

For the future of our environment

Water Scarcity Report

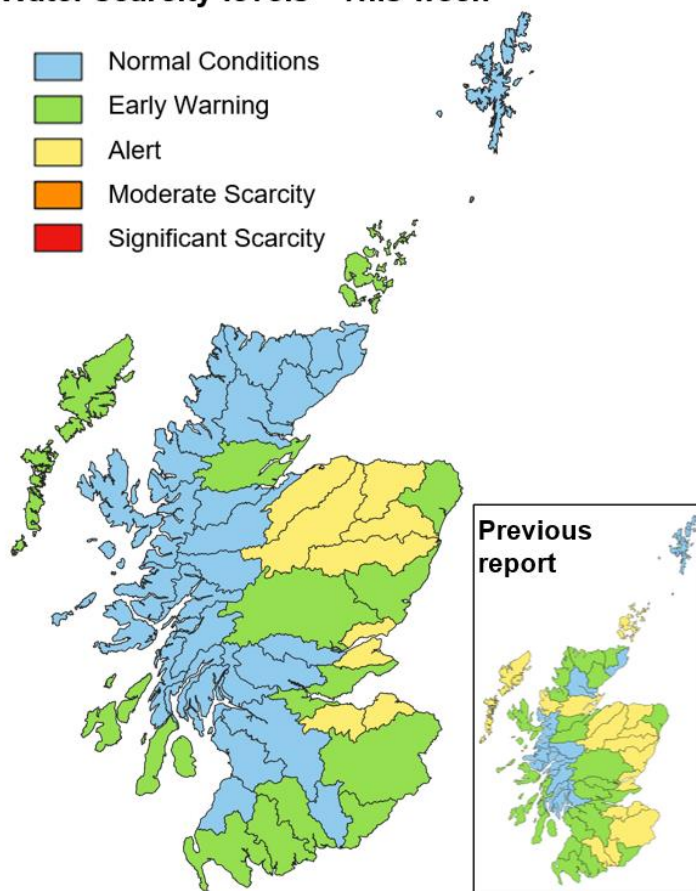
21st July 2023

Recent rainfall has resulted in continued recovery across many parts of Scotland.

However, some parts of the east and north-east remain at Alert for water scarcity.

Water scarcity levels - This week

- Normal Conditions
- Early Warning
- Alert
- Moderate Scarcity
- Significant Scarcity



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[Accessible version of national water scarcity map](#)



The overall risk of water scarcity takes account of the individual water scarcity indices, relevant water use, sectors in each region, and forecast weather conditions. The areas shown in this map represent major river catchments. Details on how levels are set and actions required can be found in SEPA's [National Water Scarcity Plan](#).

Situation Summary

Following an uncharacteristically dry first part of summer, recent rainfall has resulted in continued recovery across Scotland. However, another dry spell may quickly lead to a deterioration in the water scarcity situation, especially in the north-east, Fife and East Lothian, where soil moisture remains dry.

Widespread recent improvement in river flows and ground conditions due to recent rainfall has resulted in many areas across Scotland experiencing some recovery in their water scarcity level, particularly in the west, the south, and the northern highlands.

In the east and north-east, river flows and ground conditions have seen less recovery and remain drier, with many areas remaining at Alert. Further recovery in the north and west has resulted in more areas in these regions improving to Normal conditions.

Further rain is forecast across the southern half of the country this weekend, which may lead to continued recovery in some areas. However, there is uncertainty around the locations and quantity of this rain. With eastern and north-eastern parts of Scotland remaining at Alert for water scarcity, continued rainfall into August will be necessary to avoid further deterioration.

SEPA is monitoring the situation and coordinating steps to manage water resources in line with Scotland's National Water Scarcity Plan which is available on SEPA's website:

<https://www.sepa.org.uk/environment/water/water-scarcity/>.

You can help us by reporting any evidence you see of water scarcity. For details of information that would be useful to us and where to send it see: [Water scarcity in your area | Scottish Environment Protection Agency \(SEPA\)](#).

Advice for water users

Water sources used for irrigating farmland are at risk of becoming limited in the Alert areas. We are urging farmers in these areas, especially if taking water from burns and small rivers, to:

- Routinely check equipment isn't leaking;
- Only use the water required for the use;

- Consider water saving measures for next irrigation season.
- If the catchment reaches Moderate Water Scarcity, consider your upcoming water needs and begin to plan with others in the catchment to share the resource or schedule abstractions.

Managers of golf courses are asked to do the same.

For the most up to date advice please see: [Advice for abstractors](#).

Public water supplies are operating normally.

Weather forecast (20/07/2023)

Friday sees further showers in the north and occasional rain in the south, this is mainly light but more persistent in far southwest. During the weekend periods of rain in south and central areas, turning heavy at times, while north stays largely dry. Showery northerly developing for Monday.

During next week, a mix of prolonged outbreaks of rain and showers are possible for most, perhaps turning heavy and thundery, especially across the north-west. The start of August is likely to see further unsettled conditions.

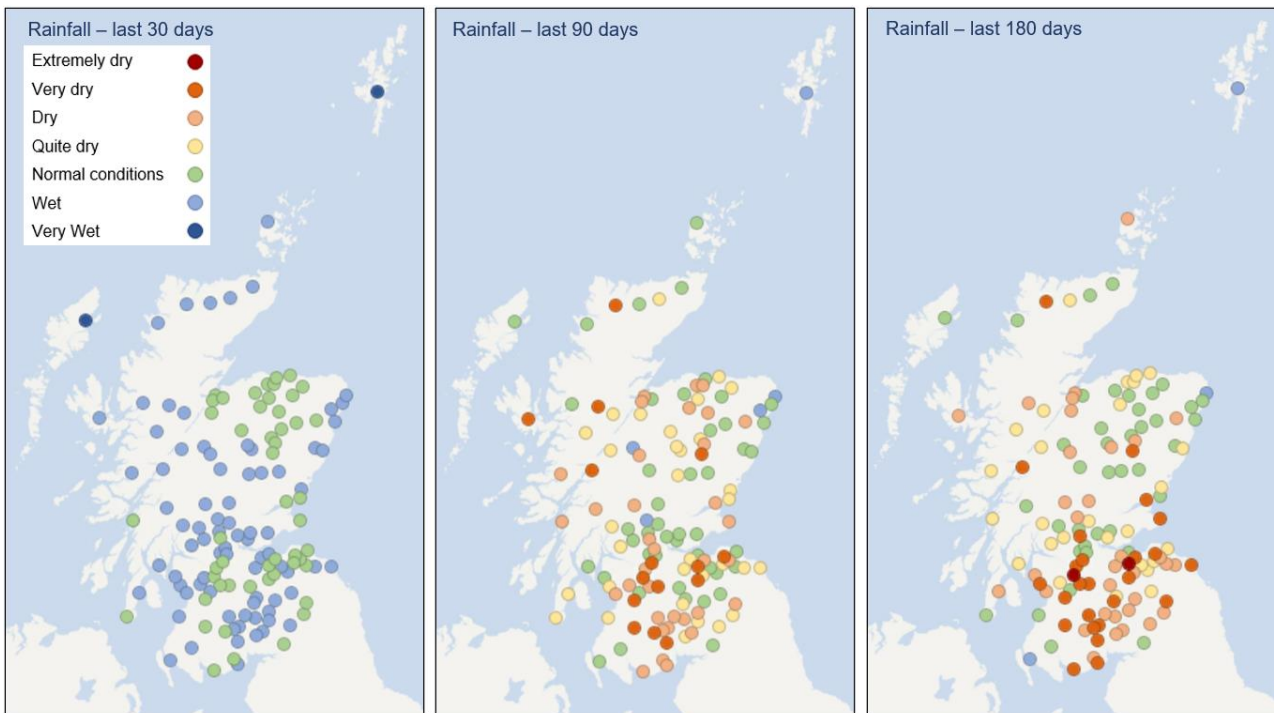
The outlook for the July – September period also suggests that across the UK there is double the usual chance of hot weather. The current long-term forecast indicates that this summer is likely to experience normal levels of rainfall.

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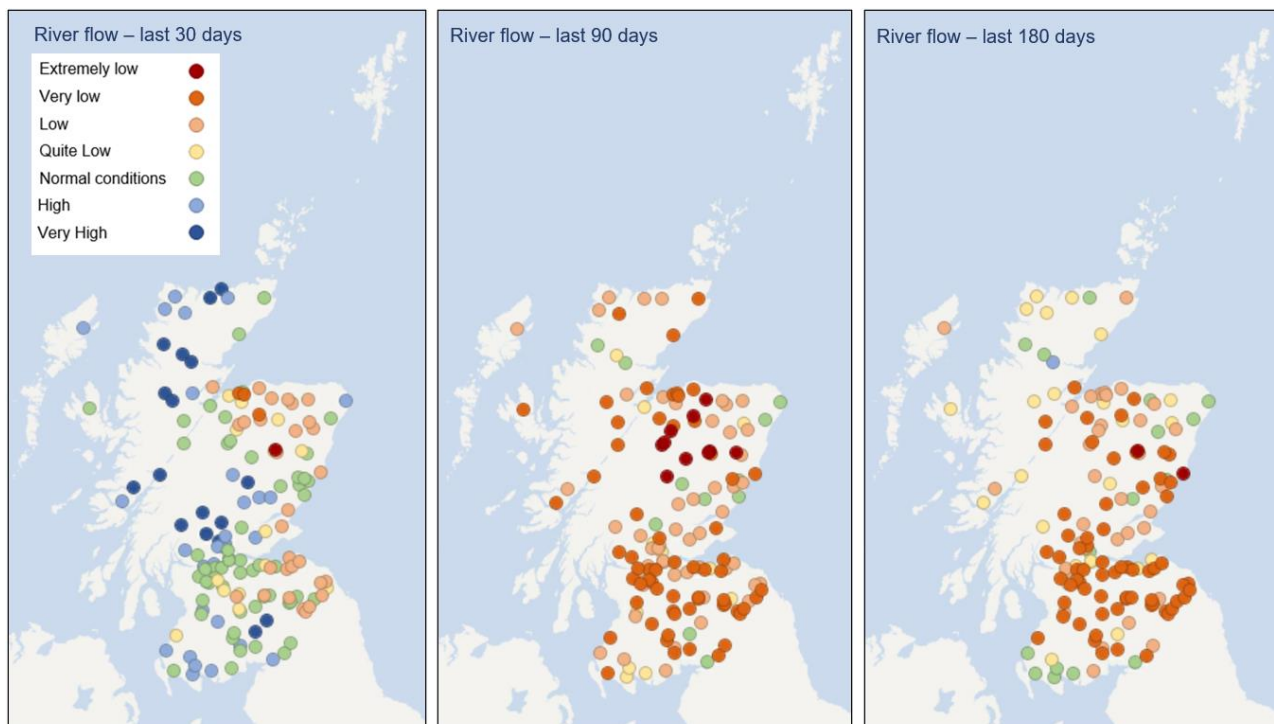
Supporting information

Rainfall and river flows:

These maps show rainfall (top row) and river flow (bottom row) relative to the long-term average, for this time of year, over 30 days, 90 days and 180 days.



Base map ©OpenStreetMap contributors



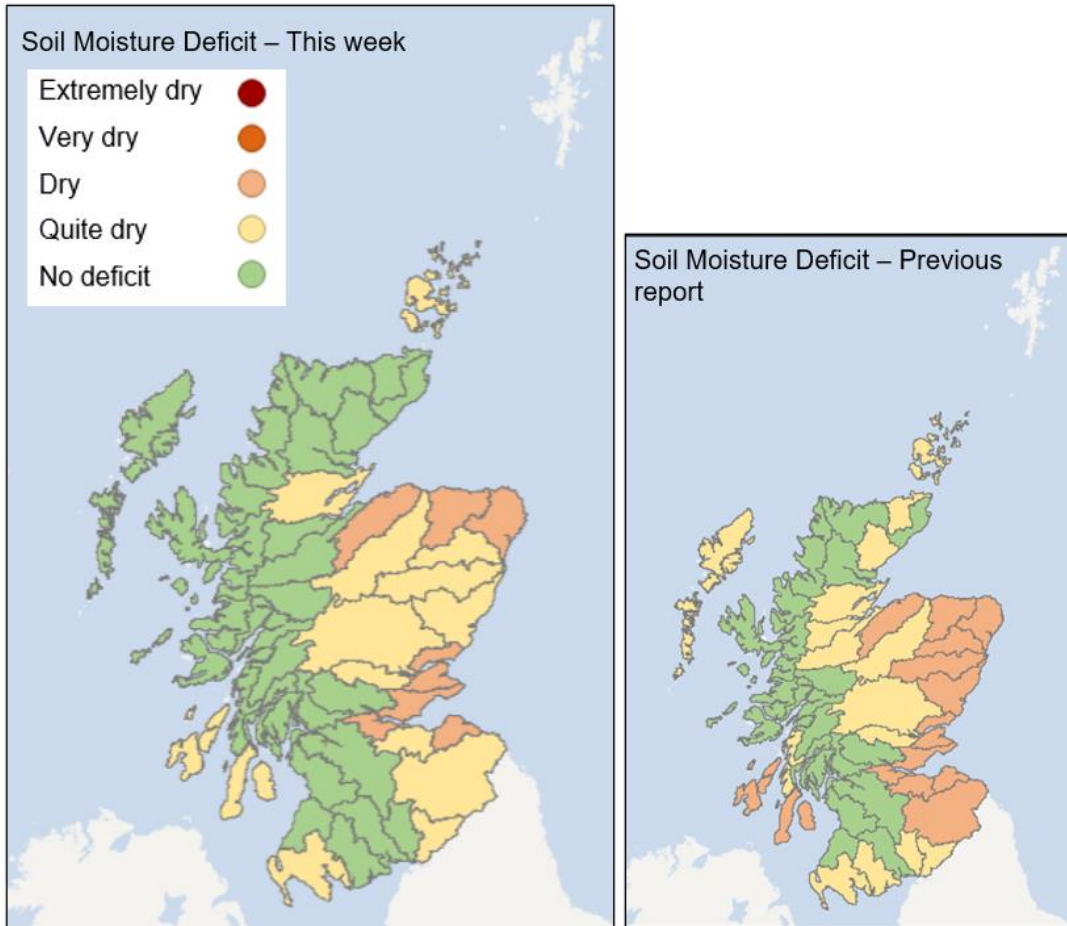
Base map ©OpenStreetMap contributors

In the short term, wet conditions have been experienced across most of Scotland for the time of year, while parts of the east and central Scotland have experienced normal rainfall totals. Rainfall conditions in the medium term remain mostly dry or quite dry compared to normal. Very dry conditions are still evident in some southern and northern areas of Scotland. In the longer term, rainfall totals have been mainly normal or quite dry in many northern areas of the country, with drier conditions still evident in the northeast due to the prolonged dry period experienced over the last few months. In southern Scotland, long term rainfall conditions have been mainly dry or very dry for this time year, with some central areas extremally dry.

In the short term, river flows across much of the northwest of Scotland have experienced recovery to high or very high flows for this time of year due to recent heavy rainfall events. In most of the northwest however, river flows remain low and extremally low. In southern Scotland, there has been some recovery, with more normal flows for this time of year being recorded in many areas. Flows in the southeast however, remain low. In the medium term, low and extremally low flows are evident across much of the north of Scotland, with flows mainly very low in the south. In the long term, river flows in most parts of southern Scotland have been very low, with some normal flows in the southwest. In the north of Scotland, flows mainly ranged between quite low and very low.

Soil moisture deficit:

These maps show this week’s soil moisture deficit, alongside those previously reported for comparison. This is obtained from the Met Office Rainfall and Evaporation Calculation System (MORECS), no data is available for Shetland.

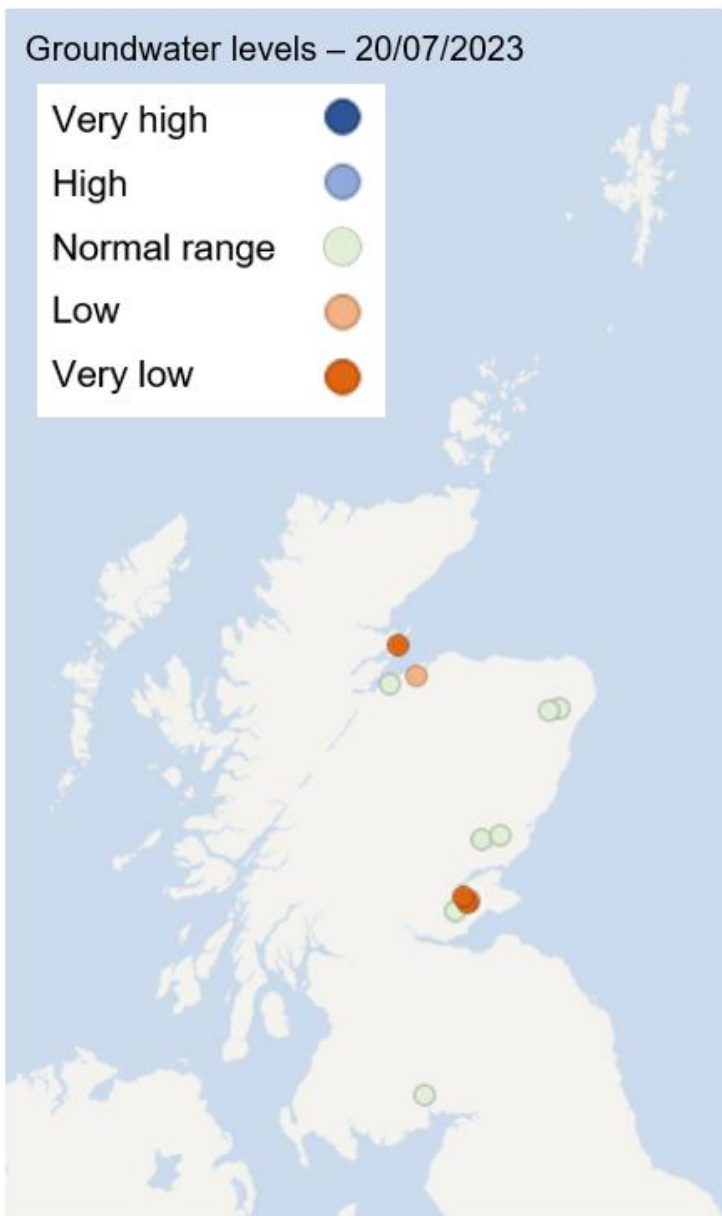


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Ground conditions have continued to improve due to recent rainfall. The majority of the west of the country is now at No Deficit. In the east, ground conditions are mainly Quite Dry with some areas being Dry.

Groundwater levels:

This map shows groundwater levels compared to the long-term record at each station. Groundwater levels are updated fortnightly and reported as above (high) or below (low) the typical (normal) level for the calendar month. Groundwater level trend bands are specific to each station and based on the long-term (minimum 10 years) record of mean monthly level values recorded at individual stations.



In Fife, and near Forres some monitoring locations show that the seasonal low and very low levels have been reached earlier than usual.

Groundwater levels at SEPA’s other monitoring stations are within the normal range for this time of year.

Base map ©OpenStreetMap contributors



Natural water storage

In each river catchment there is some degree of natural water storage, which can maintain river flows even when it is not raining. This natural water storage is mainly held in lochs and groundwater. When storage has been depleted it will take a lot of rainfall for levels to recover.

Flow, rainfall and groundwater data are accessed via SEPA's [time series data service](#) (API). SEPA's live data are subject to ongoing quality control and periodic review.

For information on accessing this document in an alternative format or language please either contact SEPA by telephone on 03000 99 66 99 or by email to equalities@sepa.org.uk

If you are a user of British Sign Language (BSL) the Contact Scotland BSL service gives you access to an online interpreter enabling you to communicate with us using sign language.

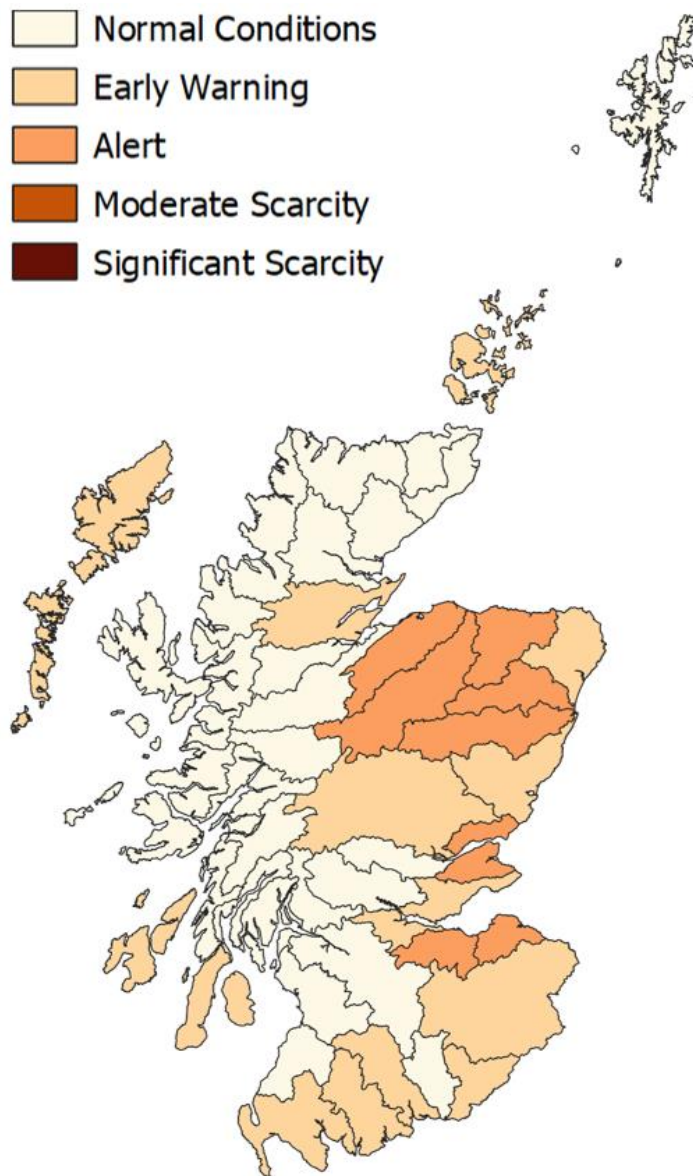
<http://contactscotland-bsl.org/>

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Appendix

Accessible national water scarcity map



[Link to Situation Summary](#)