



**RICEGROWERS' ASSOCIATION
OF AUSTRALIA INC**

RG A WATER COMMITTEE POLICY BOOK

AUGUST 2019

OBJECTIVE

To maximise water availability (supply and access) for growers and to ensure water regulation does not result in perverse negative impacts for growers, their communities and the whole rice industry.

RG A WATER COMMITTEE REPRESENTATIVES

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RG WATER POLICY POSITIONS

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Federal

1. Water recovery for the environment and the Murray Darling Basin Plan

For many decades now, governments have sought to protect the environment by limiting the amount of water than can be extracted from Murray Darling Basin river systems - investing in shifting some agricultural water use to the environment, resulting in lower supply for irrigation:

- **1997** - The Murray Darling Basin Cap (the Cap) on diversions commenced. The Cap limited surface water extractions in each valley (in the case of the Murray there is a NSW, Victorian and SA Cap). In the Murrumbidgee and NSW Murray the Cap on diversions is based on 1993/94 levels of development.
- **Mid 2000's** - The Living Murray (TLM) Program and the Water for Rivers (Snowy) investments recovered 605GL from the Southern Basin. This represented a seven percent reduction in diversions.
- **2004** – The Basin State governments signed the Intergovernmental Agreement on a National Water Initiative, signifying the commencement of a national approach to water reform.
- **2007** - The *Water Act 2007* commenced. Its purpose is to coordinate water management at a national level. Water management is currently a State power (in the Australian Constitution) and hence all States had to agree to the establishment of a national strategy for water.
- **2008** – The Federal Government commenced water recovery for the purpose of the Murray Darling Basin Plan.
- **2012** - The *Murray Darling Basin Plan 2012* was enacted.

The RGA'S Policy Positions:

- The RGA supports a healthy Murray Darling Basin.
- The RGA supports a property right for water.
- There should be no compulsory acquisition of water and water recovery must be subject to appropriate compensation.
- The characteristics of any entitlements that are purchased by the Commonwealth on behalf of the environment should not change.
- Unmitigated third-party impacts of environmental water recovery and use must be avoided (including impacts to the accessibility and reliability of existing entitlements).
- Basin Governments should take a whole of catchment approach to improving the health of the Basin – in particular they should look to address non-flow related issues that are contributing to poor water quality and ecosystem health.

2. The Baseline Diversion Limit (BDL's), Sustainable Diversion Limits (SDL's) and Water Recovery

The purpose of the Basin Plan was to reduce the current limit on diversions in each valley (the Baseline Diversion Limit (or BDL)) to a sustainable level known as the Sustainable Diversion Limit (SDL).

Current consumptive use in each valley is generally above this level and hence the government has used water recovery strategies to reduce consumptive use.

The Basin Plan sets recovery targets for each valley which are generally the difference between the Baseline Diversion Limit and the Sustainable Diversion Limit for that valley. The total recovery target for the Basin is 2750GL.

The three key forms of water recovery are as follows:

1. Buy-backs;
2. Infrastructure Projects (On-farm Irrigation Efficiency Program (OFIEP) and the Private Irrigators' Infrastructure Operators Program (PIIOP));
3. The SDL Adjustment Mechanism (explained below).

The RGA'S Policy Positions:

- A Basin wide approach should be taken to the management of the Basin, rather than just focusing on one aspect of Basin health, being water flows.
- The modelling and assumptions used to calculate the SDL's should be made public.
- The water recovery methods must be prioritised by their third-party impacts, as follows:
 - The SDL Adjustment Mechanism
 - PIIOP (Private Irrigation Infrastructure Operators Program)
 - OFIEP (On-farm Irrigation Efficiency Program)
 - Buybacks (there should be no further buybacks).
- The time frame for the implementation of the SDL's is too short and does not allow sufficient time for communities to adjust.
- The recovery of water from extraction results in social and economic impacts for basin communities – this is particularly the case for buy-backs.
- The recovery of water results in less supply available to meet the demand. This increases water prices on both the permanent and temporary markets and which may result in a reduction to the annual rice planting.

3. The SDL Adjustment Mechanism:

The SDL Adjustment Mechanism is a tool that allows for the SDL and associated total recovery target for the Basin to be increased or decreased (i.e. the 2750 to be increased or decreased) if particular projects are undertaken in the Basin – named Supply Measures and Efficiency Measures.

3.1. Supply Measures '650 GL Down-Water'

Supply Measure projects allow for equivalent environmental outcomes to be achieved with less water. I.e. if a pump can be used to lift water to a wetland rather than having to create a flood, then environmental outcomes can be achieved in this wetland much more efficiently – meaning less water is required.

Supply Measure projects will result in an increase to the SDL, meaning less water is to be recovered from irrigators and other consumptive users. The total increase that can be made

to the SDL is 650GL pursuant to the legislation (resulting in 2100GL water recovery rather than 2750GL water recovery).

The Basin States were responsible for developing a package of proposed Supply Measure projects which they provided to the Murray Darling Basin Authority in June 2017. The MDBA modelled these projects to determine how much water recovery is 'offset' in total by the projects. This modelling determined that if these projects are implemented and perform as intended, the total volume of water recovery that will be offset is 605 GL.

The Basin State governments now have until 2024 to implement the Supply Measure projects.

The RGA'S Policy Positions:

- RGA supports the use of Supply Measures (offset projects) to reduce the Sustainable Diversion Limit.
- The respective Basin Government should work together to ensure the maximum water recovery offset of 650 giga litres is achieved. A thorough investigation of all potential Supply Measure Projects should be completed for the whole Basin.
- The Supply Measure projects should include an adaptive component to allow for the incorporation of new science and risk management in the implementation of the projects.
- The design and implementation of the Supply Measure Projects should be subject to detailed consultation with landholders, industries and communities to ensure that risks to entitlement and property are prevented.
- Provided there are no third party impacts, Supply Measures achieve the triple bottom line – they improve environmental outcomes without causing economic and social impacts.
- MDBA's calculation of the total SDL adjustment should be made public.
- The 5% limit on the total SDL adjustment must be removed. There should be no limit to the adjustment and all sensible Supply Measures should be implemented.
- In addition to supply measures, complementary measures should be considered as part of the SDL offset (SEE POSITION BELOW).
- The RGA seeks an ironclad commitment from MDBA that if current 605GL of offsets shortfall, the extra water is found through supply measures or alternative projects (rather than water purchases) (*Wakool Branch Motion June 2018*).
- In the event that it becomes apparent that the State governments will not deliver the full suite of Supply Measure projects by the 2024 deadline, then these governments should be provided an extension to the timeframe for delivery of the projects.

3.2. Efficiency Measures '450GL Up-Water'

An 'Efficiency Measure' is a project that results in either an on or off-farm irrigation efficiency improvement (similar to OFIE and PIIOP). The water saved is then purchased by the Commonwealth for environmental purposes.

Efficiency Measure projects will result in a decrease to the SDL, meaning more water is to be recovered from irrigators and other consumptive users. The total decrease that can be made

to the SDL is 450GL by 2024 (resulting in 3200GL water recovery rather than 2750GL water recovery).

The Efficiency Measure projects are subject to the following:

- The project must achieve neutral or improved socio-economic outcomes (a detailed criteria for measuring neutral or improved socio-economic outcomes was agreed to by the Basin Governments at the December 2018 Murray Darling Basin Ministerial Council meeting – see here: <https://haveyoursay.agriculture.gov.au/40641/documents/95243/download> ; and
- The easing or removal of constraints to the ability to deliver environmental water.

\$1.77 billion has been set aside by the Commonwealth Government for the Efficiency Measures (and constraints measures) in the Water for the Environment Special Account.

The RGA'S Policy Positions:

- RGA opposes the further reduction of the SDL (and corresponding increase to total water recovery).
- All water recovery from productive use results in social and economic impacts for basin communities. However we note that there are some consumptive uses which are not productive i.e. river operations.
- Removing another 450GL from the Southern Connected Basin will undermine the infrastructure investment already made therein. For MI, CACL and MIL between half and one billion dollars has been invested in improving their respective systems. Around a further \$2 billion has been invested in the GMW Connections program. Furthermore, billions has been invested in on-farm irrigation efficiency infrastructure (both government funded and private investment).
- On-farm efficiencies (and to a lesser degree PIIOP) reduce demand on the supply system meaning there is less water in total going through the meter. On-farm efficiencies lead to 'Swiss-cheese effect' in the same manner as buybacks – resulting in a need to either increase water charges for remaining water users or otherwise rationalise infrastructure.
- Removing a further 450GL will increase the cost of access to water in the water market – in particular for the temporary market. In addition, given the volatility of the temporary market (for all sorts of reasons), many farmers are now much less likely to shift their water portfolio from a majority held permanent entitlement to a mix of held entitlement and temporary trade.
- Communities, industries and irrigators are in still in the midst of structurally adjusting to the recovery of the 2750GL – a significant amount of time without significant government intervention in the market is required to allow these economies to stabilise. Commencing an additional recovery program now will put many businesses and industries at severe economic risk and result in huge and avoidable economic (and social) impact.
- Governments must look at efficiency measures that can occur outside of the productive pool. There is much capacity for efficiencies in river operations and this should be a focus for the 450 GL (as well as complementary measures – although these fall outside the definition of efficiency measures).

- Socioeconomic impacts of on-farm efficiency programs:
 - The irrigator wears all the risk on the estimate of savings. If they fall short of expectations there is added demand for temporary water.
 - There is a business impacts of cashing in an appreciating asset (entitlement) for depreciating (infrastructure) asset.
 - There is a long-term dampening effect on farm business (and industry) growth from OFIEP. OFIEP might accelerate change, but it is likely (given the value of water) that these changes would happen over time anyway. It's not positive or neutral on the farm business over the medium (i.e. 10 year) term as it suppresses the ability to grow production by increasing efficiency.
 - There is likely to be a reduced appetite to participate due to more ready availability of private capital. Many of the early rounds of on-farm programs followed the drought and through the GFC- capital from banks was harder to come by and more expensive than is currently the case.
 - On-farm-efficiency often means labour saving, which results in a reduction in agricultural employment - resulting in a negative socio-economic impacts for the community.
- The government cannot effectively deliver an additional 450GL of water. The use of this additional water will likely result in flooding impacts for individuals and communities.

3.3. Constraints Measures

The Basin Plan requires the MDBA to develop a strategy, which identifies and describes the physical, operational and management constraints to environmental water delivery¹ and to develop projects to overcome or 'relax' these constraints - referred to as Constraints Measures. The three key focus areas for the Constraint Management Strategy (CMS) relevant to RGA are as follows: Hume to Yarrawonga (Upper Murray), below Yarrawonga to Wakool Junction (Mid-Murray) and the Murrumbidgee.

The relaxing of constraints is one of the criteria for the recovery of the additional 450 GL Up-Water and hence the cost of Constraints Measures is to be funded from the \$1.77 billion set aside for the 450 GL Efficiency Measures in the Water for the Environment Special Account.

One of the Strategy's overarching principles is that there will be no new risks to entitlement holders.²

The RGA'S Policy Positions:

- The Authorities must clearly demonstrate how the constraints to the delivery of environmental flows can be removed – without third party impacts, including impacts to existing property and/or water entitlement reliability.

3.4. Complementary Measures

¹ <https://www.mdba.gov.au/sites/default/files/pubs/Constraints-Management-Strategy.pdf>

² Ibid.

Complementary Measures are projects that seek to address non-flow related issues that are contributing to poor water quality and ecosystem health across the Basin. Examples of complementary measures include: Carp control and re-stocking of native fish, management of cold water pollution, improvements to fish migration through fishways, restoration of native fish habitat, feral animal control in particular in wetlands, control of erosion and nutrient run-off in particular in up-stream catchments and weed control.

The current version of the Basin Plan does not recognise any environmental benefits that could be achieved through implementing complementary measures, and consequently provides little incentive for investment in complementary measures.

The RGA'S Policy Positions:

- Of all the measures, complementary measures provide the best triple-bottom line outcome – they improve environmental outcomes without negatively impacting upon social or economic outcomes.
- Basin Governments should take a whole of catchment approach to improving the health of the Basin – in particular they should look to address non-flow related issues that are contributing to poor water quality and ecosystem health. Through mitigating these issues, less flows and water recovery will be required to dilute the issues.

3.5. Policy Pre-Requisite Measures (PPMs)

Pre-requisite Policy Measures (PPMs) are environmental projects designed to maximise environmental outcomes.

Although the same concept as supply measures (described above), PPM's are given a different name as when the Basin Plan was created and the SDLs determined, the MDBA assumed that the PPM projects would be implemented. Hence rather than these projects resulting in less water being required to achieve the same environmental outcomes (as is the case for supply measures), the improved environmental outcomes achieved through PPMs are currently factored into the SDL calculations, and therefore if the projects are not implemented, then the legislation requires that further water be recovered to meet the environmental targets of the Basin Plan.

The PPMs will be implemented only in the regulated Murray-Lower Darling and Murrumbidgee River systems. There are two key projects:

1. Environmental flow reuse – to allow for the use of licensed environmental water at multiple sites; and
2. Piggybacking - the opportunity to order licensed environmental water from a headwater storage during a natural flow event.

The RGA'S Policy Positions:

- PPM's must not result in unmitigated third party impacts for rice growers, the rice industry or their communities (including impacts to reliability and accessibility of general security or supplementary water entitlements).
- The characteristic of Held (Licenced Entitlement) Environmental Water should not be altered through this process.

4. Held (Licenced Entitlement) Environmental Water

Held Environmental Water is water that is held pursuant to an entitlement (for example high security, general security or supplementary) that is used for the purpose of achieving an environmental outcome.

Generally it is water that has previously been 'recovered' from irrigators through either a buy-back or infrastructure project.

In New South Wales, held environmental water is managed by the Commonwealth Environmental Water Holder or the NSW Office of Environment and Heritage depending on if the water is owned by the Commonwealth or NSW government.

The RGA'S Policy Positions:

- The characteristic of Held Environmental Water should not be altered in any way.

5. Managing and Monitoring Environmental Water Outcomes.

There are a number of government agencies who manage held environmental water portfolios containing NSW entitlements: NSW Office of Environment and Heritage (OEH), The Living Murray (TLM) and the Commonwealth Environmental Water Holder (CEWH). Each agency publicly publishes plans for the management of their held environmental water.

The RGA'S Policy Positions:

- The use of Held Environmental Water must not result in unmitigated third party impacts for rice growers, the rice industry or their communities (including impacts to reliability and accessibility of general security or supplementary water entitlements).
 - Losses associated with the use of environmental water should be debited from the accounts of the environmental water holders.
 - Clearer measurement is required of the use and losses incurred by environmental water.
- It is important that the use of the various portfolios of held environmental water is coordinated to achieve maximum environmental benefit.
- The responsible agencies should engage with local communities (localism) to understand the local benefits and risks of environmental watering.
- Trade of environmental water should not impact upon access to water markets for all water users.
- Clear and concise environmental objectives need to be agreed between the various agencies and must be communicated publicly. Progress against these objectives must be publicly reported on a regular basis.

6. Water Markets and Trade

The Basin Plan introduced a framework for regulating water trade at a national level including the Water Market Rules regulations.

The core principle of the national regulation is there should not be barriers to trade (with the exception of physical/operational barriers) to allow water to move to the highest value use.

The RGA'S Policy Positions:

- The RGA seeks:
 - An open and transparent water market that minimises transaction risk and costs for market users.
 - A national platform/exchange for water trade to increase transparency and reduce transaction costs (similar model to Victoria).
 - Regulation of water brokers to minimise risk for market.
 - Instantaneous trade of water.
 - Standardisation of national laws and rules for water trade.
- Trade of environmental water should not impact upon access to water markets for all water users.
- Inter-valley trade (see below).
- The government must deliver on a common southern connected water trading platform as promised in the water reform process to avoid manipulation of the water market. (*Wakool Branch Motion – June 2019*).

7. Murray Darling Basin Agreement

The RGA'S Policy Positions:

- The RGA seeks a review of the current Murray Darling Basin Agreement.

State

8. The Allocation System

The Department of Primary Industries Water (DPIW) is responsible for the available water determination (allocation announcements) for the NSW valleys.

The formula for calculating allocations increases for each valley is summarised as follows:

PLUS	Any increase in storage inflows. For the Murray, this includes NSW's share of inflows to Dartmouth and Hume Dam, Menindee Lakes and Lake Victoria. For the Murrumbidgee, this includes inflows to Burrinjuck and Blowering Dam and the smaller on-route storages.
PLUS	Any downstream tributary inflows. Murrumbidgee River, Billabong Creek and Lower Darling (when a NSW tributary). For the Murrumbidgee this includes flows from all gauged tributaries and estimates of flows from ungauged tributaries.
PLUS	Any increase to the Required Annual Release (RAR) from Snowy Hydro Where the full RAR has not yet been fully allocated due to the Snowy Scheme experiencing a Dry Inflow Sequence or where Snowy Hydro chooses to release more than RAR.
PLUS	Water set aside for river losses but unused Where on reconciliation losses were less than predicted (usually positive, but occasionally negative).
PLUS	Water resulting from internal spills in storages (Murray System only) Mostly positive, can be negative.
PLUS	Adjustments for hydrographic updates Gauge station recalibration, meter readings – (can be positive or negative).
LESS	Water allocated to South Australia in accordance with the Murray Darling Basin Agreement (Murray System only). Pursuant to the Murray Darling Basin Agreement, South Australia is provided a monthly entitlement which NSW and Victoria equally contribute to.
LESS	Water required under the Murray Darling Basin Agreement for mandatory reserves (Murray System only).
LESS	Water required for future river operations (evaporation and transmission) losses.
LESS	Water required to meet inter-valley/state trade delivery commitments.

Once the available water is determined, this water is allocated to water users in accordance with the rules in the Water Sharing Plans. The priority for allocations is generally as follows:

1. Reserves for Critical Human Needs for the following water year
2. Carryover
3. Towns and Stock and Domestic
4. Rules based environmental water
5. High Security
6. Conveyance (progressively increased with General Security announcements)
7. General Security
8. Supplementary

The allocation account limits for General Security entitlements holders is 110% of held water entitlement(s) in the Murray Valley and 100% of held water entitlement(s) in the Murrumbidgee valley. This limit consists of total carry-over and total allocation. Once the allocation account limit is reached no further water is allocated to the account.

Allocation announcements are made on the first and 15th day of each money, or the first working day thereafter.

The RGA'S Policy Positions:

- The RGA seeks the following improvements to the allocation system:
 - Real-time announcements of allocations.
 - Increased use of technology to monitor inflows and determine allocations.
 - Increased transparency regarding inflows and water demands influencing the allocation system.

9. Water Sharing/Resource Plans

In NSW, the water resource is managed in accordance with the *Water Management Act 2000*. This Act prescribes that a Water Sharing Plan be developed for each valley. The Water Sharing Plans establish rules for sharing water between the various water users in the valley, and in particular the rules for access to the various water licence categories.

The two surface Water Sharing Plans relevant to the rice industry are as follows:

1. *Water Sharing Plan for the Murrumbidgee Regulated River Water Source 2016*³
2. *Water Sharing Plan for the New South Wales Murray and Lower Darling Regulated Rivers Water Sources 2016*⁴

The *Water Act 2007* and the Murray Darling Basin Plan require the State governments to develop a Water Resource Plan for each valley by December 2019 (an extension to this deadline was granted from June 2019). The Water Resource Plans will include the Water Sharing Plan plus a Water Quality Plan, a Risk Assessment Report and a Long-term Environmental Watering Plan (a set of objectives rather than hard-line rules).

The MDBA must accredit the Water Resource Plans in addition to the NSW government. So the Water Resource Plans must meet requirements of both the *Water Management Act 2000*, the *Water*

³ <https://www.legislation.nsw.gov.au/#/view/regulation/2016/367>

⁴ <https://www.legislation.nsw.gov.au/#/view/regulation/2016/366/full>

Act 2007 and the Murray Darling Basin Plan. The Water Sharing and Resource Plans are subject to ten year statutory reviews.

The RGA'S Policy Positions:

- The RGA supports the use of Water Sharing/Resource Plans as a tool to regulate water use in each valley.
- The RGA will not support any changes to the Water Sharing/Resource Plans which will negatively impact upon water entitlements.
- The RGA supports changes to the Water Sharing/Resource Plans which will improve the security of water entitlements.
- The RGA insists on meaningful consultation with State Government on the rules and regulations for the Water Resource Plans to ensure property rights are not eroded (*Yanco Branch Motion June 2018*).
- The RGA seeks an extension of the deadline for accreditation of the Murray and Murrumbidgee Water Resource Plans by 12 months (from June 2019 to June 2020) (*Deniliquin Branch Motion June 2018*).

The following matters are regulated by the Water Sharing/Resource Plans:

9.1. Carry-over

Carryover is where unused water in a water allocation account is carried over from one irrigation season to the next. Access to carryover is based on General Security Water Entitlements.

The rules for carryover are different in each valley:

1. Murrumbidgee - carry over limit is 30%, account limit is 100%.
2. NSW Murray - carry over limit is 50%, account limit is 110%.

Carry over held in storages does not impact upon allocation announcements but for the instance where there is a dam spill. This is because carryover is not "lost" from water allocation accounts when a dam spills. Rather, the new inflows pass through the storage and are not captured for the purpose of allocation increases. In this case these flows will often result in supplementary events.

The RGA'S Policy Positions:

- The RGA supports carryover as a "risk" management tool as it provides individuals with access to increased volumes earlier in the irrigation season.

9.2. Planned (Non-Licensed rules based) Environmental Water

Planned environmental water is water required to be set aside under the Water Sharing Plans for the environment. Unlike Held Environmental Water, Planned Environmental Water is not licenced water.

In the NSW Murray this includes the Additional Environmental Allowance (AEA) (about 6 GL), the Wakool system requirements (up to 70 GL), the Barmah-Millewa Allowance (B-MA) and the Dilution and Additional Dilution flows⁵.

In the Murrumbidgee this includes the end-of-system flow requirements, the translucency and transparency flows and the environmental water allowances (EWA1, EWA2 & EWA3).

The RGA'S Policy Positions:

- There must be increased transparency regarding the volume of and use of planned environmental water.
- The use of planned environmental water must be optimised to achieve improved environmental outcomes – any improvement to the operation of planned environmental water should be considered a Supply Measure (see above) and hence should off-set the need to recover held environmental water.

9.3. Inter-Valley Transfer (IVT) Accounts

Inter-valley transfer (IVT) accounts keep track of net allocation trade to and from a valley. The IVT accounts are subject to limits on the amount of trade. These limits represent the volume of water that can be physically transferred out of a valley in one year (via the end-of-system) without incurring excessive transmission losses.

A positive IVT account balance means there is net trade out of the valley. That is, water currently sits in the valleys storages for delivery out of the valley.

There are two IVT accounts relevant to the rice growing valleys:

1. Murrumbidgee (to Murray) inter-valley transfer account - maximum balance of +100 GL. Regulating authority is WaterNSW.
2. Goulburn (to Murray) inter-valley transfer account - maximum balance of +200 GL. Regulating authority is Goulburn Murray Water.

Proposed transfers that take the IVT account beyond the range 0 to 100 GL will not normally be approved, but may be considered on a case by case basis.

The RGA'S Policy Positions:

- The RGA supports the current system of Inter-valley transfer accounts.

9.4. Cultural Water

One component of the Water Resource Plan development is to 'take account of Aboriginal people's water dependent cultural values and uses'. This reflects the indigenous-cultural water requirements outlined in several Federal water legislative instruments.

The NSW government is currently determining a framework in consultation with industry to determine how to adequately account for the cultural values and uses without impacting upon existing water rights.

⁵ Note: dilution flows are regulated by the River Murray Agreement not the Water Sharing/Resource Plan.

The RGA'S Policy Positions:

- The RGA recognises and supports the traditional and cultural uses of water by Aboriginal people.
- The RGA favours Cultural Water being managed and included via the environmental water entitlements and environmental watering strategies.
- Access to water for any commercial use should be based on attainment through the existing market.
- The RGA will not support any rule changes that negatively impact upon existing entitlements.

9.5. Cap-factors, Planning Assumptions and Compliance with the Baseline/Sustainable Diversion Limit (BDL/SDL)

Cap-factors and Planning Assumptions

The Long-Term Diversion Limit Equivalence (LTDLE) factors, otherwise known as the cap-factors, were developed in 2011 by the MDBA for the purpose of comparing different categories of water entitlement, thereby allowing comparisons between them for the purpose of water recovery. They have been used since 2011 to determine whether the entitlement recovered meets the recovery targets for each valley.

However in 2011 it was agreed that the Basin States would update these factors as part of the process of developing the Water Resource Plans. The updated factors would take into account the latest science and correct inconsistencies between the 2011 factors. Hence in 2018 the NSW Government developed the 2018 LTDLE factors based upon a new set of 'Planning Assumptions'.

Compliance with the Baseline/Sustainable Diversion Limit (BDL/SDL)

Please see paragraph 2 above for an explanation of the Baseline and Sustainable Diversion Limit (BDL/SDL).

One of the key functions of the Water Resource Plan is to ensure that the level of extraction within a valley does not exceed the Baseline/Sustainable Diversion Limit (compliance is measured against the BDL until June 2019, following this compliance will be measured against the SDL).

Compliance with the BDL/SDL is measured by comparing the level of extraction against the BDL/SDL. This compliance is managed on a rolling average basis. When total extractions are less than the Diversion Limit then the valley will receive a 'Cap Credit' equivalent to this gap. On the other hand, if valley extractions on average exceed the Diversion Limit, then mechanisms will be implemented to reduce the level of take within the valley.

The RGA'S Policy Positions:

- The RGA seeks that the objective of the Water Resource Plan review be to ensure that the level of take within the valley be as close as possible to the BDL/SDL.

10. Water Operations and Charges

In the Murray Valley the Murray Darling Basin Authority River Operations Team is responsible for operating the river. However WaterNSW place a bulk order with the MDBA on behalf of all NSW Murray customer. Therefore the point of contact for NSW Murray customers is with WaterNSW.

In the Murrumbidgee Valley WaterNSW is responsible for operating the river and is the point of contact for Murrumbidgee customer's water orders.

Both the MDBA and WaterNSW charge irrigator customers for the cost of delivering water. For general security entitlement holders, these charges consist of a fixed and variable component. The fixed/variable tariff structure is used to manage the challenge of a fluctuating availability of water versus a water delivery system that has a high fixed cost component.

Because both water delivery agencies are monopoly service providers, there annual charges are subject to determination by an independent party. The Australian Competition and Consumer Commission (ACCC) and Independent Pricing and Regulatory Tribunal (IPART) have previously been engaged for this purpose.

Water charges are set in accordance with a number of nationally agreed pricing principles, including the user pays principle. This principle recognises that the regulation of rivers provides a number of benefits to the general public beyond extractive use (i.e. recreation and amenity, environmental benefit) and therefore apportions some of the costs of river regulation to the tax payer.

The RGA'S Policy Positions:

- The RGA supports a water efficient and cost effective system of water delivery – provided efficiency and/or cost reduction measures do not impact on the reliability or accessibility of existing entitlements.

11. Snowy Hydro Licence

The Snowy Hydro Licence was issued to Snowy Hydro Limited (SHL) in 2002 upon corporatisation of the Scheme. The term of the licence is 75 years and is subject to ten year statutory reviews. The provisions of the licence aims to balance the competing needs of the scheme, as follows:

- Electricity generation;
- Western river releases – managed as two developments: the Snowy Tumut Development (flows into Blowering) and the Snowy-Murray Development (flows into Hume);
- Environmental water releases (Snowy River, Murray River and Montane Rivers Increased Flows);
- Protection of stored water.

The key provisions of the licence are as follows:

Balancing electricity generation and irrigation demand:

- **Below Target Water (BTW):** Water in each Development which is intended specifically for Western Releases (Irrigation). In other words this water is used to meet the Required Annual Releases. Monthly inflows are prioritised as Below Target Water.
- **Above Target Water (ATW):** Water surplus to the monthly target inflows. This water can be released at SHL's discretion and is highly valuable for electricity generation.

- **Required Annual Release (RAR):** The minimum volume SHL is required to release in one year (May to April) to either Blowering Dam or Hume Dam.
- **RAR Pre-Release / Flex:** This provision allows Snowy Hydro Limited to release additional Below Target Water above the Required Annual Release in a given year, and have the additional release debited from next years Required Annual Release volume i.e. an early release of the next year's RAR. Protects the Above Target Water.

Drought Management:

- **Dry Inflow Sequence Volume (DISV):** A mechanism to stop the Snowy Hydro Scheme from running out of water. When inflows to the scheme are less than those experienced in the 1936-1946 drought, the volume of the Required Annual Release is reduced by the difference. This water is then set aside for later use for the Required Annual Release (and Drought Accounts).
- **Drought Accounts:** Reserves which can be called out if inflows reach critically low levels. These accounts are credited from the Dry Inflow Sequence Volume when a recovery occurs following a dry period.
- **Call out releases:** Under certain conditions, Above Target Water can be "called" upon by the Minister e.g. Relaxation from the previous year and drought accounts.

Flood Management:

- **Wet Sequence Protection Volume & Within Year Release Requirements:** Additional release of Above Target Water to compensate for water that spilled from Hume or Blowering dams when the Required Annual Release was released either prior to the water year (as a pre-release) OR early in that water year (prior to 30 November).
- **Relaxation:** Allows for the Required Annual Release to be reduced if conditions are wet and all downstream water needs are met for that year. The unreleased water is then rebadged as Above Target Water.

The RGA'S Policy Positions:

- The current balance between the competing needs for electricity generation and irrigation water use must be maintained unless a win-win outcome can be established.

12. Land Use Planning – Irrigation Development

Currently there are a number of large irrigation developments occurring on land that has not previously been irrigated. There is generally no State or Federal planning regulations that regulate these new irrigation developments, but for assessments related to development occurring on the bank of the river (i.e. generally the pump).

However it is argued that new irrigation development pose a number of risks to growers and their communities:

- Increased risk of 'Swiss-cheese' effect as water moves from established irrigation developments to new irrigation developments.
- Increased risk of channel capacity restrictions – in particular where large developments are occurring downstream of physical constraints in the system such as the Barmah choke.

- Increased risk of water quality issues – the establishment of large irrigation developments in close proximity to waterways in many cases may result in the mobilisation of salts and other pollutants to the waterways resulting in a decline in water quality.

The RGA'S Policy Positions:

- The RGA seeks robust and pragmatic planning regulations to address new irrigation developments and the associated risks.
- That the concept of 1ML of water at Hume equals 1ML at the lower lakes is flawed and must be addressed. (*Wakool Branch Motion – June 2019*).
- There must be a moratorium on any new irrigation development below the Barmah Choke until such time as the Government can guarantee that there will be no third party impacts to existing irrigators, community and the environment (*Wakool Branch Motion – June 2019*).

13. Water Security Infrastructure

The RGA'S Policy Positions:

- RGA advocates for the further exploration of infrastructure solutions to provide water to give benefit to the entire Murray Darling Basin, including those listed in the WaterNSW document "20 Year Infrastructure Options Study" (*Combined branch motion: Mirool, Coleambally, Deniliquin Branches - June 2019*).
- Costs vs benefits needed to be established for any project, with a long-term view taken.
- Water Security Infrastructure Projects should be seen as nation building with costs being shared by all, not just irrigators.