

Water

Overview

1. Water is a critical natural resource, shared by the public and used for numerous purposes. A complex relationship exists between mining and the water framework in Queensland.¹
2. All rights to the use, flow, and control of water in Queensland are vested in the State.² As such, a person may only take or interfere with water when authorised by the State.³

Associated and non-associated water

3. In the context of mining, there are two principal types of water: associated and non-associated.
4. Associated water is underground water which is unavoidably taken or interfered with due to mining activities. The ability to take or interfere with water is conferred upon a proponent when they obtain a mining lease. However, the exercise of these rights is contingent upon the proponent complying with their underground water obligations. Example of associated water usage include mine dewatering and evaporation during open pit operations.⁴
5. Non-associated water is any form of water (surface or groundwater) that is taken or interfered with, that is not associated water. To take or interfere with this type of water, a proponent must be authorised by the State (typically by a licence, permit or allocation). Examples of non-associated water usage include ore processing, dust suppression, waste and ore transportation, and washing, among others.⁵

Regulation of associated water

6. To take or interfere with associated water, a proponent must comply with their underground water obligations, contained in Chapter 3 of the Water Act. Unlike other parts of the Water Act, this chapter is administered by the Department of Environment, Tourism, Science and Innovation. Underground water obligation duties include:
 - preparing an underground water impact report
 - if there are bores in or surrounding the mining lease area:
 - creating a baseline assessment plan and undertaking assessment and
 - undertaking specific bore assessments and entering into make-good agreements.

Underground water impact report

7. Preparing an approved underground water impact report is a condition precedent to the proponent exercising their underground water rights.⁶ This report is designed to assess the adverse impacts of mining on the groundwater and establish monitoring strategies.⁷
8. In drafting an underground water impact report, the proponent must comply with the statutory content requirements.⁸ Once a draft has been prepared, the proponent must engage in public consultation.⁹ This commences with the proponent giving direct notice to relevant bore

owners¹⁰ and publishing the draft report in a way determined by the chief executive—which may include website or newspaper publication.¹¹ The notice must state:

- a description of the relevant area
 - that copies of the report are available from the proponent (and a method for obtaining them)
 - that written submissions addressing the report may be made by anyone for at least 20 business days and
 - all written submissions must be given to the proponent and the chief executive.¹²
9. After the consultation period, the proponent must consider all properly made submissions and prepare a submissions summary for the chief executive.¹³ The summary should summarise the submissions, detail how the proponent has addressed them, and any resultant amendments to their draft report.¹⁴
10. Upon submission by the proponent, the chief executive considers the underground water impact report and submissions summary from the proponent. They may decide to approve the report (with or without conditions) or require the proponent to modify the report to rectify inadequacies.¹⁵
11. Once approved, the underground water impact report and any associated conditions take effect. Within 10 business days, the proponent is required to publish the finalised report.¹⁶ It is an offence for the proponent to contravene any obligation arising from the report or conditions.¹⁷

Baseline assessments

12. Identified bores in affected areas require baseline testing.¹⁸ Among other reasons, a baseline assessment creates a reference point for comparison with subsequent assessments and assists in the resolution of disputes.¹⁹
13. If there are water bores requiring assessment, then the proponent must draft a baseline assessment plan.²⁰ A plan must identify priority areas and formulate a timetable for undertaking the baseline assessments.²¹
14. Upon completing the baseline assessment plan, the proponent must submit it to the chief executive. The chief executive may approve the plan (with or without conditions) or require the proponent to modify the plan to rectify inadequacies.²²
15. After approval, the proponent must notify each bore owner of their intention to undertake a bore assessment.²³ Once complete, an outcome notice must be supplied by the proponent to the relevant bore owner and the Office of Groundwater Impact. Assessment.²⁴

Bore assessments and make good obligations

16. A proponent is subject to four general make good obligations. These are:
- undertaking a bore assessment
 - entering into a make good agreement, and if the bore is, or is likely to be impaired, providing make good measures for that impairment
 - complying with a make good agreement and
 - if asked to vary the agreement in certain circumstances, to negotiate a variation.²⁵
17. A bore assessment is triggered if a bore is located within an immediately affected area, as identified by an underground water impact report.²⁶ They may also be directed by the chief executive in specific circumstances.²⁷ When a bore assessment is mandated, the proponent

must give notice to the owner of an intention to undertake the assessment.²⁸ After, the proponent must provide the owner and the Office of Groundwater Impact Assessment an outcome notice.²⁹

18. Upon completion of the bore assessment, the proponent must enter into a make good agreement with the bore owner.³⁰ The agreement must provide:
 - the outcome of the bore assessment
 - whether the bore has or is likely to have an impaired capacity
 - if the bore is likely to have an impaired capacity—the make good measures to be taken³¹ and
 - that the agreement may be terminated without penalty during the cooling-off period.³²
19. As aforementioned, the proponent must then comply with the make good agreement and negotiate a variation, if required.³³

Regulation of non-associated water

20. To take or interfere with non-associated water, proponents must obtain an authorisation under Chapter 2 of the Water Act. Unlike associated water, this chapter is administered by the Department of Local Government, Water and Volunteers.
21. A variety of authorisations to take or interfere with water exist.³⁴ However, the primary types relevant to mining are:
 - water licence or
 - water allocation.
22. The process for obtaining these authorisations is prescribed by legislation. However, the process may be modified by a water plan or water management protocol that is in effect.³⁵ The processes described are as they appear in the legislation, so are subject to geographic variation.

Water licences

23. A water licence is an authorisation that entitles the holder to take or interfere with water.³⁶ To obtain the licence, a proponent must apply to the chief executive.³⁷
24. Once the chief executive has the requisite information to consider the application,³⁸ they will publish notice of the application.³⁹ The notice must:
 - state the location of the proposed taking and/or interference with water
 - advise where copies of the application may be inspected and
 - inform the public that written submissions may be made about the application, for a period consisting of at least 30 business days.⁴⁰
25. Following the submissions period, the chief executive will decide the licence application. They must consider:
 - any applicable water plan
 - information received from the proponent
 - all properly made submissions and
 - the public interest.⁴¹
26. The chief executive may grant (with or without conditions) or refuse to grant the water licence.⁴² Their decision must be consistent with any applicable water plan.⁴³

27. If the chief executive's decision is consistent with the applicable water plan and no other decision that conforms with the water plan could have been made, then the decision is final and not appealable.⁴⁴ However, if a different decision that is still in accordance with the applicable water plan could have been made, then the proponent and each person who tendered a properly made submission must be given an information notice.⁴⁵
28. Receiving an information notice allows the person to challenge the chief executive's decision. It is mandatory that any challenge is first by way of internal review before it may progress to an external appeal by the Land Court.⁴⁶

Water allocations

29. Some water plans may allow for tradeable water allocations to exist in specified areas. Unlike water licences or permits, water allocations are perpetual titles that can be voluntarily traded on a water market.
30. Water allocations are divided between supplemented and unsupplemented water. For supplemented water, the process for water allocations is governed by the applicable water plan, water management protocol, and supply contract between the allocation holder and the infrastructure operator. In contrast, water allocations for unsupplemented water are governed by the applicable water plan and water management protocol only.

Implications and other remarks

Associated water and mining

31. Upon acquiring the mining lease, a proponent is automatically conferred underground water rights. To exercise those rights, the proponent must comply with the underground water obligations set out in Chapter 3 of the Water Act.⁴⁷
32. Prior to 2016, proponents for mining projects were required to obtain a separate water authorisation for any associated water taken or interfered with. This segregated arrangement caused duplication.
33. Another undesirable consequence was the position the Land Court occupied. Because water authorisations for were not part of the mining lease or environmental approval process, the Land Court was unable to consider them thoroughly during an objections hearing.⁴⁸ Effectively, the Land Court's jurisdiction was narrowed by the distinction between 'direct' mining impacts and associated water.
34. After amendments in 2016, the process for authorising the take or interference with associated water was modified, transitioning to the underground water rights framework that currently exists. The impacts of associated water are now considered as part of the mining lease and environmental authority approval process. Therefore, the Land Court, during an objections hearing, may consider associated water impacts.⁴⁹ Some transitional issues do remain with 'associated water licences', which are required for certain applications lodged prior to 2016.
35. A potential issue with the current arrangement is the inconsistencies in assessing and authorising the take or interference of water. For associated water, the rights are conferred by the grant of a mining lease, which is affected by the Minister for Natural Resources and Mines. To exercise those rights, the proponent must comply with their underground water obligations, which are contained in the Water Act but are assessed by the chief executive of the Department of Environment, Tourism, Science and Innovation. Meanwhile, other water authorisations for non-associated water are assessed by the Department of Local Government, Water and Volunteers.

Non-associated water and mining

36. For the take or interference of non-associated water, a proponent must obtain a water authorisation. While this requirement may be seen as duplicative, it does allow the water planning framework to regulate some impacts of mining on water resources.
37. If a water licence is required, the process can be prolonged. An application will be publicly notified, subject to submissions, and a decision may ultimately be challenged internally then externally.

Intersection with Aboriginal people and Torres Strait Islander people

38. Below are some preliminary intersections between Aboriginal people and Torres Strait Islander people and water, in the context of mining.⁵⁰
39. Statutory water plans, which are created in consultation with community, can allocate water in 'Indigenous reserves'. These reserves hold water that may only be released (via a water authorisation) for purposes that advance Indigenous social and economic opportunities.
40. When drafting an underground water impact report, the proponent must assess impacts on environmental values—which may include the cultural and spiritual value of the water.⁵¹ An underground water impact report must also include a spring management strategy,⁵² which in-turn must identify the risk to cultural and spiritual values of the spring and contain appropriate measures to mitigate or avoid these risks.⁵³

Environment Protection Biodiversity Conservation Act 1999 (Cth)

41. While the subject of other research, it is notable that the Environment Protection Biodiversity Conservation Act protects water-related resources. In 2013, a 'controlling provision' was inserted into the Act for actions that involve coal seam gas development or large coal mining developments that have or are likely to have a significant impact on a water resource.⁵⁴
42. As a 'controlled action', such an activity may be required to obtain Commonwealth approval.⁵⁵ Generally, a separate assessment process is not required, due to the bilateral agreement between the Commonwealth and Queensland.

Diverting water courses

43. Depending on the landscape, there may be a need to divert a watercourse from a mining site. Typically, this would require an authorisation to interfere with water under the water framework. However, if these matters are considered in the environmental authority for the resource activity, authorisation is not required.⁵⁶

1 The water framework in Queensland is principally administered by the Water Act 2000 (Qld) and Water Regulation 2016 (Qld). Many other statutory instruments exist, including: water plans, water use plans, water management protocols and water entitlement notices.

2 Water Act 2000 (Qld) s 26.

3 Water Act 2000 (Qld) s 27.

4 Mineral Resources Act 1989 (Qld) s 334ZP(1).

5 Ian Prosser, *Water – Science and Solutions for Australia*, (CSIRO Publishing, 2011) 138.

6 Mineral Resources Act 1989 (Qld) s 334ZP(2)(b); Water Act 2000 (Qld) s 370(1). Other than in CMA tenures, a mining proponent is a 'responsible entity': see s 368(b). There are some exceptions to giving an underground water impact report: Water Act 2000 (Qld) ss 369A, 370A–370B.

7 Department of Environment, Tourism, Science and Innovation (Qld), Underground Water Impact Reports And Final Reports (Guideline, 3 July 2024) 3.

8 Water Act 2000 (Qld) s 370(2). See also: Department of Environment, Tourism, Science and Innovation (Qld), Underground Water Impact Reports And Final Reports (Guideline, 3 July 2024) 11–27.

9 Water Act 2000 (Qld) s 381.

10 Water Act 2000 (Qld) s 382(1)(b).

11 Water Act 2000 (Qld) s 382(1)(a). See also: Department of Environment, Tourism, Science and Innovation (Qld), Underground Water Impact Reports And Final Reports (Guideline, 3 July 2024) 10–11.

12 Water Act 2000 (Qld) s 382(3).

13 Water Act 2000 (Qld) s 383(1). A ‘properly made submission’ is one that:

- is made by an entity invited to make submissions
- is in writing and signed by each entity making the submission
- is received in the permitted period for making submissions
- states the name and address of each person making the submission
- states the grounds of the submission and the facts and circumstances relied upon and
- is received by the person receiving submissions.

See Water Act 2000 (Qld) sch 4 (definition of ‘properly made submission’).

14 Water Act 2000 (Qld) s 383(2).

15 Water Act 2000 (Qld) s 385(1).

16 Water Act 2000 (Qld) s 386(1).

17 Water Act 2000 (Qld) s 390(1).

18 Bores are identified through:
Through a baseline assessment plan: Department of Environment, Tourism, Science and Innovation (Qld), Baseline Assessments (Guideline, 21 February 2024) 3.
An underground water impact report: Water Act 2000 (Qld) ss 376(1)(b)(v), 378; Department of Environment, Tourism, Science and Innovation (Qld), Underground Water Impact Reports And Final Reports (Guideline, 3 July 2024) 22.
Direction by the chief executive: Water Act 2000 (Qld) s 402.

19 Department of Environment, Tourism, Science and Innovation (Qld), Baseline Assessments (Guideline, 21 February 2024) 4.

20 Water Act 2000 (Qld) s 397(1).

21 Water Act 2000 (Qld) s 397(4).

22 Water Act 2000 (Qld) s 399(1).

23 Water Act 2000 (Qld) s 403.

24 Water Act 2000 (Qld) s 405(1). See definition of ‘office’ as Office of Groundwater Impact Assessment: Water Act 2000 (Qld) sch 4 (definition of ‘office’).

25 Water Act 2000 (Qld) s 409(1). See also: Department of Environment, Tourism, Science and Innovation (Qld), Quick Guide: Make Good Obligations (Guideline, 5 March 2024) 4.

26 Water Act 2000 (Qld) s 417.

27 Water Act 2000 (Qld) s 418.

28 Water Act 2000 (Qld) s 415.

29 Water Act 2000 (Qld) s 419.

30 Water Act 2000 (Qld) 423. If the terms cannot be agreed upon, there are dispute resolution mechanisms, concluding with a Land Court determination, see: Water Act 2000 (Qld) ch 3 pt 5 div 4.

31 For a ‘make good measure’, see: Water Act 2000 (Qld) s 421.

32 Water Act 2000 (Qld) s 420.

33 Water Act 2000 (Qld) s 424.

34 For a list of ways the State can authorise the taking and interfering with water respectively, see: Water Act 2000 (Qld) ss 27(2)–(3), ch 2 pt 3.

35 For example, in relation to water licences, see: Water Act 2000 (Qld) ss 116(1)–(2).

36 Water Act 2000 (Qld) s 106(1).

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- 37 Water Act 2000 (Qld) s 107(4). This is the relevant subsection, as a mining proponent is a 'prescribed entity' within the meaning of s 104 (definition of 'prescribed entity'). A 'resource tenure holder' is defined as including someone who is a 'mining tenure holder': sch 4 (definition of 'resource tenure holder').
- 38 They may require further information from the proponent via information requests: Water Act 2000 (Qld) s 111.
- 39 Water Act 2000 (Qld) s 112.
- 40 Water Act 2000 (Qld) s 112(3).
- 41 Water Act 2000 (Qld) s 113.
- 42 Water Act 2000 (Qld) s 114(1).
- 43 Water Act 2000 (Qld) ss 114(2)-(3).
- 44 Water Act 2000 (Qld) s 114(4).
- 45 Water Act 2000 (Qld) s 114(6).
- 46 See: Water Act 2000 (Qld) ch 6 pt 2.
- 47 Mineral Resources Act 1989 (Qld) s 334ZP(2)(b). See also: Water Act 2000 (Qld) ch 3.
- 48 This was the case before the amendments, see *Xstrata Coal Queensland Pty Ltd & Ors v Friends of the Earth – Brisbane Co-Op Ltd & Ors*, and *Department of Environment and Resource Management* [2012] QLC 13 at [606]-[610] per President MacDonald. Discussed in *Hancock Coal Pty Ltd v Kelly & Ors* and *Department of Environment and Heritage Protection (No. 4)* [2014] QLC 12 at [112]-[130] per Member Smith.
- 49 That was the view formed by Bowskill J in *New Acland Coal Pty Ltd v Smith* [2018] QSC 88 at [226]. This view was endorsed by the Court of Appeal in *Oakey Coal Action Alliance Inc v New Acland Coal Pty Ltd (No. 1)* (2019) 2 QR 271 at 308 [104]-[106], 309-310 [110]-[115] per Sofronoff P, Philippides JA and Burns J concurring. This aspect of the judgment was not disturbed by the High Court in a subsequent appeal.
- 50 This does not include some general interactions, such as that in Water Act 2000 (Qld) s 95.
- 51 Water Act 2000 (Qld) s 376(1)(db); Environmental Protection Act 1994 (Qld) s 9(d); Environmental Protection (Water and Wetland Biodiversity) Policy 2019 (Qld) s 6(2)(k).
- 52 Water Act 2000 (Qld) s 376(1)(g).
- 53 Water Act 2000 (Qld) ss 379(1)(c)-(d).
- 54 Environment Protection Biodiversity Conservation Act 1999 (Cth) s 24D. Inserted by the Environment Protection Biodiversity Conservation Amendment Act 2013 (Cth) sch 1 cl 1.
- 55 Environment Protection Biodiversity Conservation Act 1999 (Cth) ss 67-67A, 75, 133-134.
- 56 Water Act 2000 (Qld) s 98.