Water Scarcity Situation Report

8th Aug 2019

SEPA
Scottish Environment Protection Agency
Buidheann Dìon Àrainneachd na h-Alba

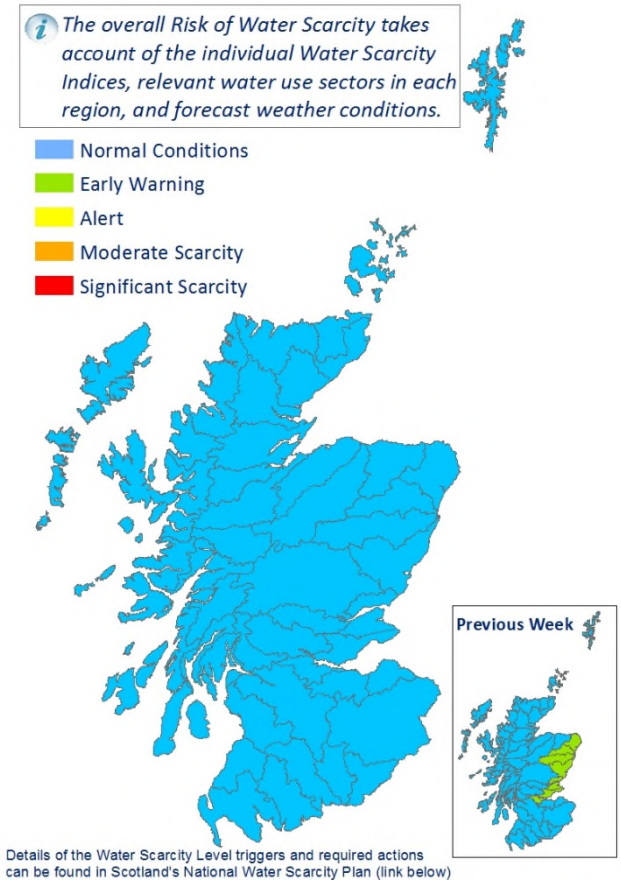
HEADLINE

Normal Conditions are now in place across the entire country.

Situation summary

Normal conditions are now in place across the entire country due to recent and forecasted rainfall. Surface conditions have improved with the majority of river levels across the country having recovered and are likely to rise further based on the current forecast.

Although groundwater levels in the east of the country still remain low for this time of year, they appear to be plateauing or marginally improving. Any prolonged periods without rainfall in these areas may see a water scarcity situation develop.



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

SEPA are monitoring the situation closely and coordinating steps to manage water resources in line with Scotland's National Water Scarcity Plan. If you have noticed any impact as a result of the dry weather, we would be interested in hearing about them. For further details on reporting impacts of dry weather see https://www.sepa.org.uk/environment/water/water-scarcity/.

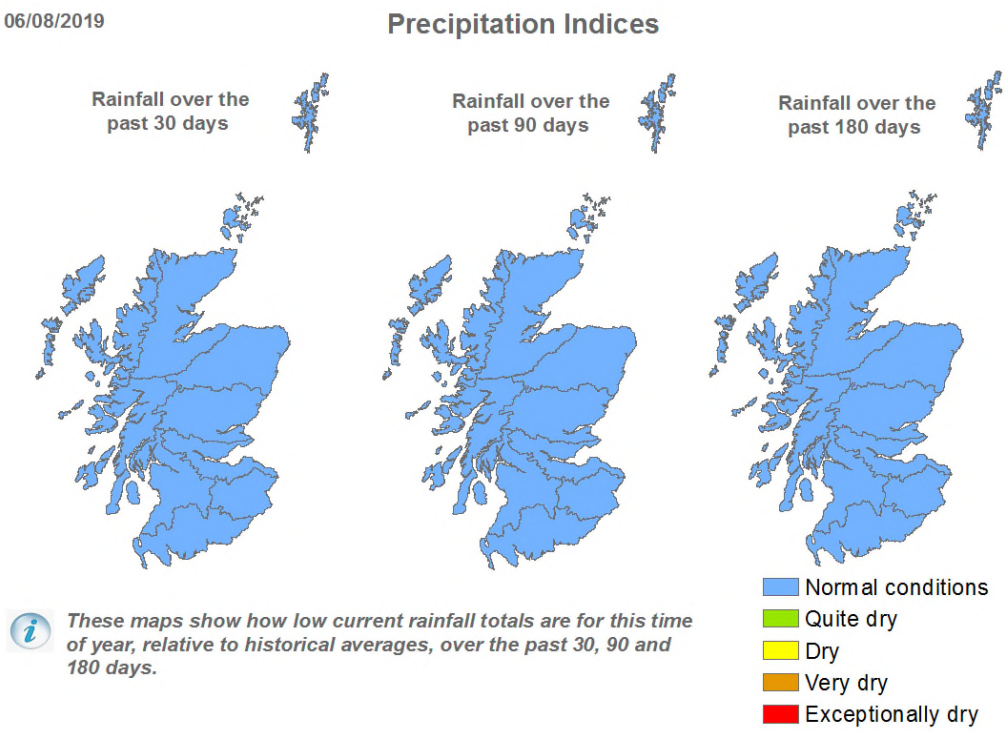
General and sector specific advice for abstractors is available: advice for abstractors.
Water abstractors with concerns about meeting licence conditions or wishing to discuss contingency measures should contact their local SEPA office.

Rainfall forecast (Source: Met Office 08/08/2019)

Fewer showers on Thursday though the odd sharp one at first in the northeast and in then in the afternoon in the south. Friday will see a band of occasionally heavy rain spreading northwards across the country, followed in the south by drier weather but with heavy showers. Some persistent heavy rain in far north on Saturday morning then thundery downpours returning to the south and east by the afternoon, lasting into the evening. Still a threat of heavy showers or longer spells of rain in the south on Sunday, then scattered, less heavy showers on Monday.

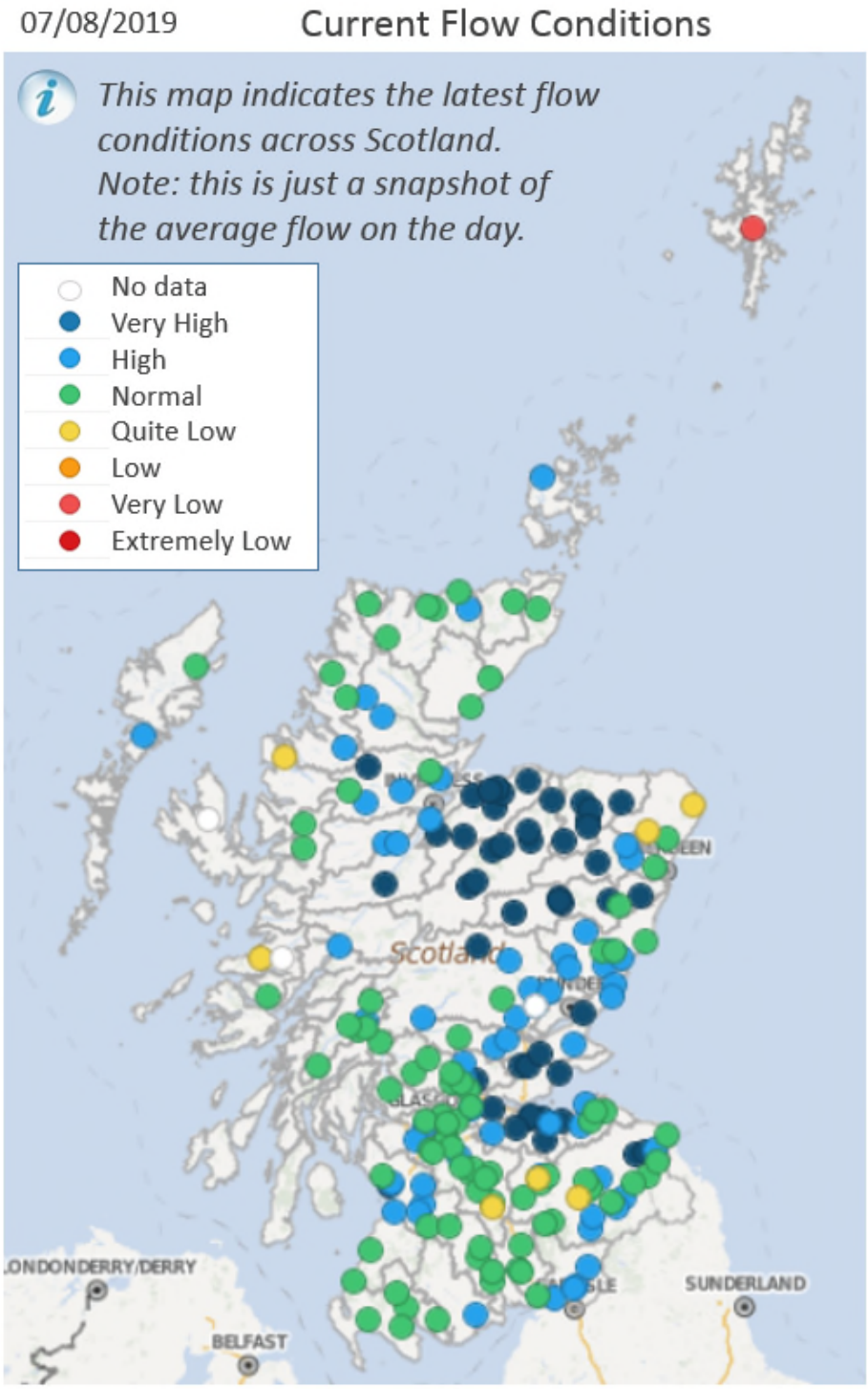
The longer-term outlook is uncertain. For August, wetter-than-average conditions are marginally more likely. For August-September-October as a whole, the chances of above- and below-average precipitation are similar. For further details on the seasonal forecast see the latest 3-month outlook summaries at https://www.metoffice.gov.uk/services/government/contingency-planners/index

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



Soil moisture deficit update – 06/08/19

The soil moisture deficit has continued to improve since last week, and most of the country now has No Deficit. Conditions remain Quite Dry along the east coast, locally on the north coast, and in Orkney.



07/08/2019

Natural water storage situation

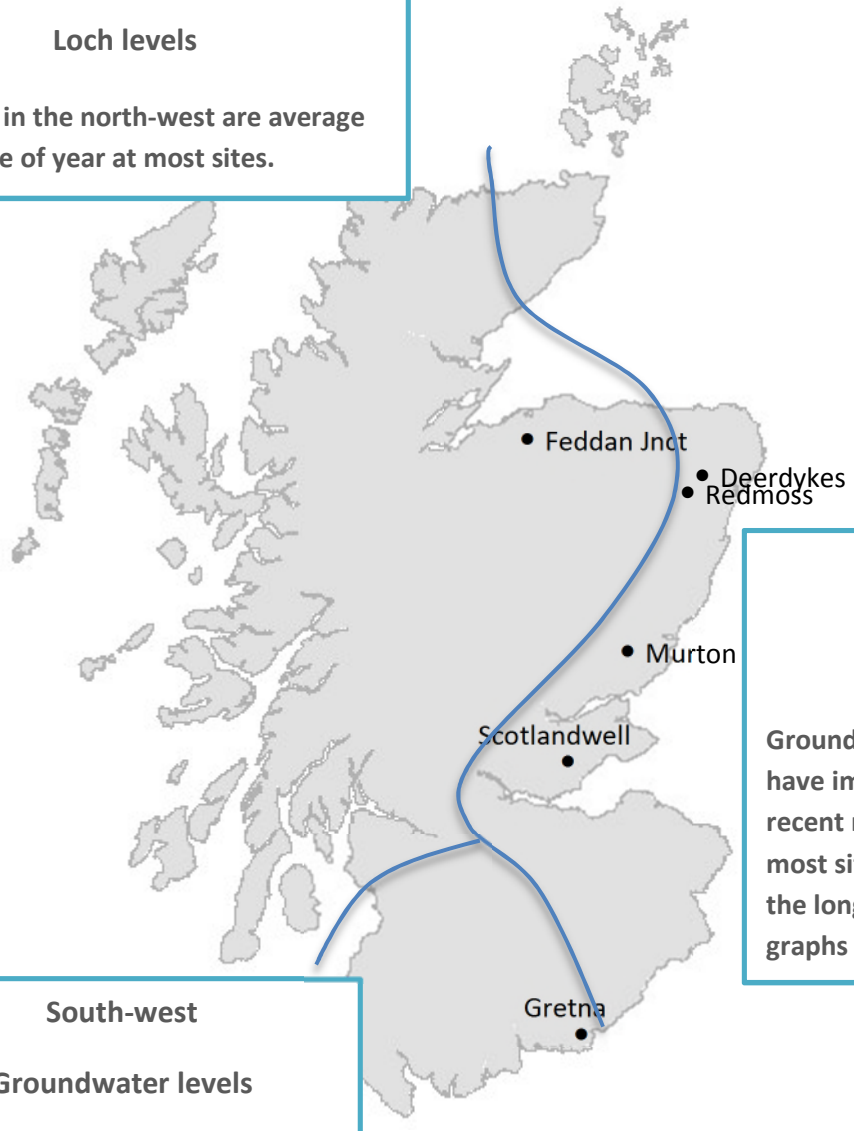
In each river catchment there is some degree of water storage, which can maintain river flows even when it is not raining. This natural water storage is mainly held in lochs and groundwater. When natural storage has been depleted it will take a lot of rainfall for levels to recover.

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

North-west

Loch levels

Loch levels in the north-west are average for this time of year at most sites.



East

Groundwater levels

Groundwater levels at some sites have improved slightly following recent rainfall. However, levels at most sites are still low compared to the long-term record (see the graphs below as an example).

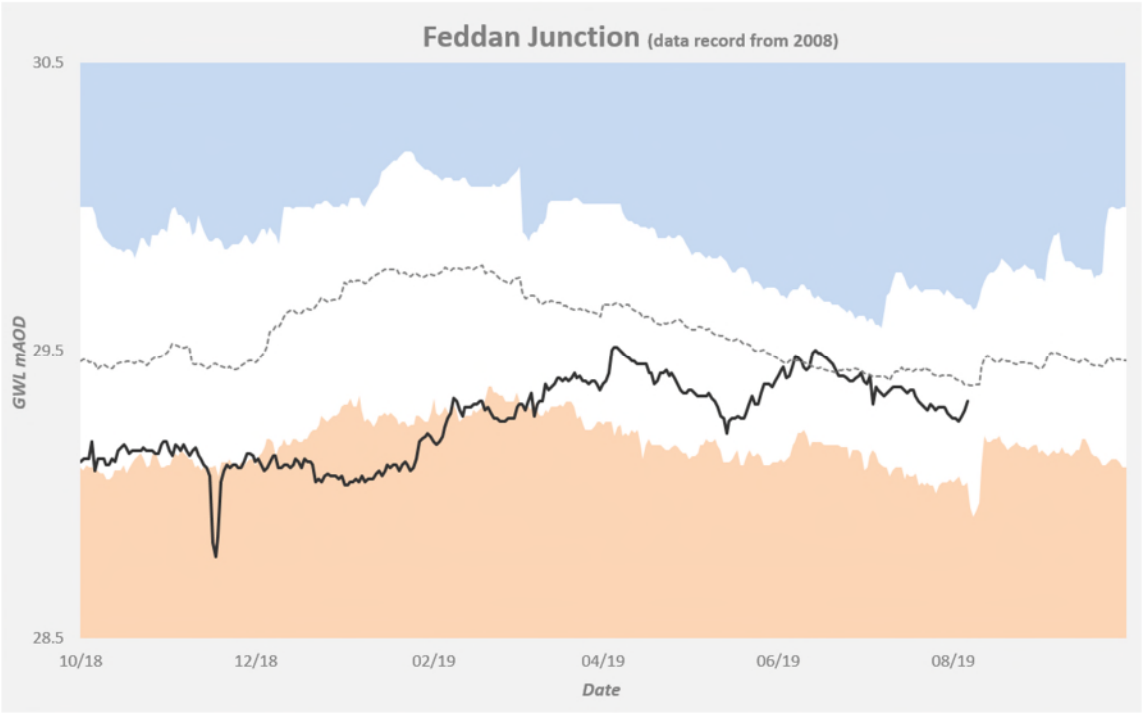
South-west

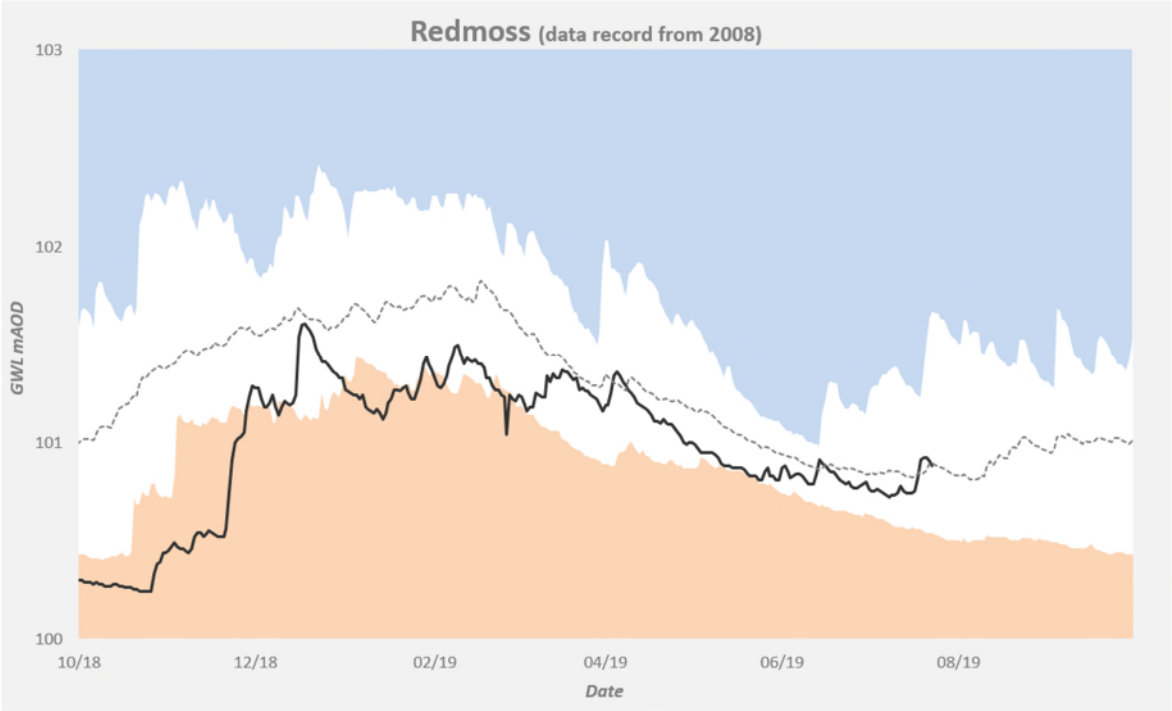
Groundwater levels

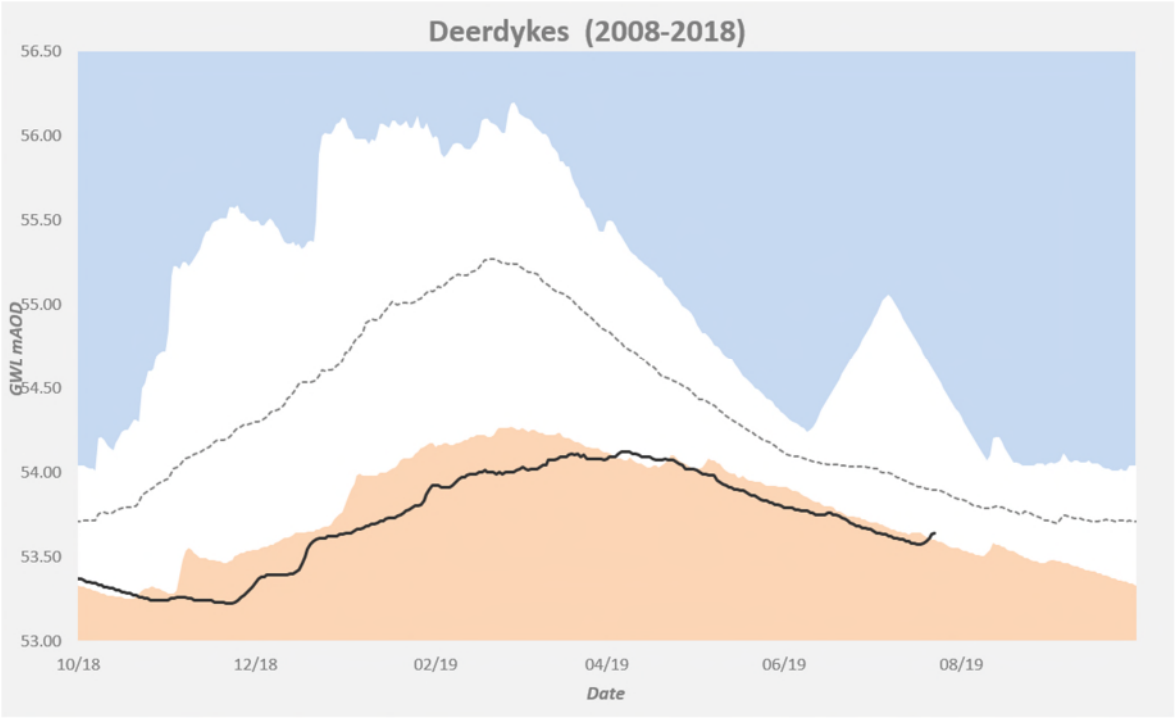
Groundwater levels in this region continue to fall. This is typical for the time of year but at some sites levels are low compared to the long term-average.

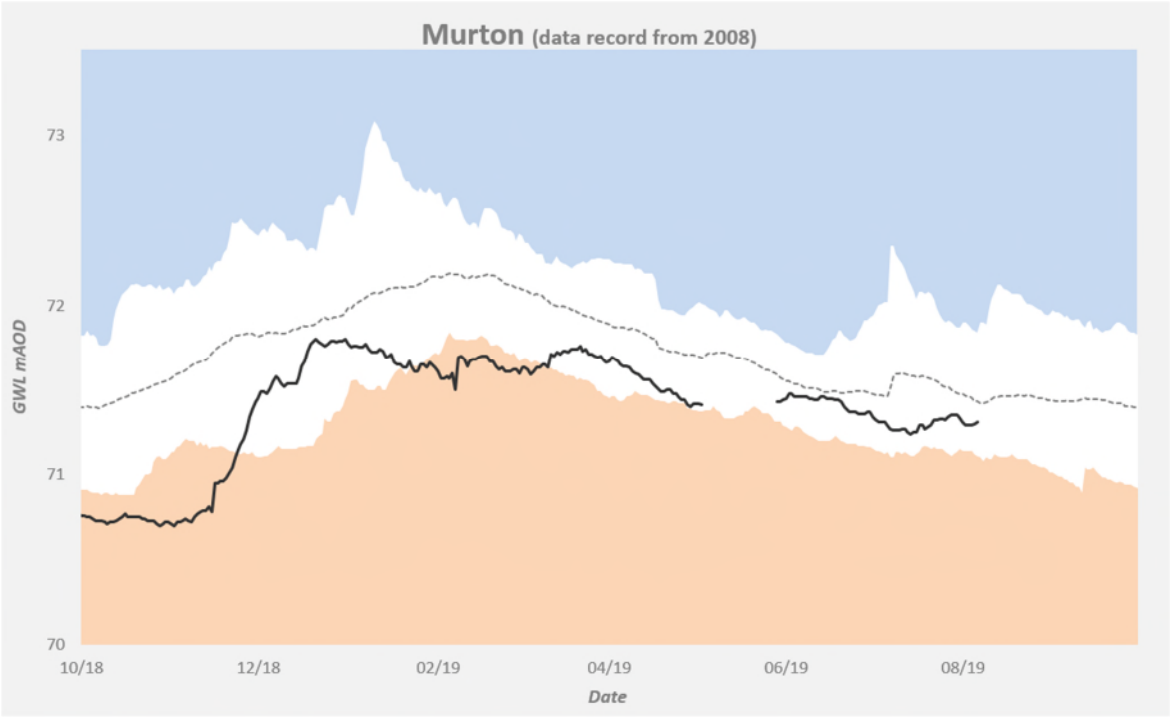
These charts show the trend in groundwater level (GWL) since autumn 2018 at selected monitoring sites (see map above). The white zone represents the observed range in the long-term record. The black line shows the actual groundwater level and the dashed line is the long-term average trend.

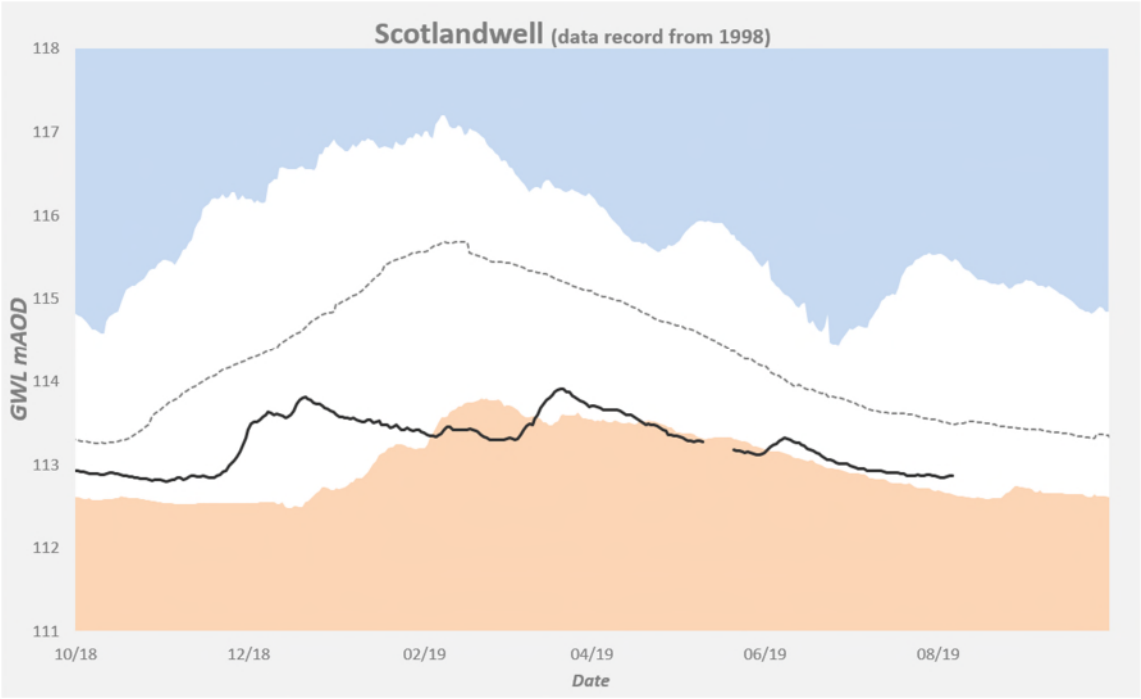
Record high groundwater level
Normal groundwater level range
Record low groundwater level

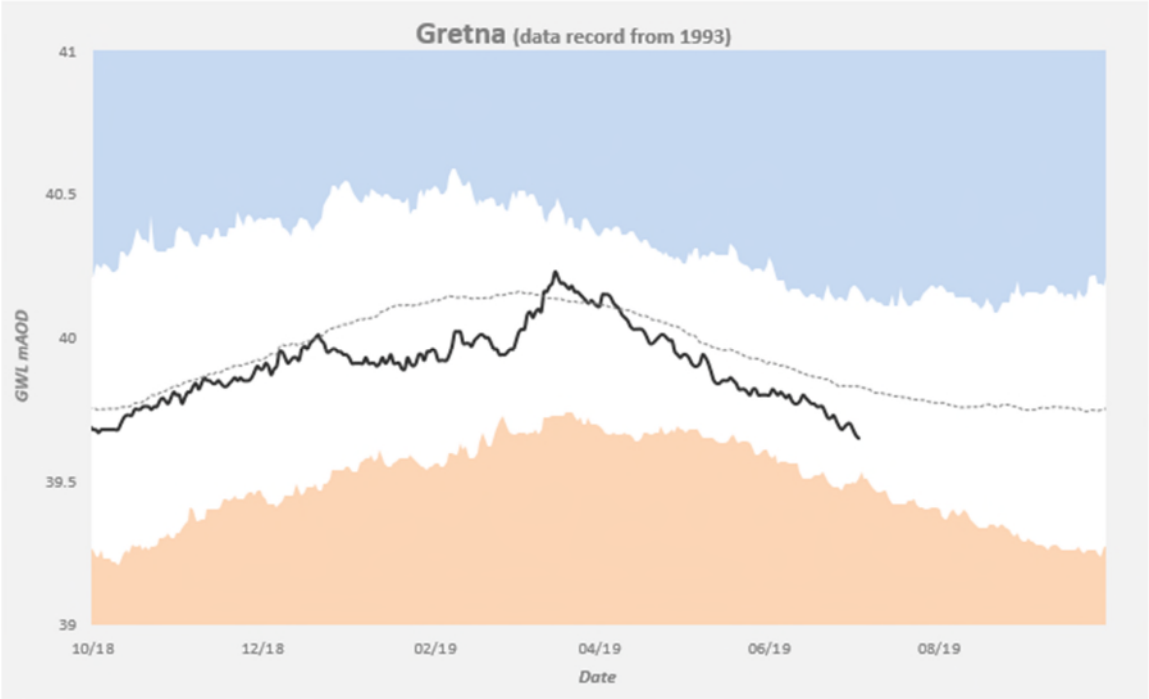





Deerdykes (2008-2018)
56.50
56.00
55.50
55.00
54.50
54.00
53.50
53.00
GWL mAOD
10/18
12/18
02/19
04/19
06/19
08/19
Date


Murton (data record from 2008)
73
72
71
70
GWL mAOD
10/18
12/18
02/19
04/19
06/19
08/19
Date


Scotlandwell (data record from 1998)
118
117
116
115
114
113
112
111
GWL mAOD
10/18
12/18
02/19
04/19
06/19
08/19
Date


Gretna (data record from 1993)
41
40.5
40
39.5
39
GWL mAOD
10/18
12/18
02/19
04/19
06/19
08/19
Date