A quick guide to the Cap register

In June 1995, the Murray–Darling Basin Ministerial Council agreed that the volume of surface water take in the Murray-Darling Basin (MDB) would be subject to a ‘Cap on Surface Water Diversions’ (the Cap). This decision was made in response to an audit of water use in the Basin and aimed to protect and enhance the riverine environment, and to balance ecological, commercial and social needs by limiting consumptive use to a sustainable level. Cap arrangements were formalised in a Schedule to the Murray–Darling Basin Agreement in 2000 (now Schedule E). The Cap applies to take from regulated rivers, watercourses and floodplain harvesting/overland flow. Following some preliminary reporting, the Cap and the Cap register began operating for the 1997–98 water year. In its current form the register is composed of eight tables that show:

- annual Cap adjustments for trade and environmental water
- annual Cap diversion targets and annual actual diversions
- annual and cumulative Cap balances.

The format of the Cap register is based on the approach adopted in Appendices A to H of the Water Audit Monitoring reports, which were published from 1994–95 to 2011–12. From 2012 onwards, as part of the transition to the new sustainable diversion limits under the Basin Plan, information about Cap compliance has been included in the MDBA’s transition period water take reports. For further information contact the MDBA’s Engagement Team at 1800 230 067 or engagement@mdba.gov.au.

Table 1 details the volume of allocation (i.e. temporary trade) trade from one Cap valley to another. It also includes an adjustment for entitlements that are permanently traded across valleys. This adjustment is made to the annual Cap target for each Cap valley in which trade occurred. Sign convention followed is that a positive (+) value represents a net volume traded in and a negative (-) value represents a net volume traded out.

Table 2 details the adjustment of annual Cap targets for the use of environmental water. This is required as compliance with the Cap is confined to consumptive use, and most of the hydrological models used to determine the annual Cap target include both environmental and consumptive water.

Each Basin state has nominated their preferred method for environmental water adjustments under the Cap. New South Wales and Victoria both employ the ‘usage method’ to determine their environmental adjustment, while South Australia employs ‘simple’ (or ‘bundled”) scaling. Adjustments for Queensland valleys are determined by the Cap models for each particular valley. For more information on the

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1 Excepting Queensland and the ACT, where Cap arrangements were formalised at a later date
2 Excepting the Wimmera-Mallee which determines the adjustment through the model for that valley
environmental water adjustment under Cap please refer to Appendix 7 of the Transition Period Water Take Report 2017–18.

**Table 3** details the annual Cap target for consumptive water after adjusting for trade and environmental water in Table 1 and Table 2. Before performing the trade and environmental water adjustments, annual targets are calculated by summing the annual target generated by a Cap model and any diversions that are outside of the model (e.g. unregulated diversions).

**Table 4** details the actual annual diversions that occurred in each year for each Cap valley. Diversions are calculated as defined in the Diversion Formula Register and includes any water taken or diverted during that water year, regardless of whether it originated from carry over, allocations in that year or purchase (i.e. trade in from other valleys). Actual diversions are based on metered or measured use where possible, annual estimates or long term averages.

**Table 5** details the annual balance after deducting actual diversions in Table 4 from annual Cap targets in Table 3 for each Cap valley. Sign convention follows positive (+) value as a credit (i.e. actual use was less than the Cap target) and negative (-) value as a debit (i.e. actual use exceeded the Cap target).

**Table 6** details the values from Table 5 on a cumulative basis since Cap commenced. The cumulative balance is the compliance test under the Cap for most, but not all valleys. On the left hand side of Tables 5 and 6, the Long Term Cap is provided along with and the Schedule E compliance trigger, which is 20% of the long term Cap except for Metro Adelaide and some Queensland valleys.

**Table 7** details the Cap compliance information for Metropolitan Adelaide, and shows the operation of the 5 year rolling balance used in that Cap valley.

**Table 8** compares the cumulative Cap credits for the last water year as determined using the best available data provided for the current water year, with those determined in the last water year. The Cap register is updated each water year with the best available information which may lead to variations between Cap reporting. Variations could be due to an updated model run (for determining the Cap target), changes in trade and environmental adjustments or improvements in accuracy of actual diversions.

**Assessing Cap Compliance**

If the compliance trigger for a given valley is exceeded, Schedule E of the Murray-Darling Basin Agreement requires the Authority to convene an Independent Audit Group to perform a special audit. If the special audit finds that the long term Cap has been breached, the Authority must declare that the relevant state has breached the Cap and report the matter to the Murray Darling Basin Ministerial Council. The government of the State in breach must then report to the Ministerial Council on why the Cap was exceeded, and the action to be taken to bring diversions back into balance with the Cap.

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3 Compliance for Metro Adelaide is determined by comparing the last 5 years of diversions with a Cap of 650 GL. Compliance in the Moonie, Nebine, Warrego and Paroo valleys is determined on the annual balance in any year.
Outcomes of compliance decisions were historically reported in either the Review of Cap Implementation or Water Audit Monitoring reports, and continues in the MDBA’s Transition Period Water Take reports. Special audits are available on the MDBA’s Cap compliance reporting webpage.