Guidance note – completing form WRC consent to investigate a groundwater source

This guidance will help you fill in application form WRC. This is so we can give you consent to drill and pump test a borehole to investigate whether you are able to abstract groundwater.

How to complete Form WRC
Water Features Survey

Natural Resources Wales has a duty to protect and manage groundwater and we issue licences to control abstraction from underground sources. The law allows you to find out what water is available, and whether it is suitable for your needs without having a full abstraction licence. For these investigations, we issue consents (under Section 32 of the Water Resources Act 1991) which limit abstraction and restrict the work carried out to:

- find out if there is groundwater present; and
- discover what effect abstracting groundwater would have on the environment.

You do not need an abstraction licence or a consent to investigate a groundwater source if you will be abstracting less than 20 cubic metres of water a day.

Before applying for consent you should first review our abstraction licensing strategies to determine if the catchment you're in has water available for abstraction.

How long does the consenting process take?

We aim to provide you with your consent within 45 working days if all the information you provide is correct. These timescales may be longer if your proposal is close to sensitive conservation sites, as we may have to consult externally.

Where to send your completed application form(s):

Send your completed application form and any supporting information by email to permitreceiptcentre@naturalresourceswales.gov.uk or by post to:
Natural Resources Wales, Cambria House, 29 Newport Road, Cardiff, CF24 0TP

Application fees

You do not have to pay a fee to apply for a consent to investigate a groundwater source. A subsequent abstraction licence application does have a fee, which can be found in the 'our charges' section of our website.

If you have any questions, phone our Customer Care Centre on 0300 065 3000 (Monday to Friday, 8am to 6pm) or email enquiries@naturalresourceswales.gov.uk

What happens once I have consent?

Any consent we issue will normally give you between 6-9 months to complete your investigations. The consent will contain conditions that you must follow, and we may withdraw the consent if these conditions are not met.

By issuing a consent we do not guarantee the quantity or quality of water you will encounter. We recommend you collect water quality samples during your testing to ensure the water isn't contaminated and is of sufficient quality for your intended use. Even if the source provides enough water, this does not mean we will automatically grant you an abstraction licence. For example, the pumping test may show that abstraction will have unacceptable effects on other

water sources or environmental features. Also, due to water shortages, there may be general restrictions on granting licences in the area.

Where to get advice on drilling your borehole and producing a groundwater impact assessment

A professional hydrogeological advisor can suggest where best to develop a source, or whether it is worth doing at all. They can also design and supervise your pumping test and produce the groundwater impact assessment required. Unless you are fully competent to complete your own investigations and groundwater impact assessments, we suggest you get appropriately qualified professional advice.

Pumping tests and producing a groundwater impact assessment

You must carry out pumping tests to find out whether the source can produce a water supply that will meet your needs, and to see if the abstraction will affect existing boreholes, wells, springs, rivers and other environmental features in the area.

We will expect you to carry out the pumping tests and produce a groundwater impact assessment in line with relevant guidance and best practice, including:

- British Standard ISO 14686 (2003) "Hydrometric determinations – pumping tests for water wells – considerations and guidelines for design, performance and use".
- Environment Agency (2012) 'Hydrogeological Impact Appraisal for groundwater abstractions
- Scottish Environment Protection Agency (2013). Regulatory Method (WAT-RM-24) Pumping Test Methodology

We may require repetition of tests or other appropriate remedial activities should the required standards not be met.

We will tell you in the consent which nearby water features and other abstractions need to be monitored during your pumping test based on the information you provide in your water features survey. You may need you to sink extra boreholes purely for monitoring purposes.

You will use the results of your test pumping and monitoring of surrounding water features to produce a groundwater impact assessment which you must provide with any abstraction licence application you make. This report will contain the interpretation of your investigation results to assess whether the abstraction will negatively affect other water users or other water features. Where negative effects are identified we are unlikely to issue you with an abstraction licence unless suitable mitigation can be provided.

Applying for an abstraction licence

After you have finished your investigations you will need to apply for an abstraction licence to continue to abstract groundwater. As part of this licence application you must send us your groundwater impact assessment report which details the results of the pumping test and includes an assessment of the effect your proposed abstraction would have on the local environment.

Other consents and permissions

An Environmental Permit may be required for the discharge of your pumped water to ground or to a watercourse. For more information please visit the 'water discharges' section of our website. You are responsible for obtaining any other consents or permissions which may be necessary.

How to complete form WRC

Section 1 - Type of consent

Tick the appropriate box to tell us whether you are applying to investigate a new source of groundwater, or to extend or alter existing works. For existing works, provide the licence number which this application relates to.

Section 2 - Applicant details

As the person completing the forms give your details, and, if different, the details of the legal entity who will hold the consent issued. Correspondence will be with the applicant unless you indicate otherwise.

When we issue a consent it will specify the name of the person or company we have given permission to ('the consent holder'). This consent holder will be responsible for keeping to the conditions set out in it. You, as the applicant, will usually be the consent holder unless you ask otherwise. If you have an agent or someone else who has agreed to be specified as the consent holder, you must provide an additional letter of authorisation.

Section 3 - Previous NRW discussions

If you have previously discussed your proposal with someone in NRW use this section to provide names or reference numbers and a summary of the discussions.

Section 4 - Remediation proposal

If you are making this application as a result of a restoring sustainable abstraction programme or remediation scheme, please tick the 'Yes' box and provide details

Section 5 - Outline proposal

You must provide an outline of your proposal. The amount of information given will depend on the complexity of your proposal and the sensitivity of the site. Information given here should allow us to clearly understand your proposal, the site location and surrounding area. Information given could include (but not be limited to):

- A description of the proposed installation, pumping test and abstraction regime
- An indication of the main reasons for the proposal, taking into account possible environmental effects
- A description of any measures proposed to mitigate any potential adverse effects on the water environment

Section 7 - Site details

7.1 Provide a 10 figure National Grid Reference (NGR) (example ST 12345 12345) and a name or reference for all points of abstraction or investigation. These should also be annotated on a suitable scale Ordnance Survey map.
7.2 State if the site has a historical use which may have caused contamination and if so provide further details.

Section 8 - Abstraction details

Tell us how much water you are looking to abstract every hour, day and year. Give the maximum amounts, not averages. Make sure that the quantities you specify accurately reflect your needs. If you later apply for an abstraction licence, you will have to tell us how you calculated the quantities you are applying for. When you apply for an abstraction licence, if you request a higher rate of abstraction than that tested as part of the groundwater investigation consent, you will have to go through the consenting process again.

Provide the purpose, period and volumes you propose to abstract for each abstraction point. If

water is to be used for multiple purposes, provide a breakdown of the abstraction quantities for each different use.

Section 9 - Proposed construction details

Complete the table to give details of the proposed borehole (or other installation) construction.

Section 10 – Construction method

We need the details of your proposed borehole construction methods to understand the potential risks to the local area. You should specify how yu will dispose of waste products. The drilling company you use should give you this information

Section 11 – Post-contruction development

The are various method that drilling companies can use to help improve the amount of water that a borehole or well can provide. Provide details of any post-construction development and how you will dispose of waste products. The drilling company should give you this information

Section 12 – Discharge of water during the pumping test

Tell us where you will disposing of the water abstracted during your investigations. Your discharge may go to one of the following:

-To land (i.e. a soakaway)
-To another borehole or well
-To the sea
-A watercourse (river, stream or ditch)
-To a surface water sewer
-Something else (please specify)

Section 13 – Discharge details

We need to consider this information to make sure the discharge does not pose a risk to others, or the environment, from flooding or reduced water quality. Please mark the discharge points clearly on the map you provide with your application, and label them so they are not confused with the abstraction points. You must give us the 10 figure NGR of each point.

13.1 Tell us if you plan to use any discharge point as part of any future operation, such as part of an open loop ground source heating or cooling system

13.2 An Environmental Permit may be required for the discharge of your pumped water. For more information please visit our website. An environmental permit application can take up to four months to determine, so you should contact us as early as possible. If you already have an Environmental Permit/Exemption to discharge water for any of these points, please give the reference number.

Section 14 - Water Features Survey

Before we can issue a consent to proceed with your application, you must carry out a detailed, accurate desk study and field survey of all the water features in the area around your proposal. Water features can include:

- boreholes and wells, even if they are disused or filled in
- springs
- watercourses
- ponds and lakes, even if filled in
- wetland areas
- seepage lagoons and catch-pits
- adits (passages for drainage to or from a mine)

The desk study work will involve viewing of available mapping (such as the Ordnance Survey, British Geological Survey and Coal Authority) and consultation with relevant authorities (such

as Natural Resources Wales and Local Authority private water supplies register). The field study will confirm the data collected during the desk study and provide opportunity to gain more information on potentially sensitive receptors. You must take care when investigating water features and apply appropriate health and safety precautions

The area your survey should cover depends on the quantity of water you wish to abstract. The table below shows the minimum area your survey should cover:

Proposed daily volume of abstraction (cubic metres)	Minimum radius for survey (metres)
20 to 100	250
100 - 500	500
500 -1,000	1,000
1,000 - 3,000	1,500
3,000 - 5,000	2,000
Over 5,000	4,000

How to present your water features survey data to us

Survey results should be presented in the table in the application form WRC or in an additional report (please indicate that you have done this). You should also provide an annotated Ordnance Survey 1:10,000 scale map showing the water features identified in your survey.

Survey quality

You must carry out the survey to a high standard. If it is incomplete, inaccurate or otherwise unsatisfactory, we will ask you to repeat it. We cannot proceed with your application until we are completely satisfied with the survey.

Effects on existing users

If the survey indicates that the work is likely to significantly affect other water users, we will not allow you to proceed further unless you can show us you have reached a satisfactory agreement with those other users. That could, for example, include providing alternative supplies.

Section 15 – Supporting documents

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Section 16 – Declaration

This section must be signed by the Consent Holder. If you have an agent or someone else as agreed to be specified as the consent holder you must provide an additional letter of authorisation.