NE	Full period of record	V7
23006	South Tyne at Featherstone	EA-NE	21/11/1972	V10
23007	Derwent at Rowlands Gill	EA-NE	03/01/1982	V11
23008	Rede at Rede Bridge	EA-NE	04/01/1982	V7
23009	South Tyne at Alston	EA-NE	27/11/1992	V9, V10, V11
23011	Kielder Burn at Kielder	EA-NE	23/11/1981	V7
23017	Team at Team Valley	EA-NE	Full period of record	V11
23018	Ouse Burn at Woolsington	EA-NE	24/12/1983	V7
23033	Rede at Otterburn	EA-NE	Full period of record	V8
24001	Wear at Sunderland Bridge	EA-NE	05/01/1982	V9, V10
24003	Wear at Stanhope	EA-NE	04/01/1982	V8, V9
24004	Bedburn Beck at Bedburn	EA-NE	04/02/1982	V7, V9
24008	Wear at Witton Park	EA-NE	04/01/1982	V9
24008	Wear at Witton Park	EA-NE	24/01/1975	V11
24009	Wear at Chester le Street	EA-NE	01/10/1981	V10
25001	Tees at Darlington Broken Scar	EA-NE	03/01/1982	V9
25004	Skerne at Darlington South Park	EA-NE	12/10/2012	V6
25004	Skerne at Darlington South Park	EA-NE	04/01/1982	V8
25005	Leven at Leven Bridge	EA-NE	15/03/1982	V9
25006	Greta at Rutherford Bridge	EA-NE	01/10/2008	V5
25006	Greta at Rutherford Bridge	EA-NE	04/01/1982	V8
25008	Tees at Barnard Castle	EA-NE	25/01/1990	V9
25009	Tees at Low Moor	EA-NE	03/01/1982	V9
25011	Langdon Beck at Langdon	EA-NE	25/09/2001	V8
25012	Harwood Beck at Harwood	EA-NE	03/01/1982	V8
25018	Tees at Middleton in Teesdale	EA-NE	06/10/1982	V9
25019	Leven at Easby	EA-NE	04/01/1982	V7
25020	Skerne at Preston le Skerne	EA-NE	04/01/1982	V11
25021	Skerne at Bradbury	EA-NE	04/01/1982	V11
25029	Leven at Foxton Bridge	EA-NE	Full period of record	V9
26016	Gypsy Race at Kirby Grindalythe	EA-Y	01/10/2013	V7
26017	Ings Beck at South Newbald	EA-Y	Full period of record	V11
27001	Nidd at Hunsingore Weir	EA-Y	18/12/1966	V9
27002	Wharfe at Wetherby Flint Mill	EA-Y	30/11/2009	V11

Station Number	Station Name	Measuring Authority	Start date of POT independence change	Released in
27003	Aire at Beal Weir	EA-Y	14/09/1993	V5
27003	Aire at Beal Weir	EA-Y	Full period of record	V8
27006	Don at Hadfields Weir	EA-Y	15/07/1968	V7
27007	Ure at Westwick Lock	EA-Y	07/01/1971	V8
27008	Swale at Leckby Grange	EA-Y	03/11/1968	V7
27021	Don at Doncaster	EA-Y	29/01/1978	V10
27022	Don at Rotherham Weir	EA-Y	09/11/2005	V7
27023	Dearne at Barnsley Weir	EA-Y	24/03/1965	V5, V10
27024	Swale at Richmond	EA-Y	14/08/1966	V8
27025	Rother at Woodhouse Mill	EA-Y	15/10/1976	V10
27026	Rother at Whittington	EA-Y	12/12/1979	V10
27028	Aire at Armley	EA-Y	28/12/1978	V6
27028	Aire at Armley	EA-Y	Full period of record	V7
27029	Calder at Elland	EA-Y	19/10/1971	V8, V9
27030	Dearne at Adwick	EA-Y	11/02/1977	V6, V10
27031	Colne at Colne Bridge	EA-Y	08/02/1966	V9, V10
27032	Hebden Beck at Hebden	EA-Y	Full period of record	V11
27033	Sea Cut at Scarborough	EA-Y	22/12/1969	V8, V10
27034	Ure at Kilgram Bridge	EA-Y	14/08/1971	V8
27035	Aire at Kildwick Bridge	EA-Y	Full period of record	V11
27040	Doe Lea at Staveley	EA-Y	Full period of record	V9, V10
27041	Derwent at Buttercrambe	EA-Y	Full period of record	V7
27043	Wharfe at Addingham	EA-Y	Full period of record	V9
27049	Rye at Ness	EA-Y	Full period of record	V10
27050	Esk at Sleights	EA-Y	03/05/1977	V9
27051	Crimple at Burn Bridge	EA-Y	Full period of record	V9
27052	Whitting at Sheepbridge	EA-Y	Full period of record	V9
27053	Nidd at Birstwith	EA-Y	Full period of record	V7
27055	Rye at Broadway Foot	EA-Y	Full period of record	V7, V9
27059	Laver at Ripon	EA-Y	Full period of record	V7
27062	Nidd at Skip Bridge	EA-Y	Full period of record	V9
27065	Holme at Queens Mill	EA-Y	Full period of record	V7
27071	Swale at Crakehill	EA-Y	Full period of record	V7, V9
27079	Calder at Methley	EA-Y	Full period of record	V11
27080	Aire at Lemonroyd	EA-Y	20/12/1996	V6
27080	Aire at Oulton Lemonroyd	EA-Y	Full period of record	V7
27081	Oulton Beck at Oulton Farrer Lane	EA-Y	Full period of record	V9
27083	Foss at Huntington	EA-Y	01/10/2013	V7
27083	Foss at Huntington	EA-Y	Full period of record	V8
27084	Eastburn Beck at Crosshills	EA-Y	Full period of record	V11
27086	Skell at Alma Weir	EA-Y	22/11/2012	V5
27086	Skell at Alma Weir	EA-Y	Full period of record	V6, V7
27087	Derwent at Low Marishes	EA-Y	Full period of record	V11
27088	Calder at Mytholmroyd	EA-Y	Full period of record	V6, V7
27089	Wharfe at Tadcaster	EA-Y	Full period of record	V8
27090	Swale at Catterick Bridge	EA-Y	Full period of record	V9

Station Number	Station Name	Measuring Authority	Start date of POT independence change	Released in
27092	Esk at Briggswath	EA-Y	Full period of record	V8, V9
27094	Wiske at Romanby Viewly Bridge	EA-Y	Full period of record	V7
27095	Pickering Beck at Pickering	EA-Y	Full period of record	V7
27096	Wharfe at Netherside Hall	EA-Y	Full period of record	V7
27097	Aire at Bingley	EA-Y	Full period of record	V8
27098	Calder at Dewsbury	EA-Y	Full period of record	V7, V8, V9
27099	Derwent at Malton A64 Road Bridge	EA-Y	Full period of record	V8
28003	Tame at Water Orton	EA-WM	01/11/1993	V7, V8
28007	Trent at Shardlow	EA-EM	Full period of record	V11
28008	Dove at Rocester Weir	EA-WM	25/11/2011	V5
28008	Dove at Rocester Weir	EA-WM	13/03/1988	V10
28009	Trent at Colwick	EA-EM	24/01/1971	V9
28012	Trent at Yoxall	EA-WM	01/10/2010	V5
28015	Idle at Mattersey	EA-EM	Full period of record	V9
28018	Dove at Marston on Dove	EA-WM	07/11/2000	V5
28018	Dove at Marston on Dove	EA-WM	28/11/1974	V8
28019	Trent at Drakelow Park	EA-WM	27/08/1996	V7
28024	Wreake at Syston Mill	EA-WM	30/11/2009	V5
28026	Anker at Polesworth	EA-WM	Full period of record	V7
28033	Dove at Hollinsclough	EA-WM	05/12/1972	V5
28039	Rae at Calthorpe Park	EA-WM	Period of record	V7, V8
28040	Trent at Stoke-On-Trent	EA-WM	01/10/2013	V7
28040	Trent at Stoke-On-Trent	EA-WM	Full period of record	V8
28041	Hamps at Waterhouses	EA-WM	01/10/2000	V7
28041	Hamps at Waterhouses	EA-WM	18/02/2000	V8
28046	Dove at Izaak Walton	EA-EM	02/01/1988	V8
28047	Oldcotes Dyke at Blyth	EA-EM	Full period of record	V7
28048	Amber at Wingfield Park	EA-EM	Full period of record	V9
28049	Ryton at Worksop	EA-EM	Full period of record	V7
28052	Sow at Great Bridgford	EA-WM	01/10/2013	V7
28052	Sow at Great Bridgford	EA-WM	Full period of record	V11
28053	Penk at Penkridge	EA-WM	01/01/2012	V5, V11
28053	Penk at Penkridge	EA-WM	Full period of record	V7
28055	Ecclesbourne at Duffield	EA-EM	Full period of record	V8
28056	Rothley Brook at Rothley	EA-EM	Full period of record	V7
28058	Henmore Brook at Ashbourne	EA-WM	29/10/2000	V8
28058	Henmore Brook at Ashbourne	EA-WM	Full period of record	V11
28060	Dover Beck at Lowdham	EA-EM	Full period of record	V8
28061	Churnet at Basford Bridge	EA-WM	06/11/2000	V5
28061	Churnet at Basford Bridge	EA-WM	Full period of record	V6, V11
28066	Cole at Coleshill	EA-WM	Full period of record	V7, V9, V11
28067	Derwent at Church Wilne	EA-EM	Full period of record	V11
28080	Tame at Lea Marston Lakes	EA-WM	Full period of record	V7
28080	Tame at Lea Marston Lakes	EA-WM	01/01/2001	V8
28081	Tame at Bescot	EA-WM	Full period of record	V6, V8
28083	Trent at Darlaston	EA-WM	Full period of record	V6, V8

Station Number	Station Name	Measuring Authority	Start date of POT independence change	Released in
28085	Derwent at St. Mary's Bridge	EA-EM	Full period of record	V11
28091	Ryton at Blyth	EA-EM	Full period of record	V7
28095	Tame at Hopwas Bridge	EA-WM	01/01/1998	V5
28095	Tame at Hopwas Bridge	EA-WM	Full period of record	V7
28115	Maun at Mansfield the Dykes	EA-EM	Full period of record	V7, V8
29001	Waithe Beck at Brigsley	EA-LN	27/08/1986	V7
29002	Great Eau at Claythorpe Mill	EA-LN	14/12/1979	V7
29003	Lud at Louth	EA-LN	14/12/1979	V8
29004	Ancholme at Bishopbridge	EA-LN	14/12/1979	V8
29009	Ancholme at Toft Newton	EA-LN	14/12/1979	V8
30001	Witham at Claypole Mill	EA-LN	11/12/1979	V7
30003	Bain at Fulsby Lock	EA-LN	14/12/1979	V8
30004	Lymn at Partney Mill	EA-LN	15/12/1979	V7
30011	Bain at Goulceby Bridge	EA-LN	14/12/1979	V9
30014	Pointon Lode at Pointon	EA-LN	21/11/2012	V6
30014	Pointon Lode at Pointon	EA-LN	14/12/1979	V8
31010	Chater at Fosters Bridge	EA-LN	27/04/1981	V9
31025	Gwash South Arm at Manton	EA-LN	Full period of record	V7
32002	Willow Brook at Fotheringhay	EA-LN	30/12/1981	V7
32003	Harpers Brook at Old Mill Bridge	EA-LN	10/03/1981	V9
32004	Ise Brook at Harrowden	EA-LN	Full period of record	V11
32008	Nene/Kislingbury at Dodford	EA-LN	10/12/1979	V9
32010	Nene at Wansford	EA-LN	01/01/1998	V7
33011	Little Ouse at County Bridge Euston	EA-EA	21/12/1980	V10
33012	Kym at Meagre Farm	EA-EA	01/10/2013	V7
33013	Sapiston at Rectory Bridge	EA-EA	04/01/1980	V10
33014	Lark at Temple	EA-EA	09/02/1980	V7
33015	Ouzel at Willen	EA-EA	Full period of record	V9
33018	Tove at Cappenham Bridge	EA-EA	28/12/1979	V7, V10
33019	Thet at Melford Bridge	EA-EA	05/02/1979	V9
33021	Rhee at Burnt Mill	EA-EA	11/12/1979	V7
33022	Ivel at Blunham	EA-EA	14/12/1979	V10
33023	Lea Brook at Beck Bridge	EA-EA	Full period of record	V9
33024	Cam at Dernford	EA-EA	22/01/1985	V7
33027	Rhee at Wimpole	EA-EA	28/12/1979	V10
33028	Flit at Shefford	EA-EA	15/12/1979	V8
33029	Stringside at Whitebridge	EA-EA	26/11/2012	V6
33029	Stringside at Whitebridge	EA-EA	28/12/1979	V7, V8
33030	Clipstone Brook at Clipstone	EA-EA	01/10/2012	V5
33034	Little Ouse at Abbey Heath	EA-EA	21/12/1980	V9
33037	Bedford Ouse at Newport Pagnell Total	EA-EA	29/12/1979	V8
33039	Bedford Ouse at Roxton	EA-EA	17/12/1979	V7, V8
33044	Thet at Bridgham	EA-EA	01/10/2013	V7
33045	Wittle at Quidenham	EA-EA	14/12/1979	V7
33046	Thet at Redbridge	EA-EA	15/01/1981	V10

Station Number	Station Name	Measuring Authority	Start date of POT independence change	Released in
33050	Snail at Fordham	EA-EA	Full period of record	V10
33051	Cam at Chesterford	EA-EA	29/12/1979	V7
33055	Granta at Babraham	EA-EA	02/02/1979	V10
33057	Ouzel at Leighton Buzzard	EA-EA	Full period of record	V8
33058	Ouzel at Bletchley	EA-EA	Full period of record	V9
33063	Little Ouse at Knettishall	EA-EA	Full period of record	V9
34003	Bure at Ingworth	EA-EA	03/02/1971	V7
34006	Waveney at Needham Mill	EA-EA	09/02/1980	V11
34012	Burn at Burnham Overy	EA-EA	14/12/1979	V9
35008	Gipping at Stowmarket	EA-EA	25/05/1981	V7
36012	Stour at Kedington	EA-EA	10/04/1998	V11
37001	Roding at Redbridge	EA-HNL	Full period of record	V11
37014	Roding at High Ongar	EA-HNL	21/10/2012	V6
37014	Roding at High Ongar	EA-HNL	10/03/1981	V10
37020	Chelmer at Felsted	EA-EA	Full period of record	V10
38003	Mimram at Panshanger Park	EA-HNL	27/05/1982	V8
38004	Rib at Wadesmill	EA-HNL	Full period of record	V11
38007	Canons Brook at Elizabeth Way	EA-HNL	19/07/1987	V8
38011	Mimram at Fulling Mill	EA-HNL	Full period of record	V11
38018	Upper Lee at Water Hall	EA-HNL	07/04/1987	V8
38022	Pymmes Brook at Edmonton Silver Street	EA-HNL	27/02/1987	V8
39001	Thames at Kingston	EA-T	05/11/2012	V6
39003	Wandle at South Wimbledon	EA-KSL	09/10/1987	V8, V10
39012	Hogsmill at Kingston-upon-Thames	EA-KSL	Full period of record	V9
39014	Ver at Hansteads	EA-HNL	16/03/1989	V8
39007	Blackwater at Swallowfield	EA-T	01/10/2013	V7
39011	Wey at Tilford	EA-T	31/01/1956	V11
39026	Cherwell at Banbury	EA-T	01/01/1987	V9
39028	Dun at Hungerford	EA-T	21/12/1989	V10
39035	Churn at Cerney Wick	EA-T	01/01/2013	V5
39036	Law Brook at Albury	EA-T	07/10/1987	V9
39042	Leach at Priory Mill Lechlade	EA-T	16/12/1972	V11
39052	The Cut at Binfield	EA-T	Full period of record	V9
40035	Old Mill Stream at Aylesford	EA-KSL	Full period of record	V11
39056	Ravensbourne at Catford Hill	EA-KSL	04/06/1987	V8
39056	Ravensbourne at Catford Hill	EA-KSL	26/05/1985	V9
39081	Ock at Abingdon	EA-T	16/12/1986	V9
39104	Mole at Esher	EA-KSL	Full period of record	V11
39134	Ravensbourne East at Bromley South	EA-KSL	Full period of record	V8
40004	Rother at Udiam	EA-KSL	26/09/1968	V9
40005	Beult at Stilebridge	EA-KSL	24/01/1970	V8
40007	Medway at Chafford / Colliersland Bridge	EA-KSL	01/10/2013	V7
40010	Eden at Penshurst / Vexour Bridge	EA-KSL	01/10/2013	V7
40010	Eden at Penshurst / Vexour Bridge	EA-KSL	12/05/1968	V9

Station Number	Station Name	Measuring Authority	Start date of POT independence change	Released in
40011	Great Stour at Horton	EA-KSL	01/10/2013	V7
40012	Darent at Hawley	EA-KSL	26/11/1992	V6, V8, V9
40013	Darent at Otford	EA-KSL	Full period of record	V8
40016	Cray at Crayford	EA-KSL	01/10/2013	V7
40017	Dudwell at Burwash	EA-KSL	Full period of record	V8
40018	Darent at Lullingstone	EA-KSL	30/03/2010	V6
40021	Hexden Channel at Hopemill	EA-KSL	Full period of record	V11
40035	Old Mill Stream at Aylesford	EA-KSL	Full period of record	V11
41005	Ouse at Gold Bridge	EA-SSD	14/12/1981	V10
41011	Rother at Iping Mill	EA-SSD	10/03/1982	V10
41016	Cuckmere at Cowbeeck	EA-SSD	05/01/1982	V8
41020	Bevern Stream at Clappers Bridge	EA-SSD	03/12/2006	V9
41022	Lod at Halfway Bridge	EA-SSD	07/03/1991	V7
42001	Wallington at North Fareham	EA-SSD	14/10/1982	V7
42003	Lymington at Brockenhurst	EA-SSD	Full period of record	V7
42014	Blackwater at Ower	EA-SSD	Full period of record	V9
43006	Nadder at Wilton	EA-WX	09/03/1991	V9
43007	Stour at Throop	EA-WX	28/03/1987	V8
43009	Stour at Hamoon	EA-WX	06/01/1988	V8
43014	East Avon at Upavon	EA-WX	04/04/1987	V9
43017	West Avon at Upavon	EA-WX	05/04/1987	V9
43019	Shreen Water at Colesbrook	EA-WX	Full period of record	V7
43028	Chitterne Brook at Codford	EA-WX	Full period of record	V9
43029	Wylfe at Brixton Deverill	EA-WX	Full period of record	V5
44001	Frome at East Stoke Total	EA-WX	Full period of record	V10
44008	South Winterbourne at Winterbourne Steepleton	EA-WX	Full period of record	V11
44009	Wey at Broadwey	EA-WX	Full period of record	V11
44011	Asker at East Bridge Bridport	EA-WX	01/10/2013	V7
44011	Asker at East Bridge Bridport	EA-WX	Full period of record	V8, V10
44014	Piddle at Briantspuddle	EA-WX	Full period of record	V9, V11
44015	Hooke at Hooke	EA-WX	Full period of record	V7, V8
45001	Exe at Thorverton	EA-DC	01/12/2003	V7
45001	Exe at Thorverton	EA-DC	Full period of record	V8
45002	Exe at Stoodleigh	EA-DC	Full period of record	V8
45003	Culm at Woodmill	EA-DC	Full period of record	V6
45004	Axe at Whitford	EA-DC	Full period of record	V5, V8
45005	Otter at Dotton	EA-DC	Full period of record	V9
45007	Exe at Trews Weir	EA-DC	Full period of record	V7
45008	Otter at Fenny Bridges	EA-DC	Full period of record	V8
45009	Exe at Pixton	EA-DC	Full period of record	V7
45012	Creedy at Cowley	EA-DC	Full period of record	V7
45816	Haddeo at Upton	EA-DC	Full period of record	V11
45817	Unnamed Stream at Upton	EA-DC	Full period of record	V11
45818	Withiel Florey Stream at Bessom Bridge	EA-DC	Full period of record	V11
46003	Dart at Austin's Bridge	EA-DC	Full period of record	V9

Station Number	Station Name	Measuring Authority	Start date of POT independence change	Released in
46006	Erme at Ermington	EA-DC	Full period of record	V9, V11
46008	Avon at Loddiswell	EA-DC	Full period of record	V9
46007	West Dart at Dunnabridge	EA-DC	Full period of record	V6, V8
46013	Bovey at Bovey Parke	EA-DC	Full period of record	V7
46014	Teign at Chudleigh	EA-DC	Full period of record	V7
47001	Tamar at Gunnislake	EA-DC	Full period of record	V8
47004	Lynher at Pillaton Mill	EA-DC	29/12/1966	V10
47005	Ottery at Werrington Park	EA-DC	24/12/1978	V8
47006	Lyd at Lifton Park	EA-DC	28/11/1975	V9
47007	Yealm at Puslinch	EA-DC	21/01/1970	V7
47008	Thrushel at Tinhay	EA-DC	Full period of record	V10
47009	Tiddy at Tideford	EA-DC	25/09/1976	V7
47010	Tamar at Crowford Bridge	EA-DC	Full period of record	V9
47011	Plym at Carn Wood	EA-DC	Full period of record	V9
47013	Withey Brook at Bastreet	EA-DC	Full period of record	V9
47014	Walkham at Horrabridge	EA-DC	Full period of record	V8
47015	Tavy at Ludbrook	EA-DC	01/10/1994	V7
47020	Inny at Bealsmill	EA-DC	Full period of record	V7, V10
47021	Kensey at Launceston Newport	EA-DC	Full period of record	V10
47022	Tory Brook at Newnham Park	EA-DC	Full period of record	V9, V11
47023	Tamar at Tamarstone Bridge	EA-DC	Full period of record	V7
47024	Tavy at Tavistock Abbey Bridge	EA-DC	Full period of record	V5, V8
47025	Wolf at Germansweek	EA-DC	Full period of record	V10
48001	Fowey at Trekeivesteps	EA-DC	Full period of record	V9
48003	Fal at Tregony	EA-DC	Full period of record	V8
48004	Warleggan at Trengoffe	EA-DC	Full period of record	V11
48005	Kenwyn at Truro	EA-DC	Full period of record	V11
48006	Cober at Helston Country Bridge	EA-DC	01/10/2012	V5
48007	Kennal at Ponsanooth	EA-DC	Full period of record	V10
48009	St Neot at Craigshill Wood	EA-DC	Full period of record	V9
48011	Fowey at Restormel	EA-DC	Full period of record	V7, V9
48012	Fal at Trenowth	EA-DC	Full period of record	V9
49001	Camel at Denby	EA-DC	Full period of record	V7
49002	Hayle at St Erth	EA-DC	Full period of record	V7
49003	De Lank at De Lank	EA-DC	Full period of record	V11
49005	Bolingey Stream at Bolingey Cocks Bridge	EA-DC	Full period of record	V11
49006	Camel at Camelford	EA-DC	Full period of record	V7, V8
50001	Taw at Umlerleigh	EA-DC	Full period of record	V10
50005	West Okement at Vellake	EA-DC	01/10/2012	V5
50008	Lew at Gribbleford Bridge	EA-DC	Full period of record	V10
50009	Lew at Norley Bridge	EA-DC	Full period of record	V10
50010	Torridge at Rockhay Bridge	EA-DC	01/10/2012	V5
50011	Okement at Jacobstowe	EA-DC	Full period of record	V9
51001	Doniford Stream at Swill Bridge	EA-WX	Full period of record	V9
51002	Horner Water at West Luccombe	EA-WX	Full period of record	V7
51003	Washford at Beggearn Huish	EA-WX	01/11/1982	V6

Station Number	Station Name	Measuring Authority	Start date of POT independence change	Released in
51003	Washford at Beggearn Huish	EA-WX	Full period of record	V8
52003	Halsewater at Halsewater	EA-WX	30/11/1992	V9
52004	Isle at Ashford Mill	EA-WX	07/03/1972	V5
52005	Tone at Bishops Hull	EA-WX	11/07/1968	V9
52006	Yeo at Pen Mill	EA-WX	Full period of record	V8
52007	Parrett at Chiselborough	EA-WX	Full period of record	V10
52009	Sheppey at Fenny Castle	EA-WX	14/08/1992	V10
52010	Brue at Lovington	EA-WX	Full period of record	V8
52011	Cary at Somerton	EA-WX	Full period of record	V10
52014	Tone at Greenham	EA-WX	09/02/1974	V8
52015	Land Yeo at Wraxall Bridge	EA-WX	29/11/1992	V10
52016	Currypool Stream at Currypool Farm	EA-WX	Full period of record	V11
52017	Congresbury Yeo at Iwood	EA-WX	Full period of record	V7
53002	Semington Brook at Semington	EA-WX	Full period of record	V7
53004	Chew at Compton Dando	EA-WX	Full period of record	V8
53005	Midford Brook at Midford	EA-WX	Full period of record	V9
53006	Frome (Bristol) at Frenchay	EA-WX	20/12/1983	V8
53007	Frome (Somerset) at Tellisford	EA-WX	03/08/1965	V9
53008	Avon at Great Somerford	EA-WX	Full period of record	V7
53013	Marden at Stanley	EA-WX	Full period of record	V6, V8
53017	Boyd at Bitton	EA-WX	09/10/1988	V9
53018	Avon at Bathford	EA-WX	Full period of record	V7, V9, V11
53023	Sherston Avon at Fosseyway	EA-WX	Full period of record	V6, V8
52025	Hillfarrance Brook at Milverton	EA-WX	Full period of record	V11
53009	Wellow Brook at Wellow	EA-WX	Full period of record	V11
53025	Mells at Vallis	EA-WX	Full period of record	V11
53028	By Brook at Middlehill	EA-WX	Full period of record	V9
53029	Biss at Trowbridge	EA-WX	Full period of record	V7, V9
54001	Severn at Bewdley	EA-WM	07/01/1983	V9
54002	Avon at Evesham	EA-WM	06/01/1995	V8
54004	Sowe at Stoneleigh	EA-WM	Full period of record	V9
54005	Severn at Montford	EA-WM	24/01/1971	V7
54007	Arrow at Broom	EA-WM	Full period of record	V9, V11
54008	Teme at Tenbury	EA-WM	14/01/1970	V11
54011	Salwarpe at Harford Hill	EA-WM	24/01/1971	V10
54012	Tern at Walcot	EA-WM	03/12/1972	V8
54014	Severn at Abermule	NRW	22/02/1970	V8
54014	Severn at Abermule	NRW	01/10/2008	V11
54016	Roden at Rodington	EA-WM	Full period of record	V7
54018	Rea Brook at Hookagate	EA-WM	14/12/1978	V9
54019	Avon at Stareton	EA-WM	Full period of record	V9
54020	Perry at Yeaton	EA-WM	Full period of record	V7
54023	Badsey Brook at Offenham	EA-WM	Full period of record	V11
54024	Worfe at Burcote	EA-WM	Full period of record	V11
54028	Vyrnwy at Llanymynech	NRW	13/12/2011	V6
54028	Vyrnwy at Llanymynech	NRW	Full period of record	V8, V11

Station Number	Station Name	Measuring Authority	Start date of POT independence change	Released in
54029	Teme at Knightsford Bridge	EA-WM	Full period of record	V7
54034	Dowles Brook at Oak Cottage	EA-WM	Full period of record	V9
54036	Isbourne at Hinton on the Green	EA-WM	Full period of record	V8
54038	Tanat at Llanyblodwel	EA-WM	02/12/1992	V10
54040	Meese at Tibberton	EA-WM	Full period of record	V8
54041	Tern at Eaton upon Tern	EA-WM	28/01/1977	V8
54044	Tern at Ternhill	EA-WM	Full period of record	V9
54052	Bailey Brook at Ternhill	EA-WM	Full period of record	V9
54080	Severn at Dolwen	NRW	22/11/2011	V6
54080	Severn at Dolwen	NRW	Full period of record	V8
54102	Avon at Lilbourne	EA-WM	01/01/2013	V10
54106	Stour (Warks) at Shipston	EA-WM	Full period of record	V9
54114	Avon at Warwick	EA-WM	15/06/2007	V8
54114	Avon at Warwick	EA-WM	Full period of record	V9
55002	Wye at Belmont	EA-WM	01/10/1984	V11
55007	Wye at Erwood	NRW	11/03/1981	V8
55012	Irfon at Cilmerly	NRW	12/12/1978	V8
55012	Irfon at Cilmerly	NRW	Full period of record	V11
55013	Arrow at Titley Mill	EA-WM	14/01/1971	V11
55014	Lugg at Byton	EA-WM	01/10/1981	V11
55016	Irfon at Disserth	NRW	02/01/1988	V8
55021	Lugg at Butts Bridge	EA-WM	24/11/1984	V7
55021	Lugg at Butts Bridge	EA-WM	01/10/1988	V11
55023	Wye at Redbrook	NRW	13/03/1981	V9
55025	Llynfi at Three Cocks	NRW	11/03/1981	V9
55026	Wye at Ddol Farm	NRW	22/12/1985	V8
55029	Monnow at Grosmont	NRW	29/04/2012	V6
55029	Monnow at Grosmont	NRW	01/10/2009	V7
55032	Elan at Caban Dam	NRW	Full period of record	V9
56004	Usk at Llandetty	NRW	14/11/2009	V8
56006	Usk at Trallong	NRW	Full period of record	V9
56012	Grwyne at Millbrook	NRW	03/01/1982	V9
56013	Yscir at Pont-Ar-Yscir	NRW	05/01/1985	V9
57004	Cynon at Abercynon	NRW	13/02/1982	V7, V10
57005	Taff at Pontypridd	NRW	12/11/1992	V7
57006	Rhondda at Trehafod	NRW	15/10/1983	V7
57008	Rhymney at Llanederyn	NRW	10/03/1982	V7
57009	Ely at St Fagans	NRW	Full period of record	V8
57010	Ely at Lanelay	NRW	10/03/1982	V8
57010	Ely at Lanelay	NRW	Full period of record	V11
57014	Rhymney at Bargoed	NRW	Full period of record	V7
57017	Rhondda Fawr at Tynewydd	NRW	Full period of record	V7
58005	Ogmore at Brynmenyn	NRW	Full period of record	V11
58006	Mellte at Pontneddfechan	NRW	15/03/1982	V9, V11
58007	Llynfi at Coytrahen	NRW	06/03/1982	V7, V11
58008	Dulais at Cilfrew	NRW	12/02/1982	V10

Station Number	Station Name	Measuring Authority	Start date of POT independence change	Released in
58009	Ewenny at Keepers Lodge	NRW	22/12/1995	V8
58012	Afan at Marcroft Weir	NRW	Full period of record	V9
59001	Tawe at Ynystanglws	NRW	14/10/2002	V8
59001	Tawe at Ynystanglws	NRW	08/06/1998	V10
59002	Loughor at Tir-y-dail	NRW	06/03/1982	V9
60001	Twyi at Ty Castell	NRW	03/01/1982	V6, V7, V9
60002	Cothi at Felin Mynachdy	NRW	12/02/1982	V7
60003	Taf at Clog-y-Fran	NRW	06/03/1982	V9, V10
60006	Gwili at Glangwili	NRW	03/01/1982	V8
60007	Tywi at Dolau Hirion	NRW	12/02/1982	V7, V11
60009	Sawdde at Felin-y-cwm	NRW	29/12/2012	V6
60009	Sawdde at Felin-y-cwm	NRW	23/08/1985	V7
60011	Conwy at Cwmlanerch	NRW	01/11/1980	V11
60012	Twrch at Ddol Las	NRW	12/02/1982	V7
60016	Tywi at Manorafon	NRW	Full period of record	V11
60017	Twrch at Gurnos	NRW	Full period of record	V9
67018	Dee at New Inn	NRW	01/01/1982	V11
61002	Eastern Cleddau at Canaston Bridge	NRW	10/03/1982	V8, V10
61003	Gwaun at Cilrhedyn Bridge	NRW	24/10/2011	V6
62001	Teifi at Glanteifi	NRW	13/02/1982	V9
62002	Teifi at Llanfair	NRW	08/11/2002	V8
62002	Teifi at Llanfair	NRW	Full period of record	
63001	Ystwyth at Pont Llolwyn	NRW	29/10/1989	V8
63003	Wyre at Llanrystud	NRW	01/10/1999	V7
63003	Wyre at Llanrystud	NRW	Full period of record	V8
64001	Dyfi at Dyfi Bridge	NRW	18/11/2009	V6
64001	Dyfi at Dyfi Bridge	NRW	11/01/1990	V8
64002	Dysynni at Pont-y-Garth	NRW	03/03/1998	V6, V7
64006	Leri at Dolybont	NRW	24/09/1982	V8
64011	Cerist at Llaw'r Cae	NRW	Full period of record	V7
65001	Glaslyn at Beddgelert	NRW	18/08/1982	V10
65004	Gwyrfaï at Bontnewydd	NRW	20/07/2010	V6
65004	Gwyrfaï at Bontnewydd	NRW	04/01/1982	V7
65005	Erch at Pencaenewydd	NRW	10/03/1982	V7
65006	Seiont at Peblig Mill	NRW	01/10/2013	V7
65007	Dwyfor at Garndolbenmaen	NRW	10/03/1982	V8
66004	Wheeler at Bodfari	NRW	27/01/1977	V8
66011	Conwy at Cwmlanerch	NRW	01/11/1981	V11
67005	Ceiriog at Brynkinalt Weir	NRW	24/01/1971	V7
67006	Alwen at Druid	NRW	19/02/1970	V8
67008	Alyn at Pont-y-Capel	NRW	22/01/1970	V7
67009	Alyn at Rhydymwyn	NRW	05/02/1980	V7
67010	Gelyn at Cynefail	NRW	Full period of record	V9
67018	Dee at New Inn	NRW	01/01/1982	V11
68001	Weaver at Ashbrook	EA-GMMC	05/12/1979	V7
68003	Dane at Rudheath	EA-GMMC	03/02/1977	V6

Station Number	Station Name	Measuring Authority	Start date of POT independence change	Released in
68003	Dane at Rudheath	EA-GMMC	02/01/1976	V7
68005	Weaver at Audlem	EA-GMMC	22/03/1976	V7
68010	Fender at Ford Lane	EA-GMMC	Full period of record	V11
68011	Arley Brook at Gore Farm	EA-GMMC	Full period of record	V11
68018	Dane at Congleton Park	EA-GMMC	01/10/2012	V6
68018	Dane at Congleton Park	EA-GMMC	05/12/1979	V7
68020	Gowy at Bridge Trafford	EA-GMMC	Full period of record	V7
68021	Arrowe Brook at Acton Lane	EA-GMMC	Full period of record	V11
68044	Dane at Hug Bridge	EA-GMMC	18/01/2007	V6
68044	Dane at Hug Bridge	EA-GMMC	Full period of record	V9
69005	Glaze Brook at Little Woolden Hall	EA-GMMC	Full period of record	V7
69007	Mersey at Ashton Weir	EA-GMMC	25/09/1976	V7
69008	Dean at Stanneylands	EA-GMMC	02/01/1976	V9
69012	Bollin at Wilmslow	EA-GMMC	02/01/1976	V9
69015	Etherow at Compstall	EA-GMMC	19/10/1971	V9
69017	Goyt at Marple Bridge	EA-GMMC	01/01/1976	V6
69017	Goyt at Marple Bridge	EA-GMMC	02/01/1976	V9
69027	Tame at Portwood	EA-GMMC	Full period of record	V11
69020	Medlock at London Road	EA-GMMC	01/11/1992	V7
69020	Medlock at London Road	EA-GMMC	01/05/1975	V10
69022	Irwell at Irwell Vale	EA-GMMC	Full period of record	V6, V8
69023	Roch at Blackford Bridge	EA-GMMC	01/01/1976	V10
69024	Croal at Farnworth Weir	EA-GMMC	15/03/1978	V6, V8
69025	Irwell at Manchester Racecourse	EA-GMMC	Full period of record	V9
69028	Mersey at Brinksway	EA-GMMC	11/02/1974	V7, V8
69030	Sankey Brook at Causey Bridges	EA-GMMC	28/12/1978	V10
69032	Alt at Kirkby	EA-CL	28/12/1978	V7
69041	Tame at Broomstairs	EA-GMMC	03/09/1974	V6, V8
69043	Irk at Collyhurst Weir	EA-GMMC	Full period of record	V10
69044	Irwell at Bury Ground	EA-GMMC	06/11/1996	V8
69046	Bradshaw Brook at Bradshaw Tennis Club	EA-GMMC	Full period of record	V9,V11
69047	Roch at Littleborough	EA-GMMC	Full period of record	V6, V8
69048	Tame at Uppermill	EA-GMMC	Full period of record	V10, V11
69803	Roch at Rochdale	EA-GMMC	Full period of record	V11
70002	Douglas at Wanes Blades Bridge	EA-CL	Full period of record	V9
70003	Douglas at Wigan	EA-CL	03/12/1999	V8
70004	Yarrow at Croston Mill	EA-CL	01/10/2013	V5
70004	Yarrow at Croston Mill	EA-CL	Full period of record	V6, V8, V9
71001	Ribble at Samlesbury	EA-CL	02/01/1976	V8
71004	Calder at Whalley Weir	EA-CL	01/01/1976	V7
71004	Calder at Whalley Weir	EA-CL	02/01/1976	V8
71006	Ribble at Henthorn	EA-CL	02/01/1976	V8
71008	Hodder at Hodder Place	EA-CL	02/01/1976	V9
71009	Ribble at New Jumbles Rock	EA-CL	26/11/1979	V10
71010	Pendle Water at Barden Lane	EA-CL	22/04/1977	V9
71011	Ribble at Arnford	EA-CL	Full period of record	V7

Station Number	Station Name	Measuring Authority	Start date of POT independence change	Released in
71013	Darwen at Ewood	EA-CL	Full period of record	V7
71014	Darwen at Blue Bridge	EA-CL	Full period of record	V11
72002	Wyre at St Michaels	EA-CL	22/04/1970	V10
72003	Hindburn at Wray	EA-CL	23/11/1977	V6
72003	Hindburn at Wray	EA-CL	01/10/1976	V7, V9, V10
72004	Lune at Caton	EA-CL	07/01/1979	V8
72005	Lune at Killington	EA-CL	01/10/1981	V8
72007	Brock at upstream of A6	EA-CL	Full period of record	V10
72009	Wenning at Wennington	EA-CL	14/06/1977	V9, V10
72011	Rawthey at Brigflatts	EA-CL	Full period of record	V10, V11
72014	Conder at Galgate	EA-CL	06/04/1978	V6
72014	Conder at Galgate	EA-CL	29/11/1976	V7
72015	Lune at Lunes Bridge	EA-CL	01/10/1981	V8, V10
72017	Wenning at Hornby	EA-CL	05/05/1997	V9
73002	Crake at Low Nibthwaite	EA-CL	Full period of record	V10
73005	Kent at Sedgwick	EA-CL	02/01/1976	V10
73008	Bela at Beetham	EA-CL	15/11/1978	V8
73009	Sprint at Sprint Mill	EA-CL	02/01/1976	V7
73010	Leven at Newby Bridge	EA-CL	29/11/1976	V8
73010	Leven at Newby Bridge	EA-CL	20/10/1971	V9
73011	Mint at Mint Bridge	EA-CL	Full period of record	V9, V10
73014	Brathay at Jeffy Knots	EA-CL	Full period of record	V7, V8, V9
73015	Keer at High Keer Weir	EA-CL	01/01/1991	V6
73017	Kent at Bowston	EA-CL	Full period of record	V11
74001	Duddon at Duddon Hall	EA-CL	03/02/1977	V9
74003	Ehen at Bleach Green	EA-CL	26/11/1976	V9
74005	Ehen at Braystones	EA-CL	19/10/1982	V8
74006	Calder at Calder Hall	EA-CL	17/11/1978	V8
74007	Esk at Cropple How	EA-CL	03/02/1977	V9
74008	Duddon at Ulpha	EA-CL	Full period of record	V11
75003	Derwent at Ouse Bridge	EA-CL	01/06/2012	V10
75004	Cocker at Southwaite Bridge	EA-CL	27/11/1976	V8, V11
75005	Derwent at Portinscale	EA-CL	01/10/2011	V5
75007	Glenderamackin at Threlkeld	EA-CL	Full period of record	V9
75009	Greta at Low Briery	EA-CL	02/01/1976	V7
75017	Ellen at Bullgill	EA-CL	Full period of record	V10
75018	Derwent at Seaton Mill	EA-CL	Full period of record	V8, V9
76004	Lowther at Eamont Bridge	EA-CL	25/01/1977	V9, V11
76007	Eden at Sheepmount	EA-CL	Full period of record	V8
76014	Eden at Kirkby Stephen	EA-CL	02/02/1981	V8
76015	Eamont at Pooley Bridge	EA-CL	Full period of record	V7, V11
76017	Eden at Kirkby Stephen	EA-CL	Full period of record	V8, V11
76019	Roe Beck at Stockdalewath	EA-CL	Full period of record	V10
76021	Eden at Great Musgrave Bridge	EA-CL	Full period of record	V8, V9
76022	Caldew at Cummersdale	EA-CL	Full period of record	V9
76023	Dacre Beck at Dacre Bridge	EA-CL	Full period of record	V9

## ANNEX 3 STATIONS WITH CHANGES TO DATUM HISTORY

NRFA Station	Station Name	Measuring Authority
21003	Tweed at Peebles	SEPA-SE
21005	Tweed at Lyne Ford	SEPA-SE
21009	Tweed at Norham	SEPA-SE
21015	Leader Water at Earlston	SEPA-SE
21016	Eye Water at Eyemouth Mill	SEPA-SE
21017	Ettrick Water at Brockhoperig	SEPA-SE
21025	Ale Water at Ancrum	SEPA-SE
21027	Blackadder Water at Mouth Bridge	SEPA-SE
23007	Derwent at Rowlands Gill	EA-NE
27008	Swale at Leckby Topcliffe	EA-Y
27032	Hebden Beck at Hebden	EA-Y
27035	Aire at Kildwick Bridge	EA-Y
27071	Swale at Crakehill	EA-Y
27079	Calder at Methley	EA-Y
27092	Esk at Briggswath	EA-Y
28007	Trent at Shardlow	EA-EM
28010	Derwent at Longbridge Weir	EA-EM
28052	Sow at Great Bridgeford	EA-WM
28085	Derwent at St Mary's Bridge	EA-EM
36008	Stour at Westmill	EA-EA
36011	Stour Brook at Sturmer	EA-EA
36012	Stour at Kedington	EA-EA
36015	Stour at Lamarsh	EA-EA
39054	Mole at Gatwick Airport	EA-KSL
39104	Mole at Esher	EA-KSL
40021	Hexden Channel at Hopemill	EA-KSL
45816	Haddeo at Upton	EA-DC
45817	Unnamed Stream at Upton	EA-DC
47022	Tory Brook at Newnham Park	EA-DC
48005	Kenwyn at Truro	EA-DC
49003	De Lank at De Lank	EA-DC
55004	Irfon at Abernant	NRW
55005	Wye at Rhayader	NRW
55007	Wye at Erwood	NRW
55009	Monnow at Kentchurch	NRW
55010	Wye at Pant Mawr	NRW
55012	Irfon at Cilmery	NRW
55016	Ithon at Disserseth	NRW
57010	Ely at Lanelay	NRW
58001	Ogmore at Bridgend	NRW
58007	Llynfi at Coytrahen	NRW

<b>NRFA Station</b>	<b>Station Name</b>	<b>Measuring Authority</b>
60016	Tywi at Manorafon	NRW
64001	Dyfi at Dyfi Bridge	NRW
66011	Conwy at Cwmlanerch	NRW
67018	Dee at New Inn	NRW
73017	Kent at Bowston	EA-CL
79004	Scar Water at Capenoch	SEPA-SW