

## HEADLINE

**North East Scotland and North Highland are still at Significant Scarcity due to evidence of ecological impacts resulting from a protracted period of exceptionally low flows.**

**Rainfall has not been sufficient to allow a recovery from the situation in these areas. A significantly higher than average rainfall in the worst affected areas would be needed for any real recovery to take place.**

**Some further improvement to the situation has occurred in the South West of the country.**

**There are no areas where normal public water supplies have been affected.**

### Situation summary

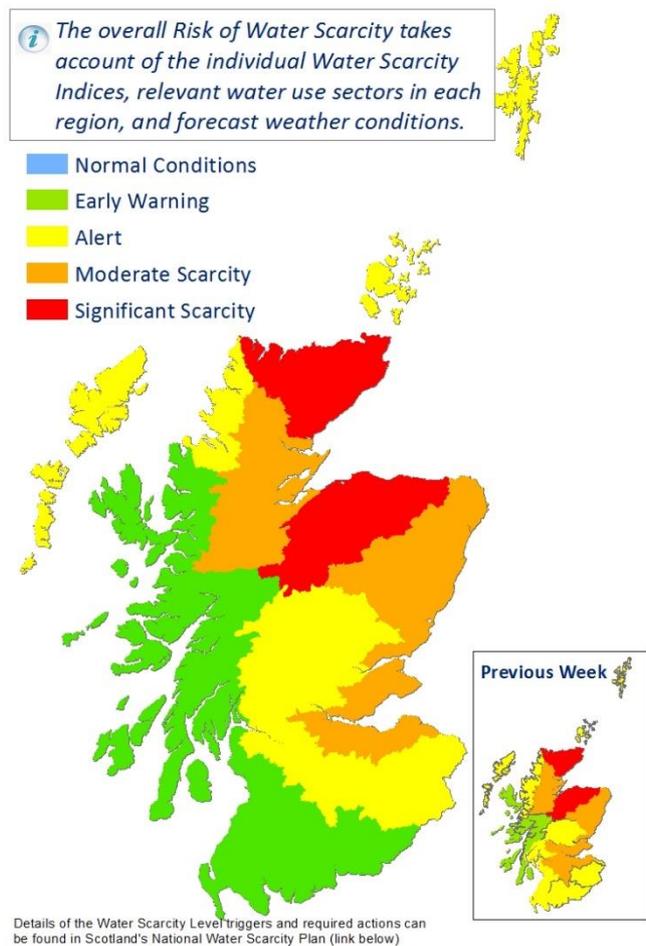
The situation across the south of the country has continued to improve with further rainfall, including the Solway region, Ayrshire and the Clyde catchment.

In the North-east and North Highland regions there has been a return to drying conditions this week, as seen in falling river levels and drying soils.

We have seen evidence in the Significant Scarcity areas of ecological and environmental impact as a result of the situation, including fish kills and some smaller watercourses drying up. SNH and Fishery Trusts have also collaborated to translocate Freshwater Pearl Mussels in affected rivers.

Rivers in the Spey catchment have been at extremely low levels for over two months now. These are levels which would normally only be seen for a few days in a normal year. Evidence has shown that the risk to ecology is much higher as a result of prolonged low flows, and the longer this goes on the worse the impact will be.

Rainfall in the North Highlands and Northeast is closer to normal for August than in recent months, but still below average. Even with normal rainfall in August conditions would normally be getting drier at this time of year. We would therefore need to have seen significantly higher than average rainfall in



August, an equivalent of two full weeks of heavy rainfall, to begin to see any recovery from the water scarcity situation.

The advice in the Moderate Scarcity areas is still to manage water resources sustainably in order to avoid reverting to the previous situation. River ecology and water supplies will still be vulnerable if conditions should get drier in the weeks ahead.

We are monitoring the situation closely and coordinating steps to manage water resources in line with [Scotland's National Water Scarcity Plan](#).

There are no areas where normal public water supplies have been affected, Scottish Water have reported that demand has returned to normal for the time of year but there is no guarantee that this will not increase again if warmer weather returns.

Scottish Water is managing water supplies across Scotland through this extended dry period and will continue to monitor the situation closely. Advice has been issued to all customers to use water wisely nationwide (*link to advice [www.scottishwater.co.uk/about-us/media-centre/latest-news/customers-across-scotland-asked-to-use-water-wisely](http://www.scottishwater.co.uk/about-us/media-centre/latest-news/customers-across-scotland-asked-to-use-water-wisely)*).

**By continuing to manage water resources sustainably, businesses that abstract water can help make the water supplies on which they and others depend last as long as possible through this period.**

SEPA is working with businesses to help ensure abstractions can be sustained and the water environment protected.

General and sector specific advice for abstractors is available: [Advice for abstractors](#).

Water abstractors with concerns about meeting licence conditions or wishing to discuss contingency measures should [contact their local SEPA office](#).

Scottish Water and Local Authorities are working together to help maintain supplies. If your private water supply is drying up you should contact your local authority for assistance and follow the advice about [maintaining your private supply](#).

**Forecast** (at 23/08/18): Based on data from Met Office

Rainfall in the next 5 days will be higher, up to 30 mm along the west coast. The east coast is expected to see rainfall totals of up to 10 mm in this time.

A band of rain, heavy at times will move eastwards across Scotland on Thursday. Scattered showers will follow during Friday with a possibility of hail and thunder. The showers will pass by quickly in the strong westerly wind so no significant accumulations expected. Showers will become fewer and lighter on Saturday then a band of rain will cross from the west later on Sunday. Drier weather will follow on Monday.

The longer-term outlook still shows a slightly higher likelihood of drier and warmer conditions than normal over the next three months. For further details on the seasonal forecast see the latest report at <http://www.hydoutuk.net>.

Further details on the current situation are provided in the following figures.

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## Precipitation Indices

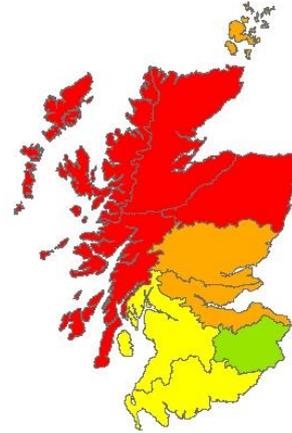
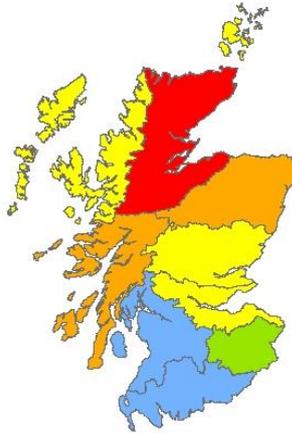
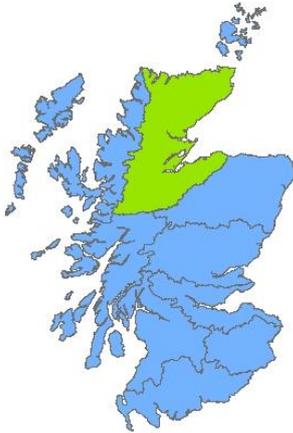
Rainfall over the past 30 days



Rainfall over the past 90 days



Rainfall over the past 180 days



*These maps show how low current rainfall totals are for this time of year, relative to historical averages, over the past 30, 90 and 180 days.*

- Normal Conditions
- Quite Dry
- Dry
- Very Dry
- Exceptionally Dry

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## Soil Moisture Deficit Maps

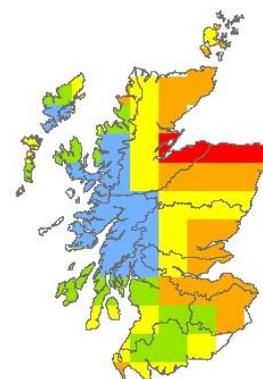
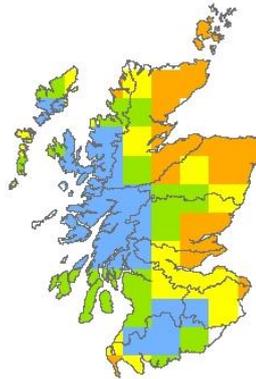
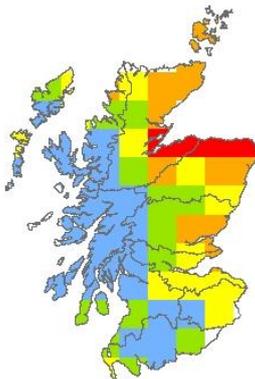
Soil Moisture Deficit Current



Soil Moisture Deficit 7 days prior



Soil Moisture Deficit 14 days prior



*These maps depict the latest Soil Moisture Deficit (SMD) data\* and the SMD 7 and 14 days prior.*

- No Data
- No Deficit
- Quite Dry
- Dry
- Very Dry
- Exceptionally Dry

\* MORECS data obtained from MetOffice

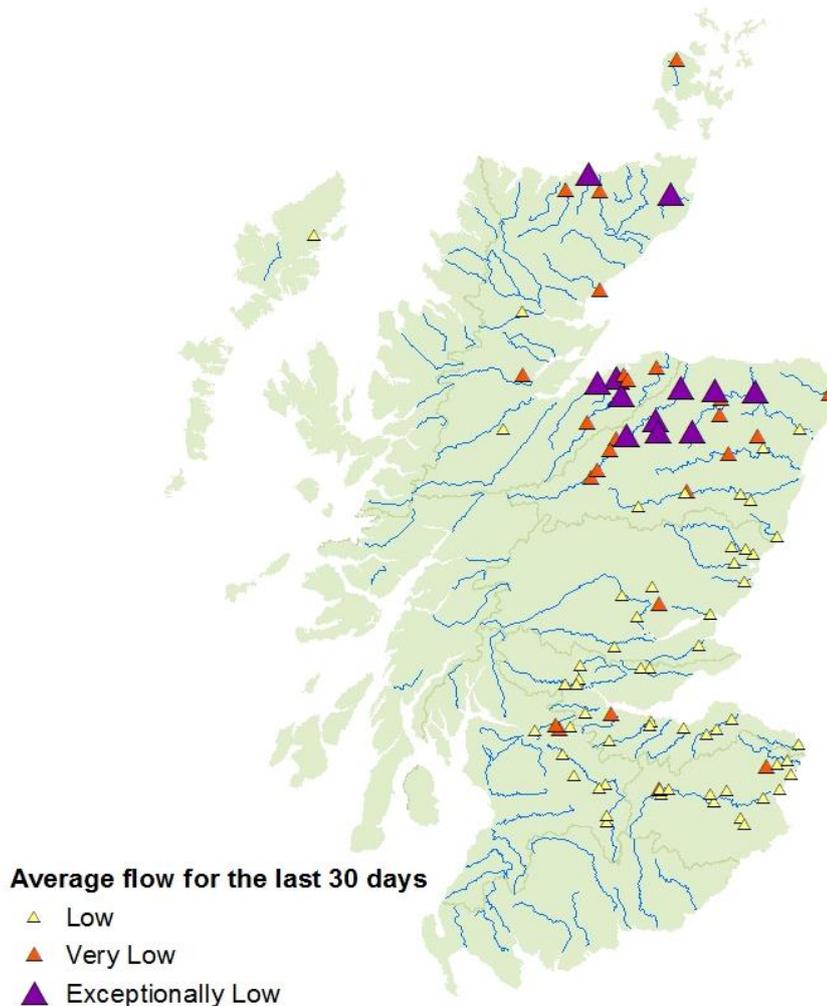
Average flow over the last 30 days

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This map shows the average flow at SEPA's gauging stations over the past 30 days, highlighting sites which have been at very low flows for this period.

Evidence shows that river ecology is at high risk when very low flows are maintained for this length of time.



**Notes on exceptionally low flows:**

- In the figure above, those sites marked as exceptionally low have had the types of low flows normally seen only a few days per year, persisting for at least a month.
- Even in areas where flows have not reached this extremely low level the advice to use water wisely still applies.

Further information from SEPA's water level stations can be found at <http://apps.sepa.org.uk/waterlevels/>.



## Natural water storage situation

In each river catchment there is some degree of 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 natural storage has been depleted it will take a lot of rainfall for levels to recover.

Please note that the map below does not reflect conditions in managed water supply reservoirs.

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### West – Low

Loch level data indicate low levels of storage in this area.

There has been further recovery to long term storage following rainfall, however without further sustained rainfall, storage levels will begin to fall again.

### East – Very Low

Loch and groundwater level data indicate very low levels of storage in this area compared to the long term record.

There are some cases where groundwater levels are lowest on record.

With current conditions it will take a long period of time for levels to return to normal.