



# **Dee Catchment Abstraction Management Strategy**

Last updated 2015

# Introduction

A water abstraction licence is required to remove more than 20 cubic metres (4,400 gallons) of water per day from a river or stream, reservoir, lake or pond, canal or spring.

We use Catchment Abstraction Management Strategies (CAMS) to assess how much water is available for abstraction, and where. The strategies aim to meet the water needs of the environment and to allow water users to sustainably exploit any surplus.

In 2014 we completed the second round of CAMS licensing strategies. The updated strategies use an improved method and which meets the requirements of the EU Water Framework Directive by applying a better understanding of how much water the environment needs.

# **General Policy**

All water abstraction licences will be determined in accordance with statutory requirements, national and local policy. Licence applications will be considered on a case-by-case basis, but some general principles apply to all:

- We will apply time limits to all new and varied licences (other than those requesting reductions in water volumes, or minor changes with no environmental impact)
- In this catchment new licences will generally be issued with a time limit to 31 March 2027
- Existing time-limited licences will be renewed as long as three tests are passed: the water is still required, it is used efficiently, and the abstraction is environmentally sustainable
- We have a duty to issue licences which do not adversely impact on the environment, or on people who abstract water already
- We monitor and enforce compliance with the licences we issue and have an inspection programme to ensure this.

### **Rivers**

Table 1 and map 1 show the availability of water for abstraction in the main catchments of the River Dee. The area around the Dee Estuary has not been assessed in detail, however it is quite likely some water is available there. We will assess applications in that area on their individual merits.

Catchment	Is more water available?
Aldford Brook	No
Alwen	No
Alyn	No
Ceiriog	No
Clywedog	No
Dee (source to Chester weir)	No
Pulford Brook	No
Worthenbury Brook	No

Table1. Water availability

### **Dee Regulation**

The River Dee is an important resource for public water supply. Water is stored in Llyn Celyn, Llyn Tegid and Llyn Brenig and released gradually down the river, regulating its flow during dry periods. The water released is taken out by the water companies at points between Llangollen and Chester Weir and used to supply the homes of more than two million people. Because of the over-riding need to protect this supply, more water is not available for abstraction from the River Dee (or its tributaries) upstream of Chester Weir, when the river is being regulated. Some additional water may be available during wetter periods, but abstractors would be required to stop taking water as soon as the river flow dropped again. We may also have to place special conditions on any new licences granted to safeguard the wildlife and conservation interest of the River Dee.

It may be possible to "trade" water with an existing abstractor to allow you to abstract, as long as there is no net increase in abstraction as a result. In most cases this will require us to issue a new abstraction licence or change an existing one.

### Groundwater

The main groundwater resources of the Dee catchment are contained in the sandstone rock beneath the Middle & Lower reaches of the River Dee. We have divided this area into four units. Table 2 and map 2 show which of these units are likely to have water available for abstraction.

Groundwater unit	Is more water available?
Aldford & Peckforton Unit	No
Chester Block	Yes with restrictions
Dee estuary & Wirral Unit	No
Middle dee Unit	Yes with restrictions

 Table 2. Groundwater availability

Where more groundwater is available, it will only be licensed if it can be demonstrated conclusively that it will not reduce the flow in any river upstream of Chester Weir, or if 100% of the water abstracted is returned upstream of the weir. This applies equally to water contained in the bedrock (such as sandstone), and in the shallow deposits known as "drift".

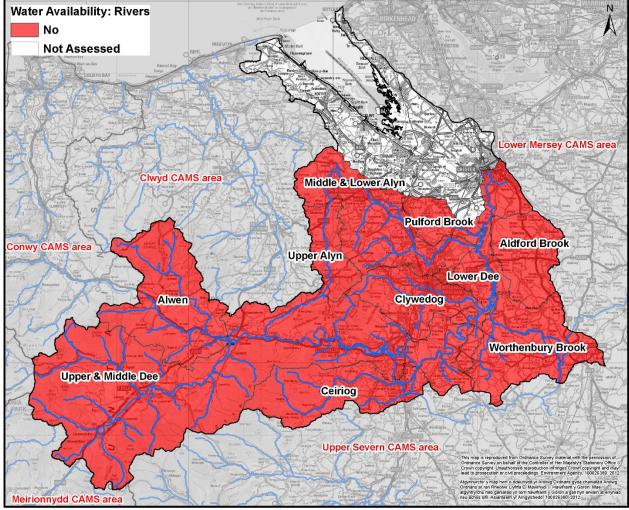
In the area to the west of Llangollen, a licence is not required to abstract groundwater (even if it is more than 20 cubic metres per day) unless the abstraction is likely to reduce the flow in a nearby

river. This exemption is likely to be removed in the future, but the exact timetable has yet to be determined. We will update this strategy when it is. In all other areas a licence is required.

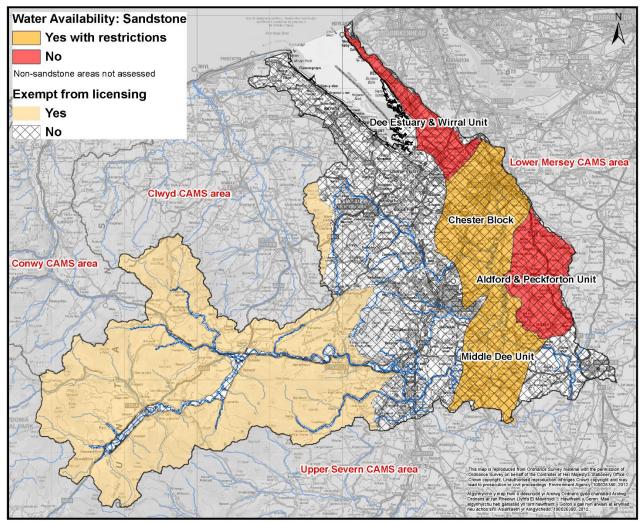
# Non-consumptive abstraction

If an abstraction returns 100% of the water abstracted back to the same catchment it is known as "non-consumptive". Common non-consumptive uses of water include hydroelectric power generation, fish farms and ground source heat pumps. Because all the water is returned, the environmental impact is localised and there is no overall change in water availability. Consequently we may be able to consider licensing new non-consumptive abstractions where we would not license other water uses.

# River water availability



Map 1. Water availability



Map 2. Groundwater availability

We have produced strategies for all of the main water catchments in Wales. If the location you are interested in is not covered in this document, please consult one of the other strategies.

Whatever type of abstraction you are considering, it's a good idea to contact us at an early stage using our customer service number (0300 065 3000) so we can advise you on your particular circumstances.