

East of England

Summary – 22 January 2019

Rainfall	December 2018 (DRT data)		January 2019 (EA data)		16/01/2019 to 22/01/2019
	mm.	%LTA	1st to 22nd mm.	%LTA	
EAST OF ENGLAND	60.00	109.09	11.2	21.9	8.7
Lincs&Northants AREA	73.82	132.79	9.0	17.6	7.0
Louth Grimsby and Ancholme	78.48	130.33	8.2	14.8	5.4
Steeping Great Eau and Long Eau	79.10	126.91	8.8	15.0	6.0
Witham to Chapel Hill	79.19	146.72	10.0	19.7	7.2
South Forty Foot and Hobhole	71.57	138.31	8.6	17.4	6.9
Upper Welland and Nene	74.07	126.27	11.6	22.1	9.2
Lower Welland and Nene	62.70	126.54	7.6	16.5	6.8
Cambs&Beds AREA	60.83	111.42	11.8	23.8	10.0
Upper Bedford Ouse	69.33	112.28	10.7	19.6	9.5
Lower Bedford Ouse	56.63	107.55	12.6	27.1	11.8
Central Area Fenland	58.08	117.59	10.5	23.5	8.3
Cam	50.28	98.94	10.4	23.0	9.1
NW Norfolk and Wissey	76.37	128.50	15.0	27.1	11.2
Little Ouse and Lark	56.96	102.92	11.5	22.3	9.1
Essex, Norfolk&Suffolk AREA	59.19	106.90	12.8	24.4	9.1
North Norfolk	73.79	121.44	19.0	33.9	11.4
Broadland Rivers	67.89	115.07	15.4	27.8	9.3
East Suffolk	56.82	105.20	10.5	19.9	7.1
North Essex	50.44	95.87	11.3	22.7	9.6
South Essex	51.36	104.11	8.8	19.2	8.1

SMD	22/01/2019
	SMD mm.
Lincs&Northants AREA	25
Cambs&Beds AREA	21
Essex, Norfolk&Suffolk AREA	12
EAST OF ENGLAND	19

Note: Previous month's rainfall totals are from EA Daily Rainfall Tool. Current month totals based on limited number of EA gauges (unvalidated).

Author: [Hydrology and Operations](#) Contact details: 02030251863

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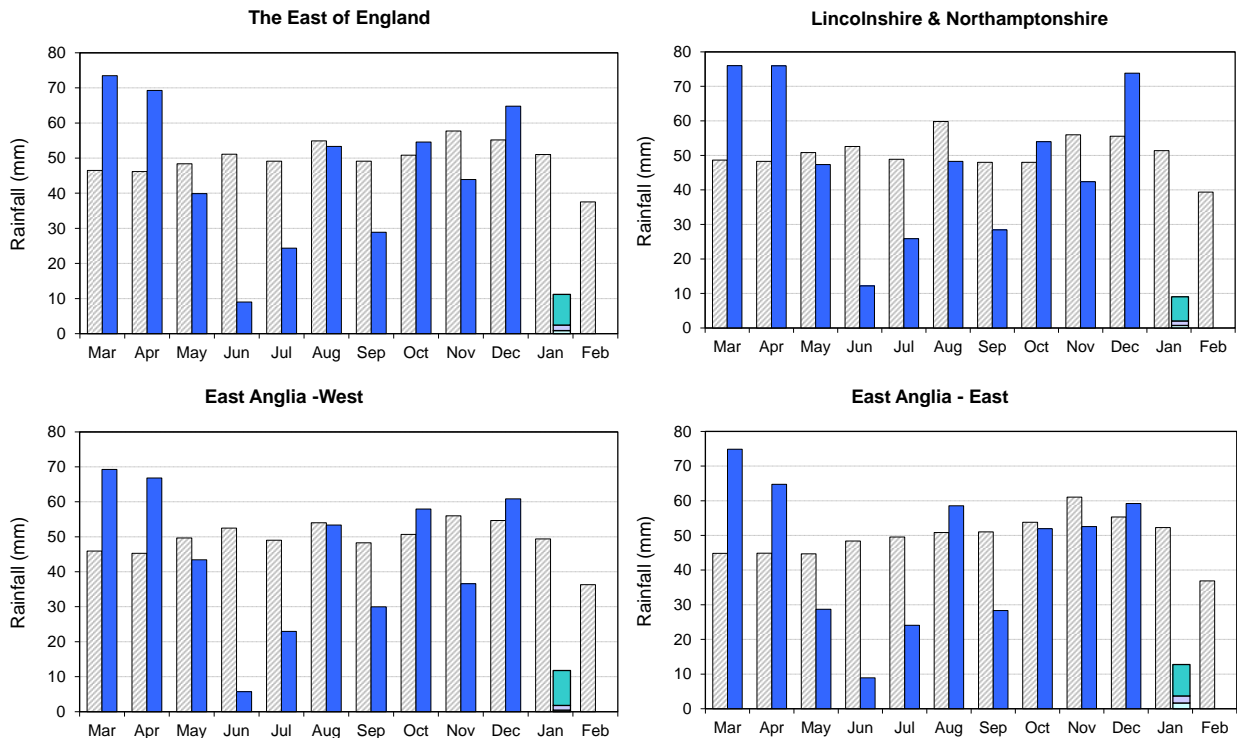
Reservoir	21/01/2019
	% full
Rutland	82
Pitsford	77
Hollowell	60
Ravensthorpe	67
Covenham	98
Grafham	69
Alton	74
Ardleigh	85
Abberton	75
Hanningfield	65

River Flows	January-2019		
Site	monthly mean	%LTA	Class
	to date (m3/s)		
Rase Bishopbridge, ANCHOLME	0.414	44	Below normal
Louth Weir, LUD	0.320	49	Below normal
Partney, LYMN & STEEPING	0.329	40	Exceptionally low
Claypole, UPPER WITHAM -SOUTH	0.927	30	Notably low
Ashley, WELLAND MKT.HARB-ROCKINGHM	0.272	9	Exceptionally low
Upton Mill Total, NENE - KISLINGBURY BRANCH	0.617	22	Notably low
Willen, OUZEL	0.747	19	Exceptionally low
Offord(Gross Flows), OUSE (AN)	7.443	24	Notably low
Denver Ely Ouse, OUSE (AN)	7.195	29	Exceptionally low
Dernford, CAM (AN)	0.315	22	Exceptionally low
Abbey Heath, LITTLE OUSE	2.152	35	Notably low
Heacham, HEACHAM	0.086	34	Notably low
Cappenham, TOVE	0.394	21	Notably low
Roxton, OUSE (AN)	4.947	23	Notably low
Marham, NAR	0.621	43	Notably low
Blunham, IVEL	1.856	43	Notably low
Temple, LARK	0.620	33	Exceptionally low
Northwold Total, WISSEY	1.094	37	Notably low
INGWORTH, BURE	0.850	53	Exceptionally low
SWANTON MORLEY TOTAL FLOW, WENSUM	1.925	45	Notably low
NEEDHAM WEIR TOTAL, WAVENEY LOWER	0.529	13	Exceptionally low
LEXDEN, COLNE (AN)	0.475	22	Exceptionally low
SPRINGFIELD, CHELMER	0.472	23	Exceptionally low

Rainfall

January 2019

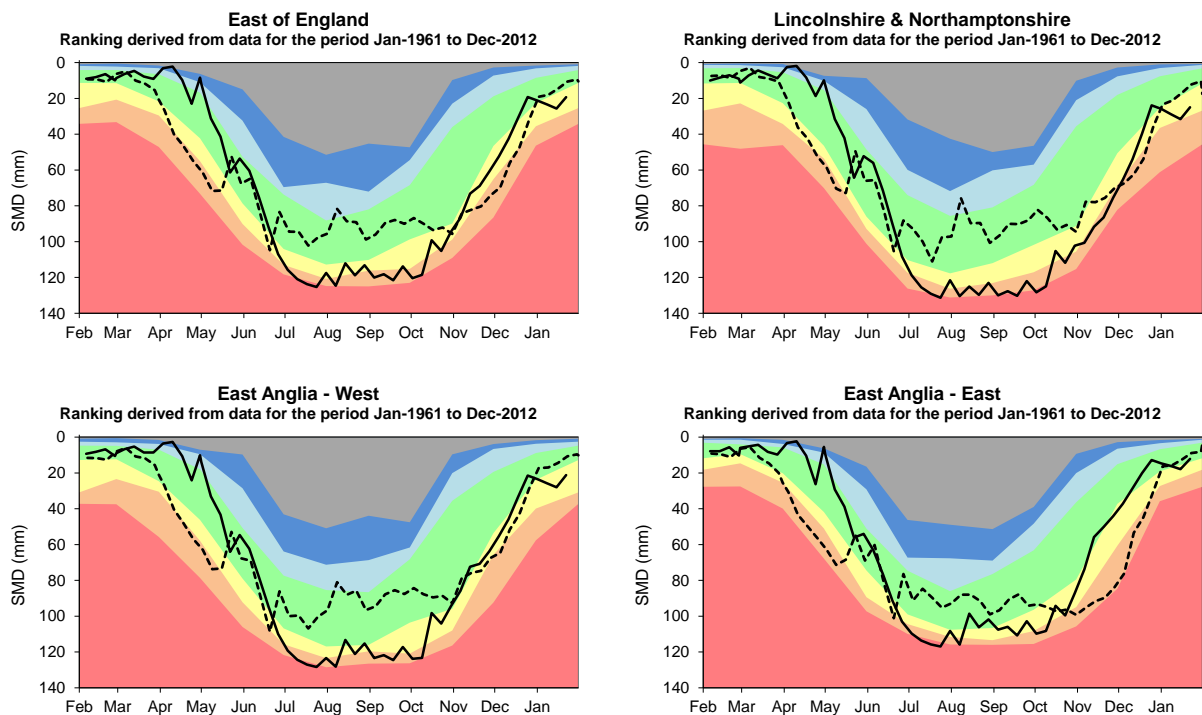
■ Monthly total rainfall (mm) Long-term average rainfall (mm)
■ January rainfall (provisional) ■ 1st to 8th ■ 9th to 15th ■ 16th to 22nd ■ period 4



Soil Moisture Deficit

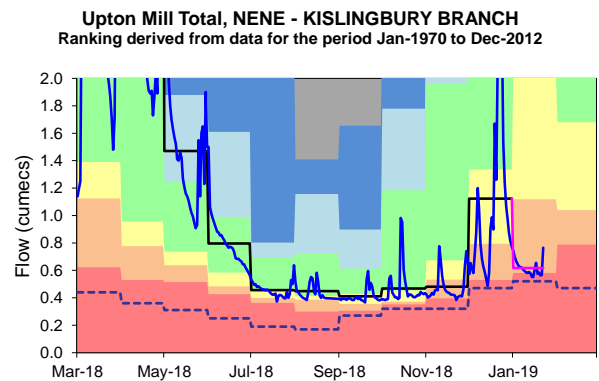
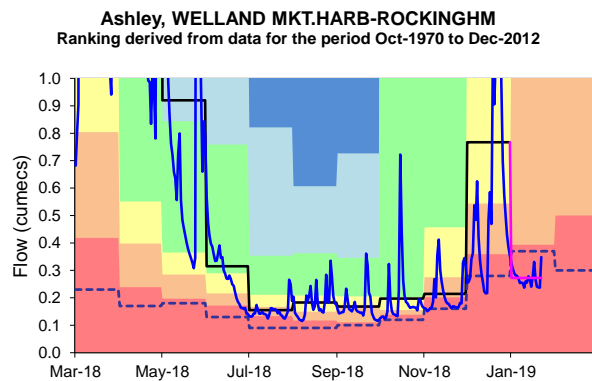
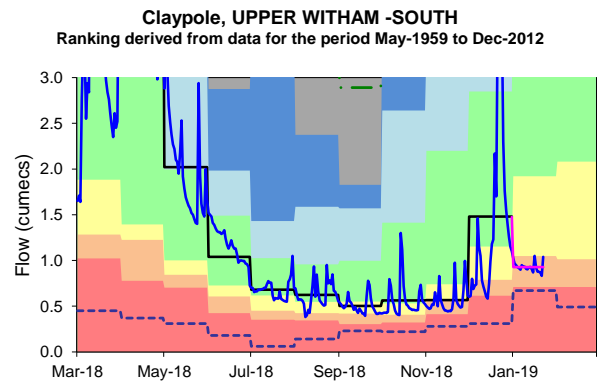
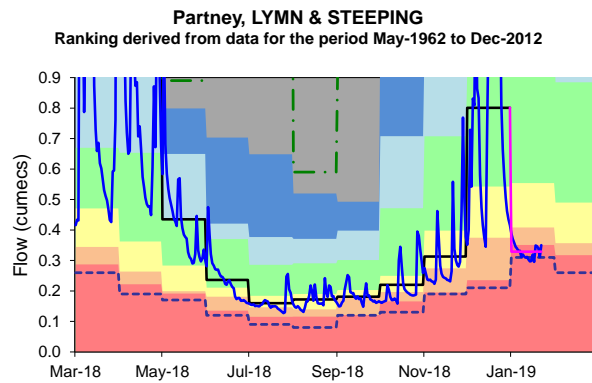
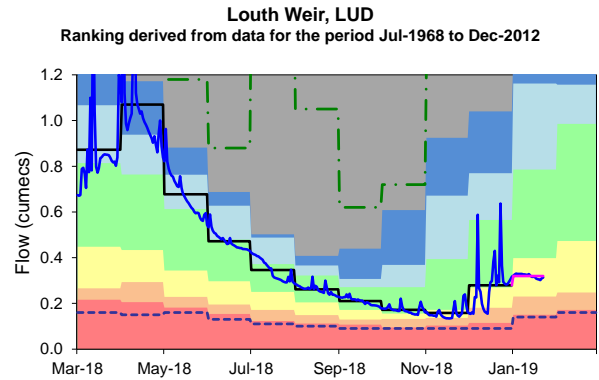
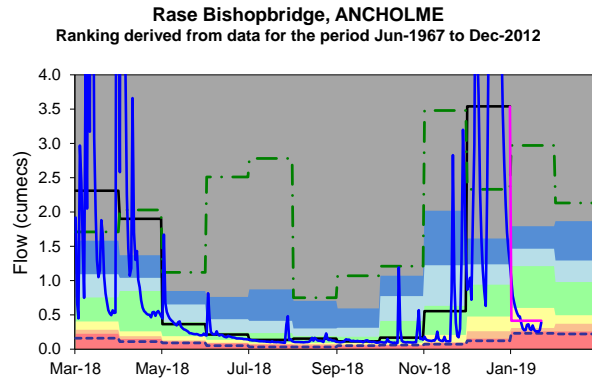
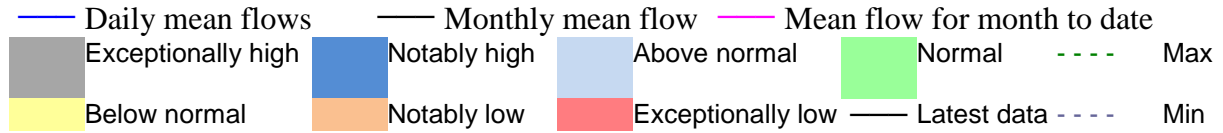
Data based on MORECS dataset (Met Office © Crown Copyright)

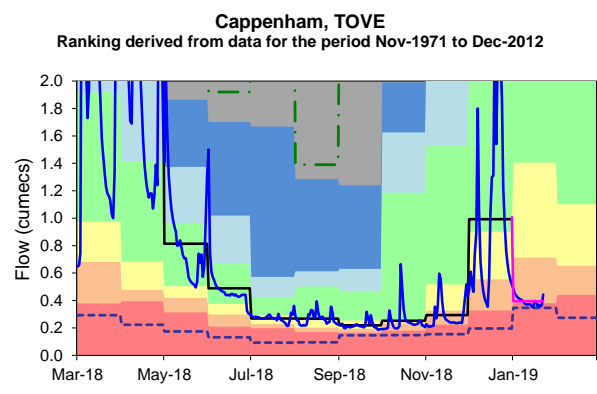
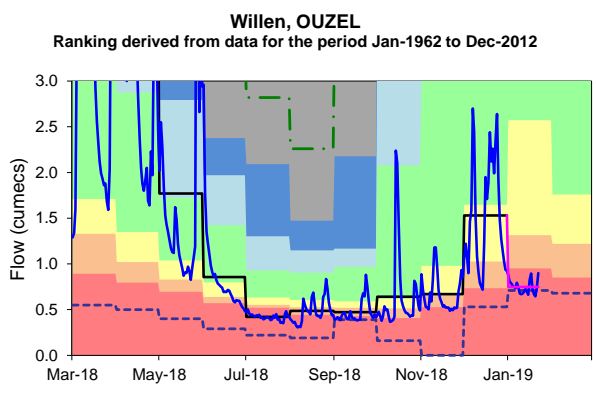
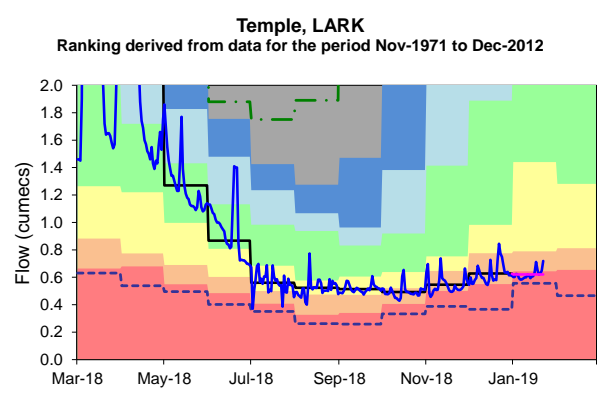
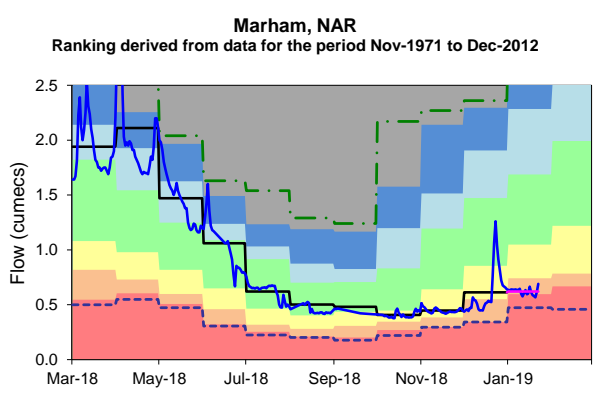
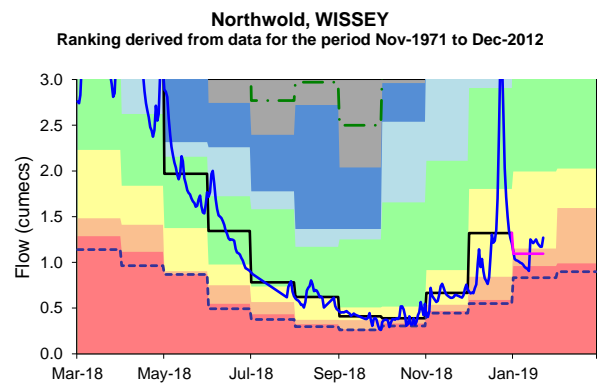
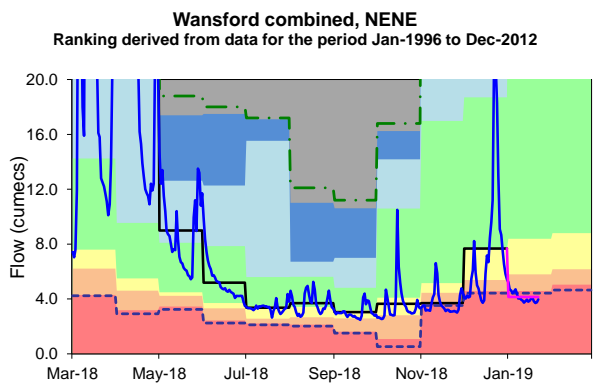
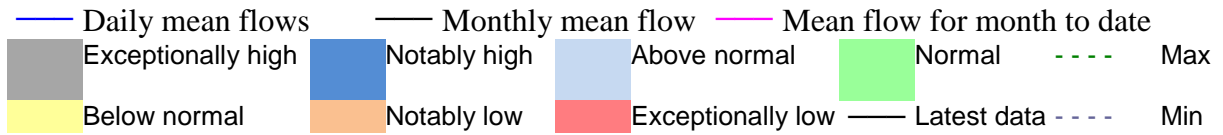
— 2018-19 - - - 2017-18
■ Exceptionally high ■ Notably high ■ Above normal ■ Normal
■ Below normal ■ Notably low ■ Exceptionally low — Latest data

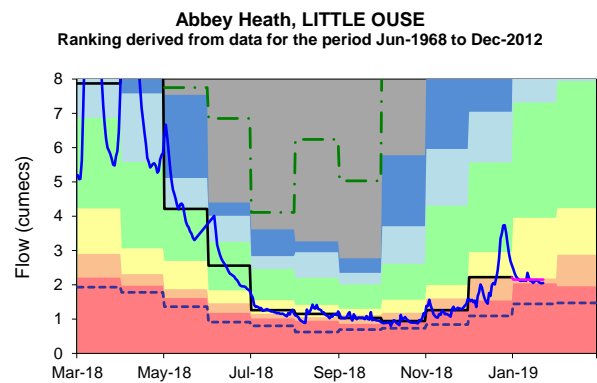
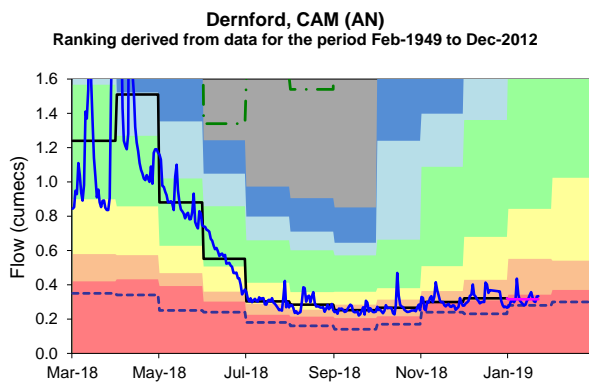
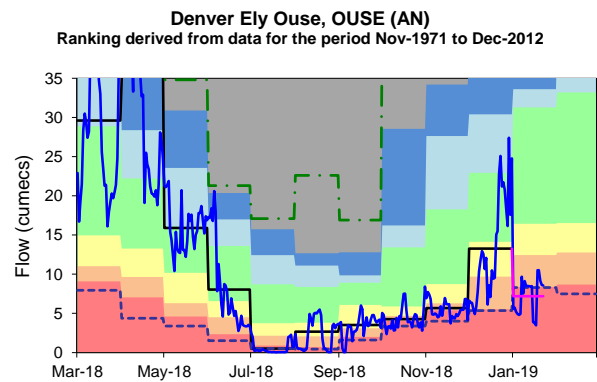
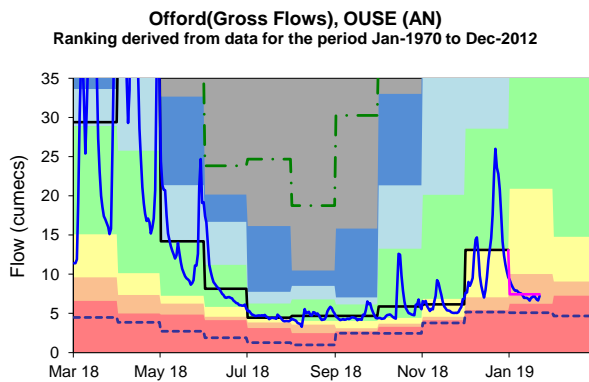
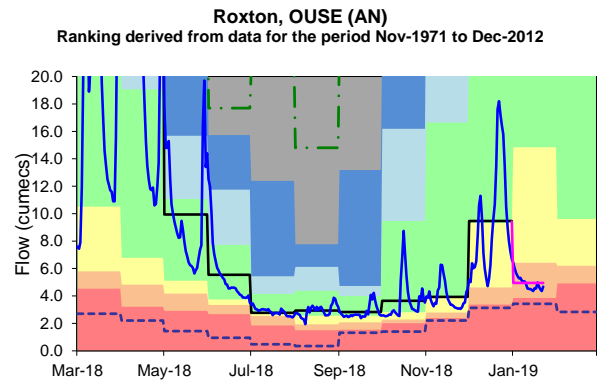
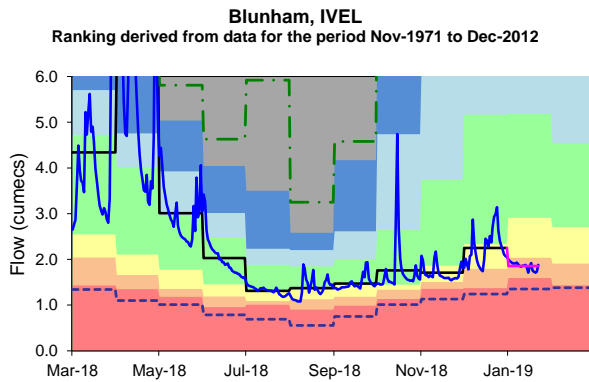
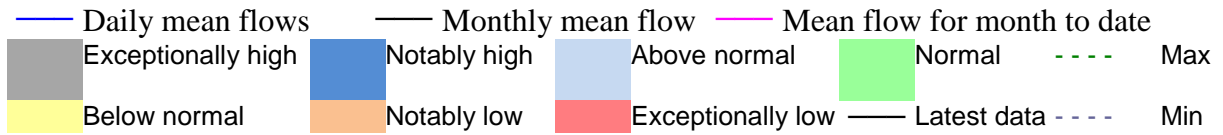


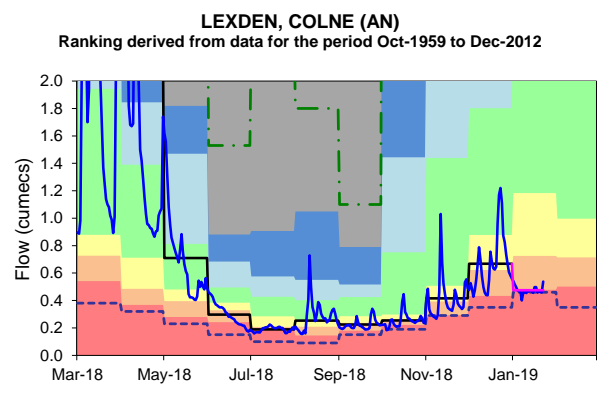
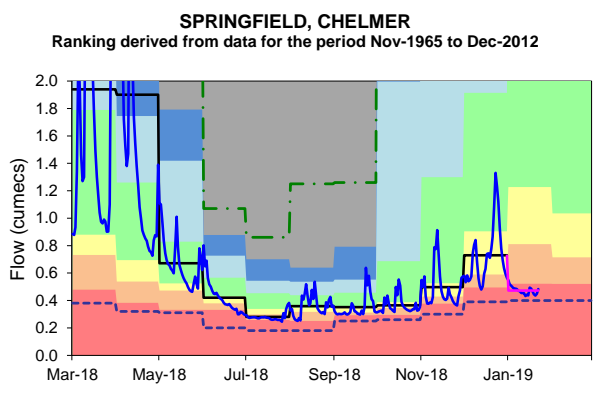
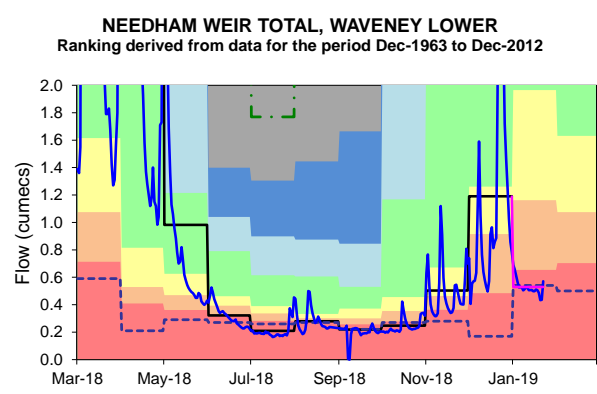
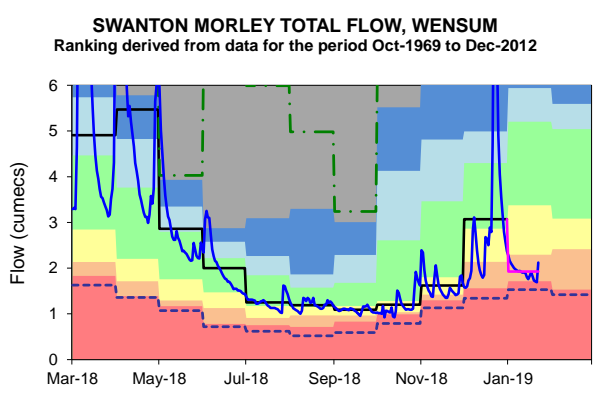
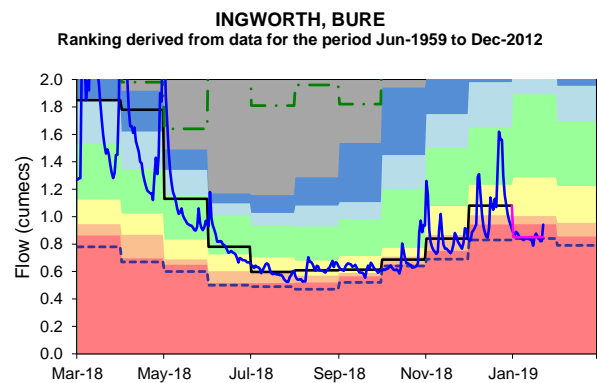
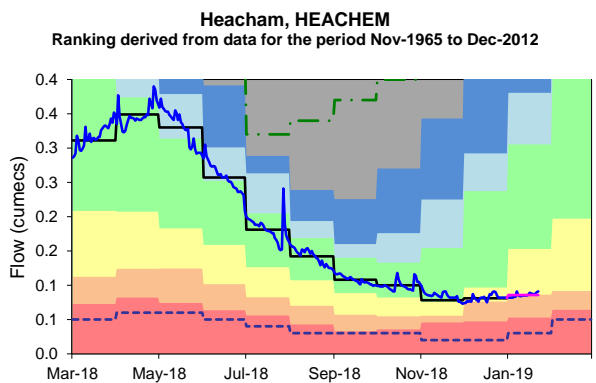
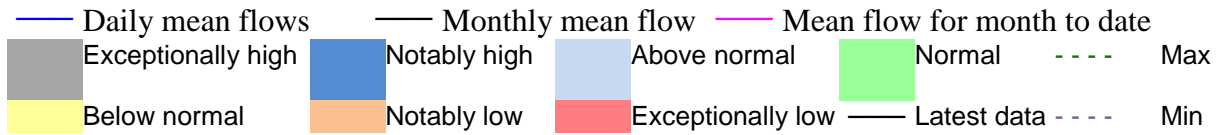
River Flow

January 2019

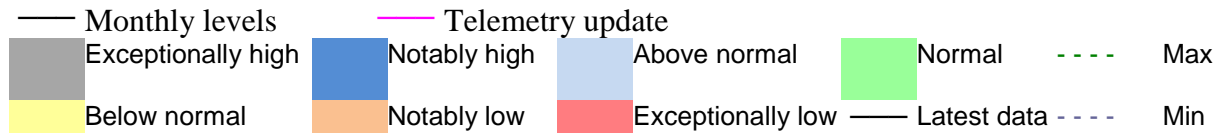




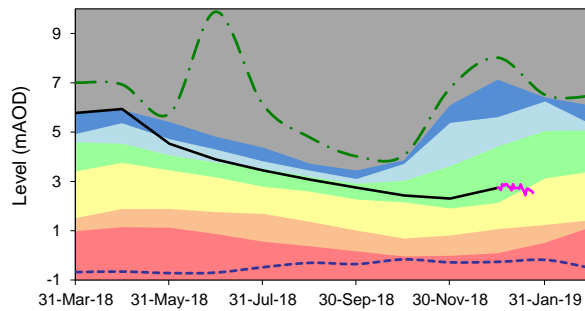




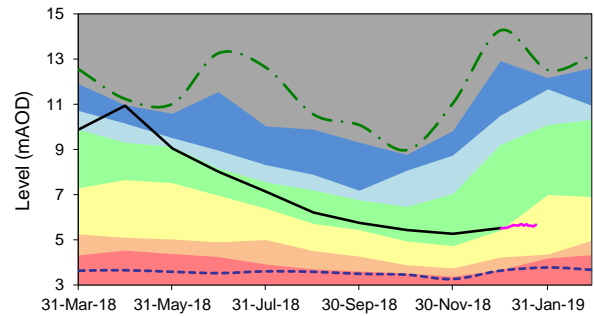
Groundwater Levels January 2019



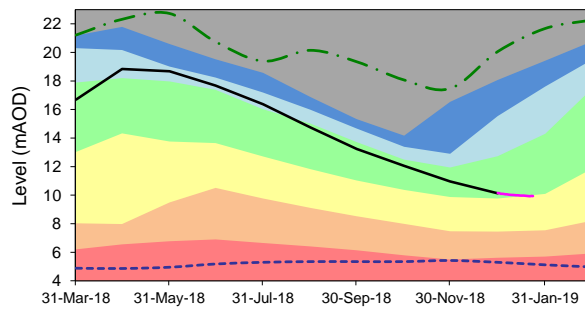
5/108 Barton Horkstow Road - N Lincs Chalk
Ranking derived from data for the period Apr-1980 to Dec-2012



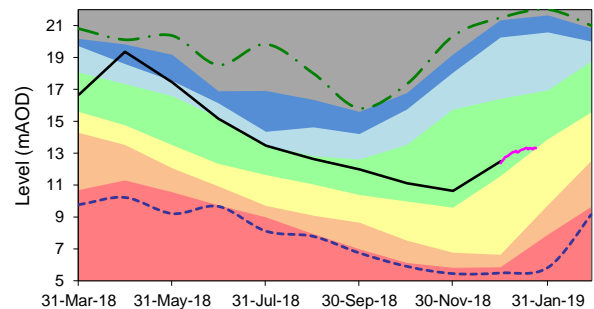
5/016 Burnham LRD - N Lincs Chalk
Ranking derived from data for the period Mar-1977 to Dec-2012



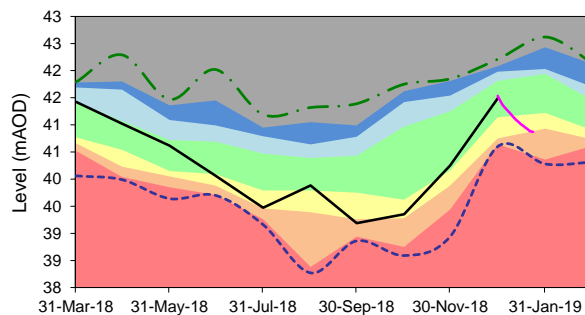
5/070 Grainsby - Lincs Chalk
Ranking derived from data for the period Oct-1977 to Dec-2012



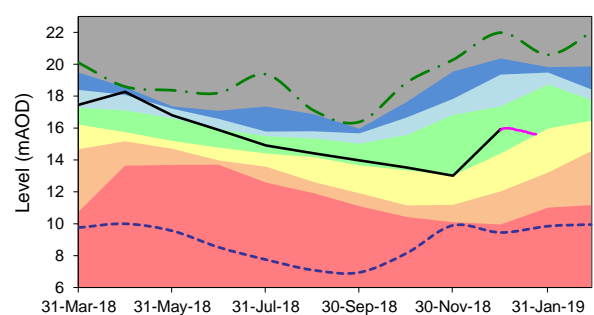
3/901 ASLACKBY - Lincs Limestone
Ranking derived from data for the period Jan-1981 to Nov-2012

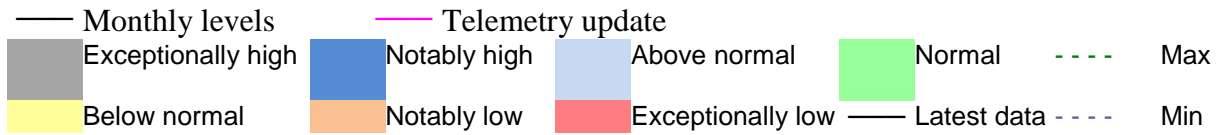


1/610 Grange de Lings - Lincs Limestone
Ranking derived from data for the period Mar-1975 to Dec-2012

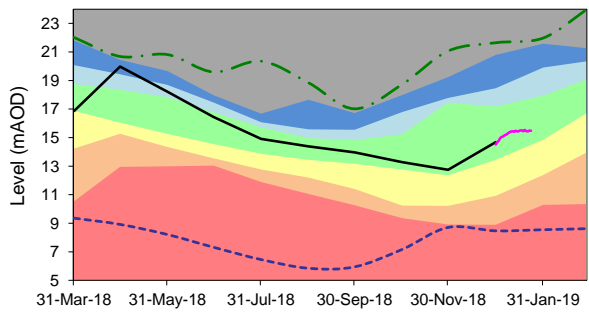


2/544 Leasingham Exploratory - Lincs Limestone
Ranking derived from data for the period Sep-1972 to Dec-2012

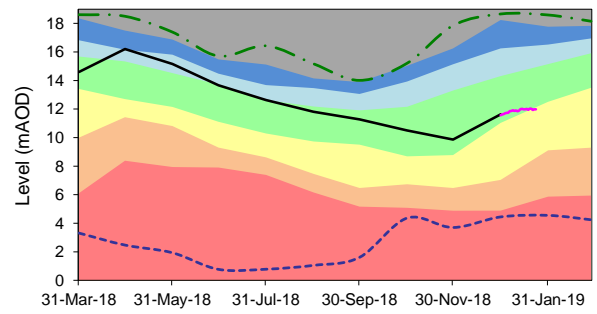




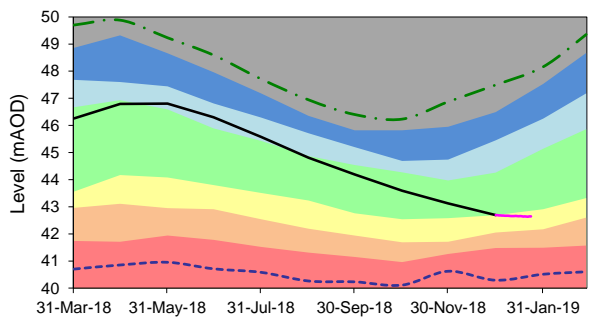
2/546 Grange Farm Aswarby - Lincs Limestone
 Ranking derived from data for the period Dec-1970 to Nov-2012



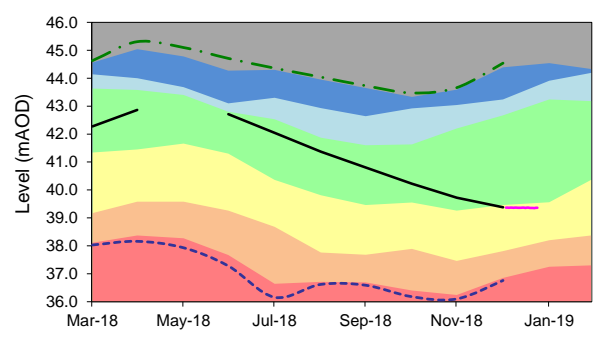
3/621 Hanthorpe - Limestone
 Ranking derived from data for the period Jul-1972 to Dec-2012



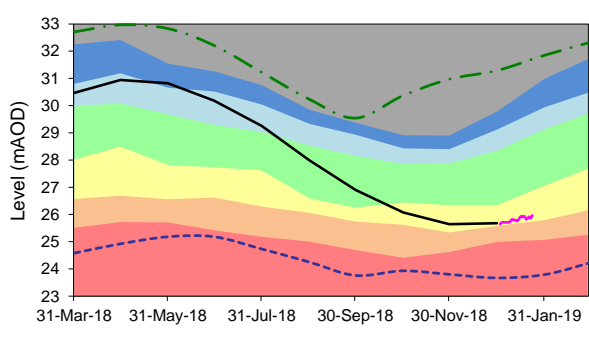
TF81/010 Washpit Farm Rougham- Chalk
 Ranking derived from data for the period May-1950 to Dec-2012



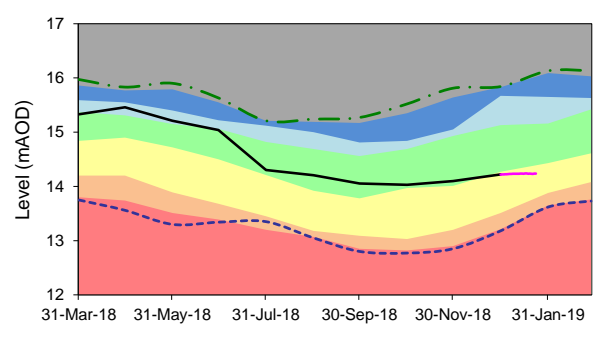
BIRCHAM NEWTON
 Ranking derived from data for the period Mar-1995 to Dec-2012

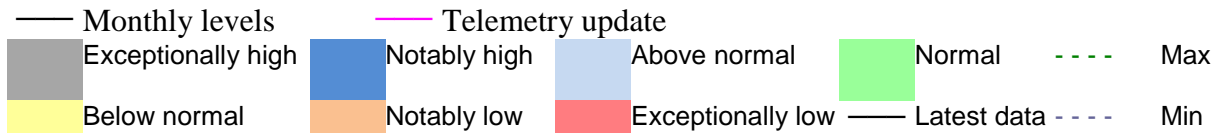


TM08/003 Kenninghall - Little Ouse Chalk
 Ranking derived from data for the period Aug-1973 to Dec-2012

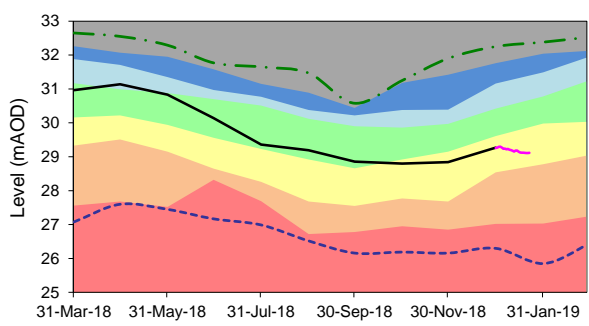


TL66/089 NEWMARKET - Snail Chalk
 Ranking derived from data for the period Feb-1983 to Dec-2012

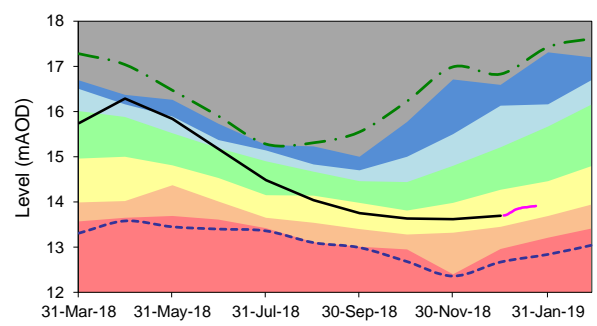




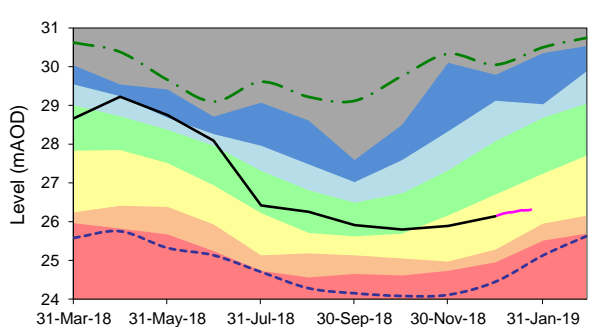
TL86/171 BURY ST EDMUNDS - U Lark Chalk
 Ranking derived from data for the period May-1983 to Dec-2012



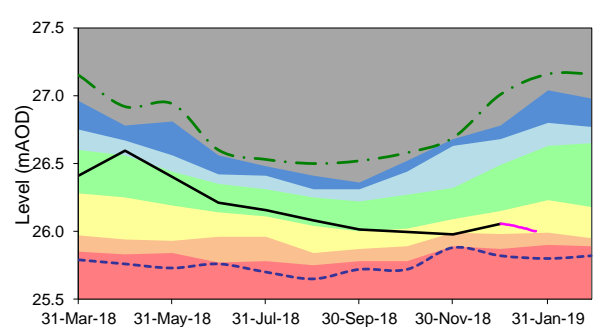
TL45/017 Gog Magog Stapleford- Cam Chalk
 Ranking derived from data for the period Jan-1980 to Dec-2012



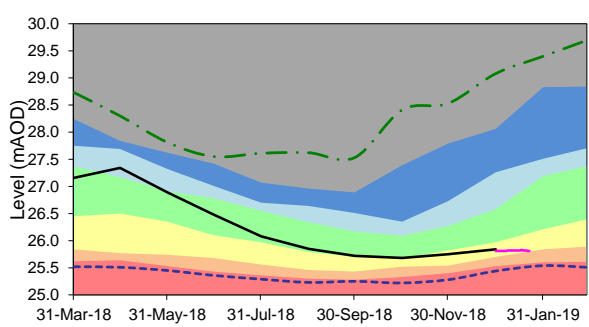
TL54/028 LINTON - Cam Chalk
 Ranking derived from data for the period Jan-1980 to Dec-2012



TL14/001 Biggleswade - Ivel Sandstone
 Ranking derived from data for the period Mar-1968 to Dec-2012

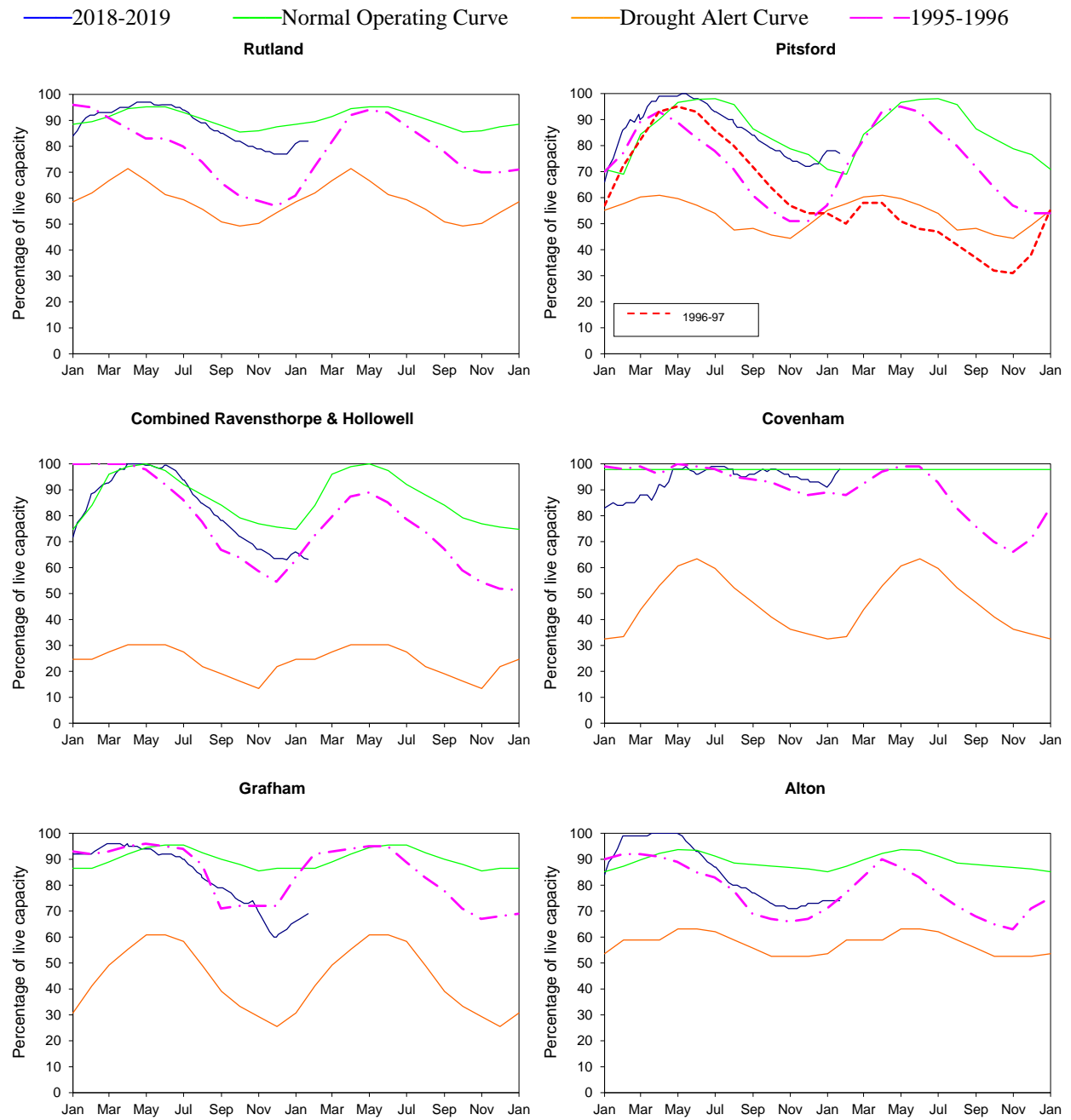


TL84/410 SMEETHAM HALL - Essex Chalk
 Ranking derived from data for the period Jan-1964 to Dec-2012

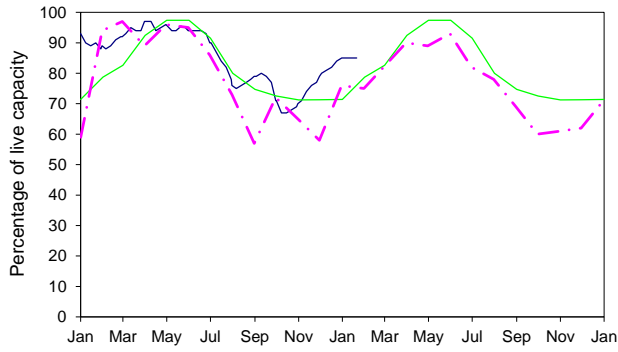


Reservoir Stocks

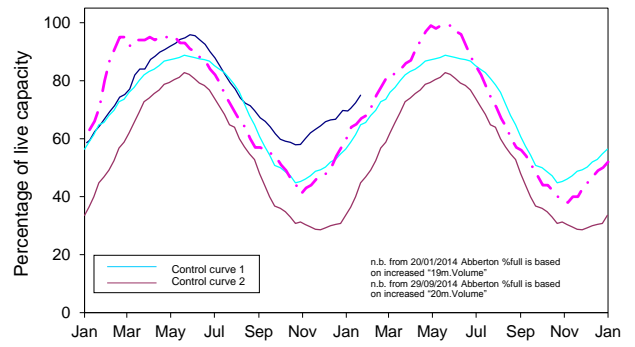
January 2019



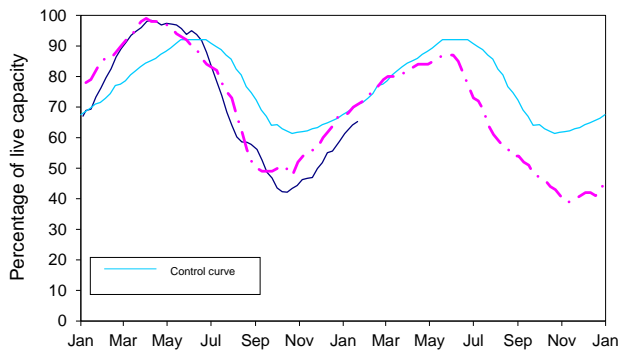
— 2018-2019 — Normal Operating Curve
Ardleigh



— Drought Alert Curve — 1995-1996
Abberton



Hanningfield



Glossary

Term

Definition

Aquifer	A geological formation able to store and transmit water.
Areal average rainfall	The estimated average depth of rainfall over a defined area. Expressed in depth of water (mm).
Artesian	The condition where the groundwater level is above ground surface but is prevented from rising to this level by an overlying continuous low permeability layer, such as clay.
Artesian borehole	Borehole where the level of groundwater is above the top of the borehole and groundwater flows out of the borehole when unsealed.
Cumecs	Cubic metres per second (m ³ s ⁻¹)
Effective rainfall	The rainfall available to percolate into the soil or produce river flow. Expressed in depth of water (mm).
Flood Alert/Flood Warning	Three levels of warnings may be issued by the Environment Agency. Flood Alerts indicate flooding is possible. Flood Warnings indicate flooding is expected. Severe Flood Warnings indicate severe flooding.
Groundwater	The water found in an aquifer.
Long term average (LTA)	The arithmetic mean calculated from the historic record, usually based on the period 1961-1990. However, the period used may vary by parameter being reported on (see figure captions for details).
mAOD	Metres Above Ordnance Datum (mean sea level at Newlyn Cornwall).
MORECS	Met Office Rainfall and Evaporation Calculation System. Met Office service providing real time calculation of evapotranspiration, soil moisture deficit and effective rainfall on a 40 x 40 km grid.
Naturalised flow	River flow with the impacts of artificial influences removed. Artificial influences may include abstractions, discharges, transfers, augmentation and impoundments.
NCIC	National Climate Information Centre. NCIC area monthly rainfall totals are derived using the Met Office 5 km gridded dataset, which uses rain gauge observations.
Recharge	The process of increasing the water stored in the saturated zone of an aquifer. Expressed in depth of water (mm).
Reservoir gross capacity	The total capacity of a reservoir.
Reservoir live capacity	The capacity of the reservoir that is normally usable for storage to meet established reservoir operating requirements. This excludes any capacity not available for use (e.g. storage held back for emergency services, operating agreements or physical restrictions). May also be referred to as 'net' or 'deployable' capacity.
Soil moisture deficit (SMD)	The difference between the amount of water actually in the soil and the amount of water the soil can hold. Expressed in depth of water (mm).

Categories

Exceptionally high	Value likely to fall within this band 5% of the time
Notably high	Value likely to fall within this band 8% of the time
Above normal	Value likely to fall within this band 15% of the time
Normal	Value likely to fall within this band 44% of the time
Below normal	Value likely to fall within this band 15% of the time
Notably low	Value likely to fall within this band 8% of the time
Exceptionally low	Value likely to fall within this band 5% of the time