Managing surface water trade restrictions

Rules covered by this guideline

The water trading rules covered by this guideline are contained in sections 12.16–12.20 of Chapter 12 of the Basin Plan. This guideline should be read together with these sections.

Purpose of the rules

The purpose of the rules is to facilitate the trade of surface water where:

- water resources are physically shared, or
- hydrologic connections and water supply considerations will permit trade.

Increasing trade opportunities will facilitate the operation of efficient and effective water markets, including water reaching the most productive use.

Defined terms

This guideline contains a number of defined terms. These terms are defined in the Basin Plan 2012, the Water Act 2007 or the Water Markets Rules 2009. An explanation of these terms can be found at the end of this document.

Explanation of the rules

Section 12.16 requires that water access rights in surface water systems are able to be traded free of restrictions on a change in location from which the water can be taken. These rules apply within or between regulated systems or within an unregulated system.

The rules also require that volumetric limits cannot be used to restrict trades in regulated surface water systems (section 12.17).

However, the rules permit Basin States to impose a restriction on surface water trade under certain circumstances, such as to manage certain third party impacts or protect the environment (section 12.18).

Section 12.19 requires Basin States to notify the MDBA of all trade restrictions imposed under sections 12.16 and 12.17. A Basin State may also request the MDBA to make a declaration that a restriction is allowable (section 12.20).
There is a relationship between sections 12.16 and 12.17 and the right to trade free of certain restrictions set out in sections 12.06–12.15. When a restriction or volumetric limit on trade is deemed necessary, it must be applied consistently with section 12.06–12.15, such that no holder of a water access right is discriminated against.

**Who do these rules apply to?**

These rules apply to:

- Basin States.

**Scope of the rules**

The water trading rules under sections 12.16, 12.18, 12.19 and 12.20 only apply to water access rights for surface water that are traded within or between regulated systems or within an unregulated system.

The rules do not apply to:

- trades between a regulated system and an unregulated system
- trades between unregulated systems, unless they are solely separated by state boundaries.

Note: section 12.17 does not apply to trades within unregulated systems.

The Basin Plan defines regulated and unregulated systems (see Defined terms for more information). However, there may be some instances where systems have some elements of regulation, but are not fully regulated. In these circumstances, the MDBA considers that the application of the rules will need to be considered on a case by case basis. In the context of trade, it may be appropriate to consider the ability to enable trade in such a system without impacting negatively on third parties or otherwise having perverse outcomes. Factors to take into consideration when determining if a system is regulated include:

- the extent of controlled delivery of water from structures (e.g. dams) associated with trades
- whether it is possible to adjust water shares between water users in storages to reflect trades between valleys and/or between Basin States
- impacts of trade on water availability for other water users.

The free trade of surface water requirements under sections 12.16–12.18 are subject to sections 12.06–12.15 of the water trading rules (see Guidelines for Water Trading Rules: Right to Trade Free of Certain Restrictions). This includes the right to trade regardless of the class of a person or the purpose for which the water will be used. Hence, trade restrictions which are allowable under section 12.18 must not be inconsistent with other rights to trade.

**Rule requirements**

**Free trade of surface water**

Under section 12.16, a person may trade a water access right:
• within a regulated system; or
• between regulated systems; or
• within an unregulated system

free of any restriction on changing the location at which the water to which the right relates may be taken, other than a restriction that:

• is necessary because of a reason listed in section 12.18(1); and
• is consistent with sections 12.06–12.15 of the water trading rules.

In instances where a border between two Basin States intersects an unregulated system, section 12.16 applies as if it is one system.

Section 12.16 relates to restrictions on ‘changing the location at which water to which the right relates may be taken’. This includes:

• changing the trading zone of a water access right, if this change means that water that could previously be taken under the right in trading zone A is now available to be taken in trading zone B; or
• changing the specific point at which water under the right can be taken, e.g. by revoking an existing linkage with a location-related right (such as a water use approval or works approval) and establishing a linkage between the right and a different location-related right.

Under section 12.17, a person may trade a water access right within a regulated system, or between regulated systems, free of any volumetric limit, unless the volumetric limit:

• is necessary because of a reason listed in section 12.18(1); and
• is consistent with the non-discrimination rules in sections 12.06–12.15.

In section 12.17, a volumetric limit means a limit whose purpose or effect is to cap the total volume of water that may be traded out of an area. This applies to:

• direct limits, e.g. a cap on water access right trade out of area A; or
• indirect limits, e.g. a requirement that a certain volume of water access right must remain within a given area, or associated with a given area.

The section also applies to whether the limit is over a given period (e.g. an annual limit), or an absolute limit.

Allowable trade restrictions

While sections 12.16 and 12.17 require that trade in certain surface water systems is free of restrictions on changing the location and volumetric limits respectively, the rules permit Basin States to impose restrictions under certain circumstances. Section 12.18 provides that a trade restriction is allowable for the following reasons under section 12.18:

• the existence of a physical constraint; or
• the need to address hydrologic connections and water supply considerations; or
• the need to protect the needs of the environment; or
• the level of hydraulic connectivity; or
• a combination of any of the above.

The above reasons are typically used by Basin States in determining where trade may be possible. The following sections set out in more detail the key criteria for allowing a trade restriction. While the reasons will tend to be used similarly by all Basin States, they will vary across the Murray–Darling Basin and between states. Therefore, in some instances, consideration of restrictions will best be done on a case by case basis.

In practice, restrictions are often considered necessary because of a combination of these reasons rather than a single reason.

Note: Under the definition in section 1.07 of the Basin Plan, hydraulic connectivity applies to groundwater and is therefore only applicable to allowable restrictions set out in section 12.18 in limited circumstances.

**Physical constraint**
A trade restriction may be allowable despite sections 12.16 and 12.17, if it is necessary because of a physical constraint (section 12.18(1)(a)). A physical constraint is defined in the Basin Plan (section 1.07) as ‘a natural formation or a physical structure that limits the volume of water that can pass a given location’.

A physical structure may be a channel or pipeline augmenting a water supply to a location that may otherwise not be connected. A natural formation may be a natural constriction in a river which limits the volume of water moving down the river.

The capacity of the channel or pipeline would limit the volume of water that would be available at a given location. Hence delivery of water to a location for a trade may be less than the actual traded volume. A subsequent restriction may be imposed because of such a limitation.

An example of a physical constraint is the Barmah Choke on the River Murray System, which is a natural restriction in channel width and bank height that significantly limits the water carrying capacity of the river channel. Trade from upstream to downstream may be restricted because of the natural constriction limiting the amount of water which can be delivered for a trade without exceeding channel capacity.

**Hydrologic connections and water supply considerations**
A trade restriction of a kind referred to in sections 12.16 and 12.17 may be necessary and allowable under the water trading rules to address hydrologic connections and water supply considerations. This includes:

• the amount of transmission loss (section 12.18(2)(a))
• the potential impact on third parties as a result of trades (section 12.18(2)(b))
• the ability to deliver water from storages (section 12.18(2)(c)).

Each of these factors is discussed in more detail below.
Transmission losses
Restrictions on trade may be allowed because of the need to address transmission losses under section 12.18(2)(a). Transmission losses may be incurred through evaporation, seepage or other means, as a result of trades that involve changing the location at which the water to which the right relates may be taken.

The application of the rate of transmission loss to trades may vary depending on climatic conditions, distance over which water is to be delivered and river levels. While transmission losses are highly variable across the Murray–Darling Basin, they are more pronounced in unregulated systems. Losses will generally be lower in regulated systems because of the level of control of flows within and between storages and channels.

Restrictions on trade, based on transmission losses will be influenced by the policy position of each Basin State. States determine the acceptable levels of losses and the policies to socialise or not socialise losses. Typically there will be a trade-off between the benefits of allowing trade (and therefore allowing water to move to its most productive use) and the impacts on third parties.

In some cases, a Basin State will determine that transmission losses are considered small enough to be socialised (i.e. be worn by all users) within the water management area. For example, in the Murray system total conveyance losses (e.g. transmission losses) are socialised under the Murray–Darling Basin Agreement. In other circumstances, trade may be permitted, but transmission losses will be required to be borne by the water user undertaking the trade. In both of these cases, no restrictions on trade should be imposed because there is an acceptable mechanism to address the loss.

Note: consideration of transmission losses for water access entitlement trades should be undertaken with reference to the Guidelines for Water Trading Rules: Use of exchange rates.

Impact on water availability for third party water access right holders
Schedule 3 of the Water Act sets out the water market and trading objectives for the Murray–Darling Basin. One of these objectives includes providing appropriate protection of third-party interests.

For the purposes of the Basin Plan water trading rules, the MDBA intends that third-party impacts are considered in the context of impacts on water availability.

Section 12.18(2)(b) of the Basin Plan allows for a restriction on trade to protect certain third-party interests. In particular:

- the potential impact, as a result of the trade of a water access right, on water availability in relation to a water access right held by a third party (other than an impact arising solely because of an increase in use of the traded water access right).

There are trade-offs between the benefits of water trade (allowing water to move to its most productive use) and the potential impacts to water availability of other water access right holders. There will be a level of judgment required by Basin States in considering what the appropriate degree of protection is.
The MDBA considers that when a Basin State imposes a restriction based on such potential impacts on third parties, this should include consideration of the benefits of trade and costs to other water users of the removal of a restriction. This is likely to include consideration of the significance and level of risk of the restriction in question, and will vary on a case by case basis.

The ability to deliver water from storages or adjust wholesale accounts
Section 12.18(2)(c)(i) considers the ability to deliver traded water from storages. This criterion is primarily applicable to regulated systems.

In a regulated system, water access rights are delivered from storages depending on the water resource availability at the time. Some rules allow for trade adjustments in storage to accommodate trades between valleys and Basin States (where water is shared between Basin States, such as in the River Murray System).

Where it would not be possible to deliver water from the storage(s), or there is no ability to adjust valley or state transfer accounts (i.e. wholesale accounts) to facilitate trade, then a Basin State may be permitted to impose a trade restriction under section 12.18(2)(c)(ii).

The need to protect the needs of the environment
Schedule 3 of the Water Act sets out the water market and trading objectives for the Murray–Darling Basin. One of these objectives includes recognising and protecting the needs of the environment.

Section 12.18(1)(c) of the Basin Plan allows for a restriction on trade because of the need to protect the environment.

The intent of the rule is to allow restrictions on trade where it could result in a detrimental impact to the environment. A relationship between trade and environmental harm or damage may exist if a trade results in changes to patterns and volumes of water delivered. Examples of environmental impacts because of trade may include:

- adverse impacts within the channel if river height is suddenly adjusted due to the delivery of traded water, e.g. channel erosion
- trade occurring from downstream to upstream reducing flows required to meet ecological objectives downstream
- overbank flows (due to the delivery of traded water) leading to unseasonal watering of an adjacent wetland with negative ecological impacts
- negative impacts on water quality downstream if accumulated salt deposits are mobilised, or changes occur in the connectivity between a highly saline groundwater system and a river.

The significance of changes in water delivery patterns and volumes will depend on the magnitude of the volumes traded. In some instances, small changes may not result in a noticeable impact but if large volumes of water are traded, a detrimental impact to the environment may be observed (or foreseeable).

In determining the needs of the environment, Basin States should consider the environmental objectives under the Basin Plan. Section 8.04 of the Basin Plan sets out the overall environmental
objectives of the Basin Plan to protect and restore water system ecosystem functions of the Murray–Darling Basin. Relevant considerations include:

- the environmentally sustainable level of take
- Basin-wide environmental watering strategy
- Basin annual watering priorities
- valley-based annual watering priorities.

It may also be useful for Basin States to consider the precautionary principle set out in section 8.38 of the Basin Plan. This principle states:

- a lack of full scientific certainty as to whether there are threats of serious or irreversible environmental damage should not be used as a reason for postponing measures to prevent environmental degradation.

The MDBA intends that if a Basin State decides to impose a restriction to protect the needs of the environment it should be able to explain the negative environmental impact that approving such a trade was anticipated to cause.

Use of this restriction should recognise the relationship with section 12.06–12.15 of the water trading rules, in particular section 12.07, which provides that a person may trade a water access right free of any restriction that relates to the person being, or not being, a member of a particular ‘class of persons’. Examples of classes of persons would include environmental water users or environmental water holders. The MDBA considers that restricting trade to protect the needs of the environment should not be used as a vehicle to give priority to the trade of (the class of) held environmental water over other users.

**Basin States notify the Authority of restrictions**

If a Basin State imposes a restriction on trade of a kind referred to in sections 12.16 or 12.17, it must notify the Authority of its decision and reasons for the restriction (section 12.19).

The MDBA considers that notification should include restrictions that are currently in place as well as conditional restrictions that may be put in place in particular circumstances. This avoids the requirement to notify the MDBA of every instance where the conditional restriction is utilised.

A Basin State is required to provide notification of a restriction:

- within 30 days after the commencement of the Basin Plan water trading rules for those restrictions which are in effect at the commencement of the rules; or
- otherwise no later than the date of effect of the restriction.

The MDBA considers that the detail that is required to be provided on the reasons for the decision will depend on the nature of the restriction in question. In some cases, a restriction will be for a single reason and straightforward in nature. In other cases, reasons may draw on a range of information and involved sophisticated judgements.

The MDBA considers that notification of restrictions should include:
• restrictions that limit trading activity outright; and
• restrictions that may only be triggered under specific conditions.

For example, a Basin State may have a rule that allows a Minister to restrict trades based on certain conditions such as the likelihood of storages spilling. While the Minister may allow some trades to proceed under this rule, the restriction on trade may be triggered at a later point in time if conditions changed.

**Basin State may request the Authority to make a declaration of a restriction**

Under section 12.20 a Basin State may request the Authority declare that a restriction of a kind referred to in sections 12.16 and 12.17 is necessary because of a reason set out in section 12.18. The request to make a declaration can be made by a Basin State imposing the restriction or by another Basin State (section 12.20(1)(a)).

The Authority must be satisfied that the restriction is allowable under section 12.18 (section 12.20(1)(b)). The Authority may consult other Basin States, the Australian Competition and Consumer Commission and any other interested parties when considering a restriction (section 12.20(2)).

The Authority’s declaration will only consider the reasons set out in section 12.18 relevant to the application of sections 12.16 and 12.17. A declaration by the Authority under section 12.20 does not have the effect of allowing restrictions that would otherwise contravene any other Basin Plan water trading rules (including the rules in sections 12.06–12.15).

The Authority must publish any declarations on its website and its reasons for being satisfied that the restriction is necessary (section 12.20(3)). The declarations process is set out in **Appendix A**.
Defined terms

The following defined terms are contained in the Basin Plan 2012, the Water Act 2007 or the Water Market Rules 2009.

Held environmental water means water available under:

• a water access right; or
• a water delivery right; or
• an irrigation right;

for the purposes of achieving environmental outcomes (including water that is specified in a water access right to be for environmental use).

Hydrologic connections and water supply considerations, in relation to a water access right, means any of the following:

(a) the amount of transmission loss that may be incurred through evaporation, seepage, or other means;
(b) the potential impact, as a result of the trade of a water access right, on water availability in relation to a water access right held by a third party (other than an impact arising solely because of an increase in use of the traded water access right);
(c) the ability to:
   (i) deliver water from the same storage from which it is currently delivered; or
   (ii) adjust valley and state transfer accounts to facilitate trade, for example by way of a back trade.

Physical constraint means a natural formation or a physical structure (e.g. a pipe or channel) that limits the volume of water that can pass a given location.

Regulated system means a surface water system in which water in a watercourse can be stored or flow levels can be controlled, through the use of structures such as large dams or large weirs.

Restrict, in relation to trade, includes refuse, prevent, deter, delay or impose a condition or a barrier on, and restriction has a corresponding meaning.

Surface water includes:

(a) water in a watercourse, lake or wetland; and
(b) any water flowing over or lying on land:
   (i) after having precipitated naturally; or
   (ii) after having risen to the surface naturally from underground.

Surface water resource means a Basin water resource consisting of:

(a) surface water; or
(b) a watercourse, lake or wetland (whether or not it has water in it).

Trading zones means zones established to simplify administration of a trade by setting out the known supply source or management arrangements and the physical realities of relevant supply systems within the zone so that trade can occur within and between zones without first having to investigate and establish the details and rules of the system in each zone.

Unregulated system means a surface water system that is not a regulated system.
**Water access right**

(a) means any right conferred by or under a law of a State to do either or both of the following:
   (i) to hold water from a water resource;
   (ii) to take water from a water resource; and

(b) without limiting paragraph (a), includes the following rights of the kind referred to in that paragraph:
   (i) stock and domestic rights;
   (ii) riparian rights;
   (iii) a water access entitlement
   (iv) a water allocation; and

(c) includes any other right in relation to the taking or use of water that is prescribed by the regulations for the purposes of this paragraph.

**Water access entitlement** means a perpetual or ongoing entitlement, by or under a law of a State, to exclusive access to a share of the water resources of a water resource plan area.

**Water resource** means:

(a) surface water or ground water; or

(a) a watercourse, lake, wetland or aquifer (whether or not it currently has water in it);

and includes all aspects of the water resource (including water, organisms and other components and ecosystems that contribute to the physical state and environmental value of the water resource).

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**Disclaimer:** This Guideline is one of a series of guidelines on the water trading rules and as such it may be appropriate to also consider the information that is set out in other guidelines.

The provisions in the *Water Act 2007* and the *Basin Plan 2012* govern the water trading rules. All decisions regarding the water trading rules need to be made by reference to these laws. This Guideline is intended as guidance only and does not constitute legal advice. Users should seek their own legal advice where appropriate. This Guideline has no statutory force.

Whilst decisions in relation to water trading rules may consider this Guideline, decisions will be based on the aforementioned laws. Reasonable care has been taken in the compilation of this Guideline, however the Murray–Darling Basin Authority does not guarantee or warrant the accuracy, or completeness, or currency of its contents and shall not be liable for any loss or damage that may be occasioned directly or indirectly through the use of or reliance on this Guideline.

Note that the Guideline will be a living document, to be updated from time to time, in consultation with relevant stakeholders, in order to incorporate new knowledge and best practice.
Declarations process for a restriction on surface water trade under section 12.20 of the Basin Plan

Model timeline

Trigger for a declaration request

- A Basin State decides to impose or is imposing a restriction of a kind referred to in sections 12.16 or 12.17; and
- the Basin State notifies the MDBA of a restriction within that State and the reasons for the restriction; or
- a Basin State affected by the restriction requests a declaration from the MDBA stating that the restriction is necessary for a reason under section 12.18.

Request for declaration

- A Basin State makes a formal request to the MDBA’s Chief Executive, in writing, seeking a declaration that the restriction imposed is necessary. If the request is from the Basin State imposing a restriction, the request must include the reasons for the restriction.
- The MDBA will aim to acknowledge receiving the request for a declaration within five working days. The acknowledgement will be provided to the requesting state and the state imposing the restriction (if different).
- If the request has been made by a Basin State that has not imposed the restriction, the MDBA may make a request for information from the Basin State imposing the restriction.

Determination

- The MDBA assesses whether or not the restriction is necessary for reasons under section 12.18.
- The MDBA may at its discretion, consult with Basin States, the Australian Competition and Consumer Commission and any other relevant parties before making a declaration.
- Depending on the nature of the restriction, the MDBA will endeavour to make a declaration within 30 working days after the acknowledgement of a request for a declaration.

Publication of the declaration

- The MDBA must notify the requesting Basin State and if applicable, the Basin State that imposes the restriction of the outcome and the reasons for the outcome, in writing.
- If the MDBA determines that the restriction is necessary under section 12.18, the MDBA must publish the declaration, and its reasons for being satisfied that the restriction is necessary.
- If the MDBA determines that the restriction is not necessary under section 12.18, the MDBA may proceed with making a declaration to this effect (however, this is optional and will be determined on a case by case basis).
- The MDBA must publish the declaration and its reasons for being satisfied that the restriction is necessary on its website (www.mdba.gov.au).