



**10 December 2021**

**Gippsland Environment Group - Response to the *Central and Gippsland Sustainable Water Strategy Discussion Draft***

Gippsland Environment Group (GEG) is a not-for-profit organisation incorporated in 2006. GEG is located in Bairnsdale, Victoria, the traditional lands and waters of the Gunnaikurnai people, who GEG honours and pays respect to, in all of our work.

Gippsland Environment Group is a member of the Concerned Waterways Alliance. GEG fully endorses Environmental Justice Australia's (EJA) response to the discussion draft of the *Central and Gippsland Sustainable Water Strategy Discussion Draft*.

Core GEG members, experts in environmental health have dedicated years of their lives to championing and advocating for the survival of Gippsland's rivers and the Gippsland Lakes system.

- 
- **The lack of water availability for the environment and water ecosystem health is a fundamental concern of Gippsland Environment Group**

Fresh water flows from the Lakes' catchment, intended for the Lakes environment, are currently being harvested and sold by Southern Rural Water, and more irrigation is being proposed. There is simply not sufficient water to service irrigation, mine rehabilitation, Melbourne Water's demands and cultural flows to the Gippsland Lakes.

Cultural flows are vital to sustain ecosystems including fisheries – and critically also involve the passing of organic material – food for the ecosystem. Rivers need flows– and not just some nominal amount stated by DELWP.

The 600km<sup>2</sup> Gippsland lakes are Australia's largest freshwater estuary and run parallel to the ocean separated only by a line of sand dunes along the Ninety-Mile beach. The lake chain discharges to the sea through a man-made and maintained entrance at Lakes Entrance.

- **Another of GEG's urgent concerns is the need to reduce the depth of the entrance at Lakes Entrance.**

**Gippsland Ports'** Dredging Permit, if re-issued must remove the extra 2 metres depth allowed on top of the navigable depth of 3.5 metres. The current allowance is to dredge 5.5

metres, to great cost. Going back to dredging to 3.5 metres will reduce ocean water intrusion and the lakes' salinity.

As a direct result of increased dredging depth, the tidal speed through the entrance has increased from three knots to 7.4 knots. The Tidal Prism, the amount of ocean water entering the Lakes each tide, has massively increased, as has the tidal range of ocean water entering the Lakes, to the extent that surface water is now classified as 'highly saline' (as in, it can kill fresh-water plants).

**The ecological impacts of increased salinity on the Lakes are stark and distressing:**

- Loss of shoreline vegetation and subsequent erosion
- Loss of bird habitat and food chain
- Marine species invasion of shore crab, sharks, stingray, squid, starfish, marine oysters etc
- The salt-water wedge has intruded up the lake chain as far as the Port of Sale (a distance of over 100 km), endangering the ecologically significant Heart, Dowd and Clydebank Morasses.

The EPA has recently listed the lakes as “marine”. Subsequently various governing bodies appear to be “managing” the lakes on this basis. This seeming acceptance of a dire situation is highly contentious and very risky. The ramifications of just allowing more salt ingress are enormous for the environment– for the health of all species, including local people. Vested interests can now make the claim that any freshwater discharging to this “marine” environment is going to waste.

- **Water quality is not being monitored or tested properly in Gippsland Lakes' feeder streams.**

The Gippsland Lakes have become a settling basin for Gippsland wastes. Pollution including heavy metals and pesticides and toxic algal blooms are serious problems for everything trying to survive around the Lakes system.

- **The Gippsland Lakes are Ramsar listed and are subject to treaties with China and Japan to protect the habitat of migratory wading birds.**

The Gippsland Lakes are a complex and unique set of diverse environments driven by river discharges. It is this unique geomorphology and wetland system that attracted Ramsar status.

**Concerningly the *Central and Gippsland Sustainable Water Strategy Discussion Draft* fails to address the restoration to health of the iconic Gippsland lakes system, with its rare chains of ponds, morasses and precious wetlands.**

In 2015 the Victorian Auditor General delivered a damning report on the mismanagement of Victoria's 10 Ramsar listed wetlands. It observed that Parks Victoria and DELWP had not been monitoring and testing, yet had been advising the Federal Government that there had

been no change in the lakes' ecological character since the 1982 Ramsar listing. The audit stated: "...overall, the governance, coordination and oversight of the Ramsar sites must improve for Victoria to effectively meet its obligations under the Ramsar Convention."

**Australia is now in breach of its Ramsar Agreement.** Gippsland Environment Group agrees with the proposal for a Universal Declaration of the Rights of Wetlands, consistent with the 1982 World Charter for Nature.

- **Management of the Gippsland Lakes system is currently fragmented and uncoordinated. There are over 30 authorities involved in the Lakes' management.**

For the Gippsland Lakes and river systems to heal, a transparent management structure must be formed. Any oversight structure of the Lakes system must be led by and in genuine partnership with local First Nations Traditional Owners and Custodians, where knowledge is valued and respected. GEG's vision is for an independent collaborative oversight body. A good model is the Snowy Independent Statutory Authority.

The Gippsland Lakes give East Gippsland its soul – its health and vitality. We cannot survive without healthy waterways. Water is Life. Tourism in East Gippsland is built on the Gippsland Lakes. The East Gippsland economy is built on Tourism.



*Freckled Ducks* . They do not breed in the Gippsland Lakes, they breed in the lower Murray Darling basin, but they occur here in drought time. This is a classic case of a species that relies on the Gippsland Lakes for its survival as a species and the importance of the Lakes system as a drought refuge.



*Green and Gold bell frogs* once very common in the fringing wetlands of the Gippsland Lakes are now only found in small areas near Clydebank Morass (the Avon River entrance into Lake Wellington).

---

- **Agriculture, Macalister Irrigation District (MID) and the Latrobe River**

The Latrobe River already has a deficit in environmental flows with no actions in the CGSWS Draft to regain the water needed.

MID has led to dry land salinity, rendering land at the Heart for example, useless for agriculture. The Heart was once a rich agriculture area around the Heart Morass on the Latrobe, and the Clydebank Morass on the Avon. It supported small dairies and butter factories. Much of the adjoining previously fresh Heart wetlands are now salt affected. This salinity is also affecting Clydebank Morass along the Avon River where it runs in to Lake Wellington.

**These are RAMSAR wetlands. Australia has a national and international obligation to preserve the natural values.**

- **Reducing Water Use in Agriculture**

**The CGSWS Discussion Draft fails to address the issue of water-use efficiency in the food system as a whole.**

The livestock sector plays a substantial role in deforestation, biodiversity loss and climate change. Livestock also significantly contributes to humanity's water footprint, water pollution and water scarcity. Water managers need to consider the difference between water use for growing food (for people) or feed (for animals).

High numbers of cattle lead to vast quantities of highly concentrated waste. A typical single beef or dairy cow can excrete about as much as 20-40 people. A 1000 cow dairy potentially produces the equivalent effluent to a town of 40,000 people!

[The Water Footprint of Beef: Industrial vs. Pasture-Raised](#)

There is a history of effluent dam breaches in the MID and a failure to fully comprehend the engineering logistics and social responsibility for each farm to contain and treat these vast amounts of effluent.

**This CGSWS Discussion Draft should include measures to confine the growth of the meat and dairy sector. There needs to be demand management in CGSWS Draft discussion.**

<https://iopscience.iop.org/article/10.1088/1748-9326/9/9/091003/meta>

- **GEG are concerned about EXPANSION of the Macalister irrigation district.**

There was a recent \$500,000 grant to Southern Rural Water to investigate expansion of the Macalister Irrigation District. The Victorian Water Minister appointed a Group advised by interested parties to guide this process.

**GEG understands this grant was aimed at gauging the demand from farmers for this opportunity, with nothing about water availability or environmental effects.**

Expansion of the MID is being strongly promoted by local politicians. It will be hard to convince them that there should be a moratorium on new extractions. Farmers will want more irrigation. In some flood irrigation set ups, irrigation requires a megalitre every hectare every 2 weeks. The point is that unless farmers invest in expensive infrastructure, there is a huge amount of wastage—and this aggravates salinity.

**The price of irrigation doesn't reflect how precious water is and opens up potential for more wastage. The benefit to community is low and the cost to the environment is high.**

- **It is timely to *reduce* irrigation rights, *not* to increase irrigation.**

The Macalister irrigation district 2030 strategy developed by Southern Rural water, claims there is “excellent quality water with substantial water resources.” Their strategy has not taken salinity and lack of environmental flows into account. Gippsland Environment Group are recommending *no new extractions* as well as prevention of sleeper licences from being activated. At present the price of production is reflected in livestock sales.

**It is a good time to force farmers to irrigate more efficiently and pay a higher price for water, promoting frugal use and to improve effluent management.**

- **SRW has a serious conflict of interest as it controls all the water supplies and sells the water.**

There are too many irrigators on its Board so an impartial vision for water is not achieved.

***GEG strongly advises:***

- Reducing agriculture water rights from rivers, dams and bores
- Water use must be metered and monitored
- Southern Rural Water must be restructured to include environmental outcomes
- Contracting rather than expanding Macalister Irrigation District.(MID)
- Grazing leases along river frontages must be stopped.

- 
- **The CGSWS Discussion Draft claims up to 28% of flow reductions are caused by climate change.**

**The CGSWS Draft must seriously address the cumulative effect of other dynamics in the catchments (for example logging, dams and bores).** Instead of passing loss of flows off as simply unavoidable climate change, SWS must address logging and burning of native forests, metering and monitoring of dams and metering and monitoring of all bores and groundwater.

- **Logging**

Logging in the catchment of rivers brings down mud and silt from the forests which were the water filters. The roading in to logging coups, often on steep slopes adds more soil disturbance and dirty water running down into the streams.

From a November 2021 [ABC story on illegal steep slope logging](#) affecting water quality: “The forests are essential in making sure that the water is of high quality before it comes into the reservoir and into the distribution system to provide that water,” Professor Stuart Khan said.

Vegetation retention also lowers the risk of algal blooms that make the water temporarily unusable. It's particularly important for Melbourne, because 60 per cent of its stored drinking water comes from the Thomson catchment. And that water is delivered to households with relatively little filtration.

*"If those forests have been damaged or are still growing, Lindenmayer said, they draw 12 megalitres more water per hectare per year than forests that are more than 100 years old."*  
[The quoted article](#) "Melbourne's water supply at risk due to 'collapse' of forests caused by logging" includes economic impact of loss of water being much greater than value of logs.

- **Burning coupes post logging, fuel reduction burns and unattended bushfires affect water quality**

The water quality in the catchments that have suffered bushfire or post logging burns are impacted by silt, ash, deoxygenation and the loss of the filtering capacity of the forests. The "clean up" after bush fires is also problematic with "salvage logging", piles pushed up to be burnt and so call "strategic firebreaks" through bush land. Punishingly severe fuel reduction burns over time have dried out the catchments and damaged the ecosystem services to supply clean water. Regrowing forests use a lot more water.

- **Farm dams have a cumulative effect on water flows**

**There is currently incomplete licensing and monitoring of farm dams.**

[This case study](#) suggests that earlier action to expand the licensing system would have resulted in many benefits including savings in public resources, increased certainty of water supply for farmers, and better protection of the environment.

[This article](#) questioning farm dam incentive legitimacy is relevant to Victoria. The basic logic is that "an increase in water in one place will require a reduction of water elsewhere. "

**From Flora and Fauna Guarantee Act 1988 Action Statement 177:** *Alteration to the natural flow regimes of rivers and streams: Dams or diversions can reduce the frequency of small freshes (flows that produce a substantial rise in river height for a short period, due to short bursts of rain). These are a very important component of riverine ecology.*

The [Resource Manual for Environmental Flows \(NRE 2002d\)](#) recommended that all **commercial dams within a catchment should be licensed.** Legislation implementing the recommendations have passed through Parliament. This manual has been used as a training and resource tool for those involved in identifying and providing environmental flows through the water allocation processes. Eg; Page 7: "Conduct farm dam assessments using the Tool for Estimating Dam Impacts in all priority catchments.

*Responsibility: Catchment Management Authorities, Water Authorities"*

The intended management actions were further elaborated in DSE's *Actions for Biodiversity Conservation* database. Detailed information about the actions and locations, including priorities, is held in this system and is provided annually to land managers and other authorities. The Actions are listed and seem relevant today. Is it being used?

- **Bores and groundwater**

**Groundwater levels have a significant influence on the flow and aquatic habitat condition of the rivers during low flow periods.** The flood plains, once covered in vegetation that slows and filters flood water, are often drained and heavily grazed. These low-lying areas have drylands salinity caused by the Macalister Irrigation District so when there is a flood it picks up the salt which has dried on the surface.

**Careful monitoring and regulation of all the bores including stock and domestic is vital.**

In bore water from shallow aquifers there is uncertain amount of surface to groundwater interaction. Shallow aquifers have immediate connectivity with the river, so pumping the aquifer is much like pumping directly from the river. This can lead to streamflow depletion and double accounting of water resources.

**Salinity needs to be seriously considered in the CGSWS Discussion Draft.**

Currently there are more and more stock and domestic bores to deeper aquifers (some to 120 meters) because of the increased shallow aquifer and surface water salinity, meaning the water is too saline for stock to drink.

---

- **Snowy River**

**Since the construction of Jindabyne Dam in 1967, the Snowy Mountains Scheme captured 99% of the annual natural flow of the Snowy River and diverted the water west to the Murray-Darling Basin.**

In June 2002 the Victorian, NSW and Commonwealth Governments signed the *Snowy Water Inquiry Outcomes Implementation Deed (SWIOID)* to restore flows to the Snowy River. The governments agreed to return 21% average natural flow (ANF) to the Snowy River below Jindabyne by 2012, and 28% ANF post-2012. In addition environmental flows equivalent to 150 GWH would be returned to five montane rivers including two sections of the Snowy River above Jindabyne Dam. The Victorian and NSW Governments each contributed \$150 million to fund the intergovernmental authority Water for Rivers to source water savings in the western rivers to offset the increased Snowy River flows up to 21% ANF, (the final 7% has never been funded).



## 1. Snowy River below Jindabyne Dam

The *Central and Gippsland Sustainable Water Strategy Discussion Draft* (the CGSWS Draft) refers to the Snowy River on p190 in a pie chart (Table10.1) and a footnote (21). The footnote states that the water recovery projects to return 21 per cent average natural flow to the Snowy River were completed in June 2012. However, despite the major investment by Victorian taxpayers in the restoration of the Snowy River **the CGSWS Draft does not undertake any assessment of the success or failure of the SWIOID commitment to deliver 21% average natural flow to the Snowy below Jindabyne Dam on an annual basis.**

Many factors continue to impede the return of 21 % long-term average natural flow:

### **a/ Approximately half the Snowy environmental entitlements deliver very little real water.**

Whilst the SWIOID commitment is to return 21% average natural flow to the Snowy, in effect the Water for Rivers acquired water savings will deliver on a long-term average less than 15% ANF. Approximately half the 212 GL entitlements are low reliability or general security licences which only deliver real water allocations in very wet years (becoming increasingly infrequent due to the impact of climate change).

### **b/ Decline in downstream inflows counteracts Snowy River increased flows**

In 2009 a study by Peter Wheeler<sup>1</sup> on the location and closure of the Snowy River entrance reported a 30-40% reduction in rainfall in the Snowy River catchment between 1970-2008 with consequent decline in stream flow yield in the unregulated downstream tributary rivers (below Jindabyne Dam). The CGSWS Discussion Draft (p308) also identifies a reduction of up to 21% surface water availability across southern Victoria. The reduction in downstream stream flow yield has counteracted (and worse) the contribution of the funded Snowy River increased flows released from Jindabyne Dam. Whilst climate change is a major contributing factor in stream flow decline the headwaters of lower Snowy catchment rivers including the Buchan and Brodribb Rivers are severely affected by logging resulting in reduced surface water availability. There is no discussion in the CGSWS Draft of the impact of logging on water yield.

### **c/ 212 GL is not equivalent to 21% ANF – SWIOID requires additional passing flows.**

The SWIOID identifies<sup>2</sup> that the 21% average natural flow calculation is based on 212 GL environmental allocation plus the base passing flow (which includes 9GL regulated flow from Jindabyne Dam plus the non-regulated passing flow over Mowamba River and Cobbon Ck weirs prior to corporatisation). The Snowy River Flow Response Monitoring Project calculated<sup>3</sup> the combined Mowamba and Cobbon Ck passing flows as 18-24GL/yr. This is equivalent to 2% of the total 21% target flows.

---

<sup>1</sup> Peter J Wheeler, Thi T. Nguyen, Jim Peterson & Lee Gordon-Brown, 'Morphological Change at the Snowy River Ocean Entrance, Victoria, Australia (1851-2008)', *Australian Geographer*, Vol. 40, No.1 pp.1-28, March 2009.

<sup>2</sup> SWIOID 2002 Definitions: Base passing flow, & Part Two cl 7.3

<sup>3</sup> Derivation of staged environmental flow release volumes to the Snowy River downstream of Jindabyne Dam, Snowy River Flow Response Monitoring Project: DIPNR February 2005

However, since corporatisation of Snowy Hydro Ltd in 2002 there have been long periods when there is no visible flow passing over Mowamba Weir. The Mowamba passing flow is not accounted for in any Snowy reports produced by NSW DPIE-Water (or its previous incarnations).

The SWIOID<sup>4</sup> requires the Snowy increased flows to be measured below the confluence of the Snowy River with the Mowamba River (ie where Mowamba weir passing flows enter the Snowy) but no automatic gauging station has been installed at that location so the community cannot access any information on the total real volume of annual Snowy River increased flows at that point.

**d/ A long-term average annual flow of 21% cannot be delivered under current agreements.**

The clear intent of the SWIOID is a joint government commitment to deliver a long-term annual average flow of 21% to the Snowy below Jindabyne. That means some years more than 21% has to be delivered, because in many years the annual flow is far less.

(As noted above, according to the SWIOID 21% ANF is equivalent to 212GL annual environmental release plus 9GL base passing flow from Jindabyne plus an average of 18-24 GL in passing flows over Mowamba weir.)

However, the bilateral deed between NSW and Victoria, the *Agreed Outcomes of the Snowy Water Inquiry* (AOSWI) (signed 5.12.2000), which is the key legal instrument under the NSW Snowy Hydro Corporatisation Act 1996 (in effect 2002) requires Snowy Hydro Ltd to be paid compensation if the annual environmental allocation released is greater than 212GL.

This issue of 21% long-term average flow has been part of intergovernmental discussions during the first Ten-year Review of the Snowy Water Licence<sup>5</sup> but the focus appears to be around ambiguities in the SWIOID. According to the Final Report the matter would be resolved by 2020 but there is still no positive outcome.

**e/ Lack of carryover provision in Snowy Water Licence**

In 2017-18 the annual environmental allocation to the Snowy River (for the first time ever) was more than 212GL. However because there is no carryover clause in the Snowy Water Licence the excess 2.334GL remains undelivered and in limbo despite very low allocations of in the following three water years (less than 12% ANF). This issue was raised in submissions to the Ten-year Review of the SWL but in the Final Report of the Review the NSW Government failed to propose a licence amendment to rectify this absurd situation.

**The CGSWS Discussion Draft gives the impression that since 2012, 21% average natural flow has been delivered to the Snowy River below Jindabyne Dam when in fact that that is far from the case.**

---

<sup>4</sup> SWIOID 2002 Interpretation 1.2 (1)(o)(i)

<sup>5</sup> See: Ten-year review of the Snowy Water Licence-Final report p27, 28 Table 12

In the CGSWS Draft p56 Table 3.1: *Water needed to meet rebalancing requirements for the environment as determined by the Long-Term Water Resource Assessment and environmental water deficits (gigalitres per year) in each Central and Gippsland Region basin.*

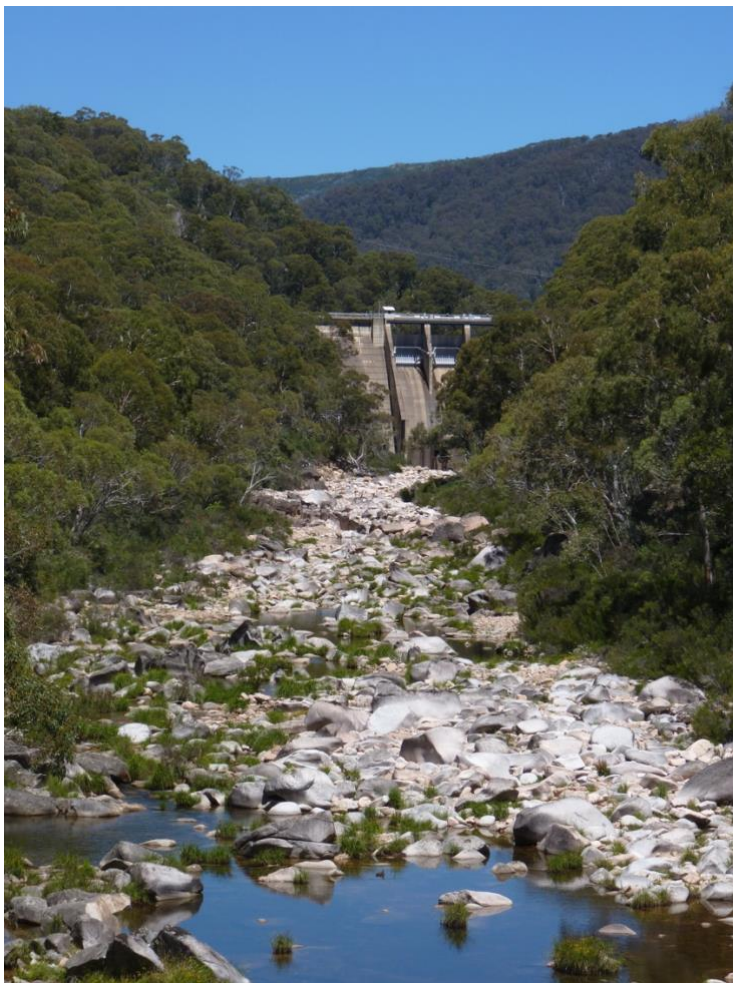
There is zero information included in Table 3.1 for the Snowy basin yet the long-term average flows released from Jindabyne Dam is barely 15% ANF and downstream tributary rivers have also experienced a decline. **Clearly the river is in very poor ecological condition.**

**An independent scientific assessment of the flow requirements to restore the Snowy River below Jindabyne Dam in the Victorian catchment must be undertaken.**

## **2. Upper Snowy River in Kosciusko National Park: Snowy Montane Rivers Increased Flows (SMRIF)**

The SWIOID intergovernmental commitments to restore the Snowy River included increased flows to five Snowy montane rivers, including two sections of the Snowy River above Jindabyne Dam in Kosciusko National Park (KNP). Almost twenty years later sections of the Snowy River above Jindabyne have still not received scheduled Snowy Montane Increased Flows as detailed in the Snowy Water Licence Schedule Three, Table One.

**Why are there still dry riverbeds in sections of the Snowy River in KNP?**



*Dry riverbed below Island Bend Dam, Jan 2018*

The Snowy River below Guthega Dam was scheduled to receive 30 GL increased flows via modification of the Perisher Ck and Rams Flat aqueducts by 2012 but instead only 3.4GL is delivered from the smaller Falls Creek. The Snowy River below Island Bend Dam was scheduled to receive 29 GL from the Gungarlin River aqueduct however this section of the river has only received increased flows from two smaller creeks Diggers and TollBar that have a combined MANF of only 18.9 GL and can never deliver the scheduled target flows in full.

Whilst the changes permit a greater length of the Snowy riverbed to be watered the consequence is far less water is released into these two sections of the Snowy River than was agreed to in the SWIOID and funded by the Victorian Government. Instead, an increased volume of Snowy Montane Rivers Increased Flows annual allocation is delivered to western flowing rivers including the Geehi and Upper Murrumbidgee where the water is of greater economic benefit to Snowy Hydro Ltd. The company also avoids the cost of modifications to weirs on the Gungarlin River and Perisher Ck.

FINAL Report of the Expert Panel Review of the Snowy Water Licence

**Table 3. Summary of the Snowy montane river increased flows program\*.**

Reach	GWh forgone electricity generation on Snowy Montane Rivers	GWh conversion factor	Increased flow in reach (GL)	Annual Natural Flow	Modified works	Average annual yield
Murrumbidgee River	52.4	1.94	27	30%	Tantangara Dam Outlet	35.8
Goodradigbee River	23.3	1.94	12	78%	Goodradigbee River Weir	12.0
Geehi River	36.6	1.85	19	19%	Middle Creek Weir Strzelecki Creek Weir	22.7
Snowy River – Gungarlin	20.6	0,71	29	13%	Tolbar Creek Weir Diggers Creek Weir	18.9
Snowy River – Perisher/Rams Flat	17.1	0.57	30	20%	Falls Creek Weir	3.4
<b>Total</b>	<b>150</b>	<b>-</b>	<b>118</b>			<b>92.8</b>

\*Table One of Schedule 3 of the Licence is summarised within the bold borders. The modified works and average annual yield are sourced from the SMRIF annual Strategy (Department of Industry 2018).

The NSW DPIE-Water did not undertake any assessment of the ecological impact of reduced flows to the Upper Snowy due to the failure to meet the target flows in the Snowy Water Licence, Schedule 3, Table One. During the Ten-Year Review of the Snowy water licence the Expert Panel for the review of the Licence states<sup>6</sup> that the panel *was not presented with any documented evidence that the Department or the Governments sought to carry out any detailed review of Snowy Hydro's proposed SMRIF modifications and supporting analysis.*

In fact, the Expert Panel recommended<sup>7</sup> that *The Department initiate independent technical review of the adopted SMRIF modifications, alternative options and assess costs, benefits and optimisation against the identified objectives, performance measures and strategy.*

This recommendation does not appear to be supported by the NSW Government according to latest departmental updates of the Ten-year licence review process.

**Gippsland Environment Group encourages the Victorian Government to support the recommended review as a matter of urgency.**

It is also of deep concern that Victorian Government failed to ensure an EIS was undertaken by NSW DPIE-Water following the failure of the Burrungabuggee diversion shaft in February 2017. Failure of the diversion shaft resulted in the Gungarlin and Burrungabuggee Rivers flowing for the first time since 1965. By January 2018 the Gungarlin River was re-diverted via the aqueduct (ceased to flow below the weir) to the Burrungabuggee aeration tank and then discharged into the Burrungabuggee River. The Burrungabuggee continued to flow for three years until February 2021<sup>8</sup>.

It is extraordinary that NSW Department failed to assess the potential impact on the riverine ecology of Snowy Hydro Ltd completely shutting off flows to the Gungarlin River after it had flowed for almost a year and the Burrungabuggee River for three years.

The Gungarlin River was one of the upper Snowy tributary rivers scheduled to receive flows under the SWIOID – why didn't the Victorian Government ensure an EIS was undertaken either by representation through the Snowy Advisory Committee or the higher level Snowy government officials committee or directly to the Commonwealth Government (sole owner of the SHL since 2018)?

**This amounts to complete failure of governance and responsibility to the commitments of the SWIOID.**

---

<sup>6</sup> *Final Report of the expert panel for the 10 year review of the Snowy Water Licence*, Alluvium Nov 2018 p 32

<sup>7</sup> *Ibid* p33 R2.3

<sup>8</sup> Letter 2 Nov 2021 from DPIE-Water Adam Vey in response to GEG letter 29 May 2021.



*Gungarlin River, 5 Oct 2017*



*Gungarlin River, note same rockface, 18 Jan 2018*

---

- **Tambo River - Gippsland Lakes**

**The Round Oak Minerals (Washington H Soul Pattinson) Stockman copper and zinc mine on the headwaters of the Tambo River poses a catastrophic risk to the Tambo River and Gippsland Lakes.**

Round Oak Minerals has approval to massively expand the old tailings dam which was constructed in the early 1990s completely across Straight Creek a tributary of the Tambo River. In 1998 Denhurst the mining company went into receivership and walked away from the site leaving a tailings dam, containing 700,000 tonnes of tailings, leaking acid and heavy metals into the Tambo headwaters. In 2005-6 DPI rehabilitated the site at a cost of \$7million. Further rehabilitation of the old processing plant site that was leaking heavy metals into the Tambo River downstream of Straight Ck was undertaken last year. The tailings dam operates as a flow through system and continues to contaminate the downstream waterway. **Expansion of the tailings dam poses increased risk of dam failure and environmental damage to the downstream waterway.**

**The CGSWS Discussion Draft (p. 211, 10.9 Pollution load targets) fails to mention this severe pollution risk to the Tambo River and Gippsland Lakes.**

The Stockman Base Metals EES (2014) prepared by Independence Group (IGO) identified that the project would require 2.5 GL of water including 230ML of freshwater which the proponent planned to obtain from the Benambra Plain borefield as annual flows in the Tambo River were highly variable and considered too unreliable.

In July 2018 at a community meeting in Omeo the company WHSP Stockman Pty Ltd announced it had revised its water balance modelling and now intended to source additional freshwater requirements from the upper Tambo River. The company already has 15ML diversion licence on Straight Ck and planned to apply for another 5 ML and up to 80ML from the headwaters of the Tambo.

**The CGSWS Discussion Draft (p194) identifies that long-term water availability in the Gippsland sub-region is declining. Since 1997, inflows have declined by between 23 and 38 per cent compared with historical inflows.**

When Gippsland Environment Group made a site visit to the tailings dam with Earth Resources staff in February 2018 the north branch of the Tambo River at McCallum Rd bridge was dry. The Tambo River below Swifts Creek more than 40 km downstream from the mine site ceased to flow in summer 2018-19.

Any water diversions from the upper Tambo River will exacerbate the impact of climate change and logging on downstream flows to Swifts Creek township and the Gippsland Lakes.

**Gippsland Environment Group is strongly opposed to SRW issuing any diversion licences for mining operations in the headwaters of the Tambo River.**

Thank you  
Gippsland Environment Group Inc.  
info@geg.org.au