Comment on separate water metering requirements for Rookwood licence holders

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The issue of focus

Sunwater requires that licence holders for entitlements from Rookwood Weir have dedicated meters for those entitlements (Sunwater 2024)[1]. This means that irrigators who have existing entitlements from the Lower Fitzroy Water Supply Scheme (Eden Bann Weir) or the Fitzroy Barrage Water Supply Scheme (Fitzroy Barrage) need to incur the expense of duplicating their water meters.

However irrigators with allocations from Rookwood weir may use their pump and meter infrastructure to access unsupplemented supplies (water harvesting), but *'customers must advise DRDMW of their start and end meter readings within the timeframes specified in the announcements*' (Sunwater 2024; 4).

Inefficiencies of duplicating meters

There are several issues with these requirements for separate metering:

(a) Separate metering generates additional costs to irrigators, particularly those who need to retrofit an additional meter to existing pumping infrastructure. The cost of purchase and installation of a separate meter is likely to be between $10,000 and $30,000 for smaller allocations, and higher for larger ones. For a standard 500ML of Medium Security water allocation from Rookwood Weir, that adds between $200 and $600 per ML of capital cost. Average prices for Rookwood water transfers in 2024 have been calculated at an average of $1,416/ML for 12,852 of new allocations issued to growers[2]. On this basis, the additional cost of metering would add an additional 14 – 42% of upfront costs, based on 2024 water prices.

(b) Requirements for separate meters create an additional barrier to future water trading or leasing, on top of the existing requirements for holders of Rookwood water to comply with land management codes of practice[3]. The high cost of separate meters will essentially constrain trading to the small group of irrigators with Rookwood entitlements, and limit potential efficiencies. It will also dissuade new entrants from holding multiple entitlements that include water from Rookwood weir.

Precedents

It is rare in Australian water markets that separate meters are required for accessing water from different entitlements. There is substantial focus at the national level to ensure that non-urban water supplies are metered accurately (DCCEEW 2022), with a particular focus on new or replacement meters meeting national standards[4]. However DCCEEW (2022) do not make any recommendations

[1] See Page 3 at https://www.sunwater.com.au/wp-content/uploads/Home/Schemes/Rookwood_Weir_Scheme_Rules_Targets.pdf

[2] Data sourced from https://www.business.qld.gov.au/industries/mining-energy-water/water/water-markets/market-information#permanent

[3] See: https://www.sunwater.com.au/wp-content/uploads/Home/Projects/Rookwood/Land_Management_Code_of_Practice.pdf

[4] This is specified in DCCEEW (2022:4) as 'Pattern Approved which comply with AS4747'

that water from separate entitlements should be metered separately. In fact they recommend a risk based approach that balances out the risks of adverse consequences against the costs incurred.

An extract of minimum metering thresholds in catchments outside of the Murray Darling Basin in provided in Appendix A. Of particular note is principle 4, as follows, from DCCEEW (2022: 25):

> *In setting metering thresholds, governments should take a risk-based approach that maximises the measurement of water taken, particularly for high-risk users, and avoids imposing undue costs, particularly for low-risk users.*

Reasons for imposing separate metering

Suncorp (2024) provide little justification for requiring separate meters for extracting Rookwood entitlements, except to say that '*a separate meter will be required for water accounting and billing of the Rookwood Weir allocation'* (Sunwater 2024: 4).

Here three potential reasons for separate metering are canvassed, none of which appear to be fully consistent:

(a) Accuracy of metering

If measurement accuracy is required, then this can be achieved in different ways, such as requiring a minimum standard for meters, and/or regular inspections and auditing. A simple way of ensuring recording accuracy will be to require irrigators taking Rookwood water to provide a digital photograph of their meter readings, at the start and end of the extraction.

(b) Different water managers

One potential reason for the separate meter requirement is that there are different water owners and operators of supplemented and unsupplemented water in the lower Fitzroy. However Sunwater is the operator of both the Rookwood and Eden Bann schemes (where single meters are not allowed), but the Department of Local Government, Water and Volunteers is responsible for unsupplemented water, that is allowed to be harvested through a meter used for Rookwood water.

(c) Environmental conditions

Another potential reason for the separate metering is that there needs to be a more stringent register of where Rookwood water is released and extracted from, given the conditions set by the Queensland and Australian Governments[5]. However the Rookwood water that can be accessed by irrigators who also have entitlements from other supplemented schemes must be released downstream into Zone B (downstream of Eden Bann Weir) or Zone A (the pond for the Fitzroy Barrage). Given that water for Stanwell Power Station and Gladstone pipeline will also be released downstream into Zone A for access to relevant pipelines, substantial mixing of water between the three supplemented schemes will occur. It will not be possible to definitively attribute any adverse environmental impacts in Zone A or B to water from Rookwood Weir, given the mixing that will occur. Because of this there is no benefit in terms of environmental monitoring from separate meters for water extractions, as compared to having a single meter

[5] See: https://www.sunwater.com.au/wp-content/uploads/Home/Projects/Rookwood/Land_Management_Code_of_Practice.pdf

with robust monitoring and verification systems to record extractions against different water entitlements.

Recommendations

A. It is recommended that Sunwater remove the requirements for licence holders from Rookwood weir to install separate water meters for metering extractions from Eden Bann or Fitzroy Barrage.
B. Other verification systems such digital recording, photographs of start and end meter readings, or telemetry methods should be used instead of separate metering.

References

DCCEEW 2021. *Metrological Assurance Framework 2: rules and guidance for the use and regulation of non-urban water meters.* Department of Climate Change, Energy, the Environment and Water, Canberra, July. CC BY 4.0

Sunwater, 2024. *Rookwood Weir Water Supply Scheme: Scheme rules and targets.* Sunwater, Brisbane, July 2024.

Appendix 1: Extract from DCCEEW (2022)

16.2 Outside of the Murray–Darling Basin

In zones outside of the Murray–Darling Basin in Queensland, New South Wales, Victoria and South Australia; and all zones in Western Australia, Northern Territory and Tasmania

16.2.1 Principles

1) Australian states and territories committed to the National Water Initiative and have undertaken to improve the measurement and metering of water.
2) Non-urban water meters must meet the Metrological Assurance Framework requirements of the National Framework for non-urban water meters (Australian Standard AS4747).
3) State and Territory governments are responsible for determining their non-urban water metering policy and regulations, including metering thresholds.
4) In setting metering thresholds, governments should take a risk-based approach that maximises the measurement of water taken, particularly for high-risk users, and avoids imposing undue costs, particularly for low-risk users.
5) Risks that are relevant to setting the metering thresholds include risks to meeting the environmental, social, economic or cultural requirements for the water.
6) The basis upon which the metering thresholds have been set, including any exemptions to thresholds, should be justified and published on the relevant state agency website.

16.2.2 Guideline

1) Subject to clause 16.2.2.2, licensed water take (meterable take) or utilised water take capacity will be metered by a date determined by the jurisdiction, including for:
    a) Licensed surface water and groundwater take
    b) Large or high-risk licensed water take for stock and domestic uses, mining and industrial uses; and
    c) Water captured through floodplain harvesting and by collecting overland flows, but only when it is possible to meter or measure the water through best practice means.
2) A government can determine that exemptions apply to their metering threshold requirements. Exemption criteria can apply for individuals or groups of entitlement (allocation) holders and may include:
    a) For small entitlements (determined by volume or infrastructure size)
    b) Where the water taken is not capable of being measured by a meter
    c) Where the costs of metering would otherwise significantly outweigh the benefits
    d) Where the entitlement holder can demonstrate that water can't be taken (eg: inactive infrastructure)
    e) Where any environmental, social, economic or cultural requirements for the water are <u>not</u> at risk using the exemption.