

Submission to the 10 year Review of the Snowy Water Licence
Private landholders: Elena Guarracino and Richard Valler “Wildcroft” Dalgety NSW

To: Snowy Water Licence review
Inter-governmental and Strategic Stakeholder Relations
Department of Primary Industries Water
Locked Bag 5123, Parramatta NSW 2124
Email: snowylicence.review@dpi.nsw.gov.au

Background

Thank you for the opportunity to provide a submission to the Snowy Water Licence review.

My comments and suggestions are from the perspective of a landholder with a 300 ha property on the Snowy River, where I have lived with my husband since 2005.

We and have been actively involved in the Snowy River Banks Restoration Project, signing two 10 year landholder agreements for revegetation and biodiversity projects along the Snowy River banks. The revegetation of about one kilometre in length and has been a huge management task, but with great rewards, with increased biodiversity, including endangered birds now nesting in the revegetation and stable, non-eroding river banks.

We are actively engaged in a number of community groups including Snowy River Landcare, Climate Action Monaro, the local Numbla Vale Rural Fire Service brigade, the local wildlife group and the Snowy River Alliance.

We are not scientists nor do we have formal education in natural resource management.

However, we have listened to a range of scientists and natural resource managers over many years, in the fields of river ecology and geomorphology. Most recently at the Snowy River Day which I helped to organise for the Snowy River Alliance and the Dalgety District and Community Association.

On that day, scientists and government informed the community about the state of the river. What had been done and what is still needed. The annual celebration marks the largest environmental water release into the Snowy River and the historic heads of agreement to release up to 28% natural flow into the river. Over 100 people attended, including local government – the mayor and councillors, members of the community, university researchers as well as paddlers and government agencies, such as the South East Local Land Services and DPI Water and Office of Environment and Heritage.

I hope my submission reflects some of what I understand is necessary for a healthy Snowy River and community and historic promises still to be implemented.

Many of the points I make in my submission are supported by scientists and other stakeholders at that event.

While some of these points fall outside the terms of reference for this review, I understand that it will be still be accepted and considered.

Who pays for the environmental impact?

Snowy Hydro Scheme was built in 1974 and diverted 99% of the natural Snowy River flows, now about 80%, for the benefit of electricity generation and irrigation and to the detriment of the health of the Snowy River and downstream communities.

As landholders we have spent hundreds of hours establishing and maintaining revegetation along a one kilometre stretch of the river. We and many others wonder why Snowy Hydro Ltd and irrigators are not paying or contributing to the cost of the ongoing work required to mitigate and make good the detrimental impact this water diversion, through some sort of levy or contribute to a trust fund.

Why should taxpayers and private landholders like us, foot the bill directly or in kind, for restoring the river to some sort of health, while Snowy Hydro and irrigators continue to profit from the Snowy River water. User pays principle surely should apply.

When a company creates a mine, the government demands a levy up front so that the site can be rehabilitated when the site closes and to mitigate the environmental impacts. So too, should Snowy Hydro and irrigators be responsible for the environmental damage caused by the diversion of water from the Snowy River.

The Snowy River and downstream communities are suffering while the Murray Darling irrigators and Snowy Hydro are benefitting / profiting from this water. It seems quite wrong to me.

The benefits of a healthy Snowy River

The Gillespie Economics Report commissioned by the Total Environment Centre in 1998 made many important findings still very relevant today and state my position more clearly than I can:

“Water from the Snowy River is a scarce resource for which there are a number of alternative competing uses. The focus of this report is on the economic benefits of allocating water to the Snowy River for environmental flows and associated recreation activities.

The economic ‘benefits’ of increased environmental flows can be considered within two economic frameworks:

- *economic efficiency; and*
- *regional economic impacts.*

The primary focus of economic efficiency is the allocation of scarce resources to maximise community welfare. In other words, this framework is concerned with the net economic benefits to the community from an action, such as the reallocation of water between competing uses.

Within an economic efficiency framework, the potential economic benefits of increased environmental flows in the Snowy River include:

- *increased consumers' surplus (net benefits to consumers) associated with market and non-market recreation/tourism;*
- *increased producers' surplus (net benefits to producers) associated with commercial recreation and tourism; and*
- *increased consumers' surplus (net benefits to producers) associated with improvements in the environment.*

Another economic framework that is often used to assess the 'benefits' of proposals is regional economic impact assessment (REIA). REIA is concerned with impacts of a proposal on regional economic activity, where economic activity is defined in terms of direct and indirect output (business turnover), value-added, income and employment. These economic entities are not, however, measures of economic costs or benefits in terms of the economic efficiency framework.

Because the REIA framework is based on actual market transactions i.e. purchases and sales, there are no regional economic impacts associated with environmental flows that only increase biodiversity preservation. Any general improvement in the environment would need to also translate into some increase in economic activity, such as expenditures by tourists and commercial tourism operators, to actually have regional economic impacts.

This report is a desktop study of the economic efficiency benefits and regional economic impacts that may be associated with increased environmental flows in the Snowy River to 28% of natural levels.

..... Information on increased visitation and likely environmental improvements in the river together with indicative economic value/regional economic impact information was then aggregated to provide indicative order of magnitude estimates of the economic benefits and regional economic impacts associated with increased environmental flows in the Snowy River.

It is estimated that 28% flows in the Snowy River may result in an increase in annual visitor days to the Snowy area, associated with rafting, canoeing and fishing, of in the order of 136,000. On the basis of consumers' surplus values of between \$30 and \$50 per visitor day, this annual increase in visitation level translates into annual consumers' surplus benefits associated with increased recreation/tourism of between \$4M and \$7M. Capitalised over thirty years these benefits would be in the order of \$51M and \$84M.

Producers' surplus benefits may also be generated for commercial tour operators that capitalise on the increased tourism opportunities. The indicative order of magnitude of annual producers' surplus benefits has been estimated at \$190,000. Capitalised over a thirty-year period this annual benefit is equivalent to in the order of \$2M.

There may also be non-use economic benefits associated with 28% environmental flows. There are no studies considered suitable for benefit transfer to the Snowy River situation. However, some studies have indicated that non-use benefits may be in the order of three times consumers' surplus use benefits. If this applies to the Snowy River, then non-use benefits may be in the order of \$150M to \$250M, giving total economic benefits of 28% flows in the Snowy River of in the order of \$200M to \$300M.

The main regional economic impact from increased environmental flows would arise from expenditure associated with increase recreation/tourism activity. Direct expenditure by tourists is estimated to be between \$20 per visitor day and \$60 per adult night. The initial expenditure stimulus from visitors can have flow-on effects for the regional economy. These flow-on effects are summarised by the multiplier, which may vary depending on region size and industry structure. Input-output studies of visitors to national parks in other regions give an indication of the direct effect, production-induced effect, consumption-induced effect and total effect for regional output, income, value-added and employment per 1,000 visitors (10,000 visitors for employment) to a regional economy. Based on these studies, it is estimated that the regional economic impacts associated with increased tourists to the Snowy environs, from 28% flows, would be in the order of \$3M to \$4M in annual business turnover, \$1.8M to \$2.3M in annual value-added including \$1M to \$1.7M in annual income to between 50 and 82 local jobs. . . .

. . . . it is evident that except for extreme variations to the assumptions made, the economic benefits and regional economic impacts of 28% flows in the Snowy River are likely to be substantial.”

Some key dates and decisions

I think it is worth remembering some important facts about the Snowy River:

- 1949-74 Snowy Mountains Hydro-electric Scheme is constructed, diverting flows from 12 rivers and 71 creeks in the Snowy Mountains to the Murray-Darling Basin.
- 1967 The Snowy Hydro Scheme captures 99% of Snowy River’s headwaters upon completion of the Jindabyne Dam, the fourth major dam on the upper Snowy catchment.
- 1996 The *Expert Panel Environmental Flow Assessment of the Snowy River below Jindabyne* recommends the equivalent of 28% mean annual natural flow (MANF) as the minimum environmental flow needed for the Snowy below Jindabyne Dam.
- 2000 Commonwealth, Victorian and NSW Governments sign the Heads of Agreement, a ten-year plan to restore the Snowy River below Jindabyne up to 28% annual natural flow (ANF) and provide increased flows up to 118 GL to Snowy montane rivers, and 70 GL to the River Murray.
- 2002 The three governments sign the Snowy Water Inquiry Outcomes Implementation Deed (SWIOD). Snowy Hydro is corporatised. Legislation commits NSW, Victoria and the Commonwealth to providing \$375 million funding for Water for Rivers to obtain water savings in the Murray and Murrumbidgee systems to off-set increased flows to Snowy River below Jindabyne Dam up to 21%; increased flows up to 118GL to five Snowy montane rivers including two sections of the upper Snowy above Jindabyne Dam; and 70 GL/yr to the River Murray by 2012. The three governments commit to returning 28% to the Snowy below Jindabyne post-2012. The legislation also requires the NSW Government to establish the independent Snowy Scientific Committee.

NSW Government issues a 75-year water licence to Snowy Hydro Ltd.

2007 Commonwealth Government contributes an additional \$50million to Water for Rivers towards the 2012 Snowy River Increased Flow target of 21% MANF.

Snowy Licence Review community consultation process concerns

As a landholder and part of the Snowy River community I am concerned about the lack of community consultation into the Snowy Licence Review. Having only one opportunity for input every 10 years is inadequate.

In addition, the consultation process for this review has been disappointing not only for the late decision to have consultation stakeholder meetings but the very short period following those meetings to prepare submissions.

Only 12 working days after the briefing which was held in Sydney on September 26 is not a reasonable timeframe, particularly for volunteer / community groups. I think it would have been more appropriate for the Snowy Water Licence Review to travel to the Snowy Mountains and the other downstream communities, for example Orbost or Marlo to engage with and conduct the community consultations with those river communities rather than expect them to travel all the way to Melbourne or Sydney at their own expense.

Snowy Scientific Committee

The original Snowy Hydro Corporatisation Act provided for the Snowy Scientific Committee (SSC) to ensure independent oversight of the impact of the environmental flows. This Committee however was disbanded in 2013 by an act of parliament with a less independent Snowy Advisory Committee to replace it. Nearly four years have passed without even that committee being appointed. A very poor state of affairs.

According to the NSW Snowy Hydro Corporatisation Act (in effect June 28, 2002), an independent Snowy Scientific Committee was to be established to advise the NSW Water Administration Ministerial Corporation on environmental flows for the Snowy River and other rivers and streams in the Snowy Scheme. It was also to produce annual public State of the Environment Reports and these were to be available to inform public submissions to the first Five-Year Review of the Snowy Water Licence. However the NSW Government delayed the establishment of the Snowy Scientific Committee until 31 January 2008, the same day as the closing date for submissions to the Five-Year Review.

In its first three-year term the Snowy Scientific Committee produced an important series of independent_reports on the adequacy of environmental flows to the Snowy River and the Upper

Murrumbidgee River - Annual Environmental Release Recommendations, and an Options paper on the impact of Mowamba Borrowings Account on the recovery of the Snowy River.

In May 2011 the Committee's first three-year term expired but was not continued despite promises by a number of NSW Government Ministers.

In September 2014 the NSW Government amended the Snowy corporatisation legislation to replace the independent Snowy Scientific Committee with a government controlled advisory committee with a greatly reduced role, certainly not independent. To date the advisory committee has not been established.

Management of the Snowy River

There appears to be a lack of coordination between the various organisations and government agencies with responsibilities for the Snowy River.

The waters seem very muddy indeed, with no single government agency accountable for the outcomes to which three governments committed to when they signed the Snowy Water Inquiry Outcomes Implementation Deed (SWIOID). There needs to be a single government agency or minister to which all relevant parties are accountable.

Some other key issues which I would like to the Review to consider

The incorrect accounting for Mowamba River flows which reduces the intended volume of Snowy River Increased Flows.

The permanent removal of the Mowamba Weir and aqueduct.

The lack of achieved flows in the Snowy Montane Rivers.

The lack of transparency of water accounts to the community, cited as "commercial in confidence" considerations by Snowy Hydro. The community has every right to have access to this information.

The overall inadequacy of annual releases into the Snowy River

Murray-Darling Basin Plan

The Snowy Hydro Scheme contributes more than 2000 gigalitres to the Murray-Darling Basin every year, of which nearly half (approximately 1000GL) is sourced from the Snowy River alone.

While the Snowy Water Licence permits this massive volume of water to be diverted from the Snowy River headwaters, the Commonwealth Water Act (2007) excluded the Snowy Scheme from the Basin Plan and the Snowy Water Licence from review.

This is inconsistent with the environmental provisions of the Water Act, which require the Basin Plan to identify sustainable diversion limits for all Basin water resources. It also limits the volume of water that the Basin Plan may return to westerly flowing rivers affected by the Snowy Scheme, and does not address the future risks to Basin water supplies of reduced snowmelt flows from the Snowy Mountains due to climate change.

Outstanding Issues

The 70GL River Murray annual allocation funded by the Commonwealth must be delivered.

Negotiations to fund and deliver the legislated 28% ANF below Jindabyne Dam must be initiated without further delay. The minimum environmental flow of 28% ANF to the Snowy River below Jindabyne Dam remains unfunded by the shareholder governments. In addition, the Act requires the three governments to compensate Snowy Hydro Ltd for lost generation capacity.

An independent Snowy Scientific Committee must be immediately re-established.

The scheduled increased flows to the Upper Snowy River above Jindabyne Dam in Kosciuszko National Park must be delivered.

The Mowamba Aqueduct must be permanently decommissioned to provide proxy headwaters for the Snowy River below Jindabyne Dam. It will also enable much needed dissolve carbon to enter the Snowy River system at the correct water temperature for native aquatic life. It could then be counted as part of the 28% and would become a natural flow. Essential according to many sources.

A number of submissions to the first Five-year Review of the SWL in 2009 recommended that Mowamba Aqueduct be decommissioned to improve the environmental condition of the Snowy River and restore connectivity to headwater flows.

Submissions (including one from the Victorian Government) recommended that the licence should be amended to allow Snowy River Increased Flows to be delivered through a combination of releases from Jindabyne Dam and Mowamba weir. The Snowy Scientific Committee's first report, *Adequacy of environmental releases to the Snowy River* (Oct. 2008), identified the important environmental benefit the variable natural flows of the Mowamba River would provide to the total Snowy River Increased Flows.

However when the NSW Government released its *Final report- Five-year review of the Snowy Hydro Water Licence, Licence review – May 2002-May 2007* (Nov. 2009:6) it was proposed that the Office of Water would “investigate by 2012 options for better achieving environmental objectives under low flow conditions, including options for the decommissioning of Mowamba Aqueduct.”

The NSW Government has still not delivered on that proposed action.

All the tributary rivers and streams in the upper Snowy catchment, including the Eucumbene River, which were not included in the original Snowy flows legislation, must receive environmental flows.

The Snowy Scheme must be fully integrated with the Murray-Darling Basin Plan and sustainable diversion limits identified for the Snowy River, and all other rivers affected by the Scheme.

I believe the Licence should be amended so that Snowy River Increased Flows (SRIF) can be delivered via Mowamba and Jindabyne, followed by permanent decommissioning of Mowamba Weir, public access to Mowamba and Snowy River flow data, and the final 7% Snowy flows funded and delivered and compensation agreed to.

The NSW Department of Primary Industries has called for comments on the Snowy Water Management Licence, but I have question the ability of the NSW Department of Primary Industries to manage environment water in the Snowy Mountains.

I am concerned about the capacity of DPI Water to undertake the 10-year Review of the Snowy Water Licence in an impartial and informed manner. This Review is being undertaken by DPI Water at a time when serious questions have been raised and investigations are underway regarding serious failures of governance by NSW water managers.

The Review is also being carried out when scientists involved in the Snowy Water Initiative have been made redundant. Hence a lack of scientific information is available for the Review.

In addition, amendments by the NSW Government in 2014 to the NSW Snowy Hydro Corporatisation Act (1997) (the Act) removed the independent Snowy Scientific Committee (SSC), consequently there have been no independent state of environment reports produced by the SSC since 2011 to inform public submissions to this review or any further review or variation of the SWL as was originally required under the Act. It would appear that the NSW Snowy Hydro Corporatisation Amendment (Snowy Advisory Committee) Act 2014 has not been formally assented to therefore the NSW Government is still legally obliged to ensure the SSC is operational and the SSC has produced annual state of environment reports which must be publicly available.

The terms of the review are very narrow and do not address some important legal requirements and serious issues relating to the lack of implementation of the various Snowy Water Inquiry legal agreements by the current management at DPI itself.

I believe that a judicial inquiry is needed into the management of water in the Snowy Mountains by the NSW DPI. Particularly in light of the recent ABC Four Corners program "Pumped" which makes very serious allegations about the integrity of DPI Water and water management of the Murray Darling Basin Plan, of which the Snowy River has a significant part.

Previously, the Snowy Water Initiative (SWI) was recognised as being of internationally significance and best practice in water management, as demonstrated by being short listed for the International River Prize in early 2017. This accolade occurred just as the new NSW DPI Water executive sacked the SWI staff driving this innovation for the Snowy Mountains community, even after the Deputy Premier of NSW said staff would be transferred with the program to OEH.

The historical management of water in the Snowy Mountains was innovative and has some important insights to improve the management of water in NSW and Australia. However, this knowledge and expertise has been lost to the NSW community and the water industry as a result of NSW DPI Water management.

I am concerned about the recent management of water in the Snowy Mountains by the NSW DPI Water executive since 2015, and the lost opportunities for the Snowy River and community.

In particular I am concerned about:

The lack of recognition of the legal responsibilities by the NSW DPI Water executive to implement the Snowy Water Licence and the various Snowy Water Inquiry legal instruments on behalf of the Commonwealth, Victorian and NSW Governments.

The apparent lack of due diligence shown by the NSW DPI Water executive in ceasing the Snowy Water Initiative activities.

The apparent lack of appropriate governance structures to manage water resources that includes the SWI partners, community, and the relevant Aboriginal nations.

The apparent lack of appropriate resources allocated to implement NSW Governments legal obligations as part of the Snowy Water Inquiry outcomes.

The quality of advice from the NSW DPI Water executive to the NSW Water Minister and Deputy Premier concerning the SWI.

Snowy River Increased Flows

The 10-year Review is an appropriate time to amend the SWL to ensure that Snowy River Increased Flows can be delivered via a combination of Mowamba weir and Jindabyne dam. The Mowamba Aqueduct should be permanently decommissioned.

The now disgraced ex-MLC Ian McDonald played a key role as NSW Minister for Primary Industries during the period of the first Five-year Review.

I believe there should be a full review of the original decision in 2009 not to amend the Licence in this regard (and decommission Mowamba Aqueduct).

The Heads of Agreement (2000) and SWIOWD (2002) by commitment by the three shareholder governments to deliver up to 28% to the Snowy River post 2012 must be implemented.

In 1996 the Expert Panel report identified 28% MANF as the minimum environmental flow required for the Snowy River below Jindabyne Dam.

The intergovernmental agreements of 2000 and 2002 agreed to fund water savings up to 21% MANF to the Snowy below Jindabyne

By 2015 Water for Rivers had acquired 212GL in water savings entitlements for the Snowy River (and 70GL for the River Murray). The 212GL (plus total base passing flow) is equivalent to 21%. However due to the fact that approximately half the entitlements are low reliability or general security entitlements that deliver very little real water except in very wet years, it is highly likely that the Snowy River below Jindabyne Dam will only receive on average approx. 15% MANF or less. This is a very poor environmental outcome for any river and not in the spirit of previous agreements.

The final 7% of legislated flows must be delivered to help restore the Snowy River to a sound ecological state.

The SWL must be integrated with Murray Darling Basin Plan

The Commonwealth Water Act requires the Basin Plan to identify Sustainable Diversion Limits (SDLs) for all Basin water resources. The Snowy Scheme contributes more than 2000GL/year of high reliability water to the MDB (approximately half that volume is contributed by the Snowy River catchment alone) yet there are no SDLs identified for any of the 12 rivers and 71 creeks diverted by the Snowy Scheme. There are many streams and rivers in the Snowy Scheme that receive no environmental flows. In addition, SDLs identified in the Basin Plan for the naturally westerly flowing rivers are capped by the Snowy Water Licence.

To maintain the legislative whitewash that the Snowy Scheme has no connection with MDB is a failure of water management planning and gives rise to the unsustainable management of the Snowy Scheme Rivers. It also poses enormous risks to the MDB through the impact of climate change on the previously reliable water supply of the Snowy Scheme catchments, which is not considered in

the MDB water resource planning. The Commonwealth Water Act requires the Basin Plan to consider the impact of climate change on all its water resources. However this has not occurred and represents a major failure of water governance by the three shareholder governments.

Thank you for considering this submission.

Elena Guarracino and Richard Valler

“Wildcroft”, 799 Ironmungie Road, Dalgety NSW 2628

PO Box 928 Cooma NSW 2630

wildcroft.799@gmail.com