

## Environment, Natural Resources and Regional Development Committee

### Inquiry into the Management, Governance and Use of Environmental Water

#### Gippsland Water contribution to Victorian Government Portfolio Submission

21 September 2017

- **Terms of Reference 1: The assessment of the role of environmental water management in preventing or causing “blackwater” events.**

No comment.

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

Gippsland Water would like to highlight to the inquiry that while irrigators represent an important and significant component of consumptive use of water resources, in the Central Gippsland region in particular, the urban water corporation (Gippsland Water) and the electricity industry are also important other users.

A significant water storage in Central Gippsland that has an environmental entitlement and also supplies urban water, irrigators and the electricity industry is the Blue Rock Reservoir. Water entitlements in this storage were restructured in 2013 as a key action of the Gippsland Region Sustainable Water Strategy, the main component of the restructure being to create a drought reserve and an environmental entitlement. Extensive consultation with all stakeholders was undertaken by the Department (now DELWP) during the restructure of entitlements in this system.

The end result is that access to water resources associated with this storage continues to be governed by clearly defined and separate entitlements for urban water, electricity generation and irrigation, with two new clearly defined and separate entitlements introduced for the environment and for a drought reserve. The latter two were created from previously unallocated water and therefore did not impact on the entitlements for existing consumptive users. Indeed the creation of the drought reserve, accessible to all consumptive users, increases supply reliability in this system.

All entitlement holders in this system, whether the urban water corporation, electricity generators, irrigators or the Victorian Environmental Water Holder, have a clearly defined share of available inflows, storage capacity and outlet works capacity. All entitlement holders therefore manage their own entitlements within the constraints of these rules, their current holdings and the prevailing streamflow conditions. Accordingly, each entitlement holder’s decisions do not adversely impact upon the supply reliability of others.

- **Terms of Reference 3: Consideration of what barriers exist to the more efficient use of environmental water and how these may be addressed.**

In the Central Gippsland region, Gippsland Water would like to emphasise the positive working relationships that the West Gippsland Catchment Management Authority (WGCMA) maintains with

other stakeholders. The relationship between Gippsland Water and WGCMA is such that Gippsland Water is consulted and kept well informed of environmental watering objectives and activities.

Environmental watering has the potential to create temporary water quality conditions within streams that can impact on the treatment of water for potable use. This mainly stems from the mobilisation of sediment during changes in water levels and flow rates. While this can certainly also occur during natural events, there is often little opportunity to plan for such natural events, whereas planned environmental watering provides such opportunities. For example, if a watering event is planned, Gippsland Water may take actions such as ensuring off-stream storages and treated water basins are full prior to the watering event.

WGCMA has also demonstrated flexibility and compromise when Gippsland Water has expressed concerns. An example of this occurred earlier this year when WGCMA changed their watering plans during a time of high urban water demand, after Gippsland Water expressed concerns that the watering event may give rise to increased stream turbidity and thus reduce water treatment plant capacity at a crucial time. In this case, the watering planned was not to promote endangered fish migration and thus deemed of lower priority compared to other environmental watering events and as such a compromise was able to be negotiated.

The planning of environmental watering in Central Gippsland by WGCMA has been managed in a way that considers the downstream needs of others and the WGCMA is to be commended for their collaborative approach. However, this does represent a “barrier” to being able to utilise environmental entitlements with complete flexibility when seeking to meet environmental objectives. A potential way to address this barrier would be to construct pipeline infrastructure to enable water to be conveyed directly from storages to urban water demands, without the need to utilise natural waterways. Two examples in Gippsland Water’s region are piping water directly from Blue Rock Reservoir to Moe as an alternative to the Tanjil River and piping water directly from Lake Glenmaggie to Maffra as an alternative to the Macalister River. In particular, a pipeline from Blue Rock Reservoir would provide the following benefits:

- Allow greater flexibility for environmental releases without the need to consider water quality consequences for urban water supply.
- Improve source water quality for urban water supply.
- Greatly reduce pumping energy consumption for supply to Moe by maintaining the hydraulic grade line at the reservoir level rather than the significantly lower river level.
- Reduce water losses associated with supply via a river reach.

Gippsland Water suggests the inquiry considers recommending a review of such opportunities for investment in pipeline infrastructure where there may be multiple benefits, including environmental watering benefits.

- **Terms of Reference 4: Assessment of fees and charges applied to environmental water and whether these differ from those imposed on other water users.**

No comment.