



Australian Government
Bureau of Meteorology



Water Markets Data Standards Project

Overview of stakeholder
engagement and feedback

October 2024



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Purpose

The Australian Government is committed to ensuring that any new Commonwealth regulatory frameworks, including new regulations or other legislative instruments like the Water Markets Data Standards (WMDS), do not impose unnecessary regulatory burden and compliance costs for businesses, individuals and community organisations.

This report summarises stakeholder feedback provided to the Bureau of Meteorology (the Bureau) during the Australian Government's journey to create the new WMDS. This preliminary feedback will be appropriately considered to inform the next stages of the Australian Government's broader water market reform project, including development of the Regulations under Part 7A (the Regulations) of the *Water Act 2007* (the Water Act) as amended by the *Water Amendment (Restoring our Rivers) Act 2023* and the development and implementation of the WMDS.

Background

On 7 December 2023, the *Water Amendment (Restoring our Rivers) Act 2023* (the ROR Act) commenced. The ROR Act made changes to the Water Act and the *Basin Plan 2012*. Changes include new functions for the Bureau related to water markets information.

The ROR Act supports water market reform to improve integrity and transparency in Murray–Darling Basin (MDB) water markets and to build confidence in their operation. The ROR Act is a key part of implementing MDB water market reforms recommended in the October 2022 [Water market reform: final roadmap report](#) (The Roadmap). The Roadmap was the Australian Government's response to the Australian Competition and Consumer Commission (ACCC) inquiry into the operation of water markets in the MDB. See [Murray–Darling Basin water markets inquiry - final report](#).

The Bureau's role in this reform is to implement improved data sharing and access to water markets information as per the new Part 7A of the Water Act.

Agency roles, functions and responsibilities

Various agencies and entities within the Australian Government have a role to play in respect of this new water market reform:

- The Bureau, the ACCC and the Inspector-General of Water Compliance (IGWC) each have prescribed duties and functions under the new Part 7A with respect to water markets information
- The Department of Climate Change, Energy, the Environment and Water (DCCEEW) plays a key role in driving development of the Regulations for the new Part 7A
- The Bureau has responsibility for issuing any new WMDS under the Water Act.

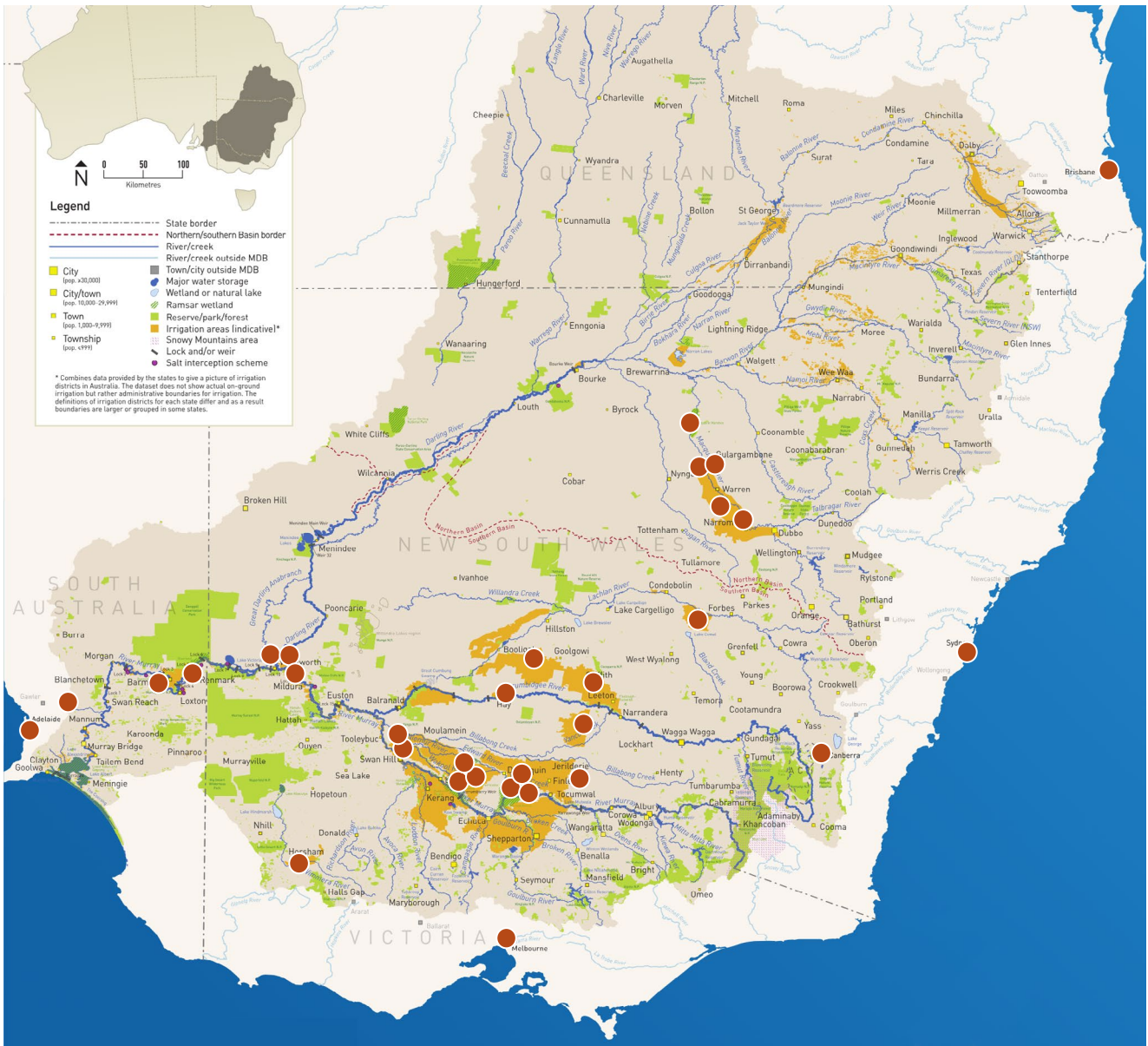


Figure 1 – Bureau stakeholder engagement activities conducted with organisations across the MDB

Prior to commencement of the ROR Act, the Bureau met with 15 representative organisations who hold and provide water markets data across the MDB to better understand the spread of perspectives and data management capability. This consultation, conducted between March and June 2023, informed DCCEE's development of the ROR Act. The Bureau published the [Water Markets Data Standards Project consultation summary of findings](#) on its website.



Craig Burke, General Manager of Narromine Irrigation with Linton Johnston from the Bureau.

Phase 2 – Development and implementation of the WMDS

In February 2024, DCCEEW advised 43 organisations that they were expected to have new obligations in relation to water markets information under Part 7A of the Water Act. These organisations were identified as either:

- water market authorities, being organisations whose roles and functions include approving, allowing or registering water trades or transfers—these included Basin state water agencies and Irrigation Infrastructure Operators (IIOs)
- water exchanges, being organisations who operate a digital platform that automatically matches bids and offers for water trades.

Between March and July 2024, the Bureau held workshops with 42 of these 43 identified organisations at various locations across the MDB (see Figure 1) to better understand the water markets information each organisation holds, their data management capability, and the spread of perspectives on upcoming data reporting requirements.

The workshops were structured:

- to share information regarding the recent amendments to the Water Act
- for the Bureau and stakeholders to present on their organisational roles, responsibilities, and functions in water markets
- to hear feedback on the development and implementation of the WMDS and proposed data reporting requirements.

Summary of stakeholder feedback

Analysis of stakeholder feedback identified 4 key areas of stakeholder interest in relation to development and implementation of the WMDS:

- Scope and implementation
- Roles and responsibilities
- Data types
- Data systems and provision.

Figure 2 shows the distribution of feedback between these key areas.

Within each of these key areas of interest, sub-themes emerged. These are represented in Figure 3 and are discussed in turn below.

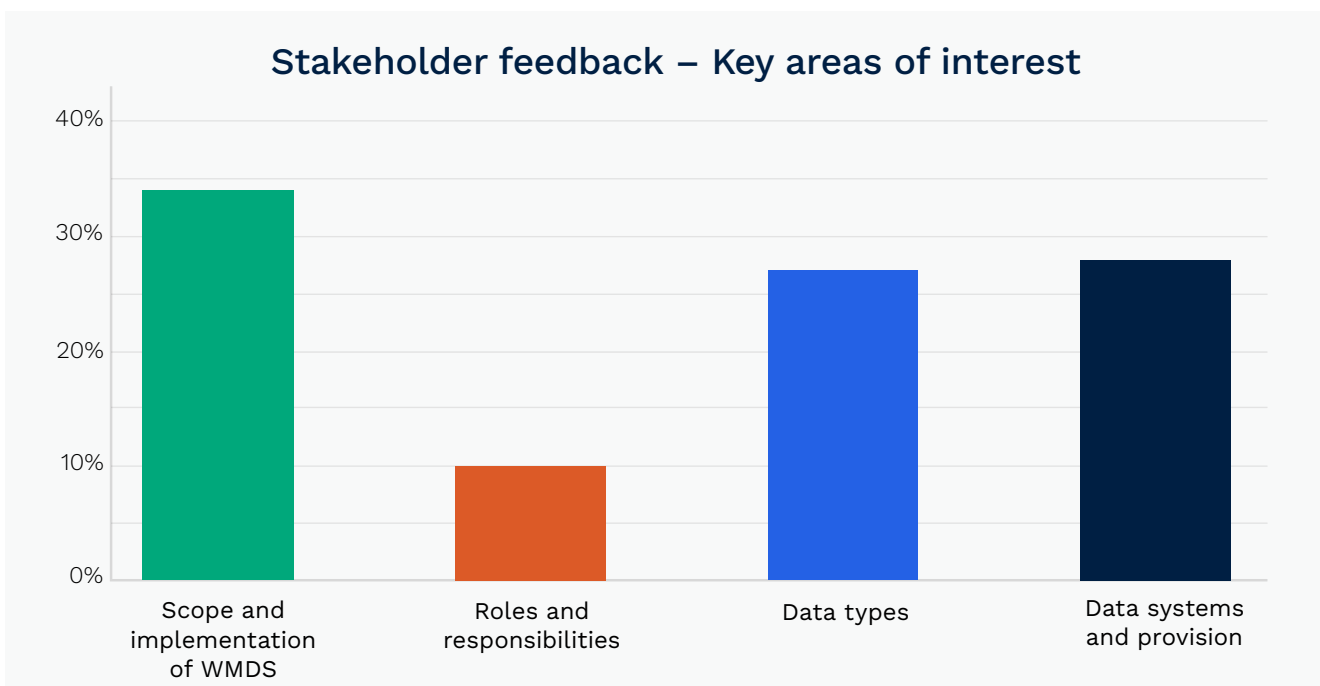


Figure 2 – Stakeholder feedback - Key areas of interest

Key Area 1. Scope and implementation of the WMDS

Approximately one-third of the total stakeholder feedback received related to this key area. Figure 3 highlights that 60% of stakeholder interest in this key area related to the application and implementation of the WMDS. Concerns related to the importance of clarity (21%) and regulatory burden (19%) made up the balance of the feedback in this area. Each of the sub-areas of interest are discussed below.

Application of the WMDS

The commencement of the WMDS from 1 July 2026 will require all named persons or classes of persons to comply with their obligations as prescribed in the Regulations and to provide water markets information to the Bureau in accordance with the WMDS.

Previous consultation undertaken by the Bureau sought feedback on the perceived application of the WMDS, noting that that any new regulatory framework will be designed in a way to ensure it is consistently and fairly applied to the market which it is intended to regulate.

The Bureau received mixed feedback from water market authorities regarding application of the WMDS. Some water market authorities believed that fit-for-purpose WMDS represented equitable application of the WMDS, while others supported WMDS that uniformly applied consistent compliance obligations for persons or classes of persons.

Water exchanges highlighted potential risks with the phasing in, not before 2027, of compliance obligations for water markets intermediaries who do not operate online digital platforms or live matched exchanges. Stakeholders advised that limiting the scope of pre-trade information to only MDB allocation trades that were live matched, would capture an incomplete picture of pre-trade allocation information.

Stakeholders suggested that this could influence competitiveness among water markets intermediaries.

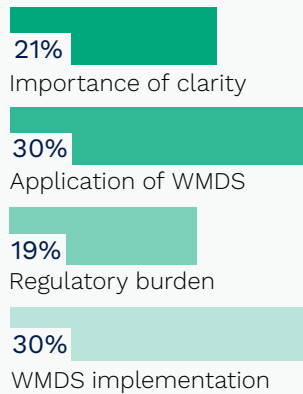
Water exchanges requested clarification on the timing for the inclusion of all other water markets intermediaries to better understand their potential commercial risks.

WMDS implementation

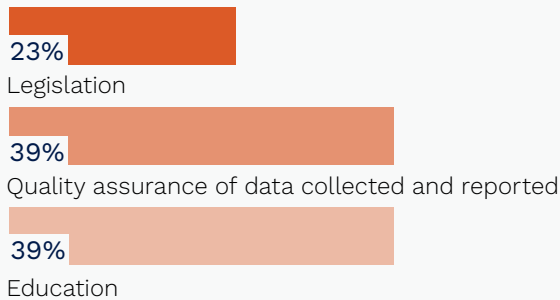
The commencement of the WMDS from 1 July 2026 raised significant concerns in relation to the time available to undertake uplifts to systems and data, and the ability to access the necessary information and communications technology (ICT) resources. ICT investment to comply with the WMDS could require business cases and organisational approvals to secure funding and procure resources, often with a minimum lead time of 12 months. Stakeholders advised that the final scope of the Regulations and the WMDS is required as soon as practical and no later than December 2024 to ensure systems and data uplift resource requirements can be included in financial year 2025–26 budgets. Stakeholders noted they may be challenged to comply with the WMDS on 1 July 2026, as all water market authorities go to market for the same bespoke ICT resources at the same time. Procuring ICT resources is seen as a significant challenge particularly for regional stakeholders, and many anticipate increased costs as demand pushes up the price of these services.

Stakeholder sub-areas of interest

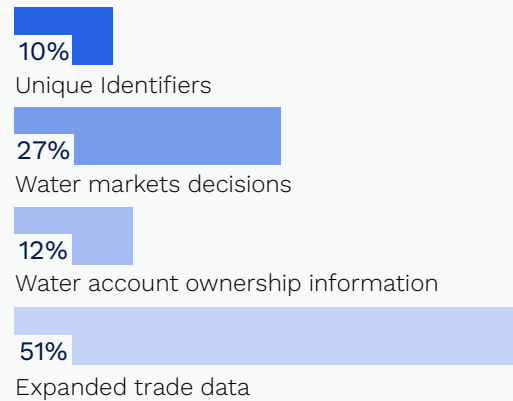
Scope and implementation of WMDS



Roles and responsibilities



Data types



Data systems and provision

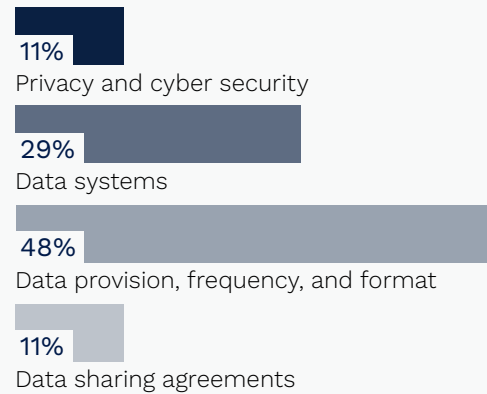


Figure 3 – Stakeholder sub-areas of interest

Importance of clarity

Regulations need to be made to enable effective operation of Part 7A of the Water Act. This includes to specify the persons or classes of persons that will be required to collect and give water markets information to the Bureau, and the kind of water markets information to be collected or given for the purposes of sections 135F and 135H. Stakeholders stressed the importance of having agreed definitions and harmonisation of key terms in the Regulations and the WMDS to inform their understanding of compliance obligations.

Stakeholders requested:

- a universally agreed list of water markets information to be included in the WMDS, with critical definitions agreed and harmonised across Basin states (including elements such as strike date, reason for trade, trading zone, water products, etc.) While harmonisation of terminology through the introduction of the WMDS is seen as important to the successful implementation of the WMDS, stakeholders noted that it comes with a cost
- consistency in the application of the definition of water market authority and the naming of persons in the Regulations.

Regulatory burden

All stakeholders expressed concern regarding the anticipated regulatory burden the WMDS would impose, regardless of organisational size and level of digital maturity.

Stakeholders unanimously agreed their respective regulatory impact and burden is wholly dependent on clarification of scope of the Regulations and the WMDS. As noted earlier, definition and harmonisation of key terms such as water market authorities, water markets intermediaries, eligible tradeable water rights and what constitutes a trade or transfer all impact on stakeholder compliance costs. Stakeholders advised they will need to recover any costs which will ultimately be borne directly by members and customers.

Stakeholder concerns included:

- increases in operating costs to initially implement compliance systems and processes and then to maintain them as part of business-as-usual, leading to necessary increases in customer fees
- disproportionate compliance burden amongst stakeholders due to differences in maturity, capacity, capability and resources available to comply.

Stakeholders who are also required to provide water markets information to the ACCC annually highlighted the importance of the Australian Government consulting with stakeholders on the development of legislative instruments to ensure no duplication.

Key Area 2. Stakeholder roles and responsibilities

The Bureau is developing the WMDS within the context of the new Part 7A to the Water Act. The Regulations being developed by DCCEEW will inform the scope of the WMDS.

The WMDS will establish requirements on data providers to collect, record and report water markets information to the Bureau. Information provided to the Bureau is critical for the ACCC in performance of its regulatory functions to monitor and investigate market misconduct and market manipulation, and for the IGWC in performance of its enforcement functions.

Stakeholder feedback in this key area of interest was significantly less than other areas (10% of all feedback).

Quality assurance of data collected and reported

The implementation of the WMDS will improve data sharing and access to water markets information primarily through new data collection and reporting responsibilities of market participants.

Over one-third of stakeholders commented on their reporting responsibilities and their role in data quality and assurance of post-trade data within the chain of custody and control of water markets information across the trade process continuum. Stakeholders are seeking clarification regarding data quality and assurances as to what is required from data providers in the chain of custody and control of water markets information as it passes from water market participants to water exchanges (sometimes) and water market authorities (sometimes more than one). Stakeholders stressed that an entity can only be held responsible for data which they generate themselves, not data provided to them by an applicant or third party and should not be held accountable for incorrect data provided to them by a preceding party.

Education

Stakeholders expressed a pressing need for broader education of water market participants, customers, and members on their new obligations under the water market reforms. Education on obligations under the WMDS and the Regulations, including price reporting and recording obligations, will be critical in the successful implementation of the WMDS and achieving the reform objectives.



James Bissett from Hay Private Irrigation District and Gunbar Private Water Supply Board, with Idske Galema from the Bureau.

Legislation

Stakeholders:

- sought careful management of potential duplication of responsibilities placed on water market authorities to comply with both state and Commonwealth legislation
- noted that WMDS timelines should account for extended timeframes if any changes are required to state legislation to give effect to the new obligations

- sought clarity to ensure the introduction of Commonwealth legislative amendments do not create conflict between current roles, responsibilities and functions of state water agencies and the Commonwealth.

Key Area 3. Data types

Stakeholder feedback related to the types of data to be included in the WMDS concentrated in 4 sub-areas:

- unique identifiers
- water markets decisions
- water accounts information
- expanded trade data.

Unique identifiers

The Roadmap identified a need for unique identifiers (UIs) for both individual trade transactions and trading parties to improve traceability of water markets transactions. The Bureau sought feedback on the value of including Australian Business Numbers (ABNs) and Australian Company Numbers (ACNs) as potential party UIs.

Stakeholders generally agreed that, in the absence of centrally generated party UIs for all water market participants, a combination of other unique party identifiers including ABN, ACN, legal name, address, water account numbers and water entitlement numbers could improve traceability and searchability of parties undertaking trades or transfers. Concerns were raised about the currency of the UIs and the need to understand the point of truth for this information. Stakeholders were also concerned with privacy and cyber security and the requirement to collect and store additional sensitive and personal customer information in their own systems.

Transaction identifiers to support traceability from pre-trade to post-trade raised less concern among stakeholders. The use of existing trade identifiers, with the inclusion of origin and destination transaction identifiers and intermediary transaction numbers, should allow traceability across pre-trade and post-trade and across multiple trade approvers.

Water markets decisions

Water markets decisions information will not be included in the WMDS as it falls under Part 5A of the Water Act. DCCEEW is working with stakeholders to identify and document an exhaustive list of water markets decisions. Stakeholders provided feedback that the scope of a water markets decision should be limited to decisions that are significant to water markets, to avoid capturing operational announcements.

While not included in the WMDS, water markets decisions information will need to be provided to the Bureau for publishing and to make it accessible in one central location. The Bureau canvassed options with stakeholders regarding their preference for providing water markets decisions information to the Bureau for publication and access. The provision of water markets decisions information does not apply to water exchanges.

Stakeholders agreed it was sensible for the Bureau to make all water markets decisions available in a central location.

Water account ownership information

Stakeholders acknowledged that the Explanatory Memorandum to the *Water Act (Restoring our Rivers Bill) 2023* limits water account information to be provided to the Bureau to account ownership details. Key concerns raised related to the provision of this information, with overarching concerns related to privacy, cyber security risks and external reporting of sensitive and personal information.

Further clarity is sought regarding the granularity, frequency and structure of water account ownership information to be provided so stakeholders can better understand the regulatory burden associated with collection and reporting of this information. Stakeholders noted there may be challenges with the synchronisation of data between data providers' systems and the Bureau's system.

Expanded trade data

Expanded trade data goes beyond what is already reported to the Bureau under Part 7 of the *Water Regulations 2008*, which is primarily entitlement and allocation post-trade data. The expanded trade data proposed as part of the WMDS is summarised below.

- All pre-trade buy and sell offers (price, volume, type, trading zone, unique IDs for seller, buyer, seller broker, buyer broker, exchange (applicant), status (e.g. live, withdrawn))
- Post-trade data – moving to daily reports
- Expanded trade data beyond allocation and entitlement markets – this includes leases, forwards, carryover and delivery rights (including reasons for trade and strike date)
- Unique trade identifier once an offer has been matched and transaction created
- Buy side broker ID, sell side broker ID
- Intermediary fees charged as part of executing the trade.

Water market authorities were broadly comfortable with the expanded scope of trade data to be collected and reported to the Bureau. However, stakeholders noted that, where changes extended beyond adding a new field to current forms and data management systems, costs to uplift data capture and systems are potentially significant (see Key Area 4. Data systems and provision).

Water exchanges advised they already collect most, if not all, of the pre-trade data proposed in the WMDS, apart from some of the party UIs. The uplift required to include party UIs and provide timely flows of information to the Bureau is marginal as it will require small changes in code to collect this information from their registered users and transmit the data via application programming interfaces (APIs).

Water exchanges stated that they did not want to provide information relating to intermediary fees charged as part of executing a trade. It should be noted that commercial in confidence information is not being sought through the WMDS.

Key Area 4. Data systems and provision

Analysis of stakeholder feedback provided insight into 3 sub-areas of interest, including:

- privacy and cyber security concerns
- data systems
- data provision, frequency and format.

Privacy and cyber security

Robust protections in the collection and transmission of private information and proprietary data are essential for the market to operate with sufficient integrity, and to give market participants confidence their data is safe from fraud or malicious intent.

Stakeholders raised concerns relating to cyber security and protection of private information. There is reluctance amongst stakeholders to collect additional private information from customers and store it in their own systems as this may increase their risk exposure in relation to security breaches. As a principle, stakeholders requested that the WMDS should include the minimum sensitive information needed to fulfil reform objectives.

Stakeholders sought:

- assurance regarding the security of Bureau systems, requiring them to be of a very high calibre and safe from data breaches
- secure downstream data sharing arrangements with regulators
- full transparency and clarification of who would have access to the data they provide to the Bureau under the WMDS. They noted they would need to advise their customers of this detail through disclosure statements
- a privacy impact assessment process related to developing and implementing the WMDS, to apply across all data capture, transfer and storage.

Data systems

The Bureau noted a diverse range of capability, capacity, and resources among stakeholders relating to their data systems and ability to provide data under the WMDS.

Basin state water market authorities varied in their ICT systems and resources. Generally, this stakeholder cohort, relative to IIOs, was observed to have the most capability, greatest capacity and best access to resources to uplift systems and processes. However, water markets information is often processed and held in multiple complex, vertically integrated legacy systems that have evolved over decades within these organisations. Where there is more than one water market authority approving, allowing, or registering water markets information within a Basin state, systems are not necessarily horizontally integrated across those organisations. This presents a challenge not only within the individual Basin state water market authorities but between them when providing water markets information to the Bureau.

The Bureau noted:

- the bespoke nature of data systems and the lack of agreed definitions and harmonisation of key terms presents challenges for interoperability and provision of water markets data to the Bureau
- where multiple systems (databases, paper-based ledgers or sets of spreadsheets) are in use within a water market authority or across multiple water market authorities that manage, approve and register water markets information, data synchronisation is often a challenge. A single point of truth at a point in time across the water trade continuum can be difficult to establish as water markets information is periodically updated and reconciled, varying from daily to weekly, monthly, quarterly or annually, depending on the organisation and the resources available to it.

The greatest diversity in capability to uplift systems and processes to comply with the WMDS by 1 July 2026 was observed within the IIO stakeholder cohort. IIO organisations staffed by volunteers who manually process, manage, and maintain water markets information in paper-based formats or on spreadsheets represent over two-thirds of the IIO cohort. These IIOs are most likely to incur proportionately the greatest uplift costs relative to the water markets information they hold and process when compared to the remaining IIOs that employ administrative staff to manage and process water markets information on a regular basis and operate more extensive ICT data management systems. A key takeaway message from the IIO stakeholder cohort was 'to keep it simple'. The Bureau received consistent feedback about the challenges of implementing sophisticated automated reporting systems and that costs would outweigh the benefits.

Data provision, frequency and format

Transferring data efficiently and securely to the Bureau is a key element of the data and systems reforms. Defining the frequency, format, and method of data transmission to the Bureau is a critical part of developing the WMDS and informs data and system uplift requirements for data providers.

Each workshop included discussion on expected frequency of provision of data elements to the Bureau, as well as initial discussion about data formats and means of provision.

In discussions with water market authorities, the Bureau detailed expectations that post-trade data provision will be required daily, noting this may change as the scope of Regulations is finalised.

Basin state water market authorities were generally comfortable with increasing the frequency of reporting post-trade data. IIOs, especially those with less capability and capacity, provided feedback that the frequency of data provision should align to their processing and reconciliation timing. Should the WMDS specify a higher level of frequency in reporting, IIOs would be faced with the need for significant additional human resources and uplift in existing systems and processes to support more efficient automated report preparation and transmission.

At workshops with water exchanges, the Bureau outlined the expectation that pre-trade data is to be provided in real-time (or as close to real-time as possible), necessitating data transfer in standardised message formats via automated machine-to-machine methods. Systems operated by these water exchanges facilitate the online matching of allocation trades and already include technologies to support real-time transfer of data to the Bureau. They stated a preference for transmitting pre-trade data as it occurs rather than daily batches as this aligns to their current practices.

Next Steps – Development and implementation of the WMDS, July 2024 to June 2026

The feedback provided by stakeholders in consultation workshops conducted between March and July 2024 will be considered by the Australian Government in the development of the legislative instruments under Part 7A of the Water Act.

DCCEEW has released a Part 7A Policy Proposal Paper and is seeking stakeholder feedback on various matters relating to the development of the Regulations for the new Part 7A to the Water Act. In particular, who will be captured by the new water markets information requirements and the kinds of water markets information such persons will be required to collect and give to the Bureau.

The Part 7A Policy Proposal Paper is available for comment on the DCCEEW website.

The Bureau will consult on the draft of the Water Markets Data Standards mid-2025.

Following consideration of any further stakeholder feedback, the WMDS will be finalised and come into effect from 1 July 2026. Parties captured by the new water markets information requirements in the Regulations will be required to perform a number of those obligations in accordance with the WMDS.

Resources

More information including the Bureau's anticipated timeline for the development and implementation of the WMDS is available on our website: [Water market reforms](#)

Read the Bureau's Phase 1 consultation report [Water Markets Data Standards Project consultation summary of findings](#)

More information about the overall water market reforms is available on DCCEEW's website: [Water market reform](#)

Water market reform: [Final roadmap report](#)

You can contact us about the WMDS by emailing regulations@bom.gov.au



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Connect with us: www.bom.gov.au

