

South Australia's comments on the Water trading rules issues paper

The water trading rules issues paper contains a total of 74 questions (as well as calling for submissions on water trading issues not otherwise covered) in chapters 5-11 of the issues paper.

As an overall comment South Australia believes that the ACCC advice regarding water-trading rules should be feasible, provide net benefits and help to integrate the water reform process. This feasibility needs to facilitate a balance of timeliness for short-term drought driven actions against longer-term trade reform.

Important aspects that will require further understanding by the ACCC are:

- Clearer understanding of how water rights will operate and be used in a separated environment
- Need to have regard to the fundamental principles of hydrology in all considerations
- A number of issues which are yet to be resolved in the development of the Basin Plan will have significant impact on any final water trading rules and associated advice. These issues include critical human needs, carryover provisions, dilution flows and losses, and system flow targets.

South Australia's replies to each of the questions posed in the issues paper is presented below.

Water access rights—rules relating to ownership

Question 5–A Are there situations where a requirement for co-holder approval for a subdivision of a water access right should not apply?

In South Australia all holders of a water right must be parties to any applications to subdivide a water access right, although this could be overcome if all or any of those individual owners delegate that right to another party in writing for that other party to exercise. In respect of corporate entities this obligation also applies but would be governed by corporations law on the application of authorised officers. There may also be issues if a co-holder is deceased. The new schedule 3A of the *Natural Resources Management Act 2004* (the Act), once it comes into force, provides a basis for dealing with such situations

Question 5–B Should the ownership of water access rights be restricted for any particular individuals? If so, on what basis?

South Australian legislation allows for a range of reasons to refuse the granting of a Water Access Entitlement, but these are mainly linked to whether the person has acted in breach of the Act, has had a previous authorisation cancelled etc. However the Act allows refusal on any reasonable ground.

Under the Act, a water licence (including its allocation) or the whole or part of an allocation may be transferred to any other person, subject to the approval of the Minister. The Minister may refuse a transfer to a person who has acted in contravention of the Act.

In contrast to Victoria, South Australia does not impose a cap on the proportion of water access entitlement in a water system that may be held by non-water users. However, there may be occasion in South Australia when ownership of some water access rights may be limited. For example the Environmental Land Management Allocation (ELMA) water access rights will only be granted to specific landowners for environmental land management purposes on particular land, and are not tradeable further.

Water access rights—rules relating to location

Question 6–A What improvements (if any) could be made to the way in which:

(a) physical constraints

(b) environmental limits

are incorporated into water trading rules?

In an unbundled environment, extraction and use are managed pursuant to regulatory approvals that are separate to water access entitlements and water allocations. Water ‘trading’ rules should not be concerned with ownership transfers but with managing extraction and use in relation to physical constraints and environmental limits. Although trading rules have governed the same issues in a bundled environment, with unbundling, trading rules might instead be conceptualised as extraction and use limits that affect only the (non-tradeable) regulatory approvals, not the trading of water access entitlements and allocations (see attachment 4 of the Minister’s response). Trading rules should not be used to restrict ownership transfers. However, the practical effect of ownership transfer often means a change in the location of extraction and/or use. There may need to be clearer specification of extraction and/or use limits in a particular zone or at a particular site.

For example, there may need to be clearly specified caps on use to deal with potential externalities such as salinity or environmental impacts. This would not constrain the transfer of the water access entitlement, but would potentially constrain the use of water at a particular site.

As trading rules are static, being set out in a water resource plan or the Basin Plan for the life of that plan, there needs to be mechanisms that enable extraction and use approvals to be varied as water moves to different areas, in the same way that continuous accounting should be used for administration of the 4% interim threshold limit for transfers of water access entitlements.

Question 6–B On what basis are water trading zones defined? Are there examples of where trading zones have been set too narrowly? Too broadly?

MDB zones are based on a mixture of physical, hydrological and administrative regions.

There is only one trading zone in the South Australian Murray-Darling Basin (SAMDB). It is defined hydrologically and the South Australian/Victorian state border to the east is the only administratively imposed part of the boundary. South Australia has a number of MDBA Cap related administrative zones within the one trading zone.

Environmental rules in water allocation plans about end of system flows or water required for specific environmental functions might limit water trade. These rules can also limit the volume that can be used in a specific area, to avoid water logging or salinity issues.

Severe low flow conditions have the potential to create artificial zones due to lack of extractable water in an existing zone. This may be either through physical lack of water or delivery of water that is not fit for purpose.

Question 6–C What scope is there to introduce trading zones where there are none already in place?

Scope exists to introduce trading zones where none are currently in place, however, there are complexities that need to be addressed (e.g. trading from unregulated to regulated systems, direction and volumes of trade, setting of and meeting end of system environmental targets) at the local and state level before trade from these zones can be established.

Trade between various groundwater management zones with good hydrological connection could be considered, for example between management zones in the Border Groundwater Agreement with Victoria and South Australia.

In all the prescribed MDB water resources of South Australia except the River Murray (eg Mallee and Marne Saunders and the Eastern Mount Lofty Ranges) there are forms of internal trading zones either in place or proposed that provide for the development of trading rules that specifically manage the trading of water within or between these zones.

Question 6–D What restrictions (if any) relating to carryover should apply to the trade/transfer of water access rights?

Ideally there would be no restrictions to carryover. Failing this then the benefits of any restrictions need to outweigh their costs.

The MDB Agreement 2007 needs to be taken into account as part of any consideration of carryover for state storage rights and for critical human needs. The Authority is required to draft a new Schedule to this end as soon as practical (Schedule 1, C130 (1) to the *Water Act 2007*). This Schedule will also need to consider spill rules and the order of spills. Individual carryover and the associated capacity sharing issues will hopefully be considered in this schedule. This Schedule should be developed and in place before the finalisation of the ACCC water trading advice to the Authority.

While carryover allows flexibility to the owners of water access entitlements, there are physical and environmental limitations to carryover.

The occurrences of end of system flows and unregulated flows that benefit the environment need to be considered when determining carryover provisions. The provision of carryover arrangements should not be to the detriment of the environment.

There is no reason to restrict carryover for water allocations traded in compared to water allocations obtained directly from a water access entitlement. Carryover

provisions should clearly apply to the water allocation, not the water access entitlement. Where holder of a water allocation has an unused water allocation at the end of the water year, the holder of that unused water allocation should be eligible to apply for carryover, irrespective of whether the person obtained the water allocation on account of their own water access entitlement or as a result of a transfer from another person's water access entitlement

Carryover should provide for any unused allocation at the end of a year to be carried over subject to an ability to provide the carried over allocation in the subsequent year eg access to reliable storage, or ability to store that water within the system. Where this retention for later use is not possible due to lack of system regulation of other matters, and the extraction on those carried over amounts in future years will adversely impact on the holders Water Access Entitlements (WAE) being granted an allocation then further control should be investigated.

Question 6–E What are the advantages and disadvantages of imposing an adjustment for conveyance losses on the trade / transfer of a water access right? How should the adjustment be calculated?

[Not clear why this question is only about entitlements and not also about allocation – i.e. if there were a case for imposition of conveyance loss on entitlement transfer, the same should apply to allocation transfer. Also not clear whether question is about any conveyance losses, or only those in districts. The comments below are in relation to the system generally, not within district losses.]

In principle, there could be advantages in being able to impose a conveyance loss adjustment on water access entitlement transfers; however, in reality, it may not be practicable. One advantage would be that water access entitlement holders, rather than third parties, including the environment and system flows, bear the losses.

However, in practice, it is unlikely to be feasible to accurately calculate a conveyance loss adjustment, partly because the impact of an individual water access entitlement transfer on overall system flows (and therefore conveyance losses) at a point in time is likely to be indiscernible. It would be necessary to establish the marginal loss attributed to a particular transfer, as distinct from the conveyance loss that would have occurred without that transfer.

While it might be relatively straightforward in conceptual terms to impose a loss on an upstream to downstream trade, it is another question as to how to treat a downstream to upstream transfer. In developing exchange rate trading, it was agreed that there could not be an exchange rate greater than 1.0, to avoid arbitrage. Were there to be any conveyance loss imposition on transfers, a similar rule would be required to avoid any expectation of a conveyance 'credit' on downstream to upstream transfers. However, if the entitlement transfer is a tagged trade (eg Murrumbidgee to South Australia) and the tag changes (eg Murrumbidgee to Sunraysia), the conveyance loss adjustment would need to be able to change, even though this change in the 'tag' could be regarded as constituting a downstream to upstream movement of water.

A disadvantage of imposing a conveyance loss factor relates to the fact that, from an overall system health perspective, moving water downstream is preferred as water can have additional system benefits before it is extracted for consumptive use. Imposition of a conveyance loss factor could be regarded as disincentive to trade, both by

individual parties to a potential trade, and by the irrigation sector as a whole. Adjustment factors imposed for other purposes (eg trade adjustment factor to reduce overall allocation level) have been criticised as posing a barrier to trade. Imposition of a conveyance loss adjustment factor would, over time, result in less water being available for consumptive use than has been allowed through the planning and allocation process if, as suggested above, downstream to upstream transfers were not able to get conveyance 'credit'.

Another challenge is implementing such a system in an unbundled environment. The transfer of the water access entitlement only affects ownership of that entitlement. Any physical change in the location of the extraction is governed by the relevant regulatory approval, and (if applicable) the tagged trading arrangement. To impose conveyance losses would require a system that makes the adjustment at the time a tagged trade is established, varied or cancelled, or when a works approval is varied. *[A practical limitation may be where, for example, a person holds a works approval authorising extraction of an amount greater than their currently held water access entitlement. Additional water entitlement could be acquired that is still within the extraction capacity authorised by the works approval.]*

As a general principle, conveyance losses should not be imposed on water access entitlement transfers.

South Australia notes that there may be situations where conveyance losses are borne by the entitlement holder, regardless of trade rules. For example, in the case of water access entitlement acquired for environmental purposes for use in the lower Murray system or the Lower Lakes.

Not accounting for losses could contribute to problems of extraction exceeding sustainable levels.

Adjustments for conveyance losses have implications for South Australia in relation to the delivery of water to South Australia and within South Australia as well as for Cap adjustment. South Australia's across border flow is to cover extractions, losses and dilution. There are established loss calculations for transmission in relation to water supplied to South Australia (shared three ways from Hume to South Australian border, then totally borne by South Australia within South Australia). Under normal conditions South Australia receives 696GL annually to cover losses and dilution in the river channel. This 696GL is delivered according to an established monthly pattern outlined in the MDB Agreement 2007.

Transmission losses in open channel irrigations systems (lined or not) are serious issues in NSW and Victoria.

Question 6-F Are there any concerns with the arrangements for the trade/transfer of water allocations ('temporary' trade) between Basin states?

Unbundling water rights in each of the States should make water allocation trade quicker and more efficient.

Streamlining the application process, for example by having more uniformity in forms and required information may assist, but each state has slightly different requirements due to legislative differences.

Question 6–G How could tagging arrangements for ‘permanent’ trade be improved?

Permanent trade requires greater checks, as it is the permanent transfer of a right. Implementation of separation of water rights will make this process more straightforward and quicker.

To date the limitations on the trading of water rights within or into SA have been largely as a result of site use limitations or environmental clearances.

Following separation, Site Use Approval (SUA) will not affect the right to trade a WAE or allocation. One of the benefits of tagging was getting approval at a date in time for the trade that would last into the future if rules changed.

Tagging seems to provide flexibility to irrigators as it assists develop a portfolio of water resources from different trading zones with different administrative arrangements for example permitted level of carry-over.

Question 6–H Are there areas where the opportunity to trade/transfer water access rights between Basin states could be expanded? What measures would be necessary for this to occur?

The issues once again come down to hydrological, environmental and extraction.

There is the opportunity to consider enabling groundwater trade between South Australia and Victoria in the area covered by the Border Groundwater Agreement 2006, part of which falls within the Basin. Legislative and administrative changes to the relevant water plans in South Australia and Victoria would be required to establish interstate trading.

Any trade considerations involving the Darling system require major consideration of transmission losses and occurrences of unregulated flows to South Australia. Major accounting and water sharing considerations affecting all three southern connected states would need to be considered.

Question 6–I Are there any concerns with the arrangements for the trade/transfer of water allocations (‘temporary’ trade) between regulated water systems within Basin states?

Refer to the replies to questions 6-F and 6-K.

Question 6–J Should trades/transfers between unregulated systems be permitted? If so, what measures could be taken to ensure that water reaches its intended recipient?

From a conceptual position such trade should be permitted. However, the feasibility and net benefits of doing so would need to be considered. See also 6-D.

Question 6–K What are the advantages and disadvantages of permitting the trade/transfer of a water allocation:

(a) from a regulated system to a (connected) unregulated system?

(b) from an unregulated system to a (connected) regulated system?

Do these factors differ depending on which system is upstream? What arrangements would be necessary to facilitate these trades/transfers?

From a conceptual position such trade could be permitted. However, the feasibility and net benefits of doing so would need to be considered.

When considering trade from an unregulated system, whether it is episodic, ephemeral or intermittent, into a regulated system the hydrogeological factors must be the overriding consideration. The security (reliability) of flow from an unregulated system into a regulated system is one of the main hydrologic factors that need to be considered. The accounting of such flows also must be considered.

Transfers of water from a regulated to an unregulated system would require identification and accounting of water that was transferred to the new allocation holder's extraction point. This would be required to ensure that another extractor on the unregulated watercourse did not take the water traded from the regulated system before it reached the extraction point of the new owner of the water.

Question 6-L Under what circumstances should a trade/transfer between a ground water system and a surface water system be permitted?

The hydrological and hydrogeological considerations need to be the overriding guide. As noted by the ACCC it is unlikely that this would or should occur, unless the systems have a hydrological connection close enough to enable a precise relationship to be established on water movement over time. Even if the groundwater surface water connection could be established, the ability of the associated accounting system would need to be at the same level of sophistication and precision to account for such transfers.

Question 6-M Are there any issues of concern about changes in the location of water access rights within a regulated system?

Trading zones should not be limited by state boundaries, but should be based on hydrological characteristics (eg physical constraints) and environmental factors.

Only ownership (not location) of the water access entitlement may change; it is the associated approvals to take and use water that enable change in location of taking and use. For various reasons, there can be limits to allow that change of location in taking or use, for example salinity impacts, water table impacts, downstream impacts on unregulated flows or end of system flows, impacts on flows to particular environmental assets.

Question 6-N Are current arrangements sufficient to limit potential third party impacts from trades/transfers that change the location of a water access right within an unregulated system?

In most cases the current measures are adequate for third parties when they are consumptive users, but may not be adequate when the third party is an environmental asset or the end of the system.

In South Australia's unregulated systems (eg Marne Saunders prescribed water resources area), the trading rules are such that they seek to limit the third party impacts.

Question 6–O Are third party impacts adequately addressed in relation to changes in location within ground water systems?

Most South Australian water allocation plans adequately address these issues through circles of influence around wells, well distance rules, maximum draw downs, buffer zones around permanent pools, etc.

Question 6–P How could the trade/transfer of ground water access rights be made more efficient?

Where possible trade/transfer of groundwater should be facilitated as it would support more efficient use of the groundwater resource. Groundwater trading is well established in South Australia, where groundwater is a significant resource and has been traded for many years. Groundwater trade in South Australia is allowed subject to the relevant water allocation plan and Border sharing arrangements, which are in place to manage sustainable resource limits and third party impacts.

When water licences for groundwater resources are unbundled, water access entitlement transfers will be more efficient, as conditions relating to the extraction and use of that water will be managed through separate approvals.

Question 6–Q Should there be any specific rules imposed relating to the trade/transfer of water access rights to locations outside of the MDB? On what basis should these be imposed?

Apart from the need to accommodate the management of environmental externalities such as salinity there should be minimal restrictions on the trade/transfer of water access rights out of the MDB. The main concern is that each state and each valley complies with its Cap on diversions. How water is allocated within the Cap is a matter for the relevant Basin state.

As noted elsewhere in this response, the water access right may be traded to any person and does not change location. Water access rights may be traded to persons outside the Basin. The taking and use of water allocated pursuant to the water access right is governed by the relevant regulatory approvals. The taking will necessarily occur in the Basin; the use of water may occur outside the Basin (as in the case of the Clare Valley, or metropolitan Adelaide). The extraction approval regulates the impacts of taking water in the Basin, and applies whether or not the water is used in the Basin. In situations where use occurs outside the Basin, the use approval is regulating potential environmental impacts in the destination, not in the Basin.

Trade of large volumes out of the system should only be allowed when it does not affect water quality, "rules-based" environmental water reliability or flow targets downstream.

The ability of parties to move water from a point of extraction to a point of use some distance away is not specifically about trade eg Victorian Sugarloaf inter-connector pipeline. It is expected that the WAE and allocation would still be connected to the original resource, and its extraction point will be on or at the original resource, its only the use of the water subject approvals for the resource at the end of the "pipe".

Water access rights—rules relating to other matters

Question 7–A What are the advantages and disadvantages of allowing a change in the priority class of a water access right?

The advantages of allowing a change in priority class of a water access right include users being able to secure water access rights to match their enterprise requirements. However, users are able to achieve this outcome by purchasing the water access right of the desired priority class in the first place. This is further supported by the interstate trading arrangements, which provide water users with a greater spectrum of water products than that exist within their own state or trading zone. Another advantage is that it enables the distribution of water across different priority classes to reflect (on an ongoing basis) the demands of water users. That is, it enables the relative distribution of the resource amongst different priority classes to be varied according to individual decisions (ie applications for conversion). The alternative is to only allow the size of each class to be collectively determined through the planning process, which occur may only every five or ten years.

The major disadvantage is the reliance on exchange rates in order to maintain overall integrity of each class and avoid perverse outcomes. It has proven difficult to establish robust exchange rates for interstate trade in the southern MDB that completely avoid perverse outcomes (such as compromising reliability of other water access entitlements) and opportunities for arbitrage.

Question 7–B Does defining a specific purpose for a water access right create a barrier to trade?

A defined specific purpose only presents a barrier to trade if that water could only be used for the specified purpose, essentially quarantining that water from other purposes and severely limiting its value for trade.

There are some specific cases where the definition of purposes and conditions on the licence endorsed with the WAE can be justified, for example Adelaide metropolitan water supply, or ELMA water that has been applied to land to avoid salinisation. In some cases trade in water access entitlements may be limited, but not allocation trade. For example it is quite feasible to limit the trade of environmental water access entitlements, but allow trade of allocation to other purposes.

Question 7–C Should there be any restrictions on the trade/transfer of water to urban areas within the MDB?

Overall trade between urban and irrigation areas should be facilitated.

See answer to question 6-Q.

The issue is not about trade but about the allowing the level of extraction from a resource such that it reduces the security of all users and particularly those users that have a lesser human need eg people and animals first and plants later on.

As a general principle, there should not be restrictions on trade to urban areas within the MDB. This is consistent with the overarching trade objective of enabling water to

move to its highest value use. Urban (town water) requirements are usually provided through the water planning process. In cases where water allocated through the planning process is insufficient, it is reasonable to enable trade to augment urban water supplies; however, there are concerns in the rural sector about the purchasing power of large urban water providers and the impact this could have on rural water markets and potential water market participants.

Question 7–D Should it be possible to trade/transfer stock and domestic rights? If so, what conditions should apply?

To the extent that stock and domestic rights represent a significant water use they would need to have access rights that should be tradeable. If it is riparian rights water, it obviously cannot be traded. Whilst South Australia does licence stock and domestic water rights on the River Murray prescribed watercourse and they are tradable, they are not licensed in areas such as the Mallee prescribed ground water resource.

Transfer of stock and domestic rights with the transfer of the associated block of land should be allowed. There are practical challenges with establishing tradeable stock and domestic rights on a broader basis, including the need to meter a very large number of small users and compliance issues, such as verifying that, where a licence has been sold, stock and domestic water use has ceased or is being supplied via another source (eg mains water or rainwater tanks). Trading of stock and domestic entitlements could also have consequences for future landholders who acquire land that no longer has a stock and domestic entitlement. Often, particularly in peri-urban areas, the number of stock and domestic users has increased as land parcels have been subdivided. This has been accommodated in water planning by reviewing the amount of water estimated for stock and domestic water use as part of the water budget. Where tradeable entitlements are established, it could either limit the potential for subdivision, or would require periodic release of further stock and domestic entitlements to accommodate the growing number of users. Any release of new stock and domestic entitlements would need to be through a market-based mechanism, consistent with the NWI, in order to avoid distorting the existing market. Water planning processes would need to set aside water for future release, or would need to explicitly reallocate water from other uses, which could be contentious.

Question 7–E To what extent, and how, should water trading rules provide for the needs of environmental water-holders?

The water trading rules should provide for the needs of all water users. Environmental water holders need flexibility to apply water to a series of sites, in accordance with identified priority for that particular time. They also need flexibility to sell allocations they do not require in a particular year.

Question 7–F What are the advantages and disadvantages of requiring the possession of a relevant water use approval as a condition of approving a trade/transfer?

Once South Australia has unbundled water rights, a person does not need to have a site use approval to trade water. Having to possess a water use approval prior to purchase defeats a key advantage of separation. The trade is about the water; while the use approval controls use.

Such a requirement could potentially limit the ability of those without land to trade (and hold) water. This has implications for environmental or urban water users, as well as prospective rural water users (i.e. who intend to but have not yet acquired land).

Question 7–G To what extent, and in what way, should water trading rules attempt to address:

(a) salinity

(b) other environmental issues

arising from changes in the timing and level of river flows (in contrast to the impacts of water use on land)?

Overall the water trading rules should be able to accommodate such externalities

This should be handled through clearly identified end of system flow targets, dilution flow targets or flow targets at particular sites (the rules based part of water management). In essence there is a critical river needs volume that is required to keep the river healthy and this should sit outside the sustainable diversion limit. Flow rates, timing, and weir pool manipulation would require a much finer and quicker real time models of river operations and integration of planning than currently exist.

Question 7–H Are there other examples (besides the 4 per cent rule) of volumetric limits on the amount of water that can be traded/transferred out of particular areas?

The Victorian 10% non-water user limit, which restricts the amount of water access entitlement of a water system that can be held by non-water users, and the lack of a schedule, which covers water markets and trade between the northern and southern basins, are examples.

South Australia has a five-year 650GL non-tradeable South Australia water licence for Adelaide. This is related to related critical human needs. Another example of a volumetric limit is the ELMA water trade restrictions, which directly relate to environmental health and salinity prevention issues.

If there are areas where water use needs to be limited because of salinity impacts, this is managed through a cap on site use approvals. If there are parts of a river, where the volume of water to be taken should be limited, because of impacts to specific sites or third parties, this can be handled through the water resource works approvals.

Question 7–I What are the arguments for and against volumetric limits on the permanent trade of water access rights out of an area?

Positive aspects of such limits are related to both environmental and infrastructure assets.

Such limits have a negative effect on structural adjustment potentially imposing longer term difficulties on rural communities. From a wider perspective it limits the efficient use of society's water resources. Apart from the termination fee there are other aspects of rural communities (eg their human, capital and established infrastructure) that will limit the speed of contraction of rural communities. Further, water policy should not be used to support specific rural communities as it likely to have detrimental effects on other communities (eg limited expansion) and to limit the options for the targeted communities.

Question 7–J Where water access rights are not currently tradeable, what are the advantages and disadvantages of requiring them to be made tradeable?

In systems where the taking of water occurs through farm dams it is difficult to facilitate trade. It is certainly difficult to trade the water access entitlement independently from making changes to water resource works approvals therefore the unbundling of water rights is not so easy to apply, because trade can only occur with a linked amendment to the water resource works approval, reducing the volume of water a dam takes.

See also 7H, water access rights are non-tradeable on the basis that they are allocated to manage a specific use eg critical human needs and environmental at a specific site.

Water delivery rights

Note that South Australia's comments on the five questions about delivery rights are premised on the assumption that the questions are only referring to delivery rights that may exist in relation to infrastructure and not to 'natural' distribution systems (eg rivers).

Question 8–A To what extent does the bundling of water delivery rights with either an irrigation right or a water access right present a barrier to, or restriction on, the trade/transfer of these rights?

Difficult to comment on the extent but at a conceptual level the more the rights are unbundled the clearer their specification and the more that they can be traded.

South Australia has made provision in legislation for delivery rights to be separated from water access rights established under the *Natural Resources Management Act 2004* (the NRM Act). Although the irrigation trust holds an NRM Act water licence, the irrigation rights of members are established by the relevant irrigation legislation, not by the NRM Act.

Irrigation trusts are established under the *Irrigation Act 1994* and the *Renmark Irrigation Trust Act 1936*. Bills have been introduced to Parliament to update the legislative framework for irrigation trusts in South Australia. The Bills aim to provide for consistency with the NWI and the new arrangements for the Murray-Darling Basin under the *Water Act 2007*, in particular, the concepts embodied in that legislation of 'irrigation rights' and 'transformation' of an irrigation right to an individually-held right, such as a water licence under the NRM Act. The Bills provide that a trust will

not be able to restrict permanent trade of water out of its irrigation network and must facilitate trade both in and out of a trust network at the request of its members, and in accordance with the *Water Act 2007*. The Bills also provide that a trust must not unreasonably restrict or prevent any activity that will support the efficiency and scope of water trades.

The extent to which bundling acts as a barrier or restriction to trade in South Australia is unknown. As both rights are currently bundled, it is difficult to distinguish the value placed on one or other of these rights. However, since there are no obvious capacity constraints within South Australia's Basin irrigation networks (ie irrigation trusts), it seems more likely that water access is the driver, rather than delivery access.

Question 8-B What are the advantages and disadvantages of requiring more explicit separation of a water delivery right from an irrigation right or water access right where these are currently bundled?

The advantages of having a separately specified delivery right and water right include being able to deal with one without affecting the other. This minimises transaction costs and assists market efficiency, while allowing users greater flexibility to manage their rights according to their individual needs. The principal benefits of separation would be to enable trading of delivery rights where there are capacity constraints, and separate trading of water rights without affecting a user's long-term interest in network infrastructure. The benefits of allowing trade in delivery rights include enabling individual users to establish the timing and/or volume of delivery right necessary for their particular enterprise. Revealing overall demand for delivery right in a particular system will signal the need (or lack thereof) for capacity maintenance, augmentation or re-configuration. This in turn will enable more efficient network investment decisions to be made. In particular, separate rights will help to distinguish the value of the delivery right versus the value of the water right.

Separate definition of delivery and water rights would enable alignment of those rights more closely with fees and charges levied by infrastructure operators – delivery rights with access and termination fees; water rights with other service delivery charges. This would also promote greater transparency and understanding of costs.

Where there are no capacity constraints, there is likely to be (at best) negligible benefit arising from establishing tradeable delivery rights. In South Australia, there does not appear to be capacity constraints in Basin irrigation infrastructure networks at the present time and it is difficult to foresee where any capacity constraints may arise in the future. Therefore, although the underlying arguments for separation are understood and supported, there remains a cost/benefit question in pursuing such an initiative. Furthermore, it is not clear how separate tradeable delivery entitlements would be created in respect of privately-owned infrastructure.

Question 8-C What conditions and restrictions on the trade/transfer of water delivery rights are reasonable?

As a general principle, where a delivery right is established, it should have characteristics similar to water access entitlements, the only distinction being that it relates to network access rather than resource access. The delivery entitlement therefore should have, broadly, the characteristics set out in NWI paragraphs 31-32. However, where the infrastructure is privately owned and the delivery right is an implied right under the terms of service of a private infrastructure operator and/or

under the irrigation right, the legal basis on which the delivery entitlements should be established is unclear.

To the extent that the infrastructure operator defines the delivery right, it would be up to the infrastructure operator to determine whether a delivery right can be separated from an irrigation right and, if so, whether it can be traded and under what conditions or restrictions.

To the extent that access fees and termination fees can be used to manage issues such as stranded assets, the primary constraint on transfer of delivery rights would seem to relate to physical capacity of the network. Rules governing transfer to certain parts of the network are reasonable to prevent transfer of delivery rights to that part that exceed network capacity. Increasing value of the transfers to a particular part should signal the need for capacity augmentation. By contrast, it does not seem reasonable to allow rules that restrict transfers from a particular part. Such rules would artificially inflate the demand for that part of the network, and promote inefficient use of resources. However, it may be reasonable to have some mechanism by which the operator is assisted in the transition to avoid a stranded asset situation, to the extent that this cannot be managed through termination fees.

Question 8–D What factors should govern the specification of areas within which water delivery rights may be traded/transferred?

As a principle, there should not be restriction related to the person who may hold a delivery right, just as there should not be restriction on the person who may hold a water right. It should be based on feasibility and net benefits. However, as the delivery right relates to infrastructure and property serviced by or able to access that infrastructure, it may be reasonable to limit ownership to a person who owns or occupies land able to be serviced by the infrastructure. In very large irrigation networks, it may be reasonable to specify areas (parts) of the network, although this would possibly skew the signals about demand for network access/capacity.

In relation to ‘on-river’ delivery rights, this is an issue that requires more consideration. There do exist capacity constraints, such as Barmah Choke. There may be delivery rights (implied) with environmental water and improved definition of any such rights could aid the management of environmental water.

Question 8–E What are the advantages and disadvantages of requiring the development of arrangements to allow for the trade/transfer of water delivery rights?

The establishment of tradeable delivery rights has merit as it could facilitate more efficient use of the water resource, but development of arrangements to allow for transfer of such rights will need to have regard to the nature of the infrastructure ownership.

Before the delivery right may be tradeable, it is necessary to first establish the delivery right as a separate instrument. In South Australia, delivery rights currently cannot be established under the *Natural Resources Management Act 2004*. Once amendments to the Act come into operation, a delivery entitlement may be established, but cannot be established in relation to privately owned infrastructure, over which the Minister is not able to confer a property right. As irrigation

infrastructure in the South Australian MDB is privately owned, it is not possible to establish a statutory delivery entitlement under the NRM Act in respect of that infrastructure.

Irrigation rights

Question 9–A What requirements, if any, should be placed on IIOs so as to enhance the trade/transfer of irrigation rights?

The Irrigation Bill 2009 and Renmark Irrigation Trust Bill 2009 provide that a trust must fix an irrigation right for each of its members. An irrigation right will be fixed by resolution of the trust therefore ensuring transparency and democratic processes. The Bills stipulate that an irrigation right must be fixed on a fair and equitable basis having regard to the nature of the crops growing on the relevant land, and such other matters considered relevant by the trust. The new Bills also create a clear definition of rights and provide for these rights to be traded within trusts regardless of transformation. South Australia would support all other jurisdictions adopting a similar approach. Appeal provisions under both Bills provide for an individual to appeal to the Environment, Resources and Development Court in relation to the fixing of an irrigation right.

Question 9–B What are the advantages and disadvantages of requiring more explicit separation of an irrigation right from a water delivery right, where these are currently bundled?

As per response to Question 8–B.

Question 9–C Are the policies and procedures of IIOs in relation to the trade/transfer of irrigation rights transparent and accessible to their customers?

The Irrigation Bill 2009 and Renmark Irrigation Trust Bill 2009 provide that water available under an irrigation right can be surrendered or transferred. The Bills state that a person must not transfer an irrigation right without first notifying the trust of the proposed transfer in accordance with any requirements specified by the trust.

*Question 9–D To what extent, and in what circumstances, is it appropriate for an IIO to impose restrictions on the ‘permanent’ trade of an irrigation right to another person located **within** the IIO’s area? What are the specific forms of any current restrictions, and their implications?*

For both this and Q 9-E the need is to minimise the restrictions on trade particularly those which are at the unspecified discretion of the IIO. The process needs to be transparent and non discriminatory.

In relation to the transfer of an irrigation right to another person within a trust's network, both Bills provide that a member must not transfer an irrigation right without first notifying the trust of the proposed transfer and in accordance with any requirements specified by the trust.

*Question 9–E To what extent, and in what circumstances, is it appropriate for an IIO to impose restrictions on the 'temporary' trade of water allocated under an irrigation right to another person located **within** the IIO's area? What are the specific forms of any current restrictions, and their implications?*

For both this and Q 9-D the need is to minimise the restrictions on trade particularly those which are at the unspecified discretion of the IIO. The process needs to be transparent and non discriminatory.

In relation to the surrender or transfer of an irrigation right to another person within a trust's network, both Bills provide that a member must not transfer an irrigation right without first notifying the trust of the proposed transfer and in accordance with any requirements specified by the trust.

Both Bills provide that a member must firstly notify the trust prior to any temporary trade of water, in accordance with any requirements specified by the trust.

Question 9–F What are the arguments for and against linking the ability to trade/transfer irrigation rights with the possession, transfer or termination of water delivery rights against the IIO?

No comment

Question 9–G To what extent, and in what circumstances, is it appropriate for an IIO to impose restrictions on the trade/transfer of water allocated to an irrigation right to a location outside of the IIO's area? What are the specific forms of any current restrictions, and their implications?

Overall any restrictions should be minimised i.e. determined by feasibility and net benefits. The restrictions need to conform to the water market rules with respect to termination fees and payment of any outstanding debts to the IIO. Trusts are required to operate in accordance with conditions of the licence held under the NRM Act. Both irrigation Bills affirm this.

Question 9–H To what extent, and in what circumstances, is it appropriate for an IIO to impose restrictions on the trade/transfer of a specific volume of water from outside the IIO's area, to a location in the IIO's area?

Circumstances could include a third party land use or environmental reason e.g. salt levels/salinity zones. They would need to conform to the water market rules and be a balance between the value of the entitlement and any outstanding debts to the IIO.

In addition refer to answer 9-G

Approval processes

An overall comment is that it is often agents or brokers (anecdotally over 85% of trades) who are submitting and filling the forms (correctly or incorrectly) rather than the owners or the buyers.

Question 10–A What are the practical implications of multiple approval authorities involved in the approval of a trade/transfer?

Practical implications include state legislation, time, accuracy, different conditions, human error, and complaints from brokers, openness, impartiality, supply and extraction considerations that differ, within IIO delivery.

The comments in the issues paper in essence answer their own question. Current state laws requires multiple authorities over the basin and various forms and fees, that could be reduced if it was run by a single authorising authority. The processors need to be better informed, contact and work with a wider range of people and offices in different locations and to ensure that trading platforms are adequately complete to cover off on these complexities.

The result is that it probably costs more to trade than if there were a single system run by one organisation with common forms using a common computerised register/application system.



Question 10–B What are the advantages and disadvantages of enabling Basin state approval authorities to have direct access to each other's registers and/or accounts for the purposes of determining or giving effect to particular kinds of trade/transfer?

Access is only of real advantage if as noted it carries the ability to use this information to effect an outcome eg trade approval. The issue is that access to data in itself does not always provide the whole picture of an authority's dealing with a customer or a clear understanding of the rules on which that authority's approve trades. So DWLBC in South Australia may not be able to easily make a decision based on an account balance on the NSW register without a clear understanding of the other trade rules in operation eg which zone is it in, is it above the choke etc.

Different title registration systems between states, firewalls, circular trading issues (preventing the creation of water), accuracy of accounting and management of river flows are some of the disadvantages and challenges to inter-registry contact.

Question 10–C What considerations are relevant when considering the form and manner of applications to trade/transfer tradeable water rights?

Nil response

Question 10–D Are there other legislative requirements limiting the ability of approval authorities to accept applications electronically?

There is a need for a common administrative process and legislative framework across jurisdictions that trade with each other.

This is an issue that the region has been confronting for some time and that South Australia, as well as all of the other jurisdictions, has not yet fully resolved. The real issue is ensuring that the parties to the water right transfer have provided their full approval to the application, which we do currently by way of signatures of the parties or their authorised representative. The *NRM Act 2004* requires that application must be made in a form approved by the Minister, and at this time South Australia is limited to paper forms as there is no other mechanism in place.

Question 10–E Is there scope to develop application forms relating to the trade/transfer of tradeable water rights that are consistent between states? Would there be merit doing so?

There have been various efforts at establishing common forms in the past. They have failed because of various state legislative and statutory requirements and registry differences. As unbundling moves across the states the forms have become or will become (in South Australia's case) simpler to understand so benefits would be less than previously may have been the case.

Question 10–F What are the advantages and disadvantages of allowing applications to be lodged through a single portal (to be forwarded to the appropriate approval authority or authorities)?

The real question here is how many approving authorities is necessary. The key disadvantage are: create another layer in the process, slow down the process, increase potential for errors and potential loss of data.

Question 10–G What factors can negatively influence approval times? What measures should be taken to address these factors?

- Applications forms not filled in correctly
- Non payment of fees
- Applications not signed or not signed fully
- Use of wrong application forms
- Lack of supporting information
- Lodgement of non consistent applications with opposing state authorities application eg different allocation volumes
- Delays in lodgement of applications by brokers from date of signing by parties until reaching approving authority
- Trades being negotiated that are refused due to items such as seller having no allocation left, that require new trade to negotiated and relodged forms.
- Environmental clearances required seeking technical advice and assessing the application

- Delays in interstate authority processing the trade (not a major issue)
- Different legislative requirements for registers

Trade between a licence holder and a government entity may involve a range of checks that may not be required when the trade is between two private licence holders. These checks impact on the time taken to effect settlement and have a consequential impact on the trade approval time. Any measures taken to address this time lag will need to satisfy government purchasing requirements.

Question 10–H What are the advantages and disadvantages of incorporating maximum approval times into water trading rules? What factors would need to be taken into account in setting these times?

It will be important to distinguish exactly what the standards pertain to, in particular separating approval time from purchasing time.

The advantages of specifying maximum approval times in water trade rules would be principally for water market participants, as it would provide some certainty that could be factored into their business decision-making. However, a major requirement that would need to be clearly articulated and incorporated would be a mechanism to cease processing (“stop the clock”). For example, a major contributor to trade delay relates to incorrect or incomplete transfer applications. Delays in the process relating to incorrect or incomplete applications should not be counted towards a maximum approval time, as these are beyond the control of the approval authority. In such instances, the approval time should start again on receipt of a correctly completed form. That is, only matters within the control of the approval authority could be reasonably accounted against any maximum approval time.

A service standard for approval time would not address other delays associated with the sale process – which anecdotally appears to be where major delays occur. Purchases by government will continue to require checks (which may be complex) prior to settlement and hence the purchase, but unrelated to the transfer approval process.

To the extent that delay is attributed to factors either separate to the approval process, or to incorrect or incomplete applications, maximum approval times are unlikely to significantly affect the overall time taken to complete a trade.

The current approach to setting expected service standards is appropriate at this time. The approach developed through COAG with respect to service standards should be given sufficient time to assess its effectiveness.

Also refer to the reply to 10-G.

Question 10–I What requirements are placed on intermediaries when dealing directly with approval authorities regarding an application to trade/transfer?

The same requirements apply to intermediaries as apply to buyers and vendors regarding transfer applications.

The need for particular requirements for intermediaries has not been demonstrated at this stage. The ACCC has released a set of brochures outlining responsibilities and rights of the various market participants.

Question 10–J Do approval authorities recommend specific brokers or exchanges to water market participants? On what basis are such recommendations made?

As an approval authority, South Australia does not recommend or endorse brokers or exchanges. South Australia is unaware of irrigation trusts recommending specific brokers or exchanges to trust members.

In the case of purchasing by the South Australian Government, SA Water acts as an agent for the Minister for the River Murray. Vendors can deal directly with SA Water (and pay no brokerage fee) or could use the service of a water broker. In the case of the latter no recommendation of a specific broker would be made.

Question 10–K Is there evidence that particular applications to trade/transfer are expedited or processed differently by approval authorities because those applications take place through a particular exchange or broker? If so, what is the justification for this?

All transfer applications are treated in the same manner in South Australia, irrespective of whether the application is submitted by a particular broker or exchange. South Australia is not aware of evidence of transfer applications by particular brokers or exchanges being treated differently by other approval authorities.

Question 10–L What influence, if any, does an approval authority’s other activities have on its consideration of applications to trade and transfer tradeable water rights?

The Department of Water, Land and Biodiversity Conservation has responsibility for the purchase of water to meet The Living Murray commitments as well as being the approval authority. The Department’s purchasing activity has no influence on the consideration of applications to trade and transfer water rights – applications involving government trades are treated in the same manner as those submitted by other traders. To avoid conflicts of interest, the approval section and the purchasing sections of the department are in different divisions under different Directors.

South Australia fully supports the need to ensure that any potential conflicts of interest are appropriately managed.

Question 10–M Are there examples of approval authorities with conflicts of interest? If so, are measures taken to address this possible conflict? Are these measures adequate?

Refer to answer for 10-L.

Reporting and the availability of information

The National Water Commission Australian Water Markets Report 2007-2008 is the first comprehensive market report. The BoM report on water prices due later in 2009 will also add the available information.

Question 11–A What issues do market participants encounter in relation to obtaining information to enable the trade/transfer of tradeable water rights?

There appears to be limited access to information about actual prices paid, as distinct from prices asked or offered for water entitlements that appear on water brokering websites.

Question 11–B How relevant are the particular characteristics of a tradeable water right to a decision to trade/transfer?

Irrelevant for allocation trade: it is the actual volume of water that was paid for and is able to be extracted.

Important for entitlement purchases. Reliability differs amongst water access rights in NSW (high or general security access licences), Victoria (high and low reliability water shares), and South Australia (high reliability water licence). Carryover will be a consideration as will recent history of allocation announcements: is it NSW Murray or Murrumbidgee, or Vic Murray? The purchaser should consider all aspects of each entitlement.

Question 11–C Are there particular characteristics of water access rights where greater consistency throughout the MDB would lead to more efficient markets?

In general terms, greater consistency would enhance trade efficiency. However, the ability to achieve a high level of consistency is constrained partly by differences in overarching legislative frameworks of each jurisdiction, but chiefly by the fact that a water access right must always be specific to a particular resource.

The advent of tagged trading arrangements should render more or less obsolete the idea of variations in water access rights being a hindrance to market efficiency. So long as the market extends across different resources (eg valleys in the Murray system), the market will inevitably consist of water access rights with different characteristics. If anything, the existence of water access rights with different characteristics could be regarded as beneficial, as market participants may have a wider array of product types to choose from and therefore the ability to more closely match products to their enterprise requirements. Trading arrangements that rely on conversion of water access rights from one form to another obviously benefit from consistency (reducing the requirement to convert access rights).

Question 11–D What are the advantages and disadvantages of developing consistent terminology for use throughout the MDB in relation to the trade/transfer of tradeable water rights?

There does not appear to be any significant advantages for either water market participants or state agencies in developing consistent terminology. Current terminology across jurisdictions is sufficiently similar and understood. Water market participants are business people and there is some responsibility for them to understand the transfer terms and processes.

The disadvantages of attempting to develop consistent terminology include the costs involved in developing and implementing consistent terminology. For example, legislation in each Basin jurisdiction would need to be amended. Despite consistent terminology, water market participants, brokers and approval authorities would still need to be able to identify and understand differences in the water access rights being traded. That is, consistent terminology would not seem to be a panacea.

Question 11–E What are the advantages and disadvantages of providing information about the characteristics associated with tradeable water rights:

- (a) at a single point (e.g. a website)?*
- (b) in a particular format and/or template?*

Both have the potential to reduce transaction costs and facilitate trade.

Question 11–F What measures could be taken to make trading rules more easily accessible and transparent for stakeholders?

Most trading rules are available on websites or are included in water allocation plans or on forms.

Many trades that are complex are undertaken through brokers or with assistance from authorities.

Question 11–G What are the advantages and disadvantages of providing information about water trading rules and requirements:

- (a) at a single point (for example, a website)?*
- (b) in particular format(s) and/or template(s)?*

Refer to 11-E

Question 11–H Are there any concerns about the role of intermediaries in providing information about trading rules and other related matters to water market participants?

Intermediaries can play a useful role in providing information to water market participants. However, at times some intermediaries are not as well informed, and hence are unable to offer the same level of advice and/or support as others. There is the potential that intermediaries might not provide the latest information, or that they might provide the wrong information.

Question 11–I What are the advantages and disadvantages of requiring water market participants to report the price of their water trades/transfers as a condition of approval and/or registration?

Advantages are that it provides the ability to report such information, which may assist other market participants in buying and selling decisions. The issue is one of data reliability and usefulness. Price information is often not reported, or there may be ‘trades’ between family members for nominal sums that do not reflect the market value of the water transfer. These factors combine to undermine the utility of price information if averages are to be determined, or if price summaries are to be reported (eg to avoid identifying particular transfers). Nonetheless, the overall advantages would seem to outweigh any data deficiencies.

South Australia previously required price information in order to calculate stamp duty. When stamp duty on water licence transfers was abolished, as a measure to

establish consistency with other Basin jurisdictions, the requirement to provide price information was removed.

Reporting of pricing is a key component in the efficient working of the water market.

Question 11–J What practical measures could be taken to ensure the accuracy of pricing data that is reported?

Measures appear limited but could be in sighting contracts if they exist, and comparing against average prices. The *Australian Bureau Statistics Act (ABA Act) (1975)* requires census/survey respondents to provide accurate information. Whilst not perfect the *ABA Act* approach might be worth considering.

Question 11–K To what extent do differences in how data (in relation to the trade/transfer of tradeable water rights) is collected, classified and reported affect the usefulness of trading volume and pricing information?

Consistency on the terms is valuable to minimise distorted reporting. It could be expected that any differences would have some negative effect on the value of the market and usefulness of the information. Refer to general comment at start of section re: NWC AWMR 2007-2008.

Question 11–L What measures could assist in making trading volume and price data more readily available to interested parties?

A standard data reporting requirement is necessary so that searches can be made by those interested eg web-based as per land titles office sales data.

Question 11–M What concerns, if any, are there with the current approaches informing water market participants about allocation announcements?

The timing of announcements is important but it is necessary to ensure that the interpretation of the announcements is easy to understand, particularly for those outside of the relevant basin state. South Australia's announcements are made on the 15th day of the month and implemented on the 1st of the next month, the other states announce on the 1 and the 15th and the change is immediate.

Question 11–N What are the advantages and disadvantages of water authorities providing forecasts for future water allocation announcements?

Forecasts can provide assistance in forward planning of ground water use and/or water purchases/sales, but they also impact water markets so there is a need to be clear and unambiguous. Forecasts are key to irrigators' decision making as they allow irrigators to consider a range of options. However, the forecasts need to be as accurate as possible and delivered in a timely manner.

Question 11–O Is sufficient information available on how water allocations are calculated?

From a licensing view point water allocation data is not needed. Many community members and irrigators would like more transparently in allocation calculations and announcements. The more transparent the system, and the easier to understand the information, the more efficient a market should perform.

Question 11–P How can the way in which a trading rule policy change is communicated affect the water market?

Effective communication of policy changes will ensure no uninformed parties enter the market and are disadvantaged of press releases, web based, stakeholder bulk e-mail systems. The more transparent the system, and the easier to understand the information, the more efficient a market should perform.

Question 11–Q What principles and procedures should be implemented in relation to the communication of policy changes that affect the water trading rules (e.g. should all stakeholders be notified of a change at the same time)?

Refer to 11-P

Question 11–R How should the water trading rules provide for the use of registers to provide information about the trading or transfer of tradeable water rights?

The Bureau of Meteorology may already request any information from a water manager (*Water Act 2007*). The Australian Water Markets Report 2007-2008 has already increased the amount of information available to the market. Subsequent reports, to be undertaken through the Bureau of Meteorology, will extend the availability of market information.

The advent of fully electronic NWI compliant registers will make a large amount of water right trade information available.

Given the level of information available through and requirements of the operation of the *Water Act (2007)* and the implementation of NWI commitments, it is a moot point if the water trading rules need to add any more information supply provisions to those already current.

Question 11–S To what extent are inter-operable registers between Basin states necessary to facilitate the operation of efficient water markets?

The water market operates at a reasonably efficient level with existing registers. The COAG Water Sub Group has been investigating the requirements and differences between compatible and interoperable. The logistics and business rules for such a system are very extensive.