



METEOROLOGICAL OFFICE

ESTIMATED SOIL MOISTURE DEFICIT AND POTENTIAL
EVAPOTRANSPIRATION OVER GREAT BRITAIN

SOIL MOISTURE DEFICIT AT 0900 GMT ON 28 JUNE 1978

Following the issue of the previous bulletin (15 June 1978) weather was mainly dry on 14th but heavy thundery rain starting on 15th in southeast England moved to North Wales, north Midlands and Lincolnshire. The rainfall was associated with an occlusion which became stationary and brought heavy rain to these districts on 15th and 16th; values exceeded 20 mm on both days in the Nottingham area. The following few days were dry in most places, except for a little light rain in northern Scotland, 18th-19th, but the period 21st-23rd was generally unsettled in most areas with heavy thunderstorms in southeast England on the 23rd. Rainfall was also heavy in northeast Scotland and the Southern Uplands on 21st and 22nd. Drier weather with generally small amounts of rain prevailed everywhere from 24th.

Although rainfall was heavy over much of Scotland on 22 June and earlier on 4th June, general amounts are still below average for near end of June, continuing the run of very dry months from April. So far, it has been one of the driest periods, April-June, on record for Scotland.

The heavy rainfall of 15-16 June has helped reduce deficits considerably over an area extending from northeast Wales across the Midlands to Lincolnshire and northern Norfolk. Deficits are below average generally for the time of the year in eastern river authority areas from Lincolnshire to the Lee and very much below (58 per cent of average) in Norfolk and Suffolk. Deficits are above average over western districts of England and Wales (more than twice the average in Southwest Wales). Although parts of the North West Highlands are near or possibly at capacity in the wettest districts, deficits over Scotland generally are above average, particularly in western River Purification Board area (more than twice the average in the Western Isles).

RATES OF SUBSCRIPTION: £15.00 per season (post free)

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Issued on 29 June 1978

ESTIMATED SOIL MOISTURE DEFICIT (S.M.D.)
AT 09 GMT ON 28 JUNE 1978

River Area	Estimated Areal	Change during the week ending 09 GMT on	
	S.M.D. mm	28 June 1978 mm	21 June 1978 mm
Northumbrian	64.7	- 15.0	+ 14.8
Yorkshire	60.7	- 10.8	+ 3.8
Trent	55.4	- 1.0	- 11.8
Lincolnshire	51.8	- 0.1	- 15.7
Welland and Nene	57.4	- 2.0	- 13.7
Great Ouse	56.3	- 5.1	- 6.7
Norfolk and Suffolk	47.7	- 9.7	- 6.4
Essex	73.3	- 1.9	- 0.4
Lee Division	61.2	- 4.1	- 5.1
Thames Conservancy	68.3	- 1.1	+ 6.3
London Area	82.1	+ 0.7	+ 8.4
Kent	80.2	- 0.2	+ 7.4
Sussex	80.8	- 1.2	+ 4.4
Hampshire	72.8	+ 1.9	+ 6.0
Isle of Wight	90.0	+ 4.7	- 2.7
Upper Thames	76.8	+ 2.5	+ 8.1
Avon and Dorset	88.4	+ 2.1	+ 9.5
Devon	77.8	- 3.9	+ 10.4
Cornwall	76.7	- 8.3	+ 7.6
Somerset	86.7	- 0.5	+ 10.5
Bristol Avon	83.7	- 0.8	+ 9.8
Severn	64.8	+ 0.8	- 2.0
Wye	65.3	+ 1.6	+ 3.6
Usk	64.2	- 3.6	+ 8.3
Glamorgan	67.2	- 6.3	+ 8.8
South West Wales	80.1	+ 3.1	+ 2.2
Gwynedd	52.0	- 6.3	- 10.7
Dee and Clwyd	39.5	- 10.6	- 7.9
Mersey and Weaver	50.2	- 5.3	- 3.9
Lancashire	49.8	- 14.0	+ 13.3
Cumbria	63.2	- 20.6	+ 15.5

N.B. Apart from normal changes these differences also reflect retrospective adjustments after receipt of additional data.

ESTIMATED SOIL MOISTURE DEFICIT

0900 GMT 28 June 1978

Areas with no soil moisture deficit are shaded. Remaining areas bounded by 12, 25, 50, 75 & 100 mm --- lines
SHORT-ROOTED VEGETATION



