

**RE: OBJECTION TO LAKE LYELL PUMPED HYDRO (PROJECT NUMBER: 77018220)**

I am a local resident and visit Lake Lyell and Marrangaroo National Park often. I **strongly object** to the proposed needless destruction of natural environments and aquatic ecosystems in the proposal area.

I am a member of Lithgow Environment Group (LEG) and as Project Officer have coordinated volunteer water quality and flora monitoring programs in the Proposal area for 20 years. That data is publicly available on the Lithgow Environment Group website <https://www.lithgowenvironment.au/>, NSW Bionet Atlas <https://atlas.bionet.nsw.gov.au/>, Atlas of Living Australia <https://www.ala.org.au/>, iNaturalist Australia <https://www.inaturalist.org/>, and specimens sent to the NSW Herbarium on the Australasia Virtual Herbarium <https://avh.ala.org.au/>. My wife has represented LEG on *Mount Piper Lithgow Region Community Consultative Committee* for 18 years, long before Energy Australia arrived.

I fully support the Lithgow City Council motion in January 2025 **opposing** this project. I endorse the Concerned Lithgow Community Group Inc. (CLC) submission **opposing** this project. And I personally **oppose** Lake Lyell Pumped Hydro in its currently exhibited form for the reasons outlined below.

**INTRODUCTION**

I have vivid memories of the enormous River She-oaks (*Casuarina cunninghamiana*) that once lined the Coxs River before Lake Lyell flooded the area in 1982. Iconic native wildflowers in that area for me include River Bottlebrush (*Callistemon sieberi*), Silver Banksia (*Banksia marginata*), Hoary Grevillea (*Grevillea arenaria subsp. canescens*), Purple Loosestrife (*Lythrum salicaria*), and *Bertya rosmarinifolia*.

Iconic bird species for me include Azure Kingfisher & Black Swan. The most serious Weeds of National Significance along Lake Lyell include Gorse (*Ulex europaeus*) and Scotch Broom (*Cytisus scoparius*).

The deepest most fertile soils supporting wet sclerophyll forest (PCT 3226) and widest range of fauna in Lake Lyell/Lidsdale State Forest/Marrangaroo NP area are restricted to the southern side of Mt Walker, clearing of which may have been avoided had the project been located on the north side of Mt Walker.

I have a keen interest in aboriginal history, early European history, early explorers & surveyors, historic Trig Points, Survey Marks, and Reference Trees.

None of the above native plant, weed, or bird species rate a mention anywhere in the Biodiversity Assessment Report (BDAR) or EIS. PCT3226 Western Blue Mountains Montane Wet Fern Forest is not identified, and the significance of Wet Sclerophyll Forest downplayed. Neither Mount Walker Trig nor historic survey marks rate a mention. 1300 Aboriginal artefacts were allegedly removed offsite.

These glaring omissions sum up my concerns about this entire EIS – what else has been missed?

## 1. FALSE OR MISLEADING INFORMATION

It is an offence under s 10.6 of the *Environmental Planning and Assessment Act 1979* (NSW) to provide information on a planning matter that a person knows, or ought reasonably to know, is false or misleading information in a material particular. It is an offence under s 491 of the *Environment Protection and Conservation Act 1999* (Cth) to “knowingly” or “recklessly” provide information to the decision-maker.

In Australia false and misleading information can be regarded as encompassing –

- Outright false statements
- Omitting crucial details
- Creating a false impression that leads the reader to an incorrect conclusion.

The above applies not only to Proponents but also individuals making submissions. And whilst I accept that LLPH is a contentious proposal in the local community and some dubious statements have been aired publicly, this EIS has also omitted crucial details which has inflamed social division.

Below are just some of those errors/omissions –

### 1.1 Lake Lyell is still used to supply water to Mount Piper power station

Energy Australia repeatedly state in the EIS that Mount Piper power station still uses water from Lake Lyell, thereby admitting to breaching Water Access Licence 27428, a prosecutable offence under the *Water Management Act 2000*. Condition 4 of Mount Piper’s Water Access Licence 27428 clearly states:

*Condition 4: The Licence Holder must not take any water from the Coxs River under this access licence unless the Licence Holder has first used all available mine water from its storages for the purpose of power generation.*

This has been the case since before Energy Australia arrived in 2011. The Government intent was to use mine water to reduce pollution & water-take from the Coxs River. Just 2 of many examples in the EIS are -

- Main Report, page 9: *“The lake is still used to supply water to the Mount Piper power station.”*
- Main Report, page 184: *“Lake Lyell is an asset owned by EnergyAustralia with its primary use as the water supply to Mount Piper Power Station”.*

These erroneous statements in the EIS create a false impression to the public and potential investors that Lake Lyell is integral to electricity generation locally, when in fact Lake Lyell has not been a significant source of cooling water for Mount Piper power station since Energy Australia took over in 2011, and not since the Springvale Transfer commenced in 2008/2009.

### **1.2 Failure to acknowledge that Coxs River baseflows have been artificially inflated since 2009**

Energy Australia create a false impression that Lake Lyell has an ample water supply to viably operate a pumped hydro project for the next 80 years, despite being fully aware that since 2008/2009 the Springvale Transfer has artificially inflated baseflows by up to 42 ML/day in the Coxs River.

Minewater inflows currently represent a very significant proportion (ie. 80 to 90%) of Coxs River baseflows. And yet Energy Australia do not provide any figures to show what the real baseflows of the Coxs River are likely to be once Springvale Mine closes, which could be any time from 2028.

Failure to provide the actual likely baseflow figures for the Coxs River once the Springvale Transfer ceases creates a false impression to readers and potential investors that LLPH is viable long-term.

### **1.3 Failure to mention McPhillamy Gold Mine proposal to extract 15.6 ML/day indefinitely**

Energy Australia are fully aware of the McPhillamy's Gold Mine proposal currently being assessed by NSW Planning to extract 15.6 ML/day from Angus Place Mine and hence the Coxs River catchment.

The EIS fails to mention this anywhere, despite the fact it will further reduce Coxs River baseflows into Lake Lyell by 15.6 ML/day indefinitely, and has major implications for long-term viability of LLPH.

Failure to report in the EIS that McPhillamy's Gold Mine plans to extract 15.6 ML/day from the Coxs River catchment and pipe it to Blayney creates a false impression that LLPH is viable long-term.

### **1.4 Failure to report that Lake Lyell didn't spill for 11 years, or the two Fusegate failures**

Energy Australia fail to mention in the EIS that Lake Lyell didn't spill for 11 years from 1999 – 2010, nor two significant failures of the rubber Fusegates on top of Lilyvale Dam in 1997 & 1999. The water level in Lake Lyell suddenly dropped by six metres, causing flash-flooding downstream. That water loss coincided with the start of a decade-long drought, and Lake Lyell didn't spill for another 11 years.

The Main Report, page 60 says *"Previously, when both Mount Piper and Wallerawang power stations were operating, drought conditions have seen the lake as low as 765 m AHD (2007). However, during the most recent drought event (2018-2020) and as a result of Wallerawang power station no longer operating, the water level in Lake Lyell was able to be maintained above 780 m AHD."*

The EIS misleads the community and investors by inferring that the operation of LLPH will cease once the water level drops to 785.5m AHD, which current conditions suggest can be maintained. Lake Lyell dropped to 765m AHD in 2007, and 780m AHD in 2018 despite artificial minewater inflows of up to 42 ML/day. It is therefore unlikely that 785.5m AHD can be maintained in future droughts once the Springvale Transfer ceases and McPhillamy's Gold Mine starts pumping 15.6 ML/day to Blayney.

### **1.5 Failure to identify known and reasonably foreseeable future impacts**

The EIS identifies that Lake Lyell inflows include the Coxs River (58%), Farmers Creek (25%), other catchments (14%) and direct rainfall (3%), but fails to identify known and foreseeable future losses -

- The Angus Place West proposal will undermine Kangaroo Creek Swamp and the Coxs River Long Swamp, significantly reducing the 58% inflows into lake Lyell from the Coxs River.
- McPhillamy's Gold Mine plans to pump 15.6 ML/day of minewater from Angus Place mine to Blayney indefinitely, significantly reducing the 58% inflows to Lake Lyell from the Coxs River.
- Proposed Clarence Colliery secondary extraction & intensification of mining in the headwaters of Farmers Creek (700 Area) will significantly reduce the 25% of inflows from Farmers Creek.
- Springvale Colliery is currently undermining Marrangaroo Creek headwaters and is proposing to further undermine them in future, reducing the 14% inflows from other Catchments.
- The Springvale West proposal will undermine the headwaters of Sawyers Swamp Creek, further reducing the 14% inflows into Lake Lyell from other Catchments.

The EIS fails NSW DPI [Cumulative Impact Assessment Guidelines for State Significant Projects \(2021\)](#).

The EIS uses water modelling of the *'recent period' for assessment (1 July 2019 to 30 June 2024)* to justify LLPH, which just happens to coincide with the highest period of above average rainfall in history.

The EIS fails to identify the above cumulative impacts, unprecedented rainfall since the last drought, that minewater inflows will cease, known & reasonably foreseeable future impacts on water security, & that climate change will cause longer more severe droughts. This creates a false impression to the community and investors that water inflow into Lake Lyell is secure and LLPH is viable long-term.

### **1.6 Failure to disclose Mount Pipers water use from Oberon Dam, Duckmaloi Weir, Fish River**

Energy Australia fail to disclose in the EIS the volumes of water Mount Piper power station have in the past and is currently using from the Fish River Supply (Oberon Dam & Duckmaloi Weir).

The EIS creates a false impression to the community and potential investors that Lake Lyell and the Coxs River is capable of providing all the water needs for Mount Piper power station by failing to disclose that it also reliant on water from outside the Coxs River catchment (ie. Fish River Supply).

### **1.7 Failure to disclose the perimeter of Lake Lyell**

Despite an EIS comprising 28 huge volumes, 6000 pages, there is not one mention of the length of Lake Lyell's perimeter, or the width of the riparian zone exposed by lowering the water level by 2.9m for 5 years during construction and 2m daily for 80 years thereafter. Claiming that existing operational guidelines cover impacts to aquatic ecology values of these new fluctuating water levels is a nonsense. This is not a minor oversight, the riparian zone is part of the disturbance area, and must be disclosed.

## 1.8 Failure to conduct flora and fauna surveys along the entire riparian zone of Lake Lyell

The EIS creates a false impression that a comprehensive assessment comprising 28 huge volumes, 6000 pages, 48 BAM survey sites etc, was undertaken. However in reality the entire focus of the EIS is limited to the immediate construction & operational disturbance footprint only. No assessments were done for the 33 km riparian zone of Lake Lyell & tributaries which will be disturbed by lowering the water level by 2.9m for 5 years during construction, and 2m daily for 80+ years thereafter.



*Photo 1: The EIS - 28 volumes, 6000 pages, looks convincing, no one can possibly read it all, yet full of omissions.*

In the absence of this vital information my own calculations using Google Earth of the perimeter of Lake Lyell and its 'tidal' tributaries when full is 33km. If the littoral zone width exposed between high and low water mark averages 20m, then the disturbance area is 66 hectares. Energy Australia will no doubt dispute this, but I'll defend it in Court because it's better than their estimate of zero hectares.

The EIS claims a total disturbance area of 137 hectares, however fails to include vegetation disturbed by widening Magpie Hollow Road and Sir Thomas Mitchell Drive which will destroy a further 16 ha. Add that 16 ha and the 66 ha riparian zone impact zone to the stated 137 ha and the disturbance area is 219 ha. However in reality the entire 238 ha surface area of Lake Lyell will be impacted, and therefore  $238\text{ha} + 137\text{ha} = 391\text{ha}$ , or 2.8 times more than stated. Include edge-effects and it is even more again. The actual disturbance area is therefore at least 3 times more than reported in the EIS.

BAM surveys were restricted to the 137 ha construction and operational disturbance footprint only, and failed to survey flora and fauna occurring in the additional 238 ha that will also be disturbed.

The EIS grossly under-reported the actual disturbance area, which is 3 times more than stated. No flora or fauna surveys were undertaken for 2/3 of the actual disturbance area including the 33km riparian zone of Lake Lyell and tributaries. The riparian zone is likely to support the highest diversity of plants, animals, birds, frogs and insects. The EIS/BDAR fail to meet the Minimum Survey Efforts.

## 1.9 Failure to report on recent amendments to the Water Management Act 2000

The EIS fails to report on nor explain the implications for LLPH of the *Water Management Legislation Amendment (Stronger Enforcement and Penalties) Bill 2025*.

The Minister described it as a historic step to protect rivers, wetlands and communities across NSW. The new laws give the Natural Resources Access Regulator (NRAR) stronger enforcement powers and massively increases penalties for illegal water take, sending a clear message that stealing water will no longer be treated as a cost of doing business. There is also a new offence to providing false and misleading info to NRAR. [Water Management Act 2000 No 92 – NSW Legislation](#).

These amendments should have implications for EnergyAustralia because the Minister could ensure –

- That the updated water sharing plan includes an upper limit on ‘environmental flows’ into the environment, as EnergyAustralia has been using this loophole to discharge large volumes of excess Springvale minewater into Thompsons Creek Reservoir and then into the environment.
- Reduced power station demand for clean river water by using discretionary powers under the Water Management Act to urgently revise the EnergyAustralia water access licence.
- A rewrite of the licence for extracting from the Fish River to ensure EnergyAustralia prioritises mine water use and doesn’t compensate reduced Coxs River with increased Fish River take.
- That the NSW EPA review prosecution potential for unlicensed Thompsons Creek Reservoir discharges into the environment. These discharges are contrary to the zero-discharge design governing the operation of the Springvale Water Treatment Plant.
- That any beneficial reuse scheme for polluted water from mines does not delay mine closure, rehabilitation, sealing, nor permits continued pollution beyond the life of the mines.
- That the Planning Minister review McPhillamy’s Gold mine currently on public exhibition, which will pipe 15.6 ML/day of minewater out of the Coxs River Catchment to Blayney indefinitely.
- That the strongest possible SEARs apply for mine expansions including Angus Place West, Clarence Colliery, and Springvale West, ensure immediate sealing of Angus Place, ensure no further intensive longwall & mini-longwall proposals are considered, ensure NorBE test applies to all developments, and reduces the ability of mining companies to use Modifications to sidestep EIS scrutiny.
- That the imminent Angus Place Mod 10/Springvale Water Treatment Plant Mod 12 which plans to directly discharge polluted water into upper Coxs River streams is instead required to be an EIS (not a Modification) due to its impacts exceeding the ‘no or minimal environmental impact’ threshold of modifications. This EIS should be an SSD with NorBE applying.
- Require Real-time publicly accessible water quality monitoring for LLPH linked to the EPA to raise an alert when exceedances occur, and to ensure full and open public transparency.

## 2. WHY WAS THE NORTHERN SIDE OF MOUNT WALKER NOT CONSIDERED?

The original concept for LLPH may not have considered all options nor anticipated the huge community backlash. Advantages of the northern area compared to the proposed southern site include –

- Native vegetation clearing would involve the most common in the proposal & wider area - PCT3735 Central Tablelands Peppermint Shrub- Grass Forest, unlike the southern side which targets the rarest vegetation type of all - PCT3226 Western Blue Mountains Montane Wet Fern Forest;
- Contours on the north side of Mt Walker appear better suited to building a 40m high dam wall;
- Visual impacts of a 40m high upper dam wall on the northern side would be far less intrusive and hardly seen by anyone, unlike the highly controversial socially divisive south side of Mt Walker;
- Overall head of the upper dam could be up to 20m higher on the northern than southern side;
- The primary access road for construction could be from the Great Western Highway via Mt Walker Rd, the shortest route to the upper dam site, and only requires an upgraded rail level crossing, unlike the controversial southern route which involves major upgrades to Magpie Hollow Rd and Sir Thomas Michell Dr, four (4) temporary bridges and one permanent bridge;
- The diversion of Farmers Creek and destruction of Platypus & fish habitat could be avoided;
- Marrangaroo National Park could incorporate the currently unrepresented and most significant vegetation type in that area - PCT3226 Western Blue Mountains Montane Wet Fern Forest;



Figure: Trees Near Me map showing Mt Walker contours and PCT3226 not identified in the EIS/BDAR

The subject land was publicly-owned until 2011, and should have been added to Marrangaroo National Park in 2007. Whilst relocating the upper dam to the northern side of Mt Walker requires a land-swap between the National Parks & Wildlife Service and Energy Australia, a similar land swap was done by the Emirates Wolgan Valley Resort in Wollemi National Park, and should not pose an insurmountable obstacle given that this proposal has been given Critical State Significant Infrastructure status.

### 3. HISTORY OF FLORA ASSESSMENTS IN THE PROPOSAL AREA

There is no publicly available evidence that EISs or Flora Assessments were ever done before –

- Construction of Lake Lyell in 1982,
- Construction of Line 76/77 Sydney South – Wallerawang – Ingleburn 330 kV transmission line,
- Destruction of 1,695 ha of native forest in Lidsdale State Forest for Radiata Pine plantations,
- Reservation of Marrangaroo National Park on 28 February 2007, the Statement of Management Intent saying - “No native plant or native animal surveys have been conducted in the area”.  
<https://www.environment.nsw.gov.au/sites/default/files/marrangaroo-national-park-statement-of-management-intent-140194.pdf>
- Metromix Quarry, Oakey Forest Road in Marrangaroo – although a 2001 SOEE was done it failed to identify the Platypus colony in Marrangaroo Creek, Purple Copper Butterfly, any other rare or threatened plants or communities at risk, nor impacts on Aboriginal heritage.
- Lithgow City Council’s *Marrangaroo Local Environment Study* September 2006 failed to identify Platypus and *Bursaria spinosa* subsp. *lasiophylla*, host plant for Purple Copper Butterfly (Endangered). This prompted the then DEC to inspect the site, record that Platypus colony on the Bionet Atlas, and remind Council of its obligations under the EP&A Act.
- Council’s approval of Combined Development Application/Construction Certificate 197/08 failed to apply the NoRBE test, prompting the EPA to write to Council.

It is a damning indictment on the NSW Government which owned the Proposal area for 50+ years (NSW Electricity Commission, Delta Electricity) that no comprehensive Flora Assessment was ever done before selling that land to Energy Australia in 2011. The subject land should have been included in Marrangaroo National Park in 2007, and should rightfully be returned to the people of NSW now.

It is a damning Indictment on the NSW Government that no formal EISs or comprehensive Flora Assessments were ever done before building Lake Lyell, the 330 kv Transmission Line, clearing 1,695 ha of Lidsdale State Forest for radiata pine, or before reserving Marrangaroo National Park in 2007.

It is a damning Indictment on the NSW Government which funded this EIS through the *NSW Pumped Hydro Recoverable Grants Program* that it did not require a comprehensive Flora Assessment for the wider project area, rather than limiting the EIS to the direct construction/operational footprint only.

*RECOMMENDATION: The NSW Government has missed a once-in-a-lifetime opportunity to finally obtain a comprehensive flora and fauna assessment for Mount Walker, Lake Lyell area and surrounds by allowing Energy Australia to limit this EIS to the construction footprint excluding the riparian zone. The NSW Government funded this EIS, and must require Energy Australia to include the wider area.*

#### 4. FAILURE TO CONSIDER CITIZEN SCIENCE FLORA & FAUNA RECORDS IN THE PROPOSAL AREA

In an attempt to remedy the paucity of biodiversity data highlighted above, volunteers from Lithgow Environment Group (LEG) commenced a flora monitoring program in Marrangaroo National Park and around the project area in 2006. Many of those flora species are not identified in the EIS/BDAR.

That data has been publicly available for a considerable length of time on the NSW Bionet Atlas <https://atlas.bionet.nsw.gov.au/>, Atlas of Living Australasia <https://www.ala.org.au/>, iNaturalist Australia <https://inaturalist.ala.org.au/>, and Australasian Virtual Herbarium <https://avh.ala.org.au/>.

Energy Australia and/or its Consultants could have contacted Lithgow Environment Group or its long-term (18 years) representative on the *Energy Australia Lithgow Region Community Consultative Committee* Ms Julie Favell at any time prior to lodging this EIS to discuss any of those records.

It is not unusual for State and Local government departments and large corporations to trivialise, devalue, discredit, or otherwise dismiss genuine community concerns about environmental issues.

Energy Australia's predecessor Delta Electricity did just that when LEG first queried high salinity and heavy metal levels in the Cocks River downstream of Wallerawang Power Station No.8 cooling tower blowdown drain ('Tortuous Watercourse') in 2008. The then General Manager responded "I'll trust my \$250k a year consultant thanks". That led to the landmark Blue Mountains Conservation Society v Delta Electricity court case [\[2009\] NSWLEC 150- external site](#), a significant case in NSW environmental law.

Lithgow City Council similarly dismissed LEGs report of a Platypus colony (*Marrangaroo Local Environment Study 2009*) by stating that a PhD was required to identify Platypus. LEG was forced to contact the late Dr David Goldney, Professor Tom Grant, and DEC who confirmed this sighting on Bionet [Record: BioNet Atlas of NSW Wildlife:SPMC07010801 | Occurrence record | Atlas of Living Australia](#).

It was the Concerned Lithgow Community Group Inc. (CLC) which first reported the Platypus colony in Farmers Creek. We will never know whether Energy Australia would otherwise have reported it.

LEG has therefore always strived to ensure evidence-based reporting by working cooperatively with universities, threatened species officers, and government agencies including NSW Forests, National Parks & Wildlife Service, the EPA, Sydney Catchment Authority, Local Land Services etc on validated projects such as Streamwatch, Save Our Swamps, Eastern Pygmy Possum, Purple Copper Butterfly, and others.

The point being that the NSW Government recognises citizen science as a valuable tool for improving environmental outcomes. We had hoped that Energy Australia would do so in this EIS given LEGs long representation on *EnergyAustralia Lithgow Region Community Consultative Committee* for 18 years.

*RECOMMENDATION: Energy Australia should consider all publicly available Citizen Science data.*

## 5. INADEQUATE/DEFICIENT ASSESSMENT OF THREATENED SPECIES LIKELY TO OCCUR

The BDAR and EIS failed to identify all threatened species likely to occur on-site, failed to conduct adequate searches in the recommended survey window, failed to search all PCTs or 33km riparian zone of Lake Lyell, and failed to search all publicly available biodiversity databases to identify Threatened Species or indicator species for Threatened Ecological Communities (TECs) likely to occur.

Neither Energy Australia, the French Government (Électricité de France), the DECCWW, nor anyone else can honestly claim to know which threatened species actually occur in an around the proposal area, because no formal flora or fauna surveys have ever been done.

For example, the Statement of Management Intent for Marrangaroo National Park June 2014 clearly states on page 3 “No native plant or native animal surveys have been conducted in the area”. No Fauna or Flora Surveys were done before Lake Lyell flooded the area in 1982, nor for the 330Kv transmission line, nor before clearing 1,695 ha of native forest in Lidsdale State Forest for pines.

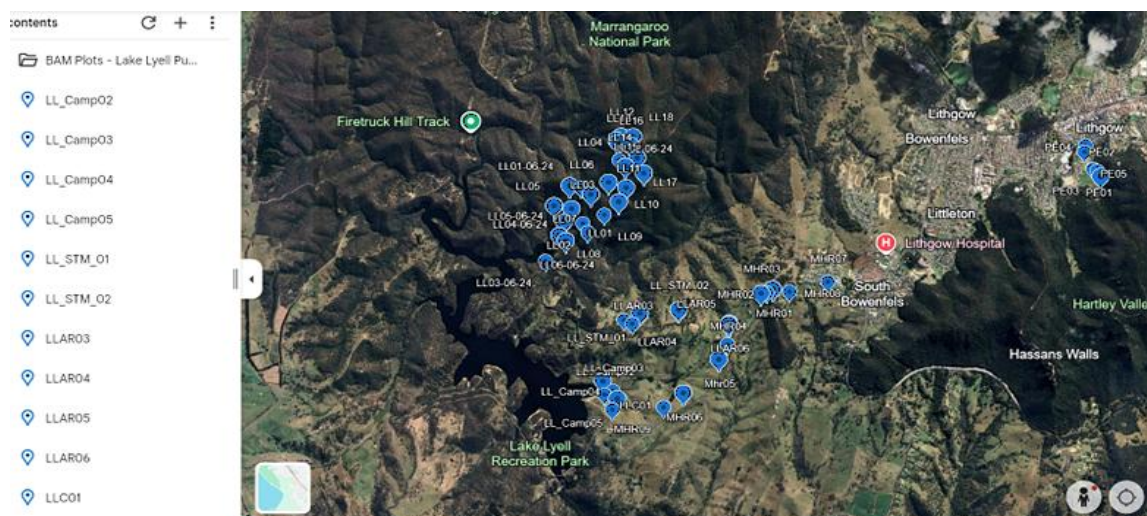
A Bionet Atlas search for all Threatened (listed on BC Act 2016) or Commonwealth listed Entities in the Lithgow City LGA returned a total of 306 species/TECs. Any one of those could occur in the proposal area, no one can say for sure, because no one in authority has ever bothered to take a look.

Below are just a few examples –

### 4.1 *Asterolasia buxifolia* (Critically Endangered EPBC Act; Critically Endangered NSW BCA)

The EIS/BDAR does at least, belatedly, acknowledge this critically endangered species. However, despite having over 3 years to prepare this EIS the Minimum Survey effort has still not been met, and no targeted surveys have been conducted in the correct survey season of September – November.

Furthermore, no targeted surveys have been conducted in the correct habitats where *Asterolasia buxifolia* is most likely to be found – along the riparian zone.



Map: The EIS/BDAR shows 48 BAM Survey Plots, none of which are along the 33km Riparian Zone

The BDAR lists 48 BAM sites where targeted surveys were conducted in the construction zone in 2023, 2024 and 2025. However none of those sites are along the 33 km riparian zone which will be impacted by lowering the water level 2.9 metres for 5 years, 2m daily for 80-100 years thereafter.

The BDAR states that *A. buxifolia* is 'known from a single location, where it is restricted to the riparian vegetation of the River Lett' in PCT 3348 Southern Tableland Granites Ribbon Gum Grassy Forest.

In fact two main populations are known (Hyde Park & Hartley) and not in PCT 3348, but mapped on NSW Government *Trees Near Me* as PCT 3367 Central Tableland Granites Grassy Box Woodland, which is also mapped in the proposal area along Farmers Creek and near Magpie Hollow.

The BDAR claims that the project site is "outside of the species known distribution and outside of species' PMST modelled distribution". That modelled distribution data is likely to be unfounded, because no formal EISs or Flora Assessments have ever been done in the project area or wider area.

Furthermore Table 6.12 states "No other *Asterolasia* species or similar species were observed". And yet *Asterolasia buckinghamii* has been recorded in Marrangaroo Creek upstream. It could easily have spread downstream along the Coxs River and proposal area, if indeed it doesn't occur there already.

But because the 24km riparian zone impacted by this proposal wasn't surveyed, it is highly unlikely either *Asterolasia buxifolia* or *Asterolasia buckinghamii* were 'observed'. Don't look, won't find.

The EIS also failed to report that *Asterolasia buxifolia* was only rediscovered in 2000 and listed as Endangered in 2002 (upgraded to Critically Endangered 7 September 2023), long after Lake Lyell and the project area was flooded in 1982. Historically therefore no searches would ever have been done.

The responsibility of searching for threatened species should not fall to volunteers. And much of the riparian land along River Lett, Coxs River, Lake Lyell, and Farmers Creek is private property, which volunteers can't search anyway. It is the responsibility of the DCCEE, Energy Australia, and EDF to survey the entire riparian zone of the Coxs River between Hartley and Lake Lyell, plus the entire riparian zone of Lake Lyell, Farmers Creek, and Coxs River upstream for *Asterolasia buxifolia*.

*RECOMMENDATION: The Minimum Survey Effort for Critically Endangered Asterolasia buxifolia has clearly not been met. The NSW Government and taxpayer funded this EIS, and should penalise Energy Australia for failing to comply. Energy Australia must be required to fund an independent survey for A. buxifolia during the correct survey season (Sept – Nov) and habitat – the riparian zone - of not only Lake Lyell, Farmers Creek, and the Coxs River upstream, but also the length of the Coxs River between Lake Lyell and Hartley. In addition, enforceable Consent Conditions must require Asterolasia buxifolia to be used in site rehabilitation after construction at suitable sites, monitored for the project life.*

#### **4.2 Long-nosed Potoroo (*Potorous tridacactylus*) - Vulnerable Commonwealth EPBC Act, NSW BCA**

The EIS/BDAR fail to mention the Long-nosed Potoroo at all. A tame colony of this Federal and State listed threatened species reportedly resides at the proposed Town Camp site near the Pottery Estate. It has also been recorded nearby on Newnes Plateau by Biodiversity Monitoring Services in 2019 and 2020 (see Bionet Atlas & ALA records). It must be considered highly likely to occur on Mount Walker.

*RECOMMENDATION 4: Long-nosed Potoroo is not identified in the EIS or BDAR yet is known to occur within the proposal area. Energy Australia must be required to conduct targeted surveys for this threatened species during the correct survey season and in the correct habitats prior to approval.*

#### **4.3 Southern Greater Glider (*Petauroides volans*) – Endangered Commonwealth EPBC Act & NSW BCA**

The BDAR states that targeted arboreal mammal surveys were undertaken for the Southern Greater Glider in a range of PCTs (3211, 3347, 3348, 3367, 3369, 3385, 3650, 3687, 3735, 3747) but not PCT3226, and fail to disclose whether any Southern Greater Gliders were actually recorded on-site.

Southern Greater Glider, including mothers with juveniles, were recorded near the Town Camp Site in 2023 & 2024 in PCT3226 Western Blue Mountains Montane Wet Fern Forest in a biodiversity report for Lithgow City Council on the Sheedy's Gully area. Those records are publicly available on ALA.

PCT3226 is not listed in the BDAR nor as having been targeted Greater Glider surveys, yet PCT3226 is mapped on the NSW Government *Trees Near Me* site on the southern side of Mount Walker.

Many Greater Glider records on ALA occur in similar wet sclerophyll PCTs containing *Eucalyptus fastigata* eg. State Mine Gully, Newnes Plateau, Maiyingu Marragu Reserve, Eusdale & Winburndale.

The endangered Southern Greater Glider is widely regarded as a picky-eater relying on trees in the most fertile sites with higher nutrient content in the leaves, and Mistletoe's. Conservation Advice states that populations have plummeted by up to 80% over the last 20 years, driven by habitat loss from land clearing and severe bushfires, which destroy the old-growth tree hollows they depend on.

So what does Energy Australia plan to do? Clear the most significant Greater Glider habitat on Mount Walker (PCT3226) and expose any that remain to 5 years of 24/7 construction noise, blasting, lighting and do the same to the Sheedy's Gully population 24/7 from a 600 person Town Camp.

*RECOMMENDATION: Energy Australia must be required to conduct additional targeted surveys for the endangered Southern Greater Glider (*Petauroides volans*) during the correct survey window in the correct PCTs on the southern side of Mount Walker and Town Camp, and mitigate the adverse impacts of 24/7 noise, artificial lighting, blasting, and habitat destruction on these sensitive native animals.*

#### 4.4 Purple Copper Butterfly (*Paralucia spinifera*) – Endangered

The Minimum Survey Effort for Purple Copper Butterfly was not met (BDAR, Table 6.11, page 153). Searches were limited to the direct disturbance area, excluding the riparian zone. *Paralucia spinifera* was recorded near the Town Camp during a Local Land Services planting event (contact Huw Evans).

The EIS fails to mention historic road naming in the Project area acknowledging Purple Copper Butterfly – eg. Butterfly Road, Copperwing Road, Bursaria Road, Blackthorn Road, Spinulosa Road. Clearly locals have known of Purple Copper and its host plant *Bursaria spinulosa* for many decades.

No formal surveys for *Paralucia spinifera* were ever done before flooding Lake Lyell in 1982, clearing the 330kv Transmission line, or clearing 1,695 ha of native forest in Lidsdale State Forest for Radiata Pine. Neither Energy Australia, EDF, nor anyone else can honestly claim that it doesn't occur there.

*RECOMMENDATION: The Minimum Survey Effort for the endangered Purple Copper Butterfly has not been met. Further targeted searches must be conducted in the correct survey window and correct habitats. Bursaria spinulosa subsp. lasiophylla must be included in all site rehabilitation planting.*

#### 4.5 Eastern Pygmy possum (*Cercartetus nanus*) – Vulnerable NSW BCA

Whilst the BDAR acknowledges the vulnerable Eastern Pygmy Possum, searches were limited to remote camera and spotlighting surveys, excluding the riparian zone, and no trapping was done.

Several main food resources for Eastern Pygmy Possum (ie. Banksia, Bottlebrush, and Grevillea) were not identified anywhere in the EIS/BDAR, despite the Conservation Advice for this threatened species identifying nectar and pollen from Banksias, Bottlebrushes and Eucalypts as important food sources.

Not a single Bottlebrush is recorded anywhere in the EIS or BDAR, despite four (4) species occurring in that area. *Callistemon sieberi* (now *Melaleuca paludicola*) is the most common species along the riparian zone, which wasn't surveyed at all. *Callistemon citrinus* (*Melaleuca citrina*), and *Melaleuca hypericifolia* occur in Marrangaroo National Park. *Melaleuca armillaris* occurs east of Rydal.

It is also entirely possible that *Callistemon megalongensis* ([Commonwealth EPBC](#) & [NSW BCA](#) Critically Endangered) and *Callistemon purpurascens* ([Commonwealth EPBC](#) & [NSW BCA](#) Critically Endangered) may once have occurred along that section of the Coxs River before Lake Lyell was flooded in 1982.

Not a single Banksia or Grevillea is recorded in the EIS or BDAR. *Grevillea arenaria* subsp. *canescens* is prominent feature of the riparian zone. Silver Banksia (*Banksia marginata*) occurs around Lake Lyell including within the disturbance area of the Preferred Lakeside Accommodation Camp. Renowned Botanists Joseph Maiden and Richard Cabbage recorded Silver Banksia in 04/1909 from "Mount Blaxland to Rydal." [Record: NSW138079 | Occurrence record | The Australasian Virtual Herbarium](#)

These nectar-producing shrubs also support other threatened species including Regent Honeyeater, Swift Parrot, Yellow-bellied Glider, Squirrel Glider, Grey-headed Flying Fox, and Blossom Bat.

No formal Flora or Fauna surveys have ever been done in or around the proposal area, so neither Energy Australia nor anyone else can honestly claim that Eastern Pygmy Possum doesn't occur.

And even where many fauna surveys have been done, it was still missed. LEGs Eastern Pygmy Possum Nest Tube program recorded it (and Feathertail Glider) in 2025. And whilst 'experts' will try to discredit and dismiss this sighting, it was witnessed by 23 people including the current General Manager of Lithgow Council, an NPWS officer, and a Fauna Ecologist from Biodiversity Management Services.

*RECOMMENDATION: The Proponent failed to identify a single Banksia or Bottlebrush species in the EIS and BDAR, significant nectar and pollen food sources for vulnerable Eastern Pygmy Possum. The riparian zone was not surveyed, nor was any trapping conducted. The Minimum Survey Effort has clearly not been met, and further targeted surveys must be required for Eastern Pygmy Possum.*

*RECOMMENDATION: The Proponent must be required to identify all nectar and pollen food sources for threatened species in the wider area including Eastern Pygmy Possum, Regent Honeyeater, Swift Parrot, Yellow-bellied Glider, Squirrel Glider, Grey-headed Flying Fox & Blossom Bat. And as a penalty for failing to identify those species in this EIS must include all of them in the rehabilitation planting mix.*

#### **4.6 South-eastern Glossy Black Cockatoo (*Calyptorhynchus lathami lathami*) – Endangered EPBC/BCA**

Whilst the BDAR identifies that the project is likely to have a significant impact on the Glossy Black Cockatoo, Energy Australia claim that only 3.62 ha of high-quality foraging habitat will be lost.

The BDAR only identified *Allocasuarina littoralis* (Black Sheoak) in the disturbance area of the upper dam where a dense sub-canopy was present over an area of 4 ha (BAM Plot LL02-06-24).

However Energy Australia failed to identify River She-oak (*Casuarina cunninghamiana*), which is an insult to the many people who remember the Coxs River lined with huge River She-oaks before it was flooded by Lake Lyell in 1982. The BDAR fails to identify remnant stands of River She-oak within the disturbance area at the end of Sir Thomas Mitchell Drive, Preferred Lakeside Accommodation Camp, and along Farmers Creek. A large population also occurs below Lake Lyell Dam wall.

The NSW Government *Trees Near Me* site identifies PCT4063 Central & Southern Tableland River Oak Forest from Lake Lyell downstream to McKanes Falls Road, Glenroy and Hartley. Remnant patches exist along Bowens Creek, River Lett, Hyde Park, and along the Coxs River down to the Six Foot Track.

The word 'Oakey' as used in Australian place names refers to River She-oaks along the banks of rivers. Locally Oakey Forest Road in Marrangaroo was likely named after Casuarinas, as were Oakey Park in Lithgow, and Palmers Oakey on the Turon River which is lined with River She-oaks.

Conservation Advice under the EPBC Act states that “*South-eastern glossy black cockatoos feed almost exclusively on the seeds of sheoaks (Allocasuarina spp. and Casuarina spp.), usually relying on one or two species within a region*”. Energy Australia only identified one species in the BDAR.

*RECOMMENDATION: Energy Australia must be prosecuted for failing to identify in the BDAR one of the most significant, historic, and visually obvious large trees in the Lake Lyell area prior to flooding in 1982, remnants of which still provide critical habitat for the endangered Glossy Black Cockatoo.*

*RECOMMENDATION: Energy Australia must be required to survey for all remnants, and restore foraging habitat for Glossy Black Cockatoo in the rehabilitation of disturbed sites. Planting should include restoring at least some stands of River She-oak which historically occurred all along the Coxs River and Farmers Creek arms of Lake Lyell, as well as restoring Black She-oak near the upper dam.*

#### **4.7 Gang-gang Cockatoo (*Callocephalon fimbriatum*) – Commonwealth & NSW Status: Endangered**

Whilst the BDAR acknowledges this endangered species, identifies that the project is likely to have a significant impact on Gang-gang Cockatoo, and claims to have conducted nest tree searches, transect searches, listening surveys, and opportunistic observations, several key points are omitted.

The BDAR fails to acknowledge that the Gang-gang Cockatoo is an altitudinal migrant. During the summer months it primarily inhabits mature wet sclerophyll forests – and the only place that occurs in the project and wider area is on the southern side of Mount Walker ie. PCT3226 Western Blue Mountains Montane Wet Fern Forest, which will be destroyed by this proposal.

In winter Gang-gangs move from these wet montane forests to inhabit drier lower altitude woodland assemblages, including those with Casuarinas. The BDAR fails to identify *Casuarina cunninghamiana*.

The EIS/BDAR fail to acknowledge the Commonwealth Listing Advice which states the main factor making the species eligible for Endangered listing was that the population declined by 69% from 1999 – 2019 (i.e. before the 2019/2020 bushfires) and additional population decline occurred due to mortality and habitat loss during the 2019/2020 bushfires. Huge parts of the local area including 90% of the Gardens of Stone region were burnt, but not Mount Walker which became a significant refuge.

The EIS/BDAR also fail to acknowledge that Cockatoos are integral to songlines, dreaming stories, and Traditional Ecological Knowledge for Aboriginal communities, including local Wiradjuri. These stories

relate to connectivity of country, to the movement of people, animals, plants, and celestial systems and are indicators of seasons and rain which informs management of country with fire and water.

*RECOMMENDATION: Energy Australia must be required to formally acknowledge that mature wet sclerophyll forests proposed for destruction on the south side of Mount Walker (PCT3226) provide Critical Habitat for endangered Gang-gang Cockatoo during the summer months, and a critical refuge from fire eg. 2019. Therefore, biodiversity offset credits must be provided to compensate for this loss.*

#### **4.8 Koala (*Phascolarctos cinereus*) – Commonwealth EPBC Act Vulnerable, NSW BCA Vulnerable**

The EIS acknowledged that a Koala was detected by dog detection surveys, scats were found near the upper reservoir site, the construction envelope did contain suitable forested habitat, it was assumed to be present (except near Town Camp site), and Threatened Species Ecosystem Credits were required. Some questions remain –

- Whilst the Koala sighting near the Town Camp site at Hassans Walls was acknowledged <https://www.abc.net.au/news/2022-08-12/blue-mountains-koala-sighting-raises-hope-after-bushfires/101321760>, part of that area was excluded from the disturbance envelope. Surely 24/7 artificial lighting, noise, traffic from a 600-person camp for 5 years won't be beneficial to the well-being of Koala, Greater Glider, Potoroo or other threatened species living there?
- The Hassans Walls Koala sighting in 2022 appeared to be in PCT3226 Western Blue Mountains Montane Wet Fern Forest in either a *Eucalyptus blaxlandii* or *E. fastigata*. PCT3226 is not one of the PCTs identified in the EIS nor the BDAR, despite being mapped on *Trees Near Me*?
- The EIS states that there are no koala records to date north of Magpie Hollow Road and South of Great Western Highway, including within the adjacent Marrangaroo National Park and Lidsdale State Forest. Why would there be when, as pointed out in (2) above, “No native plant or native animal surveys have been conducted in the area”. Just because there are no records doesn't mean Koala's don't occur, it just means that neither NSW Forests, the NPWS, Delta Electricity, Transgrid, nor any other government department has ever bothered to look.
- In fact a Koala sighting in Lidsdale State Forest on 21 November 2025 was widely circulated <https://www.facebook.com/groups/173125873633383/posts/1911399059806047/>. It is odd that no one in Energy Australia saw nor regarded it worth mentioning in 6000 pages of EIS?
- The EIS lists Koala food trees in the project area, and rates Ribbon Gum (*Eucalyptus viminalis*) as Low Use. This conflicts with DECCWW advice which lists *E. viminalis* as a Primary Food Tree. <https://www.environment.nsw.gov.au/topics/animals-and-plants/native-animals/native-animal-facts/koala/koala-habitat>

- *Eucalyptus viminalis* is common in the project area, particularly in areas excluded from the search effort ie. the entire 33 km Riparian Zone of Lake Lyell and Farmers Creek/Coxs River arms that will be impacted by this proposal.
- Koala road-kills are likely to be more common due to widening and upgrade of Magpie Hollow Road and Sir Thomas Mitchell Drive, with 1200 more vehicle trips and 300 heavy truck trips all driving faster on a newly widened road. Road widening will destroy 16 ha of native vegetation, causing habitat fragmentation & loss for Koala. That 16 ha of vegetation loss isn't included in the disturbance area, and no Biodiversity Offset Credits have been required. Why not?

*RECOMMENDATION: The EIS should clarify some of the above-mentioned concerns about Koala.*

#### **4.9 Powerful Owl (*Ninox strenua*) – Vulnerable NSW BCA**

The BDAR acknowledges Powerful Owl were observed in multiple locations north of Lake Lyell during the species' breeding season via call-playback, song meter & stag watch/listening/spotlighting surveys. The area north of Lake Lyell refers to the southern slopes of Mt Walker with the deepest most fertile soils supporting the rarest vegetation type of all in the area - PCT3226 Western Blue Mountains Montane Wet Fern Forest. PCT3226 isn't identified in the BDAR despite being mapped on *Trees Near Me*.

#### **4.10 Sooty Owl (*Tyto tenebricosa*) - Vulnerable NSW BCA**

The BDAR acknowledges that Sooty Owl were sighted in multiple locations north of Lake Lyell during the species' breeding season via call-playback, song meter & stag watch/listening/spotlighting surveys. That area north of Lake Lyell refers to the southern slopes of Mt Walker with the deepest most fertile soils supporting the rarest vegetation type of all in the area - PCT3226 Western Blue Mountains Montane Wet Fern Forest. PCT3226 isn't identified in the BDAR despite being mapped on *Trees Near Me*.

#### **4.11 White bellied Sea-eagle (*Haliaeetus leucogaster*) – Vulnerable NSW BCA**

The BDAR states that a single adult bird was incidentally recorded hunting waterfowl over Lake Lyell in June and December 2023. No evidence of breeding activity.

It is little wonder that Energy Australia recorded so few White bellied Sea-eagle in the proposal area, because they specifically excluded the entire 33km riparian zone of Lake Lyell which will be impacted.

Furthermore no native plant or native animal surveys have ever been conducted in the proposal area by NSW Forests, the NPWS, Delta Electricity, Transgrid, nor anyone else despite over 200 years of European settlement. Little wonder then that there are so few records for White bellied Sea-eagle.

Nevertheless the White bellied Sea-eagle is commonly observed by local birdwatchers on Lake Lyell and Lake Wallace, because they are known to follow the riparian corridor of the Coxs River inland.

**4.12 Large Bent winged Bat (*Miniopterus orianae oceanensis*) – Vulnerable NSW BCA**

The BDAR acknowledges that the Large Bent winged Bat was recorded in the project area by ultrasonic recording with high confidence (Definite). The 33km riparian zone was not surveyed.

**4.13 Eastern Coastal Free-tailed Bat (*Micronomus norfolkensis*) – Vulnerable NSW BCA**

The BDAR acknowledges that the Eastern Coastal Free-tailed Bat was recorded by ultrasonic recording with high confidence (Definite). The 33km riparian zone of Lake Lyell was not surveyed.

**4.14 Southern Myotis (*Myotis macropus*) – Vulnerable NSW BCA**

The BDAR acknowledges that the Southern Myotis was recorded in the project area by ultrasonic recording with high confidence (Definite). The 33km riparian zone of Lake Lyell was not surveyed.

**4.15 Pilotbird (*Pycnoptilus floccosus*) – Vulnerable Commonwealth EPBC Act; Vulnerable NSW BCA**

The BDAR claims that Pilotbirds weren't recorded in the project area because they are strictly terrestrial, living on the ground in dense forests with heavy undergrowth, and that the construction envelope habitat is unsuitable due to the lack of dense undergrowth. However, the search effort failed to search the 33km riparian zone of Lake Lyell, which is all dense to heavy undergrowth. Furthermore Pilotbirds were recorded at Hassans Walls Reserve in 2022 adjacent the proposed Town Camp site which supports dense undergrowth around the perimeter.

*RECOMMENDATION: The Minimum Survey Effort was not met for vulnerable Pilotbirds because the proponent failed to survey the 33km riparian zone of Lake Lyell and tributaries which will be impacted, and to note it at the Town Camp site. Further surveys must be conducted for Pilotbirds.*

**4.16 Diamond Firetail (*Stagonopleura guttata*) - Vulnerable Commonwealth EPBC Act & NSW BCA**

The BDAR did not record Diamond Firetail despite potential habitat occurring in the construction envelope. The Threatened Species Profile for Diamond Firetail identifies that it is often found in riparian areas (rivers & creeks). The Proponent failed to conduct surveys along the 33km length of the riparian zone of Lake Lyell or its tributaries, which will also be disturbed.

The Diamond Firetail was recorded on Sir Thomas Mitchell Drive in 2009, an integral part of this LLPH project. Road widening will destroy and fragment 16 ha of vegetation and habitat in that area.

*RECOMMENDATION: The Minimum Survey Effort was not met for vulnerable Diamond Firetail because the proponent failed to survey the 33km riparian zone of Lake Lyell and tributaries which will be impacted, nor identify the population on Sir Thomas Mitchell Drive where road widening will destroy 16 ha of vegetation. Further surveys must be conducted for the vulnerable Diamond Firetail.*

#### **4.17 Latham's Snipe (*Gallinago hardwickii*) – Vulnerable & Migratory Commonwealth EPBC, NSW BCA**

The EIS/BDAR states Latham's Snipe was not recorded in the construction envelope, but was previously recorded at Lake Lyell in 2012 and 2018. Energy Australia did not survey the entire 33 km riparian zone of Lake Lyell, which will also be disturbed. No formal surveys have ever been done in the wider area.

Latham's Snipe has also been recorded upstream along the Coxs River near Angus Place Colliery. It must be considered highly likely that this migratory bird follows the riparian zone of the Coxs River.

The Commonwealth Conservation Advice for Latham's Snipe states that they shelter during the day in small wetlands including urban water bodies, saltmarshes, as well as creek edges, where there is adequate shallow flooded or inundated substrate. They are mostly found among dense cover of sedges, grasses, lignum, reeds and rushes, widespread along the 33km riparian zone of Lake Lyell.

<https://www.environment.gov.au/biodiversity/threatened/species/pubs/863-conservation-advice-05012024.pdf>.

*RECOMMENDATION: The Minimum Survey Effort has not been met for Migratory and Vulnerable Latham's Snipe which has previously been recorded in the area. Further surveys must be required.*

#### **4.18 Blue-billed Duck (*Oxyura australis*) - Vulnerable NSW BCA**

The Blue-billed duck is commonly observed by local birdwatchers on Lake Lyell and Lake Wallace. The Atlas of Living Australia (ALA) lists dozens of local records including a 2014 record on Lake Lyell, numerous on Lake Wallace, and many more upstream along Farmers Creek near Lithgow STP.

It most definitely does occur on Lake Lyell, and if Energy Australia failed to record/report it in the EIS/BDAR that is because they didn't survey the 33km riparian zone of Lake Lyell and tributaries.

*RECOMMENDATION: The Minimum Survey Effort has not been met for Blue-billed Duck. Further surveys must be conducted, and Offset Liabilities/Ecosystem Credits must be required.*

#### **4.19 SUMMARY THREATENED SPECIES**

Despite Energy Australia downplaying the biodiversity values of the project site and limiting the flora & fauna survey effort to the immediate disturbance area of less than 140 hectares, an extraordinary number of **20 Commonwealth and/or State threatened species** occur or are likely to occur on site.

So why have Threatened Species Credits only been required for 7 threatened species? ie. -

- Callocephalon fimbriatum (Gang-Gang Cockatoo)
- Calyptorhynchus lathami lathami (Glossy Black Cockatoo)
- Ninox strenua (Powerful Owl)
- Paralucia spinifera (Purple Copper Butterfly)

- *Phascolarctos cinereus* (Koala)
- *Tyto tenebricosa* (Sooty Owl)
- *Myotis macropus* (Southern Myotis)

And despite the fact indicator species necessary to identify of PCTs are totally unknown because no formal flora surveys have ever been done in 200 years of European settlement, and Energy Australia limited the flora surveys to the immediate disturbance footprint of less than 140 ha only, they have somehow magically determined that ecosystem credit offsets are only required for 8 PCTs -

- 3211 Central Tableland Montane Wet Forest Southern Escarpment Wet Sclerophyll Forests
- 3348 Southern Tableland Granites Ribbon Gum Grassy Forest Tableland Clay Grassy Woodlands
- 3367 Central Tableland Granites Grassy Box Woodland Southern Tableland Grassy Woodlands
- 3369 Central Tableland Ranges Peppermint-Gum Grassy Forest Southern Tableland Grassy Woodlands
- 3385 Southern Tableland Creekflat Swamp Woodland Subalpine Woodlands
- 3650 Goulburn-Lithgow Ranges Silvertop Ash Forest South East Dry Sclerophyll Forests
- 3687 Newnes Plateau Peppermint-Ash Tall Forest Sydney Montane Dry Sclerophyll Forests
- 3735 Central Tableland Peppermint Shrub Grass Forest Southern Tableland Dry Sclerophyll Forests

PCT3226 wasn't even identified in the BDAR/EIS. And yet the DECCWW will no doubt present Energy Australia with an award after approval - for best practice creative accounting and greenwashing!

## **6. INADEQUATE/DEFICIENT ASSESSMENT OF NON-LISTED BUT RARE FLORA SPECIES**

Whilst Proponents are only required to report on listed Threatened Species under Federal/State legislation, and usually only report on a select few of those, unless the full suite of rare non-listed species are identified in EISs and avoided, they too will end up joining the threatened species list.

One example of a rare non-listed flora species is *Asterolasia buckinghamii*. It is not listed as threatened, but arguably should be. In 2004 Alan Fairley *Seldom Seen. Rare Plants of Greater Sydney* described it as 'rare in remote areas'. The only known population in the Lithgow LGA occurs along Marrangaroo Creek, and it may well extend downstream along the Coxs River to Lake Lyell. In cumulative terms many plants were lost when the NPWS constructed the Lost City walking tracks, making this project area even more important to search and potentially avoid localised extinction.

Despite appearances in the BDAR that a comprehensive flora assessment was done with 48 BAM sites being surveyed, less than half (23) were in native bushland, the majority in highly disturbed areas. And all those 48 BAM sites were limited to the direct disturbance footprint, ignoring the 33km

riparian zone of Lake Lyell, which supports the greatest diversity of species, and will be impacted by a 2.9m lowering of water levels for 5 years, and 2m daily fluctuations for 80-100 years thereafter.

This EIS is a scam, you know it, but sadly I have to play the game, so below are 30 obvious omissions –

- *Acacia decurrens* - not identified in BAM plots, occurs 330kv transmission line area
- *Acianthus exsertus* - not identified in BAM plots, occurs upper dam area
- *Arrhenechthites mixtus* - not identified in BAM plots, occurs upper dam area
- *Banksia marginata* - not identified in BAM plots, Preferred Lakeside Accommodation Camp
- *Bertya rosmarinifolia* – not identified in BAM plots. Only 2 Bionet Atlas records in the Lithgow LGA, both in the proposal area, 5 records in the Central Tablelands, and only 43 records in NSW. Hardly common. LLPH could make it locally extinct. Why does the DECCWW let this happen?
- *Callistemon citrinus* – Not identified in BAM plots. Looks similar to *C. megalongensis* (E).
- *Callistemon hypericifolia* – not identified in BAM plots. Only 1 record in entire Lithgow LGA.
- *Callistemon sieberi* – not identified in BAM Plots, common along riparian zone
- *Casuarina cunninghamiana* – not identified in BAM Plots, occurs at the end of Sir Thomas Mitchell Drive, Preferred Lakeside Accommodation Camp, and along Farmers Creek arm.
- *Chiloglottis seminuda* - not identified in BAM plots, occurs upper dam area
- *Dipodium roseum* - not identified in BAM Plots, occurs upper dam area
- *Epilobium ciliatum* - not identified in BAM Plots, occurs along riparian zone
- *Gratiola peruviana* - not identified in BAM Plots, common along riparian zone
- *Grevillea arenaria* subsp. *canescens* - not identified in BAM Plots, common along riparian zone
- *Gynatrix pulchella* - not identified in BAM Plots, occurs along riparian zone
- *Isotoma fluviatilis* - not identified in BAM Plots, occurs along riparian zone
- *Lagenophora sublyrata* - not identified in BAM Plots, occurs upper dam area
- *Leptospermum rotundifolium* - not identified in BAM plots, occurs 330kv transmission line area
- *Lythrum salicaria* - not identified in BAM Plots, common along riparian zone
- *Melaleuca armillaris* - not identified in BAM plots, occurs 330kv transmission line area
- *Olearia ramulosa* - not identified in BAM Plots, occurs upper dam area
- *Persicaria prostrata* - not identified in BAM Plots, common along riparian zone
- *Pomaderris andromedifolia* - not identified in BAM Plots, riparian zone
- *Pomaderris betulina* - not identified in BAM Plots, riparian zone
- *Pterostylis ampliata* - not identified in BAM Plots, occurs upper dam area
- *Pterostylis truncata* - not identified in BAM Plots, occurs in grassy woodlands
- *Sigesbeckia australiensis* - not identified in BAM Plots, rocky grassy woodland areas

- *Vallisneria nana* - not identified in BAM Plots, Preferred Lakeside Accommodation Camp
- *Veronica perfoliata* - not identified in BAM Plots, occurs upper dam area
- *Zieria cytisoides* – not identified in BAM Plots, occurs upper dam area

*RECOMMENDATION: The BDAR only searched for a select few Threatened Flora Species, but not for rare non-listed flora species, and omitted numerous common species. Unless the full suite of threatened, rare non-listed, and common plant species are identified, the Plant Community Types (PCTs) including Threatened Ecological Communities (TECs) may not have been identified. Energy Australia must be required to identify the entire suite of plant species characterising the site, including along the 33km riparian zone, rather than a select few flora species in the construction envelope only.*

## 7. FAILURE OF THE BDAR TO IDENTIFY AQUATIC PLANTS IN THE PROPOSAL AREA

LEG has recorded over 30 aquatic plants occurring in the project area that were not identified in the *Biodiversity Assessment Report (BDAR)* nor at any of the 48 BAM Survey Plots. This further illustrates the inadequacy of the EIS in failing to survey the 33km riparian zone of Lake Lyell and tributaries.

This is a huge oversight and has significant implications for LLPH, because aquatic plants can block filter screens, pump intakes, foul boat propellers, has visual impacts, and recreational safety hazards.

Management and control of aquatic plant growth on lakes and tributaries can be extremely difficult, the use of herbicides shouldn't be permitted on a waterway feeding Sydney's drinking water supply, and expensive unproven mechanical methods of control are likely to be the only options.

Some of those aquatic plants are native and play vital roles providing habitat, oxygen, and water clarity. Others are invasive exotics. Regardless, un-natural disturbance by LLPH will disrupt the natural balance, and some of these aquatics will become invasive and choke the waters of Lake Lyell and its tributaries.

Below are 30 native and invasive exotic aquatic plants not identified in the BDAR/BAM Plots -

- Eelweed (*Vallisneria australis*) – occurs at Preferred Lakeside Camp, Farmers Creek arm, and elsewhere around Lake Lyell. A native submerged aquatic plant with 3m long strap-like leaves that can block filter screens, pump intakes, tangle boat propellers, and entrap skiers and swimmers.



- Water Milfoil (*Myriophyllum crispatum*) – occurs Coxs River Marrangaroo NP, Lake Lyell. Food source for the Black Swan and Waterfowl. Some Milfoils can become very invasive.



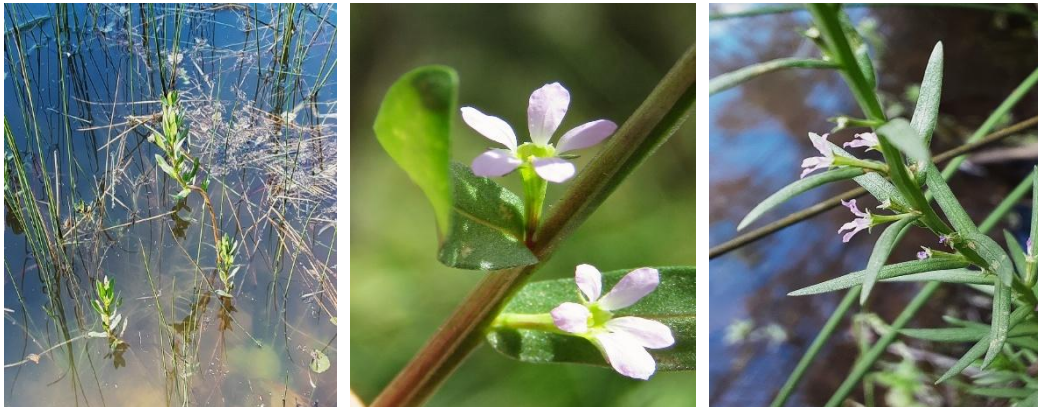
- Pondweed (*Potamogeton* sp) – occurs near Rydal and most likely in Lake Lyell and tributaries.
- Swamp Lily (*Ottelia* sp) - occurs Lake Lyell, near Rydal, and most likely all tributaries.



- Entire Marshwort (*Nymphoides montana*) – Coxs River headwaters.
- Blue Water Speedwell (*Veronica anagallis-aquatica*) – Coxs River and Farmers Creek.
- Peppermint (*Mentha x piperita*) – common Coxs River Marrangaroo NP, Lake Lyell, Farmers Creek
- Apple Mint (*Mentha suaveolens*) – Old Western Road, Rydal.
- Lesser Joyweed (*Alternanthera denticulata* – occurs Marrangaroo National Park
- Purple Loosestrife (*Lythrum salicaria*) – common Coxs River Marrangaroo NP and Lake Lyell.



- Hyssop Loosestrife (*Lythrum hyssopifolia*) – occurs Marrangaroo National Park. Rydal.



- Watermint (*Mentha aquatica*) – occurs Coxs River Marrangaroo NP. Lake Wallace. Rydal.



- Narrow-fruited Watercress (*Nasturtium microphyllum*) – occurs Coxs River Marrangaroo NP.
- Bog Yellowcress (*Rorippa palustris*) – occurs Coxs River Marrangaroo National Park
- Austral Brooklime (*Gratiola peruviana*) – occurs Coxs River Marrangaroo National Park. Rydal.



- Blue Star Creeper (*Isotoma fluviatilis*) - occurs Coxs River Marrangaroo National Park
- Australian Bugleweed (*Lycopus australis*) – Coxs River Marrangaroo NP. Sawyers Swamp Creek
- Willow-herb (*Epilobium billardioreanum*) – Coxs River Marrangaroo NP. Farmers Creek.
- Fringed Willow-herb (*Epilobium ciliatum*) - Coxs River Marrangaroo National Park.
- Bird's-foot Trefoil (*Lotus corniculatus*) – Coxs River Marrangaroo NP. Lake Wallace. Pipers Flat.
- Annual Bastard Cabbage (*Rapistrum rugosum*) – Coxs River Marrangaroo National Park

- Creeping Speedwell (*Veronica persica*) – occurs near Town Camp and Farmers Creek catchment.
- Slender Knotweed (*Persicaria decipiens*) - Coxs River Marrangaroo National Park.
- Water-pepper (*Persicaria hydropiper*) - Coxs River Marrangaroo National Park.
- Pale Smartweed (*Persicaria lapathifolia*) - Coxs River Marrangaroo National Park.
- River Buttercup (*Ranunculus inundatus*) – Coxs River.
- Creeping Buttercup (*Ranunculus repens*) – only identified in BDAR at Town camp site and Preferred Lakeside Camp, but common along Coxs River Marrangaroo NP and Farmers Creek.
- Matted St. John's Wort (*Hypericum japonicum*) - Coxs River Marrangaroo National Park
- Common reed (*Phragmites australis*) – occurs Coxs River Marrangaroo National Park and widely elsewhere. Forms dense impenetrable monocultures to 6m tall with cascading effects for riparian environments displacing virtually all other native plants. Platypus will struggle to get thru dense thickets to burrows, fishermen or skiers falling into water will struggle to get through it to dry land, and at 6m tall will block water views from land. Daily water fluctuations of 2m for 80+ years will likely result in *Phragmites* and *Typha* lining the entire foreshore of Lake Lyell & tributaries.
- Narrow-leaved Cumbungi (*Typha domingensis*) – occurs Farmers Creek catchment (as above).
- Broadleaf Cumbungi (*Typha orientalis*) – occurs Coxs River Marrangaroo National Park, and Farmers Creek. As with *Phragmites sp* forms tall impenetrable monocultures displacing all other native plants, impedes platypus movement to burrows, visual impacts, and safety hazards for fisherman, kayakers, swimmers. Likely to spread due to daily 2m water level fluctuations.

Whilst I acknowledge that a few of the above (6 to species level) are noted in the Aquatic Ecology Assessment, all 30 species were missing from the Biodiversity Assessment Report - the very report required by law to provide a true account of the plants, including aquatic plants, that actually occur.

All of the above aquatic plants have been recorded by LEG on publicly available databases including ALA and iNaturalist Australia. Anyone in the world can do a desktop search and find what occurs.

*RECOMMENDATION: The EIS fails to meet Minimum Survey Requirements for Aquatic Plants because 30 species known to occur in the proposal area were not identified. Aquatic plant growth can have serious consequences for pump intakes, filter screens, boating, and safety hazards for skiers and swimmers. The EIS plans to develop dozens of plans (though never say fully-funded plans) after approval, yet how can a plan be prepared for anything when the very things needing protection, control, or monitoring haven't been identified in an EIS? We all know that control of aquatic weeds is impossible, prohibitively expensive and won't happen. Why does NSW Planning continually allow Energy Australia and other proponents to make utterly false and misleading statements like this?*

## 8. FAILURE TO IDENTIFY WEEDS OF NATIONAL SIGNIFICANCE (WONS) AND OTHER INVASIVE WEEDS

The EIS/BDAR failed to identify a vast number of weed species including Weeds of National Significance in LLPH area that are likely to proliferate due to disturbance during construction and ongoing operations.

For example, Gorse (*Ulex europaeus*) was listed as a Weed of National Significance (WONS) in 1999 as part of the Australian Weeds Strategy. Failing to report a WONS in an EIS is a serious offense in Australia, as it violates both general biosecurity duties and legal requirements to provide truthful information.

In 2009 LEG volunteers sighted a large infestation of Gorse (and Scotch Broom) beside the Farmers Creek arm of Lake Lyell at what is now a main part of LLPH disturbance area near - BAM Plot LL05. LEG did the right thing and reported it to Delta Electricity's then Environmental Officer Nino De Falco, providing him with the map below, GPS Coordinates, and recorded it on the Bionet Atlas.

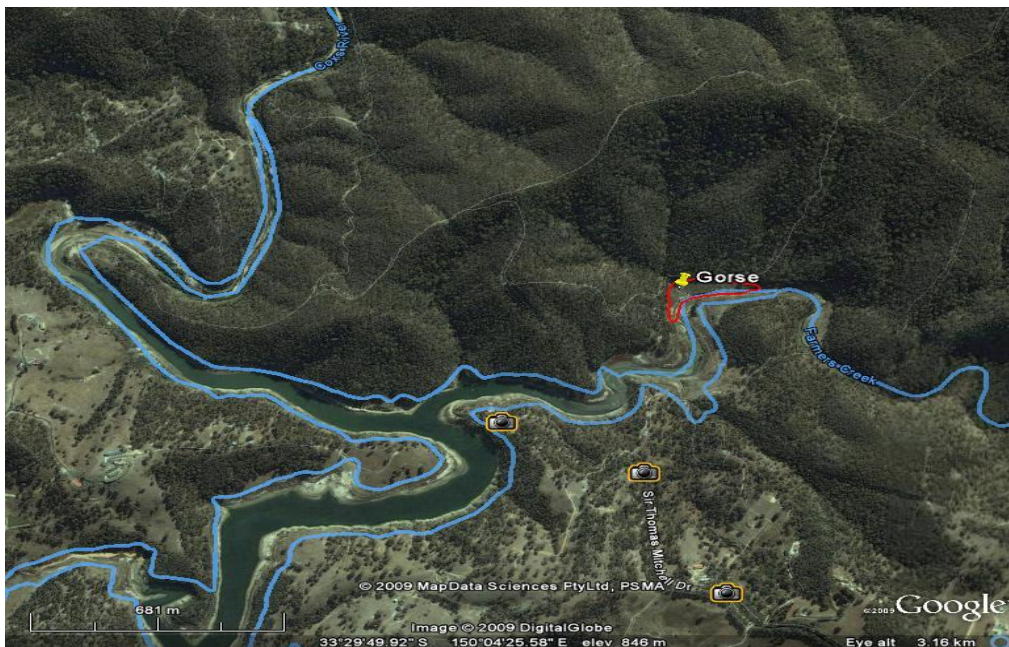


Figure: Map provided to Delta Electricity on 18 September 2009 reporting a large infestation of Gorse

Local volunteers are therefore rightly offended that Energy Australia failed to record Gorse anywhere in the LLPH area, despite having reported it to their predecessor Delta Electricity so it was on record. EA could have searched the Bionet Atlas. Even if no plants were sighted at BAM Plot LL05, the very reason Gorse was declared is because seed survives 30 years in soil and is activated by disturbance.

Gorse also occurs in Falnash State Forest, and Gorse seed is currently being massively disturbed and washed into the Cocks River by Energy Australia's arguably illegal discharges of huge volumes of excess Springvale Transfer minewater into Thompsons Creek, an ephemeral creek unsuited to such high flows and therefore erosion damage and soil disturbance is extensive.

Plans to develop plans for weed control didn't happen there - so why pretend that it will for LLPH?

Gorse also occurs upstream of LLPH in Farmers Creek near Tweed Road, Farmers Creek bridge Great Western Hwy, Coerwull Road, along the Coxs River adjacent Wallerawang Power Station, near the Castlereagh Hwy bridge over Coxs River Lidsdale, and near Mt Piper Ash Repository in Blackmans Flat.

The Weeds of National Significance, Scotch Broom (*Cytisus scoparius*) and Montpellier Broom (*Genista monspessulana*), were only reported in the EIS as occurring at the Town Camp, whereas both are common along Farmers Creek, and Scotch Broom occurs along the Coxs River Marrangaroo National Park.

Certain WONS are classified as a “Prohibited Matter” eg. Broomrapes (*Orobancha sp*), which LEG volunteers have recorded at 2 sites near LLPH in Marrangaroo National Park/Lidsdale State Forest.

Notifiable Noxious Weeds in the Central Tablelands Weed Authority area include Pampas Grass (*Cortaderia species*), rife on Mount Piper Ash Repository and former Wallerawang Power Station’s Kerosene Vale Ash Repository. Plans to develop plans for weed control haven’t worked there.

I could go on to list every single weed not identified in the EIS and the huge number of other weeds occurring within the LLPH disturbance area including the 33km riparian zone - but it is not my job! It is Energy Australia’s job, because they plan to disturb the site and enable the spread of invasive weeds.

The EIS plans to develop a plan for weed management, despite the fact weed management locally has been totally unsuccessful for the past 200 years of European settlement, as demonstrated above.

The Coxs River and the 330kv transmission line through the project site are also corridors along which weeds continue to spread into the Greater Blue Mountains World Heritage Area (GBMWhA).

Local landowners, the local community, neighbouring Blue Mountains City Council, and GBMWhA downstream want, expect, and deserve a weed management strategy that is ambitious, well-resourced and capable of delivering real long-term outcomes.

*RECOMMENDATION: Failing to declare a Weed of National Significance (WONS) or other declared noxious weeds in an Environmental Impact Statement (EIS) is a serious offense. Such a failure violates both biosecurity obligations and legal requirements to provide truthful information for environmental approvals. EnergyAustralia failed to report the WONS listed Gorse (*Ulex europaeus*) and Brooms (*Cytisus scoparius*, *Genista monspessulana*) within the LLPH disturbance area, and the Notifiable Weed Pampas Grass on its own lands upstream. Energy Australia should be prosecuted under the Biosecurity Act (2015) NSW. Further searches for, and public recording and reporting of all weed species occurring within the disturbance area, including the 33km riparian zone.*

## 9. OTHER PEST AND DISEASES

The EIS fails to mention anywhere in the 28 Volume, 6000 page EIS two seriously major native plant disease threats that could be spread by LLPH – Phytophthora Dieback caused by the root-rot fungi *Phytophthora cinnamomi*, and Myrtle Rust dieback caused by the fungi *Austropuccinia psidii*.

*Phytophthora cinnamomi* is widely known to be spread by soil disturbance and altered drainage. Both are likely consequences during construction of LLPH, and operations involving 2m daily water level fluctuations for 80-100 years. Myrtle Rust is spread by wind, water, insects, and animals.

Despite not identifying these serious diseases in the EIS, Energy Australia's predictable response will be a plan to develop a plan and monitoring. Read that as A Plan to Fail, and Monitoring to the Death.

*RECOMMENDATION: The EIS fails to recognise the potential for LLPH to spread the serious plant dieback diseases Phytophthora cinnamomi and Austropuccinia psidii. Energy Australia must address this, and the usual glib 'plan to develop a plan' and 'monitoring' response is totally unacceptable. The local community expect well-funded, environmentally responsible, best-practice, sustainable solutions.*

## 10. CUMULATIVE IMPACTS

A major failing of the NSW Planning process is that cumulative impacts are never properly assessed, despite the Consent Authority being fully aware of the many other projects in an area, and knowing full well that Proponents restrict EISs and BDARs to the smallest possible footprint omitting off-site impacts.

This EIS fails to identify a number of known and reasonably foreseeable future projects which will have cumulative impacts on water quality and long-term water security for LLPH, including –

- Clarence Colliery 700 Area – proposes to undermine swamps in the headwaters of Farmers Creek, reducing water flows into Farmers Creek and water inflows into Lake Lyell.
- Angus Place West – plans to undermine Kangaroo Creek Swamp and Long Swamp, reducing water flows into the Coxs River and water inflows into Lake Lyell.
- Angus Place Mod 10/Springvale Water Treatment Plant Mod 12 are imminent.
- Springvale Modification 5 - four-year extension shifting approved operations from 2028 to 2032.
- Springvale West - plans to undermine the headwaters of Sawyers Swamp Creek & Kerosene Vale Ash Repository, polluting & reducing water flows into the Coxs River and inflows into Lake Lyell.
- McPhillamy's Gold mine – plans to pump 15.6 ML/day of minewater from Angus Place Colliery to Blayney indefinitely, reducing water flows in the Coxs River and inflows into Lake Lyell.
- Ivanhoe BESS Centennial – in Ivanhoe No.1 Open-cut, 700 MW / 2.8 GWh four-hour storage
- Ben Bullen Windfarm at prepare EIS stage - 500 megawatts, up to 64 turbines with a maximum height of 252 metres, a 200MW / 800 MWh BESS, and associated infrastructure

Energy Australia are fully aware of Centennial's current and reasonably foreseeable future mining proposals, which supply virtually all the coal to Mount Piper Power Station. Energy Australia is also fully aware of the surface pollution impacts from those mines on water quality in the Coxs River and Lake Lyell, and are fully aware of the Groundwater Drawdown impacts associated with these mines.

Energy Australia are also fully aware of the water pollution impacts of Western Coal Services (WCS) adjacent Mount Piper Power Station, where salinity peaked at 7,780 uS/cm in August 2018 and is still around 4,000 uS/cm, prompting Australia's leading scientist on water pollution from coal mines, Dr Ian Wright, to describe WCS Licence Discharge Point LDP001 on ABC News on 7 November 2023

<https://www.abc.net.au/news/2023-11-07/water-contamination-lithgow-coal/103067856>

*"In the whole of the Warragamba drinking catchment that is the worst point source of waste I have ever measured." And the EPA's POEO Licence for LDP001 – "That is one of the most ineffective pollution licences I have ever seen," he said.*

Energy Australia are fully aware that Mount Piper Ash Repository has been leaching into Neubeck's Creek, and that Water NSW Gauge 212055 recorded a salinity level of 4,165.9 uS/cm on 9/2/2020.

All these salts and heavy metals from multiple sources cumulatively impact on water quality in the Coxs River, and are accumulating in the sediment of Lake Lyell. This has implications for LLPH.

*RECOMMENDATION: The EIS fails to comply with the Cumulative Impact Assessment Guidelines for State Significant Projects (DPIE 2022). Energy Australia must provide a more accurate report.*

## **11. VISUAL IMPACTS**

The destruction of vegetation on the southern side of Mount Walker, which has the deepest and most fertile soils supporting the highest quality wet sclerophyll forest in the region, will create an ugly scar on the landscape that will be highly visible from Rydal-Hampton Road, businesses and residents in the area.

Lowering the water level in Lake Lyell by 2.9m for five years during construction will expose an ugly, muddy riparian zone littered with dead trees and logs from every vantage point. Raising and lowering the water level by 2m daily for the next 80 - 100 years will alter the entire character of the lake.

Erosion lines will form when the water level is lowered by 2.9m for 5 years, and will never get a chance to recover with subsequent 2m daily water fluctuations. Ski boats and fishing boats will create waves which will scour the exposed riparian zone even more, and a once clear lake could become a muddy lake.

Few native plants are likely to tolerate such unnatural water level fluctuations, however a range of weedy species will. The lakes edge and tributaries will look like a Sydney drain, lined with dead trees covered in invasive climbing vines like Honeysuckle & Giant Bindweed (*Calystegia sylvatica*); impenetrable thickets of

Typha and Phragmites all around the edge; Pampas, Willows, Hawthorne, Privet, Gorse, Broom, Buddleja; invasive groundcovers like Creeping Buttercup (*Ranunculus repens*) and Blue Periwinkle (*Vinca major*).

Energy Australia glibly state throughout this EIS that they are planning to develop a plan (though never say a fully funded plan) for every conceivable outcome. Well those plans should include a floating slasher to cut the Cumbungi and Phragmites thickets so people can actually see the water from the lakes edge. And some way of harvesting all that debris so dissolved oxygen levels don't plummet when it decays. Or do you intend to rely on toxic herbicides and lie to Sydney water consumers that everything is fine? (collateral damage you can cover-up, who needs Platypus or fish anyway, so long as you make a profit).

Some life-buoys every few hundred metres for skiers or fishermen who fall out of a boat to hang onto until they can find a way back to shore through those impenetrable thickets of reeds and weeds. And a plan to remove dead trees and snags might be a prudent safety measure for watercraft.

Energy Australia will certainly be leaving behind an ugly legacy for our children and their children.

## 12. EUROPEAN HERITAGE

My criticism of the EIS Statement of Heritage Impact is the lack of respect for our early history –

- That just because a Convict Blockade built in 1832 and a burial site nearby aren't listed on some obscure heritage register, they have no historical significance;
- That a surveyors mark dating back to the 1880s has no historic significance;
- That old split timber fenceposts, relics of early farming practices, have no historic value;
- Or that the remains of an old dwelling which proves that someone valued the place enough to want to live there has no historic significance.

And does the NSW Government and power generation industry have some sort of vendetta against James Walker or Charles Darwin by destroying all local historic sites linked to them? Because first they destroyed James Walker's 1823 home Wallerawang Homestead (later Barton Park after his daughter married Edwin Barton) by burying it under Lake Wallace in 1978, which also happens to be where Charles Darwin stayed and first sighted Platypus on 18 January 1836. And now Energy Australia plan to destroy Mount Walker named after him, and the Platypus immortalised by Charles Darwin.

And who gave Hong Kong-based Energy Australia the right to tell us what is history when they only arrived in Lithgow in 2011, or Électricité de France (EDF) who have no history here whatsoever?

Yes a Consultant was paid to write a report to tick a box in an EIS. But when is history not history? Why are developers allowed to just omit historic items from EISs, and destroy them so there are no records of it ever having occurred? Why aren't geo-referenced photographic records kept an archive?

### 12.1 No. 2 Convict Stockade and Burial Site

There is no evidence that the NSW Government (NSW Electricity Commission/Delta Electricity) did an EIS nor identified No. 2 Convict Stockade (1832) before building Lake Lyell and flooding part of this historic site in 1982. And if they did it was likely hidden from the public until it was too late to save.

This EIS does at least identify No.2 Stockade built in 1832 and the nearby burial site. However the fact this site is still not listed on any Heritage Register is ominously foreboding – and reminiscent of the NSW Governments cover-up and irresponsible flooding of part of this historic site in 1982.

The fact the 33km riparian zone was excluded from all flora & fauna surveys and excluded as part of the project disturbance area is equally ominous and foreboding of an official cover-up afoot.

Is this EIS covering-up the fact that lowering the water level in Lake Lyell by 2.9 m for 5 years, and artificial 2m daily water levels fluctuations for 80 – 100 years after that will cause damage to this historic site? Is the EIS just keeping it all under wraps until it will once again be too late to save?

Past history suggests that the NSW public should not trust the NSW Government, nor Hong Kong owned Energy Australia, nor French Government (Électricité de France) with one of the most historic sites of National Heritage significance in NSW if not Australia - No. 2 Convict Stockade built in 1832 to support the construction of Mitchell's Line of Road.

### 12.2 Trig Points

The EIS doesn't mention Mount Walker Trig at all in a 28 Volume 6000 page EIS. Trig TS6415F was first surveyed on 5 November 1883 and named after James Walker, who was granted a large tract of land in 1824 that was called "Waller-owang" by the local Aboriginals. At 1187m high Mount Walker is the 3<sup>rd</sup> highest peak in the Lithgow LGA after Mount Bindo 1364m and Mount Lambie 1290m.

Mount Walker Trig was once a stone cairn style trig described in 1936 as *"a cairn of stones surmounted by a stout post"* (photo of Colong Trig below is an example only) but was depiled and replaced with a concrete pillar style trig, possibly in 1979 when it was reportedly struck by lightning.



Photo: Mount Walker Trig TS6415F was a stone cairn trig, depiled in 1970s and replaced a concrete pillar style.

Below is a Lithgow Mercury article from 90 years ago, included because it mentions the Pottery Estate and Gould's Hill (Mount Kirkley) near Lake Lyell which are relevant to this LLPH proposal.

## **MT. WALKER**

-----ooOoo-----

### **FINE LOOK-OUT**

#### **GAZING ON LITHGOW**

##### **Scenic road proposal examined**

(By "Leviticus")

Lithgow Mercury: Friday 11 December, 1936

<https://trove.nla.gov.au/newspaper/article/219711620>

**A number of citizens visited Mt Walker, the highest point in the immediate neighborhood of Lithgow, at the weekend, with the primary object of investigating in a preliminary manner the possibility of constructing a road to that vantage point.**

**It was not expected that those who made the journey could arrive at an immediate decision, but they obtained information and, what was equally important, gained practical experience of the difficulties to be surmounted in blazing a trail to "the top."**

Included in the party were Aldermen O'Connor and Chandler, of Lithgow Council, who were accompanied by Mr. E. L. Parker (works overseer), Councillor L. S. Williams, president of Blaxland Shire Council, and Mr. C. E. W. Brown, Shire Clerk. Mr. H. C. Reid (engineer) was to have made the trip, but circumstances prevented him from doing so. Mr. George Evans, jun., through whose property much of the route lay, was a genial guide, and he provided historical and topographical data.

#### **MIDDLE RIVER VALLEY**

We left the Great Western Highway at Marrangaroo, and passed through Mr. Barber's holding to reach a rough bush track at the rear. The first port of call was a quarry overlooking the junction of the Middle and Cox's Rivers, whence "much of the silica used as a base in the construction of the nearby concrete road came. What was described as a mount of silica was inspected, and Mr. Evans pointed out in the valley below the spot where it was originally proposed to construct a weir with which to supply Lithgow with water.

A small concrete Wall was erected — cement was sent to the valley by packhorse: — but finally, he said, the present site (to the east of the Great Western Highway) was selected because it afforded the advantage of gravitation towards the town as against pumping.

A splendid view westwards is obtained from the quarry, and our young guide heightened the interest in the experience by recalling various incidents in his youth connected with the locality. He declared he had ridden ail over the region and "knew it backwards." : . . . . .

Off again, we retraced our steps to the ridge behind the properties of Messrs. Barber and Evans, and proceeded in a south-westerly direction for more than a mile. It is country that lends itself to easy road formation. Having gone as far as we could, we "parked" the cars in the bush, discarding surplus clothing, collars and neckties.

#### **STRENUOUS ASCENT**

Strenuous work lay ahead of us, and soon we were on the ascent through country which Mr. Evans has fenced and ringbarked. Steep climbing took us to the top. of another ridge where, turning left, we found the going fairly level, though exceptionally rocky. Mr. Barker, quite an authority on minerals,

beguiled the time by explaining the features of the country. Geologically, he said, the region was most interesting.

Down another hill, and we reached the foot of what was described as Little Mt. Walker. Those of the party who did not do much outdoor walking or exercise were beginning to "blow" a little, but no one shirked the task, and on we went to reach the top of Little Mt. Walker a circuitous route was taken, and then began the assault on Mt. Walker itself.

And an assault it was. The going to the saddle at the foot was okay. but for the last 300 yards the ascent was particularly steep and rough, the worst of the trip. Rocks abounded everywhere, and led one of the party to declare that he could well defend "the top" alone by the simple expedient of rolling rocks and stones against would-be attackers.

It stands to the credit of all that the summit was reached without much distress, Ald. Chandler and Mr. Brown actually staging a race to get there first; the Lithgow-ite prevailed by half a head.

### **MAGNIFICENT SPECTACLE**

But what a spectacle greeted us upon arrival! We were, it seemed, on the roof of the world Even without training the glasses on Lithgow which lay before us, we could pick out many familiar points - the S.A.F., Pottery, Hoskins Church, ironworks stack, Catholic Church, and Technical College. The cemetery stood out in sharp relief, and cars and buses passing, along the Great Western Highway, appeared to be like ants,

Beyond the town Burton's quarry and the Zigzag on a lower plane could be espied", but the shoulder of Bald Mountain effectively hid Oakey Park.

To the north lay Wallerawang, where the high ground carrying the Catholic Church and other buildings could be seen. Farther westward the Lidsdale State forest made a pretty picture, the plantation with its sharp outline making a carpet of deep green against a sombre background.

Mount Lambie, the highest point in the district, loomed up to the west, farther afield was Evans Crown at Tarana. In the middle ground the serpentine route to Rydal (the old road) was easily picked out, as was a settler's clearing adjacent to it. Gould's Hill and the nearby Mt. Kirkley stood out well, while Mt. Blaxland seemed to be a mere pimple, so high were we above it.

Sweeping away to the south-cast the glasses took in Blackheath, Medlow Bath and Mt. Victoria, while even the Mitchell Pass obelisk was picked up. South Bowenfels, and nearer still, the Royal Hotel, Cary's and other landmarks, were quite easily discerned.

### **COMMANDING ALTITUDE**

It is estimated that Mt. Walker has an altitude of at least 4000 feet, and is thus higher than Hassan's Walls (3610 feet) and its neighbors. As a lookout it was voted equal if not better than the Walls, since it gives a full range of vision, whereas at Hassan's Walls only two-thirds of the circle is available to the sightseer.

The theory is held by a few that it was Mt. Walker that Blaxland, Lawson and Wentworth, the first to cross the Blue Mountains, climbed in 1813; but history is against this claim. All the same, it is difficult to reconcile the explorers' report that they saw "rolling plains to the westward" from the top of Mt. Blaxland, with what can be actually seen from there. The comparatively level country around Tarana, however, can be picked out from Mt. Walker.

Mt. Walker is a trig, station, a cairn of stones surmounted by a stout post remaining today, although it is many years since it has been so used. The top is fairly level and devoid of trees. Lank grass grows in abundance. It is believed that it took its name from a James Walker, an early settler who obtained grants of land in the Wallerawang area. It lies in the Parish of Lidsdale, and has been marked off as a forestry reserve.

Having refreshed ourselves with a lounge on the grass, we began the descent which was done in quick time. Back to the cars, we compared notes and having reached the Great Western Highway, went our respective ways home. It was good day, well spent.

From every Trig Point at least two other Trigs should be seen, and surveyors used triangulation to establish property boundaries, roads, railways etc. Every residential block in Lithgow was probably marked out using Mount Walker as a reference point.

Less than 1% (0.87%) of Australia is above 1000 metres. Land between 1,100 - 1400m is regarded as a Montane area. Mount Walker is therefore a Montane area in the top 0.87% of all land in Australia.

Mount Walker Trig was once on a small Crown Reserve or Trig Reserve, but absorbed by the NSW Electricity Commission/Delta Electricity until privatisation in 2011 when Energy Australia took over.

It has always been an offence to damage or destroy a Trig or Survey Mark, and still is according to the *Surveyors Act* 2007. But that hasn't provided much protection.

The NSW Geographical Names Board lists 53 Trig Stations in the Lithgow LGA. Nineteen (19) or 36% of those have been destroyed, and many more are no longer shown on recent maps. Relevant to this proposal area is Lidsdale Trig (TS2843D), established in September 1930 by Warrant Officer HPG Clews in Lidsdale State Forest, which has since been destroyed. Woolen Mill Trig and Pottery Trig (top of chimney Pottery Estate - proposed Town Camp) are no longer shown on more recent maps.

Blasting and excavation for LLPH could disturb Mt Walker Trig, perhaps why the EIS failed to identify it.

Tragically very few Trigs in NSW are listed on any Heritage Registers, despite dating back in this case to 1883. Why are historic Trigs not worthy of reporting on?

**When is history not history? Isn't 143 years old enough? Trig TS6415F must be recorded in the EIS.**

## **12.2 Lock Spits and Reference Trees**

Lockspit's are an old surveyor's method of laying a line of stones as direction markers to indicate a change in direction or bearing of a survey line, often used in rocky areas where hammering in a stake was difficult. The one pictured below probably dates back to the 1880s around the same time Mt Walker Trig was surveyed.

Early surveyors often blazed a broad arrow and portion number into trees within 30m of a corner called reference trees, so that the next surveyor coming along could see where it was. The bark grew back in time although a bump on the trunk often showed, which could be cut back to see the reference mark. Many have been lost to bush fires, so the few that do remain are more historically important.



*Photos: A lockspit and blazed tree – several occur near the proposal area, possibly dating back to the 1880s.*

They may not be significant enough to stop a project from proceeding, however neither should it be acceptable to pretend they don't exist in an EIS. Photographic geo-referenced records should be kept of historic items such as this before they are destroyed, and archived for future use by historians.

**History is history. These lock-spits and survey marks likely date back to 1883. Isn't 143 years old enough? These historic items must be recorded/reported in the EIS.**

### **12.3 Old dwelling site, fence posts, cars, trucks**

I can just hear you 'experts' scoffing at the photos below right now, but you can guess what I think of you too. History isn't just about things listed on some obscure heritage register, it's about the wonder, awe, curiosity, nostalgia, the excitement of finding an historical item way out in the middle of nowhere.



*Old dwelling site*



*Old 1965 AP5 Valiant*



*RFB Studebaker firetruck rolled & burnt during a bushfire 1980s*



*Old Valiant Ute*

I know of many people in the community who also value and share the same curiosity and intrigue about who, why, when did they build that hut here; how on earth did they manage to drive a 2WD up such steep, rocky, gnarly terrain, or cross the Coxs River; wow those old fence posts are amazing!

And finding something old in the bush can help create community connections, shared memories and identities – for example after finding the above old Studebaker truck in the middle of the bush and doing some research I happened onto an old friend & RFB member who immediately recognised it as a fire truck that rolled during a fire in the 1980s. Nostalgia, history, shared memories.

Historic items can also just be a good excuse to enjoy the bush while exploring a bit further to look for any old wells, signs of early logging, farming, stockyards, mines, survey marks, or whatever.

In terms of Australian history and culture, a rusty bit of corrugated iron, old firetruck, or split timber fence post has more historic significance to me than Energy Australia who only arrived here from Hong Kong in 2011, or EDF who have no local history at all. Give me a rusty relic in the bush any day rather than an ugly concrete dam in a raped, pillaged, denuded landscape full of weeds.

Energy Australia and its Consultant's may not value such things, because they have no local history, no connections, and only value something for the money they can make out of destroying it.

Nevertheless, the very least Energy Australia should do is produce a digitised geo-referenced photo record of all European heritage items that will be destroyed by this proposal, to be stored in the National Library or other suitable archive for future reference by historians conducting research.

**History is history, regardless. These heritage items must be recorded/reported in the EIS.**

### **12.3 Remnants of old rammed-earth house – Lidsdale State Forest**

An EIS and Statement of Heritage Impact are supposed to provide comprehensive documentation of all European heritage sites in the wider area, not just the immediate construction footprint. This is to

ensure that, after approval, European heritage items are avoided if unforeseen problems necessitate additional roads, tracks, pipelines, Telecom lines, transmission lines or other supporting infrastructure.

One such site is the remains of an old rammed-earth house in Lidsdale State Forest, declared in 1919. This historic site provides an excellent example of early colonial building styles using rammed-earth. It is marked on an old 1935 Wallerawang Map, so at least 90 but could be 107 years old or even older.



**When is history not history? Isn't 107 years old enough? This historic site must be recorded/reported. The errors and omissions in this 28 Volume 6000 page EIS are absolutely staggering and appalling.**

### **13. WATER QUALITY IMPACTS**

On behalf of Lithgow Environment Group, I have coordinated an extensive water quality program in the Coxs River catchment since 2006. When the group first formed in 2005 several workshops were facilitated to determine what the key environmental issues were – water quality was the top priority.

However, at that time it proved difficult to find data on water quality in the Coxs River. LEG joined the Sydney Catchment Authority Streamwatch Program, received training and equipment, and commenced monitoring which continues to this day. LEGs data precedes Energy Australia's arrival in 2011, several NOW Gauge upgrades, and covers more (30) sites in the Coxs R catchment than reported on in the EIS.

The EIS predictably downplays all water quality issues associated with LLPH. Nevertheless the 2 sites with the worst water quality parameters of all 30 sites monitored over 20 years were associated with Wallerawang Power Station and Mount Piper Power Station.

Decades of historic pollution from these coal-fired power stations and associated fly-ash repositories has not magically disappeared - but has accumulated in sediment on the bottom of Lake Wallace and Lake Lyell. This is an indisputable fact identified in numerous published papers over many years.

The Farmers Creek arm of Lake Lyell contains decades of accumulated pollution in silt from Lithgow Sewage Treatment Plant (STP), urban runoff, and legacy heavy-metal contamination from 150 years of industrial sites including a Copper smelter, steelworks, Small-arms Factory & coal mines. Exceedances of Nickel, Zinc, Lead, Manganese and other metals have been recorded in peer-reviewed published papers. These pollutants haven't magically disappeared – they reside in the silt of Farmers Creek.

LLPH proposes to lower the water level in Lake Lyell by 2.9m for 5 years during construction, and by 2m daily for 80 – 100 years thereafter. And construct a new diversion channel for Farmers Creek.

These works will indisputably mobilise decades of accumulated salts & heavy metals in the sediment of Lake Lyell, Farmers Creek and Coxs River arms, and will have severe adverse impacts on all aquatic biota including macroinvertebrates, platypus, and fish, as well as waterfowl and birds of prey.

LEGs water quality monitoring data for the Coxs River has been publicly available on the Sydney Catchment Authority Streamwatch Program website (since closed), and publicly available on LEGs website for many years [www.lithgowenvironment.au](http://www.lithgowenvironment.au). That data has been used in numerous peer-reviewed research papers and has stood the test of several Court cases.

Quality assurance of LEG data is credited to government-issue, standardised, regularly calibrated monitoring instruments, training and standard procedures that provide consistent **bias-free readings**. Readings have regularly been checked against NOW gauge readings, and compared with instruments used by and in the company of Sydney Catchment Authority, EPA, University researchers, and others.

### **13.1 Salinity, Electrical Conductivity, Total Dissolved Solid (TDS)**

When LEG first raised the issue of high Salinity in the Coxs River with the then NSW Minister for the Environment, Bob Debus MP, his response was *“According to Delta Electricity there is no evidence of a salinity problem in the Coxs River”*. When we raised the same issue with the General Manager of Delta Electricity at that time his response was *“I’ll trust my \$250k/year Consultant thanks.”*

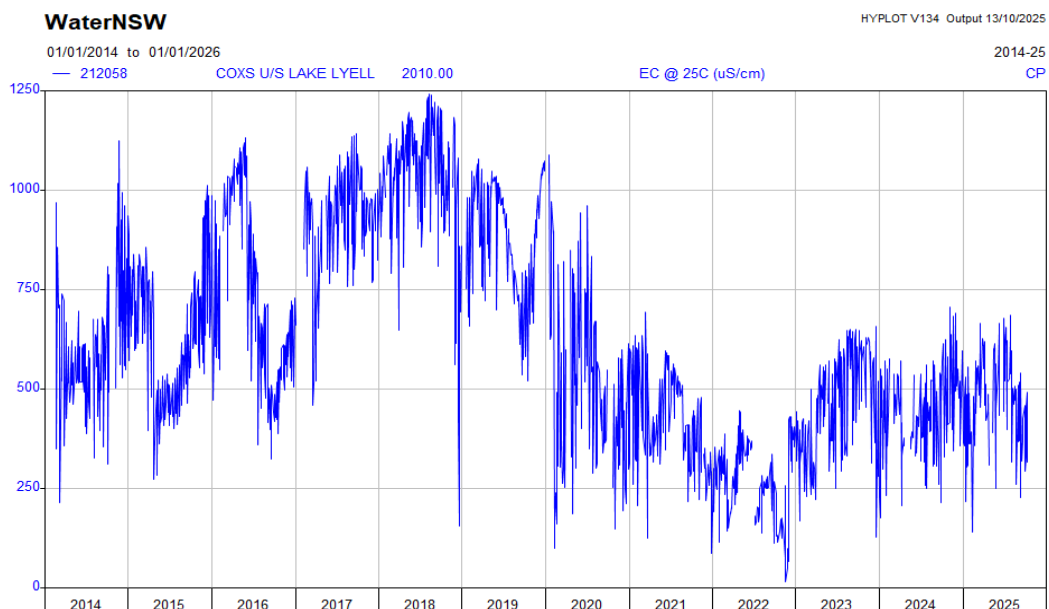
Once again 20 years later in this EIS, Energy Australia downplay salinity by claiming construction won't have any impact, and daily fluctuations from LLPH can't materially change salinity levels in Lake Lyell.

Salinity/Electrical Conductivity of water samples is used as an indicator of how salt-free, ion-free, or impurity-free the sample is. The purer the water, the lower the conductivity. Saline water is denser or heavier than clean water and sinks to the bottom of dams, the colder that water the lower it sinks.

- The inlet pipe for LLPH is well below the surface of Lake Lyell, will suck up denser cooler more saline water, and disperse it through the entire water column. Salinity will inevitably increase above current levels. On 15/5/2007 salinity in Lake Lyell reached 945  $\mu\text{S}/\text{cm}$  (SCA Field Data).

The EIS/Surface Water Report state that Coxs River inflows to Lake Lyell range from 150 to 1,200  $\mu\text{S}/\text{cm}$ . This conflicts with both NSW Water data 2014 - 2025 and LEG monitoring data 2006 - 2026 -

- LEG monitoring results for Coxs River Marrangaroo NP range from 280 to 1,970  $\mu\text{S}/\text{cm}$ .
- NOW Gauge 212058 Coxs River U/S Lake Lyell only commenced reporting in 2014, 8 years after LEG records commenced. A level of 1,250  $\mu\text{S}/\text{cm}$  was recorded in 2018 (see graph below) -



Undisturbed tributaries of the Coxs River regularly record salinity/electrical conductivity in the order of 20 - 40  $\mu\text{S}/\text{cm}$  (LEG Streamwatch, click on Document [www.lithgowenvironment.au](http://www.lithgowenvironment.au)). For example –

- State Mine Creek 2/12/2025: Salinity 19.4  $\mu\text{S}/\text{cm}$ . Total Dissolved Solids (TDS) 14.3 ppm
- Farmers Ck Oakey Park 2/12/2025: Salinity 18.6  $\mu\text{S}/\text{cm}$ . Total Dissolved Solids (TDS) 13.5ppm
- Coxs River headwaters: 28/10/2025: Salinity 36.7  $\mu\text{S}/\text{cm}$ . Total Dissolved Solids (TDS) 25.7 ppm

Compare the above to a site in the Coxs River upstream near Mount Piper power station –

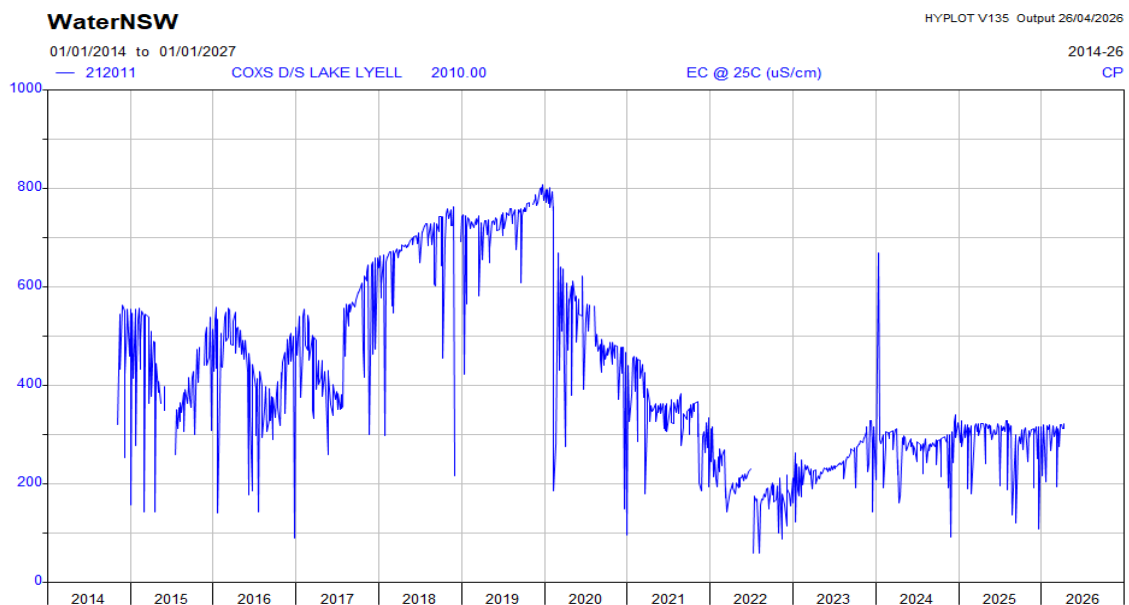
- WCS LDP001 9/12/2025: Salinity 4,350  $\mu\text{S}/\text{cm}$ . Total Dissolved Solids (TDS) 3,100 ppm
- WCS LDP001 27/01/2026: Salinity 4,180  $\mu\text{S}/\text{cm}$ . Total Dissolved Solids (TDS) 2,970 ppm
- WCS LDP001 31/03/2026: Salinity 3,990  $\mu\text{S}/\text{cm}$ . Total Dissolved Solids (TDS) 2,830 ppm

Total Dissolved Solids (TDS) refer to the total concentration of dissolved substances in water including minerals, salts, metals, and organic compounds. LEG instruments measure it in parts per million (ppm). High TDS levels can affect the taste, odour, and appearance of water, and can indicate potential contamination. For example, TDS levels above 500 ppm are generally considered undesirable for drinking water, while levels above 1000 ppm can be unsafe.

- TDS in undisturbed Farmers Creek Oakey Park 2/12/2025: 13.5 ppm
- TDS near Mt Piper PS 9/12/2025: 3,100 ppm or 3 times higher than 1000 ppm considered unsafe.

The EIS claims that Farmers Creek inflows had a salinity range of 70 to 650  $\mu\text{S}/\text{cm}$ . The lower estimate of 70  $\mu\text{S}/\text{cm}$  conflicts with LEGs lowest reading of 170  $\mu\text{S}/\text{cm}$  at Coerwull Road between 2006 – 2026.

The EIS doesn't provide information about salinity in the Coxs River downstream of Lake Lyell, a serious omission because it demonstrates whether some of that saline water stirred up by LLPH is likely to find its way downstream into the Sydney drinking water catchment. LEG monitors at McKanes Falls Road and recorded 800  $\mu\text{S}/\text{cm}$  in 2020. NOW Guage 212011 is located at Glenroy (see graph below) -



Clearly water exceeding the ANZECC Guideline upper limit of 350  $\mu\text{S}/\text{cm}$  has flowed from Lake Lyell into the Coxs River, and remained high down to the 6 Foot Track, where LEG recorded 830  $\mu\text{S}/\text{cm}$  in 2019.

LLPH therefore is likely to stir up heavier denser more saline water from lower levels and disperse it through the entire water column of Lake Lyell, releasing it via environmental flows downstream.

Energy Australia are fully aware of the salinity and heavy metal contamination issues upstream, and the deferral of Springvale Water Treatment Plant Mod 12/Angus Place Mod 10 for several years. It is highly misleading/dishonest to omit and/or not truthfully report on these issues in this EIS.

### 13.2 Platypus and salinity/heavy metal pollution

The EIS failed to acknowledge in the documentation or references a recent 2022 paper which found Platypus present in streams with a salinity of 500 EC, but absent at 700 EC. The report concluded that platypus appear to avoid streams with higher salinity and low dissolved oxygen.

<https://researchers.westernsydney.edu.au/en/publications/the-effect-of-water-quality-macroinvertebrate-assemblages-and-hab/>

Platypus use electric receptors on their bill to detect food such as crayfish and insect larvae such as caddisflies, mayflies, dragonflies and midges. Platypus are therefore highly sensitive to electrical conductivity or salinity levels in waterways, because it disrupts those electrical receptors. If salinity rises above a certain threshold Platypus simply cannot locate enough food, and die of starvation. The above study suggests that threshold is somewhere between 500 and 700  $\mu\text{S}/\text{cm}$ .

In 2011 a University of Western Sydney PhD student S. M. Judge conducted a study of the upper Coxs River catchment and found a local platypus population to be restricted to the relatively un-impacted tributary of Marrangaroo Creek, and absent from the Coxs River upstream and downstream.

<https://docslib.org/doc/4363532/fauna-of-the-upper-coxs-river-catchment-1-an-assessment-of-common-freshwater-species-in-a-high-demand-landscape>

Lower salinity levels in the Farmers Creek arm of Lake Lyell compared to the Coxs River arm suggest that lower salinity may be the determining factor as to why Platypus survived in Farmers Creek, despite higher phosphorous, nitrogen and consequently algae levels due to Lithgow Sewage Treatment Plant.

The Australian Platypus Conservancy <https://platypus.asn.au/> identifies three water quality factors related to the status of Platypus –

1. Nutrient enrichment (especially elevated levels of Phosphorus in water)
2. The amount of suspended solids in surface water after storms
3. The concentration of metal contaminants (lead, zinc, and cadmium) in bottom sediment.

Given that Platypus shut their eyes underwater and feed at night, the adverse impact of suspended solids is unlikely to be due to poor water clarity. Instead, it's that unconsolidated fine sediment provides poor habitat for most aquatic macroinvertebrates. High levels of metal contaminants affect freshwater fish and macroinvertebrate diversity and abundance. Direct toxic effects could also occur, for example through bioaccumulation. Because heavy metals bind to bottom sediment, they can remain in the environment long after the primary contamination source has been eliminated.

Years of salt and metal bioaccumulation in Lake Lyell sediment will be mobilised by LLPH, which will have dramatic adverse impacts on macroinvertebrate assemblages and food source for Platypus.

### **13.3 Macroinvertebrates and Salinity**

A 2017 study found that the most dramatic shift between groups of different salinity tolerance occurs as conductivity reaches 800 - 1000 uS/cm. This threshold value is lower than the generally accepted value of 1500 uS/cm above which freshwater ecosystems are likely to experience salinity related stress.

<https://www.sciencedirect.com/science/article/pii/S0048969726004791>

This is highly relevant to the upper Coxs River where point-sources are currently discharging water with conductivity levels of around 4,000 uS/cm, and as high as 7,780 uS/cm (WCS LDP001, August 2018). Lake Wallace reached 1,320 uS/cm in August 2018.

Unless LLPH addresses saline inflows from the Coxs River, salinity levels in Lake Lyell will inevitably rise as heavier, denser, colder saline water from lower levels is dispersed throughout the water column by daily recirculation. This will have severe impacts on macroinvertebrates relied on by Platypus and fish.

### **13.4 Selenium Bioaccumulation in Lake Wallace**

Research on selenium bioaccumulation and biomagnification in Lake Wallace highlighted the presence of selenium in various aquatic organisms and potential impact on fish spawning. The study found that selenium concentrations in water, sediments, and organisms were significant, with fish liver containing the highest levels. <https://researchportalplus.anu.edu.au/en/publications/selenium-bioaccumulation-and-biomagnification-in-lake-wallace-new/>

High selenium concentrations haven't magically disappeared but are bound up in sediment, a point source is still operating, and it is inevitable that selenium has migrated into Lake Lyell downstream.

LLPH will mobilise these selenium contaminated sediments by daily water fluctuations for 80 years.

### **13.5 Coxs River Pollution Court Case 2009 - 2011**

Researchers from Blue Mountains Conservation Society showed that the upper Coxs River had high levels of heavy metals including zinc, copper, manganese, 125 times more sulphate than surrounding streams, and only 5% of the oxygen needed by fish. The [pH level](#), a test of acidity, was up to 1000 times higher than neighbouring creeks, while the river was 80 times more salty than it should be.

The [Sydney Catchment Authority](#) confirmed that the tests were accurate, but said the water gets safer to drink in the lower river, approaching Warragamba Dam. The [Department of Environment and Climate Change](#) stated that the contamination could be caused by [Delta Electricity](#)'s Wallerawang Power Station. Delta Electricity stated that it was operating within the conditions of its licence.

In 2009, Dr Ian Wright of the [University of Western Sydney](#) reported that the water flowing into Coxs River contained high levels of copper, boron and other metals at "many times" the levels found

upstream of the Wallerawang Power Station. High arsenic levels were found downstream of the plant, although it was diluted further downstream and was not thought to pose a risk to humans.

Blue Mountains Conservation Society were taking the case to the [Land and Environment Court of New South Wales](#) with the backing of Environment Defenders Office of NSW, arguing that Delta Electricity were polluting the Coxs River.

The Society also challenged the NSW system of environmental licences. The Society's president, Tara Cameron, said at the time: "*These licences are just licences to pollute. They are just allowing the status quo and making people feel good without actually protecting the environment.*"

Journalists Ben Cubby and Erik Jensen maintained that the NSW Government had known about the pollution for over two years.

1. Cubby, Ben (2 December 2008). "[River 'killed' by pollution feeds city water supply](#)". *The Sydney Morning Herald*.
2. Cubby, Ben (18 June 2009). "[Toxic metals threat](#)". *The Sydney Morning Herald*.
3. Cubby, Ben; Jensen, Erik (19 June 2009). "[Labor knew about toxic water threat](#)". *The Sydney Morning Herald*.

Whilst the case was settled out of court, Delta admitted to polluting the Coxs River, agreed to a new POEO Licence limit (though an offensively high 2,600 uS/cm limit) on its discharges into the Coxs River from No. 8 Cooling Tower blowdown drain "The Tortuous Watercourse".

Very little has changed since 2009, salinity from one point source has since increased 6-fold. All of this pollution will continue to have implications for Lake Lyell and LLPH into the future.

### **13.5 Erosion and siltation**

The old Parish Lett map highlights that the erosion potential of the LLPH site was known way back in 1939. Conditions of Special Lease Lot 103 DP751651 were specifically related to preventing soil erosion as the area was part of the Warragamba Rivers Storage Catchment Area, summarised as:

- Agricultural activity could not take place within 60m of Farmers Ck/Coerwull Brook or on steep slopes
- All timber within 60m Farmers Ck/Coerwull Brook and 20m of other waterways was to be retained
- All timber on steep slopes, along ranges and ridgelines was to be retained
- At least 10 strong and straight trees per acre were to be retained on the remaining land
- The lessee must live on the property as their primary residence over the whole term of the lease (*Government Gazette of the State of New South Wales, 1 September 1939:4435*).
- In March 1953 the property was reserved from sale for the purposes of soil conservation (*NSW Land Registry Service*).

Soil conservation legislation was one of the first areas of natural resource law in NSW. The major types of land degradation the legislation sought to control were soil erosion, soil salinity, soil acidity, soil contamination, nutrient loss and soil structure decline.

Regrettably the NSW Soil Conservation Service was disbanded in 1991 and the NSW Government no longer gives a damn about erosion, siltation, salinity, acidity, contamination, nutrient loss or soil structure decline - despite this area still being within the Warragamba Catchment area.

**If those same conditions applied to LLPH today it would never be approved. Any proposal to clear all the vegetation on the southern side of Mount Walker would be treated with the contempt it deserves. Plans to divert the course of Farmers Creek would be dismissed outright. Claims that coir logs, silt mats, or silt curtains could protect Platypus would be laughed at. And promises of having a plan to develop a plan after approval or monitoring to the death would be thrown out the door.**

#### **14. UNACCEPTABLE ABORIGINAL HERITAGE IMPACTS**

An irony of LLPH is that Sir Thomas Mitchell Drive is the main access to the proposal. And yet a trademark legacy of Sir Thomas Mitchell's exploratory excursions was to make friendly and co-operative relationships with the Indigenous people, a practice way ahead of its time in colonial days.

Mitchell instructed his assistant surveyors to record Aboriginal names for new places. In his first four years in Australia, as his biographer Don Baker relates, Mitchell *'had experienced their [the Aborigines] great value as guides through their own country...[He] realized the difficulties and dangers of their position as the white invaders appropriated their land... and had begun to appreciate something of the complexity and beauty of Aboriginal culture'*.

I wonder what Sir Thomas Mitchell would think of Energy Australia's engagement process? Of the 22 Registered Aboriginal Parties (RAPs) referenced by Energy Australia, only two are local to the Lithgow area, and it is my understanding that both of those are opposed to LLPH.

Mount Walker clearly has aboriginal heritage significance, given the vast number (1300) of artefacts allegedly removed off-site for 'safe keeping'. The fact Mount Walker had its own aboriginal name 'Giligarambala' near 'Waller-owang' (Wallerawang), was reportedly a 'men's place', and the Coxs River provided plenty of flat camping sites on the river banks, permanent clean running water, wallabies, fish, yabbies, Bottlebrushes and Banksia's for nectar – nature's kitchen.

There is a Platypus Dreaming Story, Aboriginal culture songlines about birds, every aboriginal person has a totem animal, plant or natural feature that defines their unique spiritual essence and one they are obliged to protect for future generations. And caring for country. How can all this be dismissed?

Mount Walker is clearly a special aboriginal place, and that must be respected. LLPH must be rejected.

## 15. IS THE PROJECT VIABLE OR COMPETITIVE?

ATCO recently dumped its similar-sized 325 MW, 8 hour, 360m head Central West Pumped Hydro Project near Yetholme, citing intense competition from other energy storage projects and technologies and the ‘evolving storage technology landscape’ [eg. Batteries, advanced compressed air]. It also blamed a shift towards bigger pumped hydro projects and high geotechnical and construction risk.

Competition from bigger pumped hydro projects currently include –

- Western Sydney Pumped Hydro Project - 1000 MW, 16 hour storage, 400 m head, brownfield site using old mine tunnels & coal washery pit, underground power lines to connect to grid.
- Oven Mountain Pumped Hydro – 900 MW, 8 hour storage, 600m head.
- Phoenix Project - 800 MW, 15 hour storage, 350m head, on largely cleared grazing land.
- Glenbawn Pumped Hydro – 770 MW, 10 hour storage.
- Glennies Creek Pumped Hydro – 620 MW, 10 hour storage.
- Muswellbrook Pumped Hydro - 400 MW, 8 hour storage, 450m head, using a coal mine void
- Stratford Renewable Energy Hub – 300 MW, 12 hour storage, using old Stratford coal mine
- Dungowan Pumped Hydro Energy Storage (also EDF) – 300 MW, 10 hour storage, 612m head

Clearly Lake Lyell Pumped Hydro at only 300 MW capacity is below par; 8 hour storage is no longer competitive with the current trend towards 10, 12, 15 and 16 hour storage capacity; and the 250m head the lowest and sub-optimal according to Blaker’s 300–700 m “sweet spot” for lowest cost.

Brownfield sites are increasingly being re-purposed and cleared grazing land used, reducing native vegetation clearing, unlike LLPH which will destroy pristine wet sclerophyll PCT 3226 on Mt Walker.

Clearly Lake Lyell Pumped Hydro cannot compete on scale, storage capacity, head, nor environmental sensitivity. The viability of the project is questionable due to the difficult site, engineering/construction constraints, geotechnical risks, and dubious water security once the Springvale Transfer ceases.

## 16. ALTERNATIVES

### 16.1 Grid Scale batteries

Energy Australia are using the same tactic as Snowy 2 – deriding big batteries as prohibitively costly, unable to compete on scale or discharge duration, limited life span and must be replaced etc. etc.

Fast forward 5 years and the cost of grid-scale batteries has dropped by 45% in 2025 and 40% in 2024 alone and continues to fall – whereas Snowy 2 is the prohibitively expensive one and more by the day – from a projected \$2 billion in 2017 to \$12 billion now, and likely to hit \$20 billion by completion.

Government & industry spin continues to brainwash the NSW public that pumped hydro is essential.

And yet the most advanced renewable grid in the country, South Australia, has no pumped hydro - batteries are successfully doing the job. Currently 70% of electricity generated is renewables, 85% by end 2026, and 100% 'net' by 2027, backed up by eight batteries with ten more to be added.

Meanwhile the Central West - Orana REZ is predicted to unlock at least 4.5 gigawatts of new network capacity by 2028. Batteries are needed now to store that renewable energy for use at peak times, and Lake Lyell pumped hydro not coming on line for 5 or more years will be too little too late.

Batteries can be built faster, at a lower cost, require less land, are ideally suited to brownfield sites close to the 330 kv grid, and have fewer environmental impacts compared to Lake Lyell Pumped Hydro which will pollute Sydney's drinking water supply by constantly mobilising decades of accumulated salts and heavy metal contamination for 80 – 100 years, destroy a Platypus colony, and destroy the environmentally, socially culturally, historically, and visually significant Mount Walker.

### **16.2 Re-purpose existing pipeline from Lake Lyell – Thompsons Creek Dam for Pumped Hydro**

The existing and now redundant pipeline from Thompsons Creek Reservoir (1030m) to Lake Lyell (785m), with similar 'head' to LLP, could be re-purposed for pumped hydro, and pumping costs reduced by using excess Springvale Transfer water currently flowing to waste from Thompsons Creek Dam. This would prevent the needless destruction of Mount Walker – a National Park in-waiting.

### **16.3 Retrofit hydro power generation on existing Fish River supply pipelines**

Existing pipelines from Oberon Dam (1080m ASL) and Duckmaloi Weir to Mount Piper Power Station, Wallerawang PS/Greenspot, Lake Wallace/Lake Lyell could be retrofitted with mini-hydro pipeline turbines utilising water flow that will occur anyway to generate renewable energy.

The existing pipeline from Oberon Dam (1080m ASL) to Narrow Neck and Leura crosses the Coxs River (300m ASL) near the main 330kv transmission line. A hydro plant on that pipeline could utilise the **780m** head to generate renewable power and feed it directly into the 330 kv line nearby.

The Fish River pipeline extends from Oberon Dam (1080m ASL) to Glen Davis (300m ASL) - **780m** head. Retrofitting hydro-turbines in that pipeline could generate renewable energy.

The existing Springvale Transfer Gravity Header Tank on Newnes Plateau is at 1,184 m ASL and the pipeline drops to 900 ASL at Lidsdale. That **284m head** and **42 ML/day of flow** could be used by retrofitting a hydro turbine in the pipeline to generate electricity.

**If the NSW Government is genuinely interested in generating renewable energy then existing infrastructure should be prioritised for repurposing/retrofitting, rather than shoving socially, culturally, visually, environmentally destructive and divisive projects down our necks.**

## **17. MONITORING FOR MONITORINGS SAKE WITHOUT 'SEEING' ANYTHING PROTECTS NOTHING**

The word 'monitoring' appears hundreds of times in this EIS, misleading the public into believing it is a silver-bullet that can solve all known and unforeseen impacts. But unless those impacts are actually 'seen' or 'allowed to be seen' and reported by people doing said monitoring, it is meaningless.

Past history proves that the NSW Government required endangered upland swamps on Newnes Plateau to be monitored, mining companies complied with their Consent Conditions by doing that monitoring, however the monitors did not 'see' or were 'not allowed to see' or report anything. And as a result at least 15 endangered swamps are now gone - monitored to the death.

Mine subsidence monitoring has been required for decades in the local area, and mining companies were deemed compliant with their approvals so long as they met those monitoring requirements. Surveyors were all over the place, but 'saw nothing' or were 'not allowed to see' or report anything. The result - 100s of cliff collapses, huge surface cracks, aboriginal heritage sites lost, dried up creeks.

In response to community outrage 'Trigger Action Response Plans', 'Adaptive Management' and similar jargon was concocted – silver-bullets for all problems. But not a single endangered swamp was saved, cliff collapses continued unabated, cave art sites still lost, creeks dried and waterfalls stopped flowing.

Official cover-ups, contrived ignorance, government agencies pretending 'not to know' what they reasonably should, avoiding knowing anything that might require taking action, don't look won't find – this has been the main and only game in town for generations, and will continue with LLPH.

Delta Electricity covered-up water pollution in the Coxs River for decades. Energy Australia followed suit. Now the French, known for arrogance, and Électricité de France for whom nuclear energy, secrecy, cover-ups, and worse (ie. Rainbow Warrior, Mururoa Atoll) are the norm, will take over.

God help Sydney drinking water consumers, because no one else will!

## **18. NO NON-DISCLOSURE AGREEMENTS (NDA) OR COMMERCIAL-IN-CONFIDENCE AGREEMENTS**

The EIS fails to acknowledge that, after approval, Non-disclosure Agreements (NDAs) and Commercial-in-Confidence agreements are likely to be secretly entered into between the NSW Government, Energy Australia, and the French Government (Électricité de France).

The operator can then avoid public scrutiny and disclosure of water quality impacts on Sydney's drinking water supply, pollution spills, Platypus deaths, vegetation dieback, erosion & siltation, weed & disease spread, and other adverse impacts associated with this Proposal. Anyone who has tried to obtain information under the NSW *Government Information Public Access Act 2009* (GIPA Act) will appreciate how difficult that process is and how much information is routinely redacted.

## RECOMMENDATIONS

*RECOMMENDATION 1: Numerous false and misleading statements in the EIS (see 1) may constitute an offence under s10.6 of the Environmental Planning and Assessment Act 1979 (NSW) and s 491 of the Environment Protection and Conservation Act 1999 (Cth).*

*RECOMMENDATION 2: Failure to consider superior alternative proposals.*

*RECOMMENDATION 3: The NSW Government has missed a once-in-a-lifetime opportunity to finally obtain a comprehensive flora and fauna assessment for Mount Walker, Lake Lyell area and surrounds by allowing Energy Australia to limit this EIS to the construction footprint excluding the riparian zone. The NSW Government funded this EIS, and must require Energy Australia to include the wider area.*

*RECOMMENDATION 4: The EIS failed to search all publicly available biodiversity databases including Citizen Science data to determine flora and fauna species previously recorded in the project area. Energy Australia must be required consider all publicly available data including Citizen Science data.*

*RECOMMENDATION 5: The Minimum Survey Effort for Critically Endangered *Asterolasia buxifolia* has not been met. The NSW Government and taxpayer funded this EIS, and should penalise Energy Australia for failing to comply. Energy Australia must be required to fund an independent survey for *Asterolasia buxifolia* during the correct survey season (Sept – Nov) and habitat – the riparian zone - of not only Lake Lyell, Farmers Creek, and the Coxs River upstream, but also the length of the Coxs River between Lake Lyell and Hartley. In addition, enforceable Consent Conditions must require *Asterolasia buxifolia* to be used in site rehabilitation after construction at suitable sites, monitored for the project life.*

*RECOMMENDATION 6: Long-nosed Potoroo is not identified in the EIS or BDAR yet is known to occur within the proposal area. Energy Australia must be required to conduct targeted surveys for this threatened species during the correct survey season and in the correct habitats prior to approval.*

*RECOMMENDATION 7: Energy Australia must be required to conduct additional targeted surveys for the endangered Southern Greater Glider (*Petauroides volans*) during the correct survey window in the correct PCTs on the southern side of Mount Walker and Town Camp, and mitigate the adverse impacts of 24/7 noise, artificial lighting, blasting, and habitat destruction on these sensitive native animals.*

*RECOMMENDATION 8: The Minimum Survey Effort for the endangered Purple Copper Butterfly has not been met. Further targeted searches must be conducted in the correct survey window and correct habitats. *Bursaria spinulosa* subsp. *lasiophylla* must be included in all site rehabilitation planting.*

*RECOMMENDATION 9: The Proponent failed to identify a single *Banksia* or *Bottlebrush* species in the EIS and BDAR, significant nectar and pollen food sources for vulnerable Eastern Pygmy Possum. The*

*riparian zone was not surveyed, nor was any trapping conducted. The Minimum Survey Effort has clearly not been met, and further targeted surveys must be required for Eastern Pygmy Possum.*

*RECOMMENDATION 10: The Proponent must be required to identify all nectar and pollen food sources for threatened species in the wider area including Eastern Pygmy Possum, Regent Honeyeater, Swift Parrot, Yellow-bellied Glider, Squirrel Glider, Grey-headed Flying Fox & Blossom Bat. And as a penalty for failing to identify those species in this EIS must include all of them in the rehabilitation planting mix.*

*RECOMMENDATION 11: Energy Australia must be prosecuted for failing to identify in the BDAR one of the most significant, historic, and visually obvious large trees in the Lake Lyell area prior to flooding in 1982, remnants of which still provide critical habitat for the endangered Glossy Black Cockatoo.*

*RECOMMENDATION 12: Energy Australia must be required to survey for all remnants, and restore foraging habitat for Glossy Black Cockatoo in the rehabilitation of disturbed sites. Planting should include restoring at least some stands of River She-oak which historically occurred all along the Coxs River and Farmers Creek arms of Lake Lyell, as well as restoring Black She-oak near the upper dam.*

*RECOMMENDATION 13: Energy Australia must be required to formally acknowledge that mature wet sclerophyll forests proposed for destruction on the south side of Mount Walker (PCT3226) provide Critical Habitat for endangered Gang-gang Cockatoo during the summer months, and a critical refuge from fire eg. 2019. Therefore, biodiversity offset credits must be provided to compensate for this loss.*

*RECOMMENDATION 14: The EIS should clarify some of the above-mentioned (4.9) Koala concerns.*

*RECOMMENDATION 15: The Minimum Survey Effort was not met for vulnerable Pilotbirds because the proponent failed to survey the 33km riparian zone of Lake Lyell and tributaries which will be impacted, or to note it at the Town Camp site. Further surveys must be conducted for Pilotbirds.*

*RECOMMENDATION 16: The Minimum Survey Effort was not met for vulnerable Diamond Firetail because the proponent failed to survey the 33km riparian zone of Lake Lyell and tributaries which will be impacted, nor identify the population on Sir Thomas Mitchell Drive where road widening will destroy 16 ha of vegetation. Further surveys must be conducted for the vulnerable Diamond Firetail.*

*RECOMMENDATION 17: The Minimum Survey Effort has not been met for Migratory and Vulnerable Latham's Snipe which has previously been recorded in the area. Further surveys must be required.*

*RECOMMENDATION 18: The Minimum Survey Effort has not been met for Blue-billed Duck. Further surveys must be conducted, and Offset Liabilities/Ecosystem Credits must be required.*

*RECOMMENDATION 19: The BDAR only searched for a select few Threatened Flora Species, not for rare non-listed flora species, and omitted numerous common species. Unless the full suite of threatened, rare non-listed, and common plant species are identified the Plant Community Types (PCTs) including Threatened Ecological Communities (TECs) may not have been identified. Energy Australia must be required to identify the entire suite of plant species characterising the site, including along the 33km riparian zone, rather than a select few flora species in the construction envelope only.*

*RECOMMENDATION 20: The EIS fails to meet Minimum Survey Requirements for Aquatic Plants, because 30 species known to occur in the proposal area were not identified. Aquatic plant growth can have serious consequences for pump intakes, filter screens, boating, and safety hazards for skiers and swimmers. The EIS plans to develop dozens of plans (though never says fully-funded plans) after approval, yet how can a plan be prepared for anything when the very things needing protection, control, or monitoring haven't been identified in an EIS? We all know that control of aquatic weeds is impossible, prohibitively expensive and won't happen. Why does NSW Planning continually allow Energy Australia and other proponents to make utterly false and misleading statements like this?*

*RECOMMENDATION 21: Failing to declare a Weed of National Significance (WONS) or other declared noxious weeds in an EIS is a serious offense. Such a failure violates both biosecurity obligations and legal requirements to provide truthful information for approvals. Energy Australia failed to report the WONS listed Gorse (*Ulex europaeus*) and Brooms (*Cytisus scoparius*, *Genista monspessulana*) within the LLPH disturbance area, and the Notifiable Weed Pampas Grass on its own lands upstream. Energy Australia should be prosecuted under the Biosecurity Act (2015) NSW.*

*RECOMMENDATION 22: The EIS fails to recognise the potential for LLPH to spread the serious plant dieback diseases *Phytophthora cinnamomi* and *Austropuccinia psidii*. Energy Australia must address this, and the usual glib 'plan to develop a plan' and 'monitoring' response is totally unacceptable. The local community expect well-funded, environmentally responsible, best-practice, sustainable solutions.*

*RECOMMENDATION 23: The EIS fails to comply with the Cumulative Impact Assessment Guidelines for State Significant Projects (DPIE 2022). Energy Australia must provide a more accurate report.*

*RECOMMENDATION 24: The EIS fails to report on nor explain the implications for LLPH of the Water Management Legislation Amendment (Stronger Enforcement and Penalties) Bill 2025.*

*RECOMMENDATION 25: The northern side of Mount Walker has many advantages over the southern side (see 2). Why was the northern side of Mount Walker not considered?*

*RECOMMENDATION 26: The EIS has grossly under-reports the actual disturbance area, which is 3x more than stated. No flora or fauna surveys were done for 2/3 of the real disturbance area including*

*the 33km riparian zone of Lake Lyell & tributaries. The riparian zone supports the highest diversity of plants, animals, birds, frogs and insects. The EIS/BDAR fail to meet the Minimum Survey Efforts.*

*RECOMMENDATION 27: The EIS and Statement of Heritage Impact are deficient (see 12) because they fail to identify items of early European heritage. This must be addressed.*

*RECOMMENDATION 28: The EIS is seriously deficient in identifying known and reasonably foreseeable future water pollution impacts of this proposal (see 13), and false and misleading statements made may constitute an offence under s10.6 of the Environmental Planning and Assessment Act 1979 (NSW) and s 491 of the Environment Protection and Conservation Act 1999 (Cth).*

*RECOMMENDATION 29: Unacceptable Aboriginal Heritage impacts.*

*RECOMMENDATION 30: The Project is not competitive in terms of scale, storage capacity, head, or environmental sensitivity compared to other pumped hydro proposals in NSW, nor with grid-scale batteries. Viability of the project is questionable due to the difficult site, engineering/construction constraints, geotechnical risks, and dubious water security once the Springvale Transfer ceases.*

*RECOMMENDATION 31: Other more cost-effective, less environmentally destructive, less socially divisive alternative proposals (see 16) should be considered.*

*RECOMMENDATION 32: Monitoring for the sake of monitoring while failing to see, or not being allowed to see, environmental impacts, pollution, and other adverse impacts is no protection at all.*

*RECOMMENDATION 33: Plans to develop plans for a thing after approval without actually identifying in an EIS the actual things ie. plant, animal, bird, aquatic weed, Weeds of National Significance, water contaminants etc actually occurring in the Proposal area in need of control, protection, monitoring is tantamount to admitting that the only thing being planned for is an official cover-up.*

*RECOMMENDATION 34: The Platypus colony in Farmer's Creek will not survive LLPH. The NSW Government failed to identify Platypus before flooding Lake Lyell in 1982 and Lake Wallace in 1978, and these are the last ones. Does the NSW Government have a vendetta against Platypus in Lithgow?*

*RECOMMENDATION 35: Community Benefit funding must be provided to UNSW to continue Platypus and habitat monitoring in Farmers Creek and tributaries of Lake Lyell for the life of the project.*

*RECOMMENDATION 36: Mount Walker was formerly public land and should have been incorporated into Marrangaroo National Park in 2007. Privatisation saw it slip into Energy Australia's hands in 2011. Mount Walker must be returned to the people and included in Marrangaroo National Park.*

## CONCLUSION

Imposing a 28 Volume 6000 page EIS on the community is obscene, and contrary to NSW Planning State Significant Infrastructure Guidelines which state an EIS should generally not exceed 100 pages. It creates a false impression that a rigorous assessment identified every conceivable detail and impact, when in fact the EIS is so riddled with errors and omissions that the Proponent should be prosecuted.

It is abundantly clear to me that this proposal does not stack up against other pumped hydro projects currently being proposed in NSW, nor can it compete with grid-scale batteries. The site is very steep and challenging, constructing a 43m high upper dam wall on the southern side on Mount Walker carries significant geotechnical and construction risks, and costs could escalate as with Snowy 2.

But most significantly this is not a blue-field site as dishonestly stated in the EIS, it is a greenfield site that will destroy the southern side of Mount Walker – a National Park in-waiting - with enormous historical, cultural, visual, and environmental significance for many local people, as do Platypus.

And it is abundantly clear that this proposal will massively increase salinity and heavy metal pollution risks for Sydney water consumers and the Greater Blue Mountains Heritage Area. Decades of pollution from power stations, fly-ash repositories, coal mines, sewage treatment plants, and legacy industrial pollutants have not magically disappeared, but have accumulated in the silt and sediment of Farmers Creek and Lake Lyell. They will be mobilised by daily 2m water level fluctuations due to LLPH, will be mixed through the entire water column, and that does have serious health and environmental implications.

I urge you to reject Project Number: 77018220 Lake Lyell Pumped Hydro.

Thankyou for this opportunity to provide comment.

Yours faithfully

Chris Jonkers

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Lithgow Environment Group: Project Officer for Water Quality, Threatened Species & Natural Areas