# Scotland’s east coast faces moderate water scarcity amid record low river flows



The Scottish Environment Protection Agency (SEPA) has recently reported a concerning shift in water availability across Scotland’s east coast, categorising most areas under ‘Moderate Scarcity’—just one step away from a critical shortage. This alarming development encompasses key river catchments, including the Deveron, Ythan, and Dee, among others. The rest of Scotland, with the exception of the Inner and Outer Hebrides which are currently classified as ‘Early Warning,’ is now under an ‘Alert’ status, indicating significant concern about water resource sustainability.

The current situation is a stark reflection of prolonged dry spells, marked by an unusually dry autumn and winter period. Many regions in the east have seen 11 consecutive months of below-average rainfall. Groundwater levels in particular locations, such as Fife and Angus, have plummeted, reaching record low averages for April. Indeed, Newton of Falkland reported its lowest April levels in 28 years. Historical records show that the River Dee's flow this year is the second lowest for this time of year since records began in 1926, trailing only behind the exceptionally dry conditions of 1938.

As the dry conditions persist, some parts of Fife have not experienced measurable rainfall for nearly four weeks, with river flows across the east significantly below normal levels. Experts warn that recovery is unlikely without substantial rainfall. Fortunately, the Met Office has issued a forecast suggesting the onset of rain as early as this weekend, ending an extended dry spell attributed to persistent high pressure. Deputy Chief Meteorologist David Oliver remarked that weather systems moving in from the Atlantic will introduce much-needed rain, particularly in the northwest, where heavy downpours and strengthened winds are anticipated.

The challenges presented by this water scarcity are compounded by broader climate change implications. Research conducted by experts at the University of Dundee highlights Scotland's increasing vulnerability to such conditions. Dr. Sarah Halliday, a lead researcher, underscores the pressing need for behavioural changes in water usage. She cautioned against complacency, pointing out that Scotland's reputation for abundant rainfall does not equate to a constantly reliable water supply. Instead, intensified dry spells and rising water demand necessitate a shift towards sustainable water use practices to enhance resilience against future shortages.

SEPA is taking proactive steps to address these challenges. The agency has advised businesses with water extraction licences to exercise caution and responsibility in their water use, especially given that reports indicate sections of the country have already moved into 'Significant' scarcity levels. Affected areas include the Rivers Annan and Nith in the southwest, where SEPA has mandated some farmers to reduce water extraction to protect local aquatic environments.

This ongoing water scarcity crisis in Scotland highlights a growing concern that extends beyond immediate environmental impacts. The pressure on freshwater resources calls for a concerted effort from both the public and private sectors. It is imperative that communities and businesses alike take proactive measures to conserve water and adapt to the changing climate, lest they find themselves grappling with even more severe shortages in the future.

In conclusion, while forecasts of impending rain offer a glimmer of hope, the broader challenges posed by climate change and water sustainability remain. It is a pivotal moment for Scotland to reassess its relationship with this vital resource and to implement strategies that will safeguard water availability for future generations.

### Reference Map

1. Paragraph 1: 1, 2
2. Paragraph 2: 1, 2
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5. Paragraph 5: 1, 4, 5, 6
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Source: [Noah Wire Services](https://www.noahwire.com)

## Bibliography

1. <https://www.heraldscotland.com/news/25181375.glascarnoch-river-runs-dry-water-scarcity-grips-parts-scotland/?ref=rss> - Please view link - unable to able to access data
2. <https://www.heraldscotland.com/news/25181375.glascarnoch-river-runs-dry-water-scarcity-grips-parts-scotland/?ref=rss> - The Scottish Environment Protection Agency (SEPA) has warned that most of mainland Scotland’s east coast has moved to ‘Moderate Scarcity’ conditions – one step below a ‘critical’ shortage. River catchments across the Deveron, Ythan, Don (Aberdeenshire), Dee (Aberdeen), Esk, Firth of Tay, Firth of Forth, Almond, Tyne (Lothian), Tweed and Esk (Dumfriesshire) were marked as ‘’Moderate last week, with the rest of Scotland is now at ‘Alert,’ with only the Inner and Outer Hebrides remaining at the lowest category - ‘Early Warning’. This follows on from a drier than normal autumn and winter with some areas of the east now having 11 months of below average rainfall. All businesses with licences to take water from the environment have been warned to act responsibly. The Glascarnoch River as it usually flows (Image: NQ) Groundwater levels in Fife and Angus were at their lowest April averages on record, with Newton of Falkland recording the lowest level for April in 28 years. In the River Dee in Aberdeenshire records going back 97 years show flows are at their second lowest this early in the year, only 1938 was drier. READ MORE: Scotland sees warmest day of 2025 with temp higher than Los Angeles When is it expected to rain in Scotland after hot weather? Some parts of Fife have now gone nearly four weeks without measurable rainfall. Across the east, river flows are well below normal for this time of year and without significant rain conditions are unlikely to recover soon. Much of Scotland has seen four weeks without rain (Image: NQ) However, the Met Office has forecast the record dry spell is likely to come to an end soon, with high pressure which has dominated Scotland’s weather coming to an end. Deputy Chief meteorologist David Oliver said: “We’ll see a change in conditions this weekend as weather systems move in from the Atlantic. These will bring rain and windier conditions from the west later Friday, which will spread across the whole of the UK on Saturday. “Some heavy rain is expected, especially in the northwest later on Saturday when winds will also strengthen, bringing a risk of coastal gales in the north. “These strong winds will continue on Sunday as an area of low pressure passes the northwest of the UK. Blustery showers are expected on Sunday, which will be heaviest and most frequent in the northwest. Conversely, the south and southeast may well see a good deal of dry weather.”
3. <https://www.dundee.ac.uk/stories/scotland-vulnerable-water-scarcity-warn-experts> - Experts at the University of Dundee have issued a warning about Scotland's vulnerability to water scarcity. A report led by Dr. Sarah Halliday emphasizes the need for behavioral changes in water usage to enhance resilience against periods of scarcity. The research highlights that prolonged dry spells, intensified by climate change, combined with increasing water demand, are making Scotland more susceptible to water shortages. Dr. Halliday points out the misconception that Scotland's abundant rainfall ensures ample water resources, urging for a more sustainable approach to water consumption.
4. <https://beta.sepa.scot/news/2023/four-more-areas-across-scotland-now-in-significant-water-scarcity-situation/> - The Scottish Environment Protection Agency (SEPA) has elevated four areas in Scotland to 'Significant' water scarcity, the highest level, due to prolonged dry conditions. The affected regions include the Rivers Annan and Nith in the southwest, the Black Isle, and the Outer Hebrides. SEPA has mandated certain farmers on the Black Isle to reduce water extraction from the Newhall burn to protect local water environments. This escalation underscores the growing concerns over water scarcity across Scotland.
5. <https://beta.sepa.scot/news/2023/sepa-working-with-scottish-businesses-to-prepare-for-water-scarcity-this-summer/> - The Scottish Environment Protection Agency (SEPA) is collaborating with Scottish businesses to prepare for potential water shortages this summer. With parts of Scotland already recording low river levels and dry ground conditions, SEPA's first water scarcity report of 2023 indicates that areas in western, central, and northern Scotland have reached the 'Early Warning' level. SEPA urges businesses to develop water scarcity plans to mitigate the impact of potential shortages and protect the environment.
6. <https://beta.sepa.scot/news/2023/scotland-warned-to-brace-for-significant-water-scarcity/> - The Scottish Environment Protection Agency (SEPA) has cautioned that Scotland may face significant water scarcity, with forecasts indicating that 28 out of 83 areas could reach the 'Significant' level by June 30, 2023, if river levels do not recover. The warning highlights the widespread impact of water scarcity across Scotland, urging businesses and the public to take proactive measures to conserve water and protect the environment.
7. <https://news.stv.tv/scotland/sepa-water-levels-critical-amid-scarcity-due-to-climate-change> - Water levels in eastern Scotland are at 'critical' levels following record-high temperatures. The Scottish Environment Protection Agency (SEPA) has urged businesses to reduce water usage as nearly all of east and south Scotland experience scarcity. Groundwater and river levels have been severely impacted by a lack of rainfall, with other parts of the country potentially facing similar conditions. This situation follows the driest January in the east since 1940 and record-high temperatures in the summer.