



Illawarra Escarpment Mountain Bike Trail Network | Review of Environmental Factors

SOCIAL IMPACT COMMENT

Prepared for Niche Environment | 9 June 2022



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REVIEW OF ENVIRONMENTAL FACTORS | SOCIAL IMPACT COMMENT

Prepared for Niche Environment
9 June 2022

PR147

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Certification Page

I, Angela Peace, certify that the SIA component of the EIS contains all information relevant to the SIA for the Proposal, and that the information is not false or misleading. My qualifications and experience are listed below.

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2. Social Impact Assessment Certificate, University of Strathclyde and Community Insights Group
3. Member, International Association of Impact Assessment (membership no. 10499330)
4. Member, Environment Institution of Australian and New Zealand

Experience:

The author is trained in social science methodologies and has demonstrated SIA skills in government, private and education settings. She has managed SIAs for extractive industry, renewable energy and transport infrastructure projects in NSW, including NSW State Significant Developments.

The author is a Social Impact and Community Engagement Specialist with a range of experience in carrying out major Social Impact Assessments (SIA) across a range of sectors in NSW, inclusive of participatory engagement practices.

Date: 9 June, 2022



Angela Peace - SIA and Community Engagement Specialist

I, Dr Jamie Seaton, certify that the SIA component of the EIS contains all information relevant to the SIA for the Proposal, and that the information is not false or misleading. My qualifications and experience are listed below.

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1. Bachelor of Science Hons. (Human Geography)
2. Community Development Diploma
3. Doctorate of Philosophy (Human Geography).

Experience:

The technical reviewer is trained in social science methodologies and has demonstrated SIA skills in government, private and education settings. He has managed SIAs for extractive industry, waste recovery, and transport infrastructure projects in NSW and Queensland, including NSW State Significant Developments.

Date: 9 June, 2022



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1 PROPOSAL OVERVIEW

1.1 Introduction

The Illawarra has become a popular location for mountain biking with unsanctioned trails across the Illawarra Escarpment (the Escarpment). Wollongong City Council (WCC) is working with NSW National Parks and Wildlife Service (NPWS) to explore opportunities to formalise mountain biking activities across the Escarpment to provide a sustainable alternative to the building and use of unsanctioned trails, particularly those at nearby Mount Keira.

The proposed Illawarra Escarpment Mountain Bike Trail Network (the "IEMB network" or 'the proposal') is located along the Escarpment to the west of the Wollongong suburbs of Figtree and Cordeaux Heights and southwest of Wollongong and Mount Keira. The IEMB has exit nodes into the villages of Kembla Heights and Mount Kembla.

The IEMB involves the construction of approximately 28 kilometres (km) of new mountain bike trails and the formalisation of approximately 22 km of unsanctioned trails. It spans multiple land tenures, including approximately 250 hectares (ha) of the Illawarra Escarpment State Conservation Area (IESCA), managed by NPWS. A full description of the proposal is available in Section 6 of the Review of Environmental Factors (REF).

A best practice approach has been adopted for this social assessment by adapting the research principles and design of the *NSW Department of Planning and Environment's Social Impact Assessment Guideline* (November 2021) (the DPE Guideline (2021)). The intent of this assessment is to investigate and provide a succinct overview of the likely social impacts of the IEMB network on the local communities of Mount Kembla and Kembla Heights, surrounding communities within the Illawarra and visitors to the area. It is not the intent of this assessment, to undertake a complete social impact assessment in accordance with the DPE Guideline (2021).

This assessment has been undertaken during the design phase. It looks at both the likely positive and negative social impacts and where possible and reasonable, identifies potential mitigation strategies. It is recognised that projects typically develop their design alongside the environmental assessment process. This provides an opportunity for design refinements to reflect key findings from the environmental assessment process. It can therefore be expected that the design of the IEMB network will be advanced to take into consideration recommendations from this assessment, as well as other findings from the environmental assessment process.

Assumptions applied to this assessment include:

- The key findings of the background studies and technical reports provided to the author at the time of writing are accurate;
- Social data available that has been utilised to inform the social baseline accurately reflects the community demographic profile; and
- Outcomes of the community consultation and engagement undertaken to date by the proponents accurately reflect community feedback.

This assessment also reflects the trail network design and data provided by Niche Environment as of October 2021.

1.2 Legislative framework

Due to the complexity and multi-tenure nature of the proposal, the IEMB network is to be assessed under the NSW Environmental Planning and Assessment Act 1979 (EP&A Act) in two separate REF's.

The first REF (component one) will be inclusive of all trails, and will be assessed under Part 5 of the EP&A Act. It is comprised of NPWS, South32 and Sydney Water land. NPWS and WCC are acting as co-proponents. This REF is expected to be finalised by the end of June, 2022.

The second REF (component two) will be assessed under Part 5 of the EP&A Act, and will include all non-trail infrastructure such as parking and amenities. WCC will act as the lead proponent. This REF is expected to be finalised in the second half of 2022.

This social impact comment is one of several technical papers that support the IEMB network REF. While the REF considers the first REF as described above, this social impact comment considers perceived social impacts resulting from the whole of the IEMB network i.e. both the trail and supporting infrastructure.

The proposal is located within the Wollongong Council LGA. Regional plans which reflect the aspirations of the community have been developed by the NSW Government and local authorities have been reviewed in consideration of the IEMB network and include:

- Illawarra Shoalhaven Regional Plan 2041 (NSW DPE)
- The Wollongong 2028 Community Strategic Plan – Out Wollongong 2028 (WCC)
- Illawarra Escarpment Strategic Management Plan 2015 (WCC)

A review of these strategic plans and linkages to the IEMB network is provided in Appendix A.

1.3 Assessment approach

SIA is an approach to predicting and assessing the likely consequences of a proposed action in social terms and developing options and opportunities to improve social outcomes. Best practice SIA is participatory and involves understanding impacts from the perspectives of those involved in a personal, community, social or cultural sense, to provide a complete picture of potential impacts, their context and meaning.

This assessment has been informed by a range of research methodologies including engagement activities carried out specifically to inform this assessment, exploratory research, and desktop analysis. Respectful, inclusive, and meaningful engagement is a fundamental part of SIA, alongside research activities. It provides first-hand insights into what people value and how they expect a project to affect them and is a component of good evidence-based SIA.

The engagement has included consultation with a broad range of community groups and stakeholders including near neighbours, those with an interest in the environment, culture and heritage, business and tourism groups, sports and recreation, landholders, emergency services and government. The methods selected for this assessment are listed in Table 1.1.

WCC and NPWS have carried out several engagement activities prior to this assessment and a review of the themes and outcomes of these activities is also considered. Key engagement and reports that have informed this assessment include:

- Illawarra Escarpment Mountain Bike Strategy Public Exhibition Report, NSW Department of Planning, Industry and Environment (2019); and
- Illawarra Mountain Bike Concept Plan Engagement Report, Wollongong City Council (2021).

Table 1.1 Engagement activities and reports that have informed this assessment

Report	Description
Exploratory research	Exploratory research involves familiarising a researcher with a topic to satisfy curiosity and improve understanding. Exploratory research is often conducted in areas of inquiry, where the goals of the research are "to scope out the magnitude or extent of a particular phenomenon, problem, or behaviour, to generate some initial ideas (or "hunches") about that phenomenon, or to test the feasibility of undertaking a more extensive study regarding that phenomenon (Bhattacharjee,

Report	Description
	<p>2012). For instance, if a community is generally dissatisfied with the operations of a business or government body, exploratory research may be directed at measuring the extent of dissatisfaction or frequency of complaints, and the presumed cause of such complaints.</p> <p>For this assessment, research has included the examination of submissions and community feedback received as part of the IEMB Strategy Public Exhibition and engagement carried out by WCC in May 2021, interviews with stakeholders, and comparative analysis of similar operations. This research assists with scoping out the nature and extent of the problem and serves as a useful precursor to more in-depth research, if required.</p>
Opt-out survey methodology	<p>A random telephone survey was conducted by an independent researcher of residents in the LGA, which is an opt-out research methodology. An 'opt-in method' for measuring impact for different projects and actions are effective when wanting to determine the opinions of those with a vested interest in the topic, but not necessarily when wanting to obtain opinions and attitudes of the whole community. An opt-out survey was used to gain broader community sentiment and perception relating to the Project's social impacts across the affected LGA.</p> <p>The random survey was undertaken during August 2021 by an experienced, independent research (n=270) and outcomes are provided in Appendix B.</p>
Semi-structured interviews	<p>Interviewing was selected as an SIA method to further explore the impacts of the proposal and to collect data, evidence and insights for those stakeholders nearest to the IEMB network. The semi-structured interview format provided a flexible structure that allowed the interviewer to create and ask questions about situations as they emerged and the interviewee to digress and express views freely (Vilela, 2018).</p> <p>The work of Bradshaw and Stratford (2005) regarding qualitative research design and rigour was helpful in designing the semi-structured interview methodology and the online survey. The authors provide guidance in relation to participant selection and sampling. Their work explains that in qualitative research, the number of people we interview, communities we observe, or texts we read is less important than the quality of who or what we involve in our research, and how we conduct that research. Their work emphasises that 'purposive' sampling is typical in this type of research, and that the sample is not intended to be representative given the emphasis is usually on the analysis of meanings.</p> <p>Qualitative feedback obtained from 21 targeted stakeholder interviews undertaken by Element Environment between September and November 2021 was assessed as part of the research.</p>
Desktop analysis based on specialist studies	<p>The term desktop analysis refers to a study that is carried out primarily through integration of technical assessments into the SIA, rather than physical investigations, that is, it can be done sitting at a desk. For this assessment, several social impacts, including cumulative impacts have been mostly assessed in other technical studies in the EIS, and a desktop analysis has been undertaken to cross-reference and integrate those studies into the SIA Report. This methodology is then further complemented by methodologies outlined previously such as qualitative assessment and research methodology to provide additional supporting evidence.</p>

1.4 Structure of this report

The structure of this report is in Table 1.2.

Table 1.2 Structure of the report

Chapter	Description
Chapter 1	Introduces the proposal and structure of this social impact comment
Chapter 2	Describes the social locality and the local and regional context
Chapter 3	Describes and assesses the expected and perceived potential social impacts of this proposal and identifies impact enhancement and mitigation measures
Chapter 4	Summarises assessment outcomes

2 SOCIAL CONTEXT

2.1 Social locality

To inform this assessment, an investigation into the social locality has been undertaken. As per the DPE Guideline (2021), there is no prescribed meaning or fixed, predefined geographic boundary to a social locality; rather, the social locality should be determined for each project, depending on its nature and its impacts.

Defining the social locality begins with an understanding of the nature of the proposal, the characteristics of affected communities and how positive and negative impacts may be reasonably perceived or experienced by different people within the community.

Social impacts in and beyond the proposal's site boundary, both positive and negative, may also be considered during approval processes in terms of public interest and the suitability of the site for the proposal. This assessment has considered the following aspects in determining the social locality:

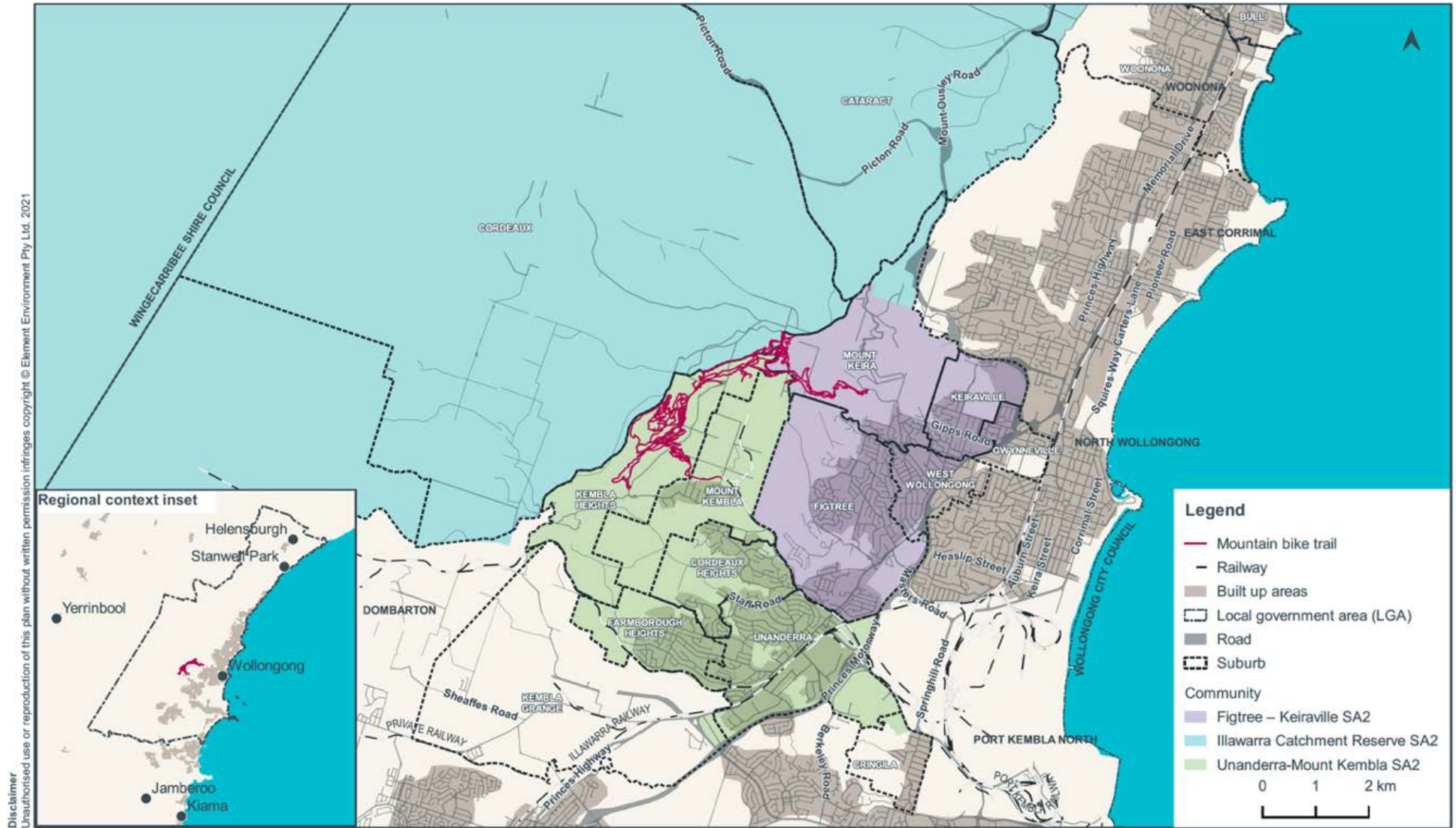
- **'Nearby neighbours'** is applied to those landholders and residents residing either adjacent to the proposal or near the entry and exit nodes. This is identified as the geographic area in which communities are most likely to experience direct social impacts from the IEMB network;
- **'Community'** is applied where the spatial extent of social impacts on communities is generally broader than the nearby neighbour. In the geographical context required for this assessment, 'community' refers to a conceptual geography not necessarily aligned to actual suburb boundaries; and
- **'Region'** In some instances, the 'social locality' is extended to a 'region' to reflect potential social impacts on a broader community. This geography is applied where a proposal is within or proximate to a social locality frequented by regional populations, for example a key employment centre, or a locality in which there are both tangible intangible services that attract visitors. In this case, the indirect social locality or 'region' includes the Wollongong LGA and NSW to assist the broader social impacts and comparative assessment.

To provide statistical a analysis, the primary areas of interest for this assessment, as defined by the ABS (2016), are shown in [Table 2.1](#) and illustrated in [Figure 2.1](#).

Table 2.1 Statistical areas of analysis

Analysis area	Geographic Boundaries
Nearby neighbours	Mount Kembla SSC, Kembla Heights SSC, Cordeaux Heights SSC
Community	Unanderra – Mount Kembla Figtree-Kieraville SA2
Region	Wollongong LGA, and NSW for comparative purposes.

Figure 2.1 Indicative social area of influence for this proposal



3 SOCIAL BASELINE

The social baseline describes the social context without the proposal. It documents the existing social environment, conditions, and trends relevant to the proposal and defines characteristics of the communities within the proposal's social locality, including any vulnerable groups.

It considers any built or natural features on or near the proposal that could be affected and the intangible values that people may associate with these features. Examples may include a sense of place or belonging and the relevant social, cultural, demographic trends or social change processes occurring now or in the local area and in the broader region.

The social baseline provides a point of comparison – it can be used as a reference against which to measure the impacts of the proposal as it develops and/or to determine the adequacy or otherwise of existing facilities (Vanclay, 2015). All data used in the baseline is derived from the 2016 Australian Census of Population and Housing unless an alternate source is cited.

For this assessment, a summary of the social baseline is provided in the body of this report. Additional supplementary data that supports the assessment such as the community profile dataset and the community snapshot from the *Our Wollongong 2028 Community Strategic Plan* (Wollongong City Council, 2018) is provided in Appendix C.

3.1 Snapshot of the social locality

3.1.1 Wollongong LGA

The IEMB network sits in the Wollongong City Council LGA in the Illawarra Shoalhaven Region of NSW (as defined by the Illawarra Shoalhaven Regional Plan 2041, DPE 2021)

Metro Wollongong is the heart of the Illawarra Shoalhaven region and the third largest city in NSW. It is home to one of Australia's top-ten universities and is characterised by a health and knowledge economy, a highly skilled workforce and a growing hub of businesses with global reach.

In 2020, the LGA has an estimated resident population of 219,798 people (.idcommunity, 2021) with an average age of 39. The average weekly income for individuals living in the Wollongong LGA (\$584 per week) was lower than the NSW average (\$664 per week), and lower for households at \$1,339 per week compared to the NSW average of \$1,486 per week.

Wollongong LGA covers an area of 684 square kilometres (km²), bounded by approximately 60 km of coastline and extending inland to the Escarpment and is largely defined by its key natural features and the location of Port Kembla. Wollongong's coastline includes dramatic cliffs, sandy beaches and rocky points and contributes to both scenic vistas of exceptional beauty and a high level of amenity for residents and visitors.

The Escarpment is a defining feature, extending some 120 km from the sea cliffs in the Royal National Park, southwest to Macquarie Pass, and then generally southeast towards the coast near Kiama. The Escarpment delineates the Wollongong LGA from its neighbouring shires to the west and provides a visual backdrop to the city.

Lake Illawarra, approximately 9.5 km long and 5.5 km wide, is a large coastal lagoon covering some 36.3 km² in the southeast of the LGA and defining part of the LGA's southern border.

Port Kembla is a fourth defining feature, both visually and economically. The port is an import-export hub with significant value to both the Illawarra region and NSW, accommodating the State's largest motor vehicle import hub and grain export terminal, and its second largest coal export port. Port Kembla and its infrastructure are clearly visible from many parts of the LGA, reinforcing Wollongong's traditional identity as an industrial city.

3.1.2 Mount Kembla and Kembla Heights

Mount Kembla is a small suburb located in the foothills of Mount Kembla on the eastern side of the Escarpment and is home to approximately 1,068 people (ABS, 2016). Most residents (83 percent) currently residing in the area were born in Australia, with strong ties and interest in the local area and its future. The dominant employment industries include hospitals, education, iron smelting and steel manufacturing and coal mining, which is indicative of the Wollongong LGA's physical landscape and social infrastructure.

The village of Mount Kembla, and the adjoining Kembla Heights, contains rich and significant heritage. The village developed slowly to support the mining, forestry, and pastoral industries. Australia's first kerosene mine was built on a plateau beside American Creek near Mount Kembla in 1849. By 1859, a National School had been established to support the settlement. Coal was first mined at Mount Kembla in 1865 to power the kerosene works.

Mount Kembla Colliery was established in 1883 and Kembla Heights was the result of a purpose-built township constructed by the company to house the employees. South32 is currently mining at the Dendrobium site, half a kilometre west of the village.

In the 2016 census, Kembla Heights had 47 private dwellings, owned mainly by one landholder and housing long term tenants.

Modern day Mount Kembla hosts a local primary school, several hundred houses and the Mount Kembla Hotel, which was built in 1896. It also hosts the Mount Kembla Oval and a memorial shared pathway that is used by a range of people including families, young children and the elderly.

Kembla Heights is located on the escarpment to the village's immediate west, and whilst it has its own historical identity as a distinct community, the population is largely dependent on and contributes to social life and social infrastructure in Mount Kembla (such as the school, hotel and fire service) and adjoining suburbs.

In 1902, an explosion at Mount Kembla Colliery killed 96 men and boys, leaving 33 women in the village widows and 120 children fatherless (Sheldon, B, viewed 2021). During engagement, feedback was provided that a number of descendants of these families still live in the Mount Kembla area today. The 96 Candles Ceremony is held every year to commemorate the victims of the mine disaster.

The memorial pathway is a community led project that provides a continuous pathway along the historic coal transport route, from the Mt Kembla Mine to Cordeaux Road, and a useable memorial/historical link to the mining heritage of the village and the impacts of mine disasters on the local community. The trail is reflective of community cohesiveness within the area and is largely maintained by the Mount Kembla Memorial Pathway Group: a volunteer group that has been active since 2004 when the first stage of the pathway began.

The village is accessible from Wollongong, via Cordeaux Road and from Mount Keira via Harry Graham Drive. The small village of Kembla Heights is to the northwest, reached by Harry Graham Drive.

4 SOCIAL IMPACT ASSESSMENT

4.1 Overview

This chapter assesses the likely social impacts arising from the proposal. The assessment of potential social impacts, both positive and negative, has been informed by feedback from the community during consultation, research and analysis of the areas surrounding the proposal, and an extensive desktop review of available documents and comparative assessment.

This section analyses and discusses the scoped issues and impacts (positive and negative) in relation to the Proposal. Analysis has been framed in accordance with the social impact categories set out in the Social Impact Assessment Guideline ([Table 4.1](#)).

Where possible, a risk assessment was carried out to determine the overall significance rating of the potential social impact and has adapted the risk framework set out in the DPE Guideline (2021). The tables used to evaluate the likelihood of both positive and negative social impacts and inform the magnitude of each impact are provided in Appendix E.

A limitation of this social impact assessment is that at the time of authorship, there is limited technical assessments available to assist with the assessment of some of the perceived social impacts, particularly those that relate to the infrastructure components of the IEMB network. This includes perceived impacts relating to traffic and ancillary features (such as congestion, parking and amenities), and the flow on effects of the entry and exit nodes of the IEMB network. It is understood that such features will be assessed further under a separate Part 5 assessment with WCC acting as lead proponent.

In most instances, this assessment only provides a risk assessment of those perceived social impacts without mitigation or enhancement. A thorough assessment of social impacts following mitigation or enhancement measures would need to be carried out once the information becomes available by a suitable technical specialist and qualified consultants.

Chapter 4 includes a summary of recommended responses to identified impacts – both mitigation measures for potentially negative impacts and actions to enhance benefits and realise potential opportunities.

Table 4.1 Social impact categories

Social Impact Categories	Definition
Way of life	How people live, how they get around, how they work, how they play, and how they interact each day
Community	Community composition, cohesion, character, how the community functions, and people's sense of place
Accessibility	How people access and use infrastructure, services and facilities, whether provided by a public, private or not-for-profit organisation
Culture	Aboriginal and non-Aboriginal, including shared beliefs, customs, values and stories, and connections to Country, land, waterways, places and buildings
Health and wellbeing	Physical and mental health especially for people vulnerable to social exclusion or substantial change, psychological stress resulting from financial or other pressures, and changes to public health overall
Surroundings	Ecosystem services such as shade, pollution control, and erosion control, public safety and security, access to and use of the natural and built environment, and aesthetic value and amenity
Livelihoods	People's capacity to sustain themselves through employment or business, whether they experience personal breach or disadvantage, and the distributive equity of impacts and benefits

Social Impact Categories	Definition
Decision-making systems	Particularly whether people experience procedural fairness, can make informed decisions, can meaningfully influence decisions, and can access complaint, remedy and grievance mechanisms.

4.2 Perceived and likely social impacts

Perceived impacts identified by research participants cover a range of social impact categories and reflect the fears and aspirations of the stakeholders consulted. [Table 4.2](#) defines the social impact themes that fall within each of the social impact categories and demonstrates the interrelationships that exist between the social impacts raised. For example, potential impacts to health and wellbeing resulting from the IEMB network, are perceived by stakeholders to impact their way of life and their access to and use of surroundings.

Following the table, this section provides further detail on each of the social impact themes identified by community stakeholders in relation to the IEMB network.

Table 4.2 Perceived and likely social impacts

Social Impact Theme	Perceived Impact to People	Social Impact Category	Project aspect
Health and wellbeing	Increased access to recreational opportunities with positive health benefits for the broader community	Health and wellbeing	operation
Public Safety	Potential for conflict with cars, cyclists and pedestrians in Mount Kembla and Kembla Heights leading to a decrease in public safety Changes to public safety associated with using the trails on the escarpment, including conflict with riders and walkers, and improved accessibility for emergency services Managing and maintaining the trails	Surroundings Way of Life Health and Wellbeing	operation
Supporting infrastructure	The availability of supporting public infrastructure, services and facilities in relation to the proposal	Accessibility	operation
European and cultural heritage	Disturbance of the connection to European heritage in Mount Kembla and Kembla Heights, including the memorial pathway Protecting cultural heritage along the Escarpment	Culture	construction and operation
The natural environment	Protecting the environmental values of the Escarpment and how people experience their surroundings	Surroundings	operation
Economic	Increase tourism and visitors to the area leading to increased opportunities expected to improve livelihoods, wellbeing and community cohesion	Livelihoods Community Health and wellbeing	construction and operation
Decision making and engagement	The ability of people to have meaningful contributions to a Project that either affects them or in which they have an interest	Decision making systems	planning and operation

4.3 Health and wellbeing

The benefits of mountain biking on the health and wellbeing of people are widely researched and was also the top of mind response in the wider community survey relating to the proposal¹. A report by GHD (Mountain Biking in Australia: An Economic and Participation Analysis, 2021) identifies various social and health benefits of mountain biking including:

- Improved mental and physical health outcomes (which can result in reduced health care costs, and enhanced productivity);
- Increased community connection and reduced isolation;
- Opportunities for friends and families to socialise and spend time together;
- Provision of an outdoor classroom for children to learn about nature, culture and history while being active; and
- Creation of a form of 'green exercise', with research suggesting that undertaking exercise in natural environments results in greater benefits than the activity alone.

Increased community connections, reduced isolation and getting youth out into open spaces were also identified as benefits during consultation.

There was some feedback from research participants that the Proposal could have some negative health and wellbeing impacts. For example, the potential conflict between riders and users of the memorial trail in Mount Kembla could potentially discourage users, particularly those that were more vulnerable from using the walking trail. The potential for conflict is also associated with increased anxieties and mental stress. Additionally, some research participants suggested that uncertainty around the proposal and the impact on personal values and belief systems, also caused a level of associated stress and anxiety experienced.

It is likely that the broader community will experience improved health and wellbeing outcomes due to the Proposal, because of recreational activity and access to the natural environment, considering the above and the extensive research carried out in relation to the health benefits of mountain biking, the impacts on health and wellbeing for the broader community were perceived as a 'high' positive social risk.

However, the potential negative impacts on those more directly impacted need to be considered further once investigations to be carried out by the proponent as part of the separate Part 5 assessment relating to the IEMB infrastructure are complete.

4.4 Public Safety

4.4.1 Public safety in Kembla and Kembla Heights

During engagement, the issue of public safety was raised, specifically, that an increase in mountain biking will decrease public safety in Mount Kembla and Kembla Heights due to the increase potential for conflicts between cars, cyclists and pedestrians. This conflict could be caused by both the potential increase in traffic in the localities associated with visitors to the IEMB network and the increase in bikers on the local roads and pathways in these communities, including the memorial trail.

Safety concerns were also raised specifically in relation to Henry Graham Drive and Cordeaux Road, and the potential dangers of increasing both traffic and bikes on these roads that research participants advised had an existing accident history.

¹ 46% of participants identified health benefits (46%) as the main benefit of the proposal (random survey, 2021)

The Proposal will include multiple entry points to the IEMB network, enabling riders to easily access the ride start point of their choice. Climbing trails enable riders to cycle into the network from surrounding suburbs including Mount Kembla and Mount Keira, Keiraville, Cordeaux Heights and Farmborough Heights.

A limitation of this social impact assessment is that at the time of authorship, there is no technical assessment available to assist with the assessment of the perceived impact. In the absence of relevant data, representatives from the Mount Kembla community did undertake some participatory observations on the Memorial Pathway during September 2021 to gauge how many people walked or rode through the area to try and further understand the potential number of users of the Proposal. The volunteers observed over 2100 movements (both bikers and walkers) on the Memorial Pathway at the corner of Benjamin Road and Kirkwood Place over one weekend (2 days). It is noted that this was undertaken during COVID-19 lockdown, where potential usership may have been elevated.

Considering the impact on traffic and the potential for conflict on both the local road network and on local pathways has consistently been raised as a concern for the community, it is considered as a 'high' perceived social risk for the community.

“Safety of the road needs to be addressed first. Safety needs to be addressed of how to share the and to not cause a problem” (respondent, random survey 2021).

“When bikers start coming down the track, they will arrive in the corner of Mount Kembla Village with nowhere to go” (targeted stakeholder interview, 2021).

“Kirkwood place is part of our memorial pathway, and that is where the main concern lies” (targeted stakeholder interview, 2021).

Access to and from the IEMB network from the surrounding communities and road networks, and the flow on effects into the individual communities in terms of traffic should be considered as part of the second component, to be assessed under Part 5 of the EP&A Act. Specifically, the network leading into and out of Mount Kembla Village and the network leading in and out of Kembla Heights, and the memorial trail.

4.4.2 Public safety on the escarpment

Consultation also highlighted concerns regarding conflict between riders and other track users along the Escarpment including walkers and other recreation users. This conflict is relevant to both the existing unsanctioned trails that intersect with walking trails and the proposed IEMB network. The concerns were primarily raised by passive users of the trails and centred around the risk of injury to people due to rider speed, crossing of walking trails, and the increasing popularity of e-bikes.

There was also an alternate perception raised during engagement that the trails would improve public safety as a result of formalising the trails, improving trail design and increasing awareness.

Feedback from emergency services outlined that the formalisation of trails would be a benefit in terms of improved response to emergency services. Currently, with the unsanctioned trails emergency services don't have the ability to quickly identify the location of a person suffering from injury particularly if that rider is new to the area. The formalisation of the trails will present an opportunity to improve wayfinding, signage and emergency management planning which will inevitably improve access to a patient in the case of emergency.

The REF acknowledges that without proper design features, unsanctioned trails can cause adverse safety impacts and that unauthorised trails can pose a risk to the safety of both mountain bikers and other recreation users. Without adequate signage regarding trail difficulty or appropriate construction standards, an unauthorised trail also presents a risk to the rider who may not have a level of skill appropriate to the trail.

The trail network will be designed to the International Mountain Bicycling Association (IMBA) standards and several measures are being considered in the trail design for managing potential conflict between riders and other trail users. Trails elsewhere in NSW exhibit these measures including adequate signage and the adoption of trail etiquette or user protocols to be respectful of all users. At present, bike users are starting to install unapproved signage which issue warnings to passive trail users about the presence of mountain biking. Passive users have felt threatened by this signage. It is important that if the IEMB network proceeds, this signage is installed in consultation with emergency services and community representatives with an in-depth local knowledge of the Escarpment.

A key consideration of maintaining the safety of trails, and preventing the building of unsanctioned trails, relates to the regular trail inspections and maintenance of trails. This is evidenced by comparative trails in Derby and Hornsby. As part of this assessment, targeted consultation was carried out with Blue Derby Trails in Tasmania, Glenrock Trail Alliance and Hornsby Mountain Bike Trails. One of the successes of each of these comparative case studies is having a dedicated crew that maintains and inspects the trails and reports and stops the building of unsanctioned trails.

In the case of Derby, they have three full-time and two part-time members of their trail crew to manage 120 km of trails. The concerns expressed by research participants for this Proposal is that there will not be enough resourcing and management to maintain safety and stop the building of unsanctioned trails. While the REF outlines that regular trail inspections and maintenance schedule will be included as part of the Proposal, the framework and how the trails will be maintained is not clear. Nor is it clear how the current unsanctioned trails will be removed and prevented from occurring in the future.

Reviewing strategies used by comparative trails demonstrate that a collaborative model for addressing need is usually successful. Engaging the users in the development and maintenance of trails has the dual benefit of educating user groups as well as facilitating them to invest in the solutions.

In terms of the design, there is a specific section of the IEMB network that will impact Stage 3 of the Mount Kembla Memorial Trail from the bottom of Benjamin Road. Representatives from the Mount Kembla community undertook some participatory observations on the Memorial Pathway at the corner of Benjamin Road and Kirkwood Place to gauge how many people walked or rode through the area and try and to further understand the potential number of users of the Proposal. While it is acknowledged that some consultation with the Mount Kembla community and users of the trail is underway, further consideration of this section is required as part of the second component, to be assessed under Part 5 of the EP&A.

While the findings of this assessment are the formalisation of trails will likely have a positive impact on improving public safety in the escarpment for emergency services and mountain bike riders; the magnitude of this positive impact will be dependent on how the trails are maintained, the wayfinding and signage, trail design, removal and prevention of unsanctioned trails and the education and awareness campaign connected to the IEMB network. Consequently, the perceived social impact on those passive trail users is currently assessed as 'medium' negative social impact.

4.5 Supporting infrastructure for the IEMB network

During consultation, concerns were raised over the availability of supporting public infrastructure, services and facilities in relation to the proposal. Specifically, parking and ancillary facilities including toilets, waste management and water. For example:

“Parking at either end might be an issue, that might become a big issue because it might end up taking areas of the escarpment. And rubbish getting left on the trails” (respondent, random survey 2021).

“The main thing is the parking, so they have somewhere to park not just on the street and so they're not going across main roads” (respondent, random survey 2021).

“If there are facilities, parking, toilets...I agree [to the proposal]. Meeting places, pop up cafes [would be positive] (respondent, random survey 2021).

The social impact assessment for the Warburton Mountain Bike Destination Project (RMCG, 2019) identified that on review of the experiences of other communities near mountain bike trails such as Forrest in Victoria, generally the trail users are broadly respect of the local community. However, there was some increased impacts created by visitors using the areas around the trails before and after riding, and during major events. These include increased traffic, inconsiderate parking, and litter.

The Proposal's current design shows the trail node in Mount Kembla at the corner of Benjamin Road and Kirkwood Place. The Illawarra Escarpment Mountain Bike Concept Plan (Synergy Trails, 2020) notes that Mount Kembla does present difficulties in interaction between mountain bikers and the local community, and that parking is lacking in the area. This concern relating to parking is supported by outcomes of engagement, specifically that trail users would use areas in Mount Kembla for parking.

Parking congestion is currently experienced within the community at certain times of the year, primarily when the nearby Mount Kembla Oval is being used. Feedback from the community suggests that there is also some congestion experienced during school drop off and pick up times and that parking facilities may not be appropriate for a potential increase in vehicles.

During consultation with various stakeholders to inform this assessment, additional options for parking were suggested for consideration including the use of private property at the bottom of the trail to create parking spaces, the use of shuttle services, and the use of existing council facilities at Mount Kembla Oval.

A key component of the IEMB network and how it functions will be the provision of parking, amenities and access to and from the trails nodes and much of this will occur outside of the current parameters of the REF. The current REF does not consider any ancillary features (such as amenities and parking) of the proposal and at the time of authorship, there is no technical parking assessment available to provide any additional insights into the potential impacts that the IEMB network may have on parking or details around proposed ancillary facilities.

Given the lack of existing available infrastructure for the IEMB network, particularly at Mount Kembla and Kembla Heights and the prominence of the feedback received during consultation regarding parking, the perceived social impact is assessed as 'high' negative social impact.

This assessment recommends further investigations regarding the proposed infrastructure and services, including consultation with key stakeholders. These investigations should be carried out by the proponent during the separate Part 5 assessment.

4.6 Culture

This section identifies the heritage values and issues of importance relating to the IEMB network as identified by research participants, including near neighbours residing in proximity to the Proposal, individuals and groups with a strong interest in heritage, and the broader community. This encompasses impacts associated with the historic village of Kembla Heights, the Mount Kembla Memorial Trail and cultural heritage.

4.6.1 Kembla Heights village

With the IEMB network leading into the village of Kembla Heights, along with potential for increased visitors into both Kembla Heights and Mount Kembla, there is a fear that the nature of communities would be changed irreversibly and that the proposal doesn't align with the social fabric of a historical area. There was a suggestion that a better option would be for the trails to exit into Obrien's Road and into Figtree, that is:

"...a more modern world. Not our historical world" (targeted stakeholder interview, 2021)

The village of Kembla Heights holds many memories for both community residents residing in the area as well as those outside of the village that have connections to the mining disaster of 1902 and for those with an interest in the history of the area in general.

The entire village of Kembla Heights is a heritage conservation area under the Wollongong City Council Development Control Plan. The plan states that "Kembla Heights is the most intact mining village in the Wollongong LGA with its simple, consistent late Victorian and early Federation period cottages" (Wollongong City Council, 2009). The southern portion of Kembla Heights is known as Windy Gully and is partially company owned (in private ownership) and part of the Kembla Heights Heritage Conservation Area. The historic Windy Gully Cemetery is located in this portion of Kembla Heights.

In relation to historic values, there was a strong view among the research participants that the village is historically important. Research participants stated that it provides insight into the earlier way of life, that its heritage was important to preserve, and that the remaining buildings are seen to tell a story of past activities of the mining village. It also provides important spiritual linkages to the Mount Kembla mine disaster of 1902 which is recognised as the worst industrial accident in Australia's history where 96 men and boys lost their lives (Media article, Illawarra Mercury, 1 August 2019). This disaster is commemorated every year in a ceremony referred to as '96 Candles'. Around a third of the victims are buried at Windy Gully.

Alternatively, some stakeholders provided feedback that the proposal could provide an opportunity to embrace the historical significance of the village, by enticing visitors to the area to celebrate and reflect on the historical significance of the village. This could include some enhancements to the streetscape, coffee shop or eatery, a museum, and other opportunities.

Some of the research participants noted that currently artefacts relating to the historic nature of the village are sitting in a storage shed. In the past a museum did operate in the village, however visitors to the museum were infrequent. Walking tours through the village and to the Windy Gully Village were also carried out by volunteers.

The disturbance on the heritage of Kembla Heights is a 'medium' negative perceived impact for some stakeholders however, this assessment is unable to provide an unmitigated social impact without a greater understanding of how the IEMB network may impact on the village, particularly regarding traffic, increased bikers in the village and potential changes to streetscape. It is recommended that any proposed changes to the village would need to be managed sympathetically and in close consultation with key stakeholders and members of the community, and that this be assessed further under the separate Part 5 Assessment.

4.6.2 Memorial pathway

The proposed IEMB network includes entry and exit points in and out of Mount Kembla through land currently owned by South32. Research participants expressed concern that the riders would use the memorial pathway, which, aside from safety concerns, would not align with the significance of the pathway.

The memorial trail commemorates the 96 men and boys who lost their lives in the Mount Kembla Mine Disaster of 1902. It is a community led project that provides a continuous pathway along the historic coal transport route, from the Mt Kembla Mine to Cordeaux Road and provides a useable memorial/historical link to the mining heritage of the village and the impacts of mine disasters on the local community.

The trail is largely maintained by volunteers, the Mount Kembla Memorial Pathway Group. A group that has been active since 2004 when the first stage of the pathway begun. It is understood that the group works with Wollongong City Council bush-care resources and is also funded as part of the Dendrobium Community Enhancement Program.

The pathway includes interpretative installations and a formal memorial at Stones Road and has been designed in consultation with the community, constructed by Council utilising funds from the Dendrobium Community Enhancement Program and Royalties for Regions. The pathway is on land sold to Council for a nominal fee and remains the responsibility of Council.

Some stakeholders expressed concerns that because it is a memorial pathway, any proposal to put a trail either aligned to or parallel to it would take away the significance of it. Similarly, any proposal that encourages mountain bikes to use the trail along Stones Road to Cordeaux Road, would also impact on the heritage significance and the reflective intent.

Given the community connection to the memorial trail, the commitment of volunteers to maintain the trail and what the trail commemorates, if the IEMB network was to use the memorial pathway, the unmitigated impact on culture would also be 'high' – it would be likely there would be a noticeable deterioration to something that people value highly.

4.6.3 The Illawarra escarpment

The proposal seeks to conserve significant cultural heritage features on the Escarpment by establishing a formal trail network and discourage future creation of illegal trails, which can have adverse cultural heritage impacts. Based on feedback from the *Draft Illawarra Escarpment Mountain Bike Strategy* (NPWS 2018), the latest proposal has avoided culturally significant areas on Mount Kembla and Mount Keira.

Some of the research participants expressed concern that those supportive of mountain biking in the Escarpment and those responsible for building and riding on the unsanctioned trails, potentially lacked an awareness of the potential damage that can be caused or is being caused to sites of both cultural and heritage significance. This sentiment is closely related to the transient nature of visitors to the Escarpment as those visitors will inherently have differing values and connection to the cultural and heritage significance of the area.

The Aboriginal Cultural Heritage Assessment (ACHA) for the proposal carried out by Niche Environment and Heritage Pty Ltd recorded five Aboriginal cultural heritage sites, consisting of three isolated finds of low archaeological significance, one open camp site of low archaeological significance and one open camp site at O'Briens Gap of high archaeological significance.

A Cultural Values Assessment (CVA) was also undertaken by Waters Consultancy. The CVA concluded that the Subject Area is located within the Djembla Djeera Cultural Landscape and is regarded to be of Very High Significance for its social and spiritual value to past, present, and future generations. The proposal has avoided culturally significant areas on Mount Kembla and Mount Keira based on feedback from the *Draft Illawarra Escarpment mountain bike strategy* (NPWS 2018). However, the proposal would still be conducted within the Djembla Djeera Cultural Landscape, which is regarded to be of very high significance for its social and spiritual value to past, present, and future generations (Waters Consultancy 2022 at Appendix 4 of Attachment A).

During the engagement carried out for this assessment, survey participants had mixed views on the Proposal. It was acknowledged that something needs to be done to prevent the ongoing uncontrolled damage happening on the escarpment due to the illegal trails, however it was recognised that culturally, the escarpment had strong connections and values.

Given the cultural connection to the IEMB network, the unmitigated impact on culture would be 'high' – it would be likely there would be a noticeable deterioration to something that people value highly.

Should the proposal proceed, this assessment recommends that opportunities to both collaborate with and empower Traditional Owners be genuinely explored to ensure the network reflects the Aboriginal cultural values of the Djembla Djeera Cultural Landscape. This should include measures outlined in the CVA such as the development of a project specific Aboriginal cultural heritage interpretation plan to promote understanding and awareness of the cultural heritage values of the Djembla Djeera Cultural Landscape. The strategy should be developed collaboratively with identified Aboriginal cultural knowledge holders, a cultural values specialist, and an interpretation specialist and explore the Aboriginal cultural values of the Djembla Djeera Cultural Landscape.

4.7 The natural environment

Mountain bike riding is a growing sport and recreation. The Illawarra Escarpment Mountain Bike Concept Plan (Synergy Trails, 2020) notes that the lack of formal trails in the Escarpment has led to the proliferation of illegal trails which cause harm to the local environment and safety hazards. NPWS has acknowledged the need for formal trails and for safety and the environment to be better managed.

The further degradation of the environmental values of the area, including degradation of vegetation and wildlife was raised as a key concern during engagement. Research participants expressed concern regarding damage to the environment of both the unsanctioned trails and the proposed formal trails. This is inclusive of how people experience their surroundings in terms of aesthetic value and passive recreational activities including walking and birdwatching. The environmental impact of the trails was also the main negative impact raised as part of the wider community survey.

There were some views expressed that the proposal to formalise trails through the Escarpment was in contradiction to the WCC vision 'from the mountain to the sea we value and protect our natural environment' and the NPWS mandate to 'conserve our parks, culture and heritage'.

In addition, there is the perception that the introduction of the formal trails will not reduce unsanctioned trails on the Escarpment. It was expressed that the focus should be on monitoring and shutting down the existing unsanctioned trails and protecting the Escarpment from further environmental impact.

Research participants also noted the possibility that those building the unsanctioned trails had little or no awareness of the environmental values of the Escarpment, or the potential damage that designing and building informal trails can have on the ecological communities. A review of the environmental impacts of mountain biking (see Marion and Wimpet, 2007) suggests that the most environmental damage occurs during the initial construction of the trails, and that trail design and management are much larger factors in environmental degradation than the type or amount of use. The review further suggests that poorly designed or located trails are the biggest cause of trail impacts and that the best trail alignments avoid the habitats of rare flora and fauna.

Research carried out by Central Coast Council (Mountain Bike Feasibility Discussion Paper, 2020), found that there were many more recreational riders using trails and that exposing people to the natural environment and providing targeted education and interpretation can increase appreciation or valuing of natural areas and awareness of the need to protect these areas.

In a similar vein, a report into Mountain Biking in Australia by GHD (see GHD, 2021) found that having trails in local neighbourhoods creates a sense of connection between the land and the community. It found that these trails can foster long term conservation outcomes and that passive surveillance of open spaces with mountain bike trails can also reduce the likelihood of antisocial behaviour in natural areas, such as illegal dumping of waste.

There is potential for this Proposal to consider opportunities to increase environmental awareness and educate those that are building and using unsanctioned trails, which will potentially increase support for and appreciation of the protection and management of natural areas. In the case of Hornsby Mountain Bike Trails, an example was provided during the targeted research of instances where those building illegal or unsanctioned trails were stopped and ultimately became members of the volunteer group involved in the building and maintenance of the formal trail network – increasing awareness of the environmental value. This demonstrates an opportunity for the IEMB to shift behaviours and increase awareness and education around environmental values.

Research participants also suggested that other sections of the Escarpment that had lower conservation values that would be more suitable for a mountain bike trail, instead of building new trails on areas that are not currently impacted. For example, decommissioned mining land or areas along the escarpment that do not host threatened ecological species.

Niche Environment and Heritage Pty Ltd carried out an ecological assessment as part of the REF for the IEMB network to assess the ecological significance of threatened flora and fauna, and vegetation communities that occur, or have the potential to occur, within the area to be impacted by the Proposal. The assessment concludes that through a combination of adjustments to the original design, as well as avoidance of overstorey vegetation, the Proposal is unlikely to have a significant impact on threatened biodiversity and their habitats.

The ecological assessment recommends several measures to avoid and mitigate potential impacts on native vegetation, flora and fauna including low impact triterring methodology (slashing strategy) and subsequent rapid rehabilitation of impact areas, on-site mitigation measures and environmental safeguards.

Research participants also raised the cumulative impacts that unsanctioned trails area having on the environment across NSW and Australia and expressed the need for a more strategic framework state-wide to ‘catch-up’ and prevent the continued building of unsanctioned trails.

“This isn’t just specific to our area, it is a problem being faced in national parks across NSW and needs to be addressed” (targeted stakeholder interview, 2021).

NPWS recognises that cycling, including mountain biking, is a popular and healthy recreational activity that can raise awareness, appreciation and understanding of the natural environment.

NPWS recognise that cycling can have impacts on a park's environment and must be managed consistent with the relevant legislation and the objectives for which a park is reserved. The NPWS Cycling Policy and Sustainable Mountain Bike Strategy (Office of Environment and Heritage, 2011) guide the provision of mountain biking experiences and at the same time ensure they will be provided only where they are appropriate and safe according to the most stringent environmental standards.

Considering the above analysis, the impacts to the environmental value of the Escarpment were perceived as a ‘high’ negative social risk for some key stakeholder groups and members of the community. Conversely, other members of the community saw the IEMB network as having the potential to improve the environmental values of the escarpment and protect the escarpment from further environmental degradation.

The technical assessment considered the ecologic impact as ‘low’ and while it is not the role of a social impact assessment to assess the technical risk of the IEMB trail on the environment, it does

recommend that a framework around closing unsanctioned trails should be considered to mitigate the social risks associated with unsanctioned trails.

4.8 Livelihoods

The economic impacts of the IEMB network have been estimated separately in a Benefit Cost Analysis by PPM Economics and Strategy (see appendix G). This includes quantifying the economic benefits arising from improved health and recreation associated with the development. The analysis concludes that the IEMB network is likely to have a significant positive impact on the Wollongong economy. The benefits will accrue to users in the form of additional recreation opportunities. Benefits will also accrue to the broader economy and society through increased spending by mountain bike riders, increased health, increased productivity, increased human capital, and better criminal and social justice outcomes. Benefits will also come from tourists.

Evidence from comparative studies also suggest that the proposal will deliver some benefits to the local and regional economy: through direct and indirect expenditure from visitors and residents and associated job and wealth creation, and through the increasing health and wellbeing of those people that utilise the trails.

The technical assessment considered that the IEMB network would likely have a significant impact on the Wollongong economy. However, during engagement, while economic benefits and the flow on effects within the community were considered as a positive impact, the magnitude of the impact was not clear. This is expected given the wider social impacts, particularly on the local community, are much more difficult to quantify. It is nonetheless important to understand them, consider their significance and assess how the community can prepare for them. Consequently, it is assessed that as a 'medium' perceived positive social impact.

4.9 Decision making systems

In general, research participants noted that there was a desire for additional and ongoing communication, and meaningful engagement with stakeholders, not only in project assessment phases but throughout operational phases of the Proposal.

Research participants also expressed a level of distrust and disempowerment with the government approvals and assessment process and that any additional formal trails on the Escarpment should be subject to a full assessment process, not just an REF so the environmental and cultural values of the Escarpment are being respected.

Historically, incidences of mistrust are evident in similar development projects where local communities may feel disempowered by large construction projects that may be proposed and approved. It is evident through the random survey and the targeted interviews that:

- There is a low level of public understanding about some elements of the IEMB network; and
- Some alternative engagement techniques should be considered to help inform and mitigate perceived social impacts.

While it is acknowledged that COVID-19 has placed significant restrictions on planned engagement activities for this Proposal during 2020 and 2021, it is important that an active program of engagement is implemented that has the objective of bridging the gap between the perception of the Proposal and the Proposal's purpose and benefits. The Community Engagement Strategy for the Proposal should include opportunities for the public to be included in decision-making and design development where possible (i.e., negotiable aspects).

Consequently, whilst the perceived inequity and lack of trust in decision making and engagement processes is assessed as a 'medium' perceived negative social impact, there is a significant opportunity to mitigate this impact through education of the Proposal needs and justification.

4.10 Summary of perceived social impacts

In most instances, this assessment only provides a risk assessment of those perceived social impacts without mitigation or enhancement. The assessment is made within the limitations described in Section 4.1 .

A more thorough assessment of social impacts following mitigation or enhancement measures would need to be carried out once the information becomes available, particularly for those impacts being assessed under the separate Part 5 of the EP&A Act (including the ancillary infrastructure on WCC and South32 land).

Table 4.3 Summary of perceived social impacts of the IEMB network

Social Impact Theme	Perceived Impact to People	Affected stakeholder groups	Perceived stakeholder significance
Social health and wellbeing	Increased access to recreational opportunities with positive health benefits for the broader community	Mountain Bike Riders Regional community	High positive (likely, moderate)
Public Safety	Potential for conflict with cars, cyclists and pedestrians in Mount Kembla and Kembla Heights leading to a decrease in public safety	Nearby neighbours of Mount Kembla and Kembla Heights	High negative (likely, moderate)
	Changes to public safety associated with using the trails on the escarpment, including conflict with riders and walkers and improved accessibility for emergency services	Emergency services and mountain bike riders	High positive (likely, major)
		Other recreational users (walkers etc)	Medium negative (possible, moderate)
Supporting infrastructure	The availability of supporting public infrastructure, services and facilities in relation to the proposal.	Nearby neighbours of Mount Kembla and Kembla Heights	High negative (likely, moderate)
European and cultural heritage	Disturbance of the connection to European heritage in Mount Kembla and Kembla Heights, including the memorial pathway.	Kembla Heights community and those with an interest in heritage values	Medium negative (possible, moderate)
		Users of memorial trail, Mount Kembla community	High negative (likely, moderate)
	Protecting cultural heritage along the escarpment	Aboriginal, First Nations and Traditional Landowners.	High negative (likely, moderate)
The natural environment	Protecting the environmental values of the escarpment and how people experience their surroundings	Interested stakeholder groups	High negative (likely, moderate)
		Broader community	Low negative (possible, minimal)
Economic	Increase tourism and visitors to the area leading to increased opportunities expected to improve livelihoods, wellbeing and community cohesion.	Region	Medium positive (possible, minor)
Decision making and engagement	The ability of people to have meaningful contributions to a project that either affects them or they have an interest in.	Region	Medium negative (possible, minor)

5 SOCIAL IMPACT RECOMMENDATIONS AND CONCLUSION

Several recommendations were made throughout Chapter 4 to further investigate potential social impacts or to mitigate or enhance perceived social impacts of the IEMB network.

[Table 5.1](#) provides a summary of the ten recommendations that may be implemented in response to the social impacts and how they relate to the social impact categories.

This assessment found that while the formalisation of trails on the IEMB network will likely have several positive social benefits, particularly relating to health and wellbeing and livelihoods, further investigations are required to consider several perceived negative impacts more completely, particularly on the local communities of Mount Kembla and Kembla Heights, and the Traditional Owners of the land.

Table 5.1 Summary of recommendations of this assessment

Ref.	Recommendation	Social impact category
1.	The proponent undertakes a traffic and parking assessment that considers: <ul style="list-style-type: none"> Any increase in traffic on the local road network and the potential impact on public safety in and around Mount Kembla and Kembla Heights; The key destination points and routes associated with the Proposal; and Parking analysis and needs assessment. 	Surroundings Way of Life Health and Wellbeing
2.	As part of the above or as a separate assessment, an observational field study to increase the understanding of the potential number of users of the trails and establish an approximate baseline for current use.	as above
3.	Targeted and collaborative consultation be continued or undertaken with the directly affected communities and decision-makers regarding: <ul style="list-style-type: none"> Monitoring and managing the maintenance of the network, to enhance public safety; Impact of the IEMB network on Stage 3 of the Mount Kembla Memorial Trail from the bottom of Benjamin Road; Proposed supporting infrastructure for the IEMB network, including provisions and placement; and The potential impact on Kembla Heights and associated heritage values. 	All
4.	Opportunities to both collaborate with and empower Traditional Owners be genuinely explored to ensure the network reflects the Aboriginal cultural values of the Djembala Djeera Cultural Landscape.	Culture
5.	Consultation with Emergency Services during the planning phase regarding emergency management plans, signage, and wayfinding.	Accessibility Health and wellbeing
6.	Additional assessment on the impact to Kembla Heights village and the memorial trail, including investigating the need to form a separate advisory committee made up of residents, historical and heritage experts, Wollongong City Council, South32 and NPWS to: <ul style="list-style-type: none"> Clearly define and articulate the values associated with the village and the trail; The potential impact of the Proposal on these values; and Appropriate mitigation and management measures. 	Culture
7.	Additional interpretive signage installed along the trails and through the escarpment to increase the awareness of the site's significance in consultation with relevant communities.	Culture
8.	Develop an education and awareness program including signage, social media, and website content on Council and NPWS website and rider sites to provide information on mountain biking and the location of authorised trails on the Illawarra Escarpment. Interaction with this and other rider sites should also seek to remove reference to or highlight the status of the unauthorised trails.	Surroundings Culture Community

Ref.	Recommendation	Social impact category
9.	Establish agreed trail assessment criteria to identify unauthorised trails that should be closed in consultation with key stakeholders and communicate the criteria and planned approaches with the broader community.	Surroundings
10.	Additional assessment of social impacts following mitigation or enhancement measures carried out once the information becomes available, including a separate assessment included in the second REF (component two), to be assessed under Part 5 of the EP&A Act. This REF will include all non-trail infrastructure such as parking and amenities.	All

APPENDIX A – REVIEW OF STRATEGIC PLANS

The proposal is located within the Wollongong Council LGA. Regional plans which reflect the aspirations of the community have been developed by the State Government and local authorities. These plans are outlined below.

Illawarra Shoalhaven Regional Plan 2041

The NSW Department of Planning and Environment Illawarra Shoalhaven Regional Plan 2041 is a 20-year blueprint for the future of the Illawarra Shoalhaven region and the overarching strategic planning framework. The elements of the Regional Plan that are addressed by the Proposal are summarised in [Table 5.2](#).

The vision outlined in the plan is: *to create a reputation for innovation, sustainability, and resilience, in 2041 the Illawarra Shoalhaven is diverse, creative and globally connected region.*

It outlines the delivery of vision through four goals:

- A productive and innovative region
- A sustainable and resilient region
- A region that values its people and places
- A smart and connected region

Table 5.2 Relationship of the Proposal to Illawarra Shoalhaven Regional Plan

Plan Reference	Regional Plan element	Relevance of the Proposal to element
A productive and innovative region Objective 5: Create a diverse visitor economy.	Strategy 5.1: Protect heritage, biodiversity and agriculture to enhance cultural tourism, agri-tourism and eco-tourism	The Proposal has the potential to contribute to the achievement of this objective
	improve public access and connection to heritage through innovative interpretation	
A sustainable and resilient region Objective 11: Protect important environmental assets	Strategy 5.2 Support a diverse visitor economy in national parks through collaboration between National Parks and Wildlife Service, Destination NSW, Destination Networks, councils and local tourism organisations to encourage and welcome visitors.	The Proposal directly contributes to the achievement of this objective
	Strategy 11.1 Protect, maintain or restore important environmental assets. Strategic planning and local plans should consider opportunities to: minimise potential impacts arising from development on areas of high environmental value and implement the 'avoid, minimise and offset' hierarchy	
A region that values its people and places. Objective 23: Celebrate, conserve and	Action 5: Develop the Illawarra Shoalhaven Green Grid and identify priority projects for enhancement. An Illawarra Shoalhaven Green Grid will provide a spatial understanding of the network of open spaces in the region and how to improve and better connect them. This will allow the NSW Government and councils to identify long-term and large-scale open space priorities.	The Illawarra Escarpment is the dominant landform of the Illawarra region.
	Strategy 21.3 Identify, conserve and enhance cultural heritage values. Strategic planning and local plans should consider opportunities to: Engage Traditional Owners and the community early in the planning process to understand heritage values	

Plan Reference	Regional Plan element	Relevance of the Proposal to element
enhance cultural heritage	<p>Undertake heritage studies early to inform conservation and value add opportunities</p> <p>Apply adaptive reuse and heritage interpretation to create distinctive local places</p> <p>Manage and monitor the cumulative impact of development on the heritage values and character of places.</p>	

Our Wollongong 2028

The Wollongong 2028 Community Strategic Plan is based on broad community consultation across the LGA. The plan identifies the main priorities and aspirations for the LGA and establishes objectives and strategies to achieve those the main priorities. Relevant elements of the plan are reported in [Table 5.3](#)

The vision outlined in the plan is:

From the mountains to the sea, we value and protect our natural environment and we will be leaders in building an educated, creative, and connected community.

It outlines the delivery of this vision through six interconnected goals:

1. We value and protect our environment
2. We have an innovative and sustainable economy
3. We have a creative, vibrant city
4. We are a connected and engaged community
5. We have a healthy community in a liveable city
6. We have affordable and accessible transport

Table 5.3 Relationship of the Proposal to Our Wollongong 2028

Plan Reference	CSP element	Relevance of the Proposal to the CSP element
Goal 1 We value and protect our environment	<p>Objective 1.1. Our natural environment, waterways and terrestrial areas are protected managed and improved</p> <p><i>1.1.1 The community is actively involved in the expansion and improvement of our green corridors and other natural areas connecting the escarpment to the sea.</i></p>	The Proposal will directly contribute to achievement of this goal.
	<p>Objective 1.4 We recognize and celebrate our heritage</p> <p><i>1.4.1 Programs and projects that achieve proactive heritage management, education and promotion are developed and implemented.</i></p> <p><i>1.4.2 Our Aboriginal community is actively engaged in the management of indigenous heritage.</i></p>	The Proposal has the potential to contribute to the achievement of this objective
GOAL 2 We have an innovative and sustainable economy	<p>Objective 2.3 The profile of Wollongong as a regional city of the Illawarra is expanded and improved</p> <p><i>2.3.1 Build our city as a tourist destination of choice for conferences, events, and a place to live, learn, work and visit</i></p>	The Proposal will directly contribute to achievement of this goal.
GOAL 3 Wollongong is a creative, vibrant city	Objective 3.1 Creative, cultural industries are fostered and thriving	The Proposal has the potential to contribute to the achievement of this

Plan Reference	CSP element	Relevance of the Proposal to the CSP element
	3.1.1 Using community art and cultural development practices, our places and spaces reflect the creativity, history and identity of our people.	objective through enhancement measures
GOAL 4 We are a connected and engaged community	Objective 4.1 Residents have easy and equitable access to information, and play an active role in the decisions that affect our city	The Proposal will be available for public submission and comment
	Objective 4.2 Our residents have an increased sense of community 4.2.1 Support residents, businesses and visitors to be actively involved in diverse community activities helping to connect neighbourhoods.	The Proposal has the potential to contribute to the achievement of this objective
GOAL 5 We have a healthy community in a livable city	Objective 5.2 Participation in recreational and lifestyle activities is increased	The Proposal will directly contribute to achievement of this goal.
	5.2.1 Provide a variety of quality public spaces and opportunities for sport, leisure, recreation, learning and cultural activities in the community.	

Illawarra Escarpment strategic management plan 2015

The Illawarra Escarpment Strategic Management Plan 2015 focuses on the role of Wollongong City Council in managing the Illawarra Escarpment in partnership with relevant government agencies and landholders.

The IESMP 2015 is founded on the vision that the Illawarra Escarpment is an outstanding feature of the Illawarra region providing a natural backdrop to the city as well as encompassing areas of high conservation value and rich cultural heritage. The long-term vision for this area is for these values to be preserved and enhanced through public reserve or private stewardship. Relevant elements of the plan are reported in [Table 5.4](#)

The objectives of the IESMP 2015 are to:

1. identify the environmental, cultural and economic values of the escarpment and foothills requiring conservation;
2. define the principles and strategic direction for protecting and enhancing escarpment values; and
3. outline an action plan for Council to improve escarpment management.

Table 5.4 Relationship of the Proposal to IESMP 2015

Plan Reference	CSP element	Relevance of the Proposal to the CSP element
Principles	Some areas of the escarpment are in a degraded state and therefore require active management; <i>any development of the escarpment should result in an overall conservation improvement to the escarpment;</i>	The Proposal has the potential to contribute to the achievement of this objective
6.3.2.4 Recreational Users	No formal routes for mountain biking currently exist within the escarpment although some fire trails within the Illawarra Escarpment State Conservation Area can be legally accessed by mountain bikes. Due to the strong potential for environmental damage and conflict between mountain bike users and walkers, it is imperative that a planned approach to facilitating mountain biking be implemented in areas where the two uses coincide.	The Proposal aims to contribute to the achievement of this objective

Plan Reference	CSP element	Relevance of the Proposal to the CSP element
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6.3.2.4.2
Mountain
Biking

APPENDIX B – RANDOM SURVEY OUTCOMES REPORT

During August 2021, qualitative and quantitative research was undertaken by an experienced, independent research company to help inform the Social Impact Comment for the Illawarra Escarpment Mountain Bike (IEMB) network.

The research was conducted via a random telephone survey of residents in the Wollongong Local Government area to gain broader community sentiment and perception relating to the IEMB networks perceived social impacts across the affected LGA.

This feedback is one of several mechanisms used to help inform the scoping of likely social impacts relating to the proposal. Other engagement techniques used to collect information and insights included targeted surveys, observation of advisory group meetings, analysis of comparative projects and desktop research (including review of social media and forums).

The survey was also used as a tool to garner broader community sentiment in relation to bike riding in Wollongong.

Survey approach

Between Monday 16 August 2021 and Friday 21 August 2021, qualitative and quantitative research was undertaken by Taverner Research. This research was undertaken in the form of a telephone survey which included a series of both open-ended and multiple-choice questions.

The following briefly outlines the survey approach:

- CATI (i.e., telephone) interviewing was conducted using a team of 11 CATI researchers from Taverner Research's Coffs Harbour CATI centre;
- Residents were called between 3:30pm and 8pm weeknights
- Phone numbers were supplied by Sample Pages, the leading supplier of residential phone records to the social and market research industries. Phone numbers were supplied as follows:
 - Zone 1 (Closest proximity): 500 in the suburbs of Mount Kembla, Kembla Heights, Cordeaux Heights, Mount Keira and Keiraville
 - Zone 2 (Neighbouring proximity): 500 in the suburbs of West Wollongong and Figtree
 - Zone 3: (Remainder of LGA): 1500 records across the remainder of the Wollongong LGA
- 2,500 phone numbers were sourced at random, split approximately 60% mobile and 40% landline;
- A final sample size of n=270 residents was achieved. This was split 51% Zones 1 and 2 (combined), and 49% Zone 3; and
- The average interview length was 9 minutes 20 seconds.

The survey focused on five key areas. These included:

- Respondent profile;
- Awareness of the proposal;
- Perceived impacts and benefits;
- Potential users of the network; and
- The broader plan of Wollongong City Council seeking to turn the Illawarra into a "bicycle city".

122A summary of the survey's reach and the respondent profile in terms of age and gender is provided in the table below. Figure 1.1 breaks down the reach per suburb. It is noted that during the survey, no response was received by residents in Kembla Heights, which is likely reflective of the number of phone numbers available within that smaller state suburb, however,

representatives from Kembla Heights were contacted directly as part of targeted stakeholder interviews.

Table 5.5 Survey respondent profile summary

Zone	Reach	Age				Gender	
		18-39	40-59	60-69	70+	Male	Female
Zone 1 and 2 (Mount Kembla, Kembla Heights, Cordeaux Heights, Mount Keira and Keiraville), West Wollongong and Figtree)	51%	49%	49%	61%	47%	48%	54%
Zone 3 (remainder of LGA)	49%	51%	51%	39%	53%	52%	46%

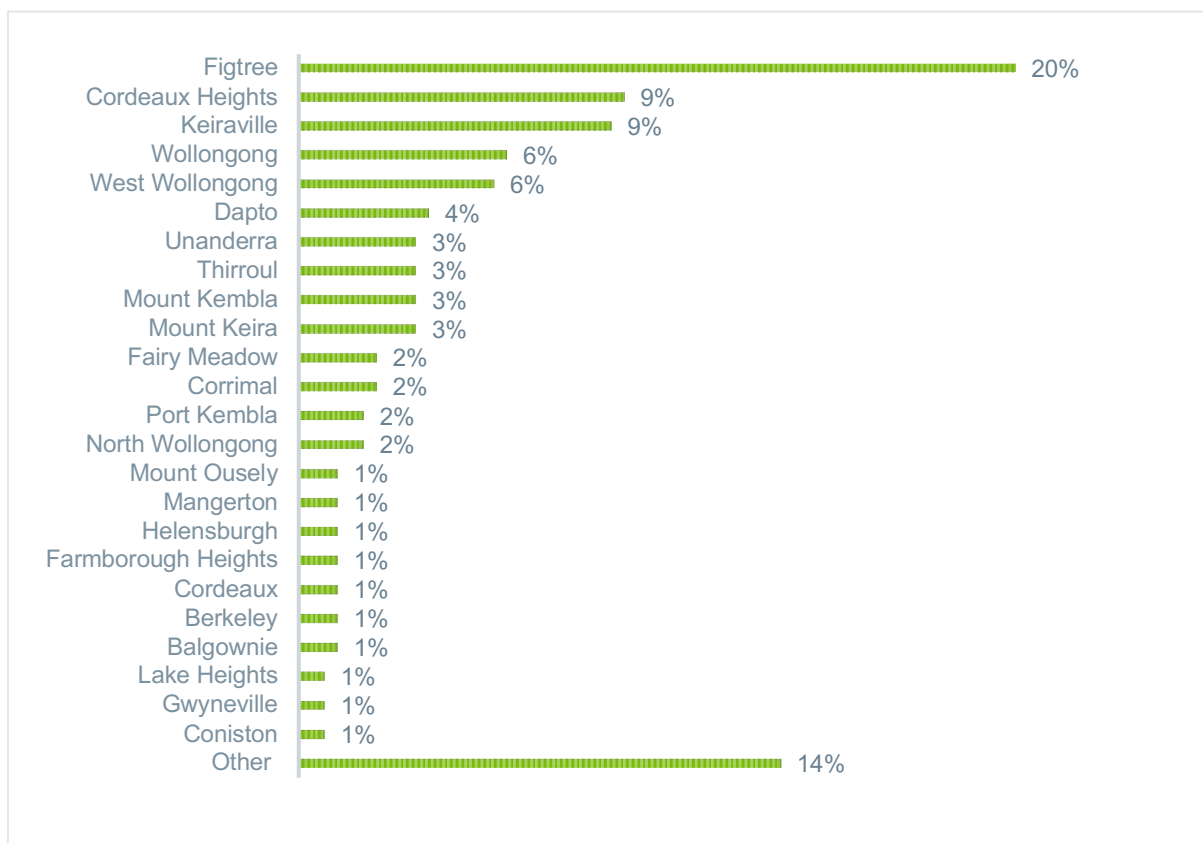


Figure 5.1 Respondents from each suburb

Findings

Awareness

In terms of Project awareness, respondents were asked if they had heard or read about any new sports or leisure facilities planned for Wollongong or the Illawarra over the coming year or two. 86% of respondents didn't mention a mountain bike trail at all, 10% mentioned a new mountain bike track more generally and 4% mentioned either the Illawarra Mountain Bike Concept Plan or Mount Kiera to Mount Kembla mountain bike trails specifically.

Of the 96% that showed little to no awareness of the Proposal, when prompted if they had heard about a proposal to build formal mountain bike trails along the Illawarra escarpment from Mount Keira to Mount Kembla, 62% answered yes.

In terms of awareness, the survey found that when unprompted, there was little to no memory recall of the proposal, however when respondents were made aware of the project name, awareness increased.

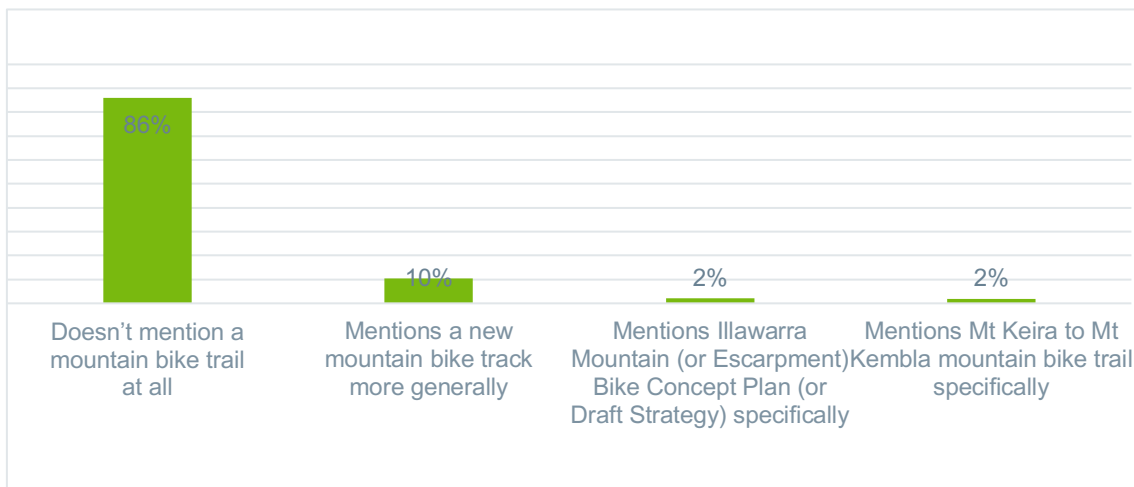


Figure 5.2 Proposal awareness (unprompted). source: Q3 Have you heard or read about any new sports or leisure facilities planned for Wollongong or the Illawarra over the coming year or two (n=270)

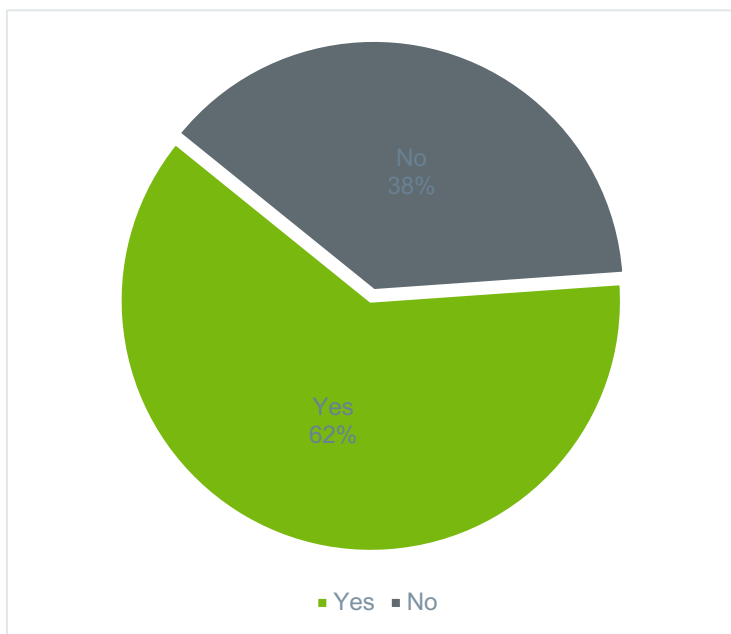


Figure 2.2 Proposal awareness (prompted), source: Q4 Have you heard about a proposal to build formal mountain bike trails along the Illawarra escarpment from Mt Keira to Mount Kembla? (n=270)

Proposal impacts

After establishing proposal awareness levels, all respondents were provided with the following overview of the proposal:

As part of the Council's commitment to cycling activities in Wollongong, they are working with National Parks and Wildlife Service to explore opportunities to formalise mountain biking activities across the Illawarra Escarpment.

The Illawarra is a popular location for mountain biking with unsanctioned trails across the escarpment. These areas are predominantly managed by National Parks and Wildlife Service with various land tenures across the area.

The proposed mountain bike trail network would be built in the area between O'Brien's Drift and Kembla village, with nodes at Mount Kembla. The trail network is aimed at providing a like for like replacement of the unsanctioned trails on Mount Keira.

Across four questions, respondents were asked regarding the benefits and disbenefits of the project. The survey provided respondents with the opportunity to both identify the proposal's specific benefits and disbenefits in a prompted and unprompted way, from the community's perspective. It also provided respondents opportunity to express concerns and aspirations in their own words. This is an essential component of best practice social impact assessment as identified in the NSW DPE *Social Assessment Guideline* (2021), as well as in the International Association of Impact Assessment (IAIA) *Social Assessment: Guidance for assessing and managing the social impacts of projects* (2015).

In terms of general support or opposition of the trails 75% of respondents either supported or strongly supported the Proposal in general, with 7% being opposed (or strongly opposed).

When asked to explain their response (unprompted), the top-of-mind responses included the project was 'good for the community in general' (34%), 'will increase safety for bikers' (22%) and 'it would benefit me/my family' (18%). The greatest concern was the environmental impact (16%). 10% of respondents were either unsure, uninterested, or identified that more information was needed to inform their response.

When specifically asked about the main benefits of the proposal, the most common responses were health benefits (46%), increase in tourism and visitors (35%) and improved safety (23%). 8% expressed no benefits or were unsure.

In terms of impacts, 60% responded with no concerns, 42% responded with the potential disturbance to vegetation and wildlife. Safety concerns in Mount Kembla Village due to increase in traffic and conflict with cars, cyclists and pedestrians was also raised by 11% of respondents.

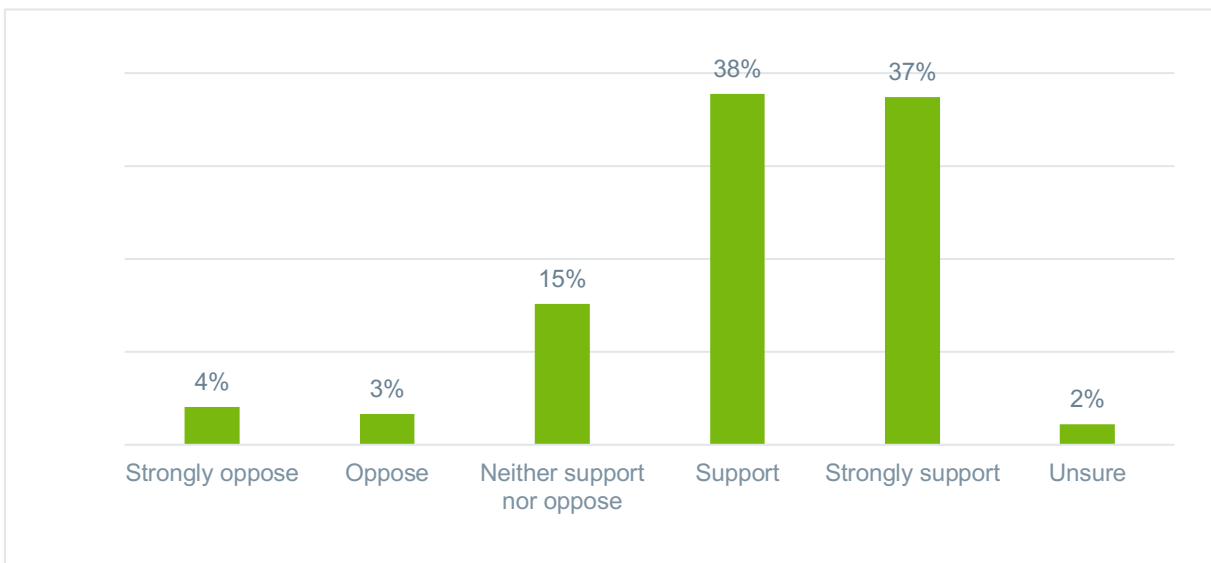


Figure 5.3 Level of support, source: Q5 Based on your knowledge of the proposed trails, or what we have just described, to what extent do you support or oppose construction of these mountain bike trails? (Prompted except "Unsure")

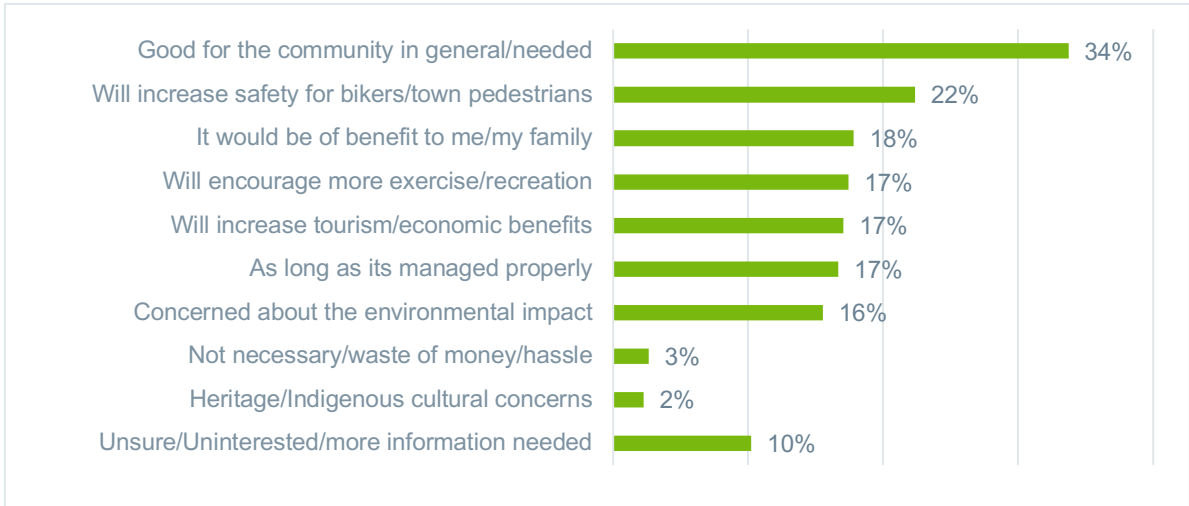


Figure 5.4 Level of support, source: Q6 And can you briefly explain why you (Q5) this proposal (unprompted)? (n=264) (n=270)

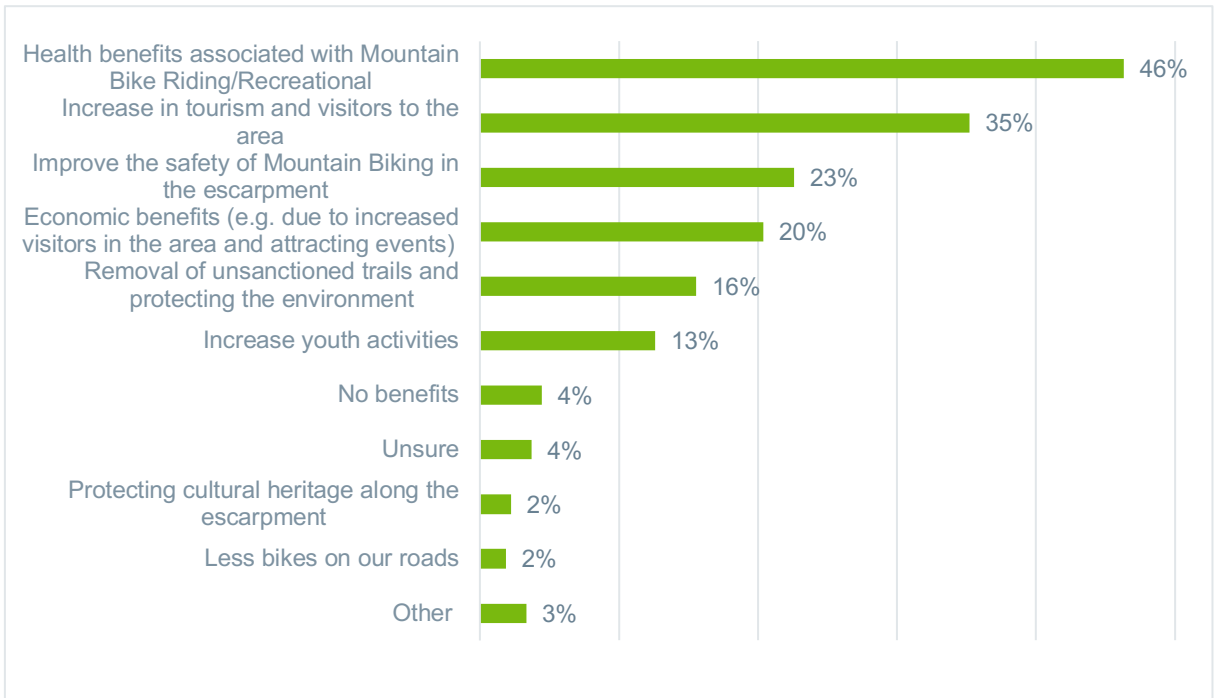


Figure 5.5 Perceived positive impacts, source: Q7 What do you think might be the main benefits of this mountain bike trail? (Unprompted, multiple responses allowed) (n=270)

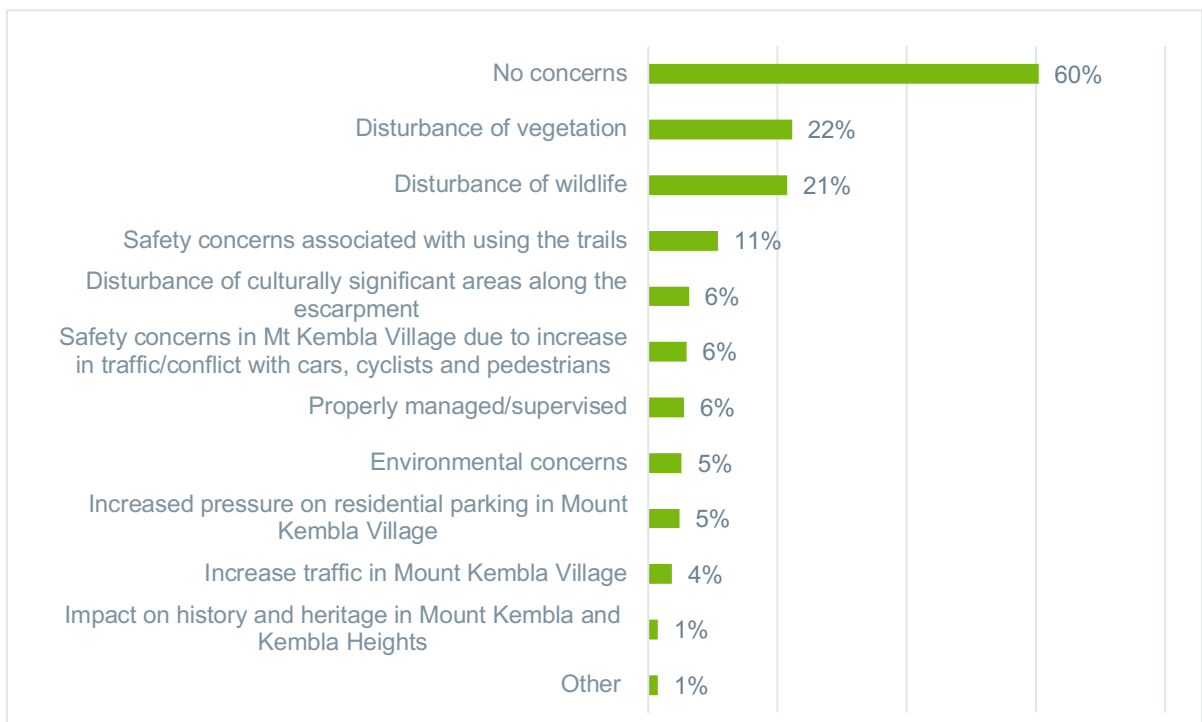


Figure 5.6 Perceived negative impacts, source: Q8 And do you have any concerns about the proposed mountain bike trail? (Unprompted, multiple responses allowed) (n=270)

Potential users

The survey also included a mechanism to identify potential users of the proposed trails. 34% of respondents indicated that they or another member of their household owned a mountain bike. Of these 34%, 63% of respondents identified that they were either very likely or quite likely to use the trails, while 34% were either not very likely or not at all likely.

36% of all respondents also indicated that they had mountain-biking friends or relatives living outside the Illawarra who might visit the region to use the proposed new mountain bike trail, where 58% of respondents advised they did not.

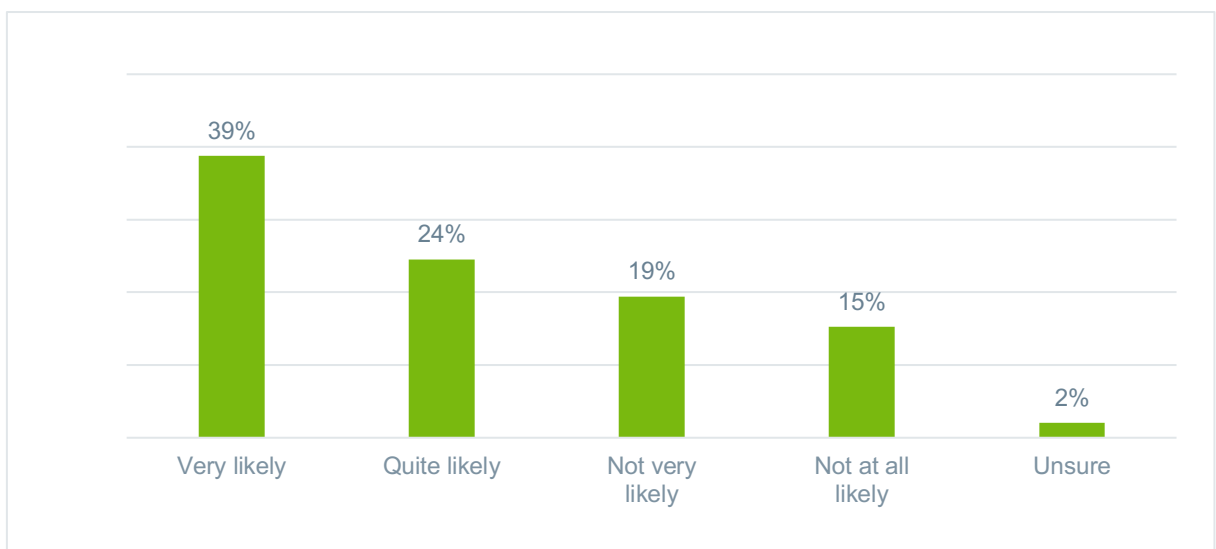


Figure 5.7 Potential users, source: Q10 (If Q9=1) How likely do you think you or another member of your household would be to use the proposed mountain bike trail from Mt Keira to Mount Kembla? (n=98)

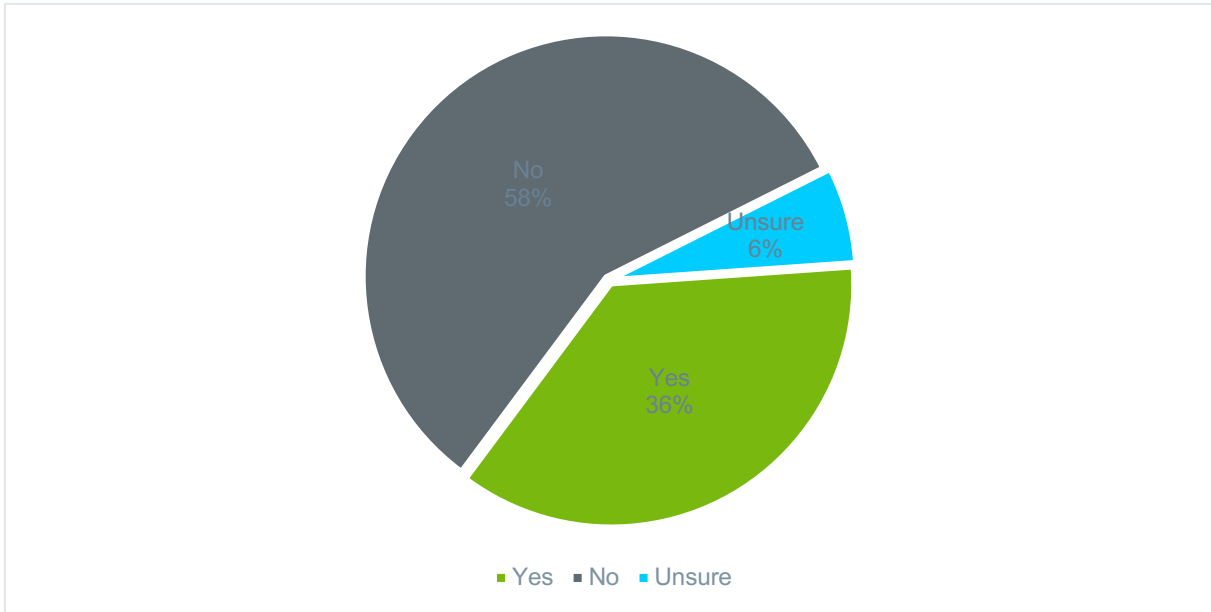


Figure 5.8 Potential tourism benefits, source: Q11 Do you have any mountain-biking friends or relatives living outside the Illawarra who might visit the region to use the proposed new mountain bike trail? (n=270)

Wollongong City Council as a 'bicycle city'

At the time of the survey, respondents were also asking questions relating to Wollongong City Councils policy to turn the Illawarra into a 'bicycle city'. 73% of respondents supported the policy, while 13% of respondents did not. The remaining 14% of respondents were either unsure or indifferent.

In terms of the perceived importance of this policy on tourism, vis-a-vis other benefits, respondents were prompted with a list of benefits in a randomised ordered. Respondents identified 'health benefits of more bicycles/less cars' as the most beneficial (31%), followed by 'environment benefits of more bicycles/less cars' (26%). Bringing tourism dollars into the Illawarra was rated as the third main benefit (23%).

Final comments in relation to the IEMB network

At the completion of the survey, respondents were provided with another opportunity to give comments or suggestions in relation to the proposal. These comments are summarised in the table below, grouped by responses to source question 5.

Response to question 5	Comments
Neither support nor oppose	<ul style="list-style-type: none"> As long they keep it to the area they're proposing and don't take up any more of the escarpment. Fashion trends at present force push bike purchases into one of two camps; the mountain bike camp or the road racing camp. One cannot simply buy a bike or ride in the urban streets that was available in the years gone by. That is not necessarily the type of bike that would most suit the average person's usage. Good to separate the Mt Keira walkers from the cyclists. Parking at either end might be an issue, that might become a big issue because it might end up taking areas of the escarpment. And rubbish getting left on the trails. I know my nephews' children rides Mt Keira bikes so I think they would appreciate having an extended track I'd love to see it being extended to from Mount Kembla to Robertson/ it would be nice for the community

Response to question 5	Comments
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- I think it would be great to have everyone out and about.
- I think they should focus on the Mount Kiera lookout too support the visitors and tourism.
- I'd prefer a basketball court in Haywards Bay
- it would be great, and I go trekking and hiking, but I don't have this information so letting people know about this information.
- Just do it right.
- My only concern was how wide it is, know what I mean? it's not going to be concrete is it people cutting down trees making a track when they do that, they make the land unstable by removing trees and stuff like that they should be going around them because you don't want a landslide
- Only that the landscape is taken care of
- Parking is a major issue/in my household there are three cars
- They will do what they want to do. They don't care what the people say.
- tread very carefully and a big backlash from the locals
- would be good if it was also safe to walk

Oppose	<ul style="list-style-type: none"> • I am strongly opposed to this trail as it could attract motorbikes, which would destroy flora and fauna. • I don't want to see it done because it will be a disaster. • I think the money spent in improving current bike tracks around the area. /Example, my wife and I were cycling 3 years ago along a bike track. It was poorly constructed. she come off the bike headfirst over the handlebars and broke both of her wrists. /Ended up having 5 surgeries. /So rather than spend money on new bike tracks on the mountain, they should use the money to improve the already existing bike paths. • Just that I'd like to think that they consider the animals up there I don't want the animals straying onto the track litter being thrown around I just want to make sure they really look after the environment • upgrading the road before the bike trails. • when we do walk in the bush we do come across echidnas and wombats, and extra bikes in the area may make these animals feel insecure and maybe kill some/trails destroy bush/my husband thinks the council should put their money into an international standard skateboard park
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Strongly oppose	<ul style="list-style-type: none"> • don't build the mountain bike trail, only build the bike paths in Wollongong • going to ask for a whole scene of awful events that could arise • I don't think it's a good idea/ with the reasons I've already told you • I feel like they should not bring them into the village. Not just for the villages sake but it is just too dangerous. /If they were to take them as far as up at the top of Mount Kembla or Keira where the drift is. There is no one around there they could put a car par there etc. /It is going to be too scary with that many bikes in this small village. / I mean that from my heart. • I just think we need to preserve the natural habitat. To destroy our natural environment is an abomination. • I live on Kirkwood place where the trail will be/ we have resident echidnas in the area. and we have concerns of habitat destruction and safety of the echidnas • It is not just mountain biking experience; road cycling is an issue. • Its safety of the road needs to be addressed first/ If I understand if you're joining Mt Keira to Mount Kembla there would be a lot of people going up Mt Keira and the safety needs to be addressed of how to share the road/ To not cause problem/ No further comment// • That it should not go ahead. /It is not well thought through. /It is ill-conceived • Yes, take it elsewhere
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Strongly support	<ul style="list-style-type: none"> • An extension of the network to include an outlet on Mt. Nebo on Walang Drive/ Ensuring there is enough supporting infrastructure for it/ No further comment// • Any of these trails around there we have the right environment around here/ the deer do more damage than the bikes will • if there are facilities, parking toilets I agree, meeting places, pop up cafes • If it's all eco-friendly and local people are employed to build it • Do more of them towards the northern suburbs of Wollongong to ride • Do more, keep it up, well done
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Response to question 5

Comments

- I haven't made a study of the proposed trails so I can't speak with any knowledge specifically about them, but I think it's a great idea and Mount Kembla to Mount Kiera is a great place for it with some fantastic views when you go between those two places/No further comment//
- I just think people should stop thinking people need to take cars, bikes and motorbikes are the way of the future, there are all sorts of benefits to using motorbikes and bicycles instead of cars, reducing congestion, lowering emissions, health benefits
- I really hope it goes ahead. I hadn't heard about it, so advertise to get more people on board.
- I suppose if decision making could be made available to the people that use it/No Further comment//
- I think it will be very good and people will be able to go watch it
- I think just as I said before, making sure a safety aspect that there is a track that the ambulance can get up If there is a safety plan for getting people out, because biking injuries tend to be head and neck injuries/ My husband's injury was a broken pelvis and couldn't get up/ No Further comment//
- I would hope it didn't get caught up in red tape for too long and that it happens rather quickly
- I would love to see it go ahead and it would be a great thing for Illawarra
- If they are upgrading the track, it is a good idea because it has been dangerous, and it is used anyway.
- If they have a track just for bicycles if the residents can walk along the track would be a great benefit.
- it might be difficult to close the informal tracks in Mt Keira since the community have love for both
- it would be nice to have walkway tracks or board walk tracks, with not too steep a gradient for older people to be able to walk and enjoy as well, I love being outside and being in nature
- just to keep it well maintained, and at a level that everyone can enjoy
- Not to that one but the one at the beach/ It used to be good because the bikes were on one side of the track and the pedestrians were on the other/ Now there's people coming on both sides and there's people all over/ I believe it was safer the other way/ No further comment//
- only that the council will look after it
- probably should be extended to other areas in the southern suburbs
- probably to emphasize the bigger the better, it gets busy up there so the more trail and area the better it will be
- The main thing is the parking, so they have somewhere to park not just on the street/ and so they're not going across main roads.
- there needs to be more car parking to cater for more vehicles
- Uh if it is managed in an environmentally friendly way, it will be all good. /It will turn Wollongong into the Derby and the Queenstown of NSW. /A go to area for outdoor recreation and activities.
- Up a hill they should get some sort of thing to bring you up the hill
- When they are being done, I think they should be done in a way so there is still space for cars to drive up and down there as well. /I know that is where a lot of rage between drivers and riders happen because of not having enough distance for them to get past.
- will it be clean safe and well lit up?
- Yes, well it must be closely monitored regarding restrictions on the amount of people who can be on the trails. /When you have too many people it could create other risks. /So, it must be managed some way. /Limit of ex number of riders per trail.

Support

- As a parent I imagine safety is a big issue so that if kids are riding on these tracks not riding helmets, I would hate to see brain injuries or major injuries happen/ No further comment//
- As I have said before if it is well managed, I have no issues. /It has got to be well managed.
- if the environment is protected when they are construction the trails
- Consider nature in the process - be careful
- Get the bikes off the streets, put them on the footpaths and they are a hazard
- I consider it a great idea and I hope it goes through/ No further comment//
- I have concerns about the riders on Mount Kiera road

Response to question 5	Comments
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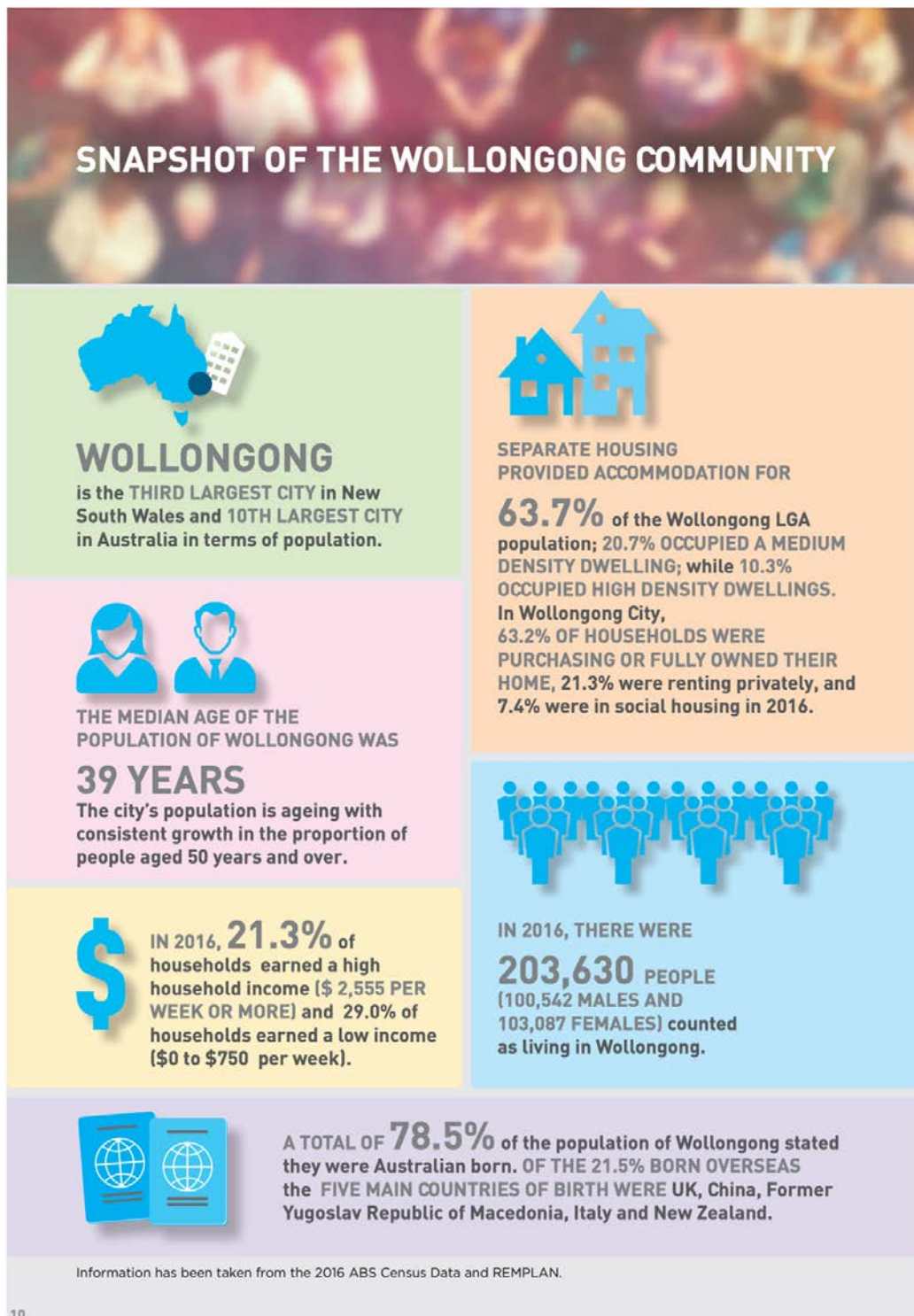
- I hope that it won't disturb the Mount Kembla Village/ it's a nice quiet village and I'd like it to stay that way
- I just think that with the population increasing in Wollongong and the cycleways the around Smith St. I think the traffic and the council taking away lanes to use as cycleways/ at school pick up times it creates a lot of congestion
- I want to see plans of this proposal/
- If we can afford it, it's a good idea
- I'm not opposing it I'm supporting but I do not know the plans of council or how long it will be, but maybe the younger generations would go for it, but it is a good idea but not for my age group
- Is there the potential to expand the trail further?
- It may lead to more tourism dollars and make Illawarra very progressive.
- It needs to be monitored.
- It'd bring more money into Wollongong; tourism is the way to go when you've got a city by the ocean/ No further comment//
- Just ensure council does correct and thorough environmental assessments. /We would not want to see our great escarpment sacrifice for a pathway alone.
- likewise, with opening the bike trails it be good to open more bush walking only trails and maybe also would be good if Wollongong collaborate with Sydney waters or catchment authority to open more trails for bush walking/
- Make flyers or communication on the website. /I live close by and did not know what was happening. //More communication.
- No, I just think it's a great idea for our young people in Wollongong/ And maybe we should have people down at the bottom taking the kids from the bottom of Mt. Kiera to the top, Like in Canberra Mount Stromlo
- there are adequate facilities for the trails
- This is good tourism possibility to attract tourist to the trail. More business for locals.
- We need car access to that area as well as bikes. An upgrade is needed to allow access and to give Wollongong residents another way out in case of bushfires.
- when is it being built

Unsure

- 1 is still maintain access to walkers, consultation with our local indigenous elders is important. management of environment of erosion weed management and pollution. safety of increased cyclist on busy roads accessing the area, working with the cycling community so that to manage issues such as safety but also ensuring there are a variety of challenges for different levels and with that there should be the ability to change the courses over time, otherwise they become boring. managing the deer population because the deer present a challenge/ and making sure it doesn't become overly commercial/
 - Consult with sub-culture groups - young boys. Their voices should be heard.
 - I don't know the area well enough to comment.
 - It should be in the outer ring of the village or a suburb/ due to safety, traffic, and privacy/
 - The only thing about that if it's a proper mountain bike trail is that no damage is done to the bush.
-

APPENDIX C – COMMUNITY PROFILES AND SOCIAL LOCALITY OVERVIEW

Community Snapshot



10

Figure 5.9 Community snapshot

Source: Our Wollongong 2028, Wollongong Council Strategic Plan



IN 2016, **30.2%** of families were couple families with child(ren), and **11.5%** WERE ONE-PARENT families compared to 33.2% and 10.9% in 2001 respectively.



IN 2016, THERE WERE **5,346** PEOPLE in the Wollongong LGA who identified as Aboriginal or Torres Strait Islander, representing **2.6%** OF THE TOTAL POPULATION.



IN 2016, THE MEDIAN WEEKLY MORTGAGE REPAYMENT WAS **\$449** and the median weekly rent payment was \$328 compared to \$456 and \$384 respectively for New South Wales.



ENGLISH WAS STATED AS THE ONLY LANGUAGE SPOKEN AT HOME BY **78.2%** OF THE POPULATION. The four most common languages other than English spoken at home are Macedonian, Italian, Mandarin and Arabic, with Mandarin as the fastest growing language.



Wollongong LGA's unemployment rate continues TO BE ABOVE THE STATE AVERAGE AT **5.7%** in September 2017 compared with 4.8% for New South Wales.



A TOTAL OF **76.6%** of Wollongong's households had broadband internet connection UP FROM 71% IN 2011. This varies across the city from a low of 55% in Warrawong to a high of 88.4% in Austinmer.

In 2016, **72.5%** of people who live in Wollongong indicated they travel to work in a motor vehicle,



5.5% travelled by train,



2.0% travelled by bus.



3.7% Used active transport.

Information has been taken from the 2016 ABS Census Data and REMPLAN.

Figure 5.10 Community snapshot

Source: Our Wollongong 2028, Wollongong Council Strategic Plan

Community profiles

Indicator	Source	Mount Kembla SSC	Kembla Heights SSC	Cordeaux Heights SSC	Unanderra-Mount Kembla SA2	Figtree - Kiera ville SA2	Wollongong LGA	NSW
People - Demographics and Education								
Total population	Quick stats	1068	119	4559	15378	21080	203630	3686014
Male	Quick stats	47.7%	49.6%	50.5%	48.6%	49.7%	49.4%	49.3%
Female	Quick stats	52.3%	50.4%	49.5%	51.4%	50.3%	50.6%	50.7%
Aboriginal and/or Torres Strait Islander people	Quick stats	2.1%	6.7%	1.0%	2.1%	1.4%	2.6%	2.9%
Age Structure								
0-4 years	Quick stats	6.0%	9.0%	4.3%	5.5%	5.5%	5.9%	6.2%
5-9 years	Quick stats	8.8%	7.5%	6.5%	6.4%	6.8%	6.2%	6.4%
10-14 years	Quick stats	6.6%	10.4%	8.2%	6.7%	6.5%	5.8%	5.9%
15-19 years	Quick stats	7.6%	9.0%	8.7%	6.9%	7.2%	6.4%	6.0%
20-24 years	Quick stats	6.3%	9.0%	8.5%	6.7%	9.0%	7.6%	6.5%
25-29 years	Quick stats	2.7%	3.0%	5.3%	5.4%	6.4%	6.6%	7.0%
30-34 years	Quick stats	4.5%	5.2%	4.2%	5.8%	5.8%	6.2%	7.2%
35-39 years	Quick stats	6.8%	8.2%	5.1%	5.6%	6.1%	6.1%	6.7%
40-44 years	Quick stats	7.1%	6.0%	6.8%	6.7%	6.9%	6.6%	6.7%
45-49 years	Quick stats	6.3%	9.7%	7.5%	6.6%	6.2%	6.4%	6.6%
50-54 years	Quick stats	8.9%	7.5%	10.4%	7.5%	5.8%	6.6%	6.5%
55-59 years	Quick stats	8.2%	7.5%	8.3%	7.0%	5.6%	6.4%	6.3%
60-64 years	Quick stats	6.6%	2.2%	5.8%	6.2%	5.1%	5.6%	5.6%
65-69 years	Quick stats	5.8%	3.7%	4.4%	5.1%	4.7%	5.1%	2.1%
70-74 years	Quick stats	4.1%	2.2%	2.4%	3.7%	4.0%	4.1%	3.9%
75-79 years	Quick stats	1.2%	0.0%	1.7%	2.4%	3.3%	3.3%	2.9%
80-84 years	Quick stats	1.2%	0.0%	1.1%	2.4%	2.6%	2.3%	2.1%
85 years and over	Quick stats	1.1%	0.0%	1.0%	3.1%	2.6%	2.3%	2.2%
Median Age (years)	Quick stats	40	30	39	40	37	39	38
Social Marital status								
Registered Married	Quick stats	58.4%	30.5%	60.5%	53.2%	51.2%	46.9%	48.3%
De facto marriage	Quick stats	9.1%	7.3%	5.3%	8.1%	6.5%	9.3%	9.4%
not married	Quick stats	32.5%	62.2%	34.2%	38.7%	42.3%	43.8%	42.3%
Education								
Pre-school	Quick stats	8.1%	7.7%	5.4%	6.1%	5.6%	6.3%	5.7%

Indicator	Source	Mount Kembla SSC	Kembla Heights SSC	Cordeaux Heights SSC	Unanderra-Mount Kembla SA2	Figtree - Kiera ville SA2	Wollongong LGA	NSW
Infants/Primary	Quick stats	33.4%	28.8%	28.1%	27.4%	25.6%	25.6%	26.2%
Secondary	Quick stats	22.4%	21.2%	30.9%	24.1%	19.7%	19.8%	20.1%
Technical or Further Educational Institution	Quick stats	6.7%	9.6%	6.7%	6.7%	4.9%	6.3%	6.2%
University or other Tertiary Institution	Quick stats	17.2%	9.6%	19.0%	14.3%	30.9%	21.5%	16.2%
Other type of educational institution	Quick stats	0.0%	0.0%	1.6%	1.5%	1.6%	1.9%	2.7%
Not stated	Quick stats	12.2%	23.1%	8.2%	19.9%	11.7%	18.7%	23.0%
Level of highest education attainment								
Bachelor's degree level and above	Quick stats	29.4%	10.8%	26.1%	18.7%	27.0%	19.9%	23.4%
Advanced Diploma and Diploma level	Quick stats	9.5%	10.8%	9.9%	9.2%	9.5%	9.0%	8.9%
Certificate level IV	Quick stats	3.2%	3.6%	3.9%	3.5%	3.3%	3.3%	2.8%
Certificate level III	Quick stats	15.5%	7.2%	15.0%	15.8%	12.8%	14.9%	12.0%
Year 12	Quick stats	11.9%	9.6%	15.5%	12.4%	16.2%	13.6%	15.3%
Year 11	Quick stats	3.2%	4.8%	3.4%	3.3%	2.8%	3.2%	3.3%
Year 10	Quick stats	10.6%	14.5%	10.5%	13.2%	10.0%	12.8%	11.5%
Certificate level II	Quick stats	0.0%	0.0%	0.0%	0.1%	0.1%	0.1%	0.1%
Certificate level I	Quick stats	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Year 9 or below	Quick stats	6.4%	8.4%	6.9%	9.6%	8.1%	10.0%	8.4%
No educational attainment	Quick stats	0.4%	0.0%	0.4%	0.6%	0.6%	0.8%	0.9%
Not stated	Quick stats	6.1%	25.3%	4.3%	10.1%	6.2%	9.1%	10.3%
People - cultural and language diversity								
Ancestry								
Australian	Quick stats	-	44.4%	23.3%	25.7%	23.7%	52.2%	22.9%
English	Quick stats	-	26.2%	23.8%	25.0%	24.6%	26.0%	23.3%
Scottish	Quick stats	-	8.1%	6.5%	6.8%	6.7%	7.0%	5.9%
Irish	Quick stats	-	3.8%	6.8%	7.2%	8.0%	7.9%	7.5%
German	Quick stats	-	2.5%	-	-	-	-	2.4%
Macedonian	Quick stats	-	-	7.2%	-	-	-	0.4%
Italian	Quick stats	-	-	-	5.1%	4.5%	4.3%	-
Country of Birth								
Australia		83.4%	89.4%	76.6%	75.7%	71.7%	72.7%	65.5%
Languages (other than English)								
English only spoken at home	Quick stats	91.7%	88.1%	75.8%	79.2%	75.3%	78.2%	68.5%

Indicator	Source	Mount Kembla SSC	Kembla Heights SSC	Cordeaux Heights SSC	Unanderra-Mount Kembla SA2	Figtree - Kiera ville SA2	Wollongong LGA	NSW
Households where a non-English language is spoken at home	Quick stats	10.0%	8.7%	28.4%	20.3%	23.7%	20.0%	26.5%
People - employment								
Employment Type								
Worked Full Time	Quick stats	57.3%	49.2%	57.1%	56.5%	53.5%	55.2%	59.2%
Worked part-time	Quick stats	34.4%	28.6%	33.4%	32.6%	34.0%	32.7%	29.7%
Away from work	Quick stats	4.8%	11.1%	4.0%	4.8%	4.7%	5.0%	4.8%
Unemployed	Quick stats	3.4%	11.1%	5.5%	6.1%	7.4%	7.1%	6.3%
Labour force participation (15-85 years) (including those are unemployed looking)	Quick stats				65.9%	62.1%		65.2%
Occupation								
Professionals	Quick stats	27.0%	15.4%	25.9%	22.6%	28.3%	23.2%	23.6%
Technicians and Trades Workers	Quick stats	16.2%	25.0%	14.2%	16.6%	12.4%	14.8%	12.7%
Managers	Quick stats	14.9%	15.4%	12.5%	10.1%	11.0%	10.5%	13.5%
Clerical and Administrative workers	Quick stats	14.8%	7.7%	15.9%	14.9%	13.7%	13.6%	13.8%
Community and Personal Service Workers	Quick stats	10.2%	5.8%	9.9%	10.8%	11.7%	12.4%	10.4%
Sales Workers	Quick stats	8.2%	11.5%	9.2%	9.2%	9.2%	9.0%	9.2%
Labourers	Quick stats	4.9%	9.6%	6.9%	8.7%	7.2%	8.8%	8.8%
Machinery Operators and Drivers	Quick stats	2.7%	9.6%	4.8%	6.5%	4.9%	6.2%	6.1%
Industry of employment								
Hospitals (except Psychiatric Hospitals)	Quick stats	5.0%		4.9%	4.4%	4.6%	4.4%	3.5%
Secondary Education	Quick stats	4.7%		3.1%	2.6%	2.8%		1.7%
Primary Education	Quick stats			3.1%			2.3%	1.9%
Iron Smelting and Steel Manufacturing	Quick stats	4.3%		4.2%	3.7%	2.8%		0.3%
Higher Education	Quick stats	3.9%				5.5%	3.2%	1.4%
Beef Cattle Farming (specialised)	Quick stats		16.7%					0.4%
Painting and Decorating Services	Quick stats		16.7%					0.3%
Building and Other industrial Cleaning Services	Quick stats		16.7%					1.2%
Higher Education	Quick stats		16.7%					1.4%
Other Social Assistance Services	Quick stats		16.7%					1.6%
Aged Care Residential Services	Quick stats				2.7%		2.6%	2.0%
Takeaway Food Service	Quick stats			3.4%	2.5%			1.7%
Cafes and Restaurants	Quick stats					2.9%	2.5%	2.4%
Coal Mining	Quick stats	3.2%						0.6%
Income								

Indicator	Source	Mount Kembla SSC	Kembla Heights SSC	Cordeaux Heights SSC	Unanderra-Mount Kembla SA2	Figtree - Kiera ville SA2	Wollongong LGA	NSW
Median individual income (weekly)	Quick stats	\$830	\$658	\$744	\$609	\$591	\$584	\$664
Family		\$2603	\$1375	\$2349	\$1861	\$1899	\$1710	\$1780
Household		\$2325	\$1208	\$2265	\$1518	\$1471	\$1339	\$1486
Method of Travel to Work								
Car, as driver	Quick stats	71.8%	68.4%	74.0%	72.0%	66.7%	66.3%	57.8%
Walked only	Quick stats		7.9%		na	2.4%	3.0%	3.9%
Worked at home	Quick stats	4.4%		3.8%	3.3%	3.8%	3.5%	4.8%
Car, as passenger	Quick stats	3.3%		5.6%	5.2%	5.9%	4.9%	4.3%
Train or Bus	Quick stats	1.6%		3.0%	3.1%	2.2%	3.4%	1.0%
Motorbike/scooter	Quick stats	1.1%		0.0%	na		na	0.6%
By public transport	Quick stats	3.4%		4.0%	4.6%	6.4%	7.5%	16.0%
by car as driver or passenger	Quick stats	77.4%	69.0%	81.4%	79.1%	75.1%	73.6%	64.6%
Unpaid work								
did unpaid domestic work	Quick stats	84.0%	62.9%	78.1%	72.1%	74.0%	70.1%	67.7%
cared for child/children	Quick stats	35.9%	30.8%	31.4%	30.8%	30.9%	29.0%	27.2%
provided unpaid assistance to a person with a disability	Quick stats	13.4%	14.0%	16.4%	14.7%	13.3%	13.3%	11.6%
did voluntary work through an organisation or group	Quick stats	28.5%	21.3%	24.0%	19.5%	22.5%	18.6%	18.1%
Families								
family composition								
Couple family with no children	Quick stats	31.0%	13.3%	30.9%	33.3%	35.4%	36.3%	36.6%
Couple family with children	Quick stats	60.9%	36.7%	58.7%	50.8%	48.2%	44.6%	45.7%
One parent family	Quick stats	8.2%	50.0%	9.3%	14.4%	14.7%	17.5%	16.0%
other family	Quick stats	0.0%	0.0%	1.1%	1.6%	1.6%	1.6%	1.7%
employment status of couple families								
Both employed, worked full-time	Quick stats	21.2%	37.5%	24.7%	20.2%	19.9%	18.7%	22.6%
Both employed, worked part-time	Quick stats	3.8%	0.0%	4.4%	3.6%	3.3%	3.6%	4.0%
One employed full-time, one part-time	Quick stats	28.8%	25.0%	28.3%	24.9%	23.5%	23.0%	20.6%
One employed full-time, other not working	Quick stats	15.0%	0.0%	13.0%	13.4%	12.8%	13.4%	15.0%
One employed part-time, other not working	Quick stats	3.1%	0.0%	5.6%	5.4%	6.1%	5.8%	6.1%
Both not working	Quick stats	16.2%	18.8%	15.6%	22.1%	24.5%	24.8%	21.0%
other (includes away from work)	Quick stats	7.3%	0.0%	4.6%	5.5%	4.8%	5.2%	5.1%
Labour force status not stated	Quick stats	4.6%	18.8%	3.9%	4.9%	5.2%	5.4%	5.7%
Dwellings								

Indicator	Source	Mount Kembla SSC	Kembla Heights SSC	Cordeaux Heights SSC	Unanderra-Mount Kembla SA2	Figtree - Kiera ville SA2	Wollongong LGA	NSW
Dwelling Count								
Occupied private dwellings	Quick stats	95.3%	93.5%	96.5%	95.1%	93.2%	92.1%	
Dwelling Structure (Occupied Private Dwellings)								
Separate house	Quick stats	97.3%	100.0%	97.3%	89.2%	78.1%	69.5%	66.4%
Flat, unit or apartment	Quick stats	0.0%	0.0%	0.0%	3.1%	9.3%	16.8%	19.9%
Other dwelling	Quick stats	0.0%	0.0%	0.4%	0.4%	2.5%	0.7%	0.9%
Occupancy Average number of bedrooms per dwelling rate	Quick stats	3.6	2.7	3.8	3.3	3.3	3.0	3.1
Average number of people per household	Quick stats	3.1	3.0	3.2	2.8	2.7	2.6	2.6
Tenure Type								
Owned outright	Quick stats	47.6%	7.3%	43.6%	36.2%	40.6%	34.8%	32.2%
Owned with a mortgage	Quick stats	46.6%	0.0%	46.0%	37.4%	32.8%	31.1%	32.3%
Rented	Quick stats	4.9%	92.7%	8.4%	22.6%	23.2%	30.3%	31.8%
tenure type not stated	Quick stats	0.9%	0.0%	2.0%	2.2%	2.4%	2.9%	2.8%
Household composition								
Family	Quick stats	85.7%	71.8%	90.6%	78.8%	72.5%	70.0%	72.0%
Single (or lone)	Quick stats	13.5%	17.9%	8.6%	19.6%	22.2%	25.5%	23.8%
Group households	Quick stats	0%	10.3%	0.9%	1.6%	5.3%	4.5%	4.2%
Household Income								
Less than \$650 gross weekly income	Quick stats	10.2%	27.0%	8.9%	19.3%	20.5%	23.1%	19.7%
More than \$3000 gross weekly income	Quick stats	35.4%	0.0%	31.9%	18.2%	18.3%	14.8%	18.7%
Rent weekly payments								
Median rent	Quick stats	400.0	300.0	450.0	295.0	340.0	320.0	380.0
Households where rent payments are less than 30% of householder income	Quick stats	97.9%	71.9%	97.6%	91.9%	89.0%	87.0%	87.1%
Mortgage monthly repayments								
Median mortgage repayments	Quick stats	2383.0	0.0	2000.0	1871.0	2000.0	1950.0	1986.0
Households where mortgage payments are less than 30% of householder income	Quick stats	93.2%	100%	93.5%	93.7%	94.1%	93.7%	92.6%
Households with mortgage payments greater than or equal to 30% of household income	Quick stats	6.8%	0.0%	6.5%	6.3%	5.9%	6.3%	7.4%
Low-income households (households in bottom 40% of income distribution under financial stress from mortgage or rent)	PHIDU 2016 (2016)				23.0%	27.6%	28.50%	29.3%
Car Ownership per Dwelling								
None	Quick stats	21.0%	7.3%	1.2%	6.0%	6.3%	9.1%	920.0%
One	Quick stats	19.5%	43.9%	16.0%	28.3%	33.6%	35.6%	36.3%

Indicator	Source	Mount Kembla SSC	Kembla Heights SSC	Cordeaux Heights SSC	Unanderra-Mount Kembla SA2	Figtree - Kiera ville SA2	Wollongong LGA	NSW
Two	Quick stats	43.1%	39.0%	46.9%	39.3%	38.6%	34.5%	34.1%
Three of more	Quick stats	32.9%	9.8%	33.5%	22.9%	18.5%	16.9%	16.7%
Not stated	Quick stats	2.4%	0.0%	2.4%	3.4%	3.0%	3.9%	3.7%
Population mobility (address)								
Same address as one year ago	ABS Community Profile	92.7%	95.5%	89.6%	89.8%	84.3%	85.8%	84.3%
Same address as five years ago	ABS Community Profile	67.8%	58.3%	74.9%	71.3%	61.4%	62.1%	58.0%
At risks and vulnerable groups								
Aboriginal and/or Torres Strait Islander people	Quick stats	2.1%	6.7%	1.0%	2.1%	1.4%	2.6%	2.9%
Provided unpaid assistance to a person with a disability (last two weeks before Census night) (%)	Quick stats	13.4%	14.0%	16.4%	14.7%	13.3%	14.7%	11.6%
Highest Educational attainment: Year 9 or below (%)	Quick stats	6.4%	8.4%	6.9%	9.6%	8.1%	10.0%	8.4%
Population aged 65+ (%)	Quick stats	13.4%	5.9%	10.6%	16.7%	17.1%	17.7%	13.2%
With need for assistance (person's need for help or assistance in one or more of the three core activity areas of self-care, mobility and communication, because	ABS Community Profile (typically tab G18)	2.2%	2.5%	3.8%	6.3%	5.1%	6.4%	5.4%
% Learning or earning at ages 15 to 24	PHIDU 2016 (2016)	na	na	na	86.5%	91.9%	86.7%	85.0%
Estimated number of people aged 18 years and over who were obese (modelled estimates) (ASR PER 100)	PHIDU 2016 (2017-2018)	na	na	na	27.90%	28.90%	38.50%	29.00%

APPENDIX D - COMPARATIVE PROJECT CASE STUDIES

The following case studies have been sourced from Central Coast Council, Mountain Bike Feasibility Study Discussion Paper. Representatives from each of the case studies were also targeted for interviews in relation to this Social Impact Comment.

8.1 OLD MANS VALLEY – NSW (HORNSBY SHIRE COUNCIL)

Hornsby Shire Council is located in northern Sydney with almost 70% of the area being bushland. In 2008 an Unstructured Recreation Strategy was undertaken for the Council which highlighted the increasing popularity of mountain biking. One of the recommendations was for further investigation into developing mountain bike trails. Site feasibility studies were undertaken, and Old Mans Valley was selected as the most appropriate site. There was opposition from some members of the community regarding the proposal, however Council approved development of stage 1 of the track. Initially a Trailcare Program undertook the maintenance of the trails, however this is now professionally maintained. Water and toilets are not located on site but are located nearby. A small pump track is also located on site. The Council looked at the likely benefits of providing for mountain biking including the following:

- « Access to authorised mountain bike trails promotes healthy living for a large age range.
- « Youth participation and reductions in antisocial behaviour.
- « Creating opportunities for strong economic and social return.
- « More access to scenic bushland areas for public on bike ready tracks.

Some of the challenges identified throughout the project were:

- « Unknown process – first by a Sydney local government area.
- « Controversial – bushland area and the proximity to homes.
- « Meeting the market, eg, design, for a successful mountain bike facility.
- « Site constraints (amount of space, the terrain and Plan of Management).
- « Competing land uses.
- « Traffic plan for parking & bike crossings.

Key Learnings

- « Trying to stop mountain biking without any plan generally fails and increases opportunities for conflict.
- « Be proactive - do something or more asset damage will occur and trail user conflicts will increase.
- « Communicate, consider and educate – so all stakeholders have a good understanding of the issues.
- « Good partnerships lead to good decisions and sustainable outcomes.
- « The result is a popular off-road cycling facility which has reduced unauthorised riding.
- « Averaging approximately 900 laps per week over the past 4 years.
- « An average of 300 users per week.

Figure 15: Hornsby Mountain Bike Trail



8.2 BLUE DERBY - TASMANIA (DORSET COUNCIL)

Blue Derby is the single largest and most ambitious mountain bike project ever in Australia, involving the construction of 125km of purpose-built mountain bike trails in the stunning wilderness of northeast Tasmania.

The driver behind this project is economic development through mountain bike tourism. An emerging form of tourism, mountain bike tourism provides good returns on investment and provides new incentives for people to visit regional areas. The township of Derby, around which the trail network is based, was once a prosperous tin mining town, but has been declining for many years since the tin mining operations ceased. Since the project commenced in 2014, however, the township has seen a reversal of fortune, with new businesses opening providing hospitality and accommodation services, property sales increasing and tourism visitation increasing massively.

The Blue Derby Trails project is led by Dorset Council, and was made possible with funding through the Australian Government's Regional Development Australia Fund. Project partners include Break O'Day Council, Forestry Tasmania, Parks & Wildlife, and public, private and community sectors. World Trail has been the lead contractor on all design and construction of trails.

The Blue Derby trail network has been constructed to attract riders of all skills and abilities. The trail network includes IMBA green trails (Beginner) through to IMBA Black Diamond (Most difficult), with most of the trails falling into the IMBA Blue (Intermediate) classification. This mix of trails allows for riders to develop their skills and have the opportunity to develop their skills. Advanced riders have many options to enjoy themselves and test their ability on the advanced trails. Gravity trails are well catered for in Blue Derby due to their growing popularity.

Current visitation numbers for Blue Derby are approximately 45,000 riders per year.

Blue Derby is managed by Dorset Council who employ a trail maintenance team to ensure the trails are maintained to a high standard. Providing well maintained trails is key to encouraging riders to visit and return regularly to Blue Derby.

Key learnings from the project include:

- « Consultation with key stakeholders early in the project feasibility stage;
- « Proactive council;
- « Front end development of relationships with land managers and council;
- « Front end community consultation;
- « Professionally designed and constructed trails;
- « Develop strategies to boost local economic benefit.

In recognition of this great project, Dorset Council recently won a national Award for Excellence in Economic Development for the Blue Derby Mountain Bike Trails. The project was presented as the winner of the Community Economic Development Award at the Economic Development Australia (EDA) Conference in Queensland in September 2015.

Prior to this, the Blue Derby project also won the Delivering Excellence – Smaller Council's Award at the Local Government Association of Tasmania's Awards for Excellence in July 2015.

OVERALL PROJECT BUDGET:

Approximately \$4.5 million in Federal and State funding

Figure 16: Blue Derby Trails, Tasmania (photo by World Trail)



8.9 GLENROCK STATE CONSERVATION AREA (NSW)

Glenrock State Conservation Area is located is a small (544ha) reserve approximately 5km south of Newcastle. The area is managed by the National Parks and Wildlife Service (NPWS) with the conservation area used by visitors for many different activities including bush walking, trail running, horse riding and hang gliding.

In 2008, NPWS engaged World Trail to undertake an audit and review of the existing, mostly informal network of mountain bike trails to determine a feasible network of trails that could be formalised and promoted for use by mountain bikers. World Trail's recommendations were adopted, and the trail network formalised and included in the 2010 NPWS Glenrock State Conservation Area Plan of Management. Several works were undertaken to improve the network, including construction projects by World Trail in 2011 and 2012 and others by volunteers and NPWS staff.

Given the success of the network, in 2016 World Trail was engaged by NPWS to prepare a concept plan for an expanded network in the conservation area, with some

new areas of the park potentially made available for further trail expansion. The plan recommended a 29.2km network of fourteen trails, incorporating some existing formal and informal trails.

There is currently 14km of cross-country mountain biking trails and 20km of linked management trails in the northern section of the park. There are trails to suit all levels (15 green, 24 blue, 5 black and 1 double black) winding through open forest and woodlands. There are a number of regular mountain biking events held at Glenrock, including:

- « Port to Port – 4-day stage race
- « Hunter School MTB Championships – 2-day event with over 250 school children participating
- « Shimano MTB Grand Prix Race Four – 1-day event
- « Skills Coaching
- « Hunter Schools MTB coaching
- « Local bike store group rides



A large proportion of the trail building and maintenance is undertaken by a volunteer group, the Glenrock Trails Alliance, formed in 2004. The group's aim is to see a sustainable and enjoyable network of single trail within the

park and to advocate for access to the south of the park, through a sustained open working relationship with the NPWS.

APPENDIX E– DPE RISK ASSESSMENT TOOLS

The following tables have been adapted from the 2021 Guideline.

Table 5.6 Defining magnitude levels for social impacts

Magnitude level	Meaning
Transformational	Substantial change experienced in community wellbeing, livelihood, amenity, infrastructure, services, health, and/or heritage values; permanent displacement or addition of at least 20% of a community
Major	Substantial deterioration/improvement to something that people value highly, either lasting for an indefinite time, or affecting many people in a widespread area
Moderate	Noticeable deterioration/improvement to something that people value highly, either lasting for an extensive time, or affecting a group of people
Minor	Mild deterioration/improvement, for a reasonably short time, for a small number of people who are generally adaptable and not vulnerable
Minimal	No noticeable change experienced by people in the locality

Table 5.7 Defining likelihood levels of social impacts

Likelihood level	Meaning
Almost certain	Definite or almost definitely expected
Likely	High probability
Possible	Medium probability
Unlikely	Low probability
Very unlikely	Improbable or remote probability

Table 5.8 Dimensions of social impact magnitude

Dimensions	Details needed to enable assessment
Extent	Who specifically is expected to be affected (directly, indirectly, and/or cumulatively), including any vulnerable people? Which location(s) and people are affected? (e.g., near neighbours, local, regional, future generations).
Duration	When is the social impact expected to occur? Will it be time-limited (e.g., over particular project phases) or permanent?
Severity or scale	What is the likely scale or degree of change? (e.g., mild, moderate, severe)
Intensity or importance	How sensitive/vulnerable (or how adaptable/resilient) are affected people to the impact, or (for positive impacts) how important is it to them? This might depend on the value they attach to the matter; whether it is rare/unique or replaceable; the extent to which it is tied to their identity; and their capacity to cope with or adapt to change.
Level of concern/interest	How concerned/interested are people? Sometimes, concerns may be disproportionate to findings from technical assessments of likelihood, duration and/or intensity.

Table 5.9 Social impact significance matrix

Likelihood	Magnitude level				
	Minimal	Minor	Moderate	Major	Transformational
Almost certain	Low	Medium	High	Very High	Very High
Likely	Low	Medium	High	High	Very High
Possible	Low	Medium	Medium	High	High
Unlikely	Low	Low	Medium	Medium	High
Very unlikely	Low	Low	Low	Medium	Medium

APPENDIX F - REFERENCES

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APPENDIX G - BENEFIT COST ANALYSIS OF THE PROPOSED ILLAWARRA ESCARPMENT MOUNTAIN BIKE PROJECT



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