

HEADLINE

North East Scotland and North Highland are still at Significant Scarcity due to evidence of ecological impacts resulting from an exceptionally prolonged period of 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.

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

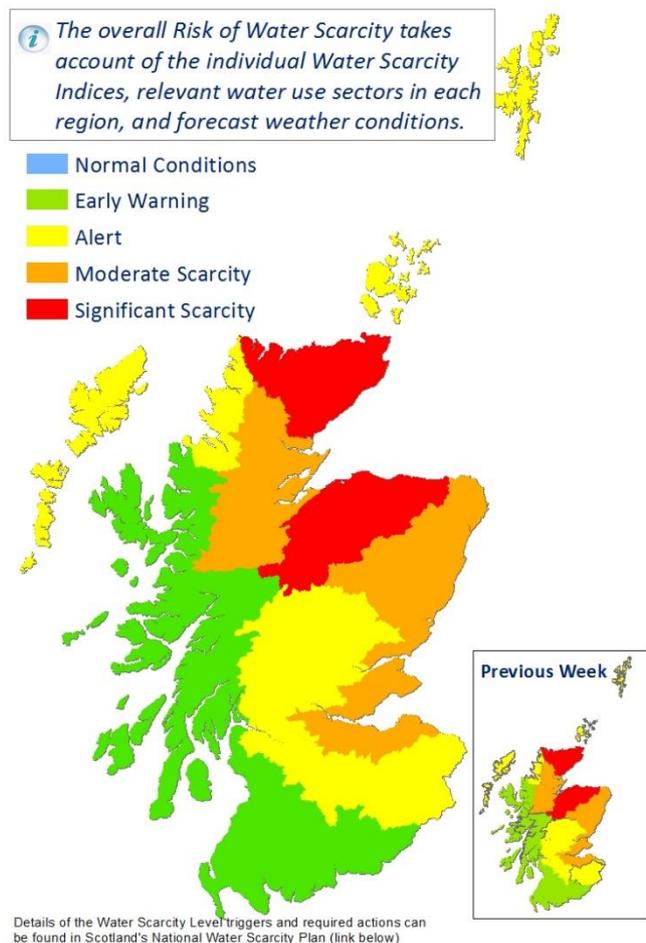
Situation summary

The situation this week has remained similar to the previous week, with a significant water scarcity remaining in the North Highlands and Moray regions.

Ground conditions in the northeast are still exceptionally dry and river levels are extremely low. The flows in the river Spey have now been at very low flows for over two months; the most prolonged low flow period in the river Spey in a record that begins in 1952. 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 totals for August were below normal in the north and northeast, but close to average throughout the rest of the country. As conditions have not improved in the worst effected areas we still estimate that the equivalent of two full weeks of heavy rainfall are required to begin to see recovery from the water scarcity situation. As this is not in the short term forecast, the water scarcity situation in the northeast is expected to continue further into the autumn.

The advice in areas at Moderate Scarcity 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*).

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 06/09/18): Based on information from the UK Met Office

Heavy showers are likely in the northeast on Thursday night, moving down the east coast on Friday. Patchy light rain is expected across the far north on Friday but otherwise largely dry through to Saturday. A band of rain will cross the country on Sunday, with a further front bringing outbreaks of rain on Monday.

The 5-day rainfall totals are slightly higher than have been seen in recent weeks in the northeast. The amount of rain is likely to balance with evaporation rates for this time of year though so we do not expect a great deal of recovery in river flows or loch and groundwater levels.

Over the next 30 days, conditions over the UK may become more settled generally although the north and west of the UK may have some wet and windy periods. There is currently a higher likelihood of below average rainfall than above average for the UK in September

The longer-term outlook still shows a slightly higher likelihood of drier and warmer conditions than normal over the next three months for the UK. 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.

05/09/2018

Precipitation Indices

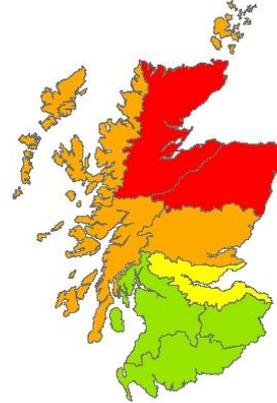
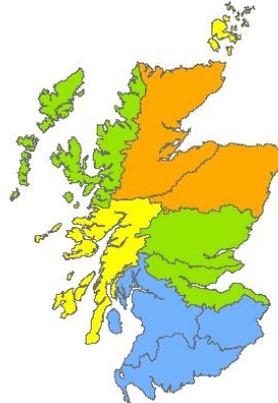
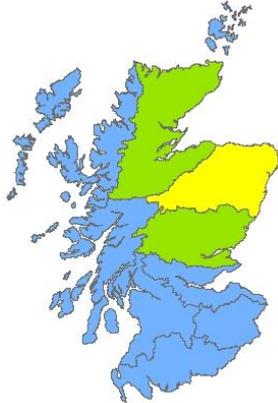
Rainfall over the past 30 days



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

05/09/2018

Soil Moisture Deficit Maps

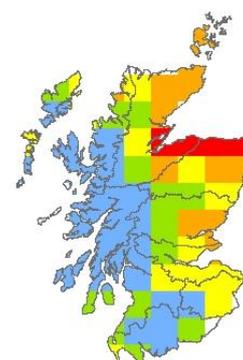
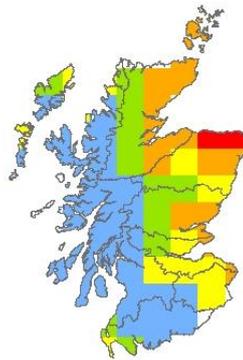
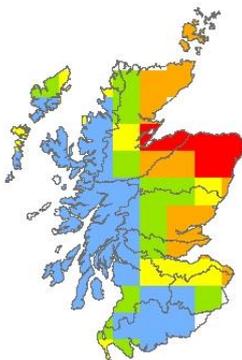
Soil Moisture Deficit Current



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.*

* MORECS data obtained from MetOffice

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

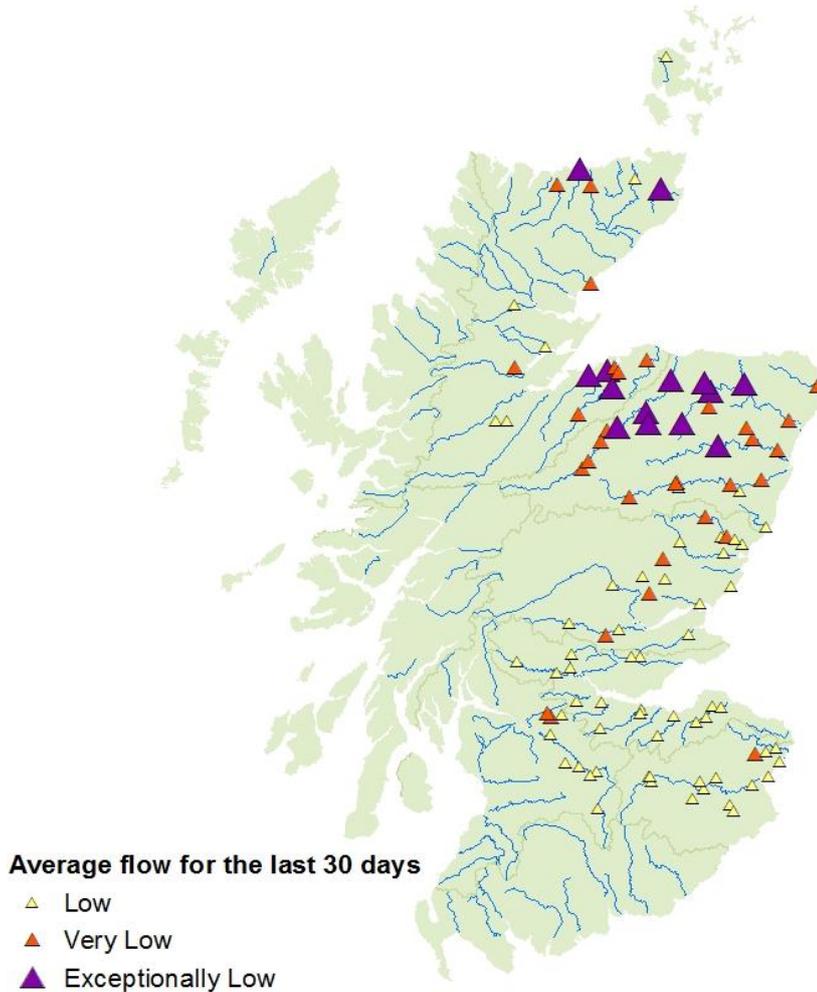
Average flow over the last 30 days

05/09/2018



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.

06/09/2018



North 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 time for levels to return to normal.

West and South – Recovering

Loch level data indicate that storage is recovering in this area.

Without further sustained rainfall, however, loch levels will begin to fall again.

Where groundwater level data is available, it shows that levels are largely within the normal range, although at the lower end of normal in many cases.