

Victoria to NSW Interconnector West

Preferred Corridor Report – NSW

October 2023



ACKNOWLEDGEMENT

Transgrid acknowledges Indigenous and Torres Strait Islander peoples as the Traditional Custodians of the land, water and sky throughout Australia on which we do business. We recognise their strength, diversity, resilience and deep connections to Country.

Transgrid acknowledges the Wiradjuri, Wamba Wamba, Perrepa Perrepa and Yorta Yorta people as the Traditional Owners of the lands on which the proposed transmission line has been considered and pays respect to Elders past, present and future. Traditional Owners of these lands have lived in the area for thousands of years and have an enduring custodianship and connection over the land and waterways of this region.

Community summary

Background

In June 2023, Transgrid shared with the community a draft corridor of land proposed to house the route of the NSW half of the Victoria to NSW Interconnector West (VNI West). VNI West is a new transmission line proposed to connect the high voltage electricity grids within NSW and Victoria as part of Australia's critical energy transition.

Over the following 10 weeks, we received 70 written responses about this draft corridor and held 16 community events attended by over 270 local landowner and community members.

This report summarises community feedback received throughout the process to date and provides Transgrid's responses.

Your questions answered

How does the community feel about the draft corridor?

The majority of feedback related to potential impacts to agricultural operations with a strong focus on irrigated agriculture and rice production at western end of the draft corridor. Protection of biodiversity values was also a dominant theme.

How has Transgrid responded?

Transgrid has assessed community feedback and, as detailed in this report, made multiple changes to the preferred corridor, including widening the preferred corridor to the north. We have also addressed specific questions raised by the community within this report.

What are the major concerns?

In order of priority, based on the amount of feedback received per subject, the following major concerns were raised:

- **Loss of agricultural production** – The most common concern is that introducing a transmission line easement across high-value farmland would potentially lead to lower production, job losses and commensurate impacts to the local economy and services. Highlighted areas were the Western Murray Valley irrigation farms, especially the rice growing community near Moulamein. The community requested that agricultural land should be excluded from the project corridor.
- **Flooding** – Community members highlighted that Transgrid's data did not adequately map flood-prone land, especially the areas between the Victoria/NSW border and Moulamein. In particular they requested that it take into account the extent of flooding in late 2022 that affected the land at the western end of the identified project corridor.

- **Biodiversity** – There was strong support for protecting local endangered flora and fauna and ensuring species are not impacted by the transmission line. The community is concerned about numerous flora and fauna species, especially the Southern Bell Frog, Australasian Bittern, Bush Stone-curlew, and the critically endangered Plains Wanderer (see section 2.1.1 of this report for the complete list of species identified).
- **Bushfires** – Concerns were raised about the potential for bushfire and grass fires being ignited by a transmission line.
- **Aboriginal heritage** – Feedback indicated a strong presence of Aboriginal cultural heritage sites and artefacts in the region with specific reference to the ‘Nacurrie Man’ site being located within the draft corridor.

What were the community ideas for reducing impact?

Community members offered local knowledge and ideas to help us adapt the corridor to address concerns (see section 2.2 of this report for the full list). These included:

- **Expanding the corridor north** – During route development, Transgrid should investigate areas to the north of Moulamein, away from productive irrigation lands and dwellings along Pretty Pine Road.
- **Using public land** – Transgrid should maximise the use of public lands within and outside of the corridor, to minimise and mitigate the impact on private landholdings. Opportunities for Transgrid to further investigate include:
 - Following public road corridors – such as Mabins Well Road and Wanganella Road
 - Following travelling stock routes
 - Following the disused Stony Crossing Rail Corridor
- **Downgrading constraints around the Moulamein airport** – Feedback indicated the ‘highly constrained area’ around Moulamein airport could be overstated, given its lack of current use.

How is Transgrid responding to these concerns and ideas?

We have amended the preferred corridor in multiple ways, taking into account community feedback and the new information. The big change is to **expand the corridor north** (refer to Figure CS.1 below).

This change to the preferred corridor allows us to investigate routes that could:

- Reduce the potential impact on productive irrigation land near Moulamein, protecting jobs and the local economy
- Further avoid areas of mapped Plains Wanderer habitat
- Maximise the potential to follow public land corridors, including travelling stock routes
- Be aligned with road corridors, including Wanganella Road and Mabins Well Road
- Minimise conflict with current renewable developments to the west of the Dinawan substation (Bundure).

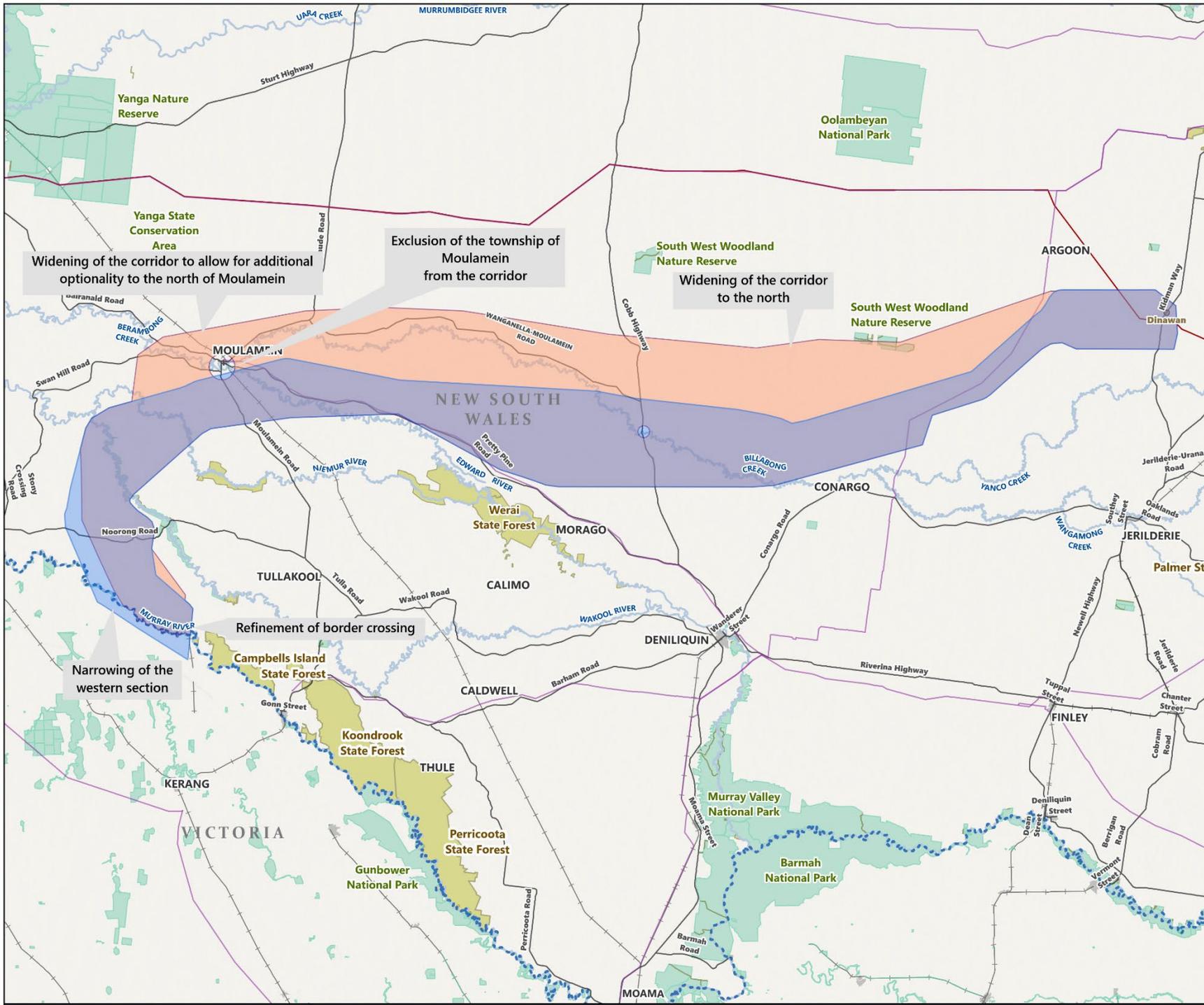
What happens next?

Using the amended preferred corridor, Transgrid will identify a series of potential route options, including a recommended preferred route option within the corridor, based on detailed consideration of technical, environmental and social constraints.

This recommended preferred route option will be placed on public display in the first half of 2024 to give the community and stakeholders an opportunity to review the recommended route and provide further feedback.

Following this next stage of community consultation, Transgrid will confirm the preferred route option and begin the detailed environmental assessment and approvals phase.

Figure CS.1
Corridor amendments



Coordinate system: GDA2020 MGA Zone 55
Scale ratio correct when printed at A3

1:630,000 Date: 5/10/2023

Data sources: DPE, DELWP, Geoscience Australia, World Hillsshade, Esri, CGIAR

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Abbreviations

Project term/acronym	Definition
AEMO	Australian Energy Market Operator
AHIMS	Aboriginal Heritage Information Management System
ARPANSA	Australian Radiation Protection and Nuclear Safety Agency
BC Act	<i>Biodiversity Conservation Act 2016</i>
BDAR	Biodiversity Development Assessment Report
DIWA	Directory of Important Wetlands Australia
EIS	Environmental Impact Statement
EMF	Electric and magnetic fields
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1999</i>
ISP	Integrated System Plan
kV	kilovolt
MCA	multi-criteria analysis
NEM	National Electricity Market
PACR	Project Assessment Conclusions Report
REZ	Renewable Energy Zones
RIT-T	Regulatory Test for Investment
TCV	Transmission Company Victoria
WHO	World Health Organisation

1. Introduction

Transgrid and Transmission Company Victoria (TCV) are investigating where to develop a new electrical connection between Victoria and NSW called VNI West. Transgrid is responsible for developing the NSW component of VNI West (the Project) in the Riverina Region of NSW.

The Project will run from the Dinawan substation site, north of Jerilderie, to a crossing point along the Victoria/NSW border, north of Kerang in Victoria, to connect with the Victorian component of the project.

1.1. What is VNI West?

VNI West is a second transmission link proposed between Victoria and NSW which would harness clean, low-cost electricity from Renewable Energy Zones (REZ) in both states and improve the reliability and security of electricity supply. VNI West involves a 500 kilovolt (kV), double-circuit overhead transmission line connecting the EnergyConnect project (at the Dinawan substation) with the Western Renewables Link project via new substations near Kerang and Bulgana in Victoria.

1.2. Purpose of this report

This Preferred Corridor Report contains Transgrid's response to community feedback and the ideas put forward in submissions and community information sessions during the public exhibition of the *Draft Corridor Report* (Transgrid, 2023). This report shares:

- A summary of issues raised by community members and other stakeholders regarding the draft corridor, including community feedback, ideas for alternative routes and local knowledge (Chapter 2).
- How Transgrid has amended the preferred corridor in response to this feedback, including extending the corridor boundary north to allow for the investigation of route options passing to the north of Moulamein township (Chapter 3).
- How the actual route will be chosen (Chapter 4).
- Transgrid's answers to specific questions (Chapter 5)

It also includes Appendices detailing:

- The extent of community consultation
- How the draft corridor was determined.

2. What you told us

2.1. About the draft corridor

Local community members and landowners raised a number of issues about the location of the VNI West draft corridor, especially in the western end of the corridor where it overlaps with extensive irrigated agricultural and rice production operations and areas recently subjected to flooding. We also received feedback on some mapping data, suggesting it omitted flood-prone areas and a biodiversity hotspot in the southwestern areas of the corridor, and that the major route constraint around Moulamein airport could be revisited.

Who gave us feedback

We received 70 written responses, with 57 percent (%) coming from landholders within the corridor, 26% coming from neighbouring properties or the local community and 11% coming from interest groups. The majority (93%) of responses expressed their opposition to the project, with 4% expressing support.

In addition, 16 community information events held in July, August and September were attended by over 270 local landowner and community members, noting that this includes a number of local landowners who attended multiple events.

2.1.1. Feedback themes

- Agricultural production** – The biggest concern is that introducing a proposed transmission line easement across high-value farmland would potentially lead to lower production, job losses and commensurate impacts to the local economy and services. Highlighted areas were the Western Murray Valley irrigation farms, especially the rice growing community near Moulamein. Impacts to livestock production were also identified. Some people thought the impact on agricultural land could be in the thousands of hectares. The historical significance of the Wakool irrigation area as an agricultural production region was also noted. Some responses said the uncertainty introduced by the proposal was making it hard for producers to plan for the future, especially around succession planning. The community also told us our mapping data does not include all the local airstrips used for agricultural production, noting that there are many additional on-property air strips in the region, particularly in the areas around Moulamein and Deniliquin. Ricegrowers said that any transmission infrastructure on or adjacent to productive land would change how aerial operations (essential to production) would be conducted.

People fear that if production suffers, the local economy will also suffer, leading to school and service closures. The community therefore put the case that agricultural land should be excluded from the project corridor. There were calls to consider traversing Ramsar Wetlands, National Parks and State Forests, given it would introduce shorter line lengths and minimise impact to agricultural land.

- Flooding** – Community members highlighted that Transgrid's data did not adequately map flood-prone land, especially the areas between the Victoria/NSW border and Moulamein. Nor did it take into account the extent of flooding in late 2022 that affected the land at the western end of the identified project corridor, and the interconnectedness of the Murray River, the Edward River, the Neimur River, and the many creeks, tributaries and wetlands present in the region.

Community members questioned the technical capacity of known flood-prone areas to support transmission towers, and how Transgrid would maintain the infrastructure during flood events when

access would be a problem. One response also questioned how the project would align with the ongoing Reconnecting Rivers Program, which aims to utilise flood ways more effectively.

- **Biodiversity** – People strongly support protecting local endangered flora and fauna and ensuring species are not impacted by the transmission line. The community is concerned about various flora species, such as Buloke Woodlands of the Riverina and Murray-Darling Depression Bioregions Grey Box, Grassy woodlands and derived native grasslands of SE Australia. Fauna species that could be affected include: Southern Bell Frog, Rainbow BeeEater, Bush Stone-curlew, White Bellied Sea Eagle, Wedge Tail Eagle, Major Mitchells Cockatoo, Australasian Bittern, Painted Snipe and the critically endangered Plains Wanderers.

A number of submissions said the transmission lines would lead to increased bird strikes of these and other birds. Generally, people want wetland habitats, such as Coolong Creek, Rhyola Wetlands and Wanganella Swamp, to remain free of impact from any transmission infrastructure.

- **Bushfires** – People are concerned about the potential for bushfire and grass fires being ignited by a new transmission line, noting preferred corridor areas that are mapped as bushfire prone land. Landholders spoke to fast moving grass fires across open grazing lands (particularly north of Moulamein and Wanganella). They are concerned about the inability to use aerial firefighting and fire trucks under or near these 500kV lines and the potential for damage/stock losses before a fire can be controlled, especially given the low number and geographical spread of local resources available to fight or contain such fires. The community also raised concerns regarding insurance and liability in the event that a Transgrid transmission line was the source of ignition for a bushfire. Would, for example the potential loss of livestock or property repairs be covered by appropriate insurances? How might the presence of a transmission line impact their own insurance coverage?
- **Aboriginal heritage** – Feedback also indicated a strong presence of Aboriginal Heritage and artefacts in the region with specific reference to the 'Nacurrie Man' site being located within the preferred corridor.

Our response

Section 3 of this report details how we have amended the draft corridor in response to this feedback. These amendments have been influenced by local knowledge gathered during consultation on the Draft Corridor Report. They address the above issues by allowing for:

- More use of public land and areas with less irrigated agriculture, rice production and associated aerial agricultural activities.
- Less interaction with rivers, creeks and wetlands, and associated biodiversity and aboriginal heritage
- Greater avoidance of bushfire prone land.

In addition, we are establishing two important reference groups to help guide the future stages of the project. These are a Community Consultative Group, who will advise Transgrid on how to minimise social impacts and maximise community benefits and an Indigenous Working Group, who will advise on the preservation of Aboriginal cultural heritage values in the project area.

We are also aware that landowners and the broader community want clarity on the exact route VNI West will take and that, while the proposal remains at a corridor level, landowners may find it challenging to effectively plan for the future. The next stage of the project therefore involves developing a preferred route that we will share with the community for feedback in the first half of 2024. This preferred route will be up to 1km wide.

Development of the preferred route will be supported by:

- Input from the **Community Consultative Group** on constraints and opportunities to be considered
- Input from the **Indigenous Working Group** on Aboriginal Cultural Heritage matters to be considered
- The results of a **flooding study** we have commissioned to ensure the transmission towers are appropriately designed and access to tower locations has been accounted for
- Ongoing collection of detailed environmental data, including the location of **private conservation agreements**
- Detailed property **constraint mapping** to determine areas of greater agricultural, environmental and social importance to landowners.

Once the preferred route has been developed, we will begin detailed environmental impact assessment work, including developing a Social Impact Assessment (see section 4.1).

Community and landowner consultation will be ongoing throughout route development and the environmental and social impact assessment, with formal consultation phases as detailed below.

Consultation staging



The next three figures show common concerns from people offering written submissions, which largely reflect the views of people at the community information sessions.

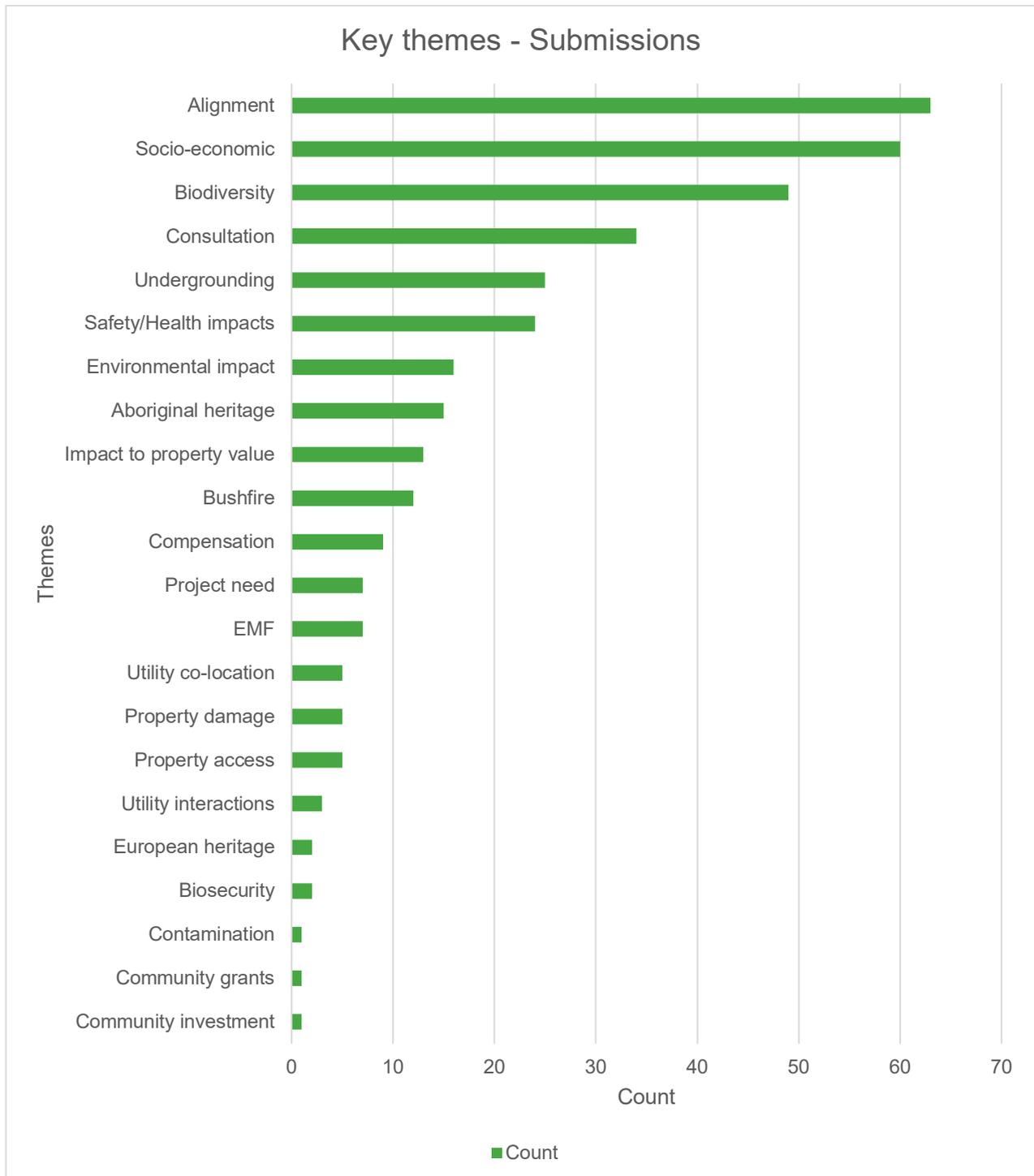


Figure 2.1 Key feedback themes

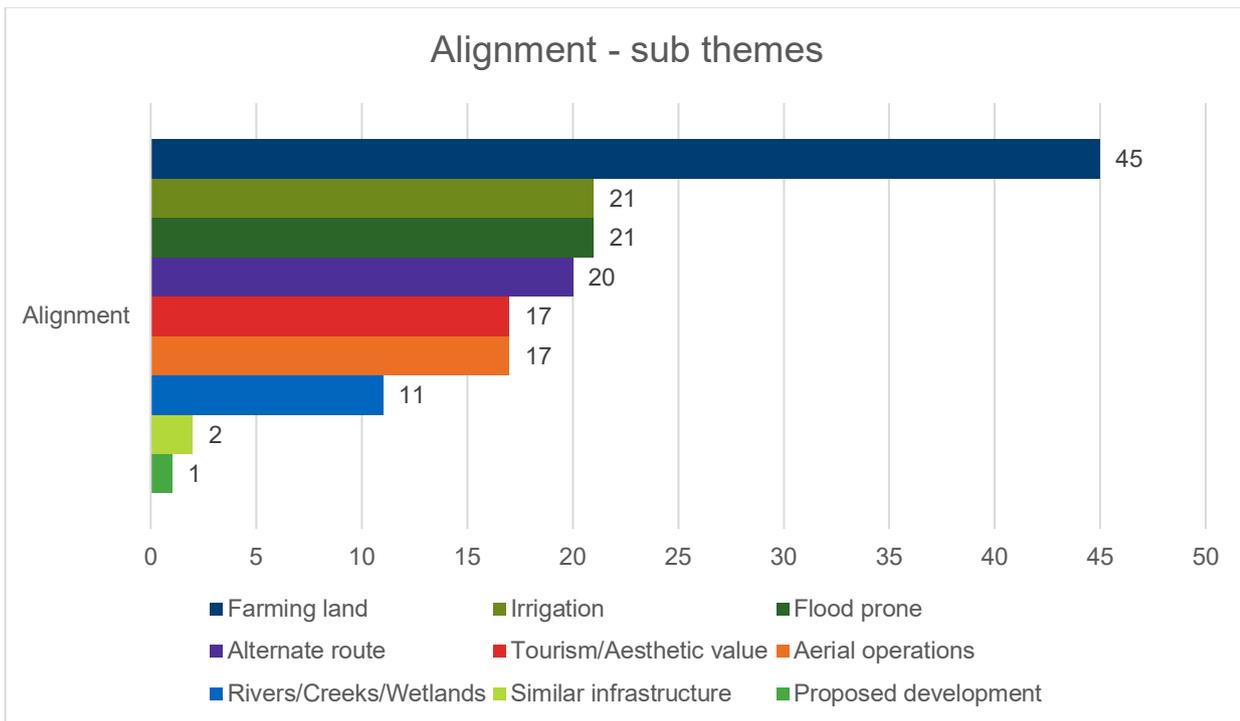


Figure 2.2 Breakdown of issues raised in submissions regarding the project alignment

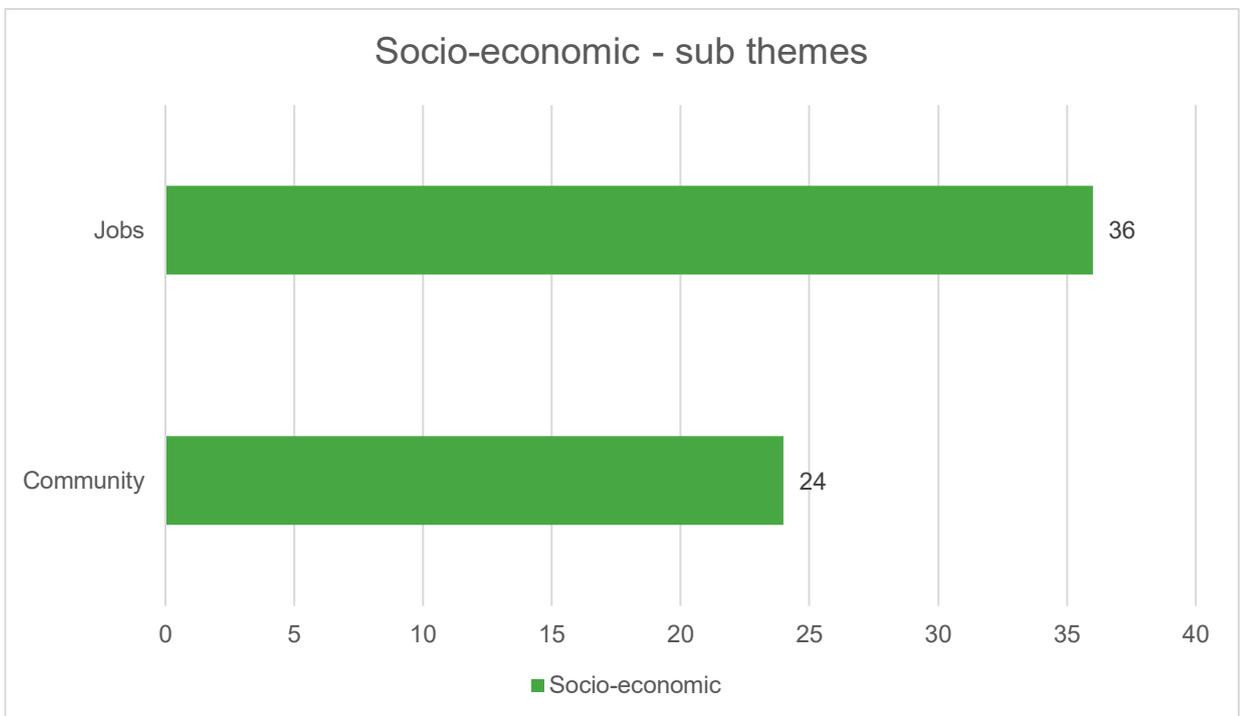


Figure 2.3 Breakdown of socio-economic issues raised in submissions

2.2. Community ideas for changes to the corridor

Community members offered important information and ideas to help us adapt the corridor to meet local needs. These included:

- **Expanding the corridor north** – Transgrid should investigate alignments to the north of Moulamein, anywhere from the north of the constraint zone for Moulamein and its airport up to the transmission line corridor where the new EnergyConnect line is being constructed.
- **Using public land** – People are keen to maximise use of public lands within and outside of the corridor, to minimise and mitigate the impact on private landholdings. Opportunities for Transgrid to further investigate include:
 - Following public road corridors – such as Mabins Well Road and Wanganella Road
 - Following travelling stock routes
 - Following the disused Stony Crossing Rail Corridor
- **Downgrading constraints around the Moulamein airport** – Feedback indicated the ‘highly constrained area’ around Moulamein airport could be overstated, given its lack of current use.

A number of submissions called for modifications that have not been adopted. The reasons for these are outlined in Section 5. These ideas included:

- **Taking a more direct route** – Building on concerns about the length of the route, a series of submissions suggested the cost of the project could be reduced by taking a more direct route between the Victoria/NSW border and the Dinawan substation.
- **Going back to earlier route options** – The preliminary list of corridor options included three routes, south of the current area, which cross the Murray River near Moama. These options were ruled out following a ministerial order made under the National Electricity (Victoria) Act in February 2023 requiring VNI West to cross the Murray River north of Kerang. Some people said that they preferred these alternative options.
- **Starting again and finding new options** – Some people wanted alternative options that were not identified in the corridor report, such as a corridor that would travel parallel to from the Victoria/NSW border and which followed the existing Deniliquin to Barham transmission line.
- **Undergrounding** – People strongly support undergrounding the transmission line, either in full, or in part.

Two sections of the draft corridor received specific feedback, which will not be able to be adopted in full due to consideration of existing constraints but will be further reviewed during route development:

- The section between Swan Hill and Moulamein should avoid existing farming land and should instead use the edge of existing roads and highways, in addition to existing travelling stock routes
- A south-west route should be taken from Dinawan Substation to the 132kV power line at the bend on the Moonbria Road south-west of the Moonbria homestead.

2.3. Other areas feedback from the community information sessions

2.3.1. Community views on renewable energy policy

Some people disagree with Australia’s renewable energy policy. While some noted their support for achieving sustainable outcomes regarding energy generation, there was strong negative sentiment towards

renewable energy projects on regional land. People believe the government's default position is to use regional land as the 'solution' for all renewable energy production.

Feedback indicated that 'transition to renewable energy' is viewed strongly as a 'metropolitan/city energy crisis'. Some people think nuclear power or battery storage could prove a solution that provides sufficient energy generation and supply without compromising productive agricultural land. Some also noted being unaware their land was identified in a Renewable Energy Zone until Transgrid released the VNI West Draft Corridor Report.

2.3.2. Overall project need

Queries typically related to the suitability of the proposed project in light of the speed of change in technology. For example, battery development and storage and 'traditional' methods of planning for and addressing future energy requirements.

Other submissions noted more general concerns about net zero policy, the development of renewable energy zones and why nuclear energy is not considered in the mix. Another submission asked why existing transmission could not be used.

2.3.3. Land use and renewable energy

Landholders advised Transgrid (in general terms) of having been approached by renewable energy developers. Some people suggested that any transmission line proposal should pass through lands where renewable energy development occurs (and not on productive agricultural land).

2.3.4. Community benefit

People feel that Transgrid must invest in the local community, providing a long-term, tangible, sustainable investment that supports the local economy and community fabric. There is support to use local providers and source materials locally (to the extent possible).

2.3.5. Views about how we engaged with the community

Stakeholders, community and landholders expressed mixed sentiments about Transgrid's engagement program on the draft corridor.

Submissions indicated that community and landholders were generally unaware that the region, particularly at the western end of the draft project corridor, had been identified as a potential location for the VNI West transmission line project. Landholders further advised of a delay in receiving information about the project and their property and the closing date for submissions.

While submissions acknowledged Transgrid provided an extension of time to the submission process, this was deemed insufficient to consider all options and engage the community effectively, particularly in reference to potential impacts on individual livelihoods and the broader community fabric. Further, some submissions indicated the tight timeframes was a mechanism for Transgrid to expedite the project, and that longer timeframes had been afforded to other parts of the project such as the duration of project scoping and engagement with other stakeholders.

Submissions from landholders and community expressed concerns about contradictory information and 'confusing' assessment within the Draft Corridor Report. The underlying message from community was to encourage open and honest communication from Transgrid, with a more inclusive and considerate planning process that genuinely incorporates community feedback.

One response commented on the PACR, which is part of the Regulatory Test for Investment (RIT-T) process. The RIT-T is an economic and technical cost-benefit test conducted early on in a transmission project, to determine if it would deliver economic benefits to electricity consumers. The submission noted that the inputs to the economic model used in the PACR do not take into account criteria such as fire risk, wellbeing, environment or culture.

2.3.6. Overlap with other renewable developments

Some people told us that the preferred corridor encompassed properties involved in the proposed Dinawan Energy Hub project, including properties on which wind turbines are proposed to be located. Concern was raised that running transmission lines through these properties would impact the viability of turbine locations.

2.3.7. Compensation

A series of submissions raised concerns about the compensation that would be applicable to any land acquisition requirements associated with the final transmission line. A number of the responses noted that current compensation proposals do not reflect economic losses to landholders due to the inability to practice agriculture. Concern was also raised that the current compensation proposal only outlines payments for 20 years compared to the expected life of the transmission line (around 50 years) and that for wind farm developments it is 30 years with an option to renegotiate at this time.

2.3.8. Electric and magnetic fields (EMF)

A number of responses expressed concerns regarding the potential effect of EMF radiation from transmission powerlines on human health.

2.3.9. Carbon footprint impact

One submission noted that Transgrid has yet to evaluate the effects of the project with respect to its carbon footprint, stating that it was important that the quantity of native vegetation that would be removed and the resultant carbon footprint impact this would have should be compared for each of the corridor options.

3. How we have amended the preferred corridor

In the Draft Corridor Report, we noted that Option 1 (Swan Hill north) would need to be refined to minimise impacts to: the Murray Valley National Park (Wetuppa Forest); important bird movement corridors and habitat; Wanganella village; and Plains Wanderer habitat in the area between Conargo and the Dinawan substation.

Based on these needs, and in response to the community concerns noted above and the new local information provided, we amended the preferred corridor in multiple ways. The big changes, largely driven by community feedback, are to:

- Expand the corridor north. This supports potential route options that:
 - Minimise impact to productive irrigation land near Moulamein
 - Further avoid areas of mapped Plains Wanderer habitat
 - Maximise the potential to follow public land corridors including travelling stock routes
 - Are broadly aligned with road corridors including Wanganella Road and Mabins Well Road
 - Minimise conflict with current renewable developments to the west of the Dinawan substation
- Modify the Western section to align with TCV’s Draft Corridor and focus route option development along the former Stony Crossing Railway corridor.

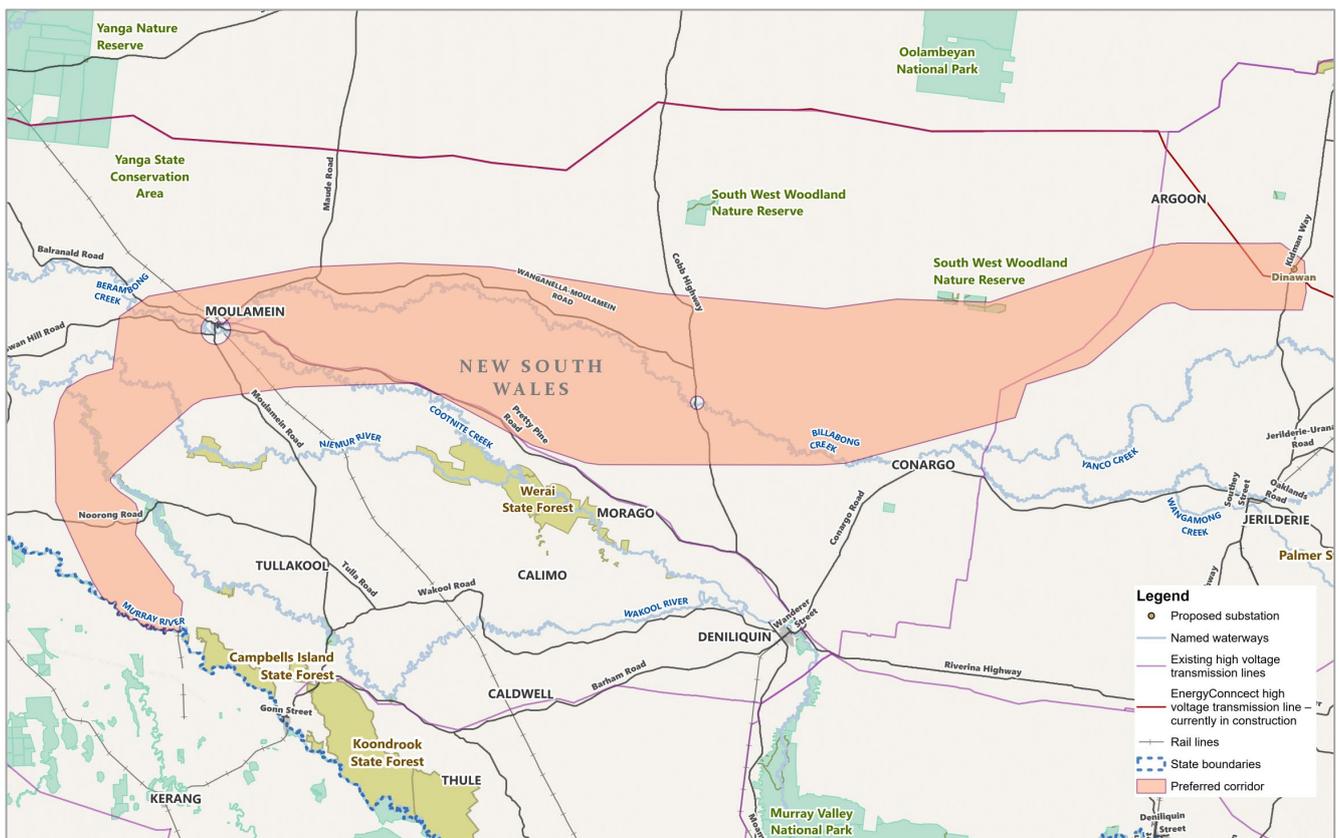


Figure 3.1 Preferred corridor

3.1. Details of amendments to the proposed corridor

The following sections explain the changes to the three main sections (refer to Figure 3.2):

- The Victoria/NSW border and Moulamein
- Moulamein and the Conargo
- Conargo and Dinawan.

3.1.1. Victoria/NSW border and Moulamein

The draft preferred corridor for the western section provided a corridor that included a:

- Wide area of potential number of crossing locations of the Murray River at the Victoria/NSW border
- Broad area to the west of the Murray Valley National Park (Wetuppa Forest) to allow for a broad range of future route options
- Corridor alignment that avoided Moulamein by being aligned to the south of the township.

Proposed changes

- Reduce the width of the western side of the recommended preferred corridor, focusing route option development along the former Stoney Crossing Railway corridor which is generally located between the Murray River and the Murray Valley National Park (Wetuppa Forest)
- Widen the recommended preferred corridor to include an area north of Moulamein, and add a 4km wide exclusion zone around the main township
- Consider opportunities to follow existing travelling stock routes within this area
- Modify the width of the corridor at the Victoria/NSW border crossing to provide a narrower corridor around 10km wide at this location which aligns with the preferred corridor developed by TCV in Victoria.

Reasons

- Community suggestion to investigate areas north of Moulamein, including following travelling stock routes
- Community preference to reduce the potential impacts of the project on existing irrigated land around Moulamein, in particular lands associated with rice production
- Reflects the narrower area now agreed by Transgrid and TCV (managing the Victorian component of the project) for a mutual crossing location for the transmission line between Victoria and NSW.

3.1.2. Amendments between Moulamein and Conargo

The recommended preferred corridor for the central section provided a corridor that included:

- An east-west alignment between 10 kilometres and up to around 15 kilometres in width, generally following Pretty Pine Road and Carrathool Road along the southern border

Proposed changes

- Widen the corridor further to the north, allowing for additional route options to be considered, including a route located generally parallel with the Wanganella-Moulamein Road.

Reasons

- Community suggestion to investigate areas north of the draft preferred corridor, including following travelling stock routes and Wanganella Road
- Community preference to increase the distance of potential route options away from and the identified wetlands associated with Werai State Forest and Morago State Forest (and associated bird flight paths associated with these sites).
- Community preference to reduce the potential impacts of the project on existing irrigated land
- Community preference to increase the distance of potential route options away from the township of Wanganella
- Community preference to avoid the areas of mapped Plains Wanderer habitat.

3.1.3. Amendments between Conargo and Dinawan

The recommended preferred corridor for the eastern section provided a corridor that included:

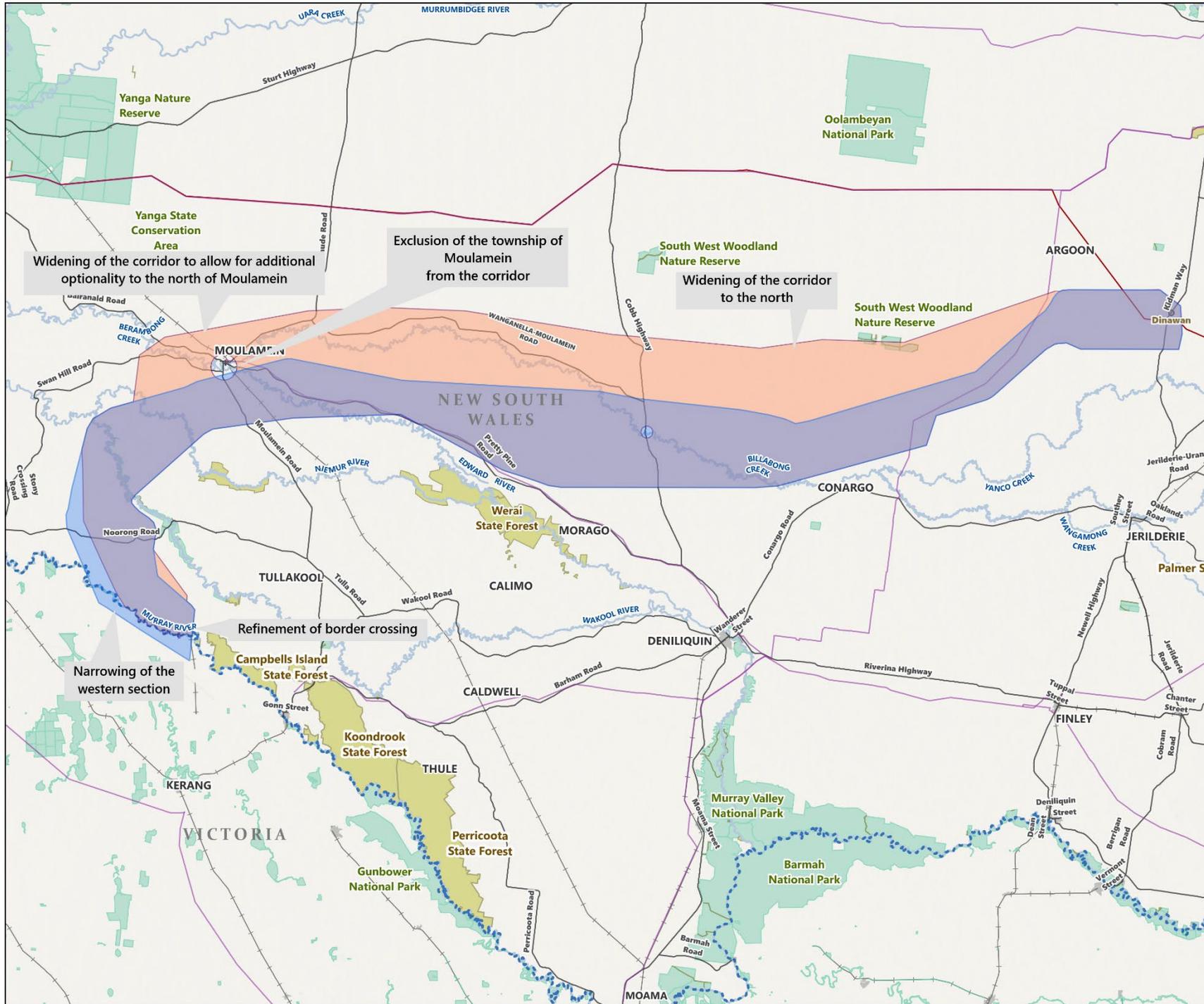
- A narrower alignment of around 5 kilometres providing a parallel alignment with the existing 132 kV Deniliquin to Coleambally transmission line
- A wider section up to around 10 kilometres wide east of the existing 132 kV transmission line to the Dinawan substation site.

Proposed changes

- Widen the corridor at Moonbria (between Carrathool Road and McLennons Bore Road) by between an additional 1-8 kilometres. This would allow for additional route options that take into account the renewable energy developments to the west of the Dinawan Substation.

Reasons

- Community suggestion to investigate areas north of the draft preferred corridor, including following travelling stock routes and Mabins Well Road
- Community preference to reduce the potential impacts of the project on existing irrigated land
- Community preference to increase the distance of potential route options away from the township of Wanganella
- Community preference to avoid the areas of mapped Plains Wanderer habitat
- Community suggestion to avoid conflicting with other renewable energy developments to the west of the Dinawan substation.



Legend

- Proposed substation
- Named waterways
- Existing high voltage transmission lines
- EnergyConnect high voltage transmission line – currently in construction
- Rail lines
- - - State boundaries
- Expanded corridor
- No change to corridor
- No longer in the corridor



0 10 20 30
Kilometers

Coordinate system: GDA2020 MGA Zone 55
Scale ratio correct when printed at A3

1:630,000 Date: 5/10/2023

Data sources: DPE, DELWP, Geoscience Australia, World Hillsshade, Esri, CGIAI

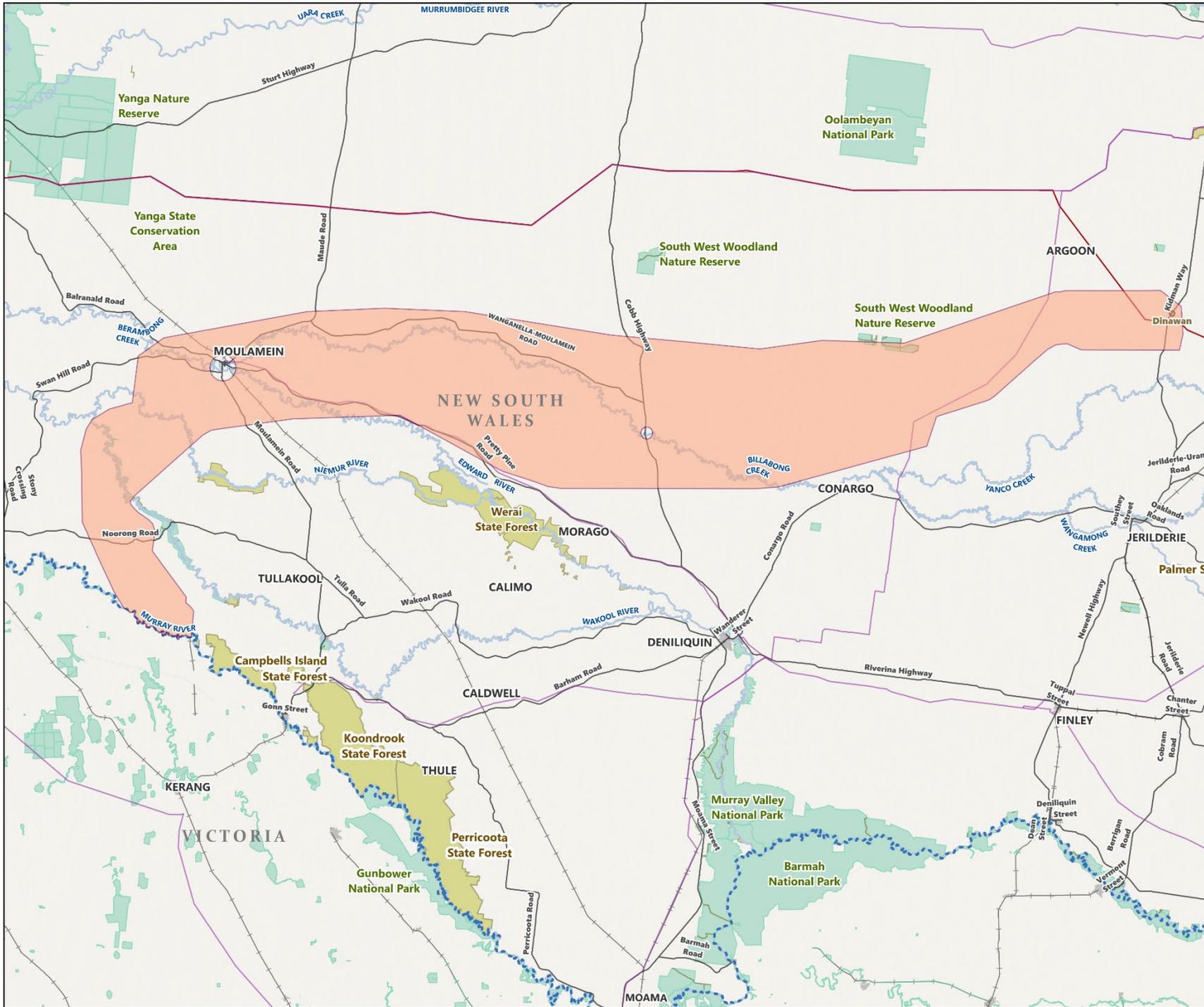
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3.2. Preferred corridor

Based on technical, environmental, and social and community constraints, and community and stakeholder input gathered during the public exhibition of the Draft Corridor Report, the amended Option 1 (Swan Hill North) corridor has been identified as the preferred corridor for progression to the route options development phase of the project.

The amended corridor is shown in Figure 3.3.

Figure 3.3
Preferred corridor



- Proposed substation
- Named waterways
- Existing high voltage transmission lines
- EnergyConnect high voltage transmission line - currently in construction
- Rail lines
- State boundaries
- Expanded corridor



Coordinate system: GDA2020 MGA Zone 55
Scale ratio correct when printed at A3

1:630,000 Date: 5/10/2023

Data sources: DPE, DELWP, Geoscience Australia, World Hillshade: Esri, CGIAIR

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4. How the actual route will be chosen

Looking at the amended preferred corridor, Transgrid will identify a series of potential route options, including a recommended preferred route option.

This recommended preferred route option will be placed on public display in the first half of 2024 to give the community and stakeholders an opportunity to review the recommended route and provide feedback.

Following community consultation, Transgrid will confirm the preferred route option and begin the detailed environmental assessment and approvals phase.

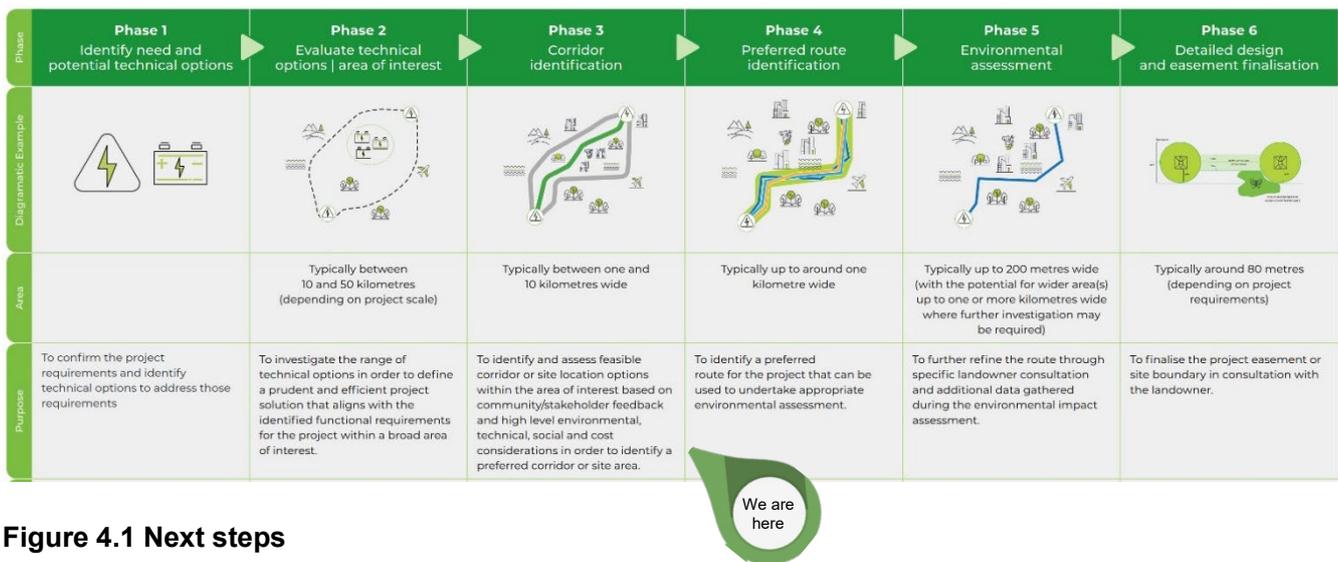


Figure 4.1 Next steps

4.1. Preferred route identification and social impact assessment

Transgrid will seek to minimise any potential impacts to current agricultural practices and environmental values within the region. This will only be possible with continued input from landowners and community members and require an ongoing and transparent dialogue.

We aim to achieve this through:

- Continuing discussions with potentially affected landowners throughout the route development process to further identify:
 - how each property is used
 - areas of land with greater agricultural production that should be avoided
 - areas of environmental significance or where private conservation initiatives exist
 - where on-farm infrastructure is located and how it is used
 - areas where there may be minimal impact to farming operations that could potentially support a transmission easement
- Determining a preferred route that will:
 - reduce potential fragmentation or severance of agricultural land, through disruption to agricultural operations

- avoid wherever possible existing farm infrastructure and assets that would be adversely affected by a transmission line easement, such as areas with existing irrigation systems, rice paddies, sheds and silos, or calving and lambing yards.

Overall, **Transgrid will aim to design the final transmission line to cause the least overall impact to agricultural land or disruption to agricultural operations.** While most existing farming operations would generally be able to continue within a majority of the final transmission line easement, we would nevertheless complete a detailed agricultural assessment as part of the environmental impact assessment for the project once the preferred route has been identified.

This work will inform a broader Social Impact Assessment, which is standard for projects of this scale. The Social Impact Assessment will look at many of the areas of concern raised in community feedback, such as loss of income and employment, along with less tangible impacts to community cohesion which can accompany large scale developments and the changes to local economic conditions they can bring.

This would include issues such as:

- How the local labour and supply markets respond to opportunities created by the project and what this means for existing industries
- How the local housing and accommodation supply responds to an influx of labour and how accommodation camps can be used to offset adverse impacts
- How to prepare local communities to participate in major project opportunities in a sustainable way
- How to provide enduring community benefits through skills development, education and training, and investment opportunities.

5. Answers to specific questions

5.1. Why do we need to build this transmission line?

Regardless of how energy is generated, it needs to be transferred from the point of generation to the distribution network to reach homes and business. Interconnectors, like VNI West, connect the states together so energy can be shared quickly and efficiently from where it is generated, when and where it is needed.

The project will:

- Increase the capacity to share electricity between NSW and Victoria
- Improve the reliability and security of electricity supply in both states
- Increase access to renewable energy sources
- Create an economic boost for regional communities by providing jobs, training and local supply contracts
- Help achieve renewable energy targets and the overall decarbonisation of the NEM, while continuing to deliver safe, reliable and affordable electricity to consumers.

The analysis of the project is contained in the initial [Regulatory Test for Investment \(RIT-T\)](#).

5.2. With the speed of change in the energy sector, how can you be sure that transmission lines are the right solution?

The Integrated System Plan (ISP) is a whole-of-system plan produced by the Australian Energy Market Operator (AEMO) that provides a roadmap for efficiently developing the National Electricity Market (NEM) over the next 20 years and beyond. VNI West was identified as an actionable project in the 2022 ISP.

The ISP's primary objective is to optimise value to end consumers by designing the lowest cost, secure and reliable energy system capable of meeting any emissions goals determined by policy makers. The ISP takes into account existing technologies and anticipated innovations in Distributed Energy Resources (i.e., solar roof panels), large-scale generation, networks and coupled sectors such as gas and transport. This plan is reviewed and updated every two years in response to changes in energy needs and use as well as technological changes. As part of this process, AEMO consults widely with stakeholders at both an industry and consumer level.

[More information can be found at the AEMO website.](#)

5.3. Why didn't we have more consultation time?

We acknowledge that some landholders and community members felt there was not enough time to understand and process the information or provide feedback and insight on the draft preferred corridor.

We understand that people were generally unaware that the region, particularly at the western end of the draft project corridor, had been identified as a potential location for the VNI West transmission line project. Landholders also told us of a delay in receiving information about the project and their property and the closing date for submissions.

We also recognise that our advertising campaign (see Appendix 1) may not have reached everyone in the community.

This is why we decided to extend the consultation period for the Draft Corridor Report, which was on exhibition for 10 weeks, from Friday 30 June to Friday 8 September.

Consultation does not stop here. Extensive community engagement will accompany the route development process and environmental assessment, and our landholder relations team will continue to directly engage with property owners regarding the potential interaction between the project and landholdings. This will help us work through concerns and issues in much greater detail as the project develops and a defined route is identified.

We also encourage concerned members of the community to contact the project team directly at any time:

- Email – vniw@transgrid.com.au
- Website – transgrid.com.au/vniw
- Phone – 1800 955 588

5.4. Why can't we use the corridors near Moama?

The original Draft Corridor Report included three options with a border crossing point at Moama. However, a Victorian ministerial ruling under National Electricity (Victoria) Act has removed the potential for a crossing point between Victoria and NSW within the vicinity of Moama / Echuca.

5.5. What about a different corridor altogether?

Some people thought that a more direct route or a line following the existing Deniliquin to Barham distribution line should be considered. However, a more direct corridor or one following this line would be highly constrained on the approach to the Victoria/NSW border crossing the area between Yallakool and Barham presenting significant environmental and social impacts. These constraints include extensive Ramsar wetlands and wetlands included on the Directory of Important Wetlands Australia (DIWA) within the Koondrook and Perricoota Forests, along with the township of Barham, which would not be able to be avoided.

5.6. Why can't we put the lines underground?

While the installation of High Voltage Direct Current (HVDC) underground cables is becoming more widespread globally in cities, over long distances energy companies do not put high voltage alternating current (HVAC) cables underground for a range of reasons including:

- The cost of undergrounding is typically several times more expensive than for an overhead transmission line.
- Over long distances, underground HVAC cables lose power and require additional, large above-ground facilities called 'reactive compensation' sites installed roughly every 50km.
- Underground HVAC cables are installed in wide trenches, typically filled with a thermally rated concrete to keep the cable temperatures stable. This results in extensive environmental impact and soil sterilisation. Large, excavated pits are also required every 500m where sections of cable are joined together.

- Cultivation above underground cables is limited to low rooted crops resulting in more restrictive easement conditions and a greater agricultural impact when crossing private land.
- Repairing underground cables is typically more challenging and time consuming than for overhead lines, decreasing power reliability for energy consumers.

5.7. Why haven't the environmental, heritage and engineering assessments been more detailed?

The original corridor options were compared at a reasonably high level using desktop research and did not include any on ground assessment. Now we have an amended preferred corridor incorporating community feedback, the next stage is to make much more detailed, on ground assessments, as we narrow down the best route.

We acknowledge that the biodiversity hot spot surveys were limited to accessible areas and specifically targeted key biodiversity values known to be poorly identified from existing desktop assessments, notably the mapping of Murray Valley grassland and derived Weeping Myall, certain threatened ecological communities and breeding bird habitats at waterway crossings. Also, we have yet to undertake a detailed assessment of threatened species, which is a standard part of our environmental assessment process. A detailed Biodiversity Development Assessment Report (BDAR) will be prepared to support the EIS during the impact assessment phase of the Project. This assessment will provide a comprehensive assessment of all potential biodiversity impacts associated with the final design of the Project.

Some feedback referenced additional information resources that should be considered during route planning and development. The NSW Murray Biodiversity Management Plan (Murray Catchment Management Authority, December 2012) is a good example of such a reference, which will be considered further through the next phase of the route selection process and within the detailed assessment of EIS. The identified areas of active management and values within this document reflect many of the base layers and other information used within the Draft Corridor Report (including the preliminary biodiversity assessment presented in Appendix B, section B.1). Vegetation mapping and species records will be progressively updated as project planning continues to ensure route development and environmental impact assessment is undertaken with the best available information.

We have commissioned a flood study to support the assessment. Flood information for the region is fragmented across different organisations, (Murray Darling Basin Authority, local councils, and Water NSW) and doesn't take into account the 2022 flooding events.

We have also taken on board the feedback that relying on Aboriginal Heritage Information Management System (AHIMS) data to indicate a low-heritage potential was not comprehensive, noting that the AHIMS database indicates known sites only based on prior archaeological assessment. Assessment of potential Aboriginal cultural heritage impacts will continue in increasing detail through the route development and environmental assessment stages of the project. This will involve on-country survey work conducted in consultation with public and private landowners.

5.8. Can we put a new a substation between Hay and Balranald rather than south of Coleambally?

This question was raised because people pointed out that moving the substation location would result in a shorter corridor. The new substation south of Coleambally (known as the Dinawan substation) was previously identified and approved as part of the EnergyConnect transmission project and is already under

construction. As such, Dinawan substation is not proposed to be relocated. No additional substation will be constructed between Hay and Balranald, as this is not required for VNI West and would add significant cost to the Project.

5.9. When powerlines cross waterways, won't they interfere with vessels?

People were concerned about the effect a transmission line would have on the passage of paddle steamers, and other vessels using the Murray, Edward, Niemur and Wakool rivers, and Billabong Creek.

The final alignment of the transmission line will seek to minimise the number of waterway crossings as far as possible. However, due to the scale and general location of the project, some waterway crossings will be required. Where the transmission line crosses over waterways, it will be strung from transmission towers on either side of the waterway. No transmission towers will be located within existing waterways. The project will not interfere with the existing passage of boats or other vessels along these waterways.

5.10. When will construction start?

Construction is currently estimated to begin in 2026, subject to receiving all relevant environmental and planning approvals, with delivery estimated by 2028.

5.11. How will construction affect farming activities, such as livestock grazing and movement?

During construction, individual sites will be established at transmission tower locations. Outside these sites, existing farming activities, such as livestock grazing and movement, would generally be able to continue, noting there will be some project activities, such as vegetation clearing and the construction of access tracks which take place outside the tower construction sites. We will work with individual land holders to minimise impacts throughout the project, including by developing Property Management Plans that identify requirements for access and controls around construction activity for work within each property.

5.12. What sort of equipment and access routes will be used?

Equipment is likely to include general work vehicles, excavators, trucks, concrete mixers and cranes throughout various portions of the construction process. Further information regarding specific construction methods, access requirements and construction equipment would be detailed in the future environmental impact statement (EIS) for the project.

Transgrid's first preference is to use existing roads and tracks to minimise impacts. The construction footprint would identify any required access tracks to access each transmission tower site.

5.13. How will transmission infrastructure and its maintenance affect farming activities?

Transgrid periodically inspects and maintains transmission tower structures and carries out vegetation maintenance to prevent it from interfering with power lines. We will try to coordinate these activities around farm activities to minimise their impact.

There would be some movement and activity restrictions for some forms of agricultural activities, such as ongoing cropping directly at the transmission line tower bases or potential restriction of the use of some tall

farming equipment directly within the transmission line easement. For most activities, including livestock grazing and movement, existing operations will be able to be maintained.

The [Easement Guidelines \(PDF\)](#) provide information on issues such as safe approach distances to transmission lines and structures and what machinery heights are permissible when working under live lines.

5.14. Can the new transmission line interfere with GPS-based farming equipment?

Transgrid's transmission lines are required to comply with Australian Standard 2344 (AS 2344), which sets out limits for electromagnetic interference from overhead powerlines and high voltage equipment.

We recently completed a series of studies to assess the potential for similar transmission lines to interfere with farm equipment. The studies identified that the potential for interference from the transmission line is only likely to affect VHF receiving antennas within about 50 metres of the transmission line.

For properties close to existing base stations, the VHF signal would be so strong that it would not be subject to interference from the transmission line.

Once the final transmission line alignment has been determined, the EIS process will further consider potential GPS impacts. We will work with landowners to identify solutions in areas of weak VHF signal where potential GPS signal interference could occur.

5.15. What about biosecurity?

Some community members are concerned that the construction and maintenance of the proposed transmission line would result in disease, pests and weeds being introduced onto local properties.

Transgrid uses a range of biosecurity measures and protocols as part of our standard operations to minimise the risk of off-site transport or spread of disease, pests or weeds when working on easements across NSW and the ACT. As part of the ongoing consultation with property owners within the preferred corridor, we are keen to identify any areas of potential biosecurity risks so these can be identified as constraints and considered as part of the ongoing identification of potential route options.

Where Transgrid needs to gain access to properties as part of future phases of the project, including construction, we will work with property owners to ensure appropriate biosecurity controls minimise the risk of off-site transport or spread of disease, pests or weeds. These controls include:

- Contacting landowners prior to accessing properties
- Inspecting and cleaning vehicles, machinery and personnel equipment before moving it on and off construction work areas or between properties
- Minimising movements across adjoining farmland including trip numbers and locations.

5.16. What about the visual impact?

People are concerned that overhead transmission lines would mar the picturesque landscape, diminishing the value of rural lands and affect the overall appeal of the region.

We will try to reduce the visual disruption to private properties near the transmission lines by maximising the spacing of transmission line structures wherever possible. Potential screening may also be developed

in consultation with affected landowners during the EIS and detailed design stages of the project in an effort to reduce disruption to views on private domain.

5.17. What about electric and magnetic fields (EMF)?

Internationally, almost 3,000 studies have been carried out into EMFs. Leading health bodies such as the World Health Organisation, the US National Institute of Environmental and Health Sciences and the UK National Radiological Protection Board have evaluated the research to assess the likelihood of health effects associated with exposure to EMFs.

In Australia, the [Australian Radiation Protection and Nuclear Safety Agency \(ARPANSA\)](#) has advised that *“The scientific evidence does not establish that exposure to the electric and magnetic fields found around the home, the office or near powerlines causes health effects...There is no established evidence that the exposure to magnetic fields from powerlines, substations, transformers or other electrical sources, regardless of the proximity, causes any health effects.”*

The World Health Organisation (WHO) has advised that: *“...current evidence does not confirm the existence of any health consequence from exposure to low level electromagnetic fields.”*

Transgrid adopts a precautionary approach to the management of electric and magnetic fields by:

- taking electric and magnetic fields into account in the design and location of new facilities
- closely monitoring ongoing research and reviews by scientific panels and international policy developments
- regularly reviewing our policies and practices in light of the latest scientific information
- measuring field strengths in and around our own installations and other places where appropriate
- providing up-to-date information to interested people on request.

Our [EMF fact sheet](#) provides general information on electric and magnetic fields in relation to our network as well as resources for further information.

5.18. What are we doing to reduce impacts on threatened species?

We have noted the specific threatened and endangered species of concern to the community, as well as those listed under the *Biodiversity Conservation Act 2016* (BC Act) and the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) and would seek to avoid these species wherever possible when developing route options.

Once we have the final project design, extensive ecological studies and on-site surveying will be conducted, in accordance with NSW and Commonwealth guidelines, in the surrounding vicinity to identify any potential threatened species.

5.19. Why haven't Biodiversity Stewardship agreements been considered in the corridor assessment?

Transgrid recognises the environmental and economic benefits that Biodiversity Stewardship agreements bring. Information about these Stewardship Agreements is not publicly available, and we are working

through the licensing process to obtain this information which will then form part of our assessment during route development.

5.20. Will you be including the carbon impacts, including the amount of native vegetation that could be removed when looking at potential routes?

The assessments undertaken as part of the route development process will quantify the extent of native and other vegetation that could potentially result from route options evaluated. These impact estimates will then be further quantified during the Environmental Impact Statement.

5.21. Won't new transmission lines increase bird strikes?

We included a high-level consideration of transmission line strike in the Draft Corridor Report as part of the assessment of impacts to key wetland bird flyways and migratory patterns. Line strike is a known threat for large low flying birds, including the Bush Stone Curlew. This threat will be assessed further in detail during the route selection process and as part of the BDAR prepared to support the EIS during the impact assessment phase of the project. All bird species and avifauna will be subject to a detailed risk assessment to quantify potential impacts and likelihood of line strike. We will also consider the impact of the final transmission line on wildlife movement pathways within known ecological corridors.

Ecological studies and on-site surveying to identify any potential threatened species within the vicinity of the final project design will also be undertaken in accordance with regulated survey guidelines. These survey efforts will be completed in accordance with the relevant NSW and Commonwealth guidelines for biodiversity surveys and will include investigating waterbirds and other wetland species. As noted previously, a detailed BDAR will be prepared to support the EIS during the impact assessment phase of the project. This assessment will include a comprehensive assessment of all potential biodiversity impacts associated with the final design of the project, including the potential for the transmission line to impact on bird species (and the potential for increase bird strike risks). In particular, the assessment would concentrate on the potential impacts within the greenfield section that do not currently have electrical infrastructure.

Various mitigation measures will be outlined in the BDAR and EIS to reduce potential impacts from bird strikes. Such measures may include (subject to final design and impact assessment) conductor line-marking and use of bird diverters, such as 'flapper' style devices. Where residual unavoidable impacts are considered likely to species, offsets will be required in accordance with State and Commonwealth regulations that directly provide for those species being potentially impacted.

5.22. What about the critically endangered Plains Wanderer?

The corridor has been amended based on community feedback to provide additional width to the north of Conargo so route options can be identified that seek to avoid or minimise impacts to mapped Plains Wanderer habitat. One of the key intentions of the route selection phase (with respect to biodiversity impacts) will be to seek to avoid all areas of mapped Plains Wanderer primary habitat wherever possible.

A detailed biodiversity development assessment report (BDAR) will also be prepared to support the EIS during the impact assessment phase of the project. This assessment will provide a comprehensive assessment of the potential biodiversity impacts associated with the final design of the project, including full consideration of potential impacts to the critically endangered Plains Wanderer species. The EIS and BDAR assessment will also seek to minimise any residual impacts by implementing various avoidance

measures. These measures will be determined in future phases of the project. They may include micro-siting of transmission towers, identifying access track locations that avoid impacts and adopting specific construction techniques that will further eliminate potential impacts.

5.23. How can we avoid impact to wetlands?

People want to protect biodiversity in areas such as Wanganella Swamp, the Edward and Wakool River floodplain, Tally's Lake, the Brechin wetland and the agricultural wetlands that rice fields create. One of the key issues associated with the concern regarding overall wetland impacts was the waterbird flight paths and the high likelihood of collisions with the proposed infrastructure associated with bird species in these wetlands.

Transgrid recognises that a substantial portion of the western section of the recommended preferred corridor would cross wetland areas between the Victoria/NSW border and south of Moulamein. As a result of the extensive area that these generally low-lying areas cover, it may not be possible to avoid potential wetland areas.

Section B.1.2 and Figure B.1 of the Draft Corridor Report (Appendix B) acknowledged that the area of interest included several wetlands, including Ramsar wetlands and wetlands listed on the [Directory of Important Wetlands Australia \(DIWA\)](#). Ramsar wetlands and DIWA areas represent a high biodiversity constraint. As such, the preferred corridor avoids these areas with the exception of minor encroachments of DIWA areas within Werai State Forest adjacent to Pretty Pine Road. We also note that a number of small, localised wetlands may develop during years of high rainfall in areas not identified as formal wetland areas such as those listed as Ramsar wetlands or DIWA areas.

A key consideration in determining each of the possible corridors identified was to avoid wherever possible direct impact to these wetlands. These impacts were also considered as part of the MCA undertaken to assess each of the identified corridors (refer to Appendix F and Appendix G). Further consideration will be undertaken during the route selection phase to identify potential route options that both maximise the distance away from known wetland areas (such as Koondrook and Perricoota Forests and the Werai State Forest) as well as minimise impacts to other potential wetland areas, including the agricultural wetlands that rice fields create.

5.24. What about the impact to vegetation?

People are concerned about general native vegetation loss and specific impacts to red gums adjoining the Murray River, old hollow bearing trees and a large area of saltbush that was established in the 1990s to prevent soil erosion.

The final project will result in some unavoidable impacts to a range of vegetation. Transgrid will seek to avoid and minimise potential impacts on all biodiversity values, including avoiding areas where highly significant vegetation is concentrated.

Not all vegetation within the preferred corridor would need to be removed to accommodate the final transmission line. Depending on the location of the transmission line, the final easement may require up to 70 metres of vegetation at any one location. Depending on the final easement alignment and vegetation types impacted, only partial clearing of some vegetation species may be required where it meets minimum clearance guidelines. These will be outlined in the EIS for the transmission line.

We will also seek to reduce the amount of centreline vegetation clearance required during line stringing and investigate the use of drones to string transmission lines across sensitive environmental areas.

5.25. What about the Indigenous heritage impact?

The area between Moulamein and the Murray River is considered to be abundant in cultural heritage values, with a high number of cultural sites reported to be located throughout the landscape. Some submissions contend that developing a transmission line within the recommended preferred corridor would have the potential to cause irreversible damage to culturally significant site, including a potentially culturally sensitive area referred to as the Nacurrie Man site.

We have taken these concerns on board, and also note that a number of the areas along the preferred corridor would include undisturbed areas around creeks and waterways that would likely have a high potential for impact to undiscovered sites.

The process for mitigating any potential risks to Indigenous heritage will begin with detailed studies, including on-ground assessments. Initially, this will include undertaking a predictive modelling assessment of the preferred corridor to identify areas of potential higher risk of identifying potential Indigenous sites to assist in identifying areas for potential targeted site walkover investigation during the route option identification and assessment phase. Areas of potential cultural significance identified in community feedback will also be considered as part of this predictive modelling.

Once the preferred route has been determined, an Aboriginal Cultural Heritage Assessment will include a detailed walk over of the overall route by representatives from the relevant local Indigenous groups and specialist heritage advisors. These field investigations will be used to further refine the proposed route with the aim of avoiding all areas of identified heritage wherever possible.

Finally, the engineering design of the project will prioritise:

- Minimising the amount of alignment that impacts previously undisturbed areas
- Minimising waterway crossings and considering easement and the tower setbacks from creeks
- Identifying construction elements such as access tracks that avoid the need for further temporary clearing (such as using existing access tracks where possible).

Nacurrie Man is not a listed AHIMS site, but it is documented in various papers, such as Murray River Societies in Australia through the Lens of Bioarchaeology. We will ensure this site and the potential for others like it are considered in ongoing investigations.

5.26. What about the Native Title Registration underway?

The application for Native Title registration is noted. Based on the location of the property referred to, the refinements made to determine the preferred corridor would mean that this property would no longer be affected.

5.27. What about impact to historic heritage sites?

In addition to formally listed heritage items, the new preferred corridor may contain a number of currently as-yet not formally listed historical sites, including the 'Blue Gate' (Cobb and Co), the Moulamein Court

House, older shearing sheds (including Nyang and Chah Singh), a number of local, historic homesteads and Moonbria House and shearing shed).

Wherever possible, we will avoid all items of identified heritage, including both formally listed items and other items of potential historic significance to the local community. Once the preferred route has been determined a detailed Historic Heritage Assessment will consider any potential heritage impacts.

5.28. What about the increased risk of bushfires? Who is liable?

The incidence of ignition from high voltage transmission lines is rare, given Transgrid's infrastructure design and operational easement clearing requirements.

Transgrid actively manages a range of potential ignition sources for operational high voltage transmission lines and equipment, including:

- Trees or tree branches falling/touching conductors
- Bird strikes
- Equipment malfunction
- Heat causing power lines to sag and connect with the ground/vegetation
- Lightning strikes
- Failure of power line including breakage of wires, poles, cross arms, insulators and associated equipment.

However, as noted above, the incidence of these ignition sources from high voltage transmission lines is rare. From a technical perspective, the final transmission line, when constructed, will be installed with two earth wires to protect the asset against lightning strike and safely transfer lightning surge to the ground, reducing the potential for a lightning-induced risk creating a bushfire associated with the transmission lines.

We also operate a rigorous network wide annual bushfire preparedness program, involving a combination of aerial survey, on-ground inspections and extensive vegetation management.

Should these controls not mitigate fire risk, Transgrid holds insurance policies to cover the risks of operating a transmission network. This includes cover for fires that are started by our network and result in third party property damage and / or bodily injury. In other words, Transgrid will be legally liable for any loss or damage to third parties for which it is found to be legally responsible.

Transgrid will continue to consider avoiding high-risk areas, such as mapped bushfire prone land. In addition, the final design of the proposed transmission line would look to mitigate the risk of bushfire impacts from, or to, the new infrastructure as far as practicable, through detailed mitigation measures in how the final design will be designed, operated and maintained. These measures may include requirements to undertake periodic fuel load reduction, manage asset protection zones and regularly inspect infrastructure.

5.29. Why can't we have more compensation? People get more for windfarm infrastructure

Windfarm developers are private companies that are not governed by legislation. Whereas, in the case of transmission lines, compensation is strictly governed by the *Land Acquisition (Just Terms Compensation) Act 1991* (Land Acquisition Act 1991). Transgrid is required to negotiate the terms of the easement and compensation payable for that easement interest with landholders. These negotiations will be based on independent valuation advice based on market value for the easement, reasonably incurred legal and valuation fees in dealing with the acquisition as well as any increase or decrease in the market value of the remaining portion(s) of the property after acquisition. Landholders affected will also be entitled to obtain their own valuation advice to advise on compensation. Compensation is based on comparable market transactions. In most cases, landholders reach an agreement with Transgrid.

In addition to this negotiated compensation, if part of a property is required for the final transmission line easement, for every kilometre of the new transmission line easement, the property owner will be entitled to be paid \$10,000 per annum (indexed to CPI) over 20 years under the new Strategic Benefits Payments scheme. The Strategic Benefits Payment scheme is in addition to compensation determined under the Land Acquisition Act 1991.

Further information on easements and the compensation process is detailed in Transgrid's [Landowner Easement and Compensation Guide](#) (PDF).

6. References

Murray Catchment Management Authority, December 2012. *NSW Murray Biodiversity Management Plan*

NSW Legislative Council, 2023. *Feasibility of undergrounding the transmission infrastructure for renewable energy projects,*

Transgrid, 2023. *Draft corridor report*

Appendix A How we consulted on the preferred corridor option

Our community engagement teams talked with landowners and residents across the study area and along the proposed corridors. Early community engagement ensures that people living or working near these corridors are kept informed at all stages of the planning process and have an opportunity to have their say.

Letters to landholders in the corridor

An introductory letter was sent on 30 June 2023 to 277 landholders in the corridor, introducing the project, requesting contact details, offering to meet landholders one on one, and advising of Landholder Q & A sessions. 20 of these letters were returned to sender. A second letter was sent on 2 August 2023 to 247 landholders (fewer sent out due to updated contact details), advising of the extension of consultation, requesting contact details, offering to meet landholders one on one and providing maps of their property/ies in relation to the corridor. 16 of these letters were returned to sender.

Advertising

A large-scale print advertising campaign was undertaken to promote:

- initial program of community information sessions: 3-5 July 2023
- landholder specific Q & A sessions: 17-18 July 2023
- additional information sessions: 1-4 August 2023/Call for submissions by 4 August
- additional information sessions: 15-17 August and 29 Aug – 1 September/Call for submission by 8 September.

A summary of the advertising undertaken is presented in Table A.1.

Table A.1 Summary of advertising

Type	Dates	Channel	Reach/circulation
Print media advertising	22 & 29 June 2023	The Land	112,512
	20 & 27 June 2023 11, 14, 18, 21, 25, 28 July 2023 08, 15, 22 August 2023	Deniliquin Pastoral Times	2,441
	21 & 28 June 2023 12, 19, 26 July 2023 02, 09, 16, 23 August 2023	Finley Southern Riverina News	1,497
	22 & 29 June 2023 13, 20, 27 July 2023 03, 10, 17, 24 August 2023	The Koondrook Barham Bridge	1,200
	20 & 27 June 2023 11, 14, 18, 21, 25, 28 July 2023 08 & 15 August 2023	The Swan Hill Guardian	2,995
	02 & 09 August 2023 16 & 23 August 2023	The Hay Riverine Grazier	1,000

Type	Dates	Channel	Reach/circulation
Digital advertising	21 July 2023	Email	80 – Confirmation to participants that closing date for submissions extended until Friday 8 September.
	26 July 2023		80 – Presentation and Q&A notes emailed to participants from Landholder Q&A Session
	30 June – 8 September 2023	Website	4,934 page views
	25 – 30 July 2023	Facebook - geo targeted to the following localities: Deniliquin, Conargo, Wakool, Jerilderie, Barham, Cobramunga, Gonn, Tullakool, Moulamein, Mallan, Tooranie	15,828 (the number of people who saw the ad at least once)

Key Stakeholder Briefings

Briefings and project updates were provided to key stakeholders outlined in Table A.2.

Table A.2 Summary of key stakeholder briefings

Date	Stakeholders	Topics
13 February 2023	Justin Clancy MP, Member for Albury	VNI West Project briefing
19 April	Helen Dalton MP, Member for Murray	VNI West Project briefing
18 – 19 July 2023	Moama LALC Deniliquin LALC	Draft Corridor - Assessment of country
19 July 2023	Murray River Council Edward River Council Murrumbidgee Council Regional Development Australia – Murray National Parks and Wildlife Services Yanco Creek and Tributaries Advisory Council Local Land Services Murray (Board member)	VNI West project update and briefing on corridor report
26 July	Helen Dalton MP, Member for Murray	VNI West project update and briefing on corridor report
04 August	The Hon. Sussan Ley, Member for Farrer	VNI West project update and briefing on corridor report
07 August 2023	Murray Local Land Services	VNI West project update

Date	Stakeholders	Topics
	Murray River Council	
14 August 2023	Water NSW, Yanco Creek Modernisation project	VNI West project briefing
23 August	Helen Dalton MP	VNI West project briefing
31 August 2023	Yarkuwa Indigenous Knowledge Centre Aboriginal Corporation	VNI West project briefing
04 September 2023	Senator Perin Davey	VNI Draft corridor report update and consultation

Community information sessions

Transgrid held 14 community information sessions and two Q&A sessions for landholders in a two-month period (3 July 2023 to 1 September 2023). Details are captured in Table A.3 below.

Table A.3 Schedule of community information sessions

Date	Format	Location	Attendance
3 July 2023	Information session	Deniliquin	12 people
4 July 2023	Information session	Moulamein	24 people
5 July 2023	Information session	Jerilderie	8 people
17 July 2023	Landholder Q&A	Moulamein	90 people
18 July 2023	Landholder Q&A	Deniliquin	30 people
1 August 2023	Information session	Moulamein	24 people
2 August 2023	Information session	Moulamein	16 people
3 August 2023	Information session	Moulamein	18 people
15 August	Information session	Wanganella	6 people
16 August	Information session	Conargo	9 people
17 August	Information session	Moulamein	9 people
29 August	Information session	Moulamein	3 people
30 August	Information session	Moulamein	4 people
31 August	Information session	Deniliquin	2 people
1 September	Information session	Wanganella	2 people

Other consultation activities

Fact Sheets and guides

A range of fact sheets has been produced on topics related to the project and made available to landholders, and the community via the website. These include:

- [Project overview factsheet](#)
- [VNI West Route Development fact sheet](#)

- [VNI West Land access fact sheet](#)
- [VNI West Ecology Fact sheet](#)
- [VNI West Cultural Heritage Fact sheet](#)

In addition, the [Landowner easement and compensation guide](#) and [Easement guidelines](#) are available.

Interactive Map

An [interactive map](#) was developed and used as tool to elicit and illustrate information with landholders and the community. This map shows publicly available information in the categories of:

- highly constrained areas
- technical considerations
- environmental considerations and
- social considerations.

As well as contextual information such as local government boundaries, REZ locations major roads and towns and existing energy infrastructure. The map was also used to support conversations held at the community information sessions.

Appendix B How was the draft preferred corridor identified?

Identification of corridor options

Between February 2023 and July 2023, Transgrid assessed the technical, environmental and community and social constraints and opportunities identified within a broad area of interest. This assessment led to the development of a preliminary list of corridor options for the Project. The preliminary options took into consideration the Project needs, objectives and technical requirements of the Project and initial community and stakeholder feedback and engagement gathered during this period. These corridor options were presented in the Draft Corridor Report.

The development of the preliminary list of corridor options took into account two primary crossing points along the Victoria/NSW border within the broadly identified area of interest. The location of these crossing points within the area of interest generally comprised:

- a crossing point east of Swan Hill, generally between an area north west of Benjeroop (in Victoria) and the Campbells Island State Forest
- a crossing point west of the townships of Moama, generally between Moama and the Gunbower National Park/Perricoota State Forest.

A total of six preliminary corridor options were identified across two the broad crossing points including:

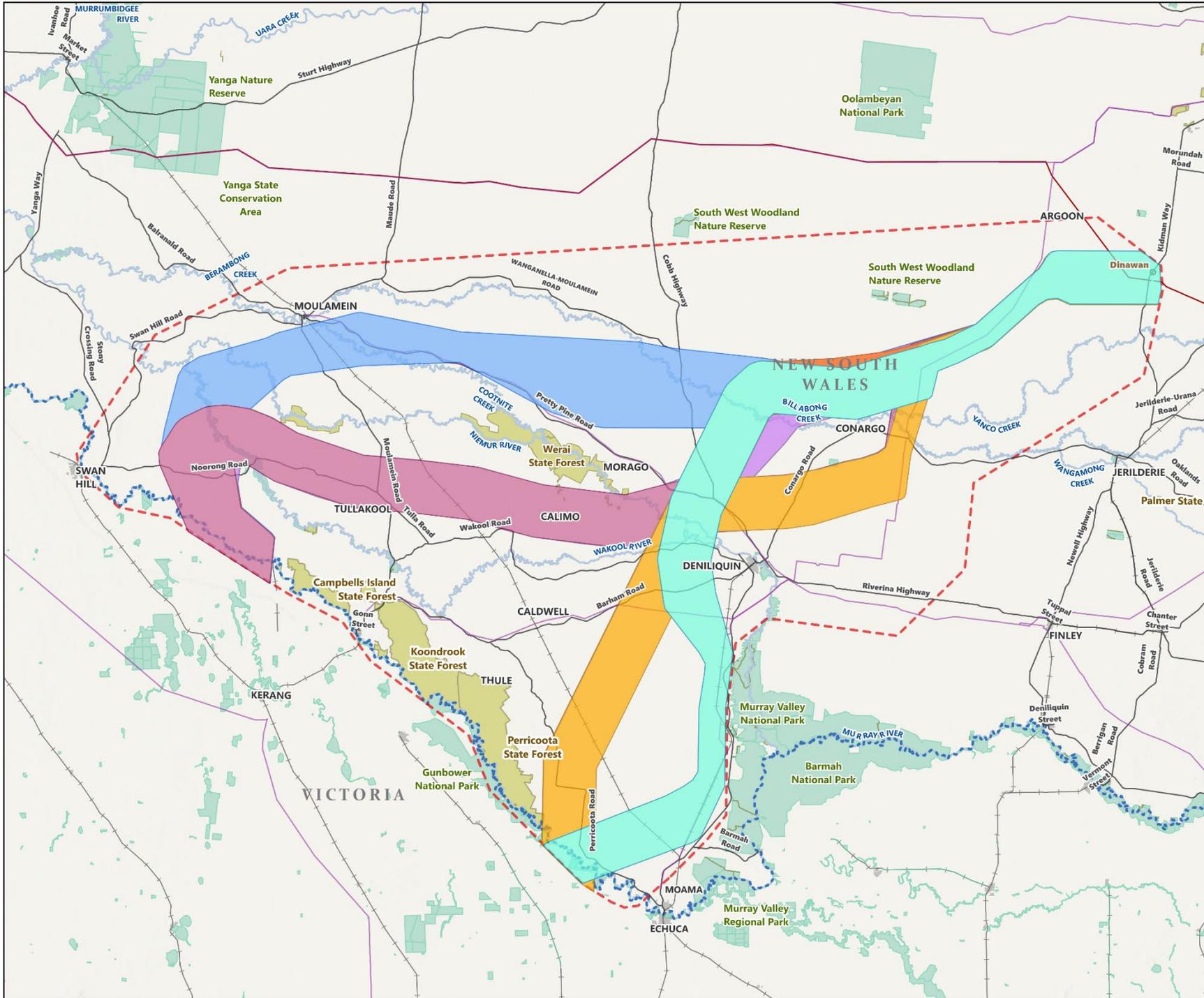
- three western corridors, providing a connection point between Victoria and NSW south-east of Swan Hill consisting of:
 - Corridor 1 – Swan Hill North
 - Corridor 2 – Swan Hill Central
 - Corridor 3 – Swan Hill Central (Alternative)
- three eastern corridors, providing a connection point between Victoria and NSW north-west of Moama-Echuca consisting of:
 - Corridor 4 – Moama West
 - Corridor 5 – Moama West (Alternative)
 - Corridor 6 – Moama East.

NOTE: a Victorian ministerial ruling under National Electricity (Victoria) Act made in May 2023 removed the potential for a crossing point between Victoria and NSW within the vicinity of Moama / Echuca. As a result corridor options 4-6 were no longer viable at the time the Draft Corridor Report was published. Nevertheless options 4-6 were included in the Report to demonstrate that assessment work had been done on corridor options in this area.

An overview of the six preliminary corridor options identified are shown in Figure A.1.

For the sections of corridors considered 'greenfield', a generally 10-kilometre-wide buffer was identified. For the sections of corridors that generally travel parallel to existing transmission easements, an approximate 5-kilometre-wide buffer was identified due to the proposed 'parallel' nature of these options. Where large areas of constraints were identified (such as a large number of river crossings or to provide flexibility for the final crossing location of the Murray River), certain parts of the corridor were widened to allow for ongoing route refinement to take place in subsequent phases of the development of the Project.

Figure A.1
Preliminary corridor options
identified within the area of interest



Legend

- Proposed substation
 - Named waterways
 - Existing high voltage transmission lines
 - EnergyConnect high voltage transmission line – currently in construction
 - Rail lines
 - - - Project Area of Interest
 - - - State boundaries
- Corridor Option**
- █ Corridor 1 - Swan Hill North
 - █ Corridor 2 - Swan Hill Central
 - █ Corridor 3 - Swan Hill Central (Alternative)
 - █ Corridor 4 - Moama West
 - █ Corridor 5 - Moama West (Alternative)
 - █ Corridor 6 - Moama East



Coordinate system: GDA2020 MGA Zone 55
Scale ratio correct when printed at A3
1:700,000 Date: 25/09/2023

Data sources: DPE, DELWP, Geoscience Australia, World Hillsshade, Esri, CGIAR
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Evaluation of the identified corridor options

The Draft Corridor Report considered a wide number of criteria across technical, environment and social and community considerations. These criteria were scored for each of the options identified and scored using a weighted scoring system. The results of the scoring of each corridor are shown in Figure A.2.

Assessment criteria	Swan Hill crossing location			Moama crossing location		
	Option 1	Option 2	Option 3	Option 4	Option 5	Option 6
	Score	Score	Score	Score	Score	Score
TECHNICAL CONSIDERATIONS	35	23	28	36	37	29
Land use	0	0	5	3	8	3
Engineering	9	8	8	18	17	11
Land use/land tenure	13	13	13	10	10	10
Bushfire	3	-3	-3	0	-3	0
Opportunities	10	5	5	5	5	5
ENVIRONMENT CONSIDERATIONS	24	15	15	26	26	18
Ecology	-6	-11	-11	0	0	-8
Heritage	18	18	18	20	20	20
Land use / land tenure	6	6	6	6	6	6
Floodplain and hydrology	-3	-2	-3	-1	-2	-1
Soil and contamination	4	4	5	1	2	1
Opportunities	5	0	0	0	0	0
SOCIAL AND COMMUNITY CONSIDERATIONS	18	15	15	-6	-9	-9
Land use	13	10	10	-3	-6	-6
Visual landscape and amenity	0	0	0	-3	-3	-3
Opportunities	5	5	5	0	0	0
Total score	77	53	58	56	54	38

Note: A higher score equated to an improved corridor outcome

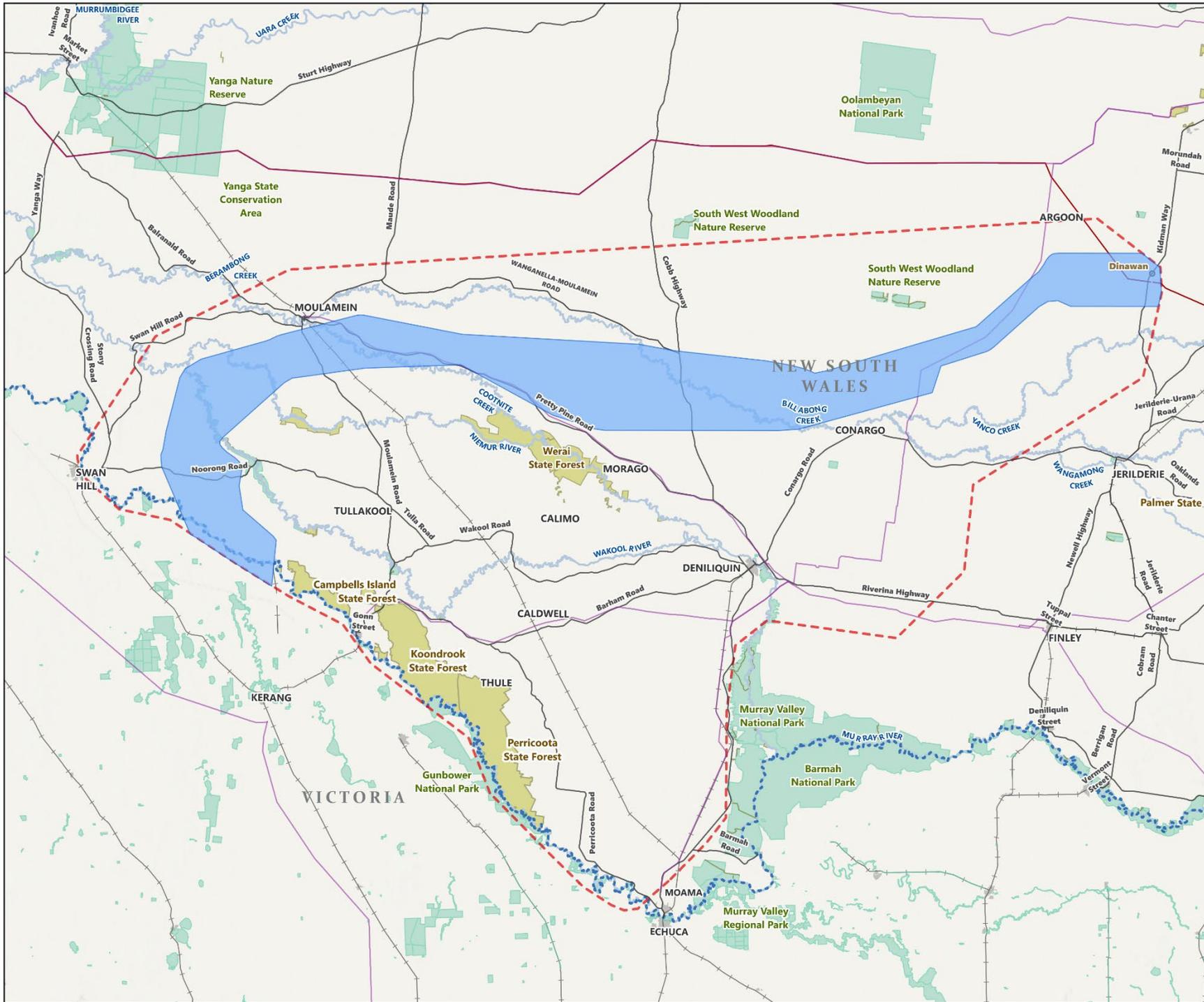
Figure A.2 Summary of corridor option evaluation for the preliminary corridors

What was identified as the draft preferred corridor

Option 1 was shown to lead across all three criteria because it represented:

1. *A good technical solution* – aligning with other large, existing infrastructure, being close to the South West Renewable Energy Zone and avoiding bushfire prone land
2. *A good social and community solution* – avoiding future developments and minimising the impact on irrigated agriculture, local townships and regional tourism
3. *A good environmental solution* – avoiding protected wetlands, parks and forests.

The draft preferred corridor presented in the Draft Corridor Report is shown in Figure A.3.



Legend

- Proposed substation
- Named waterways
- Existing high voltage transmission lines
- EnergyConnect high voltage transmission line - currently in construction
- Rail lines
- Project Area of Interest
- State boundaries

Corridor Option

- Corridor 1 - Swan Hill North



Coordinate system: GDA2020 MGA Zone 55
Scale ratio correct when printed at A3

1:700,000 Date: 25/09/2023

Data sources: DPE, DELWP, Geoscience Australia, World Hillsshade, Esri, CGIAR
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