Water Scarcity Situation Report

18th October 2018

HEADLINE

East coast catchments remain very dry. Angus and North East Scotland remain at Moderate Scarcity level due to extremely low groundwater levels affecting private water supplies.

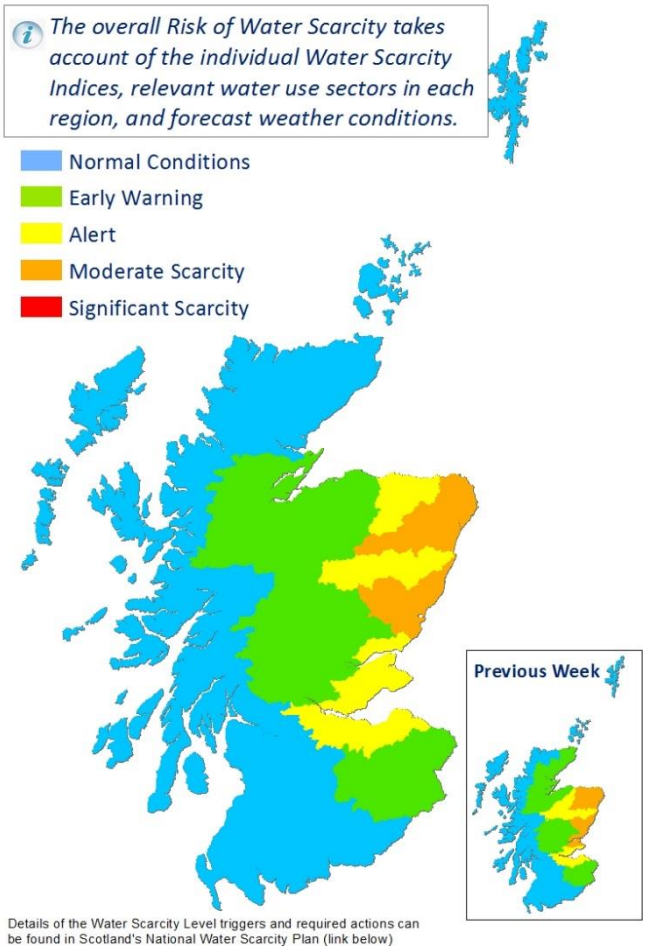
There are no areas where normal public water supplies have been affected.

Situation summary

Storm Callum brought rainfall to all parts of the country last week. This has led to a recovery in river levels in the northeast, which had been extremely low since early in the summer. Soils have moistened however groundwater levels in the East are still at record low levels, and recovery will be much slower.

In areas at Moderate Scarcity any water abstractors with concerns about groundwater supplies should contact their local SEPA office to discuss possible contingency measures.

Groundwater levels and loch storage would normally begin to recover in October. Water resources generally are low going into this recharge period so the amount of rainfall over winter will determine whether there are any knock-on effects into next year. SEPA will continue to monitor this water storage situation throughout the autumn and winter. The areas in Moderate and those remaining at Alert and Early Warning are where current low groundwater levels could lead to issues if insufficient winter recovery takes place.



Details of the Water Scarcity Level triggers and required actions can be found in Scotland's National Water Scarcity Plan (link below)

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

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)*.

General and sector specific advice for abstractors is available: Advice for abstractors.

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 17/10/18): Based on information from the UK Met Office

Lighter and patchy showers through Friday with drier conditions following into the north in the afternoon. Further rain moving east across the country on Saturday and heavy bursts for a time in the northwest, but only light and patchy rain in the east. Heavier and more prolonged rain in northwest later on Saturday as a cold front moves in but clearing quite quickly southeast on Sunday morning with drier and colder conditions following, though heavy and blustery showers spreading into the north and west, though falling as snow above 600m.

The longer-term outlook now shows a very slightly higher likelihood of wetter and warmer conditions than normal over the next three months for the UK, with an increased chance of spells of wet and stormy weather throughout autumn, compared to normal. For further details on the seasonal forecast see the latest report at http://www.hydoutuk.net.

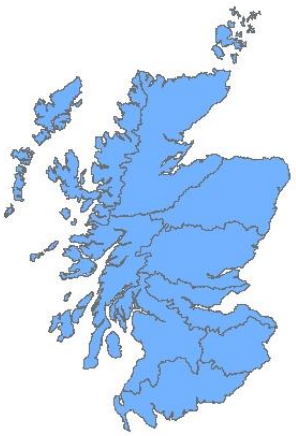
Further details on the current situation are provided in the following figures:

16/10/2018

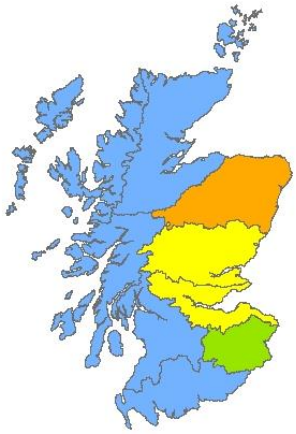
Precipitation Indices

Rainfall over the past 30 days

Rainfall over the past 90 days



Rainfall over the past 180 days



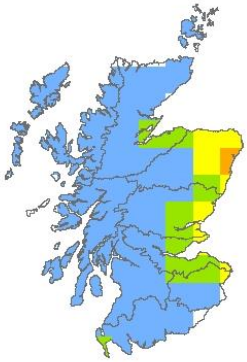
Normal Conditions
Quite Dry
Dry
Very Dry
Exceptionally Dry

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.

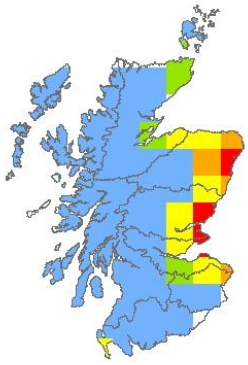
17/10/2018

Soil Moisture Deficit Maps

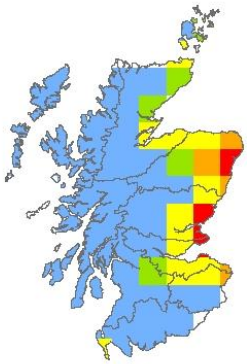
Soil Moisture Deficit Current



Soil Moisture Deficit 7 days prior



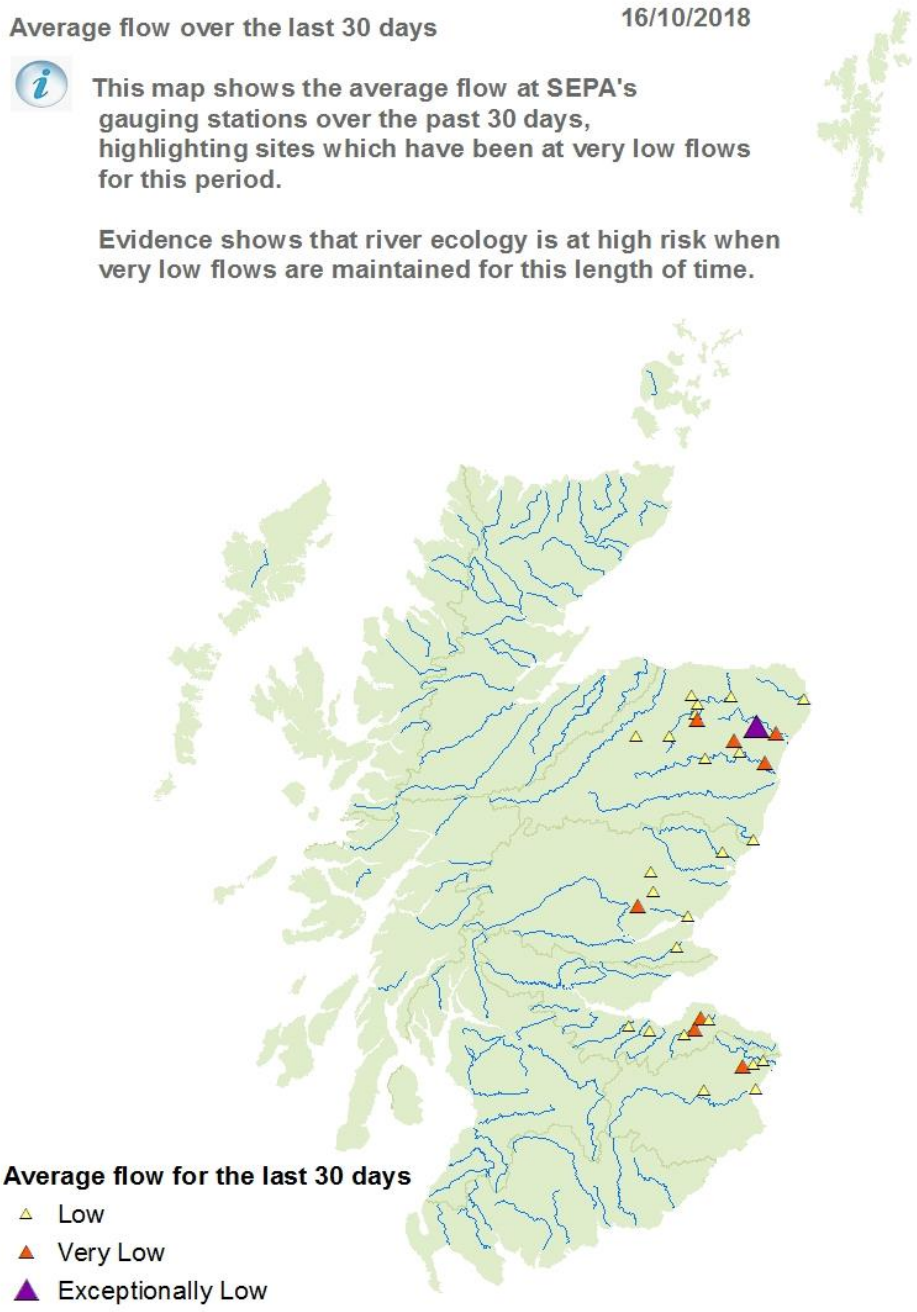
Soil Moisture Deficit 14 days prior



No Data
No Deficit
Quite Dry
Dry
Very Dry
Exceptionally Dry

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

** MORECS data obtained from MetOffice*



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 exceptionally 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/.

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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.

North East

Groundwater levels - very low
Loch storage – low

Very low groundwater levels in the Northeast area compared to the long-term record. With current conditions it will take a long time for levels to return to normal.

Loch levels in this area are also low following the dry summer but have shown some recent recovery following rainfall, particularly in the North Highlands.

Northwest, West and South – Recovering

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

Where groundwater level data is available, it shows that levels are largely within the normal range, and some recovery of levels is evident.