

Armidale Branch est.1974 Attention: Anthony Ko Team Leader, Energy Assessments Department of Planning and Environment Email: <u>Anthony.Ko@planning.nsw.gov.au</u> The Honourable Paul Scully, MP, Minister for Planning and Public Spaces office@scully.minister.nsw.gov.au

Sent by email as the Department Planning's Portal inoperable 13-14-15 -16 October 2033 Submission re Oven Mountain Pumped Hydro Storage (OMPHS)

Application Number SSI-12422997, EPBC ID Number 2020/8850, Assessment Type; Critical State Significant Infrastructure. Exhibited as: (EXH-62250958).

Dear Mr Scully and Mr Ko,

Armidale Branch National Parks Association (NPA) objects to the OMPHS proposal on environmental, cultural, social/community and economic grounds.

Overview

While we support renewable energy, project options for the New England Renewable Energy Zone need to be responsibly considered with regard to their economic feasability, and impacts on the environment, Aboriginal heritage and community.

Identifying all the costs associated with the OMPHS project is paramount. These need to take into consideration the economic, social, environmental and cultural outcomes for local communites, not just the financial returns and benefits to the proponents and investors. The NSW Government guide to cost-benefit analysis TPG23-08 requires inclusion of direct and indirect impacts, full life cycle costs, & externality costs.

We understand that the rapid development of renewable energy zones has resulted in a rush of proposals without an overall framework with relation to the New England Renewable Energy Zone. Current governments are having to deal with the realities of a plethora of projects. This has resulted in some inappropriate proposals for environmentally and culturally damaging projects that are currently causing community distress and have potentially high economic blow outs at unacceptable costs to NSW and local Governments.

Pumped hydro is old technology, popular from the 1960's to the 1980's and this may have influenced the OMPHS proponent who has been trying to get support for some decades. Currently only 3 pumped hydro storage projects are in operation in Australia: in NSW Tumut 3 commissioned 1973 upgraded in 2012, and Shoalhaven 1979; and Wivenhoe in Queensland 1985. (Vecchi, A, Davis, D, Brear, M 2023). *Despite a large short-list of projects, a federal government underwriting program has failed to land any funding agreements and only the massive Snowy 2.0 pumped hydro scheme is going ahead, through the government owned Snowy Hydro, despite many concerns about its commercial viability and environmental impacts.* (Renew Economy 18 December 2020).

Pumped hydro schemes are unlikely to be viable especially with the rapid improvements in batteries re price and capacity together with their ease of installation. Pumped hydro storage systems are more complex and risky - the last was constructed almost 40 years ago and the current Snowy 2:0 has long over shot its completion date and is 500% over budget. At an initial cost of \$770 million Kidston in Qld is experiencing major problems, delays, and is also over budget. Started in 2014, a decade on Kidston has not yet begun to operate. *Genex Power founder Simon Kidston backed warning by the CSIRO that pumped hydro projects are unlikely to be the answer to Australia's medium term renewable energy storage requirements because of long development lead times.* (Australian Financial Review 10 April 2023). The OMPHS proposed construction time is 4-5 years (barring delays such as extreme weather events) and this technology will continue to be superseded by more efficient and economical storage systems before the project is completed at a current cost *Estimated to be about \$1.8 billion (*OMPHS EIS Oct 2023)

Our concern is that the NSW State and local governments (Kempsey and Armidale) will be picking up the considerable 'tabs' and local communities will be severely and adversely impacted, not only by the on site project but also by the off site works essential to it.

This needs to be assessed thoroughly and addressed transparently by Dept of Planning.

Inadequacies of data and reports:

There are serious flaws in the OMPHS EIS and Development Application process, mainly due to many incomplete surveys that recommend in their reports that these will be completed at a later date, including the Aboriginal Cultural Heritage Management Plan, Historic Plan, Social Impacts, major off site Traffic and Road Construction required by the proponents for the project, as well as Erosion control, River flow and uptakes, Waste Management Plan, Geological and Geochemical testing, Decommisioning Plan, Landscape and Visual Impact Statement and Landscape Conflict Risk Assessment. This deferral of information is entirely unsatisfactory in not providing adequate data and information that is required before such a project is given approval.

These essential elements are SEARs requirements for detail design stage and must be resolved by the DA/EIS process. Otherwise information is inadequate to properly assess the project's feasiblity and analysis of overall cost and benefits for the assessment process of determination. This project cannot be viewed in isolation of the surrounding area and communities, therefore the Department of Planning needs to take into consideration the social, cultural, environmental and economic cost to the rural communities of the Macleay Valley, Carrai Plateau, hinterland villages and the tablelands, to the Kempsey and Armidale Councils and to the NSW taxpayers.

The OMPHS EIS and its 27 appendices do not adequately address these impacts with its focus on the footprint of the project area, thus minimising the landscape wide impacts of infrastructure required by the project but paid for by local councils, state government and therefore taxpayers. Impact on local communities and costings to councils need to be addressed in deliberations on determining the approval of OMPHS proposal.

For example the EIS states that there is a need of "an upgrade of the existing section of Line 965 from the Project to Armidale will be subject to a separate application under the EP&A Act"....; "Upgrades to the Kempsey Armidale Road are required to facilitate construction of the Project"

This requires response either from the proponent or from Dept. of Planning as it directly involves costs to Councils and the community

Community Consultation

Genuine community consultation is inadequate as there has been no formal presentations to community in Armidale, Bellbrook, Kempsey. At community meetings in Armidale attended by members of Armidale NPA the meetings were poorly executed with some of the OMPHS staff and even some directors ill informed. For example the PR people did not know on which side of the Macleay River the Project land was sited and a Director did not know that the proponents had applied to Armidale Regional Council (ARC) to privatise the public road called the Macleay Trail that is part of the Bicentennial National Trail. (Many in the community opposed this and subsequently ARC refused the proponents request and so the road/trail remains open to the public)

At meetings direct questions to Directors were not answered e.g. How much has OMPHS been granted by NSW and Federal governments ? What is the ownership of Alinta ? There is considerable concern that the OMPHS will be majority owned by a (Hong Kong/Chinese) company with the realistic view that the Project will primarily be an investment rather than of benefit to local communities, NSW Government and taxpayers. Transparency is vital to all aspects of the OMPHS proposal and direct and clear answers to community concerns would be welcome as genuine community consultation.

While the EIS uses lavish examples of their support to community with funding for events & organisations e.g. Armidale and Kempsey shows, football club etc., genuine thorough and transparent consultation has been lacking. Thus the publicised community consultation and OMPHS newsletters appear as spin, and the funding for community events could be perceived as bribery when the essential information sought by communities is lacking. This is especially evident in the lack of notification and availability of the EIS, reinforced by the difficulties of downloading and accessing documents via the Dept.Planning portal.

Notification of the EIS available for public response has been extremely poor. At the very least those whose names are in the appendices should have been directly notified and many were not, including Aboriginal people. Nor were copies of the EIS and appendices available to communities in Bellbrook, Kempsey and Armidale despite requests by members of communities for hardcopies to be made available in Kempsey and Armidale councils and libraries. Have all the residents and property owners along the Armidale-Kempsey Road (from Georges Junction east) and along the Carrai Road been directly notified that the EIS was released ? Have all the Aboriginal people consulted during the information gathering been notified and sent copies of the relevant documents ? These are the people most directly impacted by the project.

The proponents and consultants have failed to understand the challenges of distance and impacts of natural disasters on local communities - for example to write that Armidale is approximately 60 kms to the south west of the project (as the crow flies!) thus minimalising actual road distances and conditions. At best it demonstrates lack of

information, at worst it is an indication of lack of respect to communities. As have many others, the Mayor of Armidale Regional Council requested an extension of time to read the large among of documentation in order to make informed submissions. (see media release below)

Refusing to make documentation available (other than the inadequate glossy 40 page *Summary of Findings* and then only after requests via Dept. of Planning) reflects poorly on the OMPHS proponents and on a lack of Dept. of Planning requirements as part of a meaningful consultation process. This is in contrast to other large scale projects where EIS were publicised effectively and full documentation readily available in public facilities.

Community consultation has not been sufficiently transparent or adequate re vital information required to be fully informed of all aspects that will severely impact community and the environment. This needs to be rectified by an extension of time for response to the EIS plus hard copies of full documentation available in Kempsey and Armidale.

Environment :

The width of clearing for power lines and clearing for roads on an off the project area will necessitate major impact on vegetation and must be a serious consideration in assessing the impacts of the OMPHS project.

The project will impact on threatened ecological communities, four threatened flora including *Pultenaea rubescens* and 11 threatened fauna including Brush-tailed Rock-wallaby (Appendix H Biodiversity Development Assessment Report); One EEC listed under the Environmental Protection and Biodiversity Conservation Act 1999 (EPBC Act).

Subtropical eucalypt floodplain forest and woodland of the New South Wales North Coast and South East Queensland bioregions, occurring within the disturbance footprint with impacts to 1.9 ha of this community. Six flora species and eight fauna species listed under the EPBC Act were recorded within the Project area.

Brush-tailed rock-wallaby: throughout 15 Bioregions, this species is listed as in decline in 5 (including this region), severe decline in 4 and extinct in 6. A detailed assessment of

BTRW records was undertaken in 2004. There are 962 nationally recorded BTRW sites, of which approximately half are in conservation reserves. Most of the other sites are on private lands, while fewer than 10% of sites are on state forest or vacant Crown land. In NSW, there are 876 recorded sites. Of these, 42% are in reserves, 30% are on freehold lands and the rest are in state forests, on Crown land or on leasehold lands. (NSW Department of Planning and Environment - Recovery Plan for the brush-tailed rock-wallaby *Petrogale penicillata*).

Therefore it is vital that all remaining identified habitat for this species be retained.

OMPHS Biodiversity Assessment Report Appendix H states that *the Project will have an* adverse impact on critical habitat for Brush-tailed Rock-wallaby; however, it is unlikely to significantly impact the local population of species

Given that this species is in decline, this statement needs validation and explanation because it is vital to preserve all brush-tailed Rock wallaby habitat

The other species (including four migratory species) are unlikely to be significantly impact by the Project.

The EIS needs to explain what is meant by the statement 'significantly impact'

Considering the number and diversity of recorded threatened flora and fauna it is extraordinary to make the following statement in 4.1.5 *There are no areas of outstanding biodiversity value, as declared by the NSW Minister for Environment and Heritage, within the Project area.*

To accept this claimed statement by the Minister for the Environment, it is imperative that the reference to this statement is included in the document Terrestrial Ecology - 11 threatened species are identified, 4 threatened flora species and 7 hectares of threatened ecological species. The EIS does not provide adequate details for protection, nor mitigation measures.

It does not give full details of where or how the PCTs and ecosystem credit species will compensate losses and impacts.

A detailed plan of management for each identified species is required.

Aquatic Ecology - field work restricted to one month in autumn and one month in winter and desktop modelling is inadequate for an ecology impact assessment. This is acknowledged and it is stated that further field sampling will occur. Given the length of project, it is an indication that the proponents have not given due attention to environmental values and a more comprehensive survey over all seasons and aquatic conditions needs to be completed before approval given to the project.

Further research is essential to cover all seasons and conditions. As these reports are therefore based on incomplete data, and due to threatened species and habitat being adversely impacted, the Project should not be allowed to proceed.

WATER

More details are required with regard to the amount and frequency required by OMPHS of Macleay River water. This should include details about evaporation rates during various conditions both now and predicted future associated with climate change.

Details should be supplied with regard to how much water for construction will come from bores and where these bores will be located as well as how much water will be pumped from the Macleay River during construction. EIS states that *Construction water will be supplied either via groundwater bores, or via pumping of water from the Macleay River to support camp operations.*

This is inadequate information and and the details need to be provided before the Project is given approval. Natural processes affecting this area include water erosion, slope wash and flood action. These cause loss of vegetation, reduction of top soils and bank collapse or destabilisation. All this can impact on the Macleay River and will be a feature of major construction work. **Mitigation and rehabilitation measures will add considerably to costs and** these costs need to be clearly stated.

The Macleay River has also been subject to heavy metals from mining upstream but as some could occur naturally especially due to erosion from vegetation clearing and soil and rock disturbance during construction, this needs to be assessed more thoroughly.

Aboriginal Cultural Heritage :

Concern has been expressed with regard to correct procedures in relocation and in removal of artefacts by OMPHS to a university without appropriate protocols as per Aboriginal Heritage Impact Permit. (Appendix K point 4)

This is unacceptable practice and reflects poorly on attitudes by OMPHS.

Within a short framework there was very worthwhile archaeological and field work as reported in the Aboriginal Cultural Heritage Report (Appendix K) revealing that there are significant sites (documented 108 sites 7.2.3 and 44 identified sites) that include scar trees, rock shelters, stone arrangements showing occupation and connection from at least 5,000 years. There are significant Aboriginal cultural values both traditional and contemporary. The evidence reveals deep long term connection with this area, where people had a variety of food sources and celebrated in ceremonies in dedicated sites for initiation and ceremonies increase site within the Macleay River).

As research was hampered by weather conditions, the Report recommends that further research be undertaken:

Prior to the granting of any Project approval, the archaeological test excavation proposed in Section 7.3 of the ACHA must be completed. Due to unprecedented weather conditions, the program could not be completed prior to the completion of this report. While it is not considered that the findings of these additional works would result in fundamental changes to the findings or recommendations of the ACHA, they nonetheless are required to inform the final designs of the eastern access road (EAR). Prior to construction ground disturbance, an Aboriginal Cultural Heritage Management Plan (ACHMP) must be developed by a heritage specialist in consultation with the Registered Aboriginal Parties (RAPs) and consent authority to provide the post-approval framework for managing Aboriginal heritage within the Project area. The ACHMP should include the following issues:

Consideration of cultural flows of the Macleay River and Georges Creek – and with a focus on the increase site, #21-5-0023 – should be given when developing the application for the SPAL.

Further research is required especially with the statement that the OMPHS Project may be larger than originally intended. The Project's disturbance footprint is 330 ha and that a larger construction area of around 780 ha is being considered in the EIS as described in Appendix K : to allow some movement and flexibility in the Project's final design... and of the 44 discreet Aboriginal sites and places, sites within or near the disturbance footprint, 19 resulting in their complete or partial loss; three would be inundated by the eventual reservoirs created; and three of the cultural places have the potential to be indirectly affected through view-line and/or hydrological changes, which require further exploration in subsequent stages of the Project. At least one of these, Kunderang Station, has been subject to broader visual impact considerations as part of the EIS, and shown to have minimal impacts, but has not been specifically discussed with the local Aboriginal community.

Of 22 references cited in Appendix K, it is surprising that there is only one pertaining to local information i.e. (Davis.S.J. 1993)

We query whether it is appropriate in a public document to publish the photo of stone arrangement site and publish personal address, phone number ?

These are stated requirements with regard to water and to Aboriginal Heritage before the Project is given permission to proceed:

- An overview of the catchment or river systems, including hydrological information from prior to establishment of the dams and reservoirs.

- Clear objectives for the cultural flow in maintaining the significance of the Aboriginal sites, objects, places and values.

- Description of how water will be managed into the future to maintain necessary water regimes; and any constraints/limitations.

The archaeological research is very valuable but needs to be complemented by further consultation with Aboriginal community regarding the protection of sites ranging from prehistory through to contact period, including massacre sites as well as sites valued for meeting and camping and those in sites and features of the landscape revered in traditional stories. Given the impacts of the project on Aboriginal Cultural Heritage, the project should not be allowed to proceed.

Historic and National Heritage:

The area has long been regarded as a special place, not only by Thunghutti, but also by Gumbaingirr and Anaiwan people.

It has also long been appreciated as a place for peaceful trekking in the Macleay gorges since at least the 1930's, linked with the fledgling the environmental movement, and recognised as deserving of protection. Long ago a Bird and Animal Sanctuary was declared on Crown Land north of East Kunderang.

In 1929 J..J. de Warren, an ornithologist and owner of West Kunderang, proposed the creation of a national park that included the area of the Oven Mountain project as well as Carrai Plateau, and up onto the escarpment - in all 160,00 acres. He wrote "Australia, with its unique fauna and flora should take advantage of every means of securing their protection." (see map & article below *A Proposed National Park with notes on the Avifauna of the Upper Reaches of the Macleay River*)

While the EIS acknowledges the presence of surrounding and adjoining national park estate with World Heritage and ancient Gondwana Rainforest designation, **this is not given due accord as to its importance locally, nationally and globally**. Without an understanding of, or by downplaying these extraordinary areas with such close proximity to a large scale project, the natural and cultural values are devalued. This aims to deflect the effects of the impact that construction of an industrial project will have on Aboriginal cultural sites; on the values which created the Bicentennial Trail along the Macleay Trail; on the well frequented picnic, camping and riverine activities on the Macleay River; on the recognised World Heritage and Gondwana Rainforest values; and on the quiet and peaceful solitude values afforded by Kunderang East historic homestead. (Noted that the location of East Kunderang historic homestead is not included on any of the maps or diagrams in the EIS and appendices as this would show just how close in proximity it is to the main site, and well within hearing of construction noise and any on going work).

The top reservoir could be visible from the Homestead as well as possibly from Mary's Peak.

The project will impact on the BNT section of the Macleay Trail and on the listed heritage and ambient qualities of Kunderang Homestead in Oxley Wild Rivers National Park. It will also impact on Georges Junction, a very popular recreational area for walking (along the Macleay trail) to Kunderang as well as for bird watching, photography, kayaking, canoeing, riding, fishing and camping. The impact of a large construction site with clearing for associated road works, transmission lines etc will have a serious impact on the scenic, cultural and recreational values of this area.

Georges Junction is important traditionally to Aboriginal communities from the coastal plains to the tablelelands and is currently often visited, playing a vital role as a meeting place. There are significant archaeological sites along the Macleay River and adjoining areas plus significant contemporary and historical values of the Kunderang.

The shared pastoral history and shared landscapes is also very important and it is surprising that there are no references in the Appendices to available written documentation of this historical value.

The following statement indicates the importance of the area in a whole of landscape context that needs to be taken into account regarding the impact of an industrial project in a location of outstanding cultural, historical, environmental values of significance locally and globally

' Four cultural, historical and/or social history sites identified in the vicinity of the

Project area, including: Kunderang Station (OMPS-CS3), a large pastoral station to the west of the Project area with a history of frontier conflict and associated with the pastoral history interlinked with work lives of local Aboriginal families; George's Creek Camp (OMPS-CS4) and Lower Creek/Long Flat Station (OMPS-CS5), both post contact camp sites and the reported locations of initiation ceremonies; and, AHIMS# 21-5-0023, a catfish increase site believed to be a large rock in a portion of rapids within the Macleay River. (Appendix K)

Landscape Values - significance to local communities and visitors (Appendix AA Landuse Conflict Risk Assessment & Appendix S)

The Project area is situated on the western slope of the Carrai Plateau within the New England Tablelands. The site has steep topography ranging from 140 metres (m) along the Macleay River to 1,147 m above sea level at the highest point of Oven Mountain. Consider what is being proposed in construction for area significant in natural and cultural World Heritage values.

Despite the fact that it is going to become a very prominent visual scar on this landscape and despite the fact that it is located adjacent to a popular part of the Macleay River and Macleay Trail, Appendix S Landscape and Visual Impact Assessment states that *The reservoirs and operations buildings are expected to be visible only from a limited stretch of the National Trail and Macleay River. The proposed pump facility will also be partly visible from this location as it will be located on the river bank below the lower reservoir.*

Nonetheless, the development of the Project will result in some changes to the landscape. Visual impacts will occur during the construction and operational stages of the Project, and the visual landscape will be altered from its current state for the duration of the operation of the Project.

It is erroneous to claim that along the Macleay River valley floor that views are constrained along the valley due to limited access and to the vegetation and height of the valley walls. Similarly it is erroneous to claim that views are limited on upper

slopes and the plateau and *that the Landscape Character Zones will have negligible, low and moderate impact.*

It is erroneous to claim that the visual landscape will be altered from its current state only for the duration of the operation of the Project as it will be a permanent alteration

It is erroneous to conclude Because of this isolated location, the distance and the time needed to travel to the Project area, there are no anticipated cumulative landscape and visual impacts.

Appendix S also states that A visual impact assessment is not meant to determine whether a Project is visible or not. The objective is to determine how the Project will impact on the existing landscape character and visual amenity. Any potential negative impact must be investigated to determine how it can be mitigated and reduced to an acceptable level.



This is the Macleay Trail section of the National Bicentennial Trail from Georges Junction heading south with the Macleay River on right and the OMPHS project land on left.

The claim in Appendix S that the visual impact from OMPHS reservoirs and other major infrastructure relating to the valley floor, upper slopes and plateau will be negligible, low or medium contrasts with the statement that "any potential negative impact must be investigated to determine how it can be mitigated and reduced to an acceptable level"

Due to significant visual impact on landscape values this project should not proceed, especially when negative impacts must still be investigated.

High level noise impacts as well as **disturbance from blasting** from the project during work occurring 24 hours per day 7 days per week for 365 days per year as stated in the EIS and continuing for the four to five years of construction (or more if there are delays) **will severely impact on fauna**, including endangered species, destroy values that are deeply significant to Aboriginal people and also destroy values held dear to local communities, as well as compromising the World Heritage listed values of adjoining listed National Parks.

Due to these significant impacts this project should not proceed. There will be additional disturbance of heavy machinery associated with on-going rehabilitation work. This needs more details to be supplied in order for an assessment of the works that are stated as on-going after construction stage

In the OMPHS EIS and appendices the documentation has stated that the project will destroy Aboriginal sites and habitat of threatened species.

EIS Documentation states that many of the surveys and investigations are incomplete.

The EIS does not acknowledge how severely the project will change the landscape adjoining World Heritage and which is cherished by diverse members of communities for access along the Macleay River; for the beauty and tranquility; for pastoral shared history; for traditional and current Aboriginal values, and still as a meeting place for Thungutti, Gumgaingirr and Anaiwan. Due to significant impact on Aboriginal cultural heritage, historic, cultural and World Heritage the project should not be allowed to proceed.

Economic viability - Appendix Z

The cost benefit analysis is inadequate.

The early proposal costing was \$1.8 billion plus unstated costs for upgrade of public roads and transmission lines required by the development.

Although the report mentions benefits to Local Government and community it does not give details. Nor does it include costing for public infrastructure it expects will be provided courtesy of taxpayers. Nor does it factor in the impact on local communities by extensive road works. These communities are already impacted by road closures/part closures/ road repairs due to flooding and landslips. What proportion of money was used for influencing community rather than on Project investigations, research?

Local communities could have better been served if the \$9.5 million Government funding given so far to OMPHS was spent directly by Government to improve local services.

As the stated aim is to generate 900MW of electricity from the pumped hydro storage scheme, it will need approx. 25 % more electricity to pump from lower to upper reservoir to achieve this making the scheme less efficient and more expensive than other battery storage systems.

OMPHS claims that 600 -1,000 workers will be required during construction. For the purpose of cost analysis this needs to be more clearly delineated by providing details of types of jobs and numbers required for each category.

The EIS states that there will be 30-50 full time workers - *this and the additional contractors for regular and ad hoc maintenance and repairs* **need full accounting and job description and costings** because it contrasts with the statement in the EIS that the *Primary operation of the Project can be undertaken remotely and will require minimal onsite operational staff, other than for maintenance activities.*

Until there is a more responsible Economic Assessment, this Project should not be allowed to proceed as it does not provide full costs and could therefore depend on NSW Government to bail it out.

Alternatives exist and innovative storage systems are being rapidly developed

These are less environmentally and culturally damaging than OMPHS.

"Brown Field" storage in Hunter Valley coal mines are close to transmission lines and electricity distribution infrastructure. Renew Economy 18 December 2020

- •<u>https://reneweconomy.com.au/old-hunter-valley-coal-mine-could-be-turned-into-big-pumped-hydro-storage-plant-51970/</u>
- •<u>https://www.energyinnovation.net.au/article/arena-tests-potential-second-life-for-</u> <u>coal-mines-through-pumped-hydro</u> Arena tests potential second life for coal mins through pumped hydro
- Genex Bouldercombe Battery total capital spending budget \$60 million including finance costs and contingency funds. Located next to the 275kV /132kV Bouldercombe substation owned by transmission line operator Powerlink Sky Energy -
- Community based innovative solar self-contained energy system Sky Box with a battery, inverters (Sydney Morning Herald 9.10.23)

CONCLUSION

The Project will cause massive disruption and disturbance to upper Macleay-Kunderang, and along the Armidale-Macleay road in the Macleay Valley.

The project will destroy Aboriginal cultural sites and impact on contemporary cultural practices.

The project will severely impact on landscape, terrestrial and riparian fauna, and World Heritage values.

The project will destroy habitat of threatened species

The project will destroy the qualities of tranquil nature appreciation and enjoyment sought by locals and visitors picnicking or camping at Georges Junction, walking and horse riding along the Macleay Trail, kayaking, rafting, canoeing or fishing in the Macleay River, photographers, birdwatchers and those who visit East Kunderang homestead.

The project is a dubious economic proposition without due consideration to concerns for Aboriginal sites and values, without concern for the long term impact of those who have property along the Armidale-Kempsey and Carrai Roads and without concern that local Councils will be the poorer from the ancillary infrastructure required by the project

There are more viable and economic and less destructive alternatives elsewhere that are located near existing transmission lines.

Thank you for the opportunity to comment on the OMPHS Proposal

Yours sincerely Lynne Hosking President Armidale Branch NPA 14 October 2023

* ARC Media Release 20.9.23

Mayor concerned over Oven Mountain EIS timeframe Mayor Sam Coupland has expressed concern over the short timeframe provided for Council and the public to make submissions on the proposed Oven Mountain Pumped Hydro Energy Storage project (Oven Mountain PHES).

The Oven Mountain PHES Environmental Impact Statement (EIS) is on exhibition from Tuesday 19 September 2023 until Monday 16 October 2023, however, Mayor Coupland questioned whether the developer or NSW Government were genuinely interested in hearing from the Council or the community.

"The EIS and associated documents total over 5000 pages, allowing the Council and the community a paltry 28 days to read and digest this amount of information really seems like a token effort," concluded the Mayor.

Oven Mountain PHES comprises a new 900 megawatt underground pumped hydro-electric power station, upper dam and reservoir, lower dam and reservoir, main access tunnels, water intake structures, spillway, Macleay River pump facility, grid connection and ancillary infrastructure.



FIGURE 4.30 J J de Warren's 1929 map showing the proposed national park. (Original map, donated to NPWS)

A Proposed National Park

With Continuation Notes on the Avifauna of the Upper Reaches of the Macleay River

By J. J. DE WARREN, R.A.O.U., George's Creek, Macleay River, N.S.W.

Australia, with its unique fauna and flora, should take advantage of every means of securing their protection. This can be brought about by creating properly supervised reserves where necessary, and proclaiming in every municipality a district sanctuary.

The younger generation would then be brought up in a different environment. Naturalists' clubs might then spring into being, the various towns vieing with each other in ensuring complete protection. By-laws could be made putting restrictions on the unwanted domestic cat and bonuses upon the tail of the fox. Thus would the ambition of all lovers of nature be achieved.

For the advancement of natural science, the education of the general public, and the edification of oversea visitors, it is essential that suitable areas (not only adjacent to our large cities) be set apart in selected localities where there is to be found a large variety of fauna and flora with outstanding scenic beauty and of easy access to the public.

All these are embodied in the proposed area here dealt with--see map. It covers a wide range of country from dense tropical fern-tree jungles to bleak tablelands where snow falls during the winter months. It is traversed by one of Australia's finest streams-the Macleay River and some of its numerous branches-teeming with fish. The proposed site has a geological formation of special interest, with brushes on every creek, steep hillsides, precipitous mountains, low ridges and river flats. Such a diversity of country and climate ensures a variety of fauna and flora not to be found elsewhere in the Commonwealth. The scenic and panoramic views compare favourably with those of any other part of the State. The wealth of orchids and ferns, flowering shrubs and plants is commented upon by all.

There are at least 301 species of birds likely to occur in the area, 214 of which I have observed in the past twelve months. The principal absentees are the water-birds.

The support of the various natural science bodies of N.S.W. has been enlisted and the proposal has been placed before the Chief Secretary. It now awaits the approval of Parliament.

References:

- Harrison, Rodney Shared Landscapes, Archaeologies of Attachment and the Pastoral Industry of NSW especially Part 4 - East Kunderang Pastoral Station p.62; Part 5 Hidden Heritage: Aboriginal People in the Pastoral Industry p.87; Part 6 Mustering in the Kunderang Gorges p.113 University of NSW Press Ltd 2004
- Cohen, B. *To my Delight, the Autobiography of Bill Cohen, a grandson of the Gumbangarri.* Aboriginal Studies Press, Canberra. 1987
- Kunderang East Pastoral Station OWRNP Conservation Management Plan prepared by Jill Sheppard Heritage Consultants for NPWS Cultural Heritage Division and Armidale Area December 2003 J.J. de Warren A Proposed National Park with continuation notes on the Avifauna of the Upper Reaches of the Macleay River. Emu 29(1) pp12-15 1929
- Clayton-Dixon, Callum Surviving New England, Newara Aboriginal Corporation, 2019
- J.J. de Warren A Proposed National Park with continuation notes on the Avifauna of the Upper Reaches of the Macleay River. Emu 29(1) pp12-15 1929
- Bloomfield. G Baal Belbora. The End of the Dancing especially section 2 on the Macleay River Basin. Apcol 1981
- Harden, B. European Settlement & Pastoralism at Kunderang; Upper Macleay River, 1840-1960. Privately published by B.Harden. 2015. Available from Readers Companion bookstore, Armidale
- Bowdler, Sandra Aboriginal Sites on the Crown-timber lands of NSW. A Report to the Forestry Commission of NSW 1983
- Aboriginal Sites on NSW Crown Timber Lands Styx River & Petroi Bora Grounds
- Nomination by Armidale Branch NPA and Friends of the Earth 1998: Community Reserve Nomination Proposed Nature Reserve in the Catchments of Georges River, Cunnawarra, Little Styx and Sunday Creeks; and Proposed National Park in the Upper Catchment of the Styx River 1998
- Schwoebel, C & Cruickshanks, J. *Macleay Walking Trails* Published by Kempsey Macleay Valley University of the Third Age Inc. 2020

- Jackson, A. & Hardaker B, *Family Outings Around Armidale*, NPA Armidale 1997; Hardaker, B. Family Outings Around Armidale, NPA, 2003 (2nd Edition)
- Vecchi, A, Davis, D, Brear, M 19 April 2023, 'Downscaling Firm Generation and Pumped Hydro Energy Storage', *Net Zero Australia*, https://www.netzeroaustralia.net.au/
- Renew Economics 18 December 2020 *Old hunter coal mines could be turned into hydro storage plant* <u>https://reneweconomy.com.au/old-hunter-valley-coal-mine-could-be-turned-into-big-pumped-hydro-storage-plant-51970/</u>
- Australian Financial Review 10 April 2023 *Pumped hydro takes time and stamina which Australia may not have <u>https://www.afr.com/companies/energy/pumped-hydro-takes-time-and-stamina-which-australia-may-not-have-20230406-p5cykp</u>*