

19 September 2017

Our File: EV-02-0001

**ENVIRONMENT, NATURAL RESOURCES AND REGIONAL DEVELOPMENT
COMMITTEE**

Inquiry into the Management, Governance and Use of Environmental Water

Thank you for the opportunity to provide a response to the Environment, Natural Resources and Regional Development Committee's Inquiry into the Management, Governance and Use of Environmental Water.

Environmental water is actively managed within the Glenelg Hopkins CMA region to support values in the Glenelg River. In 1932, the Glenelg River was regulated to supply water to the Wimmera-Mallee system through inter-basin transfers. Construction of reservoirs and diversions reduced stream flow and, when combined with other catchment impacts, dramatically reduced the condition of the Glenelg River. The completion of the Wimmera-Mallee Pipeline Project in 2010 resulted in a significant increase in water allocated to all users across the system including the environments of the Wimmera and Glenelg Rivers.

The Wimmera and Glenelg Rivers Environmental Entitlement (2010) is shared across two river basins and multiple reservoirs. Management of this entitlement therefore requires robust governance arrangements between CMAs and the Victorian Environmental Water Holder (VEWH). With water demands across the two river basins exceeding water available for environmental use, the VEWH develops directions around sharing water between the two basins along with prioritising water security through carryover.

Environmental water has played a critical role in the Glenelg River Restoration Program. This Program has utilised an integrated planning approach to restoring the health of the Glenelg River that includes instream works, riparian management, habitat improvement and environmental water delivery. The Program continues to be well supported with implementation through partnerships with landholders and community groups. Managed releases of environmental water have underpinned a range of water quality and geomorphological responses in the river and produced significant ecological improvements including the expansion of threatened and recreational fish species. The integrated approach of the Glenelg River Restoration Program was recognised through winning the International River Symposium Australian River Prize in 2013, and nomination as a finalist in the International River Prize in 2014.

Support for water allocations for the environment in this region is increasing as the benefits become more evident over time. The use of environment water as an important component of waterway management has become 'business as usual' with increasing confidence that the benefits of environmental flows will be realised. This is particularly evident in the recreational fishing sector as anglers enjoy the benefits of flows for recreational fishing species.

Response to the inquiry questions:

Question 2. How environmental water and environmental water managers interact with, and utilise management tools such as carryover and whether carryover of environmental water impacts on the availability of water for irrigators.

Seasonal conditions are highly variable across the Wimmera and Glenelg System headworks. Tools to manage water availability are employed across the system such as quarantining water in wet years as a system reserve while each entitlement holder employs strategies including trade, carryover and substitution to manage their own supply risk. These are discussed in more detail below.

Trade: Trade between bulk entitlements is difficult in this system in the absence of an established trade framework and market. VEWH sought to purchase an allocation in this system in 2015 to address a supply shortfall across the Wimmera and Glenelg Systems. While ultimately successful, the trade required 18 months to complete and is therefore, not an effective risk management activity.

Carryover: Carryover has been utilised in the system by all entitlement holders with common rules governing its use. No irrigators exist in this system. Carryover is particularly important for the environment in dry and drought years where other water sources such as passing flow deliveries and consumptive water en-route are limited. For the Glenelg System, flow deliveries supplied through carryover are important for improving water quality which benefits both the environment and stock and domestic water users.

Substitution: Where possible, environmental water is managed with consideration of other water sources including tributary inflow (unregulated flow), consumptive water en-route (delivery of the Glenelg River Compensation Flow entitlement to domestic and stock users), and passing flow deliveries. This maximises benefits for consumptive and environmental users while changing environmental demands in wet and average conditions however these options are limited in dry and drought conditions.

Carryover is the most effective tool used by entitlement holders to manage a range of risks. Within the Wimmera and Glenelg System entitlement framework, rules have been developed to ensure that carryover does not impact on other entitlement holders.

Question 3. Consideration of what barriers exist to the more efficient use of environmental water and how these may be addressed.

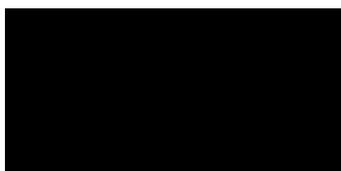
While environmental water management is a relatively new field, significant advances to improve efficiency have been made in response to monitoring outcomes and more sophisticated approaches to management. Knowledge sharing through groups such as the DELWP-sponsored Victorian Waterway Managers Forum and the Environmental Water Working Group are key mechanisms advancing the practice of environmental water management by agencies.

Areas where Glenelg Hopkins CMA anticipates increased efficiency in coming years include:

- Improved accuracy of storage management operations including finer tolerance of deliveries released from storage.
- Improved prioritisation processes between rivers- significant work is still required to inform transparent decisions around prioritising environmental water between rivers across the state whether the connection includes a physical transfer mechanism or where trade provides scope for virtual transfers.
- Improved prioritisation processes within rivers – decisions around reach scale prioritisation is an area that Glenelg Hopkins CMA will continue to work on to ensure that scarce water is targeted efficiently and effectively.
- Targeted monitoring will inform refinement of environmental water actions. Experience from the Glenelg River has identified that efficiency needs to be tempered by effectiveness – sometimes using more water is both more efficient and effective than using a minimum volume.
- Care will be needed to ensure the quest for multiple benefits from environmental water deliveries does not reduce efficiency.

For further clarification on the above responses, please contact Bryce Morden - Water Resources Manager on 

Yours sincerely



Kevin Wood
CEO