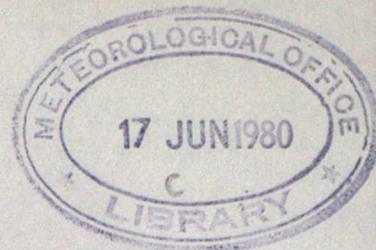


METEOROLOGICAL OFFICE



ESTIMATED SOIL MOISTURE DEFICIT AND POTENTIAL
EVAPOTRANSPIRATION OVER GREAT BRITAIN

SOIL MOISTURE DEFICIT AT 0900 GMT ON 11 JUNE 1980

The long spell of dry weather which had persisted since the beginning of April over much of Britain and which was causing concern to agricultural interests, was interrupted in the last few days of May. Weather continued unsettled over much of northern Britain in June and the dry spell may now be at an end at many places. From 1 to 9 June however, rainfall was comparatively light in southern Britain and many places in the south were rain free in that period. Despite the rather wet end to May, totals for the two months combined were the lowest since 1896 over England and Wales generally. Over Scotland, there has been no drier April-May since the beginning of the series in 1869.

Some heavy thunderstorms occurred in the east Midlands on 28 May; rainfall exceeded 20 mm there and also in north Cornwall. Rainfall exceeded 10 mm quite widely on 30 May over Wales and southern England, again on 31st in the Midlands and London area, and on 2 June in northwest Scotland, the Lake District and North Wales. Exceptionally severe thunderstorms occurred on 5th over the southern Pennines, much of northern England and eastern Scotland. General rainfall over Scotland was estimated to be 24 mm for the day. Flooding was reported from many towns and more than 60 mm was estimated to have fallen in about 2 hours over the Rossendale Moors; the report was from the rainfall radar at Hameldon Hill. Values exceeded 20 mm in northern Scotland, including the Cairngorms, on 6th. The 10th was the wettest day over England and Wales generally for nearly three months; values exceeded 10 mm quite widely from the south coast, including parts of the southwest, through the Midlands to south Lancashire and south Yorkshire with more than 25 mm in parts of Wessex. Eastern England and most of Wales were comparatively dry on the day.

Less than average rainfall for the fortnight from 28 May was recorded in Shetland and northwest Scotland, the Glasgow area, most of Wales, East Anglia and Kent (where less than half the average occurred). More than double the average was recorded in Fife, northeast England, parts of the Midlands and parts of Wessex.

Changes in soil moisture deficits over the fortnight have not been as marked as earlier in the spring. There have been slight overall decreases for areal land use in northern river areas of England, the south-west and all River Purification Board areas and slight increases elsewhere, the most notable increases being of about 10 mm in Norfolk and Suffolk, Essex and the Lee Division. River area and RPB general deficits are still substantially above average for the time of the year.

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

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ESTIMATED SOIL MOISTURE DEFICIT (S.M.D.)
AT 09 GMT ON 11 JUNE 1980

River Area	Areal Land Use	Change during the week ending 09 GMT on	
	Estimated S.M.D.	11 June 1980	4 June 1980
	mm	mm	mm
Northumbrian	70.0	- 7.3	+ 2.5
Yorkshire	82.2	- 8.5	+ 0.4
Trent	77.9	- 4.1	- 2.8
Lincolnshire	92.3	+ 0.6	- 2.7
Welland and Nene	83.1	+ 4.7	- 1.3
Great Ouse	102.0	+ 6.6	+ 1.3
Norfolk and Suffolk	105.9	+ 6.5	+ 3.8
Essex	111.6	+ 8.8	+ 2.1
Lee Division	102.6	+10.8	- 1.5
Thames Conservancy	99.3	+ 6.9	- 1.0
London Area	98.4	+ 7.8	- 4.0
Kent	101.1	+ 7.1	+ 2.1
Sussex	92.8	+ 2.6	+ 1.2
Hampshire	93.8	+ 3.5	+ 0.5
Isle of Wight	99.0	- 1.2	+ 3.1
Upper Thames	95.6	+ 1.5	+ 1.4
Avon and Dorset	85.9	- 3.1	+ 1.3
Devon	77.3	+ 1.1	- 3.0
Cornwall	81.2	+ 3.0	- 0.8
Somerset	84.9	+ 0.5	- 0.2
Bristol Avon	95.4	+ 4.5	- 0.1
Severn	82.8	- 7.3	- 1.2
Wye	86.3	- 0.3	- 0.7
Usk	89.2	+ 5.7	- 2.8
Glamorgan	88.8	+ 7.0	- 3.4
South West Wales	88.8	+ 7.7	- 2.4
Gwynedd	76.8	- 4.7	- 4.3
Dee and Clwyd	73.3	-10.7	- 3.4
Mersey and Weaver	63.8	-10.5	+ 1.1
Lancashire	78.6	-11.3	+ 3.0
Cumbria	72.8	-10.2	+ 1.3

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

ESTIMATED SOIL MOISTURE DEFICIT

0900 GMT 11 June 1980

Areas with no soil moisture deficit are shaded. Remaining areas bounded by 25, 50, 75, 100 & 125 mm lines

AREAL LAND USE

