Quick guide to understanding groundwater status

Status of groundwater level

The trend in groundwater levels over the past five years (2011 to 2015 inclusive) is analysed to determine the status of the groundwater levels for 2015, for each monitoring well. First, each monitoring well is assigned a 'threshold groundwater level'. The threshold is the lowest groundwater level shown by that monitoring well over its full record, or the 'historical minimum'. Next, the status for each well was determined based on the 2015 minimum water-level measurement and the trend in water level over the past five years, specifically:

- 1. If the 2015 minimum groundwater level is greater than the historical minimum, the status is assigned according to whether the trend is rising (blue), declining (yellow) or the water level is stable (green); or
- 2. If the 2015 minimum groundwater level is the lowest on record, the status is assigned according to whether the trend is rising (purple), declining (black), or the water level is stable (grey).

Status of groundwater salinity

To determine the status of the groundwater salinity for 2015, the trend in salinity over the past five years (2011 to 2015 inclusive) is analysed. The status for each well is then determined based on whether the trend is either declining (blue), rising (yellow) or the salinity is stable (green).

Overall status of the resource

Once the groundwater level and salinity status has been assigned for each well, an overall status for the regional-scale groundwater resource is then assigned, and this overall status is typically based on five-year trends, as shown by the majority of monitoring wells. However, other factors are often taken into consideration, such as:

- the 'robustness' of an aquifer
- rates and intensity of groundwater extraction
- the value or end-use purpose of the water (e.g. water for critical human needs).

If trends in groundwater level and salinity are conflicting, a conservative approach is generally adhered to. For example, if groundwater levels are declining but salinity is stable, then the overall status will likely be based on trends in groundwater levels.

Status symbols

