

For the future of our environment

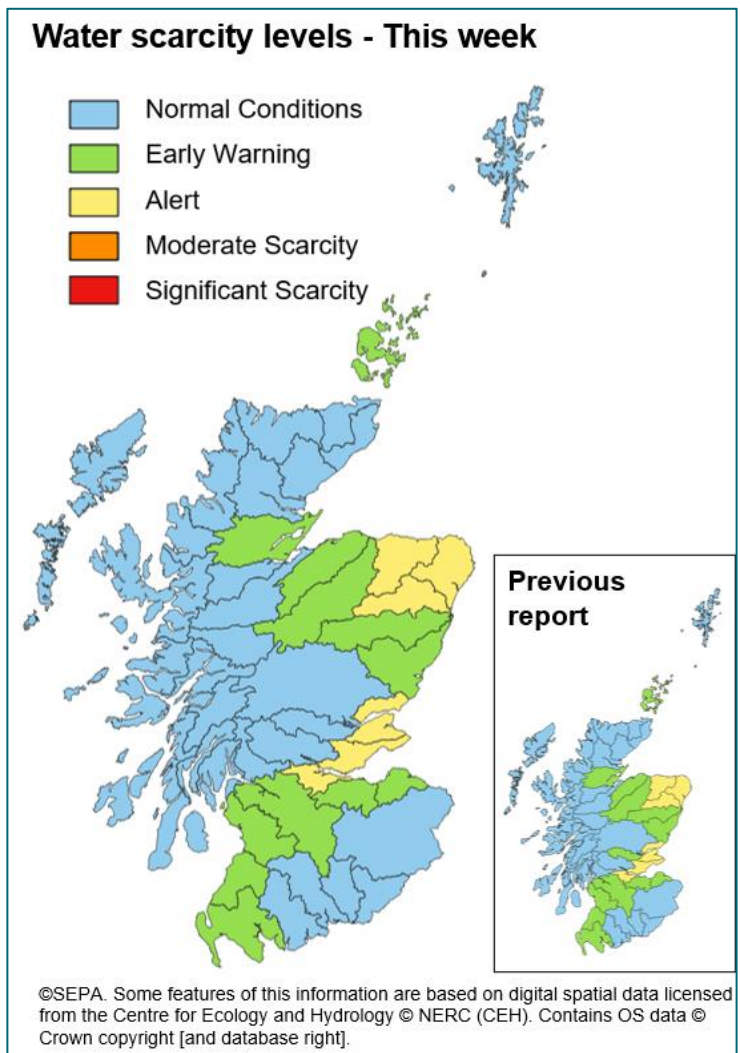
# Water Scarcity Report

14<sup>th</sup> September 2023

**Parts of Aberdeenshire, and the firths of Forth and Tay, remain at Alert for water scarcity.**

**Much of the north-east, central belt, and south-west, as well as Orkney, remain at Early Warning.**

**The River Earn catchment has recovered to Normal Conditions.**



[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

Last weekend saw rain across many parts of the country. However, the generally warm and dry conditions throughout last week mean that this rain has not led to significant recovery in the overall water scarcity level.

Parts of Aberdeenshire, as well as the firths of Forth and Tay, remain at Alert for water scarcity, and much of the north-east, central belt and south-west, as well as Orkney, remain at Early Warning.

One exception is the River Earn catchment, where recent rises in river flows see the area recover from Early Warning to Normal Conditions.

The current forecast suggests heavy rain for the south of the country at the weekend. This rainfall may lead to recovery in conditions. However, the forecast currently carries very low confidence.

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 \(SEPA\)](#).

## Standing 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 (14/09/2023)

Rain pushing across central Scotland on Friday and becoming slow moving into early Saturday. Dry for a time but heavy rain or showers expected later on Sunday and into Monday.

Next week is likely to begin with a predominantly unsettled period. Thereafter, there is the risk of strong winds and heavy rain. Confidence remains low in late September and early October, however there is a greater chance of more in the way of settled conditions. There is an increased chance of some late season warm spells.

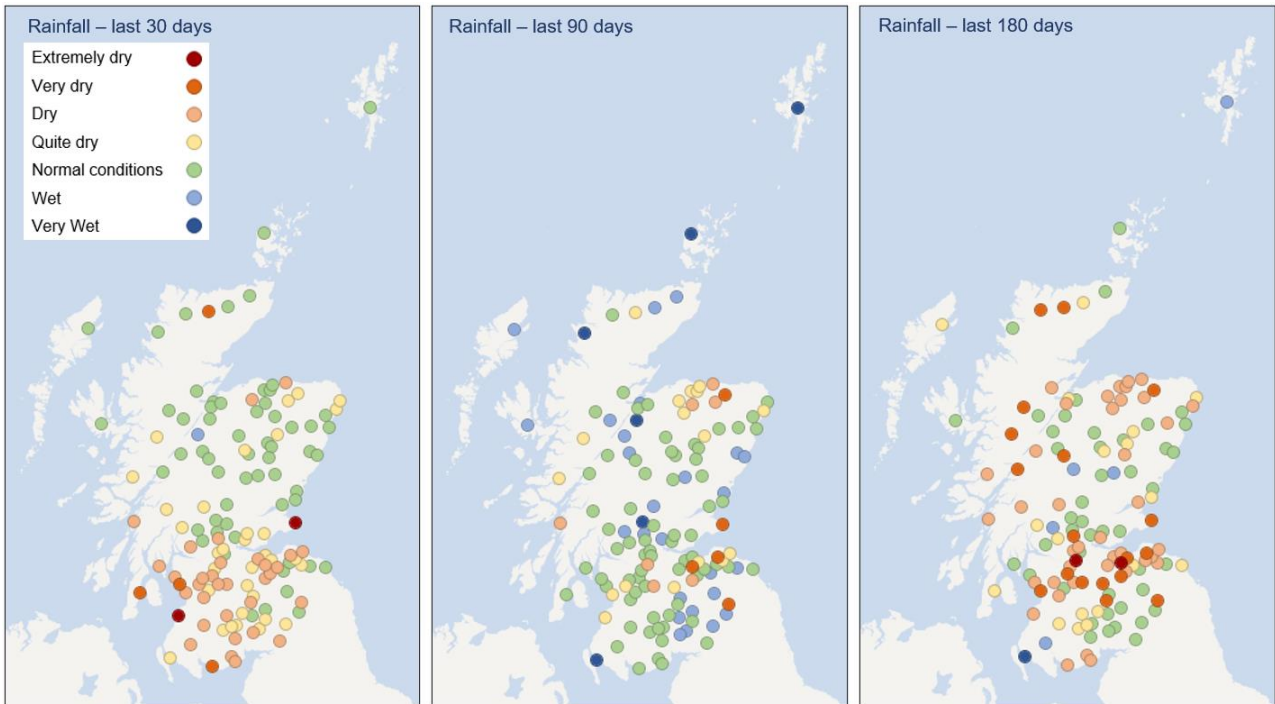
The current outlook for the September – November period indicates that near-average conditions are most likely, with wetter or drier conditions overall no more likely than usual. However, the chance of the period being warmer than average is higher than normal.

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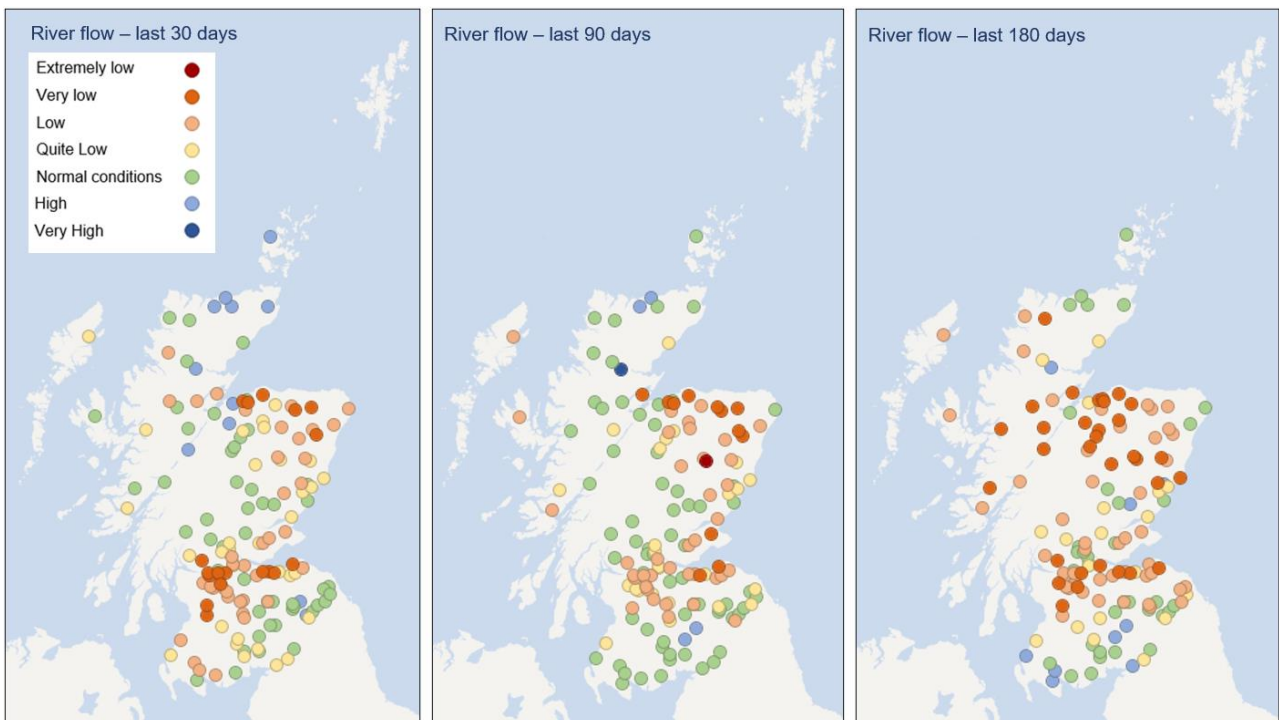
## Supporting information

### 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



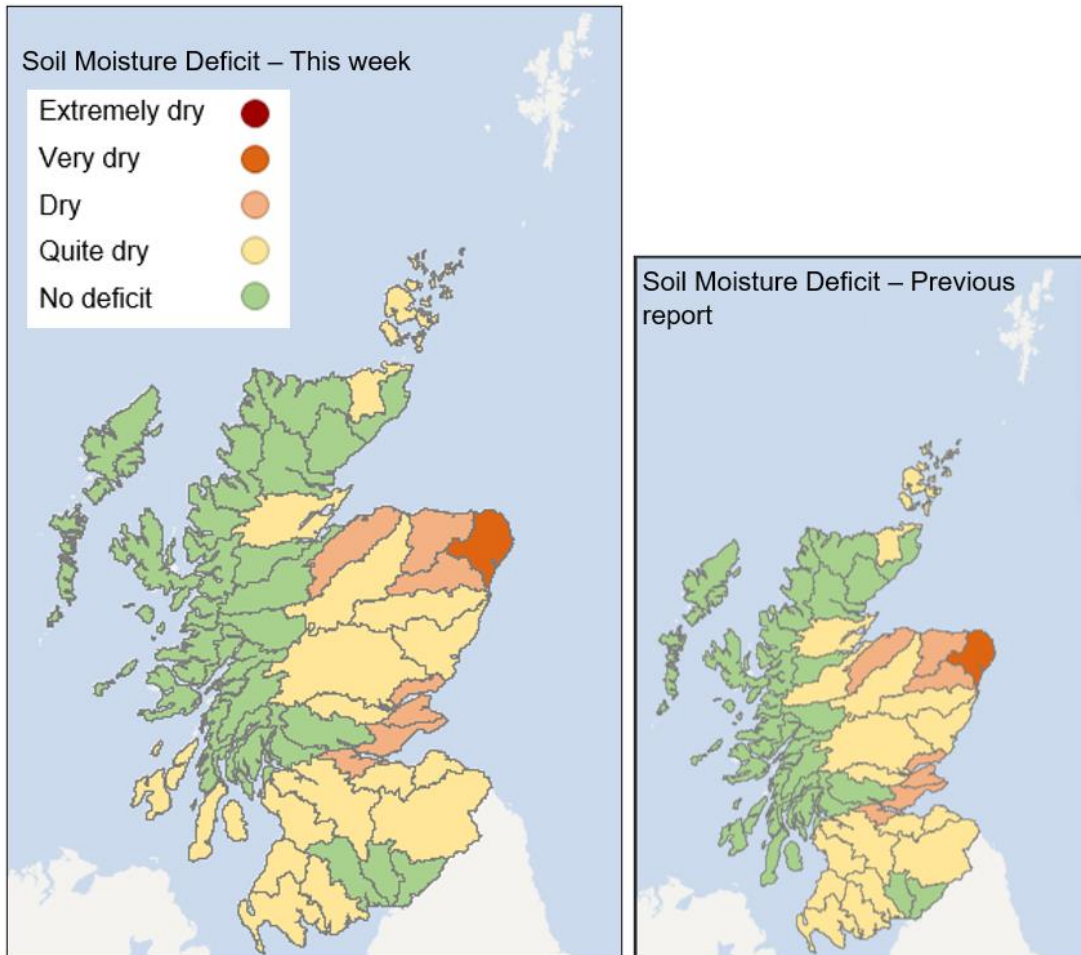
Base map ©OpenStreetMap contributors

Since mid-August, rainfall conditions have been widely normal across the highlands, though the central belt and south-west have been widely dry. Over the past three to six months, conditions have been mixed with long-term dry conditions across parts of the central belt and the highlands.

Since mid-August, river flows have been mixed for this time of year, with low or very low flows more prevalent in Moray, Aberdeenshire and the central belt. River flows have generally been more normal in the Highlands. Over the past three to six months, river flows in most areas of Scotland have ranged between low and extremely low, apart from in the far south-west where flows have generally been normal over that period.

**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.



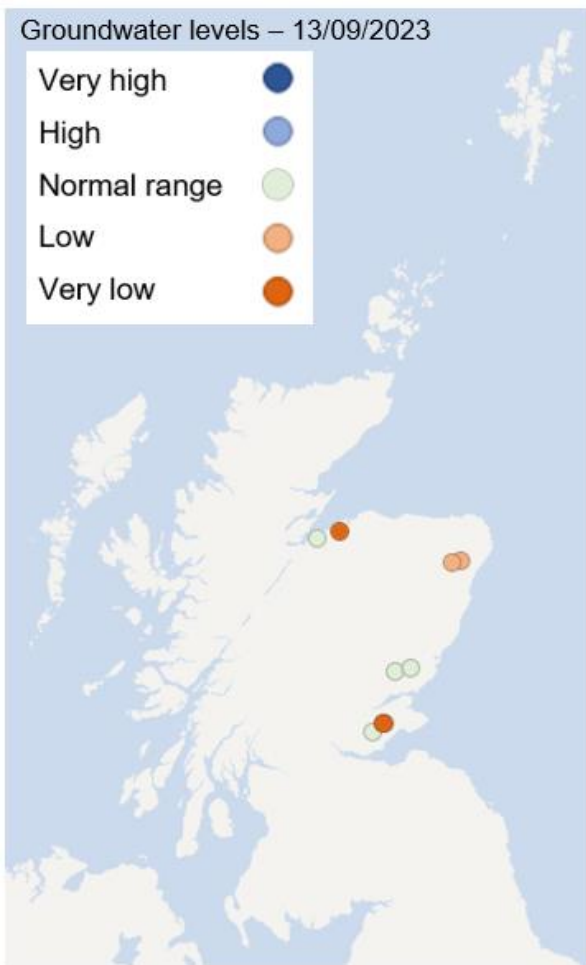
Data based on MORECS (Met Office © Crown Copyright). Some features of this information are based on digital spatial data licensed from the Centre for Ecology and Hydrology Copyright NERC (CEH). Contains OS data © Crown copyright [and database right]. Base map ©OpenStreetMap contributors

Ground conditions are currently showing No Deficit in parts of the north-west. In the east and north-east, ground conditions range between Quite Dry and Very Dry. In most of the south, ground conditions are Quite 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.



Base map ©OpenStreetMap contributors

Groundwater levels at sites in the north are mostly low and very low for the time of year, and levels in parts of Fife are still very low for the time of year after reaching their seasonal low earlier in the year than usual. However, levels in the Angus area remain within the normal range for the time of year.



### 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.

River flow, rainfall and groundwater level data can be 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](mailto: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/>

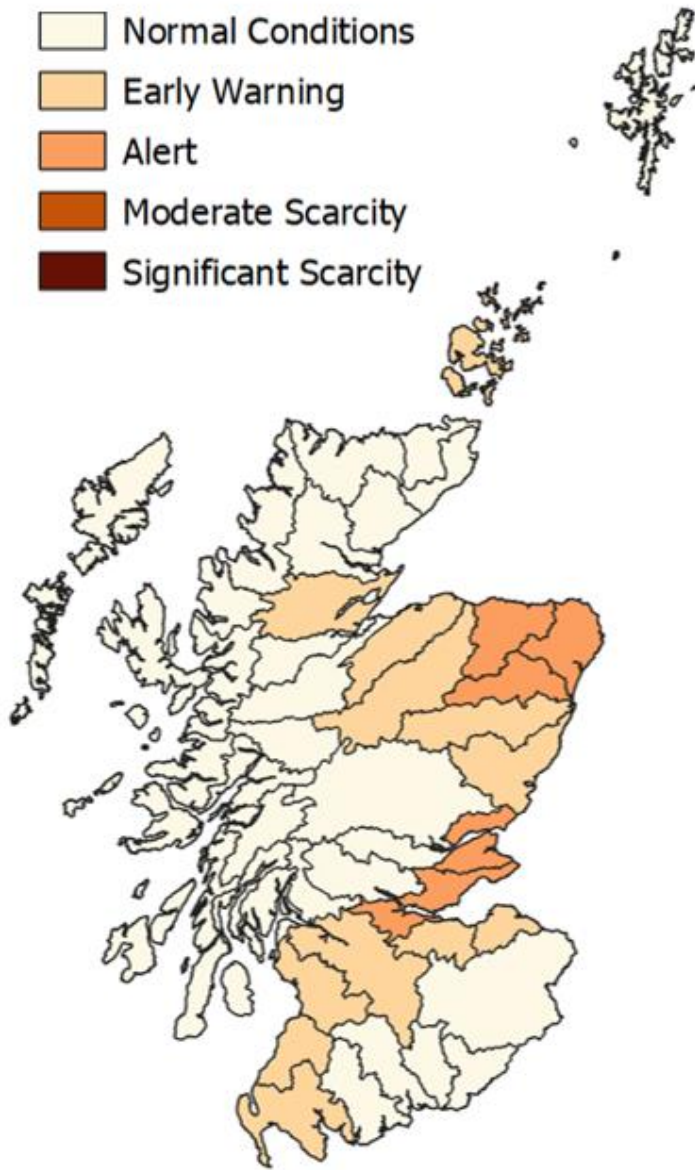
[www.sepa.org.uk](http://www.sepa.org.uk)

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## Appendix

### Accessible national water scarcity map



[Link to Situation Summary](#)