



## Tenure Matters



*A column by Sue Slater, Senior Advisor Petroleum, RLMS*

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Welcome back. This month the topic is water, specifically underground water rights for the petroleum sector. One of the problems with water is that the jurisdiction for various requirements is split across three entities – Office of Groundwater Impact (OGIA), Department of Environment of Heritage and Protection (DEHP), Department of Natural Resources and Mines (NRM). Add in the Commonwealth requirements under the EPBC “water trigger” and it is no wonder that water regulation and policy seems so confused and confusing. I believe it is critical to have an understanding of the past to better understand the information that is in the relevant databases and to address the requirements of the *Water Reform and Other Legislation Amendment Act 2014*, the remaining provisions of which will commence on 5 December 2016<sup>1</sup>.

### **A little bit of history**

Under the previous *Petroleum Act 1923*, a petroleum tenure holder had quite a wide ranging ability to use water within the tenure boundaries while the tenure remained current. The holder had to have prior permission in order to do so, and this took the form of a Petroleum Act Water Licence, issued under the 1923 Act. The permission (or licence), once given and subject to terms and conditions set out in the permission (or licence), included the right to “*search for, obtain, store, and use underground water (including artesian and subartesian water) within the limits of the land covered or demised by the authority or lease, for any of the purposes for which such authority or lease was granted and for any purpose incidental thereto*”<sup>2</sup>. The applications were referred to the Water Act regulator who made recommendations on the quantities and usage of the water. Any water obtained that was surplus to the needs of the holder could be provided to the landowner for domestic and stock purposes. This ability to allow the landowner to use the water for domestic and stock use was replicated in the 2004 Act as Section 186 (*Right to allow use of associated water for domestic or stock purposes*). This section was deleted by the *Land, Water and Other Legislation Amendment Act 2013* (No.23 of 2013) and there is no longer any such provision.

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<sup>1</sup> Water Reform and Other Legislation Amendment (Postponement) Regulation 2015

<sup>2</sup> Section 86(1)(a) Petroleum Act 1923 Reprint no 6A (reprinted as in force 3 March 2005, includes commenced amendment up to 2005 Act No 3)

The concept and definitions for associated water and non-associated water did not exist in the 1923 Act, and the water rights extended to aquifers intersected on the way to the target reservoir/formation, as well as to the water inadvertently produced with any petroleum from that reservoir/formation. Thus a tenure holder could, for example, access water from the Gubberamunda Sandstone, when the target formation was the Showgrounds Sandstone – and this was covered by the water rights under the 1923 Act.

What is important to understand is that the Petroleum Act Water Licence did not survive beyond the tenure's term, nor did it mean that the well to which the licence belonged was actually converted to a water supply bore. The water was commonly simply produced up the casing annulus with no permanent conversion to a water bore taking place. Petroleum Act Water Licences could also be issued for a holder to drill a dedicated water supply bore in the tenure. Either the well or the supply bore could be transferred to a landowner, but only with the express approval of the Minister. If not transferred, the wells and bores were required to be plugged and abandoned (or decommissioned).

Now here's the catch. The information on the Petroleum Act Water Licence, any well conversion or well transfer was not able to be captured in the existing borehole database. It was not, in fact, captured anywhere as a consolidated list. The documents were filed on the individual "well file" and on a set of files known as the "water files" which aggregated these documents. Wells no longer have "well files" and all the existing files have been archived. These can be treasure troves of information, included daily drilling reports (before they were required to be included in the well completion report), applications for Petroleum Act water licences, or transfers to landowners, and possibly even analyses results that did not appear in the well completion report (WCR). When I worked in the Department in the early 2000s, one of my roles was the Petroleum Act water licencing, and I started to build a database during this time to hold the information I collected from these various files. I believe a version of this, or a derivation of it, is still in use as a tool to track these water licences. But this information urgently needs to be integrated into the borehole database so that all the information for a particular well is available in one spot. At the very least, the existing licences and transfer approvals should be scanned and attached to the WCR in QDEX.<sup>3</sup> It is critical for government too to understand whether or not a transfer has legally taken place – otherwise once the relevant tenure, or any continuous tenure, has ended, the responsibility reverts to the State.

A relatively perfunctory search on MinesOnlineMaps results in a number of petroleum wells that have been given the status "water bore". This seems to correlate, at least in the areas reviewed around Roma and Surat, with wells that were issued a Petroleum Act water licence at some time in the past. Whilst, in a number of cases the well concerned is indeed still in use as a water bore, there will be instances where this is not the case. I found at least one example where the well has a status of water bore but is in fact plugged and abandoned – it did at one point in time produce water, most likely through the casing annulus, but was subsequently plugged and abandoned.

Also, it was common for all petroleum wells to be given an RN (registered number) in the Groundwater Database (GWDB) so that the stratigraphic information could be incorporated into that database. A specific block of numbers was reserved for the petroleum wells, but the practice was discontinued sometime after 2005. So when a search of the GWDB is done, petroleum wells with an

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<sup>3</sup> Queensland Digital Exploration Reports  
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RN number will be identified, and this shouldn't be assumed to mean that the wells have been converted to a water bore, or even ever produced any water at all.

With the introduction of the 2004 Act, the underground water rights of the tenure holder no longer needed an express approval in the form of a "petroleum water licence" for tenure administered under that Act. This was primarily to reduce the administrative burden associated with the application for and approval of these licences – and, importantly, pre-dated the CSG drilling boom associated with the CSG-LNG projects, and the consequential depressurisation of the CSG wells and concomitant water production. Note though that any continuing 1923 Act tenures still have to seek approval.

The concept and definition for associated water was introduced into the 2004 Act, although there was no definition for non-associated water. The *Mines Legislation (Streamlining) Amendment Act 2012* introduced section 15A "What is produced water". This definition stated:

**15A What is produced water**

(1) **Produced water** is—

- (a) CSG water; or
- (b) associated water for a petroleum tenure.

(2) A reference to **produced water** includes—

- (a) treated and untreated CSG water; and
- (b) concentrated saline water produced during the treatment of CSG water.

Again there was no explicit definition for non-associated water – but by inference it is anything other than produced water (water entrained in the producing horizon, and inadvertently or necessarily produced to produce the petroleum or gas).

Section 185 of the 2004 Act, which has been modified many times by subsequent amending legislation<sup>4</sup>, outlined the underground water rights of the tenure holder.

**Legislative reform**

Whilst some provisions of the *Water Reform and Other Legislation Amendment Act 2014* have commenced, some on 19 December 2014 on assent, and some on 11 September 2015 – none of these are the amendments critical to the resource sector. The remainder of the provisions have been postponed to 5 December 2016. Critically these relate to the underground water framework for resource sector development, related to Chapter 3 of the *Water Act 2000*.

The *Water Reform and Other Legislation Amendment Act 2014* introduces the concept of a "low risk" resource tenure, which is exempt under new section 370A of the *Water Act 2000* from the requirement to produce an Underground Water Impact Report. Similarly under new section 370B a further UWIR will not be required if the previous approved UWIR estimated a quantity of water to be taken to be zero and did not predict a decline in the water level of an aquifer of more than the bore trigger threshold. However, a definition for what a "low risk" resource authority might be, seems to be conspicuously absent, other than noting it may relate to any of:

- The likely impacts of the exercise of underground water rights on water bores and springs;
- The nature and scale of a mining or petroleum operation;
- The characteristics of the underground water resource;
- The location of the resource tenure.

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<sup>4</sup> **Underground water rights**

s 185 amd 2010 No. 53 s 81; 2011 No. 2 ss 121, 122 sch; 2013 No. 23 s 169; 2014 No. 47 s 618  
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How these aspects are determined is not clear, and it can only be presumed it will be addressed through Regulation or through guidelines. However, the term “low risk” does not appear in either of the *Water and Other Legislation Amendment Regulation (No. 1) 2014* or the *Water and Other Legislation Amendment Regulation (No. 2) 2015*.

Meanwhile, the *Water Legislation Amendment Bill 2015* was introduced to parliament on 10 November 2015 to align provisions of the *Water Reform and Other Legislation Amendment Act 2014* with government policy following the change of government and various election promises. This Bill has not been passed at the time of writing.

The *Environmental Protection (Underground Water Management) and Other Legislation Amendment Bill 2016* was tabled in parliament on 13 September 2016, and has been referred to the Agriculture and Environment Committee for consideration. They are required to report back to the parliament by 25 October 2016. Public submissions<sup>5</sup> on the Bill close on 7 October 2016. The Bill proposes amendments to each of the *Water Act 2000*, *Water Reform and Other Legislation Amendment Act 2014*, *Environmental Protection Act 1994*, and *Queensland Heritage Act 1992*. According to the Explanatory Notes<sup>6</sup> the objectives of the Bill include:

- “Strengthen the effectiveness of the environmental assessment of underground water extraction by resource projects;
- Allow the ongoing scrutiny of the environmental impacts of underground water extraction during the operational phase of resource projects through clearer links between the *Environmental Protection Act 1994* and *Water Act 2000*;
- Improve the make good framework in the *Water Act 2000*;
- Ensure that the administering authority for the *Environmental Protection Act 1994* is the decision-maker for specific application relating to environmental authorities;
- Ensure the impacts of mining projects that are advanced in their environmental and mining tenure approvals are appropriately assessed for their impact on the environment and underground water users and opportunities for public submissions and third party appeals are provided before the underground water is taken in a regulated area for mine dewatering purposes”.

Some of the proposed changes for the make good provisions include changes to what “impaired capacity” is taken to mean (clause 26 of the Bill). An existing water bore or a new water bore will have an impaired capacity if there is evidence of any of any of the following:

- 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 no longer, or it is likely that the bore can no longer, provide a reasonable quantity or quality of water for its authorised use or purpose; or if
- 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.

The resource authority holder will also be required to reimburse a bore owner for any accounting, hydrogeology, legal or valuation costs that the bore owner necessarily and reasonably incurs in negotiating or preparing a make good agreement (Clause 35). This amends section 119 of the *Water*

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<sup>5</sup> <https://www.parliament.qld.gov.au/work-of-committees/committees/AEC/inquiries/current-inquiries/EPUWMOLAB2016>

<sup>6</sup> [https://www.legislation.qld.gov.au/Bills/55PDF/2016/B16\\_0114\\_EnvironmentalProUWMOLAB16E.pdf](https://www.legislation.qld.gov.au/Bills/55PDF/2016/B16_0114_EnvironmentalProUWMOLAB16E.pdf)

*Reform and Other Legislation Amendment Act 2014*, to include the costs of a hydrogeologist to those that can be claimed by the bore owner. Additionally, in the event of dispute resolution, the resource authority holder will pay the costs in the make good agreement negotiation process. Previously, under the *Water Act 2000* the holder was liable for the costs only if they were the party giving notice (section 426). These additional costs could become quite substantial over a number of make good agreements.

Because of this “changes upon changes upon changes” approach to legislative reform (becoming more common it appears), it is extremely difficult and frustrating to get a true and accurate reading of the eventual amendments in the *Water Act 2000*, and the resource legislation.

### **Surat Cumulative Management Area**

The latest Underground Water Impact Report (UWIR) for the Surat Cumulative Management Area<sup>7</sup> took effect on 19 September 2016<sup>8</sup>. This replaces the previous 2012 UWIR, and used a revised regional groundwater flow model.

### **Follow up on EPBC water trigger**

In June 2013, the *Environment Protection and Biodiversity Conservation Act 1999* was amended to include water resources as a matter of national environmental significance in relation to coal seam gas and large coal mining development. An independent review of the legislation is required because the “water trigger” amendment was introduced without an accompanying Regulation Impact Statement. The issues paper for the review was released in November 2015.<sup>9</sup> Public consultation for the issues paper was extended and closed on 5 February 2016. One hundred submissions were received<sup>10</sup> and are available on the website. A review report is to be finalised, and tabled in parliament, however this review report does not seem to be available as yet.

Meanwhile in May, the Federal Labour party called to extend the water trigger to encompass shale and tight gas projects. Watch this space!

I am happy to hear suggestions about topics you would like covered. Feel free to email me at [sue.slater@rlms.com.au](mailto:sue.slater@rlms.com.au) with the subject heading Tenure Matters.

In the meantime, remember “Tenures make the Project; the Project doesn’t make the Tenures”.

*RLMS covers the project spectrum from planning through to State and Federal government approvals, including land access, compensation, environmental impact statements and work schedules for clients ranging from entrepreneurs to major corporations, from start-ups to government agencies, and state significant projects such as Queensland’s LNG giants. Contact RLMS at:*

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<sup>7</sup> <https://www.dnrm.qld.gov.au/ogia/surat-underground-water-impact-report>

<sup>8</sup> <http://www.gasfieldscommissionqld.org.au/news-and-media/2016-surat-basin-groundwater-report-takes-effect.html>

<sup>9</sup> <https://www.environment.gov.au/system/files/consultations/11c6034d-fc8e-4f06-a703-e51a16dec95c/files/water-trigger-review-issues-paper.pdf>

<sup>10</sup> <http://www.environment.gov.au/epbc/what-is-protected/water-resources/review>