Monday 4th October, 2019

Mr Anthony Ko
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Resource and Energy Assessments Planning Services
Department of Planning, Industry & Environment
GPO Box 39
SYDNEY NSW 2001

SUBMISSION:
SNOWY 2.0 – MAIN WORKS ENVIRONMENTAL IMPACT STATEMENT (EIS)

Dear Mr Ko,

Please find enclosed my submission to the **Snowy 2.0 – Main Works Environmental Impact Statement (EIS)**.

The EIS confirms that Snowy 2.0, as proposed, cannot satisfy the requirements of Section 4.15 of the *NSW Environmental Planning & Assessment Act 1979*, applicable by reason of Section 4.40, nor can it satisfy other relevant legislation, as I will detail.

In anticipation, I look forward to the planning department's consideration of this submission.

Yours faithfully

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1. INTRODUCTION

The following submission does not oppose the development of renewable energy, but does oppose Snowy 2.0 in its current form.

In 1949, there were limited renewable technology options and Kosciuszko National Park had not yet been formed. There was little legislation to provide environmental protection to the site where the original Snowy Mountains Hydro-electric Scheme was created and the project was completed in the absence of an environmental impact assessment. In retrospect, we could be forgiven for damaging this unique, fragile part of Australia for the creation of a nation-building hydro power scheme.

But in 2019 – a time of increased awareness and connectedness – where environmental protections are won in the Land & Environment Court, political corruption is fought at ICAC and social media holds corporations and governments to account – this should not be the case.

Since Kosciuszko National Park (KNP) was gazetted in 1967, NSW has adopted legislation to protect the park from damage and enhance its environment, including gazetting much of the KNP wilderness and other areas named Endangered Ecological Communities (EECs). Wilderness areas are to receive permanent protection under the *NSW Wilderness Act 1987*.

The *NSW Environmental Planning & Assessment Act 1979* has specifically ensured protection via a proper and transparent process of approvals via Section 4.15, applicable by reason of Section 4.40.

2. OVERVIEW

The Snowy 2.0 - Main Works Environmental Impact Statement (EIS) confirms:

1. The ecological environment of Talbingo Reservoir includes the Class 1 noxious fish redfin perch, as well as eastern gambusia, wild goldfish, climbing galaxias, the possibility of Epizootic Haematopoietic Necrosis Virus (EHNV), changes to the phytoplankton assemblage and large expanses of Elodea weed.
2. This ecological environment of the Talbingo Reservoir does NOT occur in the Tantangara Reservoir, the Murrumbidgee River, the Murrumbidgee upper catchment, Eucumbene Dam or the rest of the Kosciuszko National Park, Wilderness and EEC areas.
3. The ecological environment of the Talbingo Reservoir WILL transfer and become the ecological environment of the Tantangara Reservoir.
4. There is no means to prevent the ecological transfer of these species from Talbingo Reservoir to Tantangara Reservoir and no 100% means of containment.
5. Tantangara Reservoir is connected to all the aquatic systems of Kosciuszko National Park including zoned wilderness and EECs.

A reasonable person would accept that if pest and weed transfer could not be eliminated at Talbingo, it will not be eliminated once in Tantangara from transferring to the entire national park, wilderness and EEC areas. While restriction initiatives may delay such a process, transfer is inevitable over time.

The EIS requests an exemption from the *NSW Biosecurity Act 2015,* confirming that Snowy Hydro acknowledges it cannot prevent the transfer of pests throughout KNP.

Pest and disease transfer cannot be an acceptable outcome. Consequently Snowy 2.0 must be modified or the project abandoned altogether. The consequences of such interaction and transfers will be great, permanent and irreversible.

3. SUITABILITY OF SITE FOR DEVELOPMENT

(i) BACKGROUND

Kosciuszko State Park became Kosciuszko National Park in 1967. This marked the conclusion of the original Snowy Mountains Hydro-electric Scheme works in 1974. Snowy 1.0 was not required to produce an environment impact assessment: https://openresearch-repository.anu.edu.au/bitstream/1885/41879/1/dp_60.html#Part3

At the conclusion of the Snowy 1.0 works, it was accepted that all hydro works in the park had been completed. To ensure KNP was protected for future generations, the NSW Government introduced legislation to protect KNP and took measures to ensure the rehabilitation of damaged areas. These included creating the *NSW National Parks and Wildlife Act 1974*, creating areas in the KNP wilderness and providing them permanent protection via the Wilderness Act. The iconic Snowy River has its catchments in KNP and this catchment was given protection as an EEC. These steps recognised that everyone has a common bond about loving the environment, their families, and leaving a legacy to their children.

Kosciuszko National Park Wilderness areas:
https://www.environment.nsw.gov.au/resources/parks/southern/Kosciuszko_National_Park/4KosiGuide2012Maps.pdf

Endangered Ecological Community of Snowy River catchment:
https://www.dpi.nsw.gov.au/__data/assets/pdf_file/0007/635956/Endangered-ecological-community-of-the-snowy-river-catchment-in-NSW.pdf

Protection was a small price to pay to ensure the health of such a unique and fragile part of Australia. KNP only represents .0085% of NSW and 0.00089% of Australia: plenty of Australia left for future development.

(ii) EIS ACKNOWLEDGES PERMANENT DAMAGE TO KNP, WILDERNESS & EEC:

(a) EXCAVATED ROCK

Excavated rock from the project will total 6,630,000 banked cubic metres. Once taken to rubble, this will expand by up to 75%, equating to 11,602,500 cubic metres of excavated rock to be dealt with. At the depth of half a metre, this would cover 23.2 square kilometres or 2320.5 hectares.

The EIS confirms that the majority of this excavated rock will be dumped into Talbingo and Tantangara Reservoirs. The EIS observes the nature of the dam bottom at both locations as "*soft and muddy* ". This won't be the case wherever rock goes in; this will result in considerable loss of ecological habitat and the introduction of 140,000 tons of silt (small

particles) through each of the aquatic systems of both Talbingo and Tantangara Reservoirs.

The EIS acknowledges that considerable excavated rock will contain natural asbestos and other rock of a highly acidic nature. The EIS remains silent on how this will be transported and where in KNP it will be disposed.

According to the EIS, *"Approximately 1,000,000 m^3 of excavated material used for temporary construction pads will remain in Lobs Hole".* Assuming this is banked cubic meters, at a depth of 500mm it would cover an area of 350 hectares. This is larger than the entire Lobs Hole Ravine area. It was previously agreed that there would be no land-based dumping.

(b) EXCAVATED ROCK SILTAGE IN RESERVES:
The dumping of rock into Talbingo will result in 140,000 tons of silt. While figures were not found in the EIS for Tantangara, one could assume they will be similar.

Tests established that this silt would stay suspended in the water for up to two weeks, penetrating the water body and moving with water flow. This silt will be contained in flows below Talbingo Reservoir, and most likely any flows below Tantangara Reservoir into the Murrumbidgee River, as well as transfers from Tantangara across to Eucumbene Dam.

The dumping of this silt-laden excavated rock is scheduled to occur 24/7 for years.

The EIS confirms that these silt episodes will occur when the rock is first dumped and again during the operation of Snowy 2.0. Operation of Snowy 2.0 and water transfers will stir up and spread any silt present. The EIS confirms that on all occasions silt will stay suspended in the water body for up to two weeks on each transfer.

This will represent a massive impact to water quality and the aquatic ecological environments, effectively leading to aquatic catastrophe in the immediate areas.

(c) ECOLOGY TRANSFER
Environmental Planning & Assessment Act – Section 4.15 (b)
The EIS classifies the transfer of fish etc between reservoirs as "*moderate to high*."

Movement of water between Talbingo and Tantangara reservoirs will duplicate the ecology of Talbingo into Tantangara Reservoir, as Tantangara is the much smaller and shallower body of water.

The confirmed inability to prevent transfer at the source (Talbingo), means that transfers will also be leaked from Tantangara to:

- The upper Murrumbidgee and its tributaries and water catchments
- Down the Murrumbidgee during environmental flows
- Through the Tantangara/Eucumbene tunnel into Eucumbene Dam
- From Eucumbene Dam into the whole of the KNP and Wilderness and ECC areas.

The following pests do NOT occur in Tantangara, but will transfer from Talbingo (where they currently reside):

(i) Redfin perch – a Class 1 noxious fish
Redfin perch are listed by the NSW Department of Primary Industries as a Class 1 noxious fish in NSW. One of the most significant threats to native fish from redfin is their potential to spread the viral disease Epizootic Haematopoietic Necrosis Virus (EHNV). A number of native species, including mountain galaxias are highly susceptible to the disease, and EHN virus may be one factor responsible for the decline in various native species over the last couple of decades (source: https://www.feralscan.org.au/docs/MDBA-A4-Fact-Sheet-50-Redfin-perch.pdf)

(ii) Climbing Galaxias
Climbing galaxias are an aggressive upstream migrant and can climb vertical rock faces of up to ten metres. This ability allows Climbing Galaxias to inhabit the headwaters of streams that are inaccessible to introduced species such as trout.
http://fishesofaustralia.net.au/home/species/3672#moreinfo

The headwaters of Tantangara Creek hold an endangered species of Galaxias not found anywhere else. Stocky Galaxias were listed as threatened in February 2016 and are at risk of risk of extinction. https://www.dpi.nsw.gov.au/fishing/threatened-species/what-current/critically/stocky-galaxias

Given that climbing galaxias are known to climb rockfaces up to ten metres, the EIS does not adequately address the unique threat posed to the stocky galaxias found solely in this habitat.

(iii) Eastern Gambusia
These fish attack, kill and eat juvenile native fish, water bugs, frog eggs and tadpoles. They nip at much larger fish, causing fungal infections and death. They have been implicated in the decline of at least nine fish species and more than ten frog species. They have a very high tolerance for poor water quality, extreme temperatures as well as low dissolved oxygen and dirt water.
https://www.dpi.nsw.gov.au/__data/assets/pdf_file/0020/637013/What-is-eastern-gambusia.pdf

(iv) Elodea Weed
According to the EIS: *"This introduced weed is widespread in Talbingo but does not occur in the Murrumbidgee above the Tantangara Dam wall."*

Plants are regulated by the NSW Biosecurity Act 2015 with a **general biosecurity duty** to prevent, eliminate or minimise any biosecurity risk they may pose. The EIS requires a Section 404 exemption from the requirements of the Act, which governs all Biosecurity matter including weeds; pest fish such as redfin and gambusia; and fish disease.

Also according to the EIS: *"There is an abundance of Elodea in Talbingo; transfer of fragments during operation is likely*."

The location of this project is in a protected national park with gazetted wilderness and EEC areas.

(v) Phytoplankton
According to the EIS: *"Changes to the phytoplankton assemblage have the potential to*

alter the composition of other components of aquatic life, such as zooplankton communities."

The EIS confirms there are considerable differences between pondages.

	Talbingo	Tantangara
Chlorophytes	45%	44%
Cyanophytes	38%	19%
bacillariophytes	15%	30%
other	1%	8%

(vi) EHNV (devastating fish virus carried by Redfin and transferred to other species):
"A direct water connection between Talbingo and Tantangara reservoirs increases the risk for expanding the range of EHNV, if EHNV occurs in Talbingo Reservoir or occurs at some point in the future. Without any disease mitigation, there is a high risk of EHNV accessing new locations and impacting susceptible fish populations including native species. The implementation of the fish barriers described in the section above will reduce, but not eliminate the potential for spread."

Prior Knowledge?

This project is all about the water. Snowy Hydro, National Parks and Wildlife Services and the DPI should have known about the ecological composition of the Talbingo Reservoir prior to Snowy 2.0 ever being considered. If they did, this should have been disclosed.

The certainly did know about at least that redfin were present in August 2018. This prior to work commencing on the exploration tunnel at the ravine.

https://www.abc.net.au/news/2018-08-05/snowy-hydro-plans-raise-enironmental-concerns/10075224

The full ecological composition of what would be transferred, and the transfer implications, should have been made public during the feasibility process and certainly submitted as part of the approvals process. In not doing so the applicant has mislead the planning department and the public.

The fact that the ecological compositions, and the implications of their transfer, are only now being made public during the major works EIS, is a matter of the applicants own choosing. One can only assume this has been done for a reason. And, it would appear to implicate NSW government departments in a conspiracy to try to ensure the approval of a project that does not meet the stringent requirements of state legislation governing development within a national park.

TRANSFER CANNOT BE PREVENTED!

The EIS states:
"Research into available options for preventing transfer has determined that no reasonable and feasible options exist for the Snowy 2.0 waterway; however, fish barriers are proposed at the outflows from Tantangara and near the waterfall on Tantangara Creek. These secondary controls form part of Snowy 2.0 Main Works. While the transfer of these species could lead to populations establishing in Tantangara reservoir and some distance upstream with consequent impacts on native fish and salmonids, the installation of barriers

will limit *the potential range expansion"*

"The EIS proposes a Weed, Pest and Pathogen Management Plan will be prepared and ***implemented to minimise*** *and manage the spread of weeds, pest fish and pathogens which will include a description of measures that would be implemented to* ***minimise the spread of weeds and pest*** *via vehicle and plant movements."*

KNP comprises a significant proportion of the alpine environments of Australia, and holds many areas almost completely unaltered by humans. Any risk of pest and disease transfer to the whole park is completely unacceptable. Snowy 2.0 should be modified to address this, or otherwise abandoned.

4. SNOWY RIVER CATCHMENT – AN ENDANGERED ECOLOGICAL COMMUNITY

Since 1994 the aquatic ecological community of the Snowy River catchment in NSW has been listed as an endangered ecological community (EEC) under the *NSW Fisheries Management Act* . The listing includes all native fish and aquatic invertebrates within all rivers, creeks and streams of the Snowy River catchment. This includes the:

- Snowy
- Eucumbene
- Thredbo (or Crackenback)
- Gungarlin
- Mowamba
- Bombala
- McLaughlin
- Delegate
- Pinch
- Jacobs Rivers
- Tributaries of the above rivers

The listing also includes the riverbed channels inundated by the artificial impoundments of Jindabyne, Eucumbene, Island Bend and Guthega dams, but excludes the ecological communities that have developed in the waters of these impoundments. (https://www.dpi.nsw.gov.au/fishing/threatened-species/what-current/endangered/snowy-river)

Over time, Snowy 2.0 will transfer the ecology of Talbingo throughout KNP, wilderness and EEC areas. This cannot be permitted to occur.

In addition, The EIS confirms that tunneling will "**permanently** impact the upper reaches of the Eucumbene River*: "the streamflow regime in the headwaters of the Eucumbene River could change by 20-25%. within the localised area of impact, the long-term baseflow is conservatively predicted to decline by 12.5% in the upper reaches".*

This impact must not be permitted to occur. Global warming will only exacerbate these impacts in an EEC area.

5. THE TOTAL AREA OF KNP PERMANENTLY IMPACTED BY SNOWY 2.0 IS 23 TIMES LARGER THAN THE EIS STATES. AND WILL IMPACT 100% OF THE KNP AQUATIC SYSTEM

(i) Habitat Clearing:

"1,680 hectares of habitat will be removed effecting unique fauna and flora":

2 x critically endangered

4 x endangered

8 x vulnerable

"This has the potential to result in fragmentation of fauna habitat with resultant effects on fauna species movement, reproduction and gene flow".

(ii) Excavated rock dumped in KNP: up to 2,200 hectares

(iii) Water surface areas affected by transfer:

Tantangara:	2,117.7 hectares
Eucumbene:	14,532.0 hectares
Jindabyne:	3,033.5 hectares
Island Bend	327.0 hectares
Tumut:	202.7 hectares
Tooma:	180.0 hectares
Geehi:	180.0 hectares
River Systems	15,000.0 hectares (estimate)

The area of KNP, including wilderness and EEC areas that will be permanently impacted by Snowy 2.0 is conservatively 39,452.90+ hectares, or 5.8% of KNP. This is 23 times larger than stated in the EIS (the figure given was .25%).

Snowy 2.0 will impact 100% of the total aquatic ecological environment of KNP, wilderness and EEC's.

6. ALTERNATIVE LOCATIONS TO KNP

In order to satisfy Section 4.15.1 (c) of the *NSW Environmental Protection & Assessment Act, "suitability of the site".*

To satisfy this requirement the EIS should consider:

(a) Alternative locations to KNP:

The EIS does not adequately consider location alternatives. Given the currently proposed (and already commenced) works are in a protected national park this is a major flaw of the EIS.

Any objective comparison of alternative sites should require a price be placed on damage to the KNP. However a price on the KNP is absent from the EIS, as is any meaningful consideration of alternative sites to KNP.

The Australian National University has developed a list of 22,000 pumped hydro sites around Australia, 8,600 in NSW

(https://energy.anu.edu.au/research/highlights/anu-finds-22000-potential-pumped-hydro-sites-australia.
Any serious comparison requires a price to be placed on the damage Snowy 2.0 will continue to have on KNP and its associated wilderness and EEC areas. With a proper value assigned (probably priceless), you could never afford to build Snowy 2.0 in KNP. You would consider any alternative. The only trye reason Snowy 2.0 stacks up financially is the absence of placing a dollar value on the permanent damage to KNP.

(b) Build alternative.
The EIS proposal could have considered a modification that contained/quarantined the water transferred from Talbingo at Tantangara Reservoir.

For example, the project could:

1. Build a second dam wall on the Murrumbidgee above the current Tantangara Dam.
2. Place a large sealed cement pipe along the floor of the Tantangara Reservoir from this second dam linking to both the:
   * Tantangara/Eucumbene Tunnel (water transfers to Eucumbene).
   * Bottom of Tantangara dam wall (environmental flow).
3. Allowance for water above the second dam to flow, one way, to fill up Tantangara when required.

Excavated rock could be used for this second dam eliminating the need to dump it into Talbingo and Tantangara Reservoirs.

This would quarantine the waters of Talbingo Reservoir from entering into KNP. The position of the second dam wall would only need to be at that point which enabled the containment of sufficient water for the pumping between Tantangara and Talbingo.

This is a simple example to show that alternatives with far less impact on KNP could have been considered, but have not.

The EIS does not satisfy 4.15.1 (c)

7. RELEVANT LEGISLATION

1. **Environmental Planning and Assessment Act 1979 No 203**

1.3 *Objects of Act*

The objects of this Act are as follows:

(a) to promote the social and economic welfare of the community and a better environment by the proper management, development and conservation of the State's natural and other resources,

(b) to facilitate ecologically sustainable development by integrating relevant economic, environmental and social considerations in decision-making about environmental planning and assessment,

(c) to promote the orderly and economic use and development of land,

(d) to promote the delivery and maintenance of affordable housing,
(e) to protect the environment, including the conservation of threatened and other species of native animals and plants, ecological communities and their habitats,
(f) to promote the sustainable management of built and cultural heritage (including Aboriginal cultural heritage),
(g) to promote good design and amenity of the built environment,
(h) to promote the proper construction and maintenance of buildings, including the protection of the health and safety of their occupants,
(i) to promote the sharing of the responsibility for environmental planning and assessment between the different levels of government in the State,
(j) to provide increased opportunity for community participation in environmental planning and assessment.

Section 1.3 is designed to ensure ecologically sustainable development; protection for environment; conservation of threatened species and their environment; and responsibility for environmental assessment between different levels of the state's government bodies.

The EIS confirms the Snowy 2.0 Major Works will not satisfy s.1.3 (a), (b), (e) & (i).

s. 4.15 Evaluation

(1) ***Matters for consideration***
(a) the provisions of:
(i) any environmental planning instrument, and
(ii) any proposed instrument that is or has been the subject of public consultation under this Act and that has been notified to the consent authority (unless the Planning Secretary has notified the consent authority that the making of the proposed instrument has been deferred indefinitely or has not been approved), and
(iii) any development control plan, and
(iiia) any planning agreement that has been entered into under section 7.4, or any draft planning agreement that a developer has offered to enter into under section 7.4, and
(iv) the regulations (to the extent that they prescribe matters for the purposes of this paragraph),
(v) (Repealed)
that apply to the land to which the development application relates,
(b) the likely impacts of that development, including environmental impacts on both the natural and built environments, and social and economic impacts in the locality,
(c) the suitability of the site for the development,
(d) any submissions made in accordance with this Act or the regulations,
(e) the public interest.

The EIS confirms the Snowy 2.0 Major Works will not satisfy s. 4.15 (a) (i), (b), (c), (d) & (e)

This project is in a highly sensitive environmental area of Australia and the EP&A should call for a much higher standard than what may give to any other area.

2. **Wilderness Act 1987 No 196**

3 Objects of Act

The objects of this Act are:
(a) ***to provide for the permanent protection of wilderness areas,***
(b) to provide for the proper management of wilderness areas, and

(c) to promote the education of the public in the appreciation, protection and management of wilderness.

The EIS remains silent on the obvious impacts to KNP wilderness areas and how they will deal with their obligations under the *Wilderness Act* The objectives of the Act call for the permanent protection of wilderness areas. Section 3(a).

National Parks and Wildlife Services, the NSW government department responsible to this act remains silent.

3. **National Parks And Wildlife Act**
   2A Objects of Act
   (1) The objects of this Act are as follows:
   (a) the conservation of nature, including, but not limited to, the ***conservation of:***
   (i) habitat, ecosystems and ecosystem processes, and
   (ii) biological diversity at the community, species and genetic levels*, and*
   (iii) landforms of significance, including geological features and processes, and
   (iv) landscapes and natural features of significance including ***wilderness and wild rivers****,*

The National Parks and Wildlife Act regulates the conservation of nature, ecosystems and ecosystem processes, wilderness and wild rivers, and as a national park, KNP is included in this scope.

As the government department responsible, it would appear National Parks & Wildlife Service is not complying with its statutory obligation to protect this national park.

4. **Biosecurity Act 2015**
   The EIS states that Snowy 2.0 requires exemption (s404) from this Act. This confirms the project cannot comply with the requirements of the Act. Any required exemption from applicable legislation within a national park will not satisfy Section 4.15 of the Environmental Planning & Assessment Act.

A biosecurity exemption will enable the transfer of pests and pave the way for the aquatic annihilation of KNP. Such an exemption would effectively amount to gross corruption by the DPI and not satisfy s.4.15.1(b) or (c) of EP&A.

5. **NSW Fisheries Management Act**
   3 Objects of Act
   (1) The objects of this Act are to conserve, develop and share the fishery resources of the State for the benefit of present and future generations.
   (2) In particular, the objects of this Act include:
   (a) to conserve fish stocks and key fish habitats, and
   (b) to conserve threatened species, populations and ecological communities of fish and marine vegetation, and
   (c) to promote ecologically sustainable development, including the conservation of biological diversity,

The EEC status of the Snowy River upper catchments is provided under this Act. The Department of Primary Industries is the government department responsible for this Act. The DPI cannot comply with its statutory obligations if it allows the transfer of pest species into EEC areas that the EIS acknowledges Snowy 2.0 will cause.

The DPI has remained silent on their statutory obligations to legislation they are responsible for.

6. **Snowy Hydro Corporatization Act**

3 Object of Act

(1) The object of this Act is to reform the Snowy Mountains Hydro-electric Scheme by corporatising the Snowy Mountains Hydro-electric Authority and making related changes to the Scheme.

(b) is to have effect only to the extent to which it is within the legislative power of the Parliament.

While the act broadly enables "related changes" Snowy 2.0 is not "within" NSW state legislation by way of s.4.15. EP&A. Federal law does not override NSW State law, therefore Snowy Hydro is not able to make the related changes required for the Snowy 2.0 proposal as submitted.

7. **Biodiversity Conservation Act 2016 No 63**

1.3 Purpose of Act

The purpose of this Act is to maintain a healthy, productive and resilient environment for the greatest well-being of the community, now and into the future, consistent with the principles of ecologically sustainable development (described in section 6 (2) of the *Protection of the Environment Administration Act 1991*), and in particular:

(a) to conserve biodiversity at bioregional and State scales, and

(b) to maintain the diversity and quality of ecosystems and enhance their capacity to adapt to change and provide for the needs of future generations, and

(c) to improve, share and use knowledge, including local and traditional Aboriginal ecological knowledge, about biodiversity conservation, and

(d) to support biodiversity conservation in the context of a changing climate, and

(e) to support collating and sharing data, and monitoring and reporting on the status of biodiversity and the effectiveness of conservation actions, and

(f) to assess the extinction risk of species and ecological communities, and identify key threatening processes, through an independent and rigorous scientific process, and

(g) to regulate human interactions with wildlife by applying a risk-based approach, and

(h) to support conservation and threat abatement action to slow the rate of biodiversity loss and conserve threatened species and ecological communities in nature, and

(i) to support and guide prioritised and strategic investment in biodiversity conservation, and

(j) to encourage and enable landholders to enter into voluntary agreements over land for the conservation of biodiversity, and

(k) to establish a framework to avoid, minimise and offset the impacts of proposed development and land use change on biodiversity, and

(l) to establish a scientific method for assessing the likely impacts on biodiversity values of proposed development and land use change, for calculating measures to offset those impacts and for assessing improvements in biodiversity values, and

(m) to establish market-based conservation mechanisms through which the biodiversity impacts of development and land use change can be offset at landscape and site scales, and

(n) to support public consultation and participation in biodiversity conservation and decision-making about biodiversity conservation, and

(o) to make expert advice and knowledge available to assist the Minister in the administration of this Act.

While the CSSI status limits many of the above acts in issuing controls over any approvals (s5.23 EP&A) any proper s.4.15 assessment must take all applying legislation into account.

8. CONCLUSION

Snowy 2.0 will, over time via the transfer of pest fish, disease, weed and phytoplankton exchange, bring about irreversible and permanent aquatic destruction across the whole of KNP. As a direct consequence the unique makeup of aquatic ecologies will never be the same as they are today. This will include the wilderness areas and areas identified as ECC.

Facilitating Kosciuszko National Park for Snowy 2.0 can only be done by overriding – or providing exemptions to – the legislations effected to protect KNP. KNP is but a small part of the state of NSW and an even smaller part of Australia. Its uniqueness in the Australian landscape should be treasured, celebrated and its permanent protection ensured for future unborn generations.

It is disappointing there appears to be government departments not complying with legislation they are responsible for and have statutory obligations to. Under normal circumstance someone would lose their job. Perhaps those someone's could lose their job by following the legislation? I can only trust the planning department is immune to such corruption.

Snowy Hydro created the waters of the Talbingo reserve when it dammed the Tumut and Yarrangobilly rivers approximately 60 years ago as part of Snow 1.0. Since that time Snowy Hydro, National Parks And Wildlife Services and the Department of Primary Industry have managed this water body. The EIS confirms this management has not ensured the integrity of these once pristine alpine waters. It cannot now be accepted that Snowy Hydro transfer these waters across the whole Kosciuszko National Park including those recognized as wilderness and endangered ecological communities. We must learn from the mistakes of the past and not carry them forward.

The EIS is silent on when the ecological make-up of the Talbingo Reservoir was first know. If not known prior to lodging a submission for Snowy 2.0 works it should have been a prerequisite to any feasibility study undertaken and certainly prior to the issuing of any approvals. Staging the approvals in the manner they have, and contracting the major works prior to its approval indicate something is not quite right.

The EIS is also silent of what ecological and environmental impacts the original Snowy 1.0 has had on the national park, wilderness and EEC's. Given we now have a span of 60+ years it could be expected that this information is relevant as it would document actual

data where Snowy 2.0's EIS relies on projections and assumptions. I fear such information has not been presented as it would be damning.

Kosciuszko National Park, Wilderness areas and Endangered Ecological Communities were not enacted until after Snowy 1.0. Snowy 2.0 must now fit within these and all legislative constraints, as submitted, it does not.

The EIS confirms Snowy 2.0 major works project cannot meet the requirements of s 4.15 of the EP&A and cannot be granted approval. To do so would raise questions only an ICAC inquiry could find answers to, and, open the approval to a Land & Environment Court challenge.

Assuming the planning department is in agreement and does not issue approval to the proposal as submitted, this submission calls for all exploratory work to cease immediately until an alternative proposal is submitted, meets the requirements of s.4.15 EP&A and gains approval. This would stop any wastage of money should the project need to be abandoned and minimise any unnecessary damage to the KNP including loss of habitat of endangered species. If an alternative submission is to be submitted, ceasing work will create a sense of urgency to submit such an application. Ceasing work would also communicate a fair and transparent approvals process.

There are other locations for pumped hydro: 22,000 sites across Australia in fact. Snowy 2.0 could go ahead – just not in the Kosciuszko National Park, Wilderness and EEC's.