## New Authorisations Structure table/ Volume validation

**Guidance** notes



## Introduction

## Please read through these guidance notes and the form WR365 carefully before you fill the form in.

If you need help filling in the form call us on 03708 506 506 (8am to 6pm Monday to Friday), or send an email to enquiries@environment-agency.gov.uk. We have an additional guidance document containing further details and drawings to help with your estimations. Please contact us if you would like to receive a copy.

Where metering and spot flow measurements have not been undertaken, please provide the instantaneous abstraction rate (which you will need to calculate), along with the weir parameters used for calculating the flow. This is set out in 'WR365 New Authorisations Structure table/Volume validation'.

There are different equations for different types of structures (for example sluices, thin plate weir); however, all follow a similar format where parameters such as upstream water depths, structure widths, etc. are required in order to calculate the volumes. In order to help us validate your estimates using this method, we've asked for these parameters along with a description of your abstraction in the application form.

We have provided a table which you can fill in with the relevant information depending on what type of structure you have. The aim of the table is to pull out the relevant dimensions for different structure/intake types which would then be used to calculate your estimated abstraction quantities.

## Checklist for applicants when using theoretical method

Before collecting any data, you will need to ensure the structure is clear of any silt, weed and algae. This will help to reduce any errors and give you better confidence in your estimates.

- 1) Before collecting any data, identify what structure your abstraction intake forms (for example, a sluice or a broadcrest weir). If you are in any doubt as to the type of structure you use, please contact us.
- 2) Please tell us how you have calculated your quantities, along with photos and sketches of your intake. The sketch must include the relevant dimensions of the structure (for example: depths, widths, heights, etc.)
- Please tell us when and how you abstract water. For example:
  - When does the abstraction commence and during what months do you take the water?
  - Do you take water at all flows?
  - Does the water return further downstream? If so, how much of the water is returned and what is the distance between where you take the water and where the water is put back in.

4) Collect, record and fill in the relevant sections set out in the table in form WR365 for your specific structure.

- When recording water depth (or measuring sluice opening width) and your structure is not flat, an average depth across the structure will do.
- If your structure is leaking, you will either need to repair it to stop leakage or take this into account in your estimate and provide a note along with the description of your abstraction.

When measuring the water level it is important that it is measured in the correct upstream location; if not it will cause an error in your flow estimation. For example, with open weirs (i.e. Crump, Broad crested etc.), any water level measurements too close to the weir crest may increase any error.