

Guideline

Water Act 2000

Quick guide-Make good obligations

Chapter 3 of the Water Act 2000 (Water Act) establishes the underground water management framework. This framework provides for monitoring, assessment and making good impacts that result from resource operations. This framework ensures that a bore owner is not disadvantaged by such operations.

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Version history

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3.00	5 October 2016	Minor edits
3.00	02 March 2017	Update guide for legislative amendments to the <i>Water Act 2000</i> , as a result of the <i>Water Reform and Other Legislation Amendment Act 2014</i> and the <i>Environmental Protection (Underground Water Management) and Other Legislation Amendment Act 2016</i> .
3.01	24 May 2018	Updated to reflect current Queensland Government corporate identity requirements and comply with the Policy Register.
3.02	30 October 2021	Updated email address and references to Department of Resources' Engagement and Compliance Unit

1 Summary of make good obligations

Chapter 3 of the *Water Act 2000* (Water Act) establishes the underground water management framework. This framework provides for monitoring, assessment and making good impacts that result from resource operations. This framework ensures that a bore owner is not disadvantaged by such operations.

When water is extracted from a coal seam or a mine pit is dewatered, underground water levels decline in the surrounding area. In some situations this may affect private landholder bores. The purpose of this quick guide is to explain how impacts on landholder bores are identified and addressed.

Figure 1 summarises the 'make good' process under Chapter 3 of the Water Act, including the requirement for a resource tenure holder to undertake a bore assessment and enter into a make good agreement with a bore owner.

2 Underground water impact report

A key part of the underground water management framework is the requirement for resource tenure holders to prepare an underground water impact report (UWIR). The UWIR predicts impacts from a resource operation to underground water, and sets out future monitoring obligations and spring impact management strategies for the project.

If there are multiple resource tenures adjacent to each other, the impacts of water extraction on underground water levels may overlap. In these situations, a cumulative approach is required for the assessment and management of underground water impacts, and the government may declare a cumulative management area (CMA) such as the Surat CMA which was declared in March 2011. The Surat CMA only applies to petroleum tenures in the Surat and southern Bowen Basin.

Once a CMA is declared, the independent Office of Groundwater Impact Assessment (OGIA) is responsible for preparing the UWIR for the CMA.

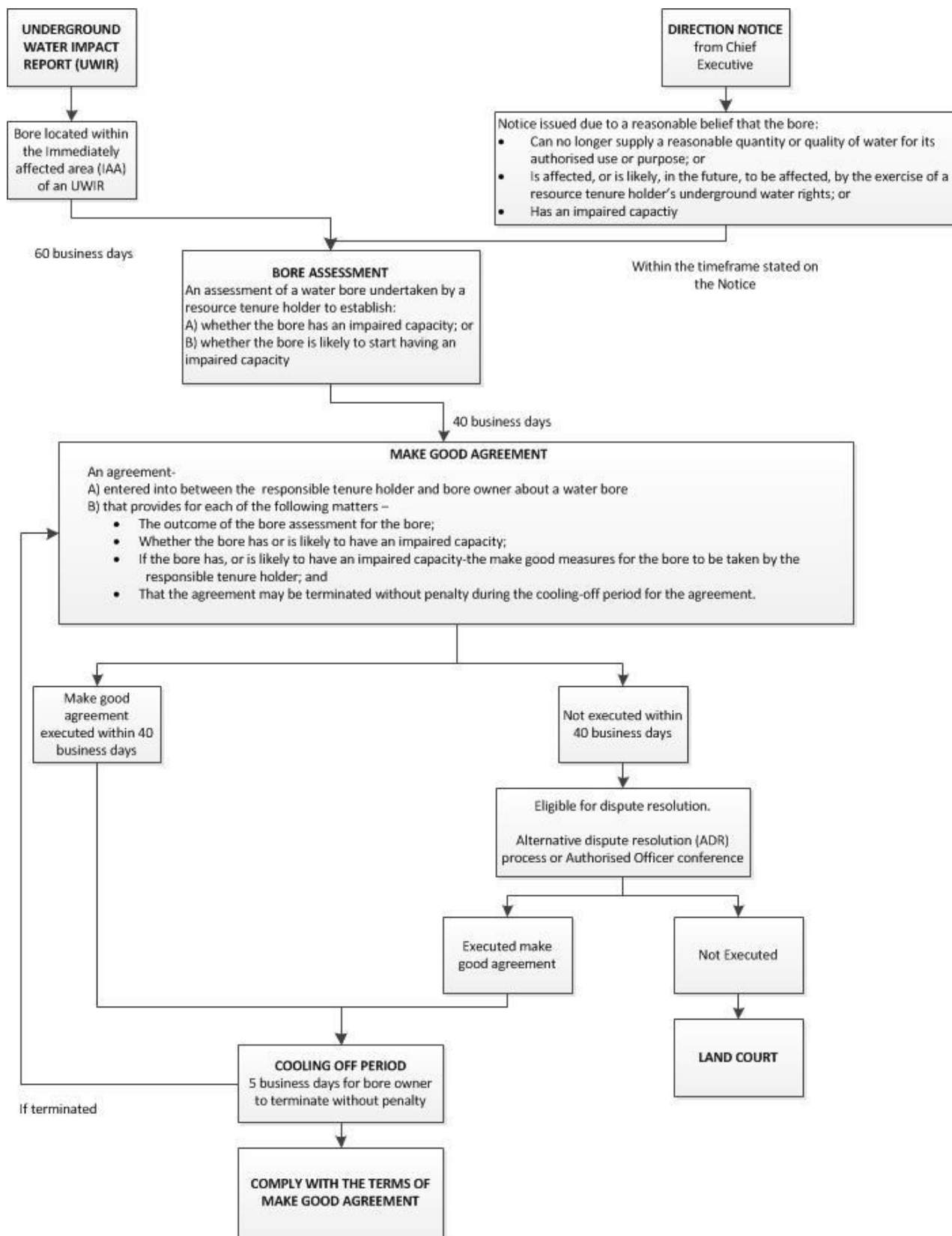
A key role of an UWIR is to predict groundwater impacts that are likely to occur in both the immediate and long-term. One of the purposes of making these predictions is to ensure that resource tenure holders enter into make good agreements with bore owners prior to their bores experiencing an adverse impact.

If an immediately affected area (IAA) or long term affected (LTAA) area is predicted in an UWIR, then the resource tenure holder (or OGIA for a CMA) must review the predictions and maps included in its UWIR each year, and submit a summary of this review to the Department of Environment and Science (the department). The summary must include any details about whether there has been a material change to information or predictions included in an UWIR. If a material change in information or predictions has occurred, the department may require the resource tenure holder (or OGIA for a CMA) to amend its UWIR.

For UWIRs which do not predict an IAA or LTAA, an annual review is not required.

In addition to annual reviews, all resource tenure holders who exercise underground water rights and OGIA (for a CMA) are generally required to submit a new UWIR every three years.

Figure 1: The ‘make good’ process under Chapter 3 of the Water Act



3 Make good obligations

3.1 Bore assessment and make good agreement

Under Chapter 3 of the Water Act, a resource tenure holder is subject to four general make good obligations which are:

- undertaking a bore assessment;
- entering into a make good agreement, and if the bore is, or is likely to be impaired, provide make good measures for that impairment;
- complying with the make good agreement; and
- if asked to vary the make good agreement in specified circumstances, negotiate a variation of the make good agreement.

These obligations ensure that a bore is properly monitored and, where necessary, that any impairment caused by a resource operation are 'made good'.

A make good agreement is only required to include make good measures when the exercise of underground water rights has, as part of a resource operation, materially contributed to the impairment of a bore. If a bore assessment shows that resource operations have not materially contributed to the impairment of the bore, the make good agreement need only include the outcome of the bore assessment and that the bore is not impaired.

3.1.1 Bore assessments

The first make good obligation is for a bore assessment to be undertaken by (or on behalf of) the resource tenure holder. This assessment is used to determine whether a bore has or is likely to have an impaired capacity.

A bore assessment is triggered when either:

- the bore is identified in an IAA in an UWIR or final report; or
- the chief executive of the department issues the resource tenure holder with a direction notice, as the chief executive reasonable believes the bore:
 - can no longer supply a reasonable quantity or quality of water for its authorised use or purpose;
 - is affected or likely to be affected by the exercise of underground water rights; or
 - has an impaired capacity (including the release of free gas).

If a bore is identified in an IAA, the bore assessment must be completed within 60 business days after the UWIR takes effect. In certain circumstances, the chief executive may agree to a longer period to undertake a bore assessment.

If a bore is not located within an IAA but it is experiencing an impairment, including due to the release of free gas derived from a resource tenure holder's activities, the chief executive of the department may direct the resource tenure holder to undertake a bore assessment. The resource tenure holder must either make a submission to the chief executive as to why a bore assessment should not be undertaken or undertake the bore assessment by the day mentioned in the direction notice. The chief executive of the department will consider any submission from a resource tenure holder as to why a bore assessment should not be undertaken, but may still decide to issue a direction notice requiring the resource tenure holder to undertake the bore assessment by a stated date.

All bore assessments must be undertaken in accordance with the guideline Bore assessments (ESR/2016/2005¹). This guideline provides resource tenure holders and bore owners with details about the minimum requirements for undertaking bore assessments, including the requirement for bore assessments to be completed by an independent third party, or certified by an independent third party. The purpose of a bore assessment is to determine whether the bore has or is likely to have an impaired capacity.

To determine whether a bore has or is likely to have an impaired capacity, the following information will assist:

- historical records;
- observations from the bore owner;
- pumping tests or flow/pressure tests; and
- a measurement of flow rate (only where pumping is not possible e.g. because of immovable head works which prevent access).

The resource tenure holder must notify the bore owner at least 10 business days before intending to access the property to undertake the bore assessment. It is important that the bore owner facilitates access to the bore, and provides any available information about the bore, for example, drill logs, pump records and a description of how the bore is used. The more information provided, the more accurate the assessment will be.

After a bore assessment has been undertaken, the resource tenure holder is required to provide a copy of the outcome of the bore assessment to the bore owner within 30 business days. It should be noted that a bore assessment is not considered to be completed or undertaken until data obtained from the field work has been analysed to determine whether the bore has or is likely to have an impaired capacity.

If the bore owner has concerns about the assessment, the bore owner should discuss this, in the first instance, with the resource tenure holder. However, if the bore owner's concerns are not adequately addressed, the bore owner should contact the Department of Resources' Engagement and Compliance Unit (details provided in section 3.8 below) for assistance.

Figure 2 provides a summary of the key obligations for resource tenure holders and bore owners during the bore assessment stage of the make good process.

Figure 2: Summary of bore assessment obligations and responsibilities

Resource tenure holder	Bore owner
<ul style="list-style-type: none"> • Give notice to bore owner at least 10 business days before accessing site to undertake assessment • Undertake bore assessment • Determine whether the bore has or is likely to have an impaired capacity • Provide a copy of bore assessment outcome to bore owner within 30 business days after the assessment • Explain outcome of bore assessment 	<ul style="list-style-type: none"> • Provide access to bore • Provide information about bore to assist resource tenure holder in completing assessment • Understand bore assessment and its implications

¹ This guideline is available on the Queensland Government website at www.qld.gov.au, using the publication number 'ESR/2016/2005' as a search term.

3.1.2 When does a water bore have an impaired capacity

Chapter 3 of the Water Act recognises two situations in which a water bore may become impaired from resource activities:

1. water level decline, due to the exercise of underground water rights by a resource tenure holder, impairing the bore's ability to provide a reasonable quantity or quality of water for the bore's authorised use or purpose; and
2. the water bore is adversely affected by free gas derived from the carrying out of authorised resource activities.

Impaired capacity is determined through the bore assessment, which must be undertaken in accordance with the guideline Bore assessments (ESR/2016/2005). When determining whether the bore has or is likely to have an impaired capacity, existing and new bores are treated differently.

1. *Water level decline*

An existing water bore (a bore in existence before the first UWIR for the area took effect) is considered to have an impaired capacity where:

- there is a decline in the water level of the aquifer at the location of the bore and the exercise of underground water rights has or has likely caused or materially contributed to the decline; and
- because of the decline the bore can no longer provide a reasonable quality or quantity of water for its authorised use or purpose.

A new water bore has an impaired capacity where:

- the requirements for establishing an impaired capacity for an existing water bore are met; and
- the decline is more than the decline predicted at the location of the bore in the relevant report (that is, the UWIR which is in effect at the time the bore is drilled).

2. *Free gas*

In addition to the above, both new and existing bores are taken to have an impaired capacity where there is evidence of any of the following adverse effects due to the exercise of underground water rights by a resource tenure holder:

- damage to the bore or the bore's pumps or other infrastructure;
- the bore poses a health or safety risk; or
- the bore can no longer, or it is likely the bore can no longer provide a reasonable quantity or quality of water for its authorised use or purpose;

AND

- free gas derived from the carrying out of authorised activities under a resource tenure, has or has likely caused or materially contributed to the adverse effect.

Certainty that the exercise of underground water right has caused or will likely cause the bore to be impaired is not needed; it is sufficient that the resource operations has likely caused or materially contributed to the decline or adverse effect.

The IAA and LTAA in an UWIR predicts a decline in water level only. As such if a bore owner is concerned their bore is being adversely affected by free gas derived from the carrying out of authorised activities under a

resource tenure, the bore owner should contact the Engagement and Compliance Unit (details provided in section 3.8 below).

The Engagement and Compliance Unit will notify the department and, if required, the chief executive of the department will direct the resource tenure holder to undertake a bore assessment of the affected bore within a certain time period.

3.2 Make good agreement

A make good agreement is a legally binding agreement entered into by a resource tenure holder and a bore owner about a water bore, which provides for the following:

- the outcome of a bore assessment;
- whether the bore has or is likely to have an impaired capacity;
- if the bore assessment has determined that a bore has, or is likely to have, an impaired capacity because of a resource operation, the agreement must include make good measures negotiated by the resource tenure holder and the bore owner (see section 3.3 Make good measures); and
- that the agreement may be terminated by the bore owner during the cooling off period (see section 3.5 Termination of a make good agreement).

A make good agreement is required for all bores that have had a bore assessment undertaken (not just those with an impaired capacity).

Make good agreements are separate contractual arrangements from conduct and compensation agreements required under petroleum legislation for access to private land and land access compensation and conditions negotiated for mining claims and mineral development license tenure holders.

As make good agreements are legally binding, it is important that bore owners seek appropriate independent professional advice when making this agreement, including advice regarding make good measures. A resource tenure holder is required to compensate the bore owner for any reasonable accounting, hydrogeological, legal or valuation costs incurred during the negotiation or preparing of the make good agreement.

The resource tenure holder is not required to reimburse the bore owner for hydrogeology costs incurred for work performed other than by an appropriately qualified hydrogeologist. An appropriately qualified hydrogeologist is a person with a minimum of two years professional experience in at least one of the following fields:

- underground water level monitoring programs, including monitoring of water level in bores equipped with pumping infrastructure;
- the conduct of underground water quality sampling programs; or
- hydrogeology and/or engineering

AND

- have a practical knowledge of water bore construction and infrastructure.

In addition to this, from the 6 December 2016, if a bore owner elects to undertake an alternate dispute resolution (ADR) process with the resource tenure holder to negotiate an outcome to the make good agreement or a variation to an executed make good agreement, the costs of the ADR facilitator will be borne by the resource tenure holder.

Figure 3 outlines the key obligations for resource tenure holders and bore owners during the negotiation of a make good agreement stage of the make good process.

Figure 3: Summary of make good agreement obligations and responsibilities

Resource tenure holder	Bore owner
<ul style="list-style-type: none"> • Seek agreement on outcome of bore assessment • Compensate for reasonable and necessary costs bore owner incurs • Negotiate make good measures if bore is impaired, or likely to be impaired 	<ul style="list-style-type: none"> • Seek appropriate professional advice • Seek agreement on outcome of bore assessment • Negotiate make good measures if bore impaired, or likely to be impaired

3.3 Make good measures

Make good measures are required for a make good agreement where a bore has, or is likely to have, an impaired capacity.

3.3.1 Types of make good measures

As part of the negotiation process, a bore owner is free to seek make good measures other than those proposed by the resource tenure holder during the negotiation process. Potential make good measures may include:

- ensuring the bore owner has access to a reasonable quantity and quality of water for the water bore's authorised use or purpose. For example:
 - adding a rising main to lower the pump setting in the bore;
 - increasing the water column above the pump;
 - improving the pressure at the bore head, including new headworks and piping, if the affected supply is artesian;
 - changing the pump so that it is better suited to the decreased water level in the bore;
 - deepening the bore to allow it to tap a deeper part of the aquifer;
 - reconditioning of the water bore to improve its hydraulic efficiency;
 - drilling a new bore; or
 - providing an alternate water supply;
- carrying out a plan to monitor the water bore, for example, by undertaking periodic bore assessments; and/or
- providing the water bore owner compensation (monetary or otherwise) for the bore's impaired capacity.

If monetary compensation is accepted as a make good measure instead of a new water supply, bore owners are encouraged to fully consider how this will affect long-term viability of the land use, and the impact that this might have on land value. Monetary compensation could also be used to improve other water infrastructure on the land.

While the requirement to implement make good measures is designed to ensure that a bore owner is not disadvantaged, resource tenure holders are not responsible for making good impairment that results from the poor maintenance of a bore (e.g. a bore with a collapsed or rusted casing).

Make good measures should not be influenced by the degree to which a bore owner utilises the supply. The key issue is the authorised capacity of the bore, and the level to which this capacity is impaired, or is likely to be

impaired. For example, a functioning bore used at times of short water supply is still entitled to the same reasonable quality and quantity of water for its authorised use or purpose as if it was required for frequent use.

Figure 4 outlines the key obligations for resource tenure holders and bore owners when negotiating make good measures.

Figure 4: Negotiating make good measures

Resource tenure holder	Bore owner
<ul style="list-style-type: none"> • Negotiate make good measures • Provide alternative solutions • Consider alternative solutions • Compensate for reasonable costs, including accounting, hydrogeological, legal, variation or ADR facilitator costs 	<ul style="list-style-type: none"> • Negotiate make good measures • Provide alternative solutions • Seeks appropriate professional advice • Consider the long term implications of make good measures

3.4 Existing make good agreements between mining tenure holders and bore owners

Existing agreements, in effect prior to 6 December 2016, between a mineral development license (MDL) or mining lease (ML) tenure holder and a bore owner about a water bore affected or likely to be affected by the take of underground water from activities on tenure are **deemed** to be a make good agreement for the purpose of Chapter 3 of the Water Act.

Therefore, these agreements are subject to the provisions of Chapter 3 of the Water Act, including the right to vary a make good agreement under the Water Act if the agreement is no longer appropriate.

3.5 Termination of a make good agreement

The bore owner may terminate a make good agreement, within the cooling-off period, by giving written notice of the termination to the resource tenure holder. The cooling-off period is 5 business days, starting on the day the make good agreement is entered into and ending at 5pm on the fifth business day. Note that the bore owner cannot terminate a make good agreement that has been decided by the Land Court.

3.6 Circumstances where an agreement can be changed

The impact on a bore caused by a resource operation may change over time for a number of reasons. For example, a resource tenure holder may change production plans, or a newly released UWIR might predict new impacts. There may also be situations where a bore owner discovers that a previously agreed make good measure is ineffective.

Because of the potential for change, a bore owner or a resource tenure holder can seek to vary an executed make good agreement, in three specified situations:

- there is a material change in circumstances
- the make good measures are ineffective
- another effective and more efficient measure is available.

In any of these situations, either party may issue a notice to the other party, requiring that they enter into negotiations using their best endeavours to vary the agreement. This statutory right seeks to ensure that any impacts on a bore are properly 'made good'.

A make good agreement may also be varied for reasons other than the three specified situations if both parties agree to the variation.

3.7 Unforeseen impacts

The underground water management framework is specifically designed to proactively identify impacts so that make good agreements can be entered into prior to predicted impacts. However, if a bore owner is concerned that their bore is experiencing an impact that has not been predicted, including being impacted from the release of free gas, the bore owner should initially contact the resource tenure holder in relation to their concerns. If there are ongoing concerns then the bore owner should contact the Engagement and Compliance Unit (details provided in section 3.8 below).

3.8 Complaints and disputes

Concerns regarding the undertaking of bore assessments, entering into make good agreements, or negotiating a change to a make good agreement can be referred to the Department of Resources' Engagement and Compliance Unit by emailing resources.info@resources.qld.gov.au. Additionally, if there is a disagreement about a make good agreement, either party may seek a conference or independent ADR to negotiate a resolution of the dispute. To seek a conference or ADR, the requesting party must complete an Election notice: Notice to seek conference or ADR (ESR/2016/2066²) and provide a copy to the Engagement and Compliance Unit and the other party. If a conference is sought, officers from the Engagement and Compliance Unit will conduct the conference to try to negotiate resolution of the dispute.

The resource tenure holder will bear the cost if an ADR conference is called by either party.

3.9 Further information and resources

Visit the department's website at www.des.qld.gov.au to access other resources linked to bore assessments and make good agreements including:

- frequently asked questions
- dispute resolution election notice
- UWIR and final report guideline
- copies of approved UWIRs
- bore assessment guideline.

² This notice is available on the Queensland Government website at www.qld.gov.au, using the publication number 'ESR/2016/2006' as a search term.