

Minutes: Minutes of the 7th Meeting of the Hills of Gold Windfarm Community Consultative Committee (CCC)

Wednesday, 22 September 2020

Meeting Venue: Held at the Nundle Memorial Hall

Members Present: Jamie Chivers (Wind Energy Partners) – via video conference; Sandra Agudelo (Wind Energy Partners); Aref Taleb (Wind Energy Partners); Ian Worley; Michael Chamberlain; Megan Trousdale (Nundle Business Tourism & Marketing Group Representative); John Krsulja (Hills of Gold Preservation Inc Representative); Donna Ausling (Liverpool Plains Shire Council); Christine Robinson (Upper Hunter Shire Council); Bruce Moore; Megan Carberry (alternate member); David Ross (Chair); Debbie Corlet (Secretary).

Apologies: Margaret Schofield; Peter Schofield; Kay Burns (Tamworth Regional Council)

Independent Chair: David Ross

Secretary: Debbie Corlet

Agenda Items	Who to Present
1. Introductions and Apologies	David Ross
2. Declaration of Pecuniary or Other Interests	David Ross and All
3. Business Arising from Previous Meeting	David Ross
4. Previous Minutes	David Ross
5. Correspondence	All
6. Update on Proposal	WEP
7. General Business	All
8. Next Meeting	All

Agenda Item	Discussion	Action/By Whom
1.	<p>Introduction and Apologies – Meeting commenced at 6:32 pm. David welcomed everyone to the meeting.</p> <p>After discussing the apologies, David appreciated that there had been some concern from within the committee and alternates when members did not inform of their inability to attend. It had been believed that many interested people were therefore missing out on contributing. David noted that, overall, this CCC has good attendance and when temporarily replacing a member who is an apology, takes a “like for like” approach as he has stated from the committee’s beginning. While this may frustrate some people, this approach was taken in order to maintain a diversity of views.</p>	
2.	<p>Declaration of Pecuniary or Other Interests</p> <p>David advised that he was paid a fee to chair the meeting as is Debbie for taking the meeting minutes.</p>	
3.	<p>Previous Minutes</p> <p>It was agreed by all in attendance that the Previous Minutes were true and correct.</p> <p>Community Member – request the link for the article regarding the proposed partnership to be placed back into the minutes. With respect to questions arising from the media – requested that these be attached to the August minutes. Jamie noted that some may need input from advisers, so will seek those answers and then provide a response.</p> <p>Community member asked how long WEP had to answer these questions and David advised that it is normally 28 days. Community member to provide the date the questions were first submitted.</p>	<p>Jamie – To upload Q & A to the website and provide to the CCC members.</p>
4.	<p>Business Arising from Previous Meeting</p> <p>David observed that all actions had been responded to. Community member asked about the Dag sheep station residence and woolshed photo montages which was due by the end of July. Jamie advised that they haven’t received them yet but as soon as they are available, they will be sharing them. He confirmed that they will be received before the submission.</p> <p>Community Member also advised that they had forwarded a second media link – re seeking investors which needs to be included as Business Arising.</p>	<p>David – get second media link from CCC member</p>
5.	<p>Correspondence</p> <p>David had received a question from the community to WEP seeking clarification as to whether the community would receive free electricity (as some have thought)? Jamie responded that the proponent has not offered free electricity.</p>	<p>David to write to community member with Jamie’s input</p>

Agenda Item	Discussion	Action/By Whom
	<p>Community member said that questions like these need to be clarified to stop them circulating in the community. An update in the regular newsletter was suggested to clarify questions that have circulated in the community. Jamie – can provide clarification in the newsletters to the facts of the project. But best way is through the consultation that is coming up.</p>	
6.	<p>Update on Proposal by WEP</p> <p>Sandra and Jamie discussed the PowerPoint presentation which has been emailed to all CCC members. Slides discussed: Social and Economic Assessment – slides covered Socioeconomic Profile, Policy Context, Literature Review, Community Engagement, Social Impact Assessment, Economic Impact Assessment, Net Community Benefit Assessment.</p> <p>Community member asked if there were a range of primary production type businesses contacted, not just in the town itself but further afield as well. Jamie – will need to check but it will be a cross-section of different businesses.</p> <p>Community member asked what’s “socially acceptable outcome” as mentioned in the presentation? Jamie advised that this is based on the specific concern raised during consultation and literature review in the assessment of longer term outcomes associated with experiences on other wind farms and community perceptions through time.</p> <p>Community members asked how will you quantify that and how is the outcome measured? Jamie discussed WEP will undertaken greater consultation during public exhibition with all information and context available for the public to review. The public exhibition process will explain more and then it is up to the community members to make comment on the application and submit all their questions to the Department of Planning.</p> <p>Community member discussed that they were called and that they gave their opinion. There were agreed montages and we’ve been given 6 from public viewpoints. There was discussion on when the individual resident assessments would be provided and particularly the photo-montages. There were a lot of community members who had assessments undertaken and have yet to receive the montages.</p> <p>A question was raised about how the social and economic assessment could say there would be a low impact when the montages have not been produced yet.</p> <p>Jamie explained that this is not designed to replace the community’s opinion or the technical assessment that will be provided in the Landscape and Visual Assessment Report. The assessment provided today is based on the literature reviews and experiences on perceptions to visual impact over the longer term.</p>	<p>WEP to check what types of businesses were contacted</p>

Agenda Item	Discussion	Action/By Whom
	<p>Concern was raised that community surveys were taken over the phone due to COVID restrictions and how could they assess the impact without understanding the context of the project in the community. Many of us think it could be quite dangerous up on this ridge.</p> <p>Jamie explained that there is obviously a lot more in the reports, factoring the impact pre and post mitigation. Community member asked WEP to consider with respect to the social and economic assessment for an analysis of reduced green-house emissions to be factored in. That has reduced impact on global warming – reduced carbon. Jamie confirmed that it is covered in the EIS – significant amount of CO2 would be reduced from the proposal – renewables. Need to do more by replacing with more renewables.</p> <p>A council representative asked for the assessment to consider how are workers going to be retrained and attract skills where shortage exist – beyond the construction phase – how it’s going to happen with educational institutions / schools.</p> <p>Community member mentioned the wild dog due diligence and that the impact should be minimised. This project and the severity of it to the local community – there are more positives than negatives.</p> <p>Community member mentioned Nundle and / or Hanging Rock housing is a major concern – we don’t have enough housing – there are limitations to the amount of housing and you would be limited to under a dozen. We are at capacity at Nundle and Hanging Rock. So, what are the benefits? Another community member mentioned that there are lots of farms with more than 1 house on them.</p> <p>Aviation Assessment – Project Background, External Context, Internal Context, Consultation, Aviation Impact Assessment, Hazard Lighting and Marking, Accident Statistics, Risk Assessment and Conclusions & Recommendations</p> <p>Community member asked if aviation lights will be required and Jamie replied that a report is detailed and recommends they will not but this may change depending on consultation with CASA and final conditions placed on the project if approved.</p> <p>Community member asked about raising the minimum sector altitude from 6300 ft above mean sea level (AMSL) to 6400 ft and to the airlines to do that? Jamie – we don’t know whether there is a cost associated to airlines however WEP will need to pay the AirServices Australia for making changes to any routes or heights. Jamie mentioned there is a procedure to follow to do that. Flying higher burns less fuel.</p>	<p>WEP to confirm if Aerial Application Association of Australia were consulted</p> <p>WEP to confirm where the 3 airfields are located and clarify about impact if blades</p>

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	<p>Community member mentioned the wild dog control by helicopters dropping bate and that they didn't see a problem flying in the vicinity. If the reasons for the helicopter usage impacted upon the community – there is a list of best practices to control wild dogs.</p> <p>Community member asked about the stakeholders being consulted about direct impacts. Aerial Application Association of Australia should be consulted – can I ask why weren't they consulted and why can't they be? Jamie is confident they were consulted but will report back to the next meeting to confirm either way.</p> <p>Community member asked where the 3 airfields are located. It says there is no impact but where are they located and if the blades have to be turned off – that means there is impact. Jamie to find out exact locations and report back to David who will provide to all CCC members.</p> <p>Telecommunication Assessment – Overview, Electromagnetic Interference effects of wind turbines, Wind turbine effects on radiocommunication, Existing situation / environment and Conclusion</p> <p>Community discussion about the graph showing the radio links in the vicinity of the project site (a line crosses above a dwelling). What about all the people that live south. 50kms around? They don't go towards Scone. I'd like to see the assessments for those that may live a lot higher than those dots on the ridge. So, please include telecommunications going south and east (rather than just north and west). Sandra – the assessment involves a 50 km radius from around each single turbine.</p> <p>Electromagnetic Frequency Assessment – Overview, Standards and Guidelines, Risk Assessment, Mitigation Measures, Conclusion. No questions on these slides.</p> <p>Water and Soil Assessment – Soil and water assessment, Impact Assessment, Management and mitigation strategy, Water demand and Water supply options</p> <p>There were questions about the extracting water from a landowner bore option and whether this would have an impact on adjacent bores. Council confirmed that, under licensing agreements, only so much can be extracted. This is licensed through WaterNSW.</p> <p>Jamie also advised that regarding the existing bore option, no particular bore has been identified as yet. Community member mentioned that after so many years in drought 2 Nundle bores have dried up and Nundle is down to 1 bore. Another community member mentioned staff from Tamworth Regional Council had explained about water consumption and how the water is divided up – it was doing extremely well and looks like it had plenty in the bore. Jamie advised that the water payback will be very quick compared to other types of fossil fuel generation that requires water for cooling.</p>	<p>have to be turned off at any time</p> <p>WEP to provide more detailed graphs for telecommunication impacts further south and east of what was provided</p> <p>WEP to fix graph to explain better what the land and soil capabilities are – explain what 1 to 8 actually means</p>

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	<p>A community member, when considering the total anticipated water usage for the proposal, observed that this would be very close to the current daily water flow into Chaffey Dam. This daily inflow was, at the time of the meeting, 31 ML as recorded by Water NSW.</p> <p>David also mentioned that over the last couple of years, the State Government has rolled out a requirement that all major water users are to install monitoring to check water usage.</p> <p>Lots of discussion from members then centred around the slide “Assessment / Existing Conditions” seeking clarification– the colour legend needs to be itemised and clearer but Sandra observed that 3 is good for agriculture and 8 is not good for cropping farming (has a low capability for agricultural cropping). Community members wanted to explore this further with regard to what this means for the project area.</p> <p>David suggested that, as the next meeting would not have as much content to consider, soil and water considerations should continue in October.</p> <p>Jamie responded that WEP provide more after a discussion after we talk with ERM and we will consider bringing in one of the experts on biodiversity who can talk us through water and soil. This approach was agreed to by the committee.</p> <p>Community member noted that they have a number of questions for that meeting about the concrete batching plant. Jamie invited the member to submit the questions beforehand and then ERM can respond to them at the next meeting.</p>	<p>WEP to explain better the erosion and real impact</p> <p>Community Member to provide David with the questions</p>
7.	<p>General Business</p> <p>David explained the process for the EIS once it is submitted in order to give the CCC some expectation of what happens and the time before a determination is made. If the EIS gets submitted in November, it must be put on exhibition for at least 4 weeks (statutory obligation). This is the point when you can make a submission one way or another from what’s in the EIS. Submission are then considered by the Department of Planning, Industry and Environment. If they see any gaps in the EIS from what was provided by the community – DPIE will provide these submissions for WEP to respond to. There are no statutory timeframes regarding when WEP must respond.</p> <p>After WEP responds back to the Department, they develop an Assessment Report. Depending on how many submissions are made, the Department will decide if they make a determination or, if there are more than adverse submissions made, the Independent Planning Commission, IPC, will make a determination. Should the IPC get involved, they now have 12 weeks within which they make the determination from when they receive the Assessment Report. Within those 12 weeks they hold hearings via video conferencing.</p>	

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	<p>HoGPI has accepted Jamie’s offer to meet with them and are suggesting Thursday 22 October with the venue to be confirmed. Jamie would like to have some questions provided – so he can adequately prepare. Community member confirmed that some questions can be provided but generally “the floor” wants to be able to ask open questions at the time of that meeting.</p> <p>Community member noted that they had approached Engie about the Financial Review article discussed at the last CCC meeting to enquire whether it was accurate. Engine noted that, “The article was not written by ENGIE or Mitsui and reflects the opinions of others. ENGIE ... will make public comments on these matters when it is appropriate to do so.”</p> <p>Community member – the process of the Neighbour agreements has stalled in some areas and neighbours are getting concerned about the time getting away. Jamie believes that the meetings have accelerated over the last few weeks. Anything we can do – we’d like to know who that is so we can action asap. The Community Member clarified that it was one resident who was concerned and that they would speak to them regarding whether they would like more information.</p> <p>Community member also mentioned that the Nundle Tourism and Marketing meeting is on Tuesday, 27 October at 8:30 am if Jamie wanted to attend that meeting, he is more than welcome to attend first up.</p> <p>Community member asked about the design of the power poles as there was an episode on Land Line from 2017 on Mount Fairy about a crow hitting a power line and causing a massive fire which burnt down about 30,000 hectares. Is that classed as a foreseeable risk – are the power poles insulated as this is bushfire area. Will we see the design of the power poles and will they be insulated? Jamie advised that he would like to understand that more as well. That would be under technical specifications and there is probably a regulation to the Australian Standard – I’ll have to dig into.</p> <p>David – should it be approved – we will try to cover this issue and that of the footings (as discussed in our August meeting) in the first meeting after determination.</p> <p>Community member asked if there is a plan for another visit to the western part or a community Open Day at the site. Jamie advised that it is possibly, perhaps during the exhibition period, but will have to think about it due to COVID / distancing issues etc plus it also requires landowner consent.</p> <p>Community member asked where is the substation located as it looks like it has moved? They would like a visual montage on the substation and also asked about the lighting. Jamie advised that the substation is to the south of the site – up high. The community member would like a montage for it and asked how many square metres it is. Jamie advised that they</p>	<p>WEP and Hills of Gold Preservation Committee to set up a meeting</p> <p>Community member to provide copy of the article for distribution</p> <p>Community member and Jamie to discuss residents seeking meeting</p> <p>WEP to provide more information about the Australian Standards in regard to bush fires</p> <p>WEP to consider another site visit</p> <p>WEP to ensure the substation is included in the visual impact assessment and</p>

Agenda Item	Discussion	Action/By Whom
	<p>already have elevation drawings from it but it's not a rendered version of the substation but shows the design and profile – a layout of where it is located.</p> <p>Community member mentioned the noise and vibration map on page 21 of the Minutes – 7 residences missing from that map. Community member will forward the names of the residents missing to Jamie.</p>	<p>include the size as well as the visual / footprint</p> <p>CCC member to forward missing names to Jamie</p>
8.	<p>Next Meeting</p> <p>Next meeting is scheduled for Thursday, 29 October 2020 at 6:30 pm.</p> <p>Meeting closed 9.20 pm.</p>	

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Appendix 1: Actions

Page No	Action No	Description	Date Raised
2	1	DR to attach the previous minutes with the upcoming meeting agenda (ongoing)	6 May 2020
2	2	WEP to provide photo montage asap	24 August 2020
2	3	Jamie – To upload Q & A to the website and provide to the CCC members.	22 September 2020
2	4	David – get second media link from CCC member	22 September 2020
2	5	David to write to community member with Jamie's input	22 September 2020
3	6	WEP to check what types of businesses were contacted	22 September 2020
4	7	WEP to confirm if Aerial Application Association of Australia were consulted	22 September 2020
4	8	WEP to confirm where the 3 airfields are located and clarify about impact if blades have to be turned off at any time	22 September 2020
5	9	WEP to provide more detailed graphs for telecommunication impacts further south and east of what was provided	22 September 2020
5	10	WEP to fix graph to explain better what the land and soil capabilities are – explain what 1 to 8 actually means	22 September 2020
5	11	WEP to better explain the erosion and real impact	22 September 2020
6	12	Community Member to provide David with the questions	22 September 2020
6	13	WEP and Hills of Gold Preservation Committee to set up a meeting	22 September 2020
6	14	Community member to provide copy of the article for distribution	22 September 2020
6	15	Community member and Jamie to discuss residents seeking meeting	22 September 2020
7	16	WEP to provide more information about the Australian Standards in regard to bush fires	22 September 2020
7	17	WEP to consider another site visit	22 September 2020
7	18	WEP to ensure the substation is included in the visual impact assessment and include the size as well as the visual / footprint	22 September 2020
7	19	CCC member to forward missing names to Jamie	22 September 2020



**HILLS OF GOLD
ENERGY**

**Community Consultative Committee
September 22nd 2020**



**SOMEVA
RENEWABLES**

Agenda



SOMEVA
RENEWABLES

1. Introduction and apologies
2. Declaration of pecuniary or other interests
3. Previous minutes
4. Business arising from previous meeting
5. Correspondence
6. Update on proposal
 1. Social and Economic
 2. Aviation
 3. Telecommunications
 4. Electro-Magnetic Frequency
 5. Water and Soil
7. General Business
 - a. DPIE Assessment Process
8. Next meeting



4. Business arising from previous meeting

Action No	Description	Date Raised	WEP Response
1	DR to attach the previous minutes with the upcoming meeting agenda. (ongoing)	6 May 2020	
2	WEP to provide updated public photomontages as a priority and private photomontages shortly after but prior to the development application	24 Aug 2020	The photomontages are currently being finalised and will be provided once they are complete.
3	Community member to provide a copy to David	24 Aug 2020	Requires community member response.
4	Jamie to provide a written response questions regarding Liddell and Bayswater and Compulsory acquisition rights to alternate member	24 Aug 2020	This has been included in the September Newsletter and a response has been provided to David Ross to be shared with the CCC on 16 th September 2020.
5	WEP to provide the presentation at least 2 days prior to each CCC meeting	24 Aug 2020	Presentation will be provided 2 days before.
6	WEP to talk to Moir about labelling the turbines on the montages.	24 Aug 2020	This comment was passed onto Moir Landscape Architecture on 2 nd of September 2020. We are awaiting their response and will confirm once we have a response from them.



4. Business arising from previous meeting

7	Discuss CEF at the October meeting	24 Aug 2020	The community enhancement fund will be discussed in the October CCC.
8	WEP to present on the technology update in a meeting after the DA submission.	24 Aug 2020	We are on track to provide this after the DA submission.
9	WEP to advertise when the Visual Assessment updated public photomontages are at the library	24 Aug 2020	This will be completed when the photomontages are made available and are at the library.
10	WEP to present on the aviation lights when available including info about shielding / flashing / sensor lights.	24 Aug 2020	This information will be provided in the October CCC.
11	WEP to provide example of Australian operating wind farm using aviation light shields (if possible)	24 Aug 2020	This will be provided in the October CCC and is being included in the visual impact assessment.
12	WEP – To have a look at this Neighborhood Agreement	24 Aug 2020	We have reviewed the Neighbour Agreement and continue to progress signing agreements with neighbours.
13	WEP and member to discuss Agreement implications offline.	24 Aug 2020	There is a meeting organised with the landowner interested in clarifications on the neighbour agreement.
14	WEP to read the document and confirm back at the next CCC what is actually factual	24 Aug 2020	This will be taken up with the CCC member as per the action point 7 above so that it is clear to them what the neighbour agreement says.
15	WEP and member to watch again and discuss further	24 Aug 2020	We have watched the documentary again and are clear on the content presented. The documentary has been widely discredited, is not a representation of what is proposed and is propagating misinformation about renewables generally and certainly in the assessment and presentation of the Hills of Gold Wind Farm.
16	Member to give a copy of the letter to David who will distribute to CCC members	24 Aug 2020	Letter has been received.



6. Update on Proposal

	Noise and Vibration Assessment	Complete
	Shadow Flicker Assessment	Complete
	Hazards and Risks – Blade Throw	Complete
	Hazards and Risks – Electromagnetic Frequency	Complete
	Aviation	In Consultation
	Updated Layout	Complete
	Social and Economic	Complete
	Telecommunications	Complete
	Water and Soil	Complete



6.1 Social and Economic Assessment



SGS Economics and Planning has been engaged to do the social and economic assessment. They have extensive expertise in assessing, quantifying and explaining the social and economic impacts of a range of projects including renewables.

Renewables

- Silvertown Wind Farm,
- The Pallamana Solar Farm, SA
- Baringhup Solar Farm, VIC
- The Ararat Wind farm, VIC

Other

- Tweed Hospital
- Clyburn Industrial Precinct
- future expansion of Melbourne Airport
- Canberra Light Rail
- Bendigo Industrial Land Demand Study

SEARs – the EIS must include an assessment of the social and economic impacts and benefits of the project for the region and the State as a whole, including consideration of any increase in demand for community infrastructure services and impacts to tourism.

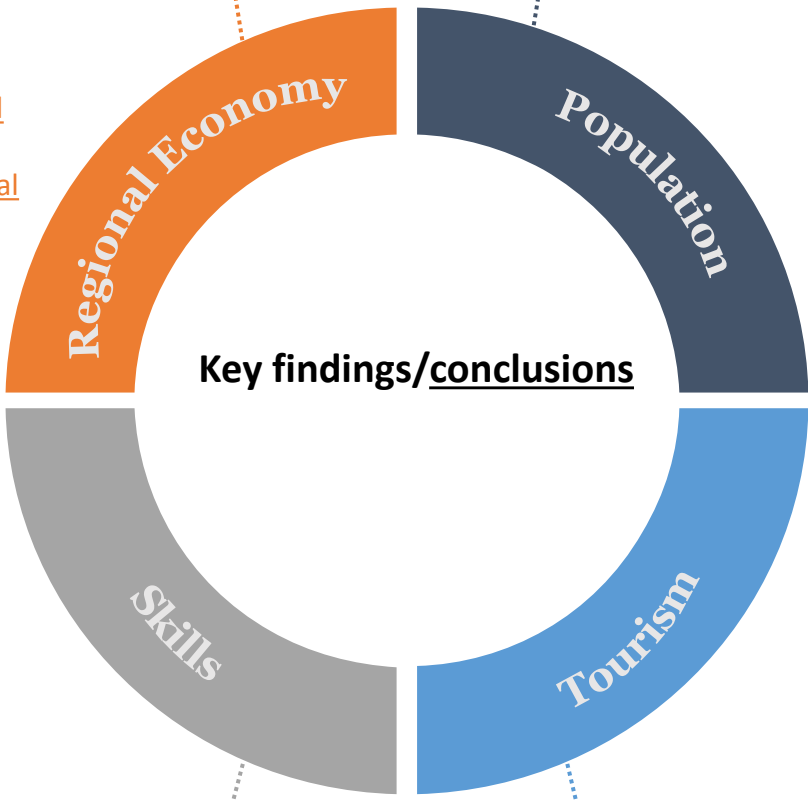
Scope of the Study

- 1 **Socioeconomic profile**
- 2 **Policy Context**
- 3 **Literature Review**
- 4 **Community Engagement**
- 5 **Social Impact Assessment**
- 6 **Economic Impact Assessment**
- 7 **Net Community Benefit Assessment**



6.1 Social and Economic Assessment

Socioeconomic Profile



- There has been a decline of the regional NSW economy in recent decades.
- Consistent periods of drought and climate change are impacting on the agricultural industry and regional communities.
- As a result it is pertinent to explore and consider other industries (such as wind energy) that could contribute to regional economies and provide employment

- All three LGAs have a significant proportion of resident population working in Industrial related jobs (this includes jobs types such as manufacturing, transport and utilities employment).
- The skillsets of these residents may be beneficial for the construction of a renewable energy development in the region.
- Local job opportunities may be welcomed by local residents

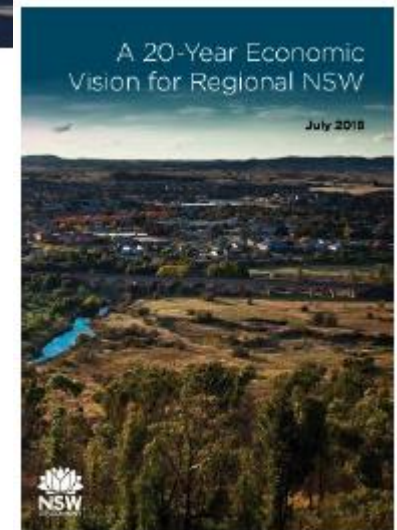
- The New England North region experienced low population growth compared to the neighboring Hunter Valley region (Excluding Newcastle and Between 2006 and 2016).
- Large regional development projects can be one way of attracting more people, and a younger workforce, to live and work in a region.

- Both Tamworth LGA and the Upper Hunter Shire LGA had more visitors to the region for the purpose of a 'holiday' over 'visiting friends and relatives'.
- Tourist attractions to cater to these visitors may be of value to the region.



6.1 Social and Economic Assessment Policy Context

- It was found that local government policy in the New England region has clearly identified renewable energy as an opportunity area.
- New England is to become a 'renewable energy hub' within NSW; that energy efficiency projects should be implemented; and that this is underlined by the community's view that achieving a sustainable future is an imperative.
- State and local government policy also supports local economic development and growth of local employment opportunities





6.1 Social and Economic Assessment

Literature Review / Case Study

Hallett, South Australia

The Hallett Wind Farms consist of four closely located wind farms in the mid-north region of South Australia (167 turbines). The wind farms are located within 20km of the small townships of Hallett and Mount Bryan



Source: shorturl.at/cyRS8

- The development demonstrated the need to assess the visual impact of a wind farm to create a ***socially acceptable outcome***.
- The development included the establishment of a community benefit fund.
- One study of the Hallett wind farms indicated that an average of ***98 construction workers had been employed at any given time from 2005 to 2010***. It was estimated that the wind farms created up to **2400 full time 'job years'** throughout construction and operation (as of 2010).
- Indirect benefits accrued to service providers and providers of accommodation in neighboring towns of Burra, Jamestown and Clare.



6.1 Social and Economic Assessment

Economic Impact Assessment

Based on SGS assessment, the HoG wind farm, in the short-term (construction phase), would have a **significant positive economic impact with guaranteed financial gains.**

- In the longer-term (operation phase), the project would continue to have a positive economic impact on the local economy.
- The project is expected to include capital expenditure in the local regional economy of \$370 million with ongoing operational expenditure of around \$18.5 million not including financing costs.
- The project is expected to produce nearly \$154m (\$104M discounted) in value-add (e.g. wages and profit) during the construction phase.



Capital Expenditure
(Local Region)



Operational Expenses



Value-Add

	Stimulus
Capital Expenditure (total)	\$750 million
Capital Expenditure (local region)	\$370 million
Annual Operational Costs	\$19 million
Total Operational Costs *	\$100 million
Turbines constructed	70

* Discounted OPEX 25 yr. at 6% rate



6.1 Social and Economic Assessment

Economic Impact Assessment

Employment

Industry Type	Construction Phase			Operation Phase		
	Direct Jobs	On-flow jobs	Total	Direct Jobs	On-flow jobs	Total
Construction	120	256	376			
Professional, Scientific & Technical Services	96	174	270	31	53	84
TOTAL	216	430	646	31	53	84

- **646 Full Time Equivalent** (FTE) jobs created across both years of construction phase.
- Ongoing employment is estimated to increase by **84 ongoing FTE** jobs including on-flow jobs.
- Around 80-85% of the economic benefits will occur in either the Tamworth Regional or in Newcastle City LGA.



6.1 Social and Economic Assessment

Some Key Results of the Assessment

Socio-economic Aspects

Literature Review Findings

Proponent mitigation Actions

Post-mitigation Rating

Community attitudes and sense of community

- Residents tend to be more receptive to a wind farm development if they have been consulted.
- Collaboration is therefore, considered an important component of a wind farm development process.

- Wind Energy Partners has collaborated and engaged community, particularly in the area of road safety, visualizations and benefits the project could bring.
Post-mitigation Rating: Neutral

Visual amenity of the surrounding natural landscape

- Literature suggests that a person's perception of the visual impact can be subjective influenced by their attachment to place, history of the place, length of time since installation, and the scale and size of the installation.

- Wind Energy Partners has been collaborating with the community to provide several agreed visual montages to clarify the visual impact of the project.
Post-mitigation Rating: Low Neg



6.1 Social and Economic Assessment

Some Key Results of the Assessment

Socio-economic Aspects	Literature Review Findings	Proponent mitigation Actions Post-mitigation Rating
Local safety	<ul style="list-style-type: none">Wind farms compared to other renewables, have vastly improved safety standards and outcome.	<ul style="list-style-type: none">The proponent is preparing a traffic and transport assessment and has consulted with residents to ensure a balanced distribution of benefits. <p>Post-mitigation Rating: Low positive</p>
Creation of education opportunities	<ul style="list-style-type: none">The literature review indicated there are examples of links made between educational institutions and wind farms(e.g., Tilt Renewables, Dundonnell Wind Farm project (Victoria).	<ul style="list-style-type: none">There is potential for educational stakeholders to collaborate in the future to develop educational opportunities. <p>Post-mitigation Rating: Low positive</p>
Local financial gain	<ul style="list-style-type: none">Wind turbines can be located on existing farms, which in turn benefits local landholders and the economy.Farming families can continue to work their land with wind turbines taking only a small site on the property.	<ul style="list-style-type: none">Community Enhancement Fund Charter has been created to ensure proper management of funds and a spread across the communityThe Neighbour Benefit Sharing Program has been established. <p>Post-mitigation Rating: Medium positive</p>



6.1 Social and Economic Assessment

Some Key Results of the Assessment

Socio-economic Aspects

Literature Review Findings

Proponent mitigation Actions

Post-mitigation Rating

Job creation and value add

- The literature review indicated that Wind farms can create employment through direct jobs indirect employment benefits.

- The proponent has performed economic modelling.

Post-mitigation Rating: Medium positive

Tourism

- The literature review indicated that Wind farms can attract tourism but do have the potential to conflict with other tourism features, therefore wind farms should be managed carefully to enhance acceptance.

- The proponent has performed a socio-economics profiling which indicated there are visitors coming to the region for the purpose of a 'holiday', additional tourism attractions incorporating the wind farm in the region may be of value

Post-mitigation Rating: Neutral

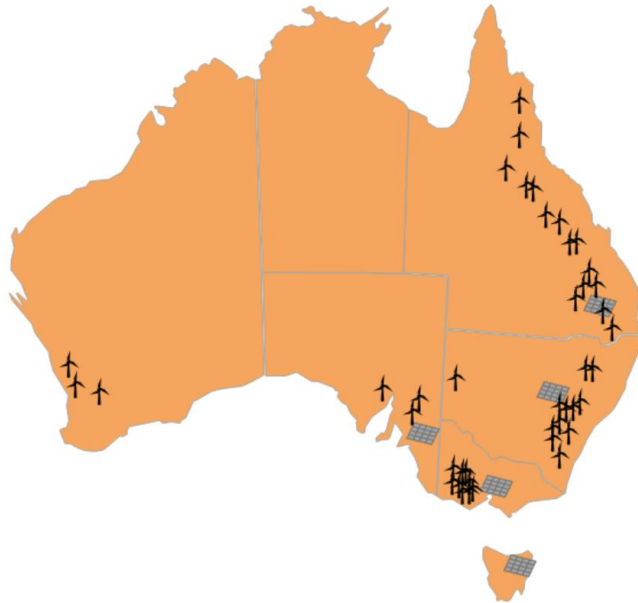


6.2 Aviation Assessment

AVIATION PROJECTS

Aviation Projects were engaged to undertake the Aviation Impact Assessment (AIA). They have a comprehensive understanding of how wind farms, wind turbines and wind monitoring towers pose potential aviation impacts and how to mitigate these.

The below map shows the locations of wind and solar farms that Aviation Projects have provided expert assistance.



Overview of the Guidelines

- Environmental Planning and Assessment Act 1979;
- NASF Guideline D: Managing the Risk to aviation safety of wind turbine installations (wind farms)/Wind Monitoring Towers; and
- Secretary's Environmental Assessment Requirements (SEARs) SSD 9679.

Location of nearby certified aerodromes





6.2 Aviation Assessment Report Breakdown

Contents of Report

- 1 Project Background
- 2 External Context
- 3 Internal Context
- 4 Consultation
- 5 Aviation Impact Assessment
- 6 Hazard Lighting & Marking
- 7 Accident Statistics
- 8 Risk Assessment
- 9 Conclusions & Recommendations

- The **external context** examines impact on aircraft for council, private, military, agricultural, firefighting and emergency purposes.
- The **internal context** is a review of the project site and infrastructure and included a site visit on the 10th of June 2020.

Stakeholders **consulted**

- Airservices Australia;
- aircraft operators;
- aerodrome operators;
- Department of Defence;
- Liverpool Plains Shire Council;
- NSW National Parks and Wildlife Service;
- NSW Rural Fire Service;
- Royal Flying Doctor Service;
- Tamworth Regional Council;
- Upper Hunter Shire Council; and
- Westpac Life Saver Rescue Helicopter Service
- Local residents consulted

- The **AIA** assesses the potential aviation impacts, provides aviation safety advice in respect of relevant requirements of air safety regulations and procedures, and informs and documents consultation with relevant aviation agencies.
- Based on the risk assessment in the report it has been concluded that **hazard lighting and marking is not required for WTGs and WMTs** however ongoing consultation will continue with relevant stakeholders.



6.2 Aviation Assessment

Aviation Impact Statement Key Findings

- Based on the proposed Project layout and overall turbine overall blade tip height limit of 230 m AGL, the blade tip elevation of the highest wind turbine, which is WP20, will not exceed 1646 m AHD (5400 ft AMSL).
- This AIS concludes that the proposed Project:
 - will not penetrate any OLS surfaces;
 - will penetrate PAN-OPS surfaces;
 - will have an impact on nearby designated air routes;
 - will not have an impact on the grid LSALT;
 - will not have an impact on prescribed airspace;
 - is wholly contained within Class G airspace; and
 - is outside the clearance zones associated with aviation navigation aids and communication facilities.
- No impact on the use of the 3 of the nearest agricultural airfields, however it is recommended that ongoing consultation and a potential plan agreed which may include suspending the relevant wind turbine's operation (dependent on wind direction and wind speed) for the period that the agricultural airfield is in use for take-off and landing.
- Penetration of PAN-OPS surfaces at Scone airport (impact on lowest safe altitude flight path on one of the Scone runways) and nearby designated commercial flights paths can be mitigated through a standard process to seek amendmend.
- Consultation ongoing with National Parks and Wildlife Service, Forestry Corporation, Defence, CASA amongst other agencies.
- Aviation Projects has undertaken a safety risk assessment of the Project and concludes that wind turbines and met masts will not require obstacle lighting to maintain an acceptable level of safety to aircraft.



6.2 Aviation Assessment

Aviation Impact Statement Key Findings

Item 1:

- The project will penetrate PAN-OPS surfaces to Scone Airport
 - PAN-OPS stands for Procedures for Air Navigation Services - Aircraft Operations. They are procedures that allow aircraft to land and take off safely when only instruments can be used, i.e. in low visibility weather conditions.

Potential mitigation strategies

- Scone Airport (YSCO) will require an increase in the minimum sector altitude from 6300ft above mean sea level (AMSL) to 6400ft AMSL
- Quirindi Airport and Tamworth requires no change to PAN-OPS surface.

Item 2:

- The project will have an impact on nearby designated air routes

Potential mitigation strategies

- Two air routes, H99 LSALT and W130 LSALT, are recommended to be increased by 300ft and 200ft respectively, to a total of 6400ft AMSL.





6.3 Telecommunication Assessment

Lawrence Derrick & Associates

Lawrence Derrick & Associates were responsible for the Telecommunication Assessment. The assessment considers the potential electromagnetic and communication effects that the project may have.

Scope of the Assessment

- 1 Overview
- 2 Electromagnetic Interference effects of wind turbines
- 3 Wind Turbine effects on radiocommunication
- 4 Existing situation/environment
- 5 Conclusion

Overview of the guidelines

SEARs

“ Identify possible effects on telecommunication systems, assess impacts and mitigation measures including undertaking a detailed assessment to examine the potential impacts as well as analysis and agreement on the implementation of suitable options to avoid potential disruptions to radio communications services; which may include the installation and maintenance of alternative services. ”

The NSW Governments Wind Energy Guideline (2016)

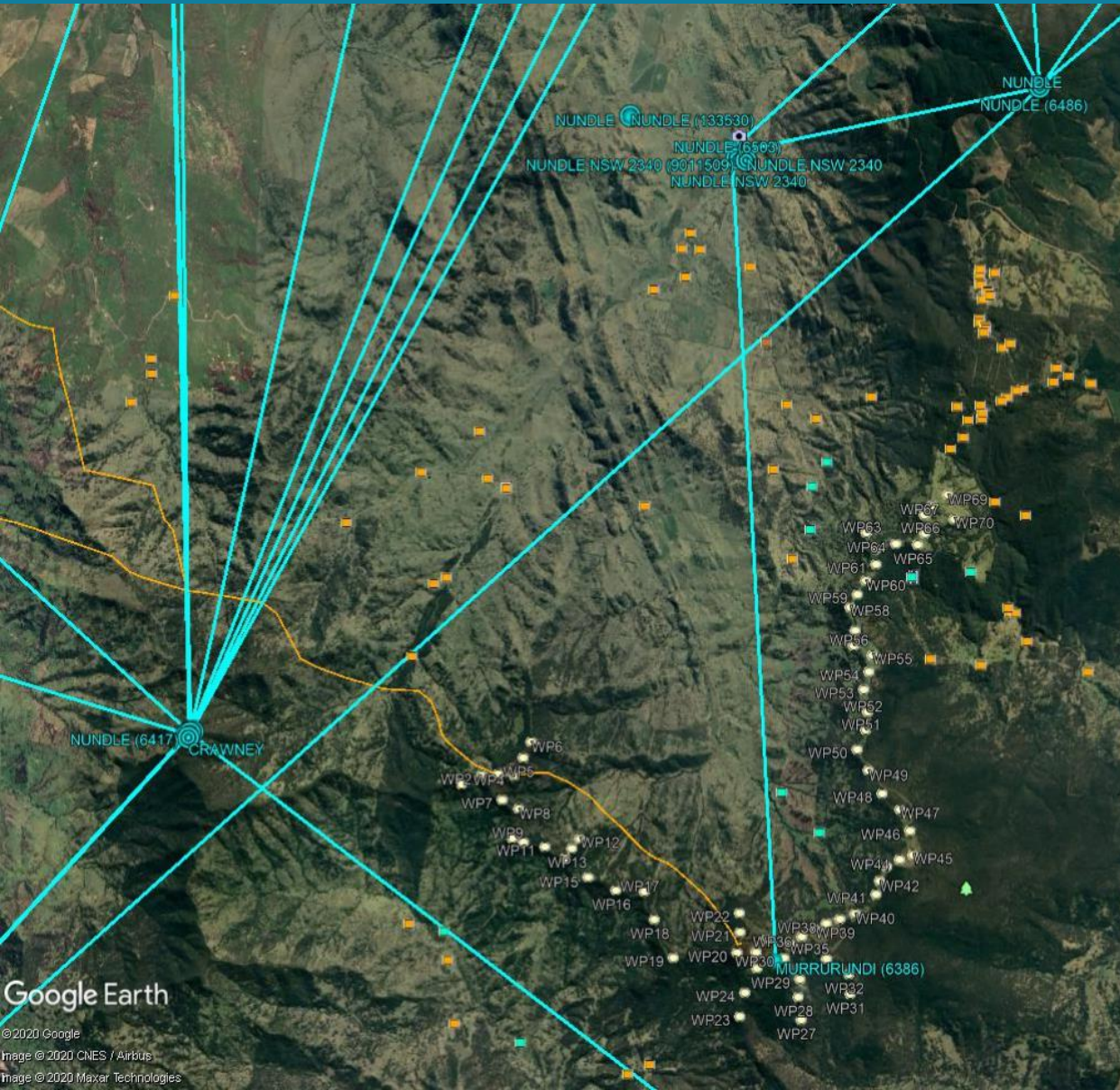
“ The consent authority will give consideration to the risk of electromagnetic interference with telecommunication services in the area, and the adequacy of the measures proposed to ensure the level of service is maintained ”.



6.3 Telecommunication Assessment

Radio links in the vicinity of the project site

- The latest Australian Communications and Media Authority (ACMA) database was used to determine registered radio sites and point to point radio links in the vicinity of the site (at least 50 km from the wind farm).
- There is one point to point radio link which passes through the Hills of Gold wind farm boundary. This is a VHF customer Telephone link operated by Telstra. Examination of the current wind turbine layout in relation to the link path indicates that the Link has sufficient horizontal clearance for a normal line-of-site link.



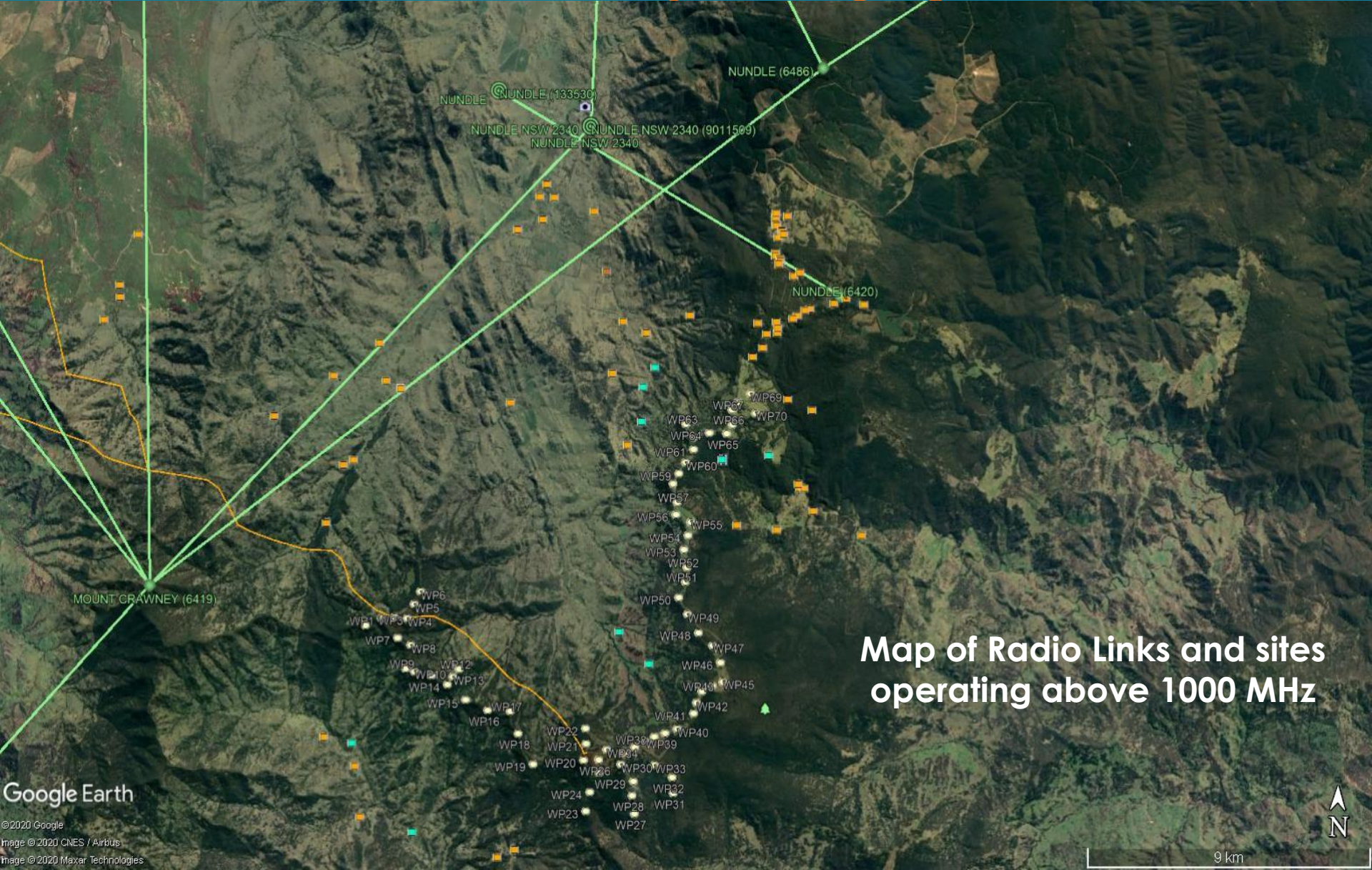
Map of Radio Links and sites operating below 1000 MHz





6.3 Telecommunication Assessment

Radio links in the vicinity of the project site





6.3 Telecommunication Assessment Conclusions

- Radiocommunications systems and radio links in the vicinity of the project were investigated and any potential impact was determined.
- There is **one point to point radio** link which passes through the wind farm boundaries and the wind turbine layout indicates that the link will have sufficient horizontal clearance.
- The Tamworth AM and FM stations are predicted to serve the area around the wind farm with transmitters about 110 km and 86 km respectively from the nearest turbine. It is considered that the turbines will not have any impact on the general coverage of these stations. Reception at dwellings in the vicinity of the wind farm are unlikely to be affected due to the robust nature of the turbine technology.
- The proposed 330 kV TL being constructed as part of the project is seen as a low risk for interfering with AM FM and TV reception at dwellings in the vicinity of the power lines.



6.4 Electromagnetic Frequency Assessment



ERM have undertaken the Electromagnetic Frequency Assessment. The assessment considers the potential hazards and risks associated with Electro Magnetic Fields (EMF)

Scope of the Assessment

- 1 Overview
- 2 Standards and Guidelines
- 3 Risk Assessment
- 4 Mitigation Measures
- 5 Conclusion

Overview of the Guidelines

1. Secretary's Environmental Assessment Requirements (SEARs)

"Health – consider and document any health issues having regard to the latest advice of the National Health and Medical Research Council (NHMRC), and identify potential hazards and risks associated with electric and magnetic fields (EMF) and demonstrate the application of the principles of prudent avoidance".

2. The NSW Governments Wind Energy Guideline (2016)

"Health – consider any health issues having regard to the latest advice of the NHMRC and consider potential hazards and risks associated with electric and magnetic fields and demonstrate the application of the principles of prudent avoidance".



6.4 Electromagnetic Frequency Assessment

EMF and Wind Farms

- *The available evidence at large does not find EMF from wind turbines or power lines required for distribution to be a likely causative agent for negative health effects in the community (Knopper, et al., 2014).*
- *“The results suggested that there is nothing unique to wind farms with respect to EMF exposure; in fact, magnetic field levels in the vicinity of wind turbines were lower than those produced by many common household electrical devices and were well below any existing regulatory guidelines with respect to human health” - (McCallum, et al., 2014)*

Electric Fields

- Magnetic fields are often described in terms of their flux density which is commonly measured in units of Tesla (T) or the older unit of Gauss (G).

Source	Distance	Microtesla (μ T)	Miligauss (mG)
Computer	Normal user distance	0.2 - 2	2 - 20
Electric Kettle	Normal user distance	0.2 - 1	2 - 10
Hair Dryer	Normal user distance	1 - 7	10 - 70
Distribution Line (street powerlines)	Directly underneath	0.2 - 3	2 - 30
Substation	At substation fence	0.1 - 0.8	1 - 8

Source: ARPANSA 2020c



6.4 Electromagnetic Frequency Assessment Conclusions

- The broadly accepted guideline in both Australia and overseas is to implement a prudent avoidance approach which WEP has adopted in the design of the Project, as well as other relevant standards and guidelines as outlined in this document.
- Due to the low exposure likely to be generated from the proposed activity and the findings of the scientific community, it is concluded that no adverse impacts are expected due to EMF.



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6.5 Water and soil Assessment



ERM is a leading global provider of environmental, health, safety, risk, social consulting services and sustainability related services. It has extensive experience in navigating projects through the NSW planning system including project in evolving industries such as the Australia Renewable Energy Sector.

- Dundonnell Wind Farm, VIC
- Cherry Tree Wind Farm, VIC
- Stockyard Hill Wind Farm, VIC
- Ararat Wind Farm, VIC
- Hawkesdale Wind Farm, VIC
- Ryan Corner Wind Farm, VIC
- Crowlands Wind Farm, VIC
- Coopers Gap Wind Farm, Qld
- Cathedral Rocks Wind Farm, SA.

Overview of Guidelines

- Managing Urban Stormwater: Soils & Construction (Landcom)
- Guidelines for Controlled Activities on Waterfront Land (DPI Water)
- Water Sharing Plans (DPI Water)
- Guidelines for Watercourse Crossings on Waterfront Land (DPI Water)
- Soil and Landscape Issues in Environmental Impact
- Assessment (OEH) Landslide Risk Management Guidelines (AGS)

SEARs requirements

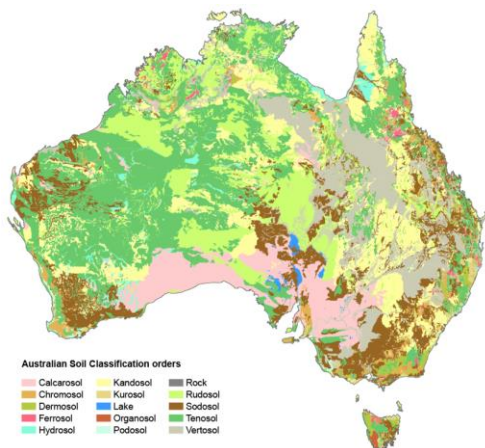
- Quantify water demand.
- Identify water sources (surface and groundwater)
- Impact Assessment (quality and quantity)
- Mitigation assessment



6.5 Water and soil Assessment

Scope of the Study

- 1 Soil and water assessment
- 2 Impact assessment
- 3 Management and mitigation strategy
- 4 Water demand
- 5 Water supply options



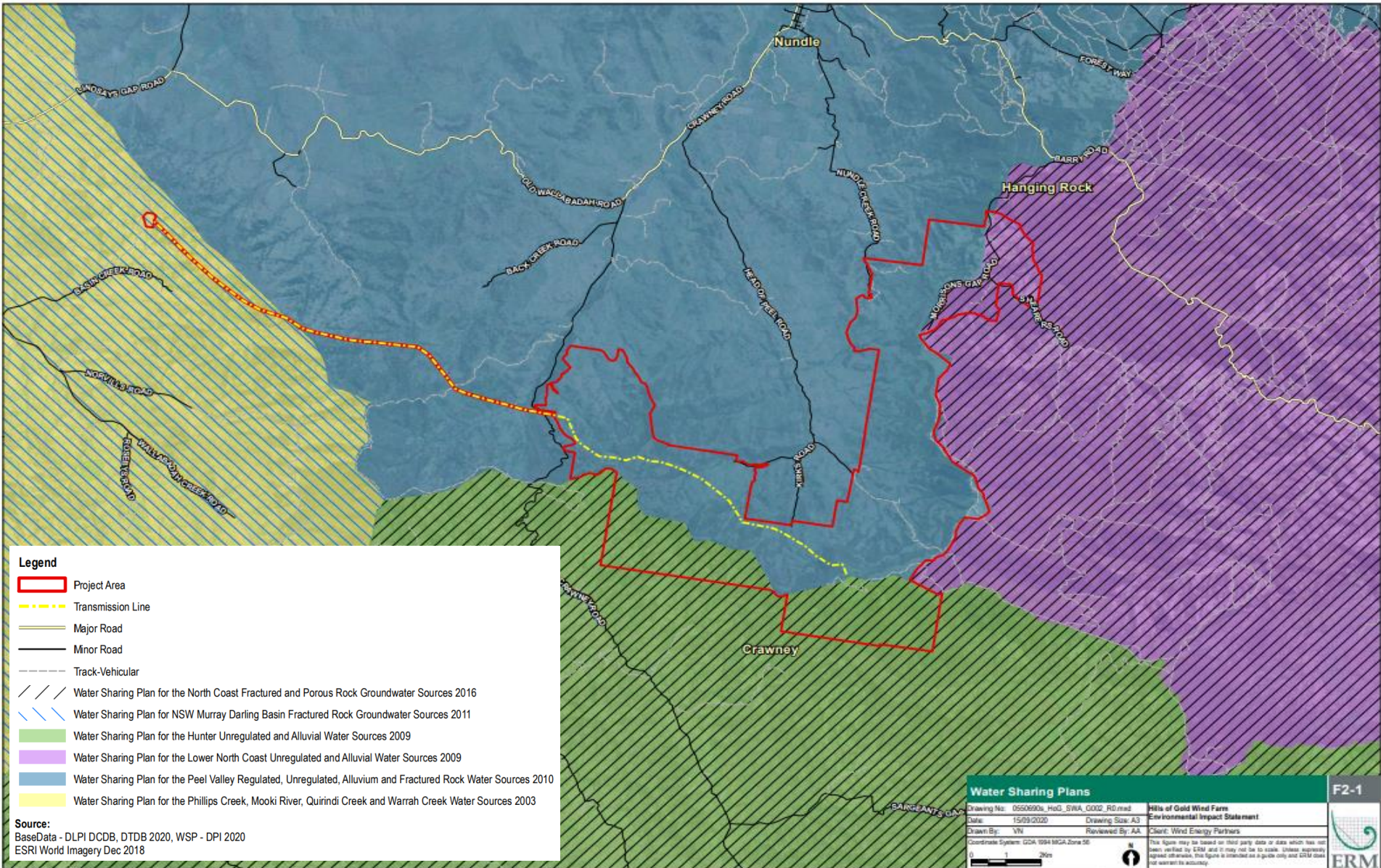
Consultation requirements

During the preparation of the EIS, consultation is required with relevant local, State and Commonwealth Government authorities, service providers, community groups and affected landowners:

- NSW department of industries (Agriculture and fisheries).
- NSW office of water.
- NSW Natural Resource Access Regulator.
- NSW Division of Resources and Geoscience.
- Local Land Services (North West and Hunter Regions).
- Tamworth Regional Council.
- Upper Hunter Shire Council.
- Liverpool Plains Shire Council.
- Environment Protection Authority.



6.5 Water and soil Assessment Water Licensing / water sharing plans



- Legend**
- Project Area
 - Transmission Line
 - Major Road
 - Minor Road
 - Track-Vehicular
 - Water Sharing Plan for the North Coast Fractured and Porous Rock Groundwater Sources 2016
 - Water Sharing Plan for NSW Murray Darling Basin Fractured Rock Groundwater Sources 2011
 - Water Sharing Plan for the Hunter Unregulated and Alluvial Water Sources 2009
 - Water Sharing Plan for the Lower North Coast Unregulated and Alluvial Water Sources 2009
 - Water Sharing Plan for the Peel Valley Regulated, Unregulated, Alluvium and Fractured Rock Water Sources 2010
 - Water Sharing Plan for the Phillips Creek, Mooki River, Quirindi Creek and Warrah Creek Water Sources 2003

Source:
BaseData - DLPI DCDB, DTDB 2020, WSP - DPI 2020
ESRI World Imagery Dec 2018

Water Sharing Plans		Hills of Gold Wind Farm Environmental Impact Statement
Drawing No: 0550690s_HoG_SWIA_G002_RD.mxd	Date: 15/03/2020	Client: Wind Energy Partners
Drawn By: VN	Reviewed By: AA	
Coordinate System: GDA 1994 MGA Zone 50		
		ERM



6.5 Water and soil Assessment

Water Sourcing / Water Demand

The Project has **four viable options available** to source water, being:

- Council water supply, in agreement with the relevant Council(s);
- Extraction from an existing nearby landowner bore, in agreement to use their allocation;
- Extraction from a new groundwater bore, which will require a license in consultation with WaterNSW;
- Extraction from a surface water source (e.g. Chaffey Dam), which will require a license in consultation with WaterNSW.
- *Confirmation of the proposed source will be determined following detailed design.*

Project Total Water Demand during construction

Activity	Water Requirement
Concrete production (batching plant);	3.5 ML
Construction of roads and hardstands	24ML
Dust suppression	5.5 ML
Total	33ML

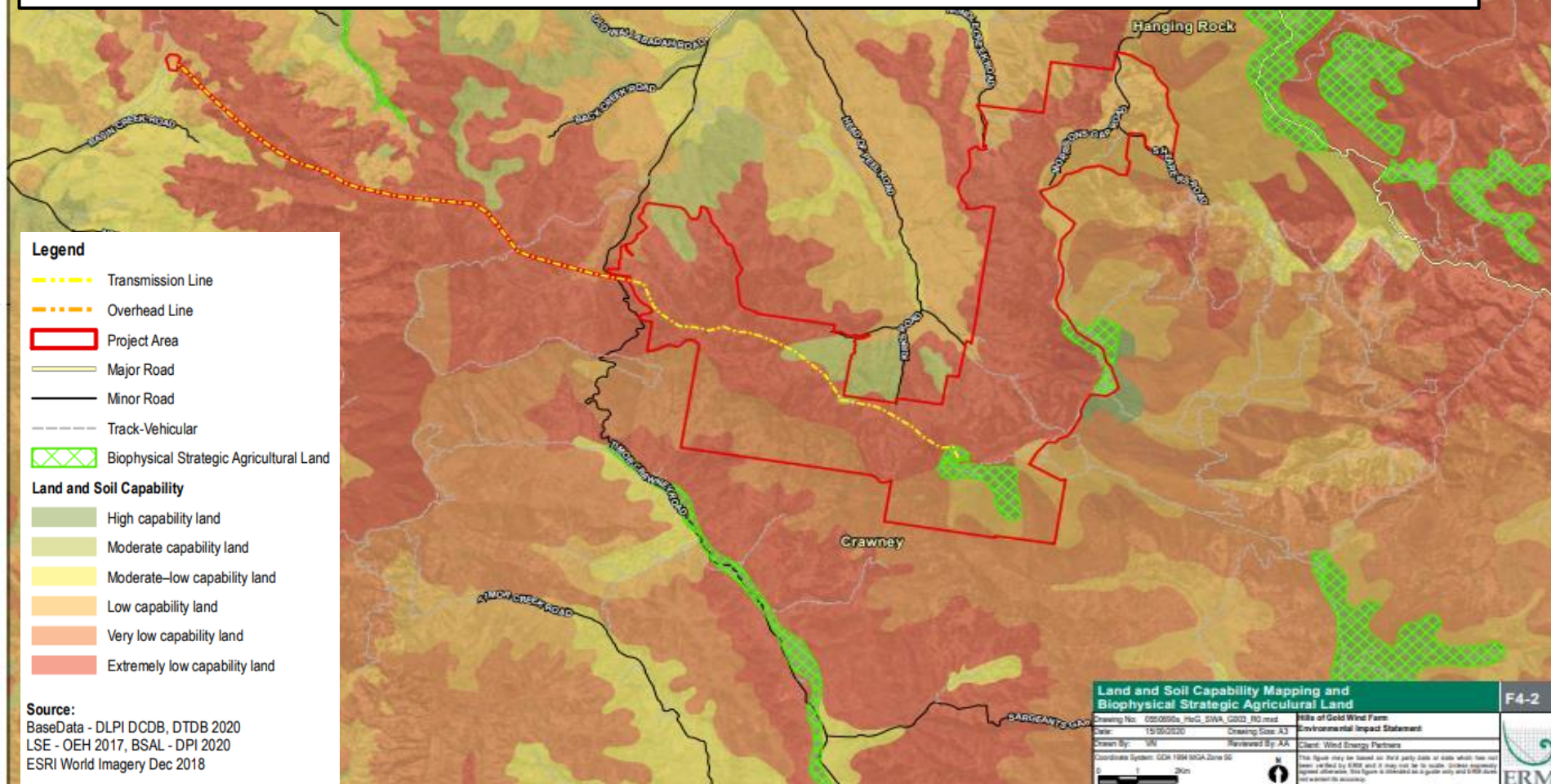
*Given the total requirement for all Project activities is limited to the 24-month construction period is approximately 33 ML, **it could be possible to permit water abstraction for the Project without impacting environmental flows.***



6.5 Water and soil Assessment

Assessment / Existing Conditions

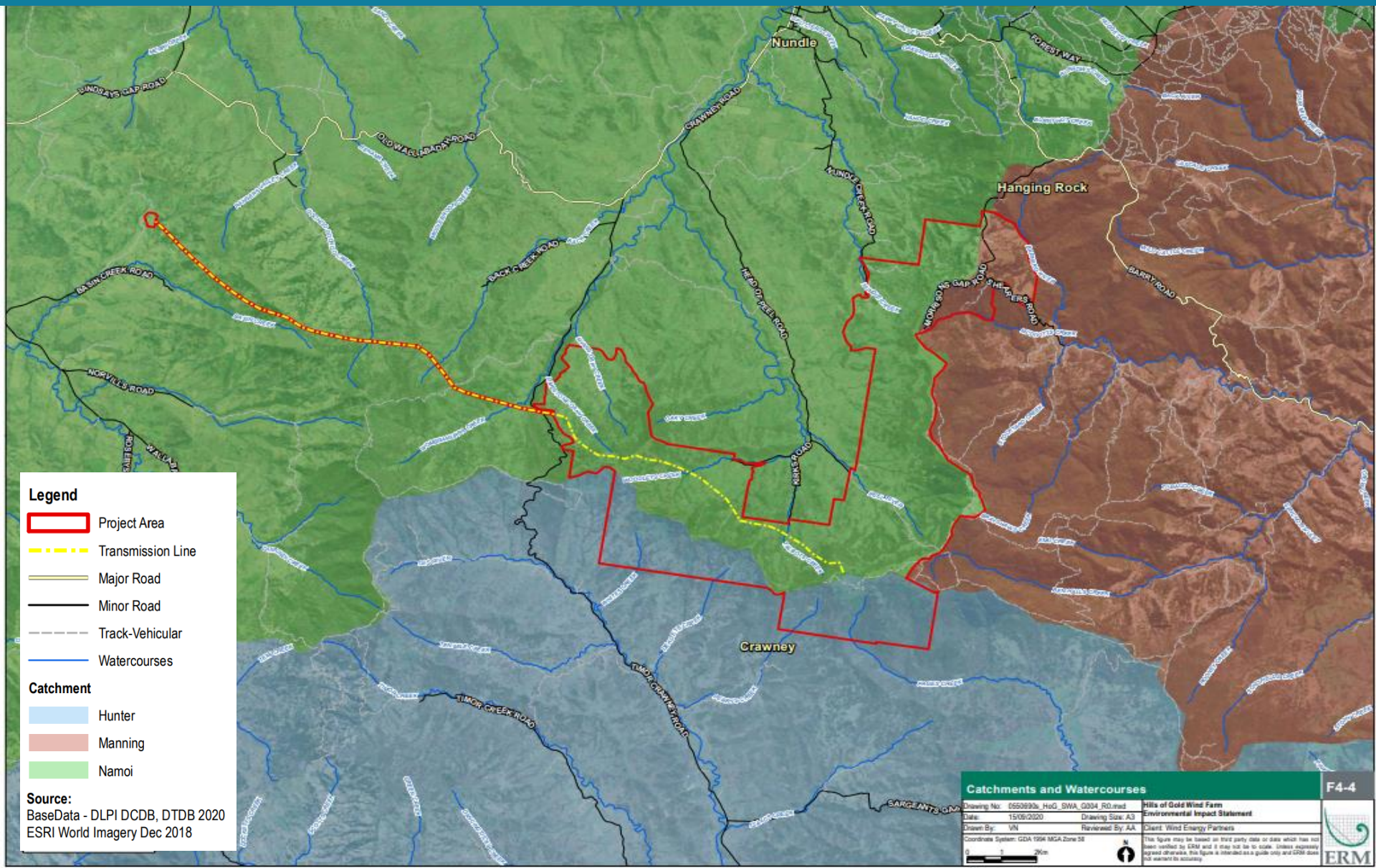
- ASC Soil Type Map: Ferrosols soil type.
- OEH eSPADE : Five soil profiles.
- The Soil Regolith Stability classification: Predominately R3 with small areas mapped as R1.
- Soil Hydrologic Groups: Type A and Type B (high and moderate infiltration rates, respectively).





6.5 Water and soil Assessment

Surface water and water crossing



Legend

- Project Area
- Transmission Line
- Major Road
- Minor Road
- Track-Vehicular
- Watercourses

Catchment

- Hunter
- Manning
- Namoi

Source:
BaseData - DLPI DCDB, DTDB 2020
ESRI World Imagery Dec 2018

Catchments and Watercourses F4-4

Drawing No: 055090b_HoG_SWA_G004_R0.mxd	Hills of Gold Wind Farm
Date: 15/09/2020	Environmental Impact Statement
Drawn By: VN	Client: Wind Energy Partners
Reviewed By: AA	
Coordinate System: GDA 1994 MGA Zone 58	This figure may be based on third party data or data which has not been verified to ERM and it may not be to scale. Unless expressly agreed otherwise, this figure is intended as a guide only and ERM does not warrant its accuracy.



6.5 Water and soil Assessment Risk Assessment Results

A qualitative risk assessment suggests that **overall potential risks to water and soils are relatively minor.**

- For the most part, pad sites and access road construction occur on relatively low-moderate gradient lands high up in the respective drainage catchments.
- construction sites within the Project Area present a **low erosion** hazard considering factors such as climate, soils and landform (RUSLE equation, Erosion hazard assessment based on five factors: rainfall erosivity; soil erodibility; slope length and gradient; soil cover and management practices).
- vegetated buffers lie between work areas and watercourses.
- **sustainable water supply** options will be pursued through consultation with landowners and relevant Government agencies. Licenses would be obtained as required.
- water flows are not anticipated to be affected during the construction of the Project, given the localised impacts are located upstream on the top of the ridgeline. Any potential impact downstream will be effectively managed at the source of works (i.e. velocity controls in areas with steep slopes) through the implementation of a progressive Erosion and Sediment Control Plan (ESCP).



6.5 Water and soil Assessment Management Plan / Mitigation Strategy

Erosion and sediment control measures will be implemented

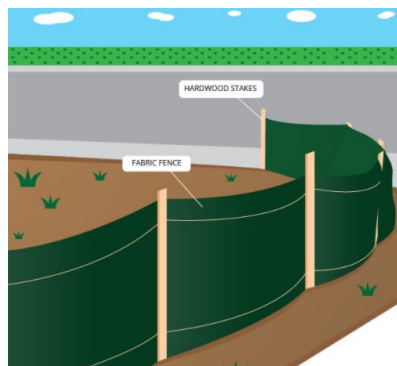
Staging of work

Staging of works is one of the simplest and most effective forms of erosion and sediment control. By limiting the exposed area to the minimum possible at any one time, reduces the risk of soil loss.

Prior to disturbing an area the following management measures should be implemented:

- barrier or sediment fencing,
- Installation sediment fence downslope and boundary fencing/flagging.
- Installation upstream stormwater diversion drains and stabilise their outlets.
- Installation of sediment traps with stabilised outlets as shown in Progressive ESCPs.

- Erosion control
- Sediment control
- Stormwater management
- Site rehabilitation



Sediment fencing



Sediment traps and basins



6.5 Water and soil Assessment Management Plan / Mitigation Strategy

Some specific construction and activities mitigation.

Pad sites

- Refer to areas that may be cleared, levelled and then stabilised .
- Pad sites will be built in accordance to Erosion Sediment Control Plan (ESCP).

Unsealed Internal Access Roads

- Maintaining good stormwater drainage.
- Limit the clearing width to the minimum that is practicable.
- Strip and stockpile topsoil separately for use in rehabilitation

Trenching

- Land disturbance minimization.
- Avoid trenching in locations concentrating water flow.
- Monitoring weather to avoid opening trenches prior to forecast rainfall.
- Topsoil and subsoil separation, topsoil is replaced on the surface.

Concrete batching plant

- Implementation of separate stormwater collection and drainage systems.
- Suitable washout locations.
- Monitoring stormwater discharges (pH and SS)

Dewatering

- Collecting of water stored in trenches, sediment traps and low-lying depressions.
- Reuse it on site for dust suppression on unsealed access roads and watering of rehabilitated areas

Site Monitoring and Maintenance

- Effective system of sediment control devices (inspection, maintenance and cleaning program)



DPIE Assessment Process



8. Next Meeting – October 29th, 2020

1. Cultural and Heritage

2. Transport Assessment

3. Biodiversity Assessment

Empty rectangular box for additional information or notes.



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Questions and Discussion



Attachment A: HOGPI CCC Meeting 22.09.20 Questions

Attachment B: Engie response 9.9.20

CCC Meeting 22.09.20

Questions about Concrete Batching Plant:

1. Where is it located?
2. Which landholders will be located downstream of concrete plant? Have WEP notified those landholders?
3. What does it mean “suitable wash out locations”?
4. There is no mentioning of the disposal plan for the concrete waste, will it be disposed of/ dumped on site or carted away?

Questions on Water and Soil Assessment

1. Has WEP conducted an extensive hydrological study to determine existing surface and sub-surface water flows?
2. Will this extensive study include a baseline study for monitoring operational impact?
3. Has WEP conducted a Hydrological study to assess impact of excavation and foundation construction on existing sub-surface hydrology?
4. The development area would require baseline water quality and quantity study, has this been done by WEP?
5. Has there been an assessment of potential impact into Chaffey Dam inflows? (Tamworth water supply)
6. Have the assessments taken into account the location high in catchment close to escarpment in high rainfall area prone to land slips?

Questions on Transmission Lines & Turbine Power Lines

1. If this development was approved and built, will the transmission towers and power lines be taken down during decommissioning?
2. How high are the Transmission Line Towers?
3. How many Transmission Line Towers will be required?
4. How wide is the clearing below the towers and along the Transmission Lines?
5. How long is the distance required for Transmission Lines between the Sub Station and the Grid / New England Hwy?
6. Will the underground Turbine Tower connecting power lines be removed at decommissioning?
7. Who will be responsible for removing these underground power lines and regenerating the land?
8. How much concrete will be required per turbine?
9. What is the overall footprint of this proposed Wind Farm, including Batching Plants, Sub Station, access roads, footings, crane pads and transmission lines?
10. Has a battery storage facility been included in the assessment and if so how much area is required for the facility?

Questions forwarded by CCC member to Engie Senior Communications Adviser Andrew Turner on September 1. Response received September 9.

I tabled the following online article at last week's Hills of Gold Wind Farm Community Consultative Committee meeting. Is the article accurate?

The article was not written by ENGIE or Mitsui and reflects the opinions of others. ENGIE is investigating a range of financial models to support the development of renewable energy projects in Australia but will make public comments on these matters when it is appropriate to do so.

May the CCC please see a copy of the International Power (Australia) Holdings brochure sent to prospective investors?

Due to commercial confidences, we are unable to release the document.

What investors has ENGIE/Mitsui attracted for ventures in the past? Does the investment come from Australia or, if outside Australia, which countries?

ENGIE and Mitsui are both stock market-listed companies. You can find more details about their respective financials here: <https://www.engie.com/espace-finance> and here: <https://www.mitsui.com/jp/en/ir/index.html>