## Monthly water situation report: South-east England

## 1 Summary - April 2024

April was the seventh consecutive month of above average rainfall with $146 \%$ of the long term average (LTA) for April. Most of the south east of England received above normal rainfall.
The highest daily total was 43.8 mm recorded at Duncton raingauge (SSD) during 18 hours of nonstop rain on 27 April. This was also the wettest day of the month. The soil moisture deficits began to rise in the second week of April and continued to rise until the rainfall at the end of the month. They then declined rapidly to single figures and were well below the LTA for the end of April across the south east of England. The heavy rainfall at the end of the month allowed recharge to reach almost twice the LTA for April for the south east of England.
Overall, river flows fell during April, but responded to the rainfall at the beginning and end of the month. Half of the key indicator sites remained at exceptionally high flows for April, a quarter of the sites were at notably high levels and the remaining sites were at above normal flows. There were 37 fluvial flood alerts and 2 fluvial flood warnings issued during the month. Groundwater levels remained high reflecting the high rainfall and recharge over the month and preceding months. Most of the key indicator sites ended April at exceptionally high levels with a few exceptions that ranged from notably high to normal. There were a total of 21
groundwater flood alerts in force during April.

### 1.1 Rainfall

April was the seventh consecutive month of above average rainfall with $146 \%$ of the LTA for April. Most of the south east of England received above normal rainfall. There were a few exceptions in the Cotswold west areal unit (Thames, THM), West Sussex Chalk, Western Rother Greensand, the Arun and Adur areal units all in Solent and South Downs (SSD) and the Stour, Dover Chalk and Romney Marsh areal units in Kent and South London (KSL) which all received notably high rainfall.
The highest daily total was 43.8 mm recorded at Duncton raingauge (SSD) during 18 hours of nonstop rain on 27 April. This was also the wettest day of the month when, on average, $32 \%$ of the monthly total rainfall was recorded. April began quite wet and for the first four days, on average, $34 \%$ of the monthly total was recorded. During the middle of the month there were on average 13 'dry' days when less than 0.2 mm of rainfall was recorded.
For the 7 months ending in April most of the areal units were the third wettest or higher, on record. The wettest units included Cotswolds West, Berkshire Downs (all THM) and the Isle of Wight and Lymington (SSD).

### 1.2 Soil moisture deficit and recharge

The soil moisture deficits began to rise in the second week of April and continued to rise until the rainfall at the end of the month. They then declined rapidly to single figures and well below the LTA for the end of April across the south east of England. Similarly, recharge was above the monthly average within the first week due to the heavy rainfall. It remained reasonably static through the middle of the month until the heavy rainfall at the end of the month. This allowed recharge to reach almost twice the LTA for April for the south east of England.

### 1.3 River flows

Overall, river flows fell during the month, but responded to the rainfall at the beginning and end of the month. Half of the key indicator sites remained at exceptionally high flows for April, a quarter of the sites were at notably high levels and the remaining sites were at above normal flows. These latter sites were generally in and around the Wealden clay area of KSL. The sites with the higher flows were generally those fed by groundwater reflecting the continuing high groundwater levels. Flows in the Kennet at Marlborough and the Wey at Tilford (both THM) were the highest on record for April. Flows in the Itchen at Allbrook and Highbridge (SSD) were the joint highest on record with 2001. Many other sites were the highest since 2001 including the Ver at Colney Street, Mimram at Panshanger (both HNL), the Test at Broadlands (SSD), the Great Stour at Horton and Dour at Crabble Mill (both KSL). There were 37 fluvial flood alerts and 2 fluvial flood warnings issued during the month.

| HNL |  | THM | KSL | Total |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Flood alerts | 7 | 15 | 12 | 3 | 37 |
| Flood <br> warnings | 0 | 0 | 2 | 0 | 2 |
| Severe flood <br> warnings | 0 | 0 | 0 | 0 | 0 |
| Groundwater <br> flood alerts | 0 | 0 | 19 | 2 | 21 |
| Total | 7 | 15 | 33 | 5 | 60 |

### 1.4 Groundwater levels

Groundwater levels remained high reflecting the rainfall and recharge over the month and preceding months. Most of the key indicator sites ended April at exceptionally high levels with a few exceptions, mainly in KSL where groundwater levels in and around the Weald ended the month at notably high levels. In THM, Jackaments was normal for the time of year. It is a responsive site and clearly reacted to the dry weather in the middle of April. Despite the high levels, the groundwater at most of the key indicator sites fell during the month as is expected at this time of year. There were 3 exceptions where levels continued to rise, albeit more slowly than over the past months. They were Lilley Bottom (HNL), Sweeps Lane and Riddles Lane (KSL). In addition, groundwater at Stonor (THM) levelled off but remained exceptionally high for April. Twelve of the key indicator sites were all the third highest or higher on record,
often since 2001. These included Ashley Green (HNL), Rockley (THM), Little Bucket (KSL) and West Meon (SSD). There were a total of 21 groundwater flood alerts in force during April.

### 1.5 Reservoir stocks

The continuing high rainfall has ensured that reservoir stocks remain above the LTA for April at all of the reservoirs across the south east of England with only Farmoor (THM) and Arlington (SSD) at their LTA.

Author: groundwaterhydrology@environment-agency.gov.uk

All data are provisional and may be subject to revision. The views expressed in this document are not necessarily those of the Environment Agency. Its officers, servants or agents accept no liability for any loss or damage arising from the interpretation or use of the information, or reliance upon views contained in this report.

## 2 Maps

### 2.1 Rainfall map

Figure 2.1: Total rainfall for hydrological areas for the current month (up to 30 April 2024), the last 3 months, the last 6 months, and the last 12 months, classed relative to an analysis of respective historic totals. Table available in the annendices with detailed information.


Rainfall data for 2024, extracted from Environment Agency 1km gridded rainfall dataset derived from Environment Agency intensity rain gauges. (Source: Environment Agency. Crown Copyright, 100024198, 2024). Rainfall data prior to 2024, extracted from Met Office HadUK 1 km gridded rainfall dataset derived from registered rain gauges. (Source: Met Office. Crown copyright, 2024).

### 2.2 River flows and groundwater levels map

Figure 2.2: Monthly mean river flow for indicator sites for April 2024, expressed as a percentage of the respective long term average and classed relative to an analysis of historic April monthly means Table available in the appendices with detailed information. Groundwater levels for indicator sites at the end of April 2024, classed relative to an analysis of respective historic April levels. Table available in the appendices with detailed information.

Flows at gauging stations in the Medway catchment (KSL) might be affected by upstream reservoir releases.

(Source: Environment Agency). Crown copyright. All rights reserved. Environment Agency, 100024198, 2024. Geological map reproduced with kind permission from UK Groundwater Forum, BGS copyright NERC. Crown copyright. All rights reserved. Environment Agency, 100024198, 2024.

## 3 Rainfall, effective rainfall and soil moisture deficit tables

### 3.1 Rainfall, effective rainfall and soil moisture deficit table

Figure 3.1: This is a second estimate of areal rainfall, effective rainfall (percolation or runoff) and SMDs for a selection of the hydrological areas across the South-east of England. There may be significant variation within each area which must be considered when interpreting these data. When additional meteorological data is available estimates are revised which will affect the period totals in Figure 3.2.

| Number | Hydrological Area | Rainfall (mm) <br> 30 day Total | $\begin{aligned} & \text { April } \\ & \text { \% LTA } \end{aligned}$ | Effective <br> Rainfall (mm) <br> 30 day total | $\begin{aligned} & \text { April \% } \\ & \text { LTA } \end{aligned}$ |  | End Apr LTA |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 6010TH | Cotswolds West (A) | 87 | 154\% | 37 | 219\% | 5 | 15 |
| 6070TH | Berkshire Downs (G) | 77 | 146\% | 28 | 194\% | 6 | 19 |
| 6130TH | Chilterns West (M) | 70 | 133\% | 19 | 128\% | 5 | 19 |
| 6162TH | North Downs - Hampshire (P) | 81 | 145\% | 32 | 191\% | 6 | 17 |
| 6190TH | Wey Greensand (S) | 88 | 154\% | 39 | 216\% | 5 | 17 |
|  | Thames Average | 74 | 146\% | 23 | 196\% | 6 | 20 |
|  | Thames Catchment Average | 75 | 145\% | 24 | 190\% | 5 | 19 |
| 6140TH | Chilterns - <br> East - Colne <br> (N) | 77 | 142\% | 26 | 155\% | 4 | 19 |
| 6600TH | Lee Chalk | 72 | 145\% | 21 | 170\% | 5 | 24 |
| 6507 TH | North London | 64 | 133\% | 9 | 99\% | 6 | 23 |
| 6509TH | Roding | 63 | 137\% | 10 | 121\% | 5 | 22 |
|  | Herts and North London | 69 | 139\% | 16 | 141\% | 5 | 22 |
| 6230TH | $\begin{aligned} & \text { North Downs } \\ & \text { - South } \\ & \text { London (W) } \\ & \hline \end{aligned}$ | 78 | 139\% | 29 | 152\% | 5 | 17 |
| 6706So | Darent | 73 | 144\% | 23 | 156\% | 5 | 19 |


| 6707 So | North Kent <br> Chalk | 68 | $129 \%$ | 19 | $118 \%$ | 6 | 18 |
| :--- | :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| 6708So | Stour | 79 | $157 \%$ | 28 | $200 \%$ | 4 | 18 |
| 6809 So | Medway | 77 | $146 \%$ | 29 | $198 \%$ | 5 | 16 |
|  | Kent \& South <br> London <br> Average | 71 | $143 \%$ | 21 | $167 \%$ | 7 | 22 |
| 6701So | Test Chalk | 79 | $153 \%$ | 30 | $203 \%$ | 6 | 19 |
| 6702 So | East <br> Hampshire <br> Chalk | 85 | $152 \%$ | 37 | $211 \%$ | 5 | 18 |
| 6703So | West Sussex <br> Chalk | 92 | $153 \%$ | 46 | $206 \%$ | 6 | 16 |
| 6804 So | Arun | 88 | $155 \%$ | 38 | $234 \%$ | 6 | 16 |
| 6805 So | Adur | 87 | $158 \%$ | 39 | $241 \%$ | 6 | 16 |
|  |  <br> South Downs <br> Average | 82 | $151 \%$ | 33 | $216 \%$ | 6 | 18 |
|  | South East <br> Average | 75 | $146 \%$ | 25 | $190 \%$ | 6 | 20 |

HadUK rainfall data. (Source: Met Office. Crown copyright, 2024).
EA effective rainfall and soil moisture deficit data (Source EA Soil Moisture Model 2024.)

### 3.2 Seasonal summary table of rainfall and effective rainfall

Figure 3.2 This is a seasonal estimate of areal rainfall and effective rainfall (percolation or runoff) for a selection of the hydrological areas across the South-east of England, expressed as totals and as a percentage of the LTA. There may be significant variation within each area which must be considered when interpreting these data. When additional meteorological data is available estimates are revised which will affect the period totals.

Summer period 01/04/2024 to 30/04/2024

| Number | Hydrological <br> Area | Seasonal <br> Rainfall <br> (mm) <br> Total | Seasonal Rainfall as \% LTA | Seasonal Effective <br> Rainfall (mm) <br> Total | Seasonal Effective Rainfall as \% LTA |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 6010TH | Cotswolds West (A) | 87 | 154\% | 37 | 219\% |
| 6070TH | Berkshire Downs (G) | 77 | 146\% | 28 | 194\% |
| 6130TH | Chilterns West (M) | 70 | 133\% | 19 | 128\% |
| 6162TH | North Downs - Hampshire (P) | 81 | 145\% | 32 | 191\% |
| 6190TH | Wey - <br> Greensand $(\mathrm{S})$ | 88 | 154\% | 39 | 216\% |
|  | Thames Average | 74 | 146\% | 23 | 196\% |
|  | Thames Catchment Average | 75 | 145\% | 24 | 190\% |
| 6140TH | Chilterns - <br> East - Colne <br> (N) | 77 | 142\% | 26 | 155\% |
| 6600TH | Lee Chalk | 72 | 145\% | 21 | 170\% |
| 6507 TH | North London | 64 | 133\% | 9 | 99\% |
| 6509TH | Roding | 63 | 137\% | 10 | 121\% |
|  | Herts and North London | 69 | 139\% | 16 | 141\% |
| 6230TH | North Downs - South London (W) | 78 | 139\% | 29 | 151\% |


| 6706So | Darent | 73 | $144 \%$ | 23 | $156 \%$ |
| :--- | :--- | ---: | ---: | ---: | ---: |
| 6707So | North Kent <br> Chalk | 68 | $129 \%$ | 19 | $117 \%$ |
| 6708So | Stour | 79 | $157 \%$ | 28 | $200 \%$ |
| 6809So | Medway | 77 | $146 \%$ | 29 | $198 \%$ |
|  | Kent \& South <br> London <br> Average | 71 | $143 \%$ | 21 | $167 \%$ |
| 6701So | Test Chalk | 79 | $153 \%$ | 30 | $203 \%$ |
| 6702So | East <br> Hampshire <br> Chalk | 85 | $152 \%$ | 37 | $211 \%$ |
| 6703So | West Sussex <br> Chalk | 92 | $153 \%$ | 46 | $206 \%$ |
| 6804So | Arun | 88 | $155 \%$ | 38 | $234 \%$ |
| 6805So | Adur | 87 | $158 \%$ | 39 | $240 \%$ |
|  |  <br> South Downs <br> Average | 75 | $146 \%$ | 33 | $216 \%$ |
|  | South East <br> Average | 829 | 25 | $190 \%$ |  |

HadUK rainfall data. (Source: Met Office. Crown copyright, 2024).
EA effective rainfall data (Source EA Soil Moisture Model 2024.)

## 4 Thames

### 4.1 Thames Rainfall and effective rainfall charts

Figure 4.1: Monthly rainfall and effective rainfall totals for the past 24 months compared to the 1961 to 1990 long term average for a selection of areal units.

Monthly total rainfall (mm)


Berkshire Downs - Rainfall


Long term average rainfall (mm)


Berkshire Downs - Effective Rainfall



HadUK rainfall data. (Source: Met Office. Crown copyright, 2024).
EA effective rainfall data (Source EA Soil Moisture Model, 2024).

### 4.2 Thames River flow charts

Figure 4.2: Daily mean river flow for index sites over the past year, compared to an analysis of historic daily mean flows, and long term maximum and minimum flows.


Source: Environment Agency. 2024

### 4.3 Thames Groundwater level charts

Figure 4.3: End of month groundwater levels at index groundwater level sites for major aquifers. 22 months compared to an analysis of historic end of month levels and long term maximum and minimum levels. Tile Barn Farm data has been estimated from 2 local sites since April 2022. A replacement is planned.

Exceptionally high
Below normal
$\square$ Notably high Notably low

Above normal Exceptionally low

Normal
Latest data

JACKAMENTS BOTTOM
Ranking derived from data for the period Jan-1974 to Dec-2022


ROCKLEY OBH
Ranking derived from data for the period Mar-1933 to Dec-2022


STONOR PARK
Ranking derived from data for the period May-1961 to Dec-2022


TILE BARN FARM
Ranking derived from data for the period Oct-1971 to Dec-2022


Source: Environment Agency, 2024.

### 4.4 Thames Reservoir stocks

Figure 4.4: End of month regional reservoir stocks compared to long term maximum, minimum and average stocks. Note: Historic records of individual reservoirs and reservoir groups making up the regional values vary in length.

----AVE ----MIN - 2003 -_ 2017 -_ 2022 -_ $2023-2024$
Thames Water - Farmoor Reservoir - Upper Thames

(Source: water companies).

## 5 Hertfordshire and North London (HNL)

### 5.1 HNL Rainfall and Effective rainfall charts

Figure 5.1: Monthly rainfall and effective rainfall totals for the past 24 months compared to the 1961 to 1990 long term average for a selection of areal units.
$\square$ Monthly total rainfall (mm)


Lee Chalk - Rainfall


Long term average rainfall (mm)


Lee Chalk - Effective Rainfall


HadUK rainfall data. (Source: Met Office. Crown copyright, 2024).
EA effective rainfall data (Source EA Soil Moisture Model, 2024).

### 5.2 HNL River flow charts

Figure 5.2 Daily mean river flow for index sites over the past year, compared to an analysis of historic daily mean flows, and long term maximum and minimum flows.



Source: Environment Agency. 2024

### 5.3 HNL Groundwater level charts

Figure 5.3: End of month groundwater levels at index groundwater level sites for major aquifers. 22 months compared to an analysis of historic end of month levels and long term maximum and minimum levels.


Source: Environment Agency, 2024.

### 5.4 HNL Reservoir stocks

Figure 5.4: End of month regional reservoir stocks compared to long term maximum, minimum and average stocks. Note: Historic records of individual reservoirs and reservoir groups making up the regional values vary in length.

(Source: water companies).

## 6 Solent and South Downs (SSD)

### 6.1 SSD Rainfall and Effective Rainfall charts

Figure 6.1: Monthly rainfall and effective rainfall totals for the past 24 months as a percentage of the 1961 to 1990 long term average for a selection of areal units.

Monthly total rainfall ( mm )
Test Chalk - Rainfall


Lymington - Rainfall


Long term average rainfall (mm)


Lymington - Effective Rainfall



HadUK rainfall data. (Source: Met Office. Crown copyright, 2024).
EA effective rainfall data (Source EA Soil Moisture Model, 2024).

### 6.2 SSD River flow charts

Figure 6.2: Daily mean river flow for index sites over the past year, compared to an analysis of historic daily mean flows, and long term maximum and minimum flows.


Source: Environment Agency. 2024

### 6.3 SSD Groundwater levels

Figure 6.3: End of month groundwater levels at index groundwater level sites for major aquifers. 22 months compared to an analysis of historic end of month levels and long term maximum and minimum levels.

| Exceptionally high | Notably high |
| :--- | :--- | :--- |
| Below normal | Notably low |

CLANVILLE GATE GWL
Ranking derived from data for the period Mar-1963 to Dec-2022


CARISBROOKE CASTLE
Ranking derived from data for the period Aug-1977 to Dec-2022


HOUNDEAN BOTTOM GWL
Ranking derived from data for the period Jan-1977 to Dec-2022

Above normal
Exceptionally low


LOPCOMBE CORNER GWL
Ranking derived from data for the period Apr-1963 to Dec-2022


WEST MEON HUT GWL
Ranking derived from data for the period Sep-1986 to Dec-2022


CHILGROVE HOUSE GWL
Ranking derived from data for the period Feb-1836 to Dec-2022


Source: Environment Agency, 2024.

### 6.4 SSD Reservoir stocks

Figure 6.4: End of month regional reservoir stocks compared to long term maximum, minimum and average stocks. Note: Historic records of individual reservoirs and reservoir groups making up the regional values vary in length.
----AVE ----MIN -_ 2020 - 2022 - 2023 - 2024
South East Water - Ardingly Reservoir - Ouse

----AVE ----MIN - 2020 - 2022 - $2023-2024$
South East Water - Arlington Reservoir - Cuckmere

(Source: water companies).

## 7 Kent and South London (KSL)

### 7.1 KSL Rainfall and Effective Rainfall charts

Figure 7.1: Monthly rainfall and effective rainfall totals for the past 24 months compared to the 1961 to 1990 long term average for a selection of areal units.

Monthly total rainfall (mm)


Eastern Rother - Rainfall


Long term average rainfall (mm)


Eastern Rother - Effective Rainfall



HadUK rainfall data. (Source: Met Office. Crown copyright, 2024).
EA effective rainfall data (Source EA Soil Moisture Model, 2024).

### 7.2 KSL River flow charts

Figure 7.2: Daily mean river flow for index sites over the past year, compared to an analysis of historic daily mean flows, and long term maximum and minimum flows.

| Exceptionally high | Notably high | Above normal | Normal |
| :--- | :--- | :--- | :--- |
| Below normal | Notably low | Exceptionally low | - Latest data |



Source: Environment Agency. 2024

### 7.3 KSL Groundwater levels

Figure 7.3: End of month groundwater levels at index groundwater level sites for major aquifers. 22 months compared to an analysis of historic end of month levels and long term maximum and minimum levels.

| Exceptionally high | Notably high |
| :--- | :--- | :--- |
| Below normal | Notably low |

CHIPSTEAD GWL
Ranking derived from data for the period Oct-1942 to Dec-2022


LITTLE BUCKET FM
Ranking derived from data for the period Jan-1971 to Dec-2022



SWEEPS LANE
Ranking derived from data for the period Jan-1984 to Dec-2022


RIDDLES LANE
Ranking derived from data for the period Apr-1982 to Dec-2022


Source: Environment Agency. 2024

### 7.4 KSL Reservoir stocks

Figure 7.4: End of month regional reservoir stocks compared to long term maximum, minimum and average stocks. Note: Historic records of individual reservoirs and reservoir groups making up the regional values vary in length.

(Source: water companies).

## 8 Glossary

### 8.1 Terminology

## 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 $\left(\mathrm{m}^{3} \mathrm{~s}^{-1}\right)$.

## Effective rainfall

The rainfall available to percolate into the soil or produce river flow. Expressed in depth of water (mm).

## Flood alert and 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 to 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 by 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 (for example, 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).

### 8.2 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.

## 9 Appendices

### 9.1 Rainfall table

| Hydrological area | Apr 2024 rainfall \% of long term average 1961 to 1990 | Apr 2024 band | Feb 2024 to April cumulative band | Nov 2023 to April cumulative band | May 2023 to April cumulative band |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Cotswold West | 154 | Notably High | Exceptionally high | Exceptionally high | Exceptionally high |
| Cotswold East | 144 | Above Normal | Exceptionally high | Exceptionally high | Exceptionally high |
| Berkshire Downs | 146 | Above Normal | Exceptionally high | Exceptionally high | Exceptionally high |
| Chilterns West | 134 | Above Normal | Exceptionally high | Exceptionally high | Exceptionally high |
| Chilterns East Colne | 142 | Above Normal | Exceptionally high | Exceptionally high | Exceptionally high |
| North Downs - Hampshire | 145 | Above Normal | Exceptionally high | Exceptionally high | Exceptionally high |
| North Downs - South London | 139 | Above Normal | Exceptionally high | Exceptionally high | Notably high |
| Upper Thames | 145 | Above Normal | Exceptionally high | Exceptionally high | Exceptionally high |
| Upper Cherwell | 152 | Above Normal | Exceptionally high | Exceptionally high | Exceptionally high |
| Thame | 150 | Above Normal | Exceptionally high | Exceptionally high | Exceptionally high |
| Loddon | 149 | Above Normal | Exceptionally high | Exceptionally high | Exceptionally high |
| Lower Wey | 152 | Above Normal | Exceptionally high | Exceptionally high | Exceptionally high |
| Upper Mole | 149 | Above Normal | Exceptionally high | Exceptionally high | Exceptionally high |
| Lower Lee | 137 | Above Normal | Exceptionally high | Exceptionally high | Notably high |
| North London | 133 | Above Normal | Exceptionally high | Exceptionally high | Exceptionally high |
| South London | 132 | Above Normal | Exceptionally high | Exceptionally high | Notably high |


| Roding | 137 | Above Normal | Exceptionally high | Exceptionally high | Notably high |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Ock | 134 | Above Normal | Exceptionally high | Exceptionally high | Exceptionally high |
| Enborne | 146 | Above Normal | Exceptionally high | Exceptionally high | Exceptionally high |
| Cut | 139 | Above Normal | Exceptionally high | Exceptionally high | Exceptionally high |
| Lee Chalk | 145 | Above Normal | Exceptionally high | Exceptionally high | Exceptionally high |
| River Test | 153 | Above Normal | Exceptionally high | Exceptionally high | Exceptionally high |
| East <br> Hampshire Chalk | 152 | Above Normal | Exceptionally high | Exceptionally high | Exceptionally high |
| West Sussex Chalk | 153 | Notably High | Exceptionally high | Exceptionally high | Exceptionally high |
| East Sussex Chalk | 141 | Above Normal | Exceptionally high | Exceptionally high | Exceptionally high |
| Sw Isle Of Wight | 182 | Notably High | Exceptionally high | Exceptionally high | Exceptionally high |
| River Darent | 144 | Above Normal | Exceptionally high | Exceptionally high | Notably high |
| North Kent Chalk | 129 | Above Normal | Exceptionally high | Exceptionally high | Notably high |
| Stour | 158 | Notably High | Exceptionally high | Exceptionally high | Notably high |
| Dover Chalk | 168 | Notably High | Exceptionally high | Exceptionally high | Exceptionally high |
| Thanet Chalk | 150 | Notably High | Exceptionally high | Exceptionally high | Notably high |
| Western Rother Greensand | 168 | Notably High | Exceptionally high | Exceptionally high | Exceptionally high |
| Hampshire Tertiaries | 163 | Above Normal | Exceptionally high | Exceptionally high | Exceptionally high |
| Lymington River Avon Water And O | 157 | Above Normal | Exceptionally high | Exceptionally high | Exceptionally high |
| Sussex Coast | 144 | Above Normal | Exceptionally high | Exceptionally high | Exceptionally high |
| River Arun | 155 | Notably High | Exceptionally high | Exceptionally high | Exceptionally high |
| River Adur | 159 | Notably High | Exceptionally high | Exceptionally high | Exceptionally high |
| River Ouse | 150 | Above Normal | Exceptionally high | Exceptionally high | Exceptionally high |


| Cuckmere River | 124 | Above Normal | Exceptionally high | Exceptionally high | Exceptionally high |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Pevensey Levels | 119 | Above Normal | Exceptionally high | Exceptionally high | Exceptionally high |
| River Medway | 146 | Above Normal | Exceptionally high | Exceptionally high | Exceptionally high |
| Eastern Rother | 142 | Above Normal | Exceptionally high | Exceptionally high | Exceptionally high |
| Romney Marsh | 147 | Notably High | Exceptionally high | Exceptionally high | Exceptionally high |
| North West Grain | 119 | Above Normal | Exceptionally high | Exceptionally high | Above normal |
| Sheppy | 136 | Above Normal | Exceptionally high | Notably high | Above normal |

### 9.2 River flows table

| Site name | River | Catchment | Apr 2024 band | Mar 2024 band |
| :---: | :---: | :---: | :---: | :---: |
| Colney Street hansteads |  | Colne |  | Exceptionally high |
| Feildes Weir (nat) | Lee (middle) | Lee |  | Notably high |
| Panshanger | Mimram | Lee |  | Exceptionally high |
| Crabble Mill Gs | Dour | Little Stour |  | Exceptionally high |
| Hawley Gs | Darent | Darent and Cray |  | Exceptionally high |
| Horton Gs | Great Stour | Stour Kent |  | Exceptionally high |
| Stonebridge Gs | Teise | Teise |  | Notably high |
| Teston Farleigh Combined | Medway100 | Medway Estuary |  | Exceptionally high |
| Udiam Gs | Rother | Rother Kent Lower |  | Exceptionally high |
| Alfoldean Gs | Arun | Arun |  | Exceptionally high |
| Allbrook Gs And Highbridge | Itchen (so) | Itchen |  | Exceptionally high |
| Broadlands | Test | Test Lower |  | Exceptionally high |
| Brockenhurst Gs | Lymington | New Forest |  | Notably high |
| Goldbridge Gs | Ouse (so) | Ouse Sussex |  | Exceptionally high |
| Iping Mill Gs | Rother | West Rother |  | Exceptionally high |
| Farmoor (naturalised) | River Thames | Thames |  | Exceptionally high |
| Kingston (naturalised) | River Thames | Thames North Bank |  | Exceptionally high |
| Marlborough | River Kennet | Kennet |  | Exceptionally high |
| Sheepbridge | River Loddon | Loddon |  | Exceptionally high |
| Tilford | River Wey | Wey Addleston Bourne |  | Exceptionally high |

### 9.3 Groundwater table

| Aquifer name |  |  | End of Apr <br> 2024 <br> band |  | End of Mar <br> 2024 band |
| :--- | :--- | :--- | :--- | :---: | :---: |
| Ashley Green <br> Stw | Mid-chilterns <br> Chalk | Exceptionally <br> high | Exceptionally <br> high |  |  |
| Lilley Bottom | Upper Lee Chalk | Exceptionally <br> high | Exceptionally <br> high |  |  |
| Little Bucket <br> Fm | East Kent Chalk - <br> Stour | Exceptionally <br> high | Exceptionally <br> high |  |  |
| Chipstead <br> Gwl | Epsom North <br> Downs Chalk | Notably high | Exceptionally <br> high |  |  |
| Riddles Lane | North Kent Swale <br> Chalk | Notably high | Notably high |  |  |
| Sweeps Lane <br> Gwl | West Kent Chalk | Notably high | Above normal |  |  |
| Houndean <br> Bottom Gwl | Brighton Chalk <br> Block | Notably high | Exceptionally <br> high |  |  |
| Chilgrove <br> House Gwl | Chichester- <br> worthing- <br> portsdown Chalk | Exceptionally <br> high | Exceptionally <br> high |  |  |
| Carisbrooke <br> Castle | Isle Of Wight <br> Central Downs <br> Chalk | Above normal | Notably high |  |  |
| West Meon <br> Hut Gwl | River Itchen <br> Chalk | Exceptionally <br> high | Notably high |  |  |
| Clanville Gate <br> Gwl | River Test Chalk | Exceptionally <br> high | Exceptionally <br> high |  |  |
| Lopcombe <br> Corner Gwl | River Test Chalk | Exceptionally <br> high | Exceptionally <br> high |  |  |
| Tile Barn <br> Farm | Basingstoke <br> Chalk | Exceptionally <br> high | Notably high |  |  |
| Rockley Obh | Berkshire Downs <br> Chalk | Exceptionally <br> high | Exceptionally <br> high |  |  |
| Jackaments <br> Bottom Obh <br> Burford Oolitic <br> Limestone <br> (inferior) | Normal | Above normal <br> Chilterns Chalk | Exceptionally <br> high |  |  |
| Exceptionally <br> high |  |  |  |  |  |
| Stonor Estate | South-west |  |  |  |  |

### 9.4 South-east England areal units for reference



Some features of this map are based on digital spatial data licensed from the Centre for Ecology and Hydrology, © CEH. Includes material based on Ordnance Survey 1:50 000 maps with the permission of the controller of His Majesty's Stationery Office © Crown copyright. All rights reserved. Environment Agency, 100026380, 2024.

