Brief Statement: We object to the location of the proposed transmission line for *Section 2 – Coonong Road to transmission line 99A (between Morundah and Lockhart)*, in particular near Lake Cullivel, Boree Creek, Brookong Creek and in associated wetlands.

Reasons why you object:

We own and live at Lakeside on the edge of Lake Cullivel. We are the 5th generation of farmers of Lakeside.

On page 45 of the EIS it is portrayed that Transgrid considered three options for the transmission route between Lockhart and Coongong Road, however it is clear from our community meeting with Transgrid at Lockhart on 1 February 2022 ("**community meeting**") Transgrid are planning on going with the options closest to Lake Cullivel, however they are unable to specify exactly how far the transmission line will be from the boundary of Lakeside. Further Transgrid's proposed route for the transmission line is extremely unclear on Figure 5.1 *Key Proposal Features* on page 80, in 5.3. *Components of the proposal* on page 81 and 82 and Figure 5-2e *detailed proposal transmission line arrangement* on page 87 of the EIS. Also on page 79 of the EIS Transgrid states that *"[t]he location for the transmission line tower infrastructure would continue to be refined as part of the finalisation of the design. These elements would be located within the transmission line easement as shown in Figure 5-1."* Transgrid's lack of specificity is likely to have detrimental and irreversible impacts on the precious environment that its transmission lines will destroy. The exact location of the transmission line matters. We completely disagree with Transgrid's reasons set out of page 48 of the EIS for their preference of 2c route for Section 2. It is despicable Transgrid consider the impact of route 2c on the environment to be "medium," instead the impact of the transmission line on the environment is extremely high.

It is extremely concerning that Transgrid are unable to specify exactly where the transmission line will be from the edge of the Lakeside boundary, as it makes it difficult for us to respond to their EIS and there are areas of great significance on and around the Lakeside boundary, which are under treat by these transmission lines.

Our concerns of the transmission line being on route 2b and 2c or any closer to Lake Cullivel/Lakeside are as follows:

1. **The environment is extremely important to us**, and this is shown in how we farm. We are trying to make our environment better through biological farming practices and to protect the precious environment that surrounds us.

Lakeside, Lake Cullivel, Boree Creek, Brookong Creek and the wetlands near and where Transgrid intend to put the transmission lines is an extremely significant habitat to various animals, in particular birds, some of which are rare and endangered. Lakeside and these waterways/wetlands/floodplains are home to bountiful birdlife (see below photo), for example Brolgas, Australasian bitterns, Australian Painted Snipe, swans, ducks and much more. The important Riparian Ephemeral wetlands saturation on and near Lakeside, occurs most winters and by Transgrid travelling into these areas (for construction or maintenance) will do significant damage to nests and birds prior to fledging, as well as the water quality. Many animal species, rely on these major breeding grounds to survive. The flooding increases the bird life numbers in the area. Further, various studies have shown that the powerlines themselves are death traps for birds. Transgrid indicate in the EIS that they will place flappers on the powerlines. Many of the species are night hunters and migratory waders etc. If you take for example the Australasian Bittern they have been tracked flying at night and will be unable to see the flappers in the dark. Further we must remember that the wetlands are continuous through our property, property boundaries and proposed easements of transmission lines.

A recent example of the significant birdlife in and around Lakeside, was the sighting of the Australasian Bittern (globally and nationally endangered) on Lakeside on 2 November 2021. This sighting was recorded with Bird Data Australia and footage of the Australasian Bittern in the wetlands was provided to Transgrid on the same day as the sighting. Transgrid acknowledged receipt of the footage, however in the EIS there was no mention of the globally and nationally endangered Australasian Bittern.

This is not the first time the Australasian Bittern has been sighted in the wetlands of Lakeside and adjacent to Lakeside.

"In New South Wales, Lake Cullivel and the adjacent lower Boree Creek floodplain near Urana supported an estimated 25–40 birds in 2000 (Matthew Herring [Wildlife Ecologist], unpublished data) (quote in https://agrifutures.com.au/product/bitterns-in-rice-a-pilot-study-of-the-endangered-australasian-bittern-botaurus-poiciloptilus-and-its-use-of-rice-crops/)... Matthew has also stated that *"These numbers are sufficient for Ramsar listing, exceeding 1% of the global population, and represent one of the largest aggregations ever recorded for the species, comparable to Fivebough, Barmah-Millewa and Bool Lagoon."* Matthew has also identified reports that have shown that "*The inappropriate placement of infrastructure (i.e.*

fence lines; powerlines) in or adjacent to suitable wetlands increases the likelihood of possible collision incidents with birds hitting wires or getting snagged on barbed wire." Here is an example of one report (http://www.environment.gov.au/biodiversity/threatened/species/pubs/1001-conservation-advice-18012019.pdf)

These types of studies highlight that powerlines increase the mortality rate of birds.

Matthew Herring also states that:

"This area is recognised as a regional hotspot for biodiversity (Herring et al., 2008) …. significance of the wetlands to the nationally and globally endangered Australasian Bittern, a species we recently estimated has a national population of only 1300 (Herring et al., 2021). The Lake Cullivel and lower Boree Creek system can support more than 2% of the national population (Herring et al., 2014), making it one of the most important wetland systems for the species, comparable to the Barmah-Millewa (NSW-VIC) and Bool Lagoon (SA) complexes, which are recognised as critical sites (Herring et al., 2019; 2021). Our satellite tracking work has shown that bitterns disperse at night and fly at heights above ground level where they are at risk of collision with high voltage power lines, especially those relying on visual deterrents (M. Herring, unpublished data, but see http://www.bitternsinrice.com.au/tracking-bunyip-birds/).

The Lake Cullivel and lower Boree Creek wetlands also support the nationally and globally endangered Australian Painted Snipe, as well as migratory shorebirds like the Sharp-tailed Sandpiper that are afforded protection under various international agreements, and state and commonwealth legislation…..The collision risks for the Australasian Bittern are also a key issue for the Brolga, Australian Painted Snipe, migratory shorebirds and a range of other waterbird species that use these wetlands, as well as bats, many of which are threatened species listed under state and federal legislation.

In south-eastern Australia, there are less than 30 natural wetlands that support regular breeding or more than one booming male (Herring et al., 2021). The Lake Cullivel/lower Boree Creek system is one of them and it is precious, not just because of its significance for bitterns but also because of the thousands of Whiskered Terns, Glossy Ibis, Yellow-billed Spoonbills, Baillon's Crakes, waterfowl and various other species that use these wetlands. I have seen them many times. These are some of the most important wetlands remaining in the Murray-Darling Basin."

Also, it seems Transgrid proposes to put the powerlines where there are magnificent 100s of year old river red gums, see below photo. The red gums have been a part of this environment for hundreds of years and are habitat for the wildlife wonders of this world, such as birds, mammals, frogs and reptiles. There are thousands of hectares of cleared grasslands that Transgrid could use, that are not wetlands or treed areas. As well how can Transgrid justify going anywhere near old growth red gum forest, let alone clearing these trees.

Transgrid propose to place the transmission line the middle of the wetlands near Lake Cullivel, see below photos of these wetlands taken on 2 February 2022. This area has been impassable by any type of vehicle since approximately July 2021 and will not be passable until approximately minimum June 2022, provided there is not further rain.

1. At the community meeting an employee of Transgrid indicated that it was nearly impossible to do the cultural survey near Lake Cullivel because the land was inundated with water. We are of the understanding from cultural surveys in the past that the land, soil, etc… should be totally visible when undertaking a cultural study. This questions the accuracy of the surveys Transgrid are relying on. Further, another employee of Transgrid who wrote the EIS said to us at the community meeting (words to the effect of) *"I have never been to the area effected by the EIS."* In relation to the flooding depth in the study area, between page 387 and 388 of the EIS there is no information provided about the flooding depth in the study area in or around

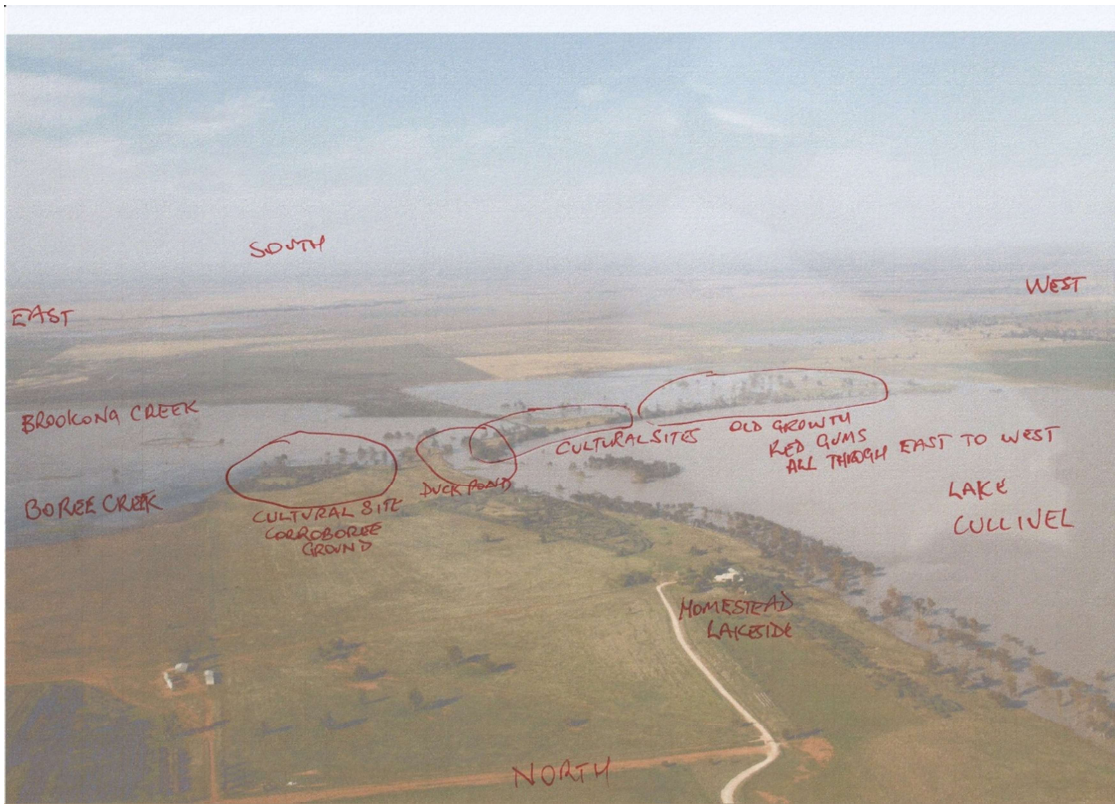
the Boree Creek, Brookong Creek, Lake Cullivel and associated wetlands. Transgrid could not possibly have a full understanding of the study area, as we do, having lived here all our lives. We were first contacted by Transgrid in May 2021 and soon thereafter a Transgrid employee indicated the ecological studies were being undertaken over a 12 month period. This is not sufficient, particularly in circumstances where a lot of the study area contains ephemeral wetlands/waterways. Therefore, we really do question the methodology and accuracy of the EIS.

2. On page 27 of the EIS Transgrid state, "*The overall methodology for the corridor selection process included consideration of a corridor that: • minimised environmental and social impacts and maximised the use of previously disturbed areas wherever possible, including: - avoiding areas of particular environmental sensitivity where obtaining planning approvals and access were considered unlikely - maximising distances to dwellings, inhabited areas and other sensitive land uses - preferencing areas of existing disturbance (e.g. transmission line or utility easements, roads, tracks, fence lines and cadastral boundaries) and targeting narrow crossing points of waterways and flood out areas (and their associated riparian habitats such as around the Murrumbidgee River, the Coleambally irrigation channels, Yanco Creek, Columbo Creek and Lake Cullivel).*

   This statement is untrue in relation to Lake Cullivel. The proposed transmission line does not follow an existing transmission route and is proposed to go straight through extremely sensitive wetlands. In the remainder of the EIS they avoid sensitive wetlands, except the ones near Lake Cullivel.

   It is acknowledged on page 377 of the EIS by Transgrid that Lakeside and the surrounding areas floods. See below aerial photos of the flooded areas where Transgrid propose to place

the transmission lines. You will notice there is a significant area south of the flooded area that does not flood and has already been cleared. Why doesn't Transgrid place the transmission line further south and avoid destroying the sensitive wetlands/waterways and floodplains? Another alternative route for the transmission line is to use the existing transmission line corridor to near Urana or along the Lockhart-Urana Road, which would be more accessible to Transgrid and emergency services compared to Transgrid's proposed route near Lake Cullivel.



A foot note for these last three photos, the flooded areas took over two years to dry enough for even in a light vehicle to pass over let alone heavy machinery needed for construction and maintenance

3. At 16.3.7 on page 392 of the EIS Transgrid acknowledges that *"Environmental sensitive receivers include surface water features such as rivers, creeks, wetlands and GDEs including: • the major watercourses, such as Box Creek, Murrumbidgee River, Abercrombie Creek, Forest Creek, Curtains Creek, Nyangay Creek, Yanco Creek, Coleambally Outfall Drain, Colombo Creek, Halliday's Creek and Burkes Creek • high potential aquatic and terrestrial GDEs located in the proposal study area (refer to Section 21.3) including Coloboralli Creek, Stringybark Creek, Boiling Down Creek, Sandy Creek and Lake Cullivel.*

Further on page 396 of the EIS Transgrid confirm there will *"Around six to ten transmission line towers would be located in the flood prone area identified near Lake Cullivel."* Transgrid do not mention any other transmission towers in flood prone areas other than the ones in the flood prone area identified near Lake Cullivel. Then on page 394 of the EIS Transgrid set out the **significant and destructive** impacts the transmission lines will have to water quality where and near where the transmission lines are proposed to be.

On page 510 of the EIS Transgrid states *"Construction of the proposal has the potential to result in soil erosion and impacts to land capability in the absence of adequate management measures. Key construction activities that present a risk to soils include excavation and other earth moving activities, vegetation removal and the movement of vehicles, plant and equipment within unsealed areas. The potential impact of these activities may include: • erosion of exposed soils and stockpiled materials • dust generation from construction activities • increased sediment loads entering the surrounding waterways • compaction of soils leading to impacts on drainage. The highest potential for soil erosion would be associated with the disturbance of soils on existing slopes during construction. Given the terrain of the construction, the footprint is predominantly flat; however, it includes rolling hills and alluvial floodplains such as areas around Lake Cullivel, Colombo Creek, Yanco Creek and the Murrumbidgee River. Soil disturbance and the associated sediment transportation is a hazard that could occur across the length of the construction impact area. The DP2020a geotechnical report indicates that surface soils have a moderate to high potential for dispersion across the construction impact area. There is potential for short term impacts on soils and land capability during constriction. Disturbed areas would be progressively rehabilitated as construction work progresses to minimise the duration of disturbance. Land would be reinstated to pre-existing conditions or other condition as agreed with the landholder. No long-term impacts to soils or the land capability of these areas is anticipated."*

The effect on the water quality and soil on and surrounding Lakeside is of grave concern to the health and wellbeing of all the wetlands, creeks, lakes on and surrounding Lakeside as well as the flora and fauna that live in and rely on this area to survive.

On Figure 21-2, sheet 9 of 10, on page 508 of the EIS the transmission line goes straight through the wetland south of Lake Cullivel, which is identified on the map as Aquatic Groundwater Dependant Ecosystems – High Potential Aquatic Groundwater Dependant Ecosystems. As you can see on this map this wetland could be avoided by the transmission line, if the transmission line is moved further south, which would alleviate the grave detrimental impacts on this wetland, Lake Cullivel and other surrounding waterways. We note this map fails to identify the Boree Creek, Brookong Creek etc, which would also be significantly effected by the placement of the transmission lines. The technical paper on groundwater impact assessment fails to adequately address this issue raised in the EIS, the detrimental effects and does not even address the impacts on the aquatic areas on and around Lakeside. Lake Cullivel, Boree Creek, Brookong Creek and various wetlands in or around Lakeside are often full of water and the groundwater report provides no information as to the frequency of this.

The trees and wetlands cannot be replaced, but Transgrid could easily avoid this **irreversible** environmental destruction if the powerlines were moved a significant distance away from the Lakeside boundary, to cleared land that does not flood often and away from significant waterways such as the Boree Creek, Brookong Creek, Lake Cullivel and associated wetlands.

4. Throughout the EIS Transgrid refers to Halliday's Cut and even at various point uses Halliday's Cut as a reference to where the transmission line will be going (pages 79 and 126 of the EIS and is mentioned again on page 378), however the location of Halliday's Cut as asserted by Transgrid in the EIS is incorrect, therefore where is the transmission actually going? Halliday's Cut is actually a drain that runs through the bed of the Boree Creek, not part of Lake Cullivel as asserted by Transgrid in the EIS. Halliday's Cut was constructed by the Chinese and Spanish workers in the 1880s for William Halliday, who was the owner of Brookong Station. Halliday's Cut is mentioned on most maps and has a grid reference, which highlights its historical significance. Therefore, the continuity of Halliday's Cut should be maintained and not be interrupted by the transmission line.

5. We are extremely concerned that this transmission line is going to have disastrous environmental impacts on the area's flora and fauna and this is not the first time that we have become aware of environmental destruction in the area where the proposed transmission line is proposed by Transgrid to be. For example, we have become aware that a significant colony of emus has been eradicated and wetlands ploughed up. We are not confident that further destruction on this scale won't happen during construction or maintenance of the transmission lines. We are objecting to the location of the transmission line to eliminate the environmental impacts on these important wetlands, habitats and species.

   We try to preserve and protect the habitat for all animals on our property and have done so since we lived here. We aren't going to stop now and hope NSW Government also take our concerns very seriously.

6. The powerlines being placed near on the boundary of Lakeside will have significant visual impacts on Lakeside and us. The Duckpond (on south eastern edge of Lake Cullivel where the Brookong and Boree Creeks meet and join together and fill Lake Cullivel – see photographs below) is an area of great significance to our family and our heritage (6 generations) and the Drummond/Webb/Lehmann/Dunbar/Tobin/Staude families for many reasons. Past family members' ashes are scattered at the Duckpond. We have spent lots of family time and have celebrated many milestones at the Duckpond over the generations including our daughter's wedding 2021, our other daughter's 30th and engagement, many Easters, family gatherings etc…We also share this beautiful environment with many others, such as hundreds of bird watchers who have visited our farm, as it is a very important bird breeding site for many animal species. It is a beautiful and peaceful place that is truly alive with memories and native wildlife, which will be destroyed by Transgrid's powerlines.

   We understand, from our review of Council documents Transgrid agreed to move the corridor away from Lockhart town and Transgrid citing the visual impact [the initial corridor] would have to residents. Transgrid even acknowledge on page 314 of the EIS that *"This infrastructure would be seen near Lake Cullivel which is a local visual feature…"* and again on page 317 Transgrid state *"the views from these [scenic] flights [from Lockhart Airport, with routes extending to Lake Cullivel] would be of regional visual sensitivity."* Then again on page 324 of the EIS Transgrid state that *"the proposal would create a strong linear corridor across the landscape and would be more prominent on scenic flights from Lockhart (Lake Cullivel). This infrastructure would be seen near Lake Cullivel which is a local visual feature and visually*

interesting from the air. In other areas surrounding Lockhart, the new transmission line easement would be seen with a complex landscape where other transmission and related infrastructure are seen and would be largely absorbed into the view." Why can't Transgrid minimise the visual impact of the transmission line near Lake Cullivel as it admits it has done in the other areas surrounding Lockhart, by moving the transmission line away from Lake Cullivel.

7. The area adjacent to where Transgrid intends to place the transmission lines, namely the Duckpond, is significant to Aboriginal heritage, as it contains a Corroboree ground. There is no

evidence that Transgrid has taken this into consideration. We have fenced off and regenerated the Corroboree ground area with native plants, see photo below.

8. It is indicated in the EIS that the social impacts of the transmission line are minor. We totally disagree, as it is greatly effecting us, our family and many people in our area who are effected by the transmission lines greatly and construction has not even started. We are deeply concerned the about impact the transmission lines will have on the environment and the flora, fauna and people living in or around the transmission lines now and in the future.

9. We are concerned about the visual and health impact of the powerlines. Transgrid's study area is about a bit over 1 kilometre from our house (which has been in our family for 5 generations) and within metres from the Duckpond, which is a sanctuary on our farm as set out above. Our views, the peace, tranquillity and pristine environment of our farm will be ruined by the powerlines. We live over 7kms from a public road and about 10 kilometres from a neighbour, however Transgrid intends to put powerlines somewhere within the proposed study area which is only bit over 1 kilometre from our house. Further, we are concerned about our physical and mental health of having the powerlines so close to where we live.

10. There is no evidence that studies have been undertaken to address the effect this transmission line will have on the long term health of livestock and humans living in close proximity to the transmission lines. This is deeply concerning.

We therefore propose that Transgrid use Route 2a as they have proposed on page 45 of the EIS, for the transmission line in *Section 2 – Coonong Road to transmission line 99A (between Morundah and Lockhart)*, in particular near Lake Cullivel and the Lakeside boundary or along the current transmission line to near Urana as they have done in the vast majority of the route, to alleviate the impacts of the transmission line as we have set out above.