



16 March 2017

Water Abstraction statistics, England 2000 to 2015

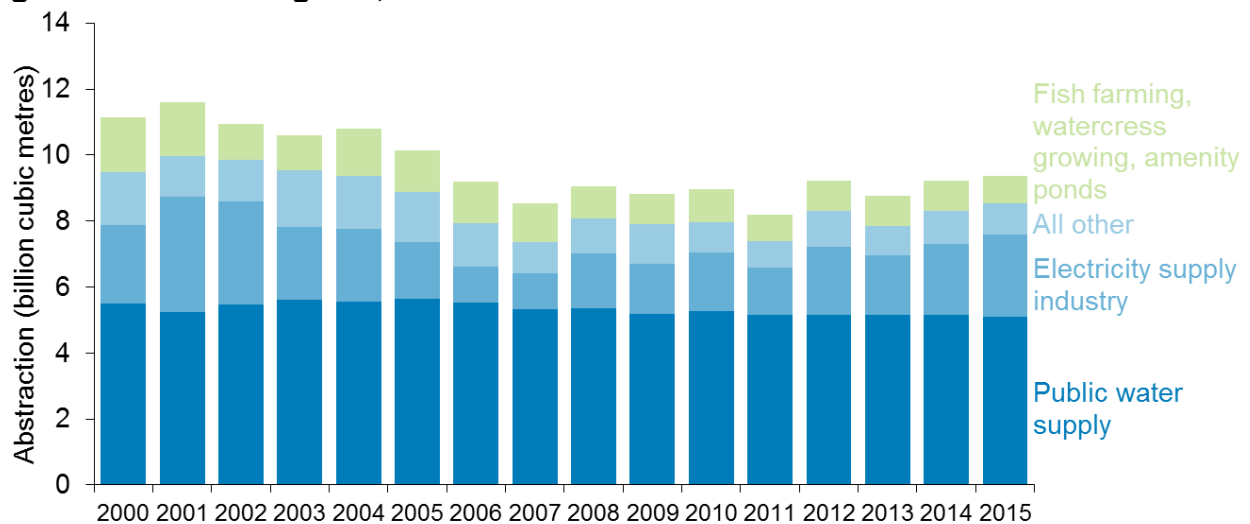
Latest estimates of direct abstraction of water from non-tidal surface and groundwater in England show an increase of 2% from 2014.

There had been a gradual decline in estimated abstractions between 2000 and 2011. Following a 13% increase in 2012, abstraction has remained level at around 9 billion cubic metres a year for the past 3 years.

In this release

Abstraction is the removal of water resources, permanently or temporarily, from rivers, lakes, canals, reservoirs or from underground strata. This release and the accompanying data set provide estimates of licensed and actual abstraction by license holders for a variety of purposes in England.

Figure 1: Estimated abstractions from non-tidal surface water and groundwater in England, 2000 to 2015



Notes:* 'All other' includes Spray irrigation, Agriculture, Private water supply, Other industry, Other
Source: Environment Agency

Figure 1 shows estimates of the amount of water abstracted for each calendar year since 2000. The abstraction of water from non-tidal surface water and groundwater in England and Wales had fallen steadily from the peak of an estimated 11.6 billion cubic metres in 2001 to 8.2 billion cubic metres in 2011.

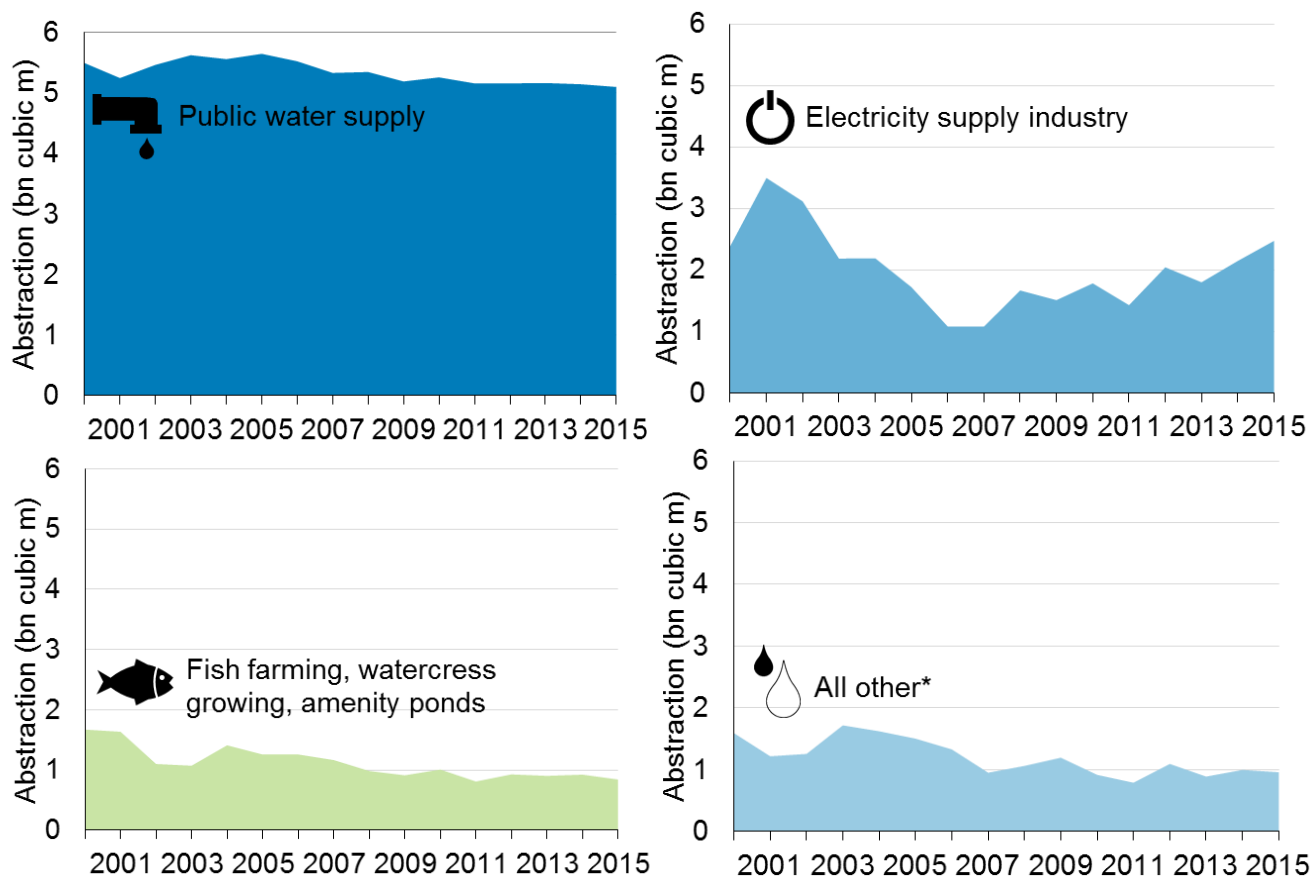
Since 2011, total abstraction has increased by 14% to 9.4 billion cubic metres, driven mostly by abstraction for electricity generation, which increased from 1.4 billion cubic

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metres in 2011 to 2.5 billion cubic metres in 2015. This is in contrast to the last publication where abstraction was decreasing due to a large reduction in hydropower abstracted in Wales. The abstractions for public water supply, which makes up 50% of total abstraction, decreased slightly by 1% over the same period to 5.1 billion cubic metres in 2015.

Figure 2: Estimated abstractions from non-tidal surface water and groundwater in England by purpose, 2000-2015



Just over 20% of abstractions are from groundwater, the amount of groundwater abstractions decreased steadily from 2.4 billion cubic metres in 2000 to 2.0 billion cubic metres in 2015. Abstractions from non-tidal surface water decreased more sharply from 8.8 billion cubic metres to a low of 6.0 billion cubic metres in 2011 but have since increased to 7.3 in 2015.

Reasons for change

The changes in abstraction levels between one year and the next can be due to a variety of factors, including:

- Weather conditions for example, drier and warmer years could result in an increase in abstraction for agriculture and spray irrigation. The highest 2 years for abstraction for the purpose of spray irrigation correspond with the lowest 2 years of annual levels of rainfall since 2000.
- Changes in the level of activity in different sectors.
- Improvements being made in the efficiency of water usage.
- Changes to abstraction licences, such as the issue of new licences and modifications to, or revocation of, existing licences during the reporting period.

Further information

The Environment Agency only license abstraction that exceeds 20 cubic metres per day. The estimates are based on records of actual abstraction received by the Environment Agency from water abstraction licence holders. The information presented is based on Environment Agency regional charge areas which are defined by river catchment boundaries and are not identical to national boundaries.

Following the devolution of responsibility for regulating water abstraction licenses in Wales to Natural Resources Wales, this publication covers England only. Due to the regional charge areas not being identical to national boundaries there are some abstractions which are in the country of England and the Dee/Wye regional charge areas which were formerly the Wales regional charge area. For the purposes of this report information concerning these has been amalgamated into the North West and Midlands regional charge areas. This creates a break in the series where the 2015 figures for these two regions and for the England total are not directly comparable to previous years. We expect to be able to give further guidance into the effect of this change on the estimated abstraction levels in the next Statistics release.

Other data available

Information on estimated abstraction (2000 to 2015) can be [downloaded](#). The following analyses are available:

- Abstraction licences in force and new licences determined by regional charge area (2000-15)
- Number of licences in force by purpose and regional charge area (2012-15)
- Abstractions from
 - All surface and groundwaters by purpose and regional charge area
 - Tidal waters by purpose and regional charge area
 - Non-tidal surface waters by purpose and regional charge area
 - Groundwaters by purpose and regional charge area
 - Groundwaters and non-tidal surface waters by purpose and regional charge area

Estimates of abstraction are categorised by purpose:

- Electricity supply
- Spray irrigation (agricultural and non-agricultural)
- Public water supply
- Other industry
- Agriculture (excluding spray irrigation)
- Fish farming, watercress growing and amenity ponds
- Private water supply
- Other

Estimates of abstraction are also calculated for three source types:

- Non-tidal surface water
- Groundwater
- Tidal waters

More information on the methodology used to estimate annual abstraction is available on request.

Next publication: Winter 2017-18