



Water take measurement and metering

Submission to the Water Reform Action Plan

April 2018

Gabrielle Coupland, Chair
Southern Riverina Irrigators
PO Box 1254, Deniliquin NSW 2710
E: admin@southernriverinairrigators.com.au
W: southernriverinairrigators.com.au
T: 0407 262 780

Southern Riverina Irrigators

SRI is a peak organisation providing advocacy for our membership comprised of five landholder associations representing irrigators operating within the footprint of Murray Irrigation Limited in the southern Riverina of NSW.

Formed in the 1960s, SRI now represents over 1,600 water users committed to producing food and fibre through environmentally and economically sustainable practices.

Our key principles are:

- We recognise the property rights of water entitlements
- Water reform must deliver against the “triple bottom line”.

Key industries

Our region is highly productive utilising water sourced from the NSW Murray above the Barmah Choke. Industries have developed to suit the highly variable water product that is predominant in the region. Despite seasonal variabilities, we continue to produce high quality crops sustainably and efficiently contributing significantly to the gross value of irrigated agricultural production.

Industry	2015-16 (\$M) (23% water allocation)	Average 2010-2016 (\$M)
Rice	\$26.5	\$105.3
Cereals	\$72	\$60.8
Other broadacre (inc cotton)	\$10	\$10
Dairy	\$112	\$99
Livestock	\$58	\$56

Source: ABS Gross Value of Irrigated Agricultural Production 2015-16, NSW Murray

Compliance

Our irrigators operate in the Murray Irrigation network. We have had our water use metered since the system was designed and constructed. Effective metering gives our landholders confidence that water use is measured and managed. Metering enables the system operator to better monitor the resource and realise system efficiencies that in turn benefit water users.

Since 2012 Murray Irrigation has been rolling out their Private Irrigation Infrastructure Operator Program to upgrade all farm outlets that show a history of use. This upgrade has resulted in improved system efficiency and better on-farm management of water. The addition of telemetric data transfer means that landholders can access up to date and relevant account information which improves compliance.

SRI is pleased to provide the following comments on the *Water take measurement and metering* consultation paper for the Water Reform Action Plan.

The following comments are based on our experience operating within a modern water delivery system with high-level metering and a strong compliance record.

Metering in NSW

NSW has been working towards a uniform water take measurement strategy for a number of years. For stakeholders, the question has to be asked: **Why has it taken so long?**

- 2009 NSW agreed to the COAG National Metering Framework for non-urban meters.
- 2010 NSW developed a business case for the NSW Metering Project.
- 2010 commenced a metering pilot in the NSW upper Murray. Murrumbidgee River Efficiency Project under Water for Rivers.
- 2012 Funding agreement signed for Metering Project, the Schedule of which was varied to cover only metering works in the Murray, Murrumbidgee and Lower Darling targeting 95 percent of water use.
- 2013 NSW Interim Water Meter Standards released to provide guidance to transition to State compliance against the National Framework.
- 2015 Discussion Paper for the NSW Water Take Measurement Strategy due to be finalised in December 2015.
- 2018 Consultation Paper for Water measurement and metering.

The National Framework requires compliance with the agreement by 30 June 2020 which leaves just two years for NSW to develop a policy that can be implemented effectively to provide the community with the confidence that water resources are being managed effectively and water users are operating in accordance with the law.

SRI supports the use of effective measurement and metering to improve resource management and underpin public confidence in our river management.

Metering requirements should apply consistently across the State. All meters installed under future metering programs should be capable of being linked into the system via telemetry.

The Metering project that was rolled out in the Murray, Murrumbidgee and Lower Darling should inform the rollout of a state-wide metering project to the same or similar standards to provide equity and confidence in the system. The fact that half the State is metered to one standard and the other not is not appropriate and not consistent with the intent of the National Metering Framework.

Consultation themes

1. When should a meter be required?

The Matthew's report into compliance recommended universal metering across the State, however, such a policy risks investment in infrastructure that may never, or rarely, be used.

The NSW southern valleys metering project set a targeted that 95% of licenced water use must go through a compliant meter. This Government set target should now become the standard across the State.

The consultation paper proposes several options for meter requirements including linking the requirement to water share, infrastructure size, water source risk or a combination.

In order to ensure public confidence that water use is monitored, the focus must be on metering use. Therefore one measure must be to look at the history of use of an outlet or pump to evaluate whether it should be metered or not. Water share is not a sufficient measure of use as there are many irrigators who operate works that have no associated water share. They utilise the temporary market or transfer from another account to utilise the works.

Basing meter requirements on resource risk is an inequitable mechanism for a metering strategy as it places the burden on water users purely based on geography and not on use or practice.

Infrastructure size can be a good measure of water use. An irrigator is unlikely to invest in a large pump that is going to sit idle. However, as the paper notes, an irrigator may have several smaller pumps associated with the one account that combined becomes significant use. The history of use condition mentioned above would address this risk.

The key principle must be equity. It has long been a concern in southern Basin valleys that there are different standards applied with regards to metering across the State. We accept the notion that different systems have different characteristics, the basic premise that all (95%) water use be metered must be applied consistently.

That means it must apply equally to all licenced water users including environmental water users where they are delivering water out of the river system. Where a meter cannot be used, there needs to be an open and transparent mechanism for measuring the environmental water use.

SRI recommends using a combination threshold of infrastructure size and historical water use to target metering of 95% of the State's licenced water use – including environmental water use.

2. What type of metering equipment and reporting will be required?

Pattern approval

The National Framework requires that all non-urban meters must comply with Australian Standard 4747 and be pattern approved.

According to information provided by WaterNSW to the NSW Irrigators' Council in February 2018 there are currently only six meters that have pattern approval, and this does not include one of the most widely used meters in inland NSW, the Mace meter.

The NSW Interim Standards for Metering allowed for the installation of meters that were designed and manufactured to a verified accuracy of +/-2.5%.

It is our understanding that the NSW Southern Valleys Metering project was carried out consistent with the Interim Metering Standards and prior to any meters achieving Pattern approval. It must be established whether these Government installed and owned meters are compliant with the National Framework. If not, there must be a process to retrospectively approve the installation of these meters.

Telemetry and data provision

Wireless data logging is the only way there can be capacity to provide water users and river operators with real-time information. This improves both system operations and compliance.

Under the Murray Irrigation upgrades, all meters have been connected to the network via telemetry. The benefits have provided water users more flexibility with their water orders and the system operators have more control of flows within the system reducing losses.

The world is becoming more connected and the demand for real-time information will only increase.

SRI recommends all meters installed under future metering programs should be capable of being linked into the system via telemetry and a program for retrofitting existing compliant meters be developed.

3. How should metering requirements be rolled out?

SRI supports the principle for staged rollout of the metering program; however, there must be clear exemptions from prosecution available in the interim period between the commencement of the National Framework (30 June 2020) and the finalisation of the metering and measurement strategy.

4. Who should own meters?

In the case of SRI, the system operator owns, installs, operates and maintains the meters.

The benefit of this system is the operator was able to negotiate a bulk contract for supply and takes responsibly for compliance. It also ensures the software and hardware is compatible with the operators systems.

The negative issues are the lack of customer choice for infrastructure options and, after the initial supply contract was agree, the lack of competition for ongoing services potentially locking in non-competitive provisions.

SRI proposes ownership is less an issue than compatibility and ongoing compliance responsibilities.

Conclusion

SRI believes the core benefit of accurate measurement and metering is through better resource management.

It is essential that any program for metering and measurement be equitable and consistent across the State. The Southern Valley's Metering project set the benchmark target for 95% of licenced water take and therefore, this target should apply in other valleys.