



METEOROLOGICAL OFFICE

ESTIMATED SOIL MOISTURE DEFICIT OVER GREAT BRITAIN

AT 0900 ON 12 NOVEMBER 1980

The day of preparation of the previous bulletin (29 October) saw an end to the long, wet unsettled spell of October and one of the quieter periods of the year intervened. Heavy rainfall occurred on 1 November, however, in extreme northwest Scotland, as frontal systems were held a little to the west by a high pressure system covering the country. Weather was severe for early November and snowfall occurred quite widely from 4th-7th: amounts were mainly small, but there was some heavy precipitation (more than 10 mm) in East Anglia and Lincolnshire on 6th and again in Lincolnshire and in the Pennines on 7th. Rainfall amounts have been unusually small (less than 5 mm) in the North West Highlands, southwest Scotland, northwest England, much of Wales and southwest England over the fortnight. In these areas, less than 10 per cent of the average for the fortnight was recorded. More than 50 per cent of average occurred only near Land's End, the Outer Hebrides, in the Cairngorms and Lothians and over a larger area covering Humberside, the east Midlands and north Norfolk. The average was exceeded only in an area extending from Lincoln to the Humber estuary.

Small deficits are apparent in many hilly western districts, as a result of recent dry days, but maps have been drawn to show soils at capacity in these areas. Low or zero deficits are noteworthy for short-rooted vegetation over Downs and Wealden districts and over the Chiltern Hills and Thames Valley areas to the south of the Hills: these arise from heavy storms over these areas during the summer. Large deficits persist in Fife, Lothians and western East Anglia: at Cambridge, a value of 100 mm for areal land use is apparent, possibly the fourth highest value for mid-November in the past 40 years.

Over most River Areas, general deficits for areal land use have decreased slowly or not at all in the past fortnight but in the most recent week, the decline has been substantial over Lincolnshire, Welland and Nene and Norfolk and Suffolk areas. General values are still above average for most River Areas but mainly by a few millimetres: biggest positive differences are in Somerset, 17mm; Avon and Dorset, 23 mm; Thames, 18 mm; Lee, 30 mm and Essex, 24 mm. Biggest negative difference is in Sussex - 22 mm.

RATE OF SUBSCRIPTION: £22.73 per season (post free)

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Issued on 13 November 1980

ESTIMATED SOIL MOISTURE DEFICIT (S.M.D.) AT 09 GMT ON 12 NOV 1980

RIVER AREA	AREAL LAND USE ESTIMATED S.M.D. MM	CHANGE DURING THE WEEK ENDING 09 GMT ON	
		12 NOV 80	5 NOV 80
		MM	MM
NORTHUMBRIAN	24.2	- 6.4	+ 0.9
YORKSHIRE	16.6	- 3.6	+ 0.7
TRENT	27.2	- 9.4	+ 0.9
LINCOLNSHIRE	45.8	-17.1	+ 0.3
WELLAND AND NENE	54.1	-10.0	+ 1.3
GREAT OUSE	68.9	- 5.8	+ 1.3
NORFOLK AND SUFFOLK	62.3	-10.7	+ 0.7
ESSEX	80.4	- 7.4	+ 1.7
LEE DIVISION	73.5	- 4.8	+ 1.8
THAMES CONSERVANCY	52.2	- 3.5	+ 3.0
LONDON AREA	48.3	- 4.7	+ 1.9
KENT	34.7	- 3.3	+ 0.7
SUSSEX	10.0	- 5.9	+ 0.9
HAMPSHIRE	34.9	- 4.3	+ 4.2
ISLE OF WIGHT	47.2	- 8.0	+ 2.0
UPPER THAMES	61.0	- 3.1	+ 4.9
AVON AND DORSET	42.8	- 1.2	+ 4.4
DEVON	10.5	- 2.7	+ 1.8
CORNWALL	3.4	- 2.8	+ 1.5
SOMERSET	32.9	+ 1.0	+ 1.9
BRISTOL AVON	55.8	+ 1.5	+ 4.9
SEVERN	31.0	- 3.3	+ 1.7
WYE	15.2	- 2.8	+ 1.8
USK	8.2	- 1.8	+ 1.9
GLAMORGAN	1.1	- 0.8	+ 1.9
SOUTH WEST WALES	0.6	- 1.3	+ 1.8
GWYNEDD	6.2	+ 0.2	+ 3.2
DEE AND CLWYD	20.3	+ 3.3	+ 1.2
MERSEY AND WEAVER	12.9	- 0.3	+ 1.6
LANCASHIRE	0.0	- 1.7	+ 1.7
CUMBRIA	0.6	- 0.8	+ 1.4

N.B. APART FROM NORMAL CHANGES THESE DIFFERENCES ALSO REFLECT RETROSPECTIVE ADJUSTMENTS AFTER RECEIPT OF ADDITIONAL DATA.



