Approved form

*Water Act 2000*

Outcome of baseline and bore assessment

This is the approved form for a resource tenure holder to give notice of the outcome of baseline and bore assessments for water bores to the Office of Groundwater Impact Assessment and the bore owners, under sections 405 and 419 of the Water Act 2000.

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# Privacy Statement

*Department of Environment, Science and Innovation (the Department) collects personal information from you, including information about your:*

* *Name*
* *Email address*
* *Signature*
* *Address*
* *Telephone number.*

*We collect this information to contact you in relation to the bore assessment.*

*Your information may be shared with The Office of Groundwater Impact Assessment, the bore owner and the resource tenure holder.*

*We will only use your information for this purpose. It will otherwise not be used or disclosed unless authorised or required by law. Your personal information will be handled in accordance with the Information Privacy Act 2009.*

*For queries about privacy matters please email* *privacy@des.qld.gov.au* *or telephone 13 74 68.*

# Resource tenure holder’s information

|  |
| --- |
| Registered legal entity name (not a business trading name)Click or tap here to enter text. |
| Trading name(s) (if applicable)Click or tap here to enter text. |
| ABN / ACN / AN or title and section of legislation under which corporation has legal statusClick or tap here to enter text. |
| Registered business address (not a post office)Click or tap here to enter text. |
| Postal address (write ‘AS ABOVE’ if same as registered business address)Click or tap here to enter text. |
| PhoneClick or tap here to enter text. | FaxClick or tap here to enter text. |
| EmailClick or tap here to enter text. | WebsiteClick or tap here to enter text. |

# Bore and baseline assessments included with this form

| Unique Bore ID  | Date of assessment | Baseline or bore assessment?  | Reason for conducting assessment? |
| --- | --- | --- | --- |
| Click or tap here to enter text. | Click or tap to enter a date. | Choose an item. | Choose an item. |
| Click or tap here to enter text. | Click or tap to enter a date. | Choose an item. | Choose an item. |
| Click or tap here to enter text. | Click or tap to enter a date. | Choose an item. | Choose an item. |
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| Click or tap here to enter text. | Click or tap to enter a date. | Choose an item. | Choose an item. |
| Click or tap here to enter text. | Click or tap to enter a date. | Choose an item. | Choose an item. |
| Click or tap here to enter text. | Click or tap to enter a date. | Choose an item. | Choose an item. |
| Click or tap here to enter text. | Click or tap to enter a date. | Choose an item. | Choose an item. |

Note: Reasons for conducting assessments:

for baseline assessments: bore has been identified in a priority area in a relevant BAP; bore has been identified in an approved UWIR; as directed under section 402 of the Water Act; or other (please specify)

for bore assessments: bore has been identified in an IAA in a relevant UWIR; as directed under section 418 of the Water Act; or other (please specify).

# Resource tenure holder declaration

The resource tenure holder declaration must be completed by an officer accountable for “sign off” on the data collected during the bore assessment(s).

**Note:** If you have not told the truth in this form you may be liable for prosecution under the relevant legislation.

* I do solemnly and sincerely declare that the information provided is true and correct to the best of my knowledge and I make this solemn declaration conscientiously believing the same to be true.
* I am aware that under section 826 of the *Water Act 2000*, it is an offence to give the administering authority a document containing information that the person knows is false or misleading in a material particular. The maximum penalty for such action is 500 penalty units for an individual or 2,500 penalty units where the applicant is a corporation. Refer to the *Penalties and Sentences Act 1992* for the current value of a penalty unit.
* I understand that all information supplied on or with this application form may be disclosed publicly in accordance with the *Right to Information Act 2009* and the *Evidence Act 1977*.

|  |  |
| --- | --- |
| Full name of principal contactClick or tap here to enter text. | TitleClick or tap here to enter text. |
| Position in corporationClick or tap here to enter text. |
| Postal address (write ‘AS ABOVE’ if same as registered business address)Click or tap here to enter text. |
| PhoneClick or tap here to enter text. | MobileClick or tap here to enter text. |
| EmailClick or tap here to enter text. |
| Signature | DateClick or tap to enter a date. |

# Third party certification

[ ]  the bore(s) have been assessed in accordance with a formal quality assurance program that meets the requirements of the relevant guideline (*baseline assessments guideline* and *bore assessments guideline*1).

Note: The quality assurance program must be provided to the chief executive upon request.

[ ]  All aspects of the bore assessments are undertaken in compliance with the relevant guideline (*baseline assessments guideline* and *bore assessments guideline*1).

Provide the contact details of the person providing third party certification that the bore has been assessed in line with appropriate quality control procedures, in compliance with the relevant guideline.

|  |  |
| --- | --- |
| SurnameClick or tap here to enter text. | Given name(s)Click or tap here to enter text. |
| CompanyClick or tap here to enter text. |
| PhoneClick or tap here to enter text. | Alternative phoneClick or tap here to enter text. |
| EmailClick or tap here to enter text. |
| Signature | DateClick or tap to enter a date. |

**Checklist**

|  |  |
| --- | --- |
| [ ]  Form completed and signed**Mandatory supporting information attached:**[ ]  Appendix 1 for each baseline assessment[ ]  Both Appendix 1 and 2 for each bore assessment | Please return your completed form to:**Office of Groundwater Impact Assessment**Department of Natural Resources Mines and EnergyPO Box 15216City East QLD 4001Email: OGIA@dnrme.qld.gov.auEnquiries: **13 QGOV (13 74 68)**This completed form and Appendix 1 may be submitted to OGIA electronically in the format provided in OGIA’s Bore Baseline Assessment Database – Data File Format Document[[1]](#footnote-2). **A copy of this form must also be provided to the bore owner/s.**If the bore assessment is being undertaken as directed by the Department of Environment, Science and Innovation (DESI), **a copy of this form must also be provided to DESI as detailed in the direction notice.**  |

# Appendix 1 – Bore data

This mandatory supporting information must be provided in accordance with the relevant guideline (*baseline assessments guideline* and *bore assessments guideline[[2]](#footnote-3)*) **for each bore**. Use as many copies of this appendix as you need.

## Part A: Document identification and bore site information

|  |
| --- |
| **Resource tenure information** |
| Principal contact name Click or tap here to enter text. | Principal contact phoneClick or tap here to enter text. |
| Tenure type (PL, ATP, MDL or ML)Choose an item. | Tenure numberClick or tap here to enter text. |
| **Bore information** |
| Unique ID (assign a unique ID to the bore, not the same as the bore RN number)Click or tap here to enter text. |
| Bore registration number (RN)[[3]](#footnote-4)Click or tap here to enter text. | Bore RN commentsClick or tap here to enter text. |
| Local bore nameClick or tap here to enter text. | Property nameClick or tap here to enter text. |
| LotClick or tap here to enter text. | PlanClick or tap here to enter text. |
| Facility type (sub-artesian, artesian – controlled flow, artesian – uncontrolled flow, artesian – ceased to flow)Choose an item. |
| Date of bore assessmentClick or tap to enter a date. |
| **Bore geographic location (GDA2020)** |
| LatitudeClick or tap here to enter text. | LongitudeClick or tap here to enter text. |
| Location method (GPS, GPS – differential, surveyed)Choose an item. |
| Additional commentsClick or tap here to enter text. |

## Part B: Bore construction details

|  |
| --- |
| Are bore construction details available? |
| [ ]  Yes → verify details (where possible) | [ ]  No → complete this section based on the site inspection and reported information from the bore owner representative (if the information is not available then please leave blank). |
| Drilling contractor (drilling name and company name)Click or tap here to enter text. | Date of bore construction (drilled date)Click or tap to enter a date. |
| Type of casingClick or tap here to enter text. | Casing diameter (mm)Click or tap here to enter text. |
| Details of perforated intervals and/or screens that have been installedClick or tap here to enter text. |
| Details of any seals and cement grouting installed in the bore annulusClick or tap here to enter text. |
| Details of water bore’s capacity (estimate the rate at which water may be produced from the bore) (L/s)Click or tap here to enter text. |
| Is the source aquifer of the bore known? |
| [ ]  Yes → | Name of source aquiferClick or tap here to enter text. |
| Details of confidence level of the source aquifer (i.e. if there is uncertainty in the source aquifer, provide the reasons for the uncertainty)Click or tap here to enter text. |
| [ ]  No → | Reasons source aquifer unknownClick or tap here to enter text. |
| Is a strata log available for the bore? |
| [ ]  Yes → a copy of the original log should also be provided | [ ]  No |
| Additional commentsClick or tap here to enter text. |

## Part C: Bore equipment and condition details

**Ensure accurate bore equipment and condition details are recorded as this data may be important for future make-good proceedings.**

**Attach photos** of the bore and equipment which captures the condition of the bore at the time of the baseline assessment—these photos must detail each site individually and include a shot of the headworks.

|  |
| --- |
| Condition of bore (existing, abandoned but still usable, abandoned and destroyed)Choose an item. |
| Is the bore equipped with a pump? |
| [ ]  Yes  | [ ]  No → go to Part D |
| Pump typeClick or tap here to enter text. | Pump make and modelClick or tap here to enter text. |
| Pump setting depth (m) (depth from ground)Click or tap here to enter text. |
| Is the bore equipped with a meter? |
| [ ]  Yes → description Click or tap here to enter text. | [ ]  No  |
| Power source (electric motor, generator, direct drive engine, mains supply, tractor, windmill)Choose an item. |
| Headworks description—provide details on the size and type of riser pipe e.g. material, diameter, joint type, details of any connection to a reticulated system (e.g. pipe sizes, distances, schematic diagram, headworks size, valves, flow meter)Click or tap here to enter text. |
| Repairs/maintenance history—provide any commentary on repairs/maintenance undertaken on the bore e.g. nature and date of work, who has undertaken the maintenanceClick or tap here to enter text. |

Note: Condition of bore as per Groundwater Database[[4]](#footnote-5):

existing: the bore is currently in use

abandoned but still usable: the bore is in a useable condition but is not currently utilised

abandoned and destroyed: the bore has had its casing removed and/or been plugged and is no longer useable

## Part D: Bore supply information

|  |
| --- |
| Authorised use/purpose of the bore (must be identified in consultation with the bore owner)(stock, domestic supply, intensive livestock, irrigation, town water supply)Choose an item. |
| Is the water use from this bore metered? |
| [ ]  Yes → | Average volume used yearly (ML/year) (in the last five years - attach records, if available)Click or tap here to enter text. |
| [ ]  No → | Estimated volume used yearly (ML/year)Click or tap here to enter text. |
| Estimated volume method description (e.g. No. of hours the bore is pumped, storage of ring tank, No. of properties supplied, area irrigated, using standard usage rates supplied in Appendix 1 of the *baseline assessments guideline**[[5]](#footnote-6)*Click or tap here to enter text. |
| **Bore utilisation** |
| How often is the bore utilised (estimated hours pumped per day)?Click or tap here to enter text. |
| Describe the operational capacity, including seasonal variationClick or tap here to enter text. |
| Peak usage—including maximum volumes extracted and period of peak extraction (where No volumetric usage information is available, use the figures provided in Appendix 1 of the *baseline assessments guideline4* to estimate volumes supplied by the bore).Click or tap here to enter text. |
| Are there any historical water use records available for this bore? |
| [ ]  Yes → attach them to this form | [ ]  No |

## Part E: Water level measurement

**Attach a photo** of the bore clearly showing the following and attach it to this form:

1. A datum for standing water level (SWL);
2. The unique identification number of the bore and the groundwater database registered number (if available);
3. The bore owner’s name;
4. Property name; and
5. The date of the photograph.

|  |
| --- |
| Can the standing water level be recorded? |
| [ ]  Yes → | Standing water level (m below ground level) Click or tap here to enter text. |
| Current conditions relevant to the water level measurementClick or tap here to enter text. |
| [ ]  No → | Reason not measured (i.e. significant modifications—e.g. pulling windmills or removing pumps—or damage to the bore would be required in order to measure the SWL)Click or tap here to enter text. |
| Duration of pumping and rest periodsClick or tap here to enter text. |
| Maximum pumping rate (L/s)Click or tap here to enter text. |
| Datum point description (e.g. top of bore casing)Click or tap here to enter text. |
| Height of datum above ground level (m)Click or tap here to enter text. |
| Are water level and/or pressure records available for this bore? |
| [ ]  Yes → attach them to this form | [ ]  No |

## Part F: Water quality assessment

All samples are to be analysed at National Association of Testing (NATA) accredited laboratories.

|  |
| --- |
| **Obtaining water quality samples** |
| Location of sampling point (where the location is not within 15m of the bore, attach photo and provide location referenced to GDA2020)Click or tap here to enter text. |
| Volume of stagnant water within the bore casing and discharge piping (upstream of the sampling point)Click or tap here to enter text. |
| Was the sample taken after full purging of the bore casing and discharge piping? |
| [ ]  Yes |
| [ ]  No → | Provide details of the pumping history including when the bore was last usedClick or tap here to enter text. |
| Is pumping equipment in place at the bore? |
| [ ]  Yes |
| [ ]  No → | Attach photo showing the bore and sampling set up |
| **Field parameters** |
| Were water quality field measurements taken? |
| [ ]  Yes → | Physical parameters |
| pHClick or tap here to enter text. | Temperature (°C)Click or tap here to enter text. | Electrical conductivity (µS/cm)Click or tap here to enter text.  |
| Alkalinity and hardness (mg/L) |
| Alkalinity - HCO3- as CaCO3Click or tap here to enter text. | Alkalinity - CO32- as CaCO3Click or tap here to enter text. | Hydroxide OH- as CaCO3Click or tap here to enter text. |
| Total hardness as CaCO3Click or tap here to enter text. |
| Field gas measurements (multi-parameter gas detector) |
| CO2 (ppmv)Click or tap here to enter text.  | H2S (ppmv)Click or tap here to enter text. | CH4 (%LEL)Click or tap here to enter text.  |
| [ ]  No → | Reason not measuredClick or tap here to enter text. |
| Are historical water quality field records available for this bore? |
| [ ]  Yes  | [ ]  No |
| **Laboratory water quality** |
| Were water quality samples taken for submission to a laboratory? |
| [ ]  Yes |
| [ ]  No → | Reason not samples not takenClick or tap here to enter text. |
| Were dissolved gas samples taken for submission to a laboratory? |
| [ ]  Yes → | Method (flow through method or Geoscience Australia method)Choose an item. |
| Reason method chosenClick or tap here to enter text. |
| [ ]  No → | Reason not measuredClick or tap here to enter text. |
| Are the laboratory results for the samples indicated above supplied with this baseline assessment? |
| [ ]  Yes |
| [ ]  No → | Reason not suppliedClick or tap here to enter text. |
| Are historical water quality laboratory records available for this bore? |
| [ ]  Yes  | [ ]  No |

## Part G: Assessment field officer details

The person conducting the field measurements required for assessing the bore:

[ ]  has a minimum of two years prior 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
* hydrogeology and/or engineering

[ ]  has a practical knowledge of water bore construction and infrastructure.

Note: Should the bore owner be concerned that the person/s conducting the assessment does not possess the appropriate skills and experience, they may request the resource tenure holder to provide evidence of the person’s skills and experience.

Provide the contact details of the person undertaking the assessment of the bore.

|  |  |
| --- | --- |
| SurnameClick or tap here to enter text. | Given name(s)Click or tap here to enter text. |
| CompanyClick or tap here to enter text. |
| PhoneClick or tap here to enter text. | Alternative phoneClick or tap here to enter text. |
| FaxClick or tap here to enter text. | EmailClick or tap here to enter text. |

## Part I: Property owner/manager details

Provide the contact details of the bore owner, and any person who has provided information to the resource tenure holder about the bore’s condition for the assessment.

|  |
| --- |
| **Bore owner** |
| SurnameClick or tap here to enter text. | Given name(s)Click or tap here to enter text. |
| PhoneClick or tap here to enter text. | Alternative phoneClick or tap here to enter text. |
| FaxClick or tap here to enter text. | EmailClick or tap here to enter text. |
| UHF Channel NumberClick or tap here to enter text. |
| Has a copy of the information collected during assessment been retained by the bore owner? |
| [ ]  Yes | [ ]  No |
| **Other information provider** |
| SurnameClick or tap here to enter text. | Given name(s)Click or tap here to enter text. |
| PhoneClick or tap here to enter text. | Alternative phoneClick or tap here to enter text. |
| FaxClick or tap here to enter text. | EmailClick or tap here to enter text. |
| Detail information provided by the above person about the condition of the bore Click or tap here to enter text. |

**Attachments**

Provide a list of the photos and documents (i.e. digital images and scanned documents) obtained as part of the assessment applicable only to this bore.

| **Documentation type** | **Description** |
| --- | --- |
| Photos (i.e. JPEG, PNG) | [ ]  Bore and bore equipment photos (Part C) | Click or tap here to enter text. |
| [ ]  Water level measurement point photo (Part E) | Click or tap here to enter text. |
| [ ]  Water quality measurement point photo (Part F) | Click or tap here to enter text. |
| [ ]  Water quality sample setup photo (Part F) | Click or tap here to enter text. |
| [ ]  Other photo | Click or tap here to enter text. |
| Documents (i.e. PDF, DOCX) | [ ]  Driller’s log (Part B) | Click or tap here to enter text. |
| [ ]  Bore strata log (Part B) | Click or tap here to enter text. |
| [ ]  Water use log (Part D) | Click or tap here to enter text. |
| [ ]  Water level log (Part E) | Click or tap here to enter text. |
| [ ]  Water quality sample laboratory results from this baseline assessment (Part F) | Click or tap here to enter text. |
| [ ]  Water quality historical laboratory results (Part F) | Click or tap here to enter text. |
| [ ]  Water quality hitorical field results (Part F) | Click or tap here to enter text. |
| [ ]  Other document | Click or tap here to enter text. |

# Appendix 2 — Bore assessment

This mandatory supporting information must be provided in accordance with the *bore assessments guideline**[[6]](#footnote-7)* **for each bore for which you are undertaking a bore assessment**. Use as many copies of this appendix as you need.

## Part A: Water level decline

### Step 1: Field assessment

The initial step in determining whether a bore has impaired capacity requires the measurement of the current bore condition. Undertake a bore assessment in accordance with the *baseline assessment guideline6* and provide details of the assessment in **Appendix 1**.

### Step 2: Determining water-level decline

Using the methods outlined in Step 2 of the *bore assessments guideline6*, determine whether the water level in the bore has declined. To make this determination, comparisons must be made with the relevant baseline assessment, underground water impact report (UWIR) and historical water levels.

|  |
| --- |
| Has there been a decline in water level?  |
| [ ]  Yes | [ ]  No |

**Attach a document** outlining reasons for your response including sources of information used for historical water levels, magnitude and time period of water-level decline, assumptions about the rate of decline and drawdown predictions contained in the most recently approved UWIR.

### Step 3: Determining if water level declines result from the exercise of underground water rights

Using the methods outlined in Step 3 of the *bore assessments guideline6*, determine if the exercise of underground water rights has, or has likely, caused or materially contributed to a water level decline at the location of the bore.

|  |
| --- |
| Has the decline in water level occurred due to the exercise of underground water rights?  |
| [ ]  Yes | [ ]  No |

**Attach a document** outlining the results of investigations into other possible causes for the declining water levels where the exercise of underground water rights is not the cause.

### Step 4: Determining impaired capacity

Using the methods outlined in Step 4 the *bore assessments guideline6*, determine whether the bore can no longer provide a reasonable quantity or quality of water for its authorised use or purpose.

|  |
| --- |
| Does the bore have impaired capacity (i.e., it can no longer provide a reasonable quantity or quality of water for its authorised use)?  |
| [ ]  Yes | [ ]  No |

**Attach a document** outlining reasons for your response including:

* a comparison of current bore yield with historical data;
* consideration of the magnitude of water level decline, aspects of the bore construction, pump depth and aquifer properties;
* reference to information about the water licence and metered use and existing plan for any allocated water entitlement;
* current groundwater quality; and
* an estimation of the extent and likelihood of any predicted impacts to water quality due to a decline in water level.

## Part B: Free gas

Using the methods outlined in the *bore assessments guideline6*, determine whether the bore is or is likely to have an impaired capacity due to free gas.

|  |
| --- |
| Is there evidence of any of the following adverse effects: |
| [ ]  damage to the bore or to the bore’s pumps or other infrastructure[ ]  that the bore poses a health or safety risk[ ]  that the bore can no longer, or it is likely that the bore can no longer, provide a reasonable quantity or quality of water for its authorised purpose.[ ]  No → no further steps required. |

**Attach a document** providing details of your response.

|  |
| --- |
| Has free gas derived from carrying out activities authorised under the resource tenure caused or materially contributed to (or likely caused or materially contributed to) the above adverse effect?  |
| [ ]  Yes | [ ]  No |

**Attach a document** outlining reasons for your response.

**Attachments**

Provide details of any supporting documentation provided with this form

| **Documentation type** | **Description** |
| --- | --- |
| Documents (i.e. PDF, DOCX) | **Part A: Water level decline** |
| [ ]  Determining water-level decline (Step 2):* reasons for response.
 | Click or tap here to enter text. |
| [ ]  Determining if water level declines result from the exercise of underground water rights (Step 3)* results of investigations into other possible causes of declining water levels.
 | Click or tap here to enter text. |
| [ ]  Determining impaired capacity (Step 4):* reasons for response.
 | Click or tap here to enter text. |
| **Part B: Free gas** |
| [ ]  Evidence of adverse effects:* reasons for response.
 | Click or tap here to enter text. |
| [ ]  Determining if free gas derived from resource activities has caused adverse effect? * reasons for response
 | Click or tap here to enter text. |

1. This document is available on the Business Queensland website at [www.business.qld.gov.au](http://www.business.qld.gov.au), using ‘data file format document’ as a search term. [↑](#footnote-ref-2)
2. The baseline assessments guideline (ESR/2016/1999) and the bore assessments guideline (ESR/2016/2005) are available on the Queensland Government website at [www.qld.gov.au](http://www.qld.gov.au/), using the publication numbers as a search term. [↑](#footnote-ref-3)
3. This information can be obtained from the Queensland Government Open Data Portal at [www.data.qld.gov.au](http://www.data.qld.gov.au) using “groundwater database” as a search term. [↑](#footnote-ref-4)
4. This information can be obtained from the Queensland Government Open Data Portal at www. [www.data.qld.gov.au](http://www.data.qld.gov.au) using “groundwater database” as a search term. [↑](#footnote-ref-5)
5. The baseline assessments guideline (ESR/2016/1999) is available on the Queensland Government website at [www.qld.gov.au](http://www.qld.gov.au/), using the publication number as a search term. [↑](#footnote-ref-6)
6. The baseline assessments guideline (ESR/2016/1999) and the bore assessments guideline (ESR/2016/2005) are available on the Queensland Government website at [www.qld.gov.au](http://www.qld.gov.au/), using the publication numbers as a search term. [↑](#footnote-ref-7)