

**Submission to: DRAFT GIPPSLAND REGION SUSTAINABILITY  
WATER STRATEGY.**

This submission relates to the Snowy Mountains Hydro-electric Scheme and its operation and is thus confined to Chapter 9 and Appendix 8.

**BACKGROUND**

The works of the Snowy Mountains Scheme provide a very high degree of regulation of the headwaters of the Snowy, Murray and Murrumbidgee Rivers. The Required Annual Releases of 1062 GL to the Murray River and 1026 GL to the Murrumbidgee River were set at 85% of long term average inflows. These releases could have been set higher (subject to allowances for spill and evaporation), or lower.

The storages of the Scheme are operated as two developments according to a target rule principle that provide the Required Annual Releases subject to inflows not being more severe than the historical 1936 to 1946 drought. Higher target storages would provide higher Required Annual Releases to the western rivers. Conversely, lower target storages would lower Required Annual Releases and increase the amount of above target water under the control of Snowy Hydro Ltd (SHL).

The dry inflow sequence clauses were included in the Snowy Water Licence in recognition that drier than historical inflows would eventually occur. The objective is to allow planned reduction of Required Annual Releases when storage levels are low relative to their target levels, rather than cause an abrupt halt of releases when the storages empty.

The years following corporatisation of the Scheme and operation according to the Snowy Water Licence, coincided with worsening drought conditions. Irrigators sought additional water and entered into specific additional release arrangements – at an agreed price per GL – with SHL. These were in the form of advancing Required Annual Releases from future years, together with a minimal amount of releases from above target water. These releases had to be ‘paid back’ from future allocations and contributed to premature triggering of the dry inflow sequence clauses.

**Chapter 9: FAR EAST GIPPSLAND**

**Section 9.4.2 Improving the environmental values of the Snowy River.**

**The Snowy Mountains Hydro-electric Scheme**

**P 213: Paragraph 1.** The Scheme was not built by the three governments mentioned. It was financed by loans from the Commonwealth government to the Snowy Mountains Hydro-electric Authority – a Commonwealth authority – that built the Scheme. The loans were to be repaid over 70 years from the proceeds of electricity production.

At the time of corporatisation of the Scheme in 2002, SHL – the corporate body responsible for ongoing operation of the Scheme – was required to refinance the remaining debt and repay the Commonwealth.

**P 213: Paragraph 4.** There is no guarantee that all water released by SHL from the Scheme will be ‘captured’ by Hume and Blowering Dams as SHL can release water into these storages for electricity production and/or derivative trading when the storages are spilling. This results in loss of regulation as Hume and Blowering spill far more frequently than Eucumbene and it is likely that there would be air space in Eucumbene Dam as it is significantly below Full Supply Level 99% of the time.

The Snowy Water Licence, by not restricting these releases, therefore **does not** optimise the regulation of the combined Snowy Scheme, Murray and Murrumbidgee storages.

**P 216: Paragraph 4.** As outlined in the **BACKGROUND** above; as the drought persisted, SHL released additional water in ‘special deals’ with irrigators that contributed to the premature triggering of the dry inflow sequence clauses. Such releases have the potential to benefit irrigators able to afford SHL’s nominated price at that time, to the detriment of the wider irrigation community over extended periods.

The total control over the release of above target water provided to SHL by the Snowy Water Licence is a significant shortcoming in the licence when viewed from the perspective of overall water resource management in the National interest. **That control of this Nations scarcest natural resource is dictated by electricity production and derivative trading is inappropriate.** The provision needs to be removed from the licence and the above target water managed – together with the below target water - to maximise the Scheme’s role as a reserve storage and its capability as a provider of water security for irrigators, communities and the environment.

**P 217: Could we manage the Scheme better in the face of a drier future?**

**First three dot points:** There is no doubt that the design could be improved. However, the concept of a planned reduction in releases and not unplanned failure should prevail. Lowering the Required Annual Releases would be one way of increasing drought security, however, unlike the dry inflow sequence concept, releases to the western rivers would be lower in **all years** and SHL would have more discretionary above target water – not a good outcome with the Snowy Water Licence as presently drafted. Conversely, raising the Required Annual Release would improve water availability to the western rivers during most years.

**Fourth dot point:** The Scheme’s importance in providing reserve storage capability and water security in times of drought certainly needs to be acknowledged. However its ability to do this is reduced by the overall provisions of the Snowy Water Licence that is weighted towards use of the Scheme’s water resource for electricity production and derivative trading; rather than optimising the use of the water for irrigation, communities and the environment.

**The Snowy Water Licence should be redrafted so that the Scheme can better meet the purpose for which it was built:** the collection, storage and release of water for irrigation and communities – and more recently the environment – and to provide reserve storage and water security in times of drought.

**Fifth dot point:** It was the ‘flexibility around the pre-release of Required Annual Releases’ – including the ‘special release deals’ with irrigators – that caused the premature triggering of the dry inflow sequence and the exacerbation of the ability of SHL to ‘make good’ releases when inflows improved. Whilst it has increased water availability in some years, it has also resulted in years of very low annual releases from the Scheme. The environmental and socio-economic impact of these pre-releases needs to be further examined.

Also, the decision of when to pre-release from the Scheme **must not** be dictated by SHL’s desire to retain above target water as this places electricity production and derivative trading before prudent water management in the National interest.

**Seventh dot point:** There can be no certainty around the timing of environmental releases to the River Murray while these are allocated to above target water. **The Snowy Water Licence should be amended to remove or modify this provision so that environmental releases can occur when needed.** Amendments to the Snowy Water Licence are feasible whilst ever the Scheme is owned by the three governments. However, amendments would not be feasible should the Scheme be privatised as compensation payments to the private owners would be prohibitive.

**Proposal 9.3: Managing the Snowy Scheme in a drier future.**

Water from the Snowy Scheme is significant in the overall water management of the Murray-Darling Basin; especially in times of drought.

Proposal 9.3 should therefore include integrated operation of the Snowy Scheme with other storages of the Murray-Darling Basin and include the Murray-Darling Basin Authority in the consultation process.

**To optimise water resource management the water resources of the Snowy Scheme and the Murray-Darling Basin need to be managed by a single water authority.**

**Appendix 8: MANAGEMENT OF THE SNOWY HYDRO-ELECTRIC SCHEME**

**Page A42: The Snowy Mountains Hydro-electric Scheme.**

The Scheme was financed and built by the Commonwealth – See Chapter 9 comments.

**Page A42: Required Annual Releases to the Western Rivers.**

**Paragraph 5:** There is no guarantee that water released from the Scheme will be captured by downstream storages – see Chapter 9 comments.

**Paragraph 6: Release of waters stored ‘above target’ should not be at the discretion of SHL** – see Chapter 9 comments.

**Page A44: Environmental Water Releases.**

**2<sup>nd</sup> last Paragraph:** As stated previously, **Murray environmental releases should not be held in the ‘above target’ account** as releases are therefore at the sole discretion of SHL and may only be made infrequently for electricity production or derivative trading.

**SUMMARY**

The 75 Year Snowy Water Licence (issued in 2002) provides flexibility to SHL in the storage and release of the Scheme’s water resource for electricity production and derivative trading and sub-optimises the use of the water for irrigation, communities and the environment. It also falls short of providing optimum regulation of the combined Snowy Scheme, Murray and Murrumbidgee storages.

**A full review of the Licence is due in 2012 (10 years after corporatisation) at which time it should be significantly redrafted to ensure that effective and optimum water management dictates Scheme operation; not electricity production and derivative trading.**

Failure of shareholding governments to achieve this outcome would be a failure of their duty of care to the communities of the Snowy Mountains and the Murray-Darling Basin whose wellbeing and livelihoods depend on a secure and reliable water supply.

H. M. Talbot,

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