

# Australian water markets report

## Preliminary Water Markets Database 2015–16

This document describes the preliminary 2015-16 update to the Water Markets Database originally published alongside the *Australian water markets report 2014–15*.

The Water Markets Database compiles information on entitlements on issue (6a), entitlement trades (6b) and allocation trades (6c) from 2007–08. This product was constructed in a similar manner as presented in Appendix C: Water Trade Database in the *Australian water markets report 2014–15*.

**Table 1: Brief description of the contents of this data package.**

File name	File description
awmr_db_eoi_15_16.csv	Entitlements on issue across Australia in 2015-16. Format: Comma Separate Variable (CSV) format. Number of records: 182,876. A detailed list of the variables in this table is given in Table 3. Data was constructed in a similar manner as presented in 'Appendix C: Water Trade Database' in the <i>Australian water markets report 2014–15</i> .
awmr_db_entit_trade_08_16.csv	Data on entitlement trade across Australia from 2007-08 to 2015-16. Format: Comma Separate Variable (CSV) format. Number of records: 65,395. A detailed list of the variables in this table is given in Table 2. Data was constructed in a similar manner as presented in 'Appendix C: Water Trade Database' in the <i>Australian water markets report 2014–15</i> .
awmr_db_alloc_trade_08_16.csv	Data on allocation trade across Australia from 2007-08 to 2014-15. Format: Comma Separate Variable (CSV) format. Number of records: 206,468. A detailed list of the variables in this table is given in Table 2. Data was constructed in a similar manner as presented in 'Appendix C: Water Trade Database' in the <i>Australian water markets report 2014–15</i> .

**Table 2: Entitlement and allocation trade data table variables**

Variable	Description
U_ID	Unique row identifier.
SUPPLIER_CODE	Identifier for the water person providing the data point.
TRADE_IDENTIFIER	Unique code for the trade, as assigned by the water person.
TRADE_TYPE	Either entitlement, lease or allocation, generated from the data subcategory and lease duration field.
TRADE_SUBTYPE	Additional detail on the type of entitlement traded, as provided by the water person.
RESOURCE_TYPE	A manual relabelling of the raw resource type to either surface water or groundwater by supplier code and origin state.
REGULATED	A generated variable for whether the water source is regulated or unregulated. Generated from the raw resource type per supplier code and origin state.
RELIABILITY_RAW	Entitlement reliability class, as defined by the water person (2014–15 and 2015–16) or as labelled in the original database (2013–14 and earlier).
RELIABILITY	A relabelling of reliability classes to achieve some consistency between years and jurisdictions.
ENTITLEMENT_TYPE	Entitlement type, as defined by the water person (2014–15 and 2015–16) or as labelled in the original database (2013–14 and earlier).
LEASE_DURATION_UNIT	If the entitlement trade is a lease, the unit of time of the lease (for example, years).
LEASE_DURATION	Number of time units of the lease.
ORIGIN_STATE	State from where trade originated.
ORIGIN_WATER_SYSTEM_RAW	Original label for the water system from which the trade originated, as designated by the water person (2014–15 and 2015–16) or as labelled in the original database (2013–14 and earlier).
ORIGIN_WATER_SYSTEM	A relabelling of the water system from where the trade originated to achieve consistency between years.
ORIGIN_TRADING_ZONE_RAW	Original label for the trading zone from which the trade originated, as designated by the water person (2014–15 and 2015–16) or as labelled in the original database (2013–14 and earlier).
ORIGIN_TRADING_ZONE	A relabelling of the trading zone from where the trade originated.
ORIGIN_PLAN_AREA_RAW	Original label for the water resources plan area from which the trade originated, as designated by the water person (2014–15 and 2015–16) or as labelled in the original database (2013–14 and earlier).
ORIGIN_PLAN_AREA	A relabelling of the water resources plan area from where the trade originated.
DESTINATION_STATE	State to which the trade was destined.
DESTINATION_WATER_SYSTEM_RAW	Original label for the water system to where the trade was destined, as designated by the water person (2014–15 and 2015–16) or as labelled in the original database (2013–14 and earlier).
DESTINATION_WATER_SYSTEM	A relabelling of the water system to where the trade was destined to achieve consistency between years.
DESTINATION_TRADING_ZONE_RAW	Original label for the trading zone to where the trade was destined, as designated by the water person (2014–15 and 2015–16) or as labelled in the original database (2013–14 and earlier).

Variable	Description
DESTINATION_TRADING_ZONE	A relabelling of the trading zone to which the trade was destined.
DESTINATION_PLAN_AREA_RAW	Original label for the water resources plan area to where the trade was destined, as designated by the water person (2014–15 and 2015–16) or as labelled in the original database (2013–14 and earlier).
DESTINATION_PLAN_AREA	A relabelling of the water resource plan area to which the trade was destined.
MDB	Generated variable to designate whether the origin water system is part of the Murray–Darling Basin.
CONNECTED_MDB	Generated variable to designate whether the origin water system is part of the southern connected Murray–Darling Basin.
VOLUME_	Quantity of trade (note that this include trades in megalitres [ML], hectares [ha] and hectare irrigation equivalents [HaiE]).
UOM	The unit of measure for the quantity of trade. Either megalitres (ML), hectares (HA) or hectare irrigation equivalents (HaiE).
PRICE_RAW	The original reported price for the trade (either net or gross).
PRICE	The total value of the trade, derived from the gross price and net price. Note that missing entries before 2014–15 are reported as zero prices. Missing entries for 2014–15 and 2015–16 are reported as null.
PRICE_ML_RAW	The original reported price per megalitre for the trade.
PRICE_ML	Price divided by quantity. See price caveats (Appendix A: Price information and Appendix C: Additional cleaning) for more detail on transformations and use of price data.
APPLICATION_DATE	Date provided on the trade application.
APP_LODGE	Date the application was lodged with the initial approver.
APPROVAL_DATE	Date the trade was approved by the water person. Most applicable for allocation trades, because in many jurisdictions allocation rights are transferred on this date.
LODGEMENT_DATE	Date the trade approval was lodged by the water person at the relevant water register.
REGISTRATION_DATE	Date the trade was officially registered by the water person. Most common date provided for entitlement trades, but often 1–2 months behind the application or approval date.
CALENDAR_YEAR	Calendar year during which the trade took place. Derived from the registration date, if available, otherwise from the approval date or application date.
MONTH_	Month the trade took place. Derived from the registration date, if available, otherwise from the approval date or application date.
FINANCIAL_YEAR	Financial year during which the trade took place. Derived from the registration date, if available, otherwise from the approval date or application date.
FINANCIAL_MONTH	Financial month the trade took place. Derived from the registration date, if available, otherwise from the approval date or application date.
BARMAH_TRADE	Either YES or NO. Identifies whether the trade passed through the Barmah Choke. Derived by a comparison of origin and destination trading zones.

Variable	Description
CEWO_TRADE	Either YES or NO. Identifies whether the trade was conducted by the Commonwealth Environmental Water Holder. Derived by matching trade identifiers provided by the Commonwealth Environmental Water Office with the category 6 data. The full list of trades may be incomplete.
TRADE_INVOLVES_PROPERTY_SALE	Whether the trade (and therefore the trade value) includes a property sale, as reported by the water person. Largely incomplete.
ENVIRONMENTAL_TRADE	Whether the trade was for the environment, as reported by the water person. Largely incomplete.
CHANGE_OF_OWNERSHIP	Whether the trade included a change in ownership, as reported by the water person.
CRITICAL_NEEDS_PURCHASE	Whether the trade was a critical needs purchase, as reported by the water person. Largely incomplete.
SOURCE	Original data source of the observation, for internal use.

**Table 3: Entitlements on issue data table variables**

Variable	Description
U_ID	Unique row identifier.
SUPPLIER_CODE	Identifier for the water person providing the data point.
DATE_OF_ISSUE	Date that the entitlement was originally issued by the water person (or its predecessors).
IS_NEW_ENTITLEMENT	States whether the entitlement has been newly issued, as designated by the water person.
STATE_	State where the entitlement is issued.
WATER_SYSTEM_RAW	Original label for the water system where the entitlement is issued, as designated by the water person (2014–15 and 2015–16) or as labelled in the original database (2013–14 and earlier).
WATER_SYSTEM	A relabelling of the water system where the entitlement is issued, to achieve consistency between years.
TRADING_ZONE_RAW	Original label for the trading zone where the entitlement is issued, as designated by the water person (2014–15 and 2015–16) or as labelled in the original database (2013–14 and earlier).
TRADING_ZONE	A relabelling of the trading zone where the entitlement is issued, to achieve consistency between years.
PLAN_AREA_RAW	Original label for the water resource plan area where the entitlement is issued, as designated by the water person (2014–15 and 2015–16) or as labelled in the original database (2013–14 and earlier).
PLAN_AREA	A relabelling of the water resource plan area where the entitlement is issued, to achieve consistency between years.
MDB	Generated variable to designate whether the water system is part of the Murray–Darling Basin.
MDB_REGION	Generated variable to designate whether the water system is part of the northern or southern Murray–Darling Basin.

Variable	Description
ENTITLEMENT_TYPE	Description of the entitlement on issue, as defined by the water person.
RESOURCE_TYPE	A manual relabelling of the raw resource type to either surface water or groundwater by supplier code and origin state.
REGULATED	A generated variable for whether the water source is regulated or unregulated. Generated from the raw resource type per supplier code and origin state.
RELIABILITY_RAW	Entitlement reliability class, as defined by the water person (2014–15 and 2015–16) or as labelled in the original database (2013–14 and earlier).
RELIABILITY	A relabelling of reliability classes to achieve some consistency between years and jurisdictions.
TRADEABLE_INTERSTATE	Whether ownership of the entitlement or allocations to the entitlement can be traded interstate.
TRADEABLE_INTRASTATE	Whether ownership of the entitlement or allocations to the entitlement can be traded outside the water system but within the state.
TRADEABLE_INTRAREGION	Whether ownership of the entitlement or allocations to the entitlement can be traded within the water system.
UOM	The unit of measure for the share of the consumptive pool defined in the entitlement.
VOLUME_	The volume or quantity associated with the entitlement. Note that some entitlements are not defined in terms of quantities.
FINANCIAL_YEAR	Financial year during which the trade took place. Derived from the registration date, if available, otherwise from the approval date or application date.
SOURCE	Original data source of the observation, for internal use.