

Changes to the Goulburn to Murray trade rule

Consultation paper



Photo credit

Goulburn Broken Catchment Management Authority – photo of the lower Goulburn River

Acknowledgment

We acknowledge and respect Victorian Traditional Owners as the original custodians of Victoria's land and waters, their unique ability to care for Country and deep spiritual connection to it. We honour Elders past and present whose knowledge and wisdom has ensured the continuation of culture and traditional practices.

We are committed to genuinely partner, and meaningfully engage, with Victoria's Traditional Owners and Aboriginal communities to support the protection of Country, the maintenance of spiritual and cultural practices and their broader aspirations in the 21st century and beyond.



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Working together to protect rivers

The Victorian Government wants to ensure that Victorian rivers are healthy and well managed. Healthy rivers provide us with clean drinking water, water to grow our food and places for recreation. Our rivers hold significant cultural and spiritual values for Traditional Owners. And they support a diverse range of native plants and animals.

The lower Goulburn River (downstream of the Goulburn Weir to the junction with the Murray River) has a long history of regulation and delivery of water for irrigation. Although flows have been altered, the lower Goulburn River still retains some of its natural flow patterns. This flow pattern has provided some protection of the river channel and floodplain, which make up important habitat for threatened fauna species such as white-bellied sea-eagles, the squirrel glider, the Murray River crayfish and Murray cod¹.

The lower Goulburn River is classified in the Victorian Waterway Management Strategy² as a 'sustainable working river', acknowledging that it supports important social, economic, environmental and cultural values. We need to manage and protect the lower Goulburn River so that these values are sustained now and into the future.

Balancing all these objectives and values for healthy rivers is challenging, particularly in light of declining rainfall and climate change. It is important that we do not demand too much of our rivers and risk causing long-term environmental damage. Since 2014, recent demands of the lower Goulburn River have risen and have been too great. In the past two water years³, delivering water from the Goulburn inter-valley trade (IVT) account to support water requirements in the Murray system⁴ during summer and early autumn has put the lower Goulburn River under stress and caused environmental damage.

In these years, record volumes of water were traded from the Goulburn region to Murray irrigators below the Barmah Choke. The delivery of this water has eroded the river banks and damaged vegetation and native fish habitat. There are also concerns about the impact of cold water pollution on the life cycle of the Murray cod.

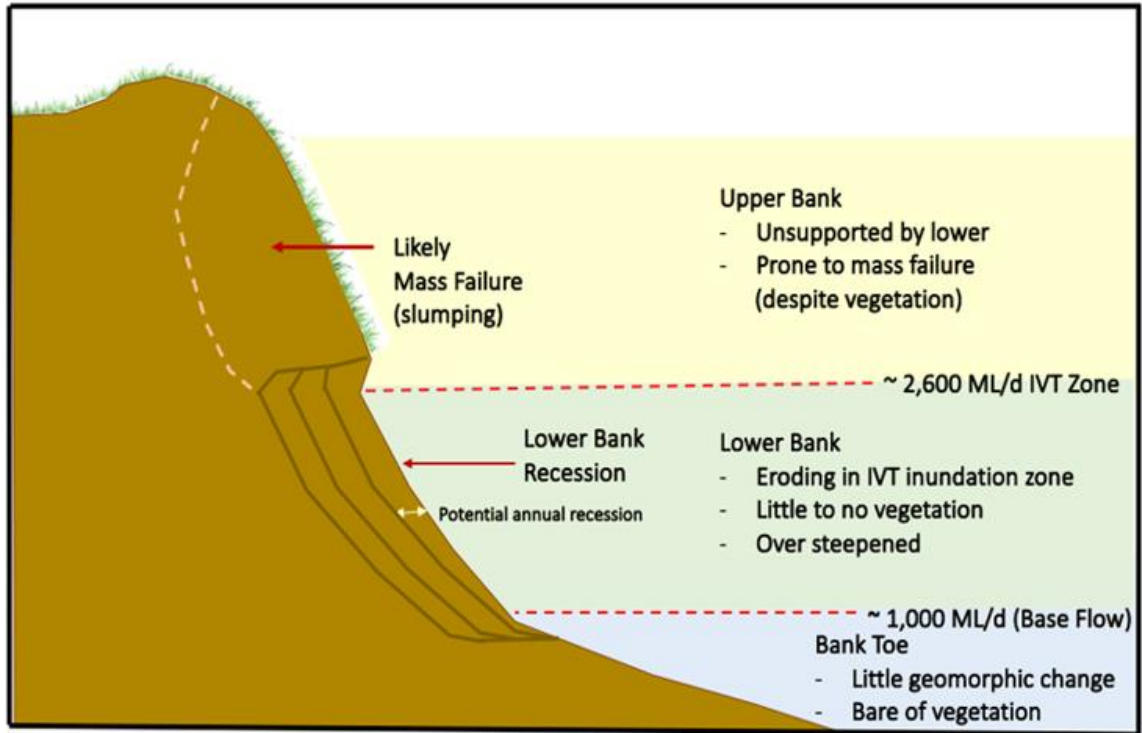
As a result of prolonged high flows in summer, environmental managers have measured significant erosion and 'notching' (large incisions) along the banks of the lower Goulburn River (Figure 1). It will take many years of environmentally sensitive flows for the river to recover from this kind of damage and reach a new ecological healthy state. These unsustainable environmental impacts are undermining the long-term health of the lower Goulburn River.

¹ The lower Goulburn River, Gemmils Swamp and Reedy swamp are listed on the directory of important wetland because it provides a major area of natural ecosystem within a large, intensively cleared landscape and forms an important breeding area for waterbirds and excellent examples of river red gum open forest.

² https://www.water.vic.gov.au/_data/assets/pdf_file/0022/52546/VWMS_Part1.pdf

³ In this paper a year means a water year from 1 July to 30 June

⁴ Requirement of the Murray system include demands for water users downstream of the Barmah Choke, the South Australian entitlement flow and environmental water deliveries for the Ramsar listed Lower Lakes at the mouth of the Murray



Source: *Streamology 2020*⁵

Figure 1: The impact of successive years of prolonged high flows on the banks of the lower Goulburn River

Water market trends

Water trade has been a feature of water resource management in Victoria since the 1990s, and since the Millennium Drought (1997-2009) it has become an increasingly important part of the way people manage their water needs. The Southern Connected Basin⁶ water market is worth \$7 billion a year to Australia.

The introduction of the Basin Plan and the recovery of significant volumes of water for the environment reduced the volume of water available for irrigation downstream of the Barmah Choke. However, irrigation demands have not reduced, and more water is being used by horticultural crops which need water every year. This has meant that since 2014-15 the region downstream of the Barmah Choke has increasingly relied on trading water from the upstream tributaries of the Goulburn and Murrumbidgee to support demands (see Figure 2). This reliance on trade and the need to deliver that traded water is testing the ecological limits of the lower Goulburn River.

Pressure on water availability in the Murray system has also been driven by extreme drought in New South Wales. Due to drought conditions, the Darling River system has not contributed to Murray system demands since late 2017, placing more pressure on southern catchments.

This drought has also meant that for the past two years, there has been no allocation in New South Wales for Murray general security entitlements. This has created greater demand for water across the Southern Connected Basin, resulting in higher water market prices and increased incentive for people with Goulburn water allocations to trade to people in the Murray.

Compounding these market changes, high prices for cotton meant that even with reduced water supply during 2017-18 and 2018-19, cotton growers in the Murrumbidgee valley in New South Wales held on to their water for local irrigation and did not trade water to Murray irrigators. Figure 2 shows that in previous years, both the Murrumbidgee and the Goulburn IVT accounts contributed traded

⁵ Vietz, G., Donges, M., Houghton, J., Mole, B., Morris, K., Clarke, S., 2019. Goulburn riverbanks and bank vegetation: Influence of Intervalley Transfers (IVT). Report by Streamology for the Goulburn Broken Catchment Management Authority and Victorian Environmental Water Holder, July 2019.

⁶ The Southern Connected Basin incorporates northern Victoria, southern New South Wales and South Australia

water to the Murray, however in 2017-18 and 2018-19 only the Goulburn IVT account contributed to the Murray system.

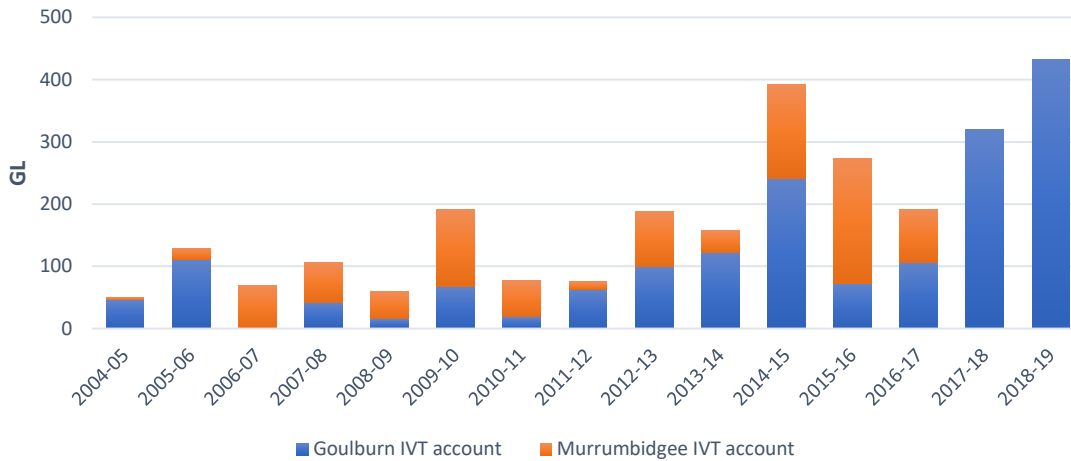


Figure 2: Delivery of water from Goulburn and Murrumbidgee IVT accounts⁷



Figure 3: Schematic of the lower Goulburn River (in orange), Murray River and alternate pathways to the Murray (yellow)

Victoria’s approach

The Victorian Government is responsible for the sustainable management of Victoria’s water resources. In August 2019, the Minister for Water announced three key actions to reduce the risk to the lower Goulburn River and to get future market settings right for Goulburn to Murray trade.

These were:

⁷ Note that this is the total IVT delivered, including during spring when there can be environmental benefits of delivering water from IVT accounts for example in 2014-15 88 GL of the 240 GL was delivered in spring

- an interim operational regime to achieve variable summer and early autumn flows in the lower Goulburn River (implemented from December 2019);
- bringing all trade under the same rules so that use from a tagged account is subject to the same 200 GL IVT limit as allocation trades⁸ (changes made on 12 December 2019); and
- the Department of Environment, Land, Water and Planning (DELWP) beginning public consultation on changes to the Goulburn to Murray trade rule in early 2020.

This paper sets out the issues associated with Goulburn to Murray trade and explores how environmental thresholds interact with possible changes to trade rules.

DELWP encourages you to read the paper and let us know what you think (see section Making a submission). We have prepared a set of questions to help guide your input.

Following this consultation, DELWP will prepare a Regulatory Impact Statement based on the feasible options and a preferred option for the trade rule. Regulatory Impact Statements describe the expected impacts of regulatory changes on social, environmental and economic factors and include public consultation. DELWP will be back in the middle of the year to discuss the proposed changes with stakeholders and the community. Changes are scheduled to be brought in by late 2020 (see Figure 4).

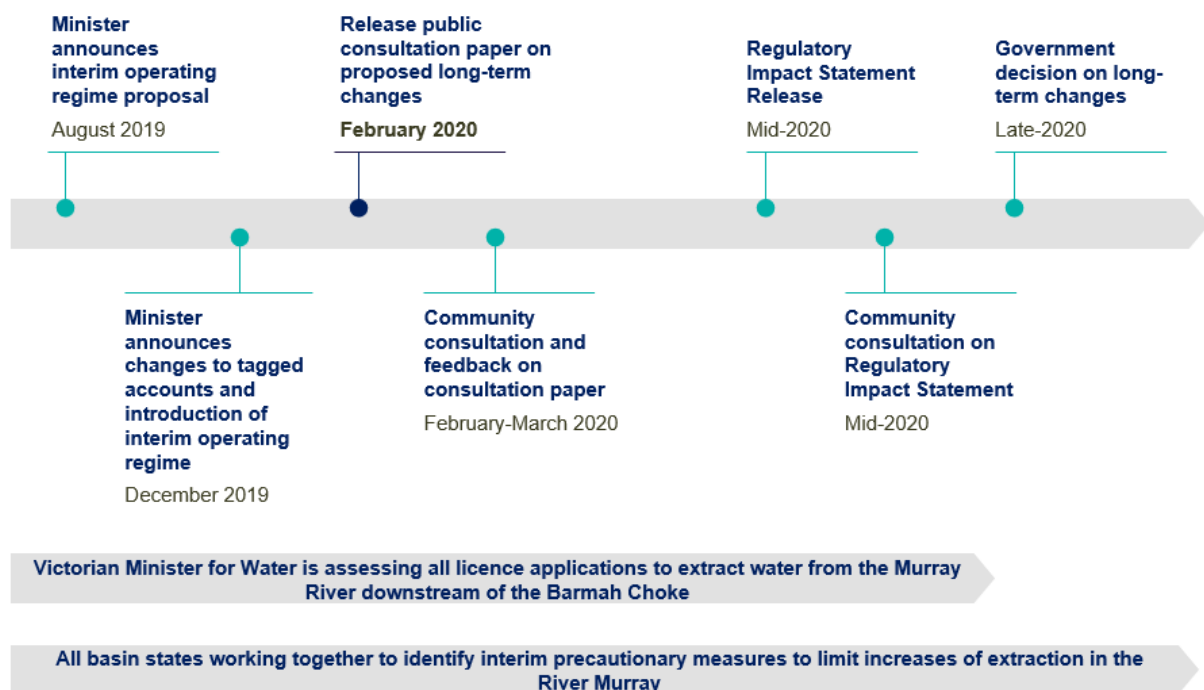


Figure 4: Key milestones for review of the Goulburn to Murray trade rule

For more information about the issues, water management arrangements and options proposed in this paper, please see the Technical attachments (<https://waterregister.vic.gov.au/water-trading/trading-rules/goulburn-to-murray-trade-review>).

⁸ The Victorian Government has committed to removing the remaining permanent exemptions from trade rules, including for tagged entitlements “grandfathered” under Basin Plan Trading Rules.

Current rules for water trade

Water trading depends on the physical ability to get the water to its destination, and the impact of the water's journey on other water users and the environment. Where water trade could have negative impacts the rules either prevent trade or set limiting conditions. These are called trading rules⁹.

Water trading is generally allowed within catchments or river valleys, but more stringent rules apply for trade between valleys. Water managers use inter-valley trade (IVT) accounts to:

- ensure there is sufficient supply as a result of a sale to meet the purchaser's demand; and
- track the bulk movement of water between systems.

For example, water in the Goulburn IVT account is water in Lake Eildon but 'owed' to the Murray and can be called on when needed to meet demands in the Murray.

The current trade rule managing the volume of water that can move between the Goulburn and the Murray systems is called the Goulburn to Murray trade rule¹⁰ (and sometimes the Goulburn IVT rule). This rule limits the volume of water that can be traded from the Goulburn, Broken, Campaspe and Loddon systems to the Victorian Murray and interstate when the Goulburn IVT account balance is greater than 200 GL. The rule however does not consider any flow limits to the volume of water which can be delivered down these rivers to the Murray River¹¹.

The Goulburn to Murray trade rule protects the reliability of Murray entitlements if water spills from Lake Eildon and cannot be delivered¹². However, it does not protect the environment from the need for the Murray-Darling Basin Authority to call-out large volumes of water in summer and autumn to meet water demands below Barmah Choke – the Murray-Darling Basin Authority does this to mitigate against the risk of a delivery shortfall in the lower Murray¹³. Typically, the greater the demand for traded water, the greater the call-out of the Goulburn IVT account.

Water is added to the Goulburn IVT account in two ways:

- legacy commitments; and
- allocation trade from the Goulburn, Broken, Campaspe or Loddon to the Victorian Murray or interstate or use from a Goulburn to Murray tagged account.

When the water market was established, permanent water trade from the Goulburn system to the Murray system was managed by cancelling water shares in the Goulburn and issuing replacement water shares in the Murray, this is often referred to as legacy exchange rate trade. This created a standing commitment for the Goulburn system to deliver water to the Murray every year. Under the Minister for Water's trading rules for declared water systems this is no longer allowed, and since 2007 all permanent trade between valleys has been managed through tagged accounts, so that the source of a water share never changes. However, before 2007, approximately 100 GL of water shares were issued in this way to the Murray, including some to South Australia.

⁹ In Victoria the Minister for Water is responsible for the approval of trades of water entitlement and water allocations. In northern Victoria the approval of trades has been delegated to Goulburn-Murray Water and Lower Murray Water, and these water corporations may approve trades consistent with Victorian Ministerial Trading Rules. In addition to Victorian Ministerial Trading Rules, the *Commonwealth Water Act 2004* describes Basin Plan Trading Rules which must be adhered to by all basin states.

¹⁰ <https://waterregister.vic.gov.au/about/news/171-understanding-the-goulburn-to-murray-trade-limit>

¹¹ There are no restrictions on flow in the Goulburn, Campaspe or Loddon systems, restrictions exist for the Broken River which runs into the lower Goulburn River. Further work is needed to understand the environmental limits of the Campaspe River and to put in place limits on it as well.

¹² Spill risk refers to the risk that water which is accounted for in one system spills from a dam in another system (held in an IVT account), and so is not available to meet demand that remains.

¹³ A delivery shortfall occurs when there is water available in dams that cannot be supplied to users at the required time and rate. Shortfalls happen when demand exceeds the physical capacity of rivers and channels to carry enough water, or when demands unexpectedly peak and there is not enough time to release water from storages to meet demand.

In addition, the *Water for Rivers* joint government project¹⁴ invested in water savings in the Goulburn system and recovered approximately 40 GL¹⁵ of water for environmental flows in the Snowy and Murray rivers. As a result of both of these 'legacy commitments', up to 140 GL¹⁵ of water entitlement in the Goulburn system is owned by the Murray system. This water needs to be delivered to the Murray every year to support the reliability of Victorian Murray entitlements.

The legacy exchange rate trades add to the Goulburn IVT account when Goulburn entitlements receive a seasonal determination. Snowy entitlements are added to the Goulburn IVT account at the beginning of the year based on allocation received to entitlements in the previous year.

From 2007-08 until 2013-14 the net trade direction between the Goulburn and the Murray was typically into the Goulburn system (see Figure 5). Positive net trade into the Goulburn system is possible because water can be back-traded against the legacy commitments. However, since then trade has typically been in the direction of out of the Goulburn system, apart from 2015-16 which was wet with low demands.

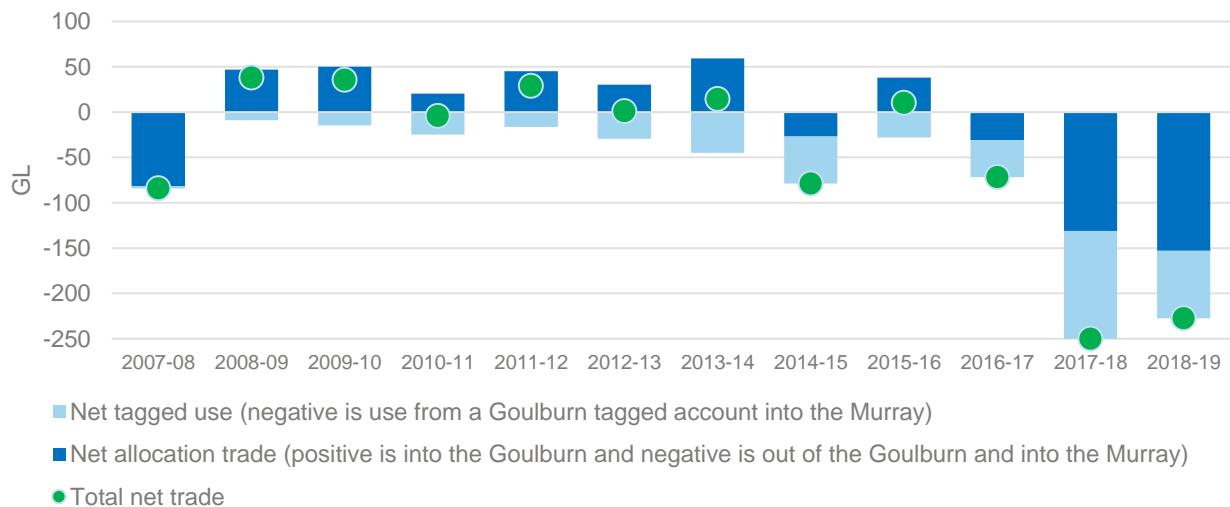


Figure 5: Net annual trade in and out of the Goulburn system

Net trade out of the Goulburn was very high in 2017-18 and 2018-19 and allocation trade and tagged use from the Goulburn to the Murray system were more than double the historic maximum, and the delivery of legacy commitments and traded water during summer and autumn meant that flows in the lower Goulburn River were two to three times the recommended flow rate of 940 ML/day (see Figure 6).

¹⁴ Water for Rivers was funded by Victoria, New South Wales and the Commonwealth governments to recover environmental water for the Murray and Snowy rivers

¹⁵ Water for Rivers recovered about 40 GL of high-reliability entitlement and 26 GL of low-reliability entitlement in the Goulburn and Loddon systems. This means in some years with allocation against low-reliability entitlement the Snowy commitment may be up to 66 GL. Snowy water requirements are known by February each year and set aside in the Goulburn IVT the following July.

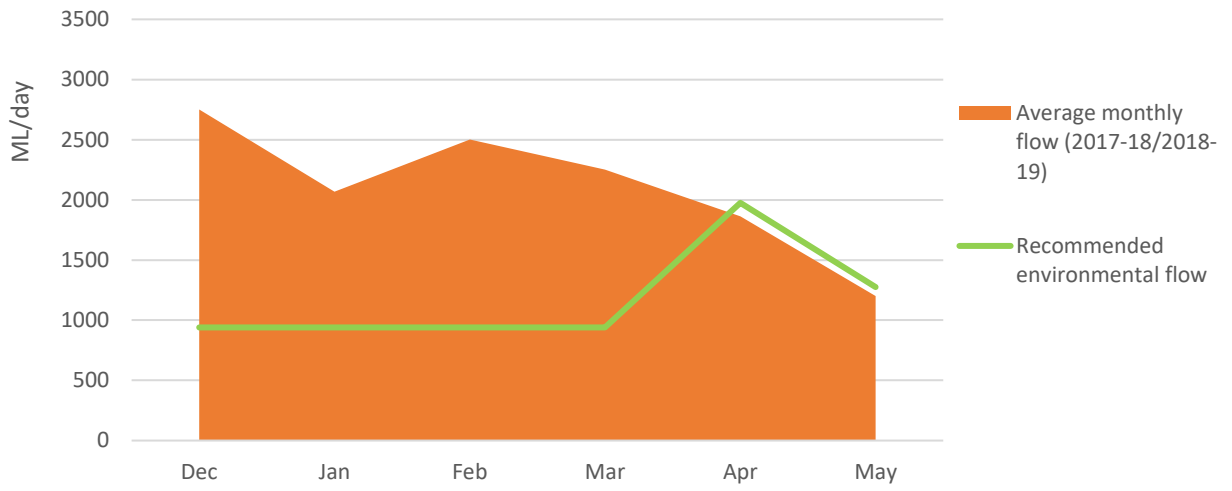


Figure 6: Goulburn River flows in 2017-18 and 2018-19

Managing water

Demand for water from the Murray downstream of the Barmah Choke is concentrated in the summer months. This demand includes delivery of South Australia's entitlement to water, horticulture in New South Wales and Victoria, and environmental needs for the Lower Lakes. The shift in demand is making it more difficult for water managers to deliver water to irrigators, towns and the environment. The physical and environmental limits of the Murray and the Goulburn's capacity to deliver water are being tested. Competing priorities for managing water flows need to be considered, but it is clear that if left unchanged, there could soon be unacceptable environmental damage to the lower Goulburn River.

The issues associated with delivering water to Murray users downstream of the Barmah Choke, and the collateral environmental damage to the lower Goulburn River is a priority of the Victorian Government. The Victorian Government is acting to protect the environment and entitlement holders and is addressing the issues on two fronts - at an interjurisdictional front and state front.

Interjurisdictional approach

Basin states and the Commonwealth are working together on a coordinated approach to managing delivery issues in the Southern Connected Basin. The Victorian Government took the lead on this issue in 2018, when it secured agreement from the Murray-Darling Basin Ministerial Council to request that the Murray-Darling Basin Authority complete modelling to better understand delivery shortfall risks. This project has begun, and an independent panel is reviewing the project scope to ensure it is appropriate.

Victoria, New South Wales and South Australia are working with the Murray-Darling Basin Authority on shared long-term solutions for delivery issues across state borders. At the Ministerial Council in December 2019, all states agreed to work together to identify interim precautionary measures to limit increases of extractions in the River Murray.

Victorian approach

The second front is rule setting by the state. Victoria can directly make changes to state-based rules concerning water management¹⁶. The Victorian Government has made changes to address the cumulative impact of increasing extraction in the lower Murray on the environment and existing users, and further, has implemented and proposed changes which will directly help to reduce the pressure on the lower Goulburn River.

To ensure that the risk to entitlement holders and the environment from increased extractions downstream of the Barmah Choke are carefully considered, the Victorian Minister for Water announced that for a 12-month period, Lower Murray Water and Goulburn-Murray Water will refer all licence applications to extract water from the Murray River downstream of the Barmah Choke to her for assessment.

Actions to reduce the pressure on the lower Goulburn River are also underway, three streams of action are necessary to effectively protect the environment.

On 12 December 2019 the first of these was completed, and new restrictions were put in place to ensure all trade including use from tagged accounts (tagged trade)¹⁷, will now be treated the same, and be subject to the same inter-valley trade rules as allocation trades.

The second action planned is to introduce operational rules limiting the volume of water that can be sustainably delivered through the lower Goulburn River in summer and early autumn. The Goulburn River is a sustainable working river and operational limits will be informed by balancing the need to deliver existing entitlements with the best available ecological information. These limits will consider

¹⁶ Within the bounds and rules set out in the Water Resource Plans

¹⁷ Excluding accounts which were set up before 22 October 2010 which have been classified as 'grandfathered', and customers with tagged accounts in the Lower Broken Creek. The holders of grandfathered tagged accounts and tagged accounts in trading zone 6B can still use water even when the trade rule is binding. The Victorian Government has committed to looking at phasing out 'grandfathered' entitlements and also looking at changes to the Victorian trading rules for customers of the trading zone 6B (Lower Broken Creek).

environmental thresholds and will reduce the volume of water which can be delivered over summer and autumn.

As an interim measure, the Minister for Water has requested that the Murray-Darling Basin Authority does not call more than 50 GL per month out of the Goulburn IVT account during summer and early autumn in 2019-20. These flows are lower than experienced in the last two years but still pose a risk to the environment. DELWP will be working with the Goulburn Broken Catchment Management Authority and technical experts to monitor the impact of these flows during 2019-20. This will help better define the long-term environmental thresholds for flows in the lower Goulburn River in summer and autumn and set the volume of water that can sustainably be traded. More details about proposed operational limits will be available as part of the Regulatory Impact Statement to be released for public comment in mid-2020.

The third action planned is to introduce changes to the Goulburn to Murray trade rule. This rule needs to change because of the introduction of operational limits to limit the volume of water that can be delivered during summer and early autumn. DELWP needs to ensure that trade rules continue to work, protecting the rights of people who own water, and that water can be traded if it can be delivered without unacceptable impacts on the environment or the reliability of other entitlements. This is the focus of this consultation paper.

Proposed actions

Victoria is making sure that new water management rules for the Goulburn system protect the environment and that traded water can be delivered without impacting the reliability of Murray entitlements held by third parties. To achieve this, the Minister for Water has already implemented new restrictions for the use of water from tagged accounts, and is implementing two further changes: operational limits on flows down the lower Goulburn River to directly manage environmental damage from constant unseasonal high flows, and updated trade rules to manage trade within these environmentally sustainable limits. Together these rules will work in tandem to protect the lower Goulburn River from long-term environmental damage, while continuing to protect the rights of other water users (see Figure 7).

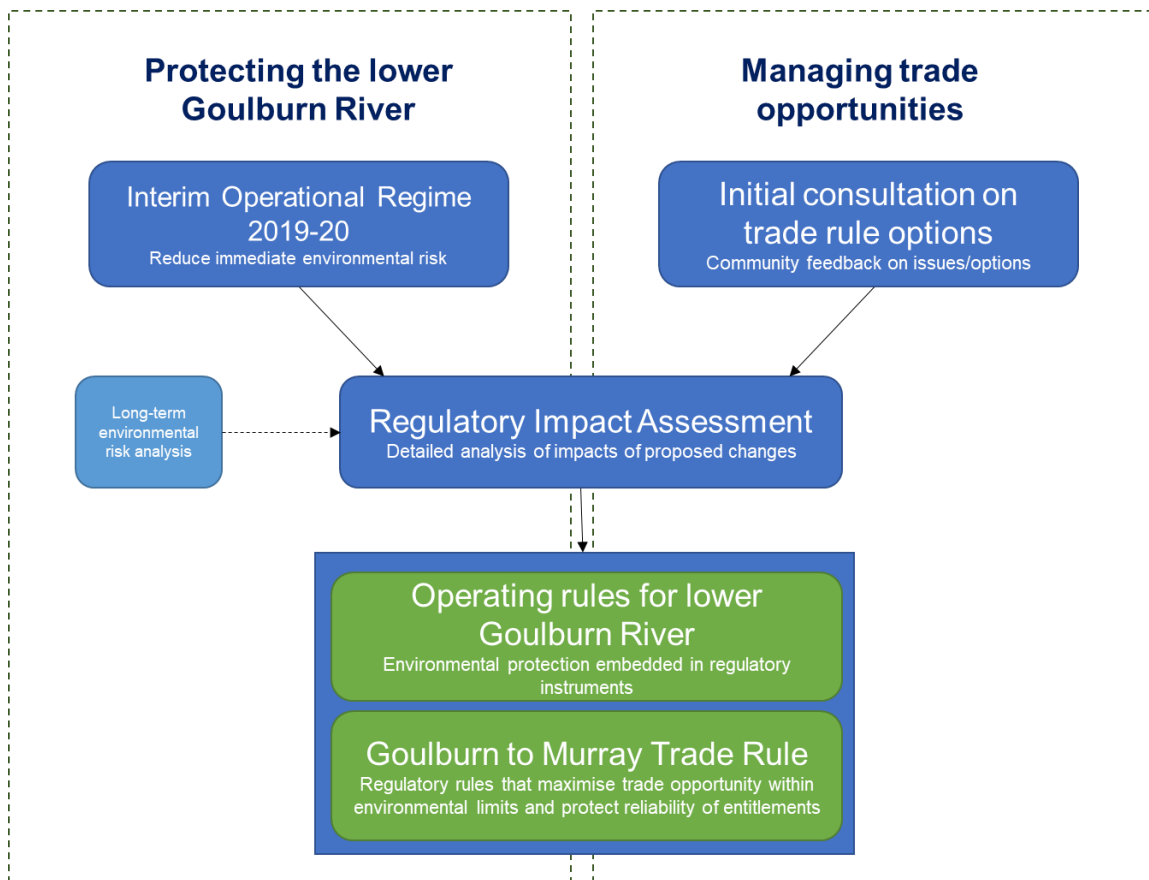


Figure 7: Actions being implemented to protect the lower Goulburn River

Operational limits are still being developed – DELWP is working with waterway managers and technical experts to better understand the impact of different operational and flow scenarios on the long-term sustainability of the lower Goulburn River.

At the same time this is occurring, DELWP is consulting the community on options for the Goulburn to Murray trade rule that will best ensure:

- trade does not have negative impacts on other entitlement holders, and
- the volume of water traded can be effectively delivered to where it has been traded.

To achieve these outcomes, the Goulburn to Murray trade rule must ensure the delivery of legacy commitments is maintained and consider the way river operators use the Goulburn IVT account to manage water delivery to the lower Murray region downstream of the Barnah Choke.

This section sets out the details of current trade arrangements and three potential alternative trade rule options on which DELWP is seeking feedback. These alternative trade rules are: an annual limit, a dynamic rule, and a seasonally-based rule.

All of the trade rule options should be considered given the following:

- operational rules limiting the flow in the lower Goulburn River will be based on environmental thresholds,
- trade opportunity from the Goulburn to the Murray for use during summer and autumn will be reduced compared to recent years when traded water has been delivered at unsustainable volumes, and
- legacy commitments will continue to be honoured.

A summary of how the current rule and the three potential alternative options protect the environment and the reliability of entitlements, and could impact trade opportunity and the water market are described in Table 1.

Table 1: Summary of current rule and potential options

Outcome	Current rule (rolling IVT account)	Annual Limit	Dynamic Rule	Seasonally-Based Rule
Environment is protected	- Environment protected by operational rule	- Environment protected by operational rule	- Environment protected by operational rule	- Environment protected by operational rule
Reliability of entitlements is protected	- High risk of reliability impacts due to likelihood of high end-of-season IVT balance	- Reliability protected by annual draw-down of IVT account	- Reliability protected by annual draw-down of IVT account	- Reliability protected by annual draw-down of IVT account
Managing trade opportunities	- Trade opportunity will depend on ability to call out IVT water - Trade likely constrained early in the season	- Trade may be unnecessarily constrained in some years - Trade opportunity available early in season	- Available opportunities to trade maximised in all years - Trade opportunity reflects seasonal ability to deliver IVT water in spring.	- Available opportunities to trade maximised in all years - Trade opportunity more available in low-risk months for delivery (May to November)
Other market impacts	- Price separation between zones occurs when trade is closed	- Price separation between zones occurs when trade is closed, likely to be more frequent	- Price separation between zones occurs when trade is closed, likely to be less frequent	- Price separation between zones occurs when trade is closed, likely to be less frequent

Current rule

The current rule allows trade to the Murray when the balance of the Goulburn IVT account is less than 200 GL. However, with the introduction of changes to operational rules limiting the flow in the lower Goulburn River, the current rule is likely to have impacts on the reliability of entitlements and the ability of the river operators to deliver water when it is needed. The balance of Goulburn IVT account will not be drawn down as quickly and will be at, or close to, 200 GL more often. Opportunity to trade will be more likely at the end of the year than the start of the year. And it may create difficulties for river operators to ensure the water traded can be delivered to meet the demand over the peak delivery period. If this situation occurs – a year when there has been more trade than can be delivered – then the risk of a delivery shortfall in the lower Murray will be increased.

The Goulburn IVT account is increased when someone in the Goulburn system¹⁸ sells water allocation to someone in the Murray system for use, someone uses water from a Goulburn-Murray tagged account, or a legacy commitment receives a seasonal determination. The Goulburn IVT account is reduced when the Murray-Darling Basin Authority calls water out of the Goulburn IVT account, or someone trades from the Murray to the Goulburn (called a back-trade).

Within the current rule the more water that is called out or back-traded, the more water can trade from the Goulburn to the Murray system. Conversely the less water that is called out or back-traded, the less water can trade from the Goulburn to the Murray system. In years when the full IVT account balance is not delivered, the Goulburn IVT account balance is carried over into the next year.

This current trade rule does not quarantine a volume at the beginning of the season for legacy commitments, rather the rule assumes increases in seasonal determination to the legacy commitments can be accommodated within the 200 GL as the year progresses.

Legacy commitments can cause the IVT balance to exceed 200 GL when seasonal determinations occur after the limit has been reached. This is because it is assumed that river operators will be able to deliver the full 140 GL of legacy commitments as well as traded water.

A quarantine rule for legacy commitments

Quarantining trade opportunity for the legacy commitments at the beginning of the year is the approach used in option 1, 2 and 3 to ensure that the legacy commitments can be delivered in each year within the operational rules limiting the flow in the lower Goulburn River.

However, in low allocation years, retaining the full quarantined volume may not be necessary and additional trade may be made available without affecting the operating rules limiting flow in the lower Goulburn River.

To work out how much trade opportunity needs to be quarantined the below formulas are proposed:

- **July quarantined trade opportunity** = Legacy commitment volume for legacy exchange rate trades + seasonal determinations for Snowy entitlement from last year
- **December quarantined trade opportunity** = Legacy commitment volume for legacy exchange rate trades × forecast seasonal determinations for Goulburn entitlements at mid-February this year + seasonal determinations for Snowy entitlement last year

The Northern Victorian Resource Manager would make a decision and announcement in both July and early December each year to confirm if, and how much, additional trade is available.

Option 1: Annual limit

This rule is a net limit to the volume of water that can be traded out of the Goulburn system each year regardless of seasonal conditions. This limit is set by the volume of water that can be delivered in a year.

The key challenge of this option is defining the limit and the appropriate volume of trade. A conservative limit would ensure the water could be delivered in most years, but there would be years where more water could have been delivered in spring when there is a lower risk to the environment from the delivery of large flows. Conversely, a less conservative limit would be more consistent with the trade opportunity in more years, however it could mean in some years more water is traded than can be delivered. Over time if this volume builds up, it could become a significant problem because there would be water in the account that could not be delivered. This would exacerbate delivery shortfall risk and spill risk and is likely to require government intervention to address.

The legacy commitments need to be honoured each year and this is done through a quarantine rule. Where more trade opportunity is available because of low seasonal determinations, the Northern Victorian Resource Manager will make that call in early December and additional trade will be possible (see A quarantine rule for legacy commitments box).

¹⁸ The Goulburn system here also includes the Broken, Campaspe and Loddon system from which trade to the Murray is managed through the Goulburn IVT account.

The advantage of the annual limit option would be that the trade opportunity is available every year at the beginning of the year. This certainty makes it easier for water users to plan. The disadvantage is that it does not maximise the opportunity to trade. In addition, if the limit is found to be set too high, the Government would likely have to intervene to reduce it, which would create uncertainty and impact all water users.

Option 2: Dynamic rule

A dynamic trade rule option is in effect a hybrid of the two rules in the current rule and option 1 (annual limit) above. It would be made up of two parts: the first working in a similar way to the current rule, and the second working in a similar way to the annual limit. A key change would be the explicit consideration of legacy commitments within the rule, while limiting the volume of water that must be delivered during summer and early autumn, the high-risk period for the environment.

From July to the end of November, the rule would set an IVT limit, in which trade can occur when the Goulburn IVT account is less than this limit and cannot occur if the Goulburn IVT account is above this limit. The legacy commitments would be honoured within this limit through a quarantine rule, and where more trade opportunity is available because of low seasonal determinations the Northern Victorian Resource Manager will make that call in early December and additional trade will be possible (see A quarantine rule for legacy commitments box).

A dynamic rule would maximise the additional trade opportunity for the rest of the year while ensuring legacy commitments are explicitly taken into account. After the limit has been reached in December, trade can occur only when it has been created by the same volume of back-trade. Releases from the Goulburn IVT account would not create more trade opportunity.

A benefit of this rule is that the volume of water moving between systems is maximised and people will be able to trade early in the season making it easier for water users to plan for the year. It would also reduce the current large demands and potential for delivery shortfall risk in the lower Murray.

Option 3: Seasonally-based rule

The seasonally-based rule has two parts based on seasonal flows in the lower Goulburn River. The first is for spring, late autumn and winter, when it is ecologically beneficial to have high flows in the system and delivery of traded water does not impact the environment, and the second is in summer and early autumn when access is restricted, and operational limits in the lower Goulburn River are applied to protect the environment.

This seasonally-based rule allows unrestricted use of tagged accounts during spring, late autumn and winter, and this use is tracked in an IVT sub-account¹⁹. This sub-account allows river operators to distinguish between water that should be released immediately to meet current downstream demands and the water that would need to be held back for likely use in summer.

As there are no conditions on when people can use water once they have traded it from the Goulburn system to the Murray system, river operators need to assume that it will be used in the high-risk months of summer and early autumn. As restrictions cannot be placed once the water is traded, restrictions must instead be placed on the approval of trade. For this seasonally-based rule, a limit on the volume of allocation trade would be in place from the beginning of the year which would include a quarantined volume for legacy commitments would be in set aside from the beginning of the year (see A quarantine rule for legacy commitments box). Once this limit has been reached, no more allocation trade from the Goulburn to the Murray can occur unless there has been a back-trade. A separate sub-account would be maintained solely to track allocation trade.

A benefit of this seasonally-based rule is that the volume of water moving between systems is maximised and provides certainty to people about when, and how much, trade opportunity is likely to be available. A disadvantage is that it could contribute to further concentration of the use of Murray entitlements into the summer months when it is already difficult to deliver peak demand.

¹⁹ This rule would require two separate IVT sub-accounts to differentiate when water is to be delivered during the different risk periods.

Have your say:

1. Which trade rule option would you most support and why?
2. Are there any changes you would make to any of the options and would this change your opinion of the options?
3. Are there other possible trade rule options that should be explored?

Other delivery pathways

In addition to the Goulburn River, the Campaspe River and the Lower Broken Creek can be used to deliver water from the Goulburn IVT account to the Murray River. Although the Campaspe River does not have operational limits to protect environmental assets and values, river operators work with waterway managers for the Campaspe River to ensure that flows in the river do not compromise these assets and values.

The Lower Broken Creek can be used by diverting water from Goulburn Weir into the East Goulburn Main Channel. The Lower Broken Creek runs into the Murray River downstream of the Barmah Choke. Depending on usage in the Shepparton Irrigation Area and the Lower Broken Creek, about 150-300 ML/day can be delivered. This pathway allows some water to be delivered through the Goulburn IVT account via channels without impacting environmental assets and values in the Goulburn and Campaspe rivers.

Currently this water is being delivered without charge through irrigation infrastructure. Additional delivery pathways through GMW infrastructure could be built or retro-fitted to by-pass environmental assets and increase the volume of water that could be delivered from the Goulburn IVT account. However, there would be costs associated with building new infrastructure or retro-fitting existing infrastructure, as well as ongoing maintenance costs. These costs would need to be recovered.

Have your say:

4. To increase the volume of water that can be delivered from the Goulburn IVT account, do you support a fee-for-service model where additional trade may occur with an associated delivery charge?
5. How much would you be willing to pay?

Conclusion

The Victorian Government is committed to preventing the type of environmental damage that has been experienced in the lower Goulburn River in recent years. This will require defining environmental thresholds and implementing operational limits based on these thresholds.

Drought conditions in New South Wales have led to increased reliance on Victorian resources to meet demands in the Murray, including demand for trade. This has resulted in the Murray-Darling Basin Authority relying heavily on the Goulburn IVT account to meet peak demands in summer and early autumn.

According to scientific research²⁰ the environment is detrimentally affected when flows are consistently above 940 ML/day during summer and early autumn. However, in situations where there are no flows in the Darling system, the Murray-Darling Basin Authority makes decisions about calling out higher volumes from other sources including the Goulburn IVT account to manage the risk of delivery shortfalls. The Murray-Darling Basin Authority must also use water in IVT accounts efficiently to minimise system losses. These competing factors and seasonal conditions mean that any solutions developed will require trade-offs and compromises.

Changes to the operating rules and the trade rules will reduce the volume of water that can be traded to environmentally sustainable limits. As with any rule change it is important to ensure that the new rules are clear and easy to understand so everyone knows how they work and how trade opportunity is determined.

In light of this consultation paper and the possible changes proposed, DELWP wants to know what matters to you, and how the Goulburn to Murray trade rule can be updated and improved to make the most of the trade opportunity.

Have your say:

6. Are there other issues about how trade is managed, and water is delivered from the Goulburn IVT account that were not explored in this paper but should have been?
7. And why are they important?

²⁰ Roberts J (2018). Vegetation objectives for the Lower Goulburn River. Prepared for the Goulburn-Broken CMA. Report Number 37/2018. Canberra, ACT 2602. August 2018.

Have your say

The Victorian Government invites the community and interest groups to read this consultation paper and provide feedback to help shape Victorian trading rules.

Anyone can make a submission to us by midnight 22 April 2020. In addition, DELWP will run community information sessions in northern Victoria and we invite you to discuss your views in person. Details are on the Engage Victoria website: engage.vic.gov.au

Making a submission

To make a submission on this consultation paper, please go to Engage Victoria's website: engage.vic.gov.au and search for Goulburn to Murray trade rule.

Submissions can also be posted to:

Goulburn to Murray trade rule review C/O Phoebe Smith
Department of Environment, Land, Water and Planning
PO Box 500
East Melbourne Vic 8002

Or emailed to: water.markets@delwp.vic.gov.au

Submissions will be made available on the Engage Victoria website, except where individuals clearly state that they do not wish to make their comments public.