Guidance for form WRC

Guidance Note WRC
Applying for a consent to investigate a groundwater source

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The Groundwater Investigation Consent Process
Groundwater is a vital natural resource. Natural Resources Wales has a duty to protect and manage it. We issue licences to control abstraction from underground sources. Applying for an abstraction licence may be a long and expensive process, so the law allows you to carry out investigation work without having a full abstraction licence. This allows you to find out what water may be available, and whether it is suitable for your needs. 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 a groundwater source
● check the quantity of groundwater and
● discover what effect abstracting groundwater would have on other nearby water sources.

You do not need an abstraction licence if you will be abstracting less than 20 cubic metres of water a day. For abstractions below this limit, you do not need a consent to investigate the groundwater source. If you want to abstract 20 cubic metres or more a day, you must obtain a consent giving you permission to drill or excavate a borehole, well, catchpit or a seepage-fed lagoon, and complete pumping tests. It is against the law to undertake these works without a consent. If you are convicted of this offence, you could be fined, imprisoned or both. You should note that the consent is no guarantee of success. Drilling a borehole, developing a well, excavating a catchpit or seepage-fed lagoon does not guarantee that you will find a source of groundwater. Also, if you do find groundwater, there may not be enough for your intended purpose, or the quality of the water may not be suitable.

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 local water sources or environmental features. Also, due to water shortages, there may be general restrictions on granting licences in the area. If this is the case, we will tell you this as soon as possible, to save you unnecessary expense. You can also find information about local water sources by looking at the local Catchment Abstraction Management Strategy for your area. These are available from us.

Once we have received a satisfactory application form we will normally issue a consent for you to carry out your investigation. We will usually grant the consent to you, the applicant for a period of six months. The consent will contain several conditions which specify the terms of the consent. Whoever we grant the consent to will be legally responsible for keeping to the conditions set out in it. If you do not fully keep to the conditions, we may withdraw the consent. We may also withdraw or change the conditions if the work has effects which we had not anticipated, or if it is otherwise reasonable for us to do so.
We will need you to carry out pumping tests to find out whether the source can produce a water supply that will meet your needs, and to see how the water level will react to a given rate of pumping. This information will also help you to choose the best abstraction method, such as the correct type of pump and the depth to set it at. Major developments, and developments close to environmentally sensitive sites, will need to be tested over a long period to see the effect abstraction will have on existing wells, boreholes, springs, streams and other environmental features in the area. You will also need to produce a groundwater impact assessment report. We will tell you what measurements you will have to take during the assessment and what you need to include in the report. We may also need to consult other organisations about your proposals. Testing water samples during the pumping tests will also show whether the water is of suitable chemical or bacteriological quality for your intended use, or whether it will need to be treated. You are responsible for making sure that the water abstracted is fit for your particular purpose.

The consent will specify the following:
- The maximum dimensions of the borehole, well, catchpit or seepage-fed lagoon
- Construction (such as casing and grouting)
- If appropriate, the need for sinking monitoring boreholes
- Where water should be discharged when carrying out pumping tests
- Other special conditions, such as testing only during the summer
- Requirements to prevent pollution from the proposed work
- Requirements to keep us informed at all stages in your work programme
- Requirements to contact other relevant organisations, including the British Geological Survey (www.bgs.ac.uk), the Health and Safety Executive (www.hse.gov.uk) and the Coal Authority (www.coal.gov.uk), before starting to drill any well or borehole
- Your responsibility for all aspects of the work, including any damage that may be caused
- Your responsibility to keep clear and accurate records, including of the dimensions of boreholes and wells, and to supply both us and the British Geological Survey with this information
- The access needed to the site so we can inspect the work as and when necessary

**Quality of work and presenting results**
You must be sure that any borehole or well is drilled with the correct materials, as recognised by the well-drilling industry. You can get guidance notes for constructing boreholes for water supply from the Well Drillers’ Association (www.welldrillers.org.uk, phone: 07885 979 583). Technical information is also available in the publication ‘Well Construction Specification for the Water Industry’. You can get copies of this from WRC Plc (www.wrcplc.co.uk, phone: 01793 865 000).

After you have finished the pumping test, you will have to send us a report giving details of the pumping and the effects it had on water levels. We will tell you what to include in your report. We will expect you to carry out the pumping tests in line with British Standard ISO 14686 (2003) ‘Hydrometric determinations – Pumping tests for water wells – Considerations and guidelines for design, performance and use’. You can get copies of this from the British Standards Institute (www.bsigroup.com, phone: 020 8996 9001). After the pumping test has been completed, you will have to send us a groundwater impact assessment report, which must provide details of the results of the pumping test and an assessment of the effect your proposed abstraction would have on the local environment. We will tell you what to include in your report. A professional advisor or consultant should be able to do this for you. We will be able to process any future licence application more quickly if you provide a satisfactory groundwater impact assessment report. In some cases, before we issue a consent we may ask you to provide a preliminary report on specific concerns about the effect of drilling or testing the borehole.
Take advice before construction, development or drilling
Drilling a borehole or well is expensive. A professional advisor can suggest where best to develop a source, or whether it is worth doing at all. Unless you are fully competent to complete your own plans, we suggest you get professional advice. Contacts can be sought from the Geologists Directory and the Well Drillers Association.

Private water supplies
If you are developing the groundwater source to provide a private supply of drinking water (and you are not a public water-supply company), you should tell the Environmental Health Officer at your local council. The Private Water Supply Regulations will apply to your abstraction and the Environmental Health Officer should be able to give you advice on this. You can get more information from the Drinking Water Inspectorate (www.dwi.gov.uk, phone: 030 0068 6400).

How long does the consenting process take?
Once we have received your completed application form, assuming all of the details are correct, we aim to provide you with your consent within 45 working days. However, these timescales may be significantly longer if your proposal is close to sensitive conservation sites, as we will have to consult comprehensively. The whole process, from you submitting your application and completing your pumping test and producing your report, will usually take several months, and it can take up to a year.

Where to send your completed form(s)
For an improved service, we encourage you to submit your application(s) electronically. Please send your completed application form and any supporting information by email to permitreceiptcentre@naturalresourceswales.gov.uk or by post to:

Permit Receipt Centre
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. The abstraction licence application does have a fee which is advertised on our website.

Next steps
Following completion of the groundwater investigation consent process, if your development is successful and you want to continue to abstract more than 20 cubic metres of water a day, you will need to apply for an abstraction licence. Although the pumping test will not usually have a significant effect on the environment, your proposed abstraction may have environmental effects which we must consider before we can grant a licence. The groundwater impact assessment report, which we may request to support any subsequent application for an abstraction licence, will help us to assess this. We aim to issue abstraction licences within four months of receiving your licence application, but it can take longer than this for more complex applications.

Questions and more information
If you have any questions, phone our National Customer Care Centre on 0300 065 3000 (Monday to Friday, 8am to 6pm).
**Data Protection Act 1998**
The information provided by you will be processed by Natural Resources Wales in line with the Data Protection Principles to enable us to process your application, to monitor compliance with the licence/registration conditions, to process renewals, and for maintaining the relevant public register. We may process and/or disclose the information in connection with the following:
- Consultation with third parties who are relevant and responsible for responding to consultation requests from NRW to enable us to process your application.
- Providing *public register information for enquiries*
- Prevent and investigate possible breaches of environmental law and taking any resulting action
- Responding to requests for information under the Freedom of Information Act 2000 and the Environmental Information Regulations 2004, where the Data Protection Act allows
- Carrying out statistical analysis, research and development on environmental issues
Guidance on completing form WRC application for a consent to investigate a groundwater source:

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 serial 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 (referred to as '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. Please provide contact phone numbers and an email address where possible.

Section 3 - Previous NRW discussions
If you have previously discussed your proposal with someone in NRW please use this section to provide names or reference numbers.

Section 4 - Remediation work
The Restoring Sustainable Abstraction programme has identified abstractions that need to be stopped or altered in order to prevent further environmental damage. If you are making this application as a result of investigations carried out under this or other remediation programmes, 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
- Why this location has been chosen
- A description of any measures proposed to mitigate any potential adverse effects on the water environment
- Any data which would be of use to NRW to assess the main effects which the proposal may have on the water environment
- An indication of the main reasons for the proposal, taking into account possible environmental effects

Section 6 - Details of the proposed investigation
Indicate what the proposed means of groundwater abstraction will comprise/specify what type of sources you intend to investigate.

Section 7 - Site details
7.1 Provide details of all proposed abstraction locations.
Provide a 12 digit National Grid Reference (NGR) and name/reference for all points of abstraction or investigation. NGRs given must correspond with maps submitted.
7.2 State if the site had a historical use which may have caused contamination and if so please provide further details.

**Section 8 - Abstraction details**
Tell us how much water you are looking to abstract every second, 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, it is likely that you will have to go through the groundwater consent process again, which will take more time and cost you more money.

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. You need to give the instantaneous/peak abstraction rate (in litres per second) and the hourly (cubic metres/hour), daily (cubic metres/day) and annual quantities (cubic metres/year) you require for each purpose.

**Section 9 - Proposed construction details**
Complete the table to give details of the proposed borehole (or other installation) construction.

**Section 10 - Construction method (borehole/well)**
There is more than one way to drill a borehole or well. Companies that do this usually need to use a drilling flush to make the drilling process effective, and to reduce the risk of damaging their drilling equipment. We need the details of your proposed construction methods to understand the potential risks to the local area. You should also specify how you will dispose of waste products. If you are having a well or borehole professionally drilled, the drilling company should give you this information.

**Section 11 - Post-construction development (borehole/well)**
There are various methods that drilling companies can use to help improve the amounts of water that a borehole or well can provide. Please 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 location (pumping test)**
If you need to carry out any pumping test, you will need to discharge the pumped water somewhere. We need details of where you plan to discharge this water. If more than one location is proposed this should be indicated.

**Section 13 - Discharge details (pumping test)**
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 will need to give us the 12 digit NGR of each point.

If there are more than four discharge points, give details of the other points on a separate sheet of paper. You may need to get an Environmental Consent to Discharge Water from us before you are allowed to discharge water from the pumping test. We will tell you if this is necessary, and if so, what you will need to do. This 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**
The Water Features Survey is an important part of your application, and we can only proceed with your application if a satisfactory survey is received.

These notes explain more about the Water Features Survey and how you must monitor and measure those features when you carry out pumping tests.

You must read British Standards ISO 14686 (2003), ‘Hydrometric determinations – pumping tests for water wells – considerations and guidelines for design, performance and use’. This is the standard you must work to. You can get a copy from:

Website: www.bsigroup.com  
Email: cservices@bsigroup.com  
Phone: 0845 086 9001

**The Water Features Survey**
Before we can issue a consent to proceed with your application, you must carry out a detailed, accurate survey of all the water features in the area around your proposal. By ‘water features’ can include:

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

You can get information which may help you identify water features from well catalogues, water company databases, and local authority registers (set up under the Private Water Supplies Regulations). Some sources of abstraction (whether licensed or not) may be (or may appear to be) unused.

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.

<table>
<thead>
<tr>
<th>Daily abstraction quantity you require: annual quantity / 365 (cubic metres)</th>
<th>Minimum radius of survey area (metres)</th>
</tr>
</thead>
<tbody>
<tr>
<td>20 to 100</td>
<td>250</td>
</tr>
<tr>
<td>100 - 500</td>
<td>500</td>
</tr>
<tr>
<td>500 - 1,000</td>
<td>1,000</td>
</tr>
<tr>
<td>1,000 - 3,000</td>
<td>1,500</td>
</tr>
<tr>
<td>3,000 - 5,000</td>
<td>2,000</td>
</tr>
<tr>
<td>Over 5,000</td>
<td>4,000</td>
</tr>
</tbody>
</table>

Survey results should be presented in Tables 14.1 and 14.2 or in an additional report (please indicate that you have done this). If more room is needed please print off additional tables 14.1 and 14.2 and indicate that you have done this.

Example surveys are provided below as an indication of the level of information which is expected.
### Example Table 14.1

<table>
<thead>
<tr>
<th>Site reference 1</th>
<th>National Grid Reference 12 digit: ST 24946 81528</th>
<th>Water feature (borehole, well, pond, spring, adit, seepage, wetland, lake, watercourse, or other)</th>
<th>Use (e.g. agricultural, drinking water, disused)</th>
<th>Alternative supplies available (e.g. &gt; mains water)</th>
<th>Diameter (millimetres)</th>
<th>Depth to bottom (metres)</th>
<th>Depth to rest water level (metres)</th>
<th>Depth to pumped water level (metres)</th>
<th>Name, address and telephone number of occupier and owner.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Borehole</td>
<td>Domestic and pig rearing</td>
<td>No</td>
<td>250</td>
<td>31</td>
<td>17.34</td>
<td>19.65</td>
<td>Owner: Mr A Other Home Farm Long Lane St Mellons 02920 xxx xxx</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Site reference 2</td>
<td>National Grid Reference 12 digit: ST 24952 81489</td>
<td>Pond</td>
<td>Nature pond</td>
<td>n/a see table 14.2</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Owner: Mr A Other Home Farm Long Lane St Mellons 02920 xxx xxx</td>
</tr>
<tr>
<td>Pond</td>
<td>Nature pond</td>
<td>No</td>
<td>n/a see table 14.2</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Owner: Mr A Other Home Farm Long Lane St Mellons 02920 xxx xxx</td>
</tr>
<tr>
<td>Site reference 3</td>
<td>National Grid Reference 12 digit: ST 24922 81583</td>
<td>Spring with catch pit</td>
<td>Domestic</td>
<td>n/a see table 14.2</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Owner: Mrs Smith Home House Long Lane St Mellons 02920 xxx xxx</td>
</tr>
<tr>
<td>Spring</td>
<td>Domestic</td>
<td>Yes</td>
<td>n/a see table 14.2</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Owner: Mrs Smith Home House Long Lane St Mellons 02920 xxx xxx</td>
</tr>
</tbody>
</table>

**Site reference 1**
- National Grid Reference 12 digit: ST 24946 81528
- Distance from source (metres): 50
- Licence serial number: WA/090/0999/099

**Site reference 2**
- National Grid Reference 12 digit: ST 24952 81489
- Distance from source (metres): 100
- Licence serial number: Not licenced

**Site reference 3**
- National Grid Reference 12 digit: ST 24922 81583
- Distance from source (metres): 125
- Licence serial number: Not licenced (>20 cubic metres per day)

**Notes:**
- Use: Agricultural, drinking water, disused
- Alternative supplies available: > mains water
- Diameter: Millimetres
- Depth to bottom, rest water level, pumped water level: Metres
- Name, address and telephone number: Occupier and owner.
<table>
<thead>
<tr>
<th>Site reference 1</th>
<th>Site reference 2</th>
<th>Site reference 3</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Construction details of the borehole are uncertain, but it is thought that the bottom 5 metres of the borehole are slotted. Sketch below shows datum point.</strong></td>
<td><strong>Pond appears to have no inflow or outflow and is in a waterlogged corner of the field. Land owner states that the pond is unlined and has never been stocked with fish. It is used for nature conservation. Please see photo below:</strong></td>
<td><strong>Catchpit at surface is sealed and was not able to observe. Abstraction is directly from catchpit. Householder stated that the spring has provided a steady clean supply of water since the house was bought in 1963.</strong></td>
</tr>
</tbody>
</table>

![Datum Flange Level](image)

Access: Open / Sealed / Permission Refused  
Access: Open / Sealed / Permission Refused  
Access: Open / Sealed / Permission Refused
Access
You must get permission from the owner or occupier of any land before you carry out survey work. We can provide a letter to help you to ask for permission. Contact us on 0300 065 3000 for assistance.

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.

Follow-up monitoring
Any consent to pumping test issued as a result of your application may state that before, during and after pumping test, you must monitor specified water and wetland features. We will tell you what monitoring is needed once we have had an opportunity to assess your application and survey results. There may also be conservation sites which are not actually within the area the survey covers but are close enough to need monitoring when carrying out pumping tests. We will let you know if this is the case. We may need you to sink extra boreholes purely for monitoring purposes.

Finalising the programme of pumping tests
Before the programme of pumping tests starts, we must be satisfied that:

- Appropriate measuring devices are in place
- Measurements will be accurately made and recorded

For large or sensitive developments we may have a site meeting with you or your staff and, where appropriate, representatives of other concerned organisations to make sure that the test has been properly set up. That meeting will normally take place about two weeks before the pumping test begins.

Section 15 - Supporting documents
Complete checklist

Section 16 – Declaration

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

Who can apply for a consent and sign the forms?
Each individual (or individual trustee) who is applying for their name to appear on the consent must complete this declaration.

<table>
<thead>
<tr>
<th>Type of Consent Holder</th>
<th>Signature needed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual / sole trader</td>
<td>*The Consent Holder</td>
</tr>
<tr>
<td>Registered company</td>
<td>Company director or company secretary</td>
</tr>
<tr>
<td>Organisation of individuals (other than partnerships, trusts and charities)</td>
<td>The chairman, treasurer, secretary or other person authorised to represent the organisation</td>
</tr>
<tr>
<td>Partnership</td>
<td>One or more of the partners</td>
</tr>
<tr>
<td>Trust</td>
<td>All trustees or the chairman, treasurer or secretary</td>
</tr>
<tr>
<td>--------------------------</td>
<td>------------------------------------------------------</td>
</tr>
<tr>
<td>Charity</td>
<td>A person authorised to sign documents on behalf of the charity</td>
</tr>
<tr>
<td>Public body (i.e. a local authority)</td>
<td>A person authorised to sign on behalf of the organisation</td>
</tr>
</tbody>
</table>

* If an agent is to sign on behalf of the Consent Holder, a letter of authorisation from the Consent Holder is required.

On the application form, you need to provide us with the following details, depending on the type of applicant you are.

<table>
<thead>
<tr>
<th>If the applicant is…</th>
<th>Then they must provide:</th>
</tr>
</thead>
<tbody>
<tr>
<td>An individual</td>
<td>their full name</td>
</tr>
<tr>
<td>A company</td>
<td>the address of the Registered Office and a company registration number, in line with Companies House records</td>
</tr>
</tbody>
</table>
| An organisation of individuals (other than partnerships, trusts secretary or other person and charities – see below) | • full names and addresses of all partners  
• the trading name  
• the trading address  |
| A club or charity                                  | • give the full names and addresses of all trustees  
• give the name and address of the person authorised to receive the licence on their behalf |