

Kaimai Wind Farm Tourism and Recreation Impact Assessment



REPORT TO VENTUS ENERGY LTD
MAY 2018



Document Register

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Acknowledgements

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1 Introduction and Background

TRC Tourism have been engaged by Ventus Energy (NZ) Ltd to provide an assessment of the potential impact of the proposed Kaimai Wind energy project on tourism and recreational activities.

The proposal is located on farmland at the northern end of the Kaimai Ranges. The area covered includes three landholdings.

The original proposal sought to install up to 26 wind turbines. After consultation with affected parties this has now been reduced to 24.

Nominally, the turbines will have a hub height in the range of 98m to 132m with a rotor diameter of between 136 and 160m. There are seven turbines in the range of 98m to 112m hub height proposed along the upper part of the range, and 17 larger turbines proposed across the balance of the site. The site is privately owned and farmed by three separate landowners. The grid connection will be via the existing 110kV lines that pass over part of the landholding.

The main recreational activities at the site itself include gliding and soaring along the mountain range and hang gliding and paragliding. The main attractions in the immediate area include the Hauraki Cycle Trail, walking in Kaimai Mamaku Forest Park, pig hunting, deer stalking, tramping and general tourism in Karangahake Gorge, and the Thermal Pools in Te Aroha.

1.1 Methodology

TRC Tourism has undertaken an assessment of the actual and potential recreation and tourism effects arising from the proposed construction and operation of the Kaimai Wind energy project. The methodology followed to carry out this assessment included:

- A review of national, regional and local recreation and tourism data
- Undertaking background research into relevant recreation and tourism strategies and plans for New Zealand, Hauraki and Matamata-Piako Districts
- Undertaking background research into relevant local government planning and strategic documents for the Districts
- Undertaking telephone and/or email interviews with a selection of key stakeholders including the Piako Gliding Club, local i-SITES, Thames Pistol Club and Hauraki Rail Trail. The Department of Conservation was contacted a number of times via email and phone however no response or comment was forthcoming
- A site visit
- A desktop review of the proposal including assessments regarding aviation, landscape and visual impacts
- Background research into recreation and tourism effects/activities at existing New Zealand wind farms.

2 Existing Recreation and Tourism Setting

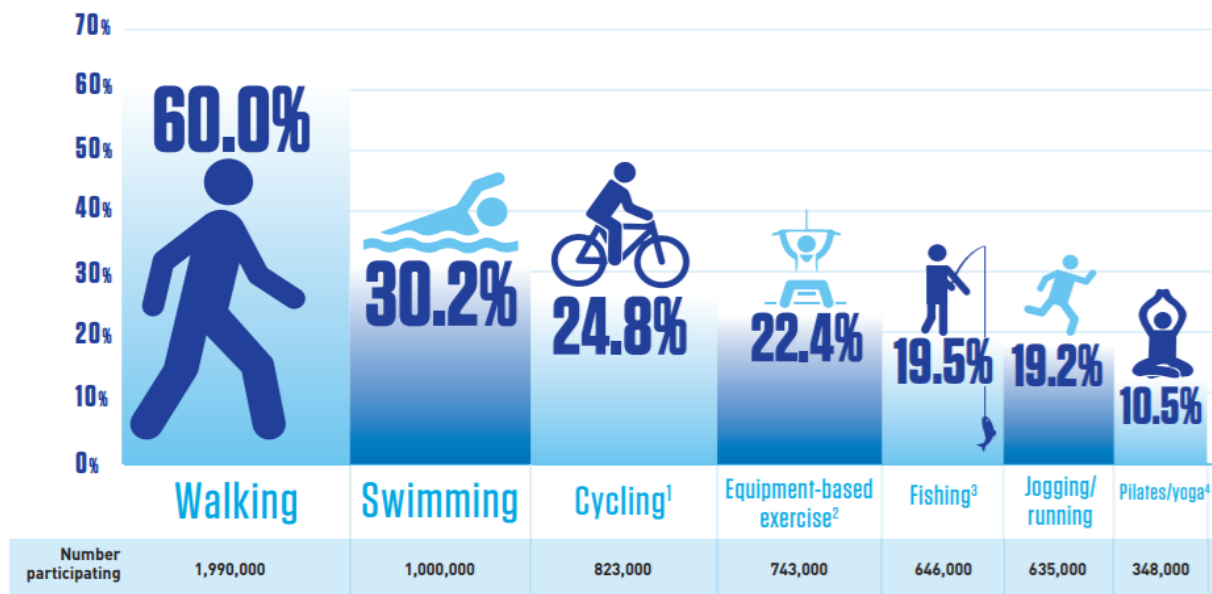
2.1 National Context

2.1.1 Recreation

New Zealanders are becoming more active, with the Active New Zealand Survey 2013/14 revealing that 74% of adults (2.5 million people) are taking part in sport and recreation in any given week, up 1% from 2007-08.

The recreation activities measured by the Active NZ Survey which are most relevant to the Kaimai Wind Farm project are walking, cycling and gliding and paragliding. This Survey revealed that walking and cycling are among the most popular recreation activities undertaken by NZ residents over 12 months (see diagram below). Gliding and paragliding are less popular, with less than 1% of the New Zealand population taking part in these activities at least once during 2013/14. There is no data available on participation rates in hang gliding.

Most Popular recreation and sports activities for participation



1 Cycling includes mountain biking and cycling.
 2 Equipment-based exercise includes the use of exercise equipment (eg, exercycles, treadmills, weights) at home or at the gym.
 3 Fishing includes freshwater and marine fishing.
 4 Pilates/yoga includes any activity done at home or at the gym.
 5 Dance includes several dance genres (eg, ballet, hip-hop, ballroom, modern and tap). It does not include club/rave/discos, which had been included and reported in previous Active New Zealand Survey reports.

Figure 1. Source: Active New Zealand Survey (2013/14)

2.1.2 Tourism

New Zealand has a ten year tourism strategy, launched in 2013, and is implementing programs and actions to achieve the goals set out in the plan, and is measuring progress towards achieving those goals.

Planned growth in tourism in New Zealand¹ centres around four key pillars:

- › Productivity – making more money from investments already made including improving seasonal spread of tourism, and dispersal to regional areas
- › Visitor Experience – driving value growth through outstanding visitor experiences
- › Connectivity – growing sustainable air connectivity, and
- › Targeting Value – seeking to grow the greatest value in the market, not simply chasing visitor numbers for their own sake.

A review of the strategy two years on² shows remarkable growth and progress towards the aspirational target of \$41 billion nationally in tourism revenue by 2025.

Published figures for 2014 to 2016 show two-year growth of:

- › 15.6% in international arrivals
- › 23.3% in hotel revenue per room
- › 10.7% in hotel guest night increases.

The total spend on tourism in New Zealand in the year to June 2017 was \$26.8 billion.

Annual Spend on Tourism in New Zealand

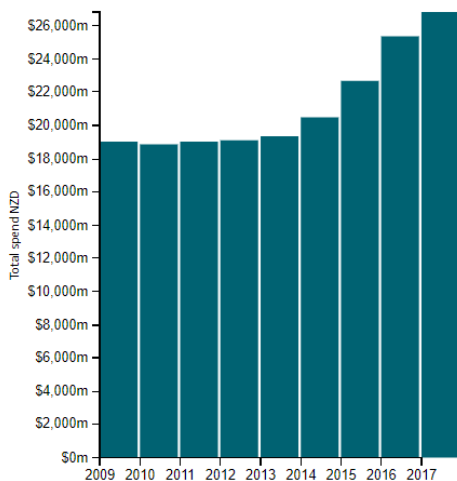


Figure 2 Source: MBIE Annual Monthly Regional Tourism Estimates

The annual spend on tourism in New Zealand has increased from \$19,318 million in 2013 to \$26,831 million in the year to June 2017, a total increase of 38.9%.

The majority of the growth in tourism spend has come from international visitors. The increase in the domestic spend has been slower, increasing from \$12,507 million in 2013 to \$15,311 million in 2017, an increase of 22.4%.

¹ Tourism 2025 Growing Value Together 2013 – NZ Tourism Industry Association

² Tourism 2025 Growing Value Together 2016 – 2 Years on- NZ TIA

Annual Spend on Tourism in New Zealand by International Visitors

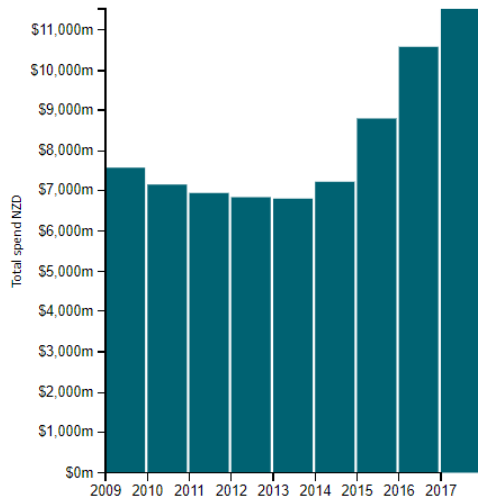


Figure 3 Source: MBIE Annual Monthly Regional Tourism Estimates

Annual Spend on Tourism in New Zealand by Domestic Visitors

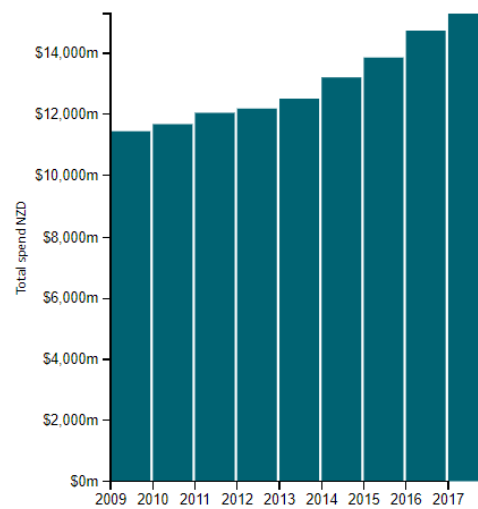


Figure 4 Source: MBIE Annual Monthly Regional Tourism Estimates

2.2 Hauraki and Matamata-Piako Districts

2.2.1 Recreation

Karangahake Gorge, in the Kaimai Mamaku Forest Park, is the main attraction in the local area and offers a number of short walks such as the Karangahake Windows Walk and the Karangahake Gorge Historic Walkway. Most of these walks are contained within the Gorge.

A network of tracks provides access to the summit of Karangahake Mountain and along the range to Te Aroha Mountain. These are longer walks of four hours to nine hours and more difficult. They range from management trails to tramping tracks and unformed routes. There are spectacular views from Karangahake Mountain including over the Waikato to the west across the proposed wind farm site. Parts of these tracks are close to the western boundary of the Park and near to the proposed location of wind energy towers.

The Hauraki Rail Trail, a 173km track from Kaiua in the north to Matamata in the south, also runs through the area. The rail trail is part of the Nga Haerenga New Zealand Cycle Trail and is made up of five sections. One of the sections travels from Paeroa to Te Aroha to the west of the Kaimai Ranges.

The main recreational activities at the site itself include gliding and soaring along the mountain range, hang gliding, paragliding and pig hunting. The Paeroa golf course is on Rotokohu Road to the north of the site. At the closest point the course is about one kilometre and the clubhouse two kilometres away from the nearest turbine.

The Thames Valley Pistol Club is on Hill Road to the south, several kilometres away from the site.

2.2.2 Tourism

According to Ministry of Business, Innovation and Employment figures, like most of New Zealand the Waikato Region has experienced strong growth in tourism spend over the last five years with the total spend increasing 39% (in line with the national increase) since 2013. The total annual spend on tourism in the Waikato Region in the year to June 2017 was \$2,489 million. Of this, \$162 million was spent in the Matamata-Piako District: \$101 million by domestic visitors and \$61 million by international visitors. A total of \$80 million was spent in the Hauraki District, the majority of which (\$68 million) was spent by domestic visitors.

Most of the international spending in the Waikato region is by Australian visitors, with the USA and the UK the next largest markets; Australians spent \$170 million in the year to June 2017, visitors from the USA spend \$107 million and those from the UK \$82 million.

Attractions

The mineral springs in Paeroa were used to produce the iconic Kiwi soft drink Lemon & Paeroa, known as L&P, and the big L & P Bottle is a Paeroa tourist attraction with visitors taking photos in front of the giant bottle.

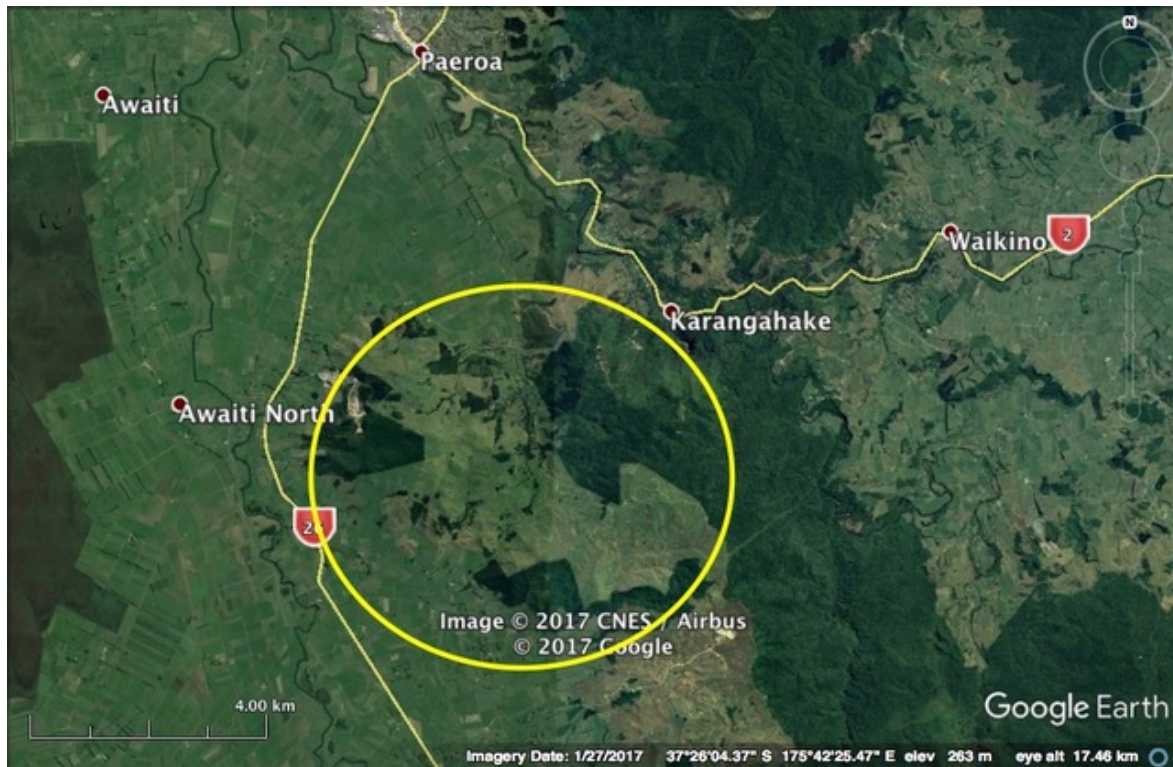
Bullswool Farm is a working farm which has walking tracks across the property allowing visitors to pet the animals (which include miniature horses, emus, goats, kune-kune pigs, alpacas, llamas, deer, ducks, pheasants, coloured sheep and donkeys) and hand feed them.

Further south in Te Aroha there are mineral springs which have been a popular spa for 100 years.

2.3 Kaimai Wind Farm site

The proposed wind farm site is located on the western side of the Kaimai Ranges, between 4 -10km south of Paeroa, in the Hauraki and Matamata-Piako Districts of the Waikato Region. Seven of the turbines are proposed for the higher ridgeline adjacent to the Kaimai Mamaku Forest Park and the other 17 are located on the lower ridges to the west.

The proposed connection to the electricity grid will occur on site through connection to the existing 110kV lines which cross over the landholdings.



2.3.1 Public access

There is no public access to the three landholdings which make up the development area.

One landholder has permitted hang gliding and paragliding from their property on an irregular basis. These pursuits also occur at other sites along the Kaimai Ranges, notably near to Te Aroha Mountain.

There is no other public access to the site, except for two road reserves within the site. One connects Rotokuhu Road with Rawhiti Road. There is a constructed road over part of its length. The other road reserve connects from Rawhiti Road to the upper part of the site. This road reserve has no exit and is largely undeveloped.

2.3.2 Gliding and soaring activity

Gliding along the Kaimai and adjacent ranges relies on the strong updrafts which occur when the prevailing westerly winds are forced up by the terrain. This style of gliding is known as 'ridge soaring' and relies on the

smooth laminar flow of wind rising over the hills. This gliding is generally undertaken at a low altitude of 100-200 feet above the terrain to take maximum advantage of the updrafts.

This line of hills extends well north and south of the Kaimai and enables gliding activities from Coromandel in the north down to near Rotorua.

Glider aircraft operate at varying heights along the ranges, with aircraft travelling north generally at a higher altitude than those returning toward the south.

The Piako Gliding Club is based at the Matamata airfield near Waharoa near Matamata.

The Kaimai ranges is a well-known site for cross country soaring and hosts up to 30 gliders over a ten-day period two or three times each year for competitions. Advice from the Club is there are 600 to 1,000 flights per annum³.

2.3.3 Tourism

There is no current tourism activity on the site. The only tourism activity directly adjacent to the site is walking in the Kaimai Mamaku Forest Park.

2.4 Wind Farm Tourism

Research and past experience demonstrates that wind farms can be of interest to locals and visitors both in New Zealand as well as overseas (eg Australia and Europe). Where recreation access and facilities have been present at New Zealand wind farm sites this has generally been maintained or enhanced following the construction phase.

The following examples highlight recreational and tourism use of wind farms:

- The Tararua Wind Farm (Manawatu Gorge) and Te Apiti (north of Manawatu Gorge) Wind Farm are both sited on private farmland in areas that originally had no public access, recreation or tourism. The sites are still not open to the general public, although people do visit Tararua on commercial tours or independently as far as public roads allow. Interest in the Te Apiti Wind Farm resulted in Meridian Energy expanding the carpark and viewing facilities to cater for the demand.

The wind farms have had a positive effect on the Manawatu tourism industry in general and are now an important component of the regions image/brand. The Te Apiti Wind Farm lookout is listed under the Activities and Attractions section on the Palmerston North City and Manawatu website (www.manawatunz.co.nz).

- The Hau Nui Wind Farm, operated by Genesis Energy, is located in the hills south of Martinborough in the Wairarapa. The viewing platform and information display are about 300 metres from the nearest turbine.

³ Peet Aviation, Kaimai Wind Farm, Aviation Issues Assessment, 17 August 2017

- West Wind at Makara, near Wellington, incorporates the West Wind Recreation Area. The area includes a viewing platform and interpretation that tells the history of the site and informs visitors of Meridian Energy’s wind farm operations. There are walking and biking tracks with varying lengths and degrees of difficulty. Since the walking and biking tracks opened in late 2011 TRC Tourism estimates the wind farm had received approximately 6,000⁴ visitors in its first year.



- The Pipiwaharoua Way at Te Uku Wind Farm was developed as a walking and cycling track as a mitigation measure when the site was developed. The trail goes over privately-owned farmland and paper roads and is open for public use. The track climbs from a car park on Kawhia Rd, near Bridal Veil, runs about 6 km and climbs 280m to the windfarm on Wharoua Plateau. Crossing steep to rolling terrain, the 18 kilometre return trip takes approximately four hours to walk or two hours to cycle. During August, September and October the sections of the trail on farm land are closed for lambing. There are outstanding 360 degree views across the greater Waikato, to include Raglan, Kawhia and Aotea harbours, and on a clear day, Mt Taranaki.

⁴ TRC Tourism estimate 2012, based on five years of observation, vehicle counts and track counter data (DOC).

3 Assessment of Potential Effects

3.1 Potential effects of wind farms on recreation and tourism

Wind farms have the potential to affect recreational and tourism activity in the following ways:

- Wind farms sited in a location used by recreationalists can physically prevent access. This may take the form of a walking track, hunting area, or an access route to a river, lake or the coast. The significance of these effects can depend on the user's ability to easily substitute that specific location or route for one of similar quality/type nearby, as well as the utilisation of the location or route.
- The location of wind farms can affect the amenity value of the recreation and tourism experience, which can be an important component for some participants. Generally, the amenity values for recreation have a higher level of importance in more 'remote' or 'wilderness' settings due to the expectations of the users in these environments. There are two areas of relevance when considering the proposed development:
 - The proposed wind farm site itself could be considered as 'rural' under the New Zealand Recreation Opportunity Spectrum classes⁵. It is an area that has been highly modified (ie by farming) in the past. The addition of wind turbines into this landscape would not be expected to significantly impact on the tourism experience in this setting.
 - The adjacent Kaimai Mamaku Forest Park is classified as an Outstanding Natural Landscape under the Hauraki District Plan and an Outstanding Natural Feature and Landscape under the Waikato Regional Policy Statement. Views both towards and from this natural area are significant for tourist activities focussed on them, and the addition of wind turbines has the potential to adversely impact this tourism experience.
 - It should be noted that community attitudes towards wind farms vary considerably and tourists experiencing either of these areas may be positive, negative or indifferent to the introduction of wind turbines into the landscape.
- Wind farms can generate community and visitor interest and some proposals have involved the enhancement of recreational amenities (eg tramping and cycling opportunities). As outlined above, some wind farm developments in New Zealand have also been of particular interest to local communities and visitors – whose visits have been accommodated by the provision of parking, viewing areas and information panels.

⁵ The New Zealand Recreation Opportunity Spectrum. Guidelines for Users. Department of Conservation, P.C. Taylor (1993).

3.2 Assessment of recreation and tourism effects for Kaimai Wind Farm site

3.2.1 Construction

The occasional site-based activity of hang gliding will be prevented by construction activity. Apart from this, there are no recreation and tourism activities on site. Construction impacts arising from the wind farm development will occur off site.

Construction stage impacts will primarily be caused by oversize vehicle movements between the port at Mount Maunganui and the site. The proposed route for these vehicles is via State Highways 24 and 26 through Tauranga, Matamata and Te Ahroa.

There are estimated to be some 288 loads required to bring the towers and associated equipment to the site. These will be managed under a permit from the NZ Transport Agency and will be subject to traffic management arrangements and other conditions.

Limiting these oversize vehicle movements to periods outside school holidays would reduce their impact.

On-site works will include upgrading of the existing access tracks and creation of level platforms for tower construction. These works will have some visual impacts during construction however these can be mitigated through battering of earthworks and revegetation with similar grass species to the surrounding farmland.

The noise associated with construction activities at the site will be temporary and managed in accordance with the relevant construction noise standards (NZS6803) via a Construction Noise Management Plan.

The potential impact of earthworks and construction noise will be mitigated by the distance of the turbine sites from nearby recreational facilities such as the golf course. There may be some impacts on walkers in Kaimai Mamaku Forest Park.

Construction impacts will be temporary and will reduce once the wind farm becomes operational.

3.2.2 Impacts on recreational activities

Despite the fact there are limited recreational activities on site at present there will be impacts on activities either above or adjacent to the site as a result of the construction and operation of the proposed wind farm.

Some users will be directly affected by the wind farm and their existing activities will need to be modified as a result of the development. These users include gliders, hang gliders and paragliders.

Other recreationalists will be indirectly impacted by the wind farm. The effect of these impacts on the recreational experience depends on the type of experience being sought. In general those seeking a predominantly natural experience are more likely to be adversely affected by the large utilitarian turbines being visible and audible in the landscape.

Our assessment of the potential impact of the proposal on the tourism and recreational experience arising from the visibility of the turbines on is based on the visibility mapping prepared by Incisive Mapping and the Landscape and Visual Assessment prepared by Mike Moore Landscape Architect for the project.

These potential impacts are discussed below:

Walking in Kaimai Mamaku Forest Park

Analysis of turbine visibility⁶ shows that up to 10 turbines will be visible from many areas in Kaimai Mamaku Forest Park, although few if any will be visible from within Karangahake Gorge.

Turbines 18-24, which are located close to the boundary of the park, will be the most visible from the reserve and are close to the walking track to Karangahake Mountain.

The closest point of the track network is near turbines 18 and 19 at the junction of Mountain Link Track and Country Road, where the turbines are approximately 400-500m from the track. The Mangakino Track heads west from this point close to the park boundary and turbines 21-24 however the track drops on the east facing slope and with the forest cover the turbine towers are unlikely to be highly visible.

The Landscape and Visual Assessment⁷ determined the turbines would have an adverse visual effect when viewed from Karangahake Mountain. The Assessment estimated a high magnitude adverse effect from the upper turbines 18-24, and low magnitude adverse effect from the lower turbines 1-17.

The Landscape and Visual Assessment also notes that the adverse visual effect from elsewhere in the Park would be low because of the forest obscuring the turbines.

Noise levels have been estimated at 55-60 dB within 100m and 35-40dB at 500m distance from turbines. These noise levels are not high; 35 dB is a whisper and 60 dB the loudness of conversational speech.

The recreational setting of the tracks in this area is 'natural edge' or 'backcountry' used primarily by day-trippers and backcountry adventurers. While some sections of the walks have a more natural and remote setting, any point along the tracks with views out to the west have a more 'edge' experience because views are of an open and settled pastoral landscape interspersed with roads, houses and villages. This is not a wilderness experience.

The presence of the turbines will have a negative impact on the feeling of 'naturalness' and this can be expected to have a negative impact on the overall tourism and recreational experience in the reserve. This negative impact is mostly related to the close presence of the upper turbines 18-24 as these will appear larger and more dominant in the landscape.

Mitigating this negative impact is the fact that the turbines will only be visible in the context of the rural character of the broader westward view and the wind turbines are not inconsistent with the visual character of this broader rural aspect. Their location spread along and below the ridge line will assist in mitigating their visual impact when viewed from within the Park.

Cycling the Hauraki Rail Trail

The section of the cycle trail between Paeroa and Te Aroha is a Grade 1 (easy) ride through lush Waikato farmland, with views of Mt Te Aroha, the bush clad Kaimai Ranges and the Hauraki Plains along the old railway track formation.

⁶ Incisive Mapping, Kaimai Wind Farm Turbine Visibility mapping, 19 Dec 2016

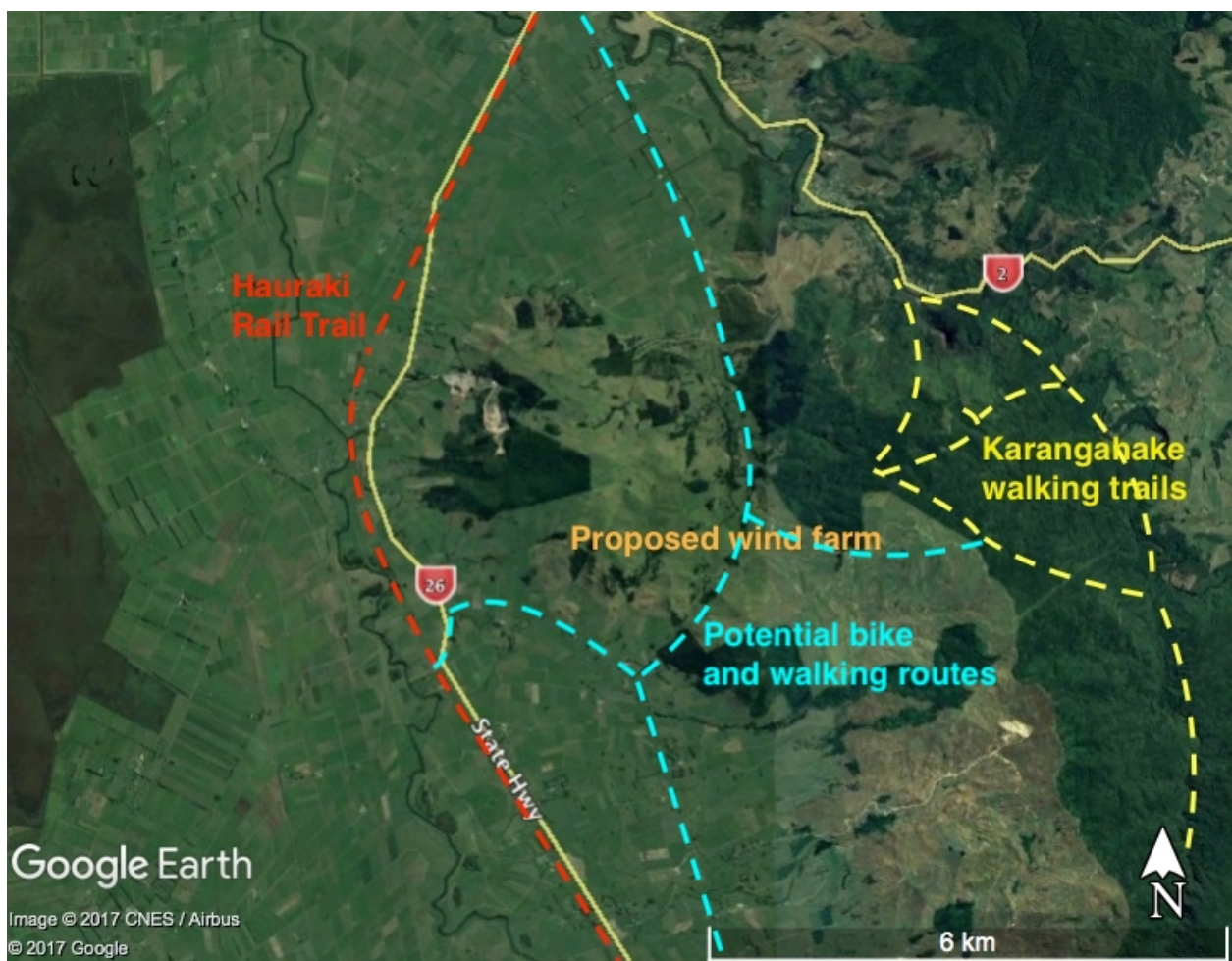
⁷ Mike Moore Landscape Architect, Kaimai Wind Farm Landscape and Visual Assessment, 12 Feb 2018

Cyclists are surrounded by lush green country scenery, punctuated with dairy cows and other farm animals.

The Landscape and Visual Assessment has estimated the adverse visual effect from the area of the trail as moderate-low and given the users' activity and landscape context the addition of wind turbines into the view should not detract from the tourism and recreational experience.

The presence of the wind farm has the potential to add to the range of features to be appreciated on the ride. Trailside information signage about the wind farm could deliver on this potential.

There is also potential to add to the range of cycling opportunities in the local area through the establishment of a cycling route on the road reserve connecting Rotokuhu Road with Rawhiti Road. Because of the steepness of the route this could not become part of the rail trail Great Ride however with good wayfinding signage and trail information could be an alternate route between Paeroa and Te Aroha for more experienced cyclists.



Hang gliding and Paragliding

Advice from Peet Aviation⁸ is that hang gliders and paragliders could no longer launch from the site itself. Despite this, gliders could fly over the site if they were launched elsewhere and operated at a safe height

⁸ Peet Aviation, Kaimai Wind Farm, Aviation Issues Assessment, 12 September 2017

above the turbines, at approximately 2,000 feet. Flight below that level would increase the potential for incident due to the pylons and turbulence generated by the turbines.

There are a number of other locations along the range where hang gliding and paragliding would continue to be possible such as Te Aroha Mountain and Swaps Quarry.

Given the limited access on site for this activity to date, and the proximity of other opportunities, loss of the launch opportunity on the site is considered a minor impact.

Gliding and soaring

Wind generators affect the laminar flow of wind which dissipates energy and creates turbulence.

Potential impacts on this ridge soaring activity include the need to avoid collisions with wind turbines but also the loss of existing gliding terrain downwind of the generators. The turbulence effects vary dependent on wind speed, and pilots will need to assess the dynamic impact of this turbulence in a similar way they negotiate other landscape elements and aviation hazards.

While there is some low level flying over this area, tracking data provided by the Soaring Club⁹ display a range of heights over the proposed site the majority of which appear to provide at least 1000 feet or more separation above the surrounding area. This provides sufficient height separation between the glider aircraft and turbines in the wind conditions in general found for the area.

Following discussions with the gliding club one turbine has been removed from the proposal to give a 1.5 km distance between turbines 16 and 17 to allow for low level return flights at this critical location. Kaimai Wind Farm Limited have also advised they will consider shutting down turbines in this location to further facilitate glider activity, especially during competitions.

It appears that while there may be an impact on low level ridge soaring in the immediate area of the turbines and some impacts on gliding downwind of the turbines, the construction and operation of the wind farm will not otherwise limit or prevent recreational or competition gliding and soaring along the Kaimai ranges.

Golf course and pistol club

These facilities, which are several kilometres north and south of the wind farm site are unlikely to be affected by the development. Turbines will be visible however this should not affect activities in these locations.

Other tourism activities

Tourism in the Hauraki and Matamata-Piako Districts is largely based around the rural landscape, history, towns and villages of the region. The main attractions such as L & P Bottle in Paeroa, Bullswool Farm and the Te Aroha mineral springs and the associated food, beverage and accommodation businesses are unlikely to be negatively affected by development of the Kaimai Wind project.

The Landscape and Visual Assessment estimated the wind farm would have a low to moderate adverse visual effect and adversely affect the 'naturalness' of about 2 kilometres of the ridgeline when viewed from the west. While the turbines will be partially visible from nearby towns and more distant locations, the range is

⁹ Peet Aviation, Kaimai Wind Farm, Aviation Issues Assessment, 12 September 2017

mostly cleared and rural in character when viewed from the west so the introduction of these new elements into the view should not detract from the tourism experience.

The view of the range from the east has a much more natural character and the Landscape and Visual Assessment estimated moderate to high adverse visual effects from the wind farm. Turbines 18-24 are visible along the skyline from a number of viewing points. This effect will impact the tourism experience through the reduction in the natural character of the area.

Given the distance of the wind farm from tourism activities in the region the impacts are likely to be negligible.

There is potential to enhance the range of experiences through the provision of information and interpretation about the wind farm to add an additional tourism feature to the existing range of activities in the area.

4 Recommendations and Mitigation

4.1 Construction Mitigation

The potential disruption to visitor traffic will need to be considered as part of the oversize vehicle permit from the NZ Transport Agency and traffic management arrangements.

Limiting these oversize vehicle movements to periods outside school holidays and major visitor periods would reduce their impact on visitors to the local area. Providing good notification of vehicle movements and providing information about alternate routes would also minimise inconvenience for visitors.

Maintaining close liaison with local hospitality and accommodation businesses and i-SITEs would be help in informing visitors about disruptions but also inform them about the project and its broader benefits.

4.2 Mitigation of potential impacts on recreational activities

4.2.1 Tourism and recreational activities in the surrounding area

All measures to reduce the visibility of the wind farm, such as revegetation of access tracks and associated earthworks with pasture grasses, paint colour and reflectivity, will reduce the dominance of the wind farm in the landscape and therefore reduce the impact on general tourism activities in the region.

A number of initiatives are recommended to assist informing the local community and visitors about the wind farm. These have the potential to enhance tourism in the local area.

Open day

On completion of construction, an 'open day' should be conducted to give i-SITE and visitor centre staff, hospitality and accommodation operators, and local attraction staff the opportunity to visit a turbine and be fully informed about its function. This 'open day' could be extended to the local community to assist build a strong relationship between the company and local community.

Information

Printed and online material should be prepared and circulated to local i-SITE and visitor centres, hospitality and accommodation businesses and other local attractions to inform visitors about the purpose and function of the wind farm.

This material should be suitable for linking from web sites, as brochures for interested individuals and as display material for businesses and centres to inform their customers. This material should be periodically updated to maintain relevance and include performance data as it becomes available.

Static interpretation

Suitable sites should be investigated for the provision of static interpretation and information about the wind farm at accessible sites which have a good overview of the site. This should include on the Karangahake Mountain Track, along the Hauraki Rail Trail, and along State Highway 26.

Wind farm tours

Consideration should be given to the possibility of offering tours of the wind farm site. This could occur on an occasional basis as operational constraints allow or could be conducted by a suitably trained and certified local guide. Dependent upon safety and operational considerations tours could also involve an in-depth adventure experience which would include climbing a tower for people of suitable ability.

Implementing some or all of these initiatives will provide benefits to local tourism and potentially provide new or expanded business opportunities.

Potential public access trails

There is potential to link the Hauraki Rail Trail with the walking tracks in Kaimai Mamaku Forest Park through use of the trails across the wind farm site, similar to the Pipiwaharaua Way at Te Uku Wind Farm.

The road reserve connecting Rotokuhu Road with Rawhiti Road could also be part of a trail providing an alternate route between Paeroa and Te Aroha for more experienced cyclists. Because of the steepness of the route this could not become part of the Hauraki Rail Trail Great Ride however with good wayfinding signage and trail information it could become part of a Heartlands trail network.

These new walking and cycling routes have the potential to increase the range of options for recreational users of both the rail trail and the Forest Park and create east west connectivity in the local area.

The existing road reserve across the site does not have a constructed formation for parts of its length, and where there is a constructed road this leaves the road reserve in a number of locations. The route also passes close to some homes and farm outbuildings.

Opening of these potential public access routes to the public will need discussion with land owners and Department of Conservation.

4.2.2 Hang gliding and Paragliding

Hang gliders and paragliders could no longer launch from on the site, however gliders who have launched at other nearby locations could pass over the site at an appropriate height. Given launching from this site has only been an occasional activity in the past, and the availability of other launch sites nearby, the wind farm development will have little impact on hang gliding and paragliding activity in the local region.

4.2.3 Gliding and soaring

The wind farm development will place some restrictions on gliding and soaring in the immediate area of the wind farm and downwind of the site through the presence of the turbines along the ridge line and the resulting increase in wind turbulence.

Following discussions with the gliding club, Kaimai Wind Farm Limited have agreed to remove one turbine in a critical location for low level return flights and to consider temporary shutdown of turbines in this location to further facilitate glider activity, especially during competitions.

These impacts have been considered in an assessment of aviation issues by Peet Aviation Limited, who have determined the wind turbines will not represent a physical obstacle to aircraft operations over the proposed site.

5 Conclusion

Overall, recreation and tourism effects from the *construction* of the Kaimai Wind Farm will be minimal provided construction traffic impacts are addressed.

The effects of the *operation* of the wind farm on recreational and tourism activities will also be minimal.

Ventus Energy Limited has proactively engaged with the local community and recreational groups during the design and construction phase. To date this has resulted in a reduction in the number of turbines to allow gliding activities to continue, and discussions have occurred about adjustments to operations to allow for enhanced use of the area during gliding competitions. This consultation process is underway and ongoing.

The potential impacts on the recreational settings in Kaimai Mamaku Forest Park are mitigated by the limited visibility of the turbines from most areas because of vegetation, and because they will only be visible from the park in the context of the open rural views to the west.

The establishment of new walking and cycling routes across the site would add to the range of recreational options for people using both the Kaimai Mamaku Forest Park and the Hauraki Rail Trail, thus enhancing these two significant recreational experiences.

More significantly there is an opportunity to make a positive contribution to local tourism through a series of initiatives designed to inform the local community and visitors to the region about the wind farm and its function. The creation of a new wind farm tour experience would add a significant new visitor experience that would positively contribute to the local tourism economy.



AUSTRALIA

Suite 5, 3/4 Gippsland Street
PO Box 837, Jindabyne NSW 2627

Phone: +61 2 64562722

Email: enquiries@trctourism.com

NEW ZEALAND

Level 5, EMC Building, 5-7 Willeston Street
PO Box 2515, Wellington 6140

Phone : +64 4 4723114

Email: info@trctourism.com

www.trctourism.com



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