

Literature Review and Mapping Analysis

Illawarra Escarpment Walk

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Prepared for
Destination Sydney Surrounds South

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Executive Summary

The Illawarra Escarpment Walking Trail has been an ongoing project since initially proposed in 1971 by the Combined Committee of the Illawarra Natural History Society and the South Coast Conservation Society (South Coast Society NSW et al, 1971). Various reports since 1971 have been developed to discuss the potential options and opportunities that such a track would provide to the Illawarra region. Through linking Otford and Cambewarra, the trail could utilise and capitalise on some of the existing infrastructure and tourism opportunities.

Destination Sydney Surrounds South (DSSS) has been recently approached by individuals to investigate whether such a walk is worthy of further investigation. The organisation would like to be in a position to recommend to its Board whether further resources should be allocated to pursuing this opportunity. Whilst, it holds no position of authority to approve and/or fund any elements of the project, it could fund a masterplan and act as coordination agency to deliver the project. DSSS has commissioned Cardno to review the previous work, use its contemporary GIS mapping tools to assess the current route, renew conversations with key stakeholders to see if there is a desire to make it happen and form a view whether the project is achievable within reasonable budgets.

Literature surrounding the project is varied and generally old reflecting different priorities at the time. It generally concludes that development of a trail is achievable. However, in recent years there has been a lack of literature available which shows the progression of the initial concept design. The opportunities of an integrated escarpment track, increasing tourism within the region will connect the local community and businesses increasing revenue and awareness.

Recent conversation with stakeholders shows that the desire for an Illawarra Escarpment Walking Trail has not waived. More recently there has been further engagement between NPWS and Wollongong Council regarding the northern section of the Trail which is promising.

In view of the age of the previous work, Cardno undertook a contemporary mapping review of the proposed route using their Geographic Information System (GIS). This enables the original IROC 1997 route to be 'remapped' in a digital (vector line) and then plotted against other vector data sets such as cadastre, land ownership, land use, property affectations and topography. This enables various statistics to be drawn from the route for planning, costing and risk assessments.

Overall the total length of the Escarpment Walking Trail would be 159km. Approximately 67km (42%) of this trail is in existing good condition and uses established walking trails such as the Wodi Wodi track and the Sublime track. The remaining 92 km (58%) of proposed trail will require planning and an extensive feasibility analysis to produce a track that is enjoyed by all its visitors. The good news is that 66km (72%) of this 'proposed' trail is on existing walking trails and only 26km (28%) requires totally new work.

There is support for the concept of an Illawarra Escarpment Walking Trail from a range of stakeholders including local and state politicians, state agencies, local councils, indigenous groups, business leaders, special interest groups and the broader community. This support has been consistent and unwavering over the many decades the project has been discussed. This is quite a unique position and a strong differentiator for this project over many others in the region. Notwithstanding, it would be expected that there would be some localised opposition from a say private landowners regarding access over or near private land. Such concerns would be in regard to trespass, amenity, fencing, livestock and theft. Such claims are usually without evidence and more of a perception than reality as hardened walkers tend to be respectful folk who visit natural areas for enjoyment.

From the above analysis, there is no one single reason why the goal of an Illawarra Escarpment Walking Trail cannot be achieved having regard to:

- *The nature of the project itself*
- *Learnings from the literature review*
- *Discussion with key stakeholders*
- *Recent GIS mapping and*
- *Level of community support.*

Key issues that would need to be resolved include:

- *Access through Barren Grounds Nature Reserve (increased access, predation and plans of management)*
- *Overall environmental impacts (clearing, erosion, weeds)*
- *Private landowner agreements (esp. mining, private bush retreats)*
- *Crossing of critical infrastructure (Mount Ousley Road and Bulli Pass, access around Gateway (although there are some current alternatives to allow the track to be walked))*
- *Key 'pinch points' such as the track between Panorama House and Gateway Centre and Bulli Pass and the Lands west of Balgownie need to be passed to NPWS to allow development of a track from Bootie St to New Mt Pleasant Rd bridge crossing (ref: National Parks Association)*
- *Availability of capital and maintenance funding (local, state and federal sources)*
- *Public access through Water Catchment Areas*
- *Inter-agency cooperation (esp. NPWS, SCA, RMS, Water NSW)*
- *Cross jurisdictional boundary (i.e. council v council, state v local) and*
- *Project Leadership*

For the project to be seriously considered, it need to advance beyond the 'idea' phase into a well-researched feasibility study that will refine the concept of the trail and then test that concept to determine if it will 'perform' both practically and financially. This should not be overlooked as this project more than most has had a number of 'false starts' which erodes confidence in the stakeholders that "this time will be different".

Much of the existing historical information (including this report) could be repurposed for this study to reduce overall costs but there is still a considerable amount of work to be done to advance the project. A budget of \$50,000 (ex GST) would be sufficient if investigations were limited to 'desk top' level.

Beyond feasibility study is the concept design and associated specialist studies (ecology, bushfire, stability) and detailed design would need to be undertaken at a later date to procure the necessary approvals. Beyond that is detailed construction. It may also be possible to stage the construction of the trail over a number of years so an initial large cost can be broken down into smaller 'bite-size' chunks which may be more palatable to funding agencies. Staging a project will also reduce the level of perceived risk associated with the project as each stage will only proceed once the previous stage has been successfully completed.

Until the initial feasibility study is undertaken, it would be simple speculation to propose a capital cost of the entire route. Having said that, a budget of say. \$5M could be realistic for the new 26km of track and minimal allowance for existing track/fire trail/access road. This excludes large capital costs items such as a crossing of Mount Ousley and property acquisitions and assumes generous 'in kind' contributions from key stakeholders. There is minimal allowance for trail infrastructure such as campsites, amenities and parking.

To take the project forward a Multi-Agency Working Party including NPWS, 4 x local Councils, Roads and Maritime Services, Destination Wollongong, Water NSW, Department of Planning and Environment, National Parks Association and the Illawarra local Aboriginal Land Council should be established. DSSS could be readily included on this Working Party.

This would take the form of sharing plans and designs for works related to the Masterplan, integrating designs with existing or proposed tracks and the promotion of existing tracks. The working party would be in a strong position to lobby for additional grant funding to implement the existing plans.

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Figure 1: Gibson Walking Trail (source: www.alltrails.com)

1 Introduction

1.1 The Illawarra Escarpment

The Illawarra Escarpment stretches for c.120 km from the sea cliffs of the Royal National Park in the north to the junction of the Shoalhaven and Kangaroo Rivers in the south. Along its length the Illawarra Escarpment rises from 300 metres in the north, to 700m in the southern area around Albion Park (see **Figure 2**).

It provides a dramatic visual backdrop to the Illawarra Coastline and a great place for residents and visitor to recreate, live and enjoy. It has an ecologically and culturally rich heritage with several regions within the escarpment being protected such as the Macquarie Pass National Park, Kembla State Forest and Water Catchment Areas.

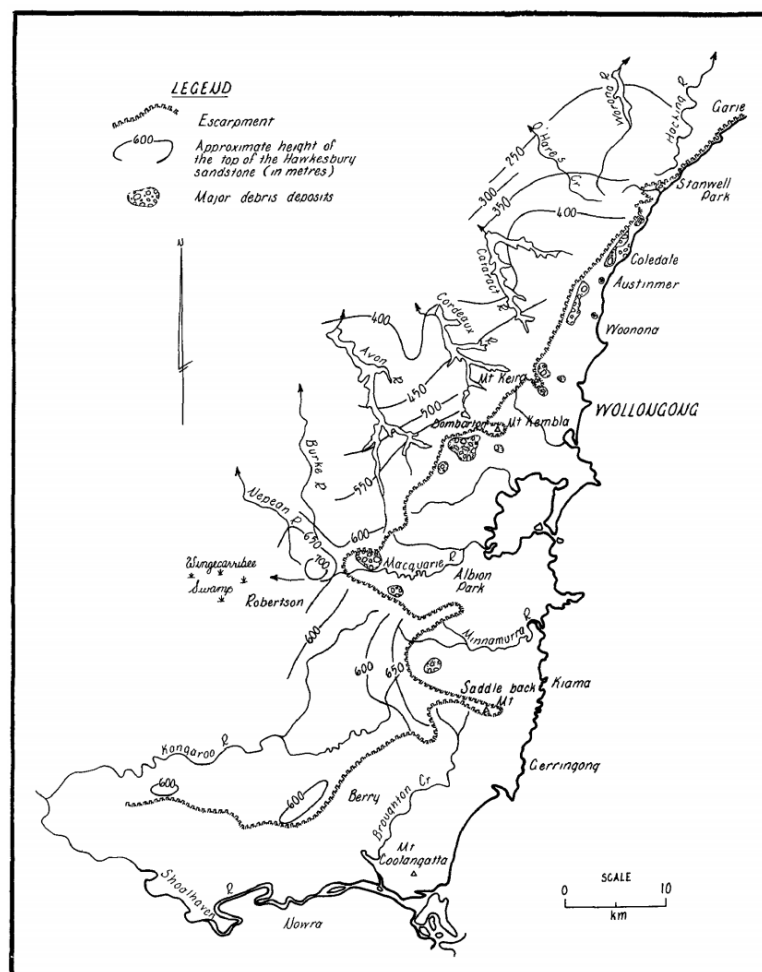


Figure 2: Illawarra Escarpment (R W Young 1979)

A large area of the Escarpment is owned privately for either mining or large-lot residential purposes. These activities have brought an influx of people into local region. With this increase, additional infrastructure to accommodate the increase of growth was required. Formalised tracks were created, as well as infrastructure such as vent shafts, old mining equipment and fences and gates are located within this area. (IROC 1997).

Within the escarpment there are a vast network of trails, historically used for communication, travel and trade. Local indigenous groups such as the Dharawal people of the Illawarra bordering along the tribe of the Gundungurra communicated through these tracks to ease the communication between the different tribes with the ever-expanding territories. Europeans similarly have enjoyed the area for walking and there are many existing formal and informal bushwalks scattered along its length.

1.2 History of an Illawarra Escarpment Walking Track

It has been the goal of many keen walkers to create a continuous walking trail along the entire length of the Illawarra Escarpment from The Royal National Park in the north to the Moreton National Park in the South. Such a walk could be world class and has been talked about for ages by many stakeholders including the National Parks Association.

"In the not too distant future it is hoped this walk will form part of the multi-day Illawarra Escarpment Walk. NPA Illawarra are promoting this and have dubbed it The Grand Escarpment Walk. This walk has been talked about and planned for more than 30 years. Such a walk, connecting the Royal National Park to the southern Illawarra and even further south to Morton National Park has the potential to become an iconic great walk for NSW"...National Parks Association

Such a walk taking 8-10 days from Otford and Cambewarra, would encourage further participation of other walks and activities such as rock climbing, mountain bike riding and camping. With the unique geography of the escarpment and the dramatic cliff edges, this walk is a one of a kind and a natural resource that can be shared by all. With the proposed length for the walk between to extend between.

With the increase of the long walks, having a large track along the beautiful escarpment within the Illawarra will warrant further trips to the region. With the connection into the already existing tracks, the track can be integrated and looped back onto one another, creating flexibility and opportunities within the layout of the trails. With local accommodation already readily available, overnight stays numbers could increase as well as a growth in revenue to local eateries.

Development of an extensive multi-day walk would replicate the success of other trails In Australia, New Zealand and the United States including:

- Appalachian Trail, United States (50 days)
- Milford Track, Milford Sounds, NZ (4 days)
- Classic Larapinta Trek, Northern Territory (6 days)
- Arkaba walk, South Australia (4 days)
- Cradle Mountain Huts, Tasmania (6 days)
- Twelve Apostles Lodge Walk, Victoria (4 days)
- Margaret River, Western Australia (4 days)

The Appalachian Trail in the United States is one of the longest walks in the world. The initial concept was thought of by Benton MacKaye, a geologist in 1921. Using volunteers, the trail was mapped out and set out. By 1937, the trails were completed with a full linkage between the Mt Katahdin and Mt Oglethorpe. With the expansion of urban neighbourhoods, the trail was moved north in 1958. The trail was created by the Appalachian Trail Conference initially but as the time went on, protection was sought from the federal government to ensure the trail was conserved (Marshall, 1998).

Many organisations such as National Parks and Wildlife Service, Wollongong, Shellharbour, Kiama and Shoalhaven Council, the previous Illawarra Region of Councils and National Parks Association have recognised the potential of such a walk. There are a variety of different documents (reports, publications etc.) that outline the promise of such a facility.

Unfortunately, none of these reports have moved beyond the 'identification' stage and the goal of a continuous walk along the Escarpment has remained as elusive as ever.

1.3 Scope of Works

Destination Sydney Surrounds South (DSSS) has been recently approached by individuals to investigate whether such a walk is worthy of further investigation. The organisation would like to be in a position to recommend to its Board whether further resources should be allocated to pursuing this opportunity. Whilst, it holds no position of authority to approve and/or fund any elements of the project, it could fund a masterplan and act as coordination agency to deliver the project.

DSSS sees merit in at least ‘dusting off’ the old plans and has commissioned Cardno to:

1. *Undertake a literature review of the previous work*
2. *Use contemporary GIS mapping tools to assess the current route*
3. *Renew conversations with key stakeholders to see if there is a desire to make it happen and*
4. *Form a view whether the project is achievable within reasonable budgets.*

The scope is effective a ‘first pass’ analysis comprising:

- Review existing literature – feasibility, route selection, costs, land ownership etc.
- Meet NPWS re previous efforts and alignment with current plans
- Meet 4 x local Councils re same
- Meet agencies like DPE/SCA/OEH
- Meet key stakeholders (NPA incl. key stakeholders like bushwalking clubs, ILALC)
- Letter advising perceived risks and impediments

The mapping analysis of the actual route would include identification of:

- Critical crossings
- Land use
- Planning permissions
- Ownership
- Trail heads
- Activation

This work is preliminary in nature and subject to limited budget, time and scope.



Figure 3: Drawing Room Rocks (source: www.berry.org.au)

2 Literature Review

2.1 Overview

Reasonable attempts were made to locate and review relevant background information pertinent to the project. These works are summarised below and included in a table in **Appendix A**. This work is incomplete as many of the records are old and in hard copy form only. Moreover, much of the information is held by local groups and interested persons without the benefit of any overarching nominated authority.

2.2 Initial Work

The creation of the concept route for the Illawarra Escarpment Walk commenced with the initial working group in 1971 consisting of the Illawarra Natural History Society and the South Coast Conservation Society (Illawarra Natural History Society et al, 1971). Since this the State Planning Authority of NSW in 1973, The National Trust 1976 and the Department of Planning and Environment 1981 have provided commentary and reports for the Illawarra Escarpment Walk (IROC 1993).

Several reports emphasising the conservation significance of the Illawarra Escarpment were produced between 1971 and 1987, and all of these reports indicated there was potential for a walking track to traverse the escarpment. In 1987, Wollongong City Council's Local Advisory Committee updated a report by the Illawarra Escarpment Working Party delineating a route from Stanwell Park to Macquarie Pass (near Morton National Park). The report was presented to the NSW Minister for the Environment; however, no project was initiated following this presentation.

2.3 Illawarra Region of Councils

In 1989, the Illawarra Region of Councils (IROC) subcommittee was set up to focus on the creation of the Illawarra Escarpment Walk. This group includes all the local governments that are around the trail such as Shellharbour Municipal, Shoalhaven City, Wingecarribee Shire, Kiama Municipal, Illawarra Country and Wollongong City Council. The proposed route began at the Royal National Park in the north, and extended to the Shoalhaven River in the south.

In 1990, the IROC sub-committee produced a report which identified actions required to implement the track for each section of the overall route. The report was used as the basis for a submission to the NSW State Government through the Illawarra Parliamentary Task Force in December 1990, and to the Illawarra Economic Development Council in March 1991. The IROC report reflected the broad desire amongst Councils, NSW Government organisations and the community for a long distance walk along the Illawarra Escarpment. It also established its broad feasibility and suggested interim routes around areas requiring additional resources, such as a safe crossing of Mount Ousley Road.

The independent study found ***"a walking track can be identified along the escarpments, the entire length of the region from Wollongong to the Shoalhaven, a distance of over 250km."*** (IROC 1997).

The subcommittee for IROC was tasked to identify the most preferred route in consultation with the local community. After performing some studies and consultation sessions with the local community as well as environmental groups, it found that there was a strong backing within the groups.

Splitting the project into two Phases, the first Phase; the concept design of the walking track was successfully completed. The IROC Escarpment Walking Route was modelled on two existing trails within NSW, the Great North Walk between Sydney and Newcastle and the Hume and Hovel walking track between Yass and Albury.

From their analysis, twenty people per day walk along the Great North walk. However, "it is apparent that there is an increasing demand for short and long-distance walking trails within the community. Due to the international popularity of this outdoor recreational activity, it is also an extremely important amenity for the Tourism Industry." (IROC 1997).

Phase 2; the detailed design was recommended to be performed by an experienced Project Manager. The project manager would be responsible to lead the team through the detailed design process and provide a costing analysis of the works. (IROC 1993). Since this time, a review of the trails was completed by various consultants, however it appears Phase 2 has never been fully commenced.

In 1997 IROC developed a segmented, Local Government Area-based map (see **Figure 4**) and analysis (see **Table 1**) of the proposed track. The proposed route links many of the townships and purposely links through existing lookouts such as the Lawrence Hargrave Memorial Lookout and the Jamberoo Lookout.

IROC talks at length about the need to ensure the cultural integrity of the trails are being maintained. It reports *“the Escarpment has played a decisive role in the pattern of European exploration and settlement throughout the Illawarra. Consequently, it is proposed a number of regional historical themes will be highlighted along the Track such as information on and interpretation of sites associated with Aboriginal heritage, European maritime and land exploration of the region, cedar cutting, coal and slate mining. Hence the Track will offer access to a variety of natural environments as well as an ‘open air’ museum, reflecting the development of the Illawarra region.”* (IROC 1197).

A cultural map reporting on the development of the significant sites along the proposed track was performed by Sally Gray and Associates. It was written in support of the IROC documentation and proposal submittals and utilised the community feedback and consultation for appropriate locations to share the cultural significance to its visitors. (Sally Gray et al). These significant sites should provide the integration of the cultural significance which can be explored as the walkers continue along their walk.



Figure 4: Proposed Illawarra Escarpment Walking Trail (IROC 1997)

Table 1: Illawarra Route 1 options proposed by IROC

| Section | Name | Existing Track | New Track Proposed | Total |
|---|---|----------------|--------------------|---------------|
| Wollongong City Council | | | | |
| 1 | Royal National Park to Scarborough | 12km | | 12km |
| 2 | Scarborough to Bulli Pass | 3km | 4km | 7km |
| 3 | Bulli Pass to Brokers Nose | 9km | | 9km |
| 4 | Brokers Nose to Mount Kembla | 8km | 4km | 12km |
| 5 | Mount Kembla to Wongawilli | 10km | | 10km |
| 6 | Wongawilli to Summit Tank | 8km | | 8km |
| 7 | Summit Tank to Johnstons Spur | 7km | | 7km |
| | Total Length | 57km | 8km | 65km |
| Shellharbour City Council | | | | |
| 8 | Johnstons Spur to Illawarra Highway | 6km | 0km | 6km |
| 9 | Illawarra Highway to Rough Range Road | 3.7km | 0.5km | 4.2km |
| 10 | Rough Range Road to Caloola Pass | 6.2km | 0.8km | 7km |
| | Total Length | 15.9km | 1.3km | 17.2km |
| Kiama Council | | | | |
| 11 | Caloola Pass to Jamberoo Look-Out | 2.8km | 7km | 9.8km |
| 12 | Jamberoo Lookout to Woodhill Gap | 13.2km | 0.8km | 14km |
| | Total Length | 16km | 7.8km | 23.8km |
| Shoalhaven Local Government Area | | | | |
| 13 | Woodhill Gap To Kangaroo Valley Road | 6km | 2.4km | 8.4km |
| 14 | Kangaroo Valley Road to Cambewarra Mountain | 4.6km | 4.5km | 9.1km |
| 15 | Cambewarra Mountain to Bugong Gap | 7.5km | 4km | 11.5km |
| 16 | Bugong Gap To Shoalhaven River | 14km | 1km | 15km |
| | Total Length | 32.1km | 11.9km | 44km |

Adrian et al wrote an Escarpment Strategy which is an extensive report for the management strategy for the Illawarra escarpment and Cambewarra range prepared for the IROC group. It considers the geology of the escarpment, the protection of trees, the landowners and has reviewed the potential stakeholders along the track. The escarpment strategy states "Many community interest groups have been arguing over the years for the establishment of a public park extending right along the escarpment. That literal ambition will take many years to be realised, but it remains an important objective. In the meantime, there are many important opportunities for much better management of the existing stock of public lands on the escarpment. There

are far too many bodies responsible for different parcels of public land. Too many of the sections of public land are simply not managed at all. The practical constraints in overcoming inadequate management resources are recognised, but it is nevertheless land tenure and management responsibility on the escarpment is long overdue. This review should aim to integrate the tenure and management of public lands into as simple a series of categories for reservation and management responsibility as possible.” (Adrian Davey & James Weirick 1986).

The IROC proposes to overcome this issue of having walking tracks cover private land by using the, now superseded, DCP46 which encourages owners to provide public access in exchange for additional subdivision rights (IROC 1997). From these reports it is evident that community consultation is an important aspect for the development of the final design of the route.

To manage the increase with tourism and track activity the IROC 1997 states “In the long-term, however, it is envisaged an independent inter-agency Management Committee will be established to take responsibility of all policy, legal, financial, implementation and maintenance tasks. Furthermore, to ensure the highest level of community participation is achieved in the final determination of a route, a suitable public consultation program must be developed.” It continues provide a rough budget for the proposed works; however these figures would no longer be relevant due to inflation and relevance of the works involved. It does note the need for a PM, Community Consultation, Heritage specialists’ reports, field surveys. (IROC 1997) which is indicative of the age.

2.4 Illawarra Escarpment Walk (Northern Section)

In 2005, the National Parks and Wildlife Service engaged consultants to comprehensively review walking track options within the Illawarra Escarpment State Conservation Area and engage with relevant user groups in determining preferred routes.

Epacris Environmental consultants developed a further elaborated version of the *Illawarra Escarpment Walk-The route* prepared by IROC, categorizing the walks by the slope of each track and the feasibility of walking along these tracks in November 2005. It also performs a commercial analysis from a tourism perspective to identify the area’s most likely to be visited. It states “The existing walking track system falls short of its potential to offer a wide diversity of walking opportunities. The absence of walking connections between existing tracks and precincts limits recreational options, and many tracks are poorly integrated with the main visitor access points, major lookouts, local communities, roads and other transport links. Potential connections with nearby walking opportunities such as the northern Illawarra coast, Royal National Park, Garawarra State Conservation Area and the Dharawal reserves are not identified or established. Only limited interpretation and other signage that would allow walkers to use the track system to its full advantage is currently available” (Epacris Environmental Consultants 2005). Infrastructure, landowners and tourism are categorized below, summarizing the data discussed in the various reports. In some sections there is a proposed walking trail, this is identified as a trail that exists from countless people walking with unauthorised entry causing in some area’s erosion (Epacris Environmental Consultants 2005).

“The result of this study was the Draft Masterplan for Walking Tracks and Associated Facilities 2005. Although it is still officially a draft document, NPWS has been actively implementing the draft masterplan over the last nine years. This is a reflection of the fact that publically accessible walking tracks in the escarpment are almost exclusively on NPWS estate. Approximately one third of the planned route extension outlined in the draft Masterplan has been implemented since the development of the report.

It is important to note that the NPWS Draft Masterplan relates to a much shorter route than the IROC proposal or the Royal National Park to Morton National Park route referred to in the Council resolution. The NPWS Royal National Park to Mount Kembla route has been chosen by NPWS as it is almost entirely on NPWS estate and able to be maintained by NPWS into the future.

Around the same time as the NPWS Draft Masterplan 2005 was developed, Wollongong Council developed the Illawarra Escarpment Strategic Management Plan 2005 (IESMP), endorsed by the State Government in 2006. The IESMP refers to the potential for Illawarra Escarpment walking trails to enhance the ecotourism potential of the escarpment, but does not contain any specific actions for implementing a trail.

A recent initiative by the National Parks Association, presented to the Escarpment Planning Reference Group in October 2013, is aimed at re-invigorating investment in the route between Stanwell Park and Mount Kembla. Presented as the Grand Escarpment Walk, it promotes the benefits of a world class long distance walk, but does not seem to follow the route established by NPWS in its Draft Masterplan.

It is important to note that although the National Parks Association is an important stakeholder in the development of an Illawarra Escarpment Walking Track, NPWS is responsible for trail creation and maintenance within NPWS estate and the NPWS Draft Masterplan is the primary guiding document relevant to its track planning. A collaborative approach between NPWS, Council, RMS and others is required to realise the vision of an Illawarra Escarpment Walking Track." Wollongong City Council (2014)

2.5 Destination Wollongong

Destination Wollongong created the "Illawarra Escarpment State Conservation Area Walking Tracks". This four-page document describes the existing tracks within the Illawarra. It has rated each walk in difficulty, from "Easy" to "Hard". It highlights four areas, Stanwell Park, Bulli to Sublime Point, Mt Kiera and Mt Kembla. These walks are in a good condition and are used frequently by the local community (Destination Wollongong).

With the integration of a new bushwalking track, more tourism should be expected to enter the Illawarra region. A report created with the collaboration between NSW government and Destination Wollongong on the nature visitors within NSW was completed in December 2018. The document provides a collection of the average money spend per visitor and their average length of stay. It provides an indication of average age groups and what their planned activities are.

2.6 Wollongong City Council

Back in 2014, Council resolved to participate in a multi-agency working party to support National Parks and Wildlife Service to implement the Draft Masterplan for Walking Tracks and Associated Facilities 2005 and also write to the then NSW Minister for the Environment, the Minister for the Illawarra and local State Members of Parliament requesting their support for the development of an Illawarra Escarpment Walking Track.

More recently, Council has adopted the Mount Kiera Summit Park Community Vision which describes some of the engagements between the community and its stakeholders that have been encountered in the past. With this, tourism has increased by 19% from 2014 to 2015 in the Illawarra. An increase of 18% was found for domestic day trips to the Illawarra. It also describes the NSW Government aiming to receive \$36.6 billion in overnight visitor's expenditure by 2020. (www.haveyoursaywollongong.com.au, 2016).

In recent times the Northern escarpment has been commonly known to have illegal dumping of cars and other rubbish (Adrian Davey & James Weirick 1986). It is anticipated that once there is more activity, such as bushwalking, within the escarpment, there will be a reduction of dumping of cars (Destination Wollongong and NSW Government 2018).



Figure 5: Mt Kiera 1925 (Illawarra Natural History Society and the South Coast Conservation Society)

2.7 National Park Association

National Park Association of NSW has created the "*Illawarra Escarpment walking track*" which provides the trail route from Stanwell Park to Austinmer. With the track receiving some upgrades in recent years, the walk has become easier identifiable as well as an enhanced accessibility. One of the main aims from the document is that in the "not too distant future it is hoped this walk will form part of the multi-day Illawarra Escarpment Walk. NPA Illawarra are promoting this and have dubbed it The Grand Escarpment Walk. This walk has been talked about and planned for more than 30 years. Such a walk, connecting the Royal National Park to the southern Illawarra and even further south to Morton National Park has the potential to become an iconic great walk for NSW" (National Parks Association of NSW).

With recent rockfall and weather events, some sections along the existing track are at risk of erosion and destabilisation. With the aging of the tracks, some of these trails require to be reconstructed due to landslips or tree falls. The trails are expensive not only to construct but also to maintain. The management plan states "The walking tracks master plan is currently more than 10 years old. NPWS will update it to ensure it continues to enable provision of sustainable walking opportunities in the park that allow visitors to experience a wide range of park values, particularly vegetation communities and scenic views. The update will continue the development of a continuous walking link along the escarpment and provide a variety of lengths and grades of track." NSW Environment, Energy and Science (2019). This document does not mention how it will further progress this Master plan, where the budget comes from, or how it proposed to complete this. It does state "Any consideration of walking tracks in this area would need to be in conjunction with other land tenures." NSW Environment, Energy and Science. (2019)

2.8 Kiama Municipal Council

Kiama Council notes that as the track winds through the different LGA's the proposed route traverses through both public and private lands. Since the initial date of the proposal, the reports states that there has been a positive response from landowners such as BHP and Water-NSW. However, "The proposed route will require negotiations with numerous landowners to secure access and resolve any concerns in relation to public liability, biosecurity, safety and risk management" (Kiama Municipal Council 2018). Kiama reports that of the trail are non-existent or is "yet to be identified and will need to be derived from more detailed feasibility analysis and community engagement and will require community consultation". Kiama Municipal Council 2018).

In July 2018, Kiama Municipal Council released their Tourism Opportunities Plan. A general methodology, this plan outlays the opportunities for tourism within Kiama. A section is reserved for the expansion of walking trails and the experience around those. It specifically talks about two walks, the Gerringong Coastal

Walk to Gerroa and the Saddleback Mountain to Macquarie Pass Iconic walk. Both these walks are not within the route proposed for the Illawarra Escarpment walk. Through the use of the NSW State Regional Tourism Satellite Accounts, Kiama Municipal Council performed a costing analysis how the influx of tourism can affect the local community. Based on their predictions on their proposed tracks an additional 17,042 people are expected to visit Kiama. However, this also states “there are no figures on current numbers of people walking the track each year, but it is a well-recognised and promoted feature of the region.” (Kiama Municipal Council 2018).

2.9 Water-NSW

A significant part of the proposed Illawarra Escarpment Walking Trail would pass through lands designated as “Special Areas” declared under the Water NSW Act 2014. WaterNSW see www.waternsw.com.au (the entity formed by the merger of the former Sydney Catchment Authority and State Water Corporation) regulates certain activities in these areas through the Water NSW Regulation 2013. A map of the Special Area is included at **Figure 6**.

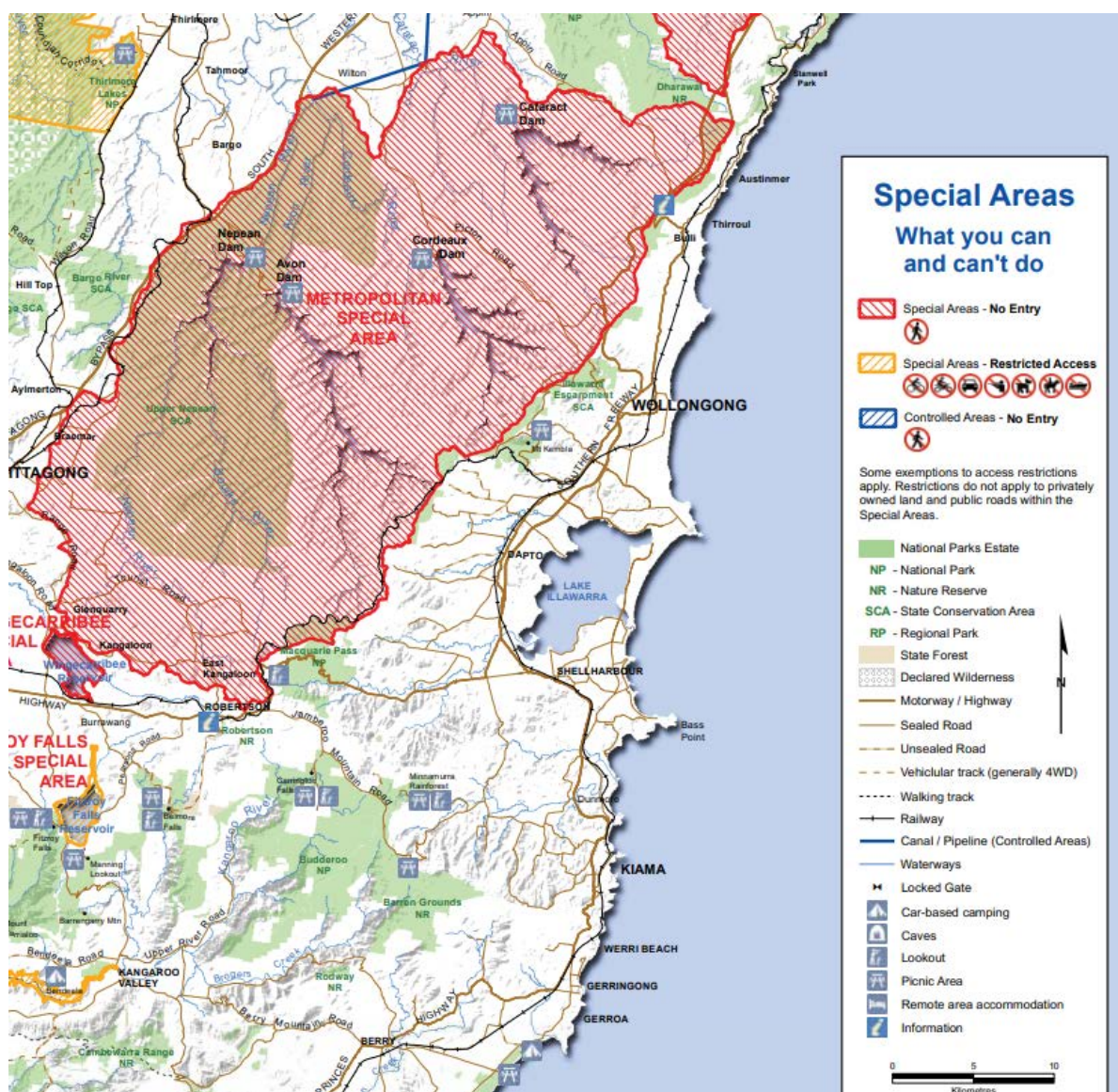


Figure 6: Metropolitan Special Areas (Water-NSW)

Special Area typically comprise unspoilt native bushland around the water storages and water supply infrastructure that supply Sydney, the Illawarra, Blue Mountains, Southern Highlands and Shoalhaven regions. Public access and activities are restricted to protect water quality in these areas. The majority of the Special Areas are off-limits or restricted to the general public and significant penalties apply to people who are caught ignoring the restrictions in Special Areas. WaterNSW, NSW Police, NSW National Parks and Wildlife Service and DPI Fisheries conduct regular surveillance and patrols of the Special and Controlled Areas, including the access corridors and waterways. Some public access is however provided to the public for a range of recreational activities at dams and reservoirs which are provided with playgrounds, recreational areas and car parking.

2.10 Recent Investigations

The trail has acquired media attention such as from the Illawarra Mercury where in September 2014 articles like the *Illawarra escarpment walking track gets a push* by Greg Humphries highlight the need for awareness for the project and is slow progression in acquiring federal attention. Later in 2017, a meeting was held between Neville Fredericks, Col Waller & Tash McQueen which discussed the opportunities that such walk would be to the Illawarra region. A rough budget to determine its feasibility and the next steps moving forward are proposed (DSSS Board 2017). However, in recent years there has been a lack of literature available which shows the progression of the initial concept design.

The theme across many of these reports is very similar, not providing a walk such as this within a region as beautiful as the Illawarra escarpment, would be a dishonour. The opportunities of an integrated escarpment track, increasing tourism within the region will connect the local community and businesses increasing revenue and awareness.



Figure 7: Forest Walking Trail (source www.nationalparks.nsw.gov.au)

3 Stakeholder Engagement

3.1 Overview

The following is a brief overview of engagement with key stakeholders. This not an exhaustive list and is limited to key agencies.

3.2 Wollongong City Council

- Damian Gibbons is the nomination representative at Council
- Damian was previously contacted regarding Council's involvement in the Illawarra Escarpment Walking Trail. He provided a copy of a report to Council seeking
- Damian recently attended a meeting with NPWS to relook at the northern section of the walk from Gateway to Otford
- Council Officers presented a report which was supported by Councillors
- Council is investing heavily on the Grand Pacific Walk
- Council support Destination Wollongong who is heavily invested in the project

3.3 Shellharbour City Council

- Nothing happening at the moment
- Not aware of any stakeholders calling on Council for support
- Would be a willing participant
- Can see the regional advantages and ties in with many priorities of Council
- Tuesday Heather who is the Manager of Environment would be the nominated representative 4221 6111

3.4 Kiama Municipal Council

- Megan Hutchison is Council's Economic Development Officer
- The concept of an Escarpment Walk has been on the on the agenda of our Walking trails and Cycleways Committee for quite some time now
- The concept of a "Saddleback Mountain to Macquarie Pass Iconic Walk" is featured on Kiama Opportunities Paper
- Council were going to meet with Wingecarribee Council to progress the project from a more localised perspective
- The project is being led by Darren Brady Acting Director of Engineering darrrenb@kiama.nsw.gov.au 4232 0463
- Manger Tourism and Events Karen Ronning karenr@kiama.nsw.gov.au 4232 0424 is also up to date with the project and also sits on the NPWS Advisory Committee.
- Council is aware that Cardno is working with DSSS on the project and would be more than happy to assist
- There is a plethora of background information that Leslie Scarlett gave up prior to retiring

3.5 Shoalhaven City Council

- Gordon Clark 4429 3355 is the nominated Council representative and is pretty passionate about the project
- Gordon remarked that the project keeps bouncing around and doesn't seem to get any traction – was first mooted 30 years ago
- Council developed the Two Rivers Walk in the early 1990s form funds obtained by Federal Government
- Unfortunately the track has not been maintained and is now unsafe
- Former City Planner Russ Evans designed the Shoalhaven part of the overall walk but it has not advanced much since then
- A "fair trading" clause was included in the former LEP which allowed Council to trade land for extra dwelling entitlements – this led to 3 x key pieces (pinch points) of land being brought into public ownership

- Council had a policy on regionally significant projects which this was supported through
- Gordon is aware of the earlier work by IROC
- Gordon is going to send me an A3 map book of their last work – includes more detailed mapping of trails
- Council would be a supporter of any regional initiatives
- Council's tourism group would also be a good supporter Corally Bell who is also the chair of association of tourism managers
- Council sees this as more of a seasonal tourism offering – show people that there is more than just the beaches and relieve pressure on key assets at holiday times

3.6 National Park and Wildlife Service

- Graham Bush (Illawarra-Highlands Area Manager) is the nominated representative
- NPWS is looking at revisiting the northern part of the trail (Gateway to Otford) which was the subject of a DRAFT concept plan prepared by consultancy Epacris in 2005
- Working with WCC on the northern section and had a meeting as recently as yesterday with Council to discuss a way forward
- Lots of things have changed in the past 26 years with the popularity of mountain biking and lookouts like sublime point
- Establishing a working group with National Parks Assoc/Destination Wollongong/Council
- Confident that funds will become available in news few years for the northern part
- Still keen to look at overall and key as like Barren Grounds are still a concern
- Any creation of tracks would allow foxes/wild dogs to venture into areas for ground nesting parrots
- Would need a change to the Plan of Management for Barren Grounds – can be done but more difficult as it's a nature reserve
- Prepared a REF for Barren Grounds a while ago
- NPWS does not have 'standard' costing on trail design and specifications and prefer to market test projects on a case by case basis
- Funding for public access is becoming more available
- Would welcome any support to regional solution

3.7 Illawarra Shoalhaven Joint Organisation

- The Illawarra Shoalhaven Joint Organisation consists of four member councils, namely Wollongong, Shellharbour, Kiama and Shoalhaven. Joint Organisations (JOs) provide a way for local councils and the NSW Government to work together to deliver things that matter the most to regional communities.
- The previous Illawarra Region of Councils (IROC) now replaced by ISJO, coordinated much of the previous Illawarra Walking Trail Investigations.
- Leanne Taylor is the new Executive Officer and has provided copies of the IROC work, which has been reviewed as part of this work.
- Leanne advised that ISJO would welcome a presentation on the findings of this report and how the project could be reformulated.

3.8 Water-NSW

- <awaiting feedback>
- .
- .
- .

4 GIS Mapping Analysis

4.1 Overview

In view of the age of the previous work, Cardno undertook a contemporary mapping review of the proposed route using their Geographic Information System (GIS). This enables the original IROC 1997 route to be 'remapped' in a digital (vector line) and then plotted against other vector data sets such as:

- Cadastre (lot and DP)
- land ownership (private v public)
- land use (forest, reserve, residential)
- property affections (LGA, zoning, catchment, bushfire, ecology, stability)
- topography (grade, orientation)

This enables various statistics to be drawn from the route for planning, costing and risk assessments. A 'screen capture' of the mapping analysis is presented in **Figure 8** with a full set of maps reproduced at **Appendix B**.

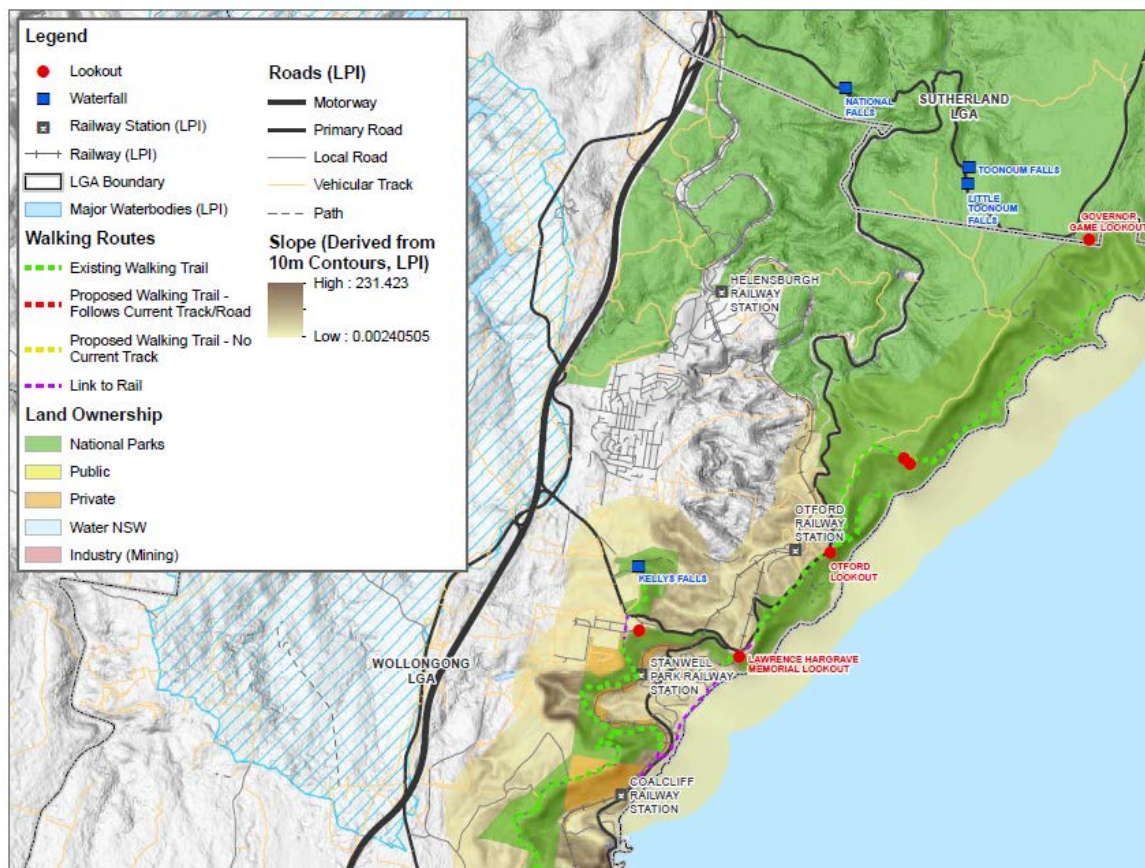


Figure 8: Example 'Screen Capture' of the northern section of the route (Cardno)

The overall route was also translated into a *.KML file which is then easily viewed in 3D platforms like Google Earth. A screen capture from the 3D model is included at **Figure 9**.



Figure 9: *.KML file of the northern section of the route viewed in Google Earth (Cardno)

The IROC trail (1997) was slightly modified to better align with existing roads (where possible) and cadastral boundaries etc. It was visually aligned with areas where people regularly walk with modern day devices such as “Strava Heat Maps”. In some cases there were minor alternatives to the route proposed, to avoid private land and use existing public roads.

Overall the total length of the Escarpment Walking Trail would be 159km. Approximately 67km (42%) of this trail is in existing good condition and uses established walking trails such as the Wodi Wodi track and the Sublime track. The remaining 92 km (58%) of proposed trail will require planning and an extensive feasibility analysis to produce a track that is enjoyed by all its visitors. The good news is that 66km (72%) of this ‘proposed’ trail is on existing walking trails and only 26km (28%) requires totally new work. Even in this case, there are many ‘walk arounds’ to save any new track construction. This is a good outcome as it allows the trail to be physically walked even under its current condition (although not legally when it comes to the Catchment Areas). **Table 2** shows the percentages of proposed and existing tracks between the proposed routes of Otford to Cambewarra.

Table 2: Total Trail Length - Otford to Cambewarra

| Trails | Kilometre (km) | Percentage (%) |
|---------------------------------|----------------|----------------|
| Existing walking Trails | 67 | 42 |
| Proposed walking Trails | 92 | 58 |
| Total Length of the Walk | 159 | 100 |

Table 3 below further identifies these exact distances.

Table 3: Proposed Walking Trails (Existing v Current)

| Trails | Kilometre (km) | Percentage (%) |
|-----------------------------------|----------------|----------------|
| Following existing walking Trails | 66 | 72 |
| No Current Tracks | 26 | 28 |
| Proposed walking Trail | 92 | 100 |

In **Table 4**, **Table 5** & **Table 6** below, the ownership for each section of the trail is identified in accordance with whether this is an existing trail and proposed trail.

Table 4: Percentage of Whole trail by Land Ownership

| Ownership | Kilometres (km) | Percentage (%) |
|---------------------|-----------------|----------------|
| National Park | 79.8 | 50% |
| Public | 5.5 | 3% |
| Private | 24.3 | 15% |
| Water NSW | 15.1 | 9% |
| Industry (Mining) | 8.5 | 5% |
| Not Classified | 25.8 | 16% |
| Total length | 159 | |

Table 5: Percentage of Proposed Trail by Land Ownership

| Ownership | Kilometres (km) | Percentage (%) |
|---------------------|-----------------|----------------|
| National Park | 32.0 | 35% |
| Public | 4.9 | 5% |
| Private | 16.1 | 18% |
| Water NSW | 15.1 | 16% |
| Industry (Mining) | 5.4 | 6% |
| Not Classified | 18.5 | 20% |
| Total length | 92 | |

Table 6: Percentage of New Trail by Land Ownership

| Ownership | Kilometres (km) | Percentage (%) |
|---------------------|-----------------|----------------|
| National Park | 10.6 | 41% |
| Public | 3.3 | 13% |
| Private | 8.0 | 31% |
| Water NSW | 0.6 | 2% |
| Industry (Mining) | 0.3 | 1% |
| Not Classified | 3.2 | 12% |
| Total length | 26 | |

Table 7: Percentage of whole trail lengths by LGA

| Local Government Areas | Kilometres (km) | Percentage (%) |
|------------------------|-----------------|----------------|
| Wollongong | 109.5 | 69% |
| Wingecarribee | 10.9 | 7% |
| Shellharbour | 0.5 | 0% |
| Kiama | 16.7 | 11% |
| Shoalhaven | 21.3 | 13% |
| Total Length | 159 | 100 |

Table 8: Percentage of Proposed lengths by LGA

| Local Government Areas | Kilometres (km) | Percentage (%) |
|------------------------|-----------------|----------------|
| Wollongong | 42.4 | 46% |
| Wingecarribee | 10.9 | 12% |
| Shellharbour | 0.5 | 1% |
| Kiama | 16.7 | 18% |
| Shoalhaven | 21.3 | 23% |
| Total Length | 92 | 100 |

5 Discussion Topics

5.1 Is there Public Support for the Work?

There is overwhelming support for the concept of an Illawarra Escarpment Walking Trail from a range of stakeholders including local and state politicians, state agencies, local councils, indigenous groups, business leaders, special interest groups and the broader community. This support has been consistent and unwavering over the many decades the project has been discussed. This is quite a unique position and a strong differentiator for this project over many others in the region.

Notwithstanding, it would be expected that there would be some localised opposition from a say private landowners regarding access over or near private land. Such concerns would be in regard to trespass, amenity, fencing, livestock and theft. Such claims are usually without evidence and more of a perception than reality as hardened walkers tend to be respectful folk who visit natural areas for enjoyment.

Added to this is the strong desire from visitors for such as facility and the economic benefits that would be derived which can be shared across the entire region and offer up another tourism attractor that can balance out seasonal fluctuations in tourist trade i.e. less summer beach trade. The desire for long-distance multi day walks is enormous and growing year by year. It has seen unparalleled rise in tourism in such places as New Zealand (Routeburn, Milford, Kepler), Tasmania (Three Capes), Victoria (Twelve Apostles), New South Wales (Snowy Mountains, Blue Mountains), South Australia (Flinders Ranges).

5.2 Why has the Project Never Been Evolved?

From the above analysis, there is no one single reason why the goal of an Illawarra Escarpment Walking Trail cannot be achieved having regard to:

- The nature of the project itself
- Learnings from the literature review
- Discussion with key stakeholders
- Recent GIS mapping and
- Level of community support.

Compared to other projects in the region i.e. the current Albion Park Rail bypass the Illawarra Escarpment Walking Trail does not appear to be particularly difficult. Any one of the *perceived key issues* listed below are certainly resolvable:

- Access through Barren Grounds Nature Reserve (increased access, predation and plans of management)
- Overall environmental impacts (clearing, erosion, weeds)
- Private landowner agreements (esp. mining, private bush retreats)
- Crossing of critical infrastructure (Mount Ousley Road and Bulli Pass, access around Gateway (although there are some current alternatives to allow the track to be walked)
- Key 'pinch points' such as the track between Panorama House and Gateway Centre and Bulli Pass and the Lands west of Balgownie need to be passed to NPWS to allow development of a track from Bootie St to New Mt Pleasant Rd bridge crossing (ref: National Parks Association)
- Availability of capital and maintenance funding (local, state and federal sources)
- Public access through Water Catchment Areas
- Inter-agency cooperation (esp. NPWS, SCA, RMS)
- Cross jurisdictional boundary (i.e. council v council, state v local) and
- A single project champion (i.e. ISJO, a project control group a well-known individual).

The fact that the project has not evolved beyond the 'idea' phase has meant that it doesn't typically appear on regional/local plans which can then influence projects. A case in point would be the RMS' Heavy Vehicle Rest Stop at the top of Mount Ousley. A simple pedestrian bridge over Mount Ousley could have included in the package of works which would have allowed south bound motorists to not only use the facility but also walkers using the Illawarra Escarpment Walking Trail to cross the busy road and use the amenities provided.

5.3 Illawarra Escarpment Walking Trail Feasibility Study

What the above analysis does show is for the project to be seriously considered, it need to advance beyond the 'idea' phase into a well-research feasibility study. The feasibility study will refine the concept of the trail and then test that concept to determine if it will 'perform' both practically and financially. This should not be overlooked as this project more than most has had a number of 'false starts' which erodes confidence in the stakeholders that *"this time will be different"*.

Recreation South Australia (2016) has set out specific key elements that should be included in a trail feasibility study, depending on the size and scale of the project. These are as follows:

1. *Introduction and background: how did the project come about? What is the proposed location? What type of recreational user is the trail designed for?*
2. *Supply and demand: is there a demonstrable need for this trail? Are there other trails in the area which may be more appropriate or could be upgraded to meet the demand?*
3. *Planning process: has the project been identified as a priority in any recreational plan, open space strategy plan or any other local/regional/ state strategic plan? Has the local council and/or land manager given their endorsement for the project? What approvals are necessary? Have they been granted or are there any obstacles that may complicate the approval process?*
4. *Connections: how will the project provide linkages between towns or community facilities, other trails, as well as areas of natural, cultural, historical, or recreational significance?*
5. *Partnerships: how will the project demonstrate cooperation or partnerships between trail users, trail groups, private interests within the area and public agencies? What type of funding has been promised? Has 'in-kind' labour or other support been secured?*
6. *Community input and support: can the project demonstrate that it has support from the local community, trail user groups, community leaders, service organisations, recreation and environmental groups, schools, businesses and other non-government groups? What methods have been used to gain knowledge of this support?*
7. *Environmental matters: how will the project protect and improve areas of environmental significance? How will it contribute to an improved knowledge of the environment and what interpretive material will the project provide?*
8. *Cultural and heritage considerations: how will the project recognise and reflect any aboriginal and other local cultural and heritage factors?*
9. *Trail access and trail sharing opportunities: does the project accommodate a range of trail users (e.g. walking, cycling, horse riding, people with mobility impairments and educational purposes)? How will the different users share the trail?*
10. *On ground assessment: has a preliminary assessment been made in relation to the 'on ground' conditions? Have constraints and opportunities been identified and the proposed corridor flagged in accordance with sustainable trail design principles?*
11. *Concept design: what are the physical specifications of the trail: length, width, surface materials, drainage, trail heads, interpretive signage and trail markers? What are the required standards of construction?*
12. *Management and maintenance planning: how will usage and maintenance issues be addressed? Is there a 'friends of group' for the trail or the potential to establish one? How will public access and cooperation be ensured in the long term? Who will undertake and pay for ongoing operation and maintenance costs?*
13. *Capital cost: what is the expected capital cost for the construction of the trail project? How will the construction of the trail be funded?*
14. *Funding: what funding opportunities are available? Can 'in-kind' support be provided from community organisations? Does the project satisfy the requirements of the funding organisations?*
15. *Conclusion: why should the project proceed? What are the strengths and weaknesses of the project? What is required for the project to proceed?*

Much of the existing historical information (including this report) could be repurposed for this study to reduce overall costs but there is still a considerable amount of work to be done to advance the project. A budget of \$50,000 (ex GST) would be sufficient if investigations were limited to 'desk top' level. Much of the work could be provided by relevant stakeholders on an 'in-kind' basis.

Beyond feasibility study is the concept design and associated specialist studies (ecology, bushfire, stability) to procure the necessary approvals. Beyond that is detailed design to allow construction to commence which could be undertaken a later date. It may also be possible to stage the construction of the trail over a number of years so an initial large cost can be broken down into smaller 'bite-size' chunks which may be more palatable to funding agencies. Staging a project will also reduce the level of perceived risk associated with the project as each stage will only proceed once the previous stage has been successfully completed.

Until the initial feasibility study is undertaken, it would be simple speculation to propose a capital cost of the entire route. Having said that, a budget of say. \$5M could be realistic for the new 26km of track based on say \$200,000 per lineal kilometre (ref: Wanghetti Trail Concept Plan, Cairns) and minimal allowance for existing track/fire trail/access road. This excludes large capital costs items such as a pedestrian crossing of Mount Ousley alone which could be in the order of \$3M. There is no allowance for property acquisitions and assumes generous 'in kind' contributions from key stakeholders. There is minimal allowance for trail infrastructure such as campsites, amenities, parking areas.

5.4 Multi-Agency Working Party

Wollongong City Council has previously suggested that Multi-Agency Working Party established by NPWS, made up of (4 x local) Councils, Roads and Maritime Services, Destination Wollongong, WaterNSW, Department of Planning and Environment, National Parks Association and the Illawarra local Aboriginal Land Council, to meet at least once a year to facilitate the implementation of the NPWS Draft Masterplan. DSSS could be readily included on this Working Party.

This would take the form of sharing plans and designs for works related to the Masterplan, integrating designs with existing or proposed tracks and the promotion of existing tracks. The working party would be in a strong position to lobby for additional grant funding to implement the existing plans.

The multi-agency working party would focus on:

- Integration of NPWS, RMS and Council assets such as toilets, signage, food outlets, accommodation and car parks
- Integrated promotion of walks through brochures, websites and advertising;
- Pedestrian links to trail network (e.g. Grand Pacific Walk); and
- Promoting dedication of strategic parcels of land to the NPWS reserve system or right of way agreements over time to increase the trail network.

Wollongong City Council suggest that the concept of a multi-agency working party has been discussed with NPWS, who are supportive of the approach. The working party should be led by the National Parks and Wildlife Service. Instead of NPWS, Department of Premier and Cabinet could coordinate the working party as they have a wider remit than NPWS.

6 Conclusion

Destination Sydney Surrounds South (DSSS) has been recently approached by individuals to investigate whether the concept of an Illawarra Escarpment Walking Trail from The Royal National Park in the north to the Moreton National Park in the South is achievable within a reasonable budget. DSSS has commissioned Cardno to review the previous work, use its contemporary GIS mapping tools to assess the current route, renew conversations with key stakeholders to see if there is a desire to make it happen and form a view whether the project is achievable within reasonable budgets.

Literature surrounding the project is varied and generally old reflecting different priorities at the time. It generally concludes that development of a trail is achievable and worth pursuing. However, in recent years there has been a lack of literature available which shows the progression of the initial concept design.

Recent conversation with stakeholders shows that the desire for an Illawarra Escarpment Walking Trail has not waived. More recently there has been further engagement between NPWS and Wollongong Council regarding the northern section of the Trail which is promising.

Cardno undertook a contemporary mapping review of the proposed route using their GIS and 'remapped' the original IROC 1997 route against other vector data sets such as cadastre, land ownership, land use, property affectations and topography. The total route would be 159km of which 67km (42%) is in existing good condition and uses established walking trails such as the Wodi Wodi track and the Sublime track. The remaining 92 km (58%) of proposed trail will require planning and an extensive feasibility analysis to produce a track that is enjoyed by all its visitors. 66km (72%) of this 'proposed' trail is on existing walking trails and only 26km (28%) requires totally new work. Even in this case, there are many 'walk arounds' to save any new track construction.

This brief report shows there is no one single reason why the project cannot be achieved having regard to:

- The nature of the project itself
- Learnings from the literature review
- Discussion with key stakeholders
- Recent GIS mapping and
- Level of community support.

Key issues listed that would need to be resolved include:

- Access through Barren Grounds Nature Reserve (increased access, predation, plans of management)
- Overall environmental impacts (clearing, erosion, weeds)
- Private landowner agreements (esp. mining, private bush retreats)
- Crossing of critical infrastructure (Mount Ousley Road and Bulli Pass, access around Gateway (although there are some current alternatives to allow the track to be walked)
- Key 'pinch points' such as the track between Panorama House and Gateway Centre and Bulli Pass and the Lands west of Balgownie need to be passed to NPWS to allow development of a track from Bootie St to New Mt Pleasant Rd bridge crossing (ref: National Parks Association)
- Availability of capital and maintenance funding (local, state and federal sources)
- Public access through Water Catchment Areas
- Inter-agency cooperation (esp. NPWS, SCA, RMS)
- Cross jurisdictional boundary (i.e. council v council, state v local) and
- A single project champion (i.e. ISJO, a project control group a well-known individual).

For the project to be seriously considered, it need to advance beyond the 'idea' phase into a well-researched feasibility study that will refine the concept of the trail and then test that concept to determine if it will 'perform' both practically and financially. This should not be overlooked as this project more than most has had a number of 'false starts' which erodes confidence in the stakeholders that "this time will be different".

Much of the existing historical information (including this report) could be repurposed for this study to reduce overall costs but there is still a considerable amount of work to be done to advance the project. A budget of \$50,000 (ex GST) would be sufficient if investigations were limited to 'desk top' level.

Beyond feasibility study is the concept design and associated specialist studies (ecology, bushfire, stability) and detailed design would need to be undertaken at a later date to procure the necessary approvals. Beyond that is detailed construction. It may also be possible to stage the construction of the trail over a number of years so an initial large cost can be broken down into smaller 'bite-size' chunks which may be more palatable to funding agencies. Staging a project will also reduce the level of perceived risk associated with the project as each stage will only proceed once the previous stage has been successfully completed.

Until the initial feasibility study is undertaken, it would be simple speculation to propose a capital cost of the entire route. Having said that, a budget of say, \$5M could be realistic for the new 26km of track and minimal allowance for existing track/fire trail/access road. This excludes large capital costs items such as a crossing of Mount Ousley and property acquisitions and assumes generous 'in kind' contributions from key stakeholders. There is minimal allowance for trail infrastructure such as campsites, amenities and parking.

To take the project forward a Multi-Agency Working Party including NPWS, 4 x local Councils, Roads and Maritime Services, Destination Wollongong, Water NSW, Department of Planning and Environment, National Parks Association and the Illawarra local Aboriginal Land Council should be established. DSSS could be readily included on this Working Party.

This would take the form of sharing plans and designs for works related to the Masterplan, integrating designs with existing or proposed tracks and the promotion of existing tracks. The working party would be in a strong position to lobby for additional grant funding to implement the existing plans.

7 References

- Adrian Davey & James Weirick 1986, *Management Strategy Illawarra Escarpment and Cambewarra Range NSW*
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- Sally Gray and Associates *Merrigong, A Cultural Map of the Illawarra Escarpment*
- Wangetti Trail Concept Plan by World Trail P/L July 2017
- Wollongong City Council (2014) Ordinary Meeting Report on Illawarra Escarpment Walking Trail

APPENDIX

A

LITERATURE REVIEW

Literature Review - Illawarra Escarpment Walk

| Report | Year | Destination Sydney Surround South | Citation | Relevance | Author | Comment |
|--------|--------|---|---|------------------------------|---|--|
| 21 | N/A | Illawarra-escarpment-trails-pdf | A description of the completed walks within the Illawarra | Detailed information. Useful | Destination Wollongong | Destination Wollongong created the "Illawarra Escarpment State Conservation Area Walking Tracks". This four page document describes the existing tracks within the Illawarra. It has rated each walk in difficulty, from "Easy" to "Hard". It highlights four areas, Stanwell Park, Bulli to Sublime Point, Mt Kiera and Mt Kembla however, it does not talk to an amalgamated track between the areas which link it together. |
| 22 | N/A | Illawarra-escarpment-walking-track | A description of the completed walks within the Illawarra | Detailed information. Useful | National Parks Association of NSW Inc. | National Park Association of NSW has created the "Illawarra Escarpment walking track" which provides the route from Stanwell Park to Austinmer. With the track receiving some upgrades in recent years, the walk has become easier identifiable as well as accessible. One of the main aim from the document is that in the "not too distant future it is hoped this walk will form part of the multi-day Illawarra Escarpment Walk. NPA Illawarra are promoting this and have dubbed it The Grand Escarpment Walk. This walk has been talked about and planned for more than 30 years. Such a walk, connecting the Royal National Park to the southern Illawarra and even further south to Morton National Park has the potential to become an iconic great walk for NSW". (National Parks Association of NSW). |
| 29 | N/A | Merrigong_A Cultural Map of the Illawarra Escarpment Report to IROC | Cultural relevance-read through | Detailed information. Useful | Sally Gray and Associates | A cultural map report to develop the significant sites along the proposed track was performed by Sally Gray and Associates. It was written in support of the IROC documentation and utilised the community feedback and consultation for appropriate locations to share the cultural significance to its visitors. |
| 31 | Dec-18 | Nature Based Tourism to NSW snapshot DEC 2018 | Visitor trends. If additional time read through. | Detailed information. Useful | Destination Wollongong & NSW Government | A report in combination with NSW government and Destination Wollongong o the nature visitors within NSW. The document provides a collector of the average money spend per visitor and their average length of stay. It provides an indication of average age groups and what their planned activates are. |
| 28 | Jul-18 | Kiama Tourism Opportunities Plan_EXTRACT | Focusses on Kiama check if relevant with route | Detailed information. Useful | Kiama Municipal Council | In July 2018 Kiama Municipal Council released their Tourism Opportunities Plan. A general methodology, this plan outlays the opportunities for tourism within Kiama. A section is reserved for the expansion of walking trails and the experience around those. It specifically talks about two walks, the Gerringong Coastal Walk to Gerroa and the saffleback Mountain to Macquarie Pass Iconic walk. Both these walks are not within the route proposed as the Illawarra Escarpment walk. Through the use of the NSW State Regional Tourism Satellite Accounts, Kiama Municipal Council performed a costing analysis how the influx of tourism can affect the local community. Based on their predictions on their proposed tracks an additional 17,042 people are expected to visit Kiama. |

| Report | Year | Destination Sydney Surround South | Citation | Relevance | Author | Comment |
|--------|--------|---|---|------------------------------|---|--|
| 12 | May-17 | Illawarra Escarpment Walk_DSSS Board Late Report | Wollongong to Cambewarra. A summary of meeting minutes from the DSSS board. | Detailed information. Useful | | A meeting was held between Neville Fredericks, Col Waller & Tash McQueen which discussed the opportunities that such walk would be to the Illawarra region. A rough budget to determine its feasibility and the next steps moving forward are proposed |
| 36 | May-16 | Mt Kiera Background Report | Background and tourism opportunities for Mt Kiera | Detailed information. Useful | Have your say Wollongong | The Mount Kiera Background report describes some of the engagements between the community and its stakeholders that have been encountered in the past. With this, tourism has increased by 19% from 2014 to 2015 in the Illawarra. An increase of 18% was found for domestic day trips to the Illawarra. It also describes the NSW Government aiming to receive \$36.6 billion in overnight visitor's expenditure by 2020. |
| 20 | Nov-05 | Illawarra Escarpment Tracks Draft Masterplan NPWS 2005 - For State Conservation Area | | Detailed information. Useful | Ian Brown - Epacris Environmental Consultants Pty Ltd | Epacris Environmental Consultants created a draft masterplan for the Illawarra Escarpment tracks. It details the level of difficulty for each of the walks, and summarizes the reports to date. The draft was put on exhibition for thirty days, allowing time for feedback from the community. A masterplan is proposed for delivery in early 2006 however, there is no evidence of such masterplan being delivered. |
| 33 | Feb-96 | The Illawarra Escarpment Walking Track - Report to IROC - Feb 1996 | Illawarra detailed. | Detailed information. Useful | W. Evans FRAPI | This document is a follow up from the initially proposed route released in 1990 by IROC. It encompasses the Management Strategy Illawarra Escarpment & Cambewarra. It has incorporated feedback from other stakeholders such as NPWS. From a logistics point of view it highlights the need for ongoing maintenance, and that a finalized route hasn't been identified yet. |
| 23 | May-93 | IROC Illawarra Escarpment Walking Track_Sub Federal Minister for Tourism_Rev May 1993 | Submission to the Federal Minister for Tourism for Illawarra's Escarpment Walking Track | Detailed information. Useful | Illawarra Region of Councils | A subgroup within the IROC established in 1989, to identify the most preferred route in consultation with the local community. After performing some studies and consultation sessions with the local community as well as environmental groups it found that there was strong support within the groups. Splitting the project into Two Phases, the first Phase was successfully completed- the concept design of the walking track. Phase 2 was recommended to be performed by an experienced Project Manager. This is to enter through the detailed design process and provide a costing analysis of the works. |
| 25 | Mar-91 | IROC The Illawarra's Escarpment Walking Track_Sub NSW State Gov_Dec 1990 | Old proposal worth reading through | Detailed information. Useful | Illawarra Region of Councils | The proposal in slide form from IROC, the last few pages provide a rough budget for the proposed works, however these figures would no longer be relevant due to inflation and relevance of the works involved. It does note the need for a PM, Community Consultation, Heritage specialist's reports, field surveys. Its totals effectively \$174,500. |
| 27 | Mar-91 | IROC_The Illawarra's Escarpment Walking Track | Old version for proposal | Detailed information. Useful | Illawarra Region of Councils | Another slide set from IROC, this seems to be an expansion of the previous slides which are detailed per LGA. It mentions some of the detailed reports |
| 32 | Nov-89 | SWB_Ecology356Report_WalkTrack | Minor discussion on what the track is to enter through. The report is incomplete so a full copy will have to be obtained to see what the actual impacts are | Detailed information. Useful | Sean McNeillage & Simon Biddle | The expected environmental impact of and management strategy talks to the track between Mount Kembla and Mount Murray. This talks about the most appropriate walking track between the two mountains. |

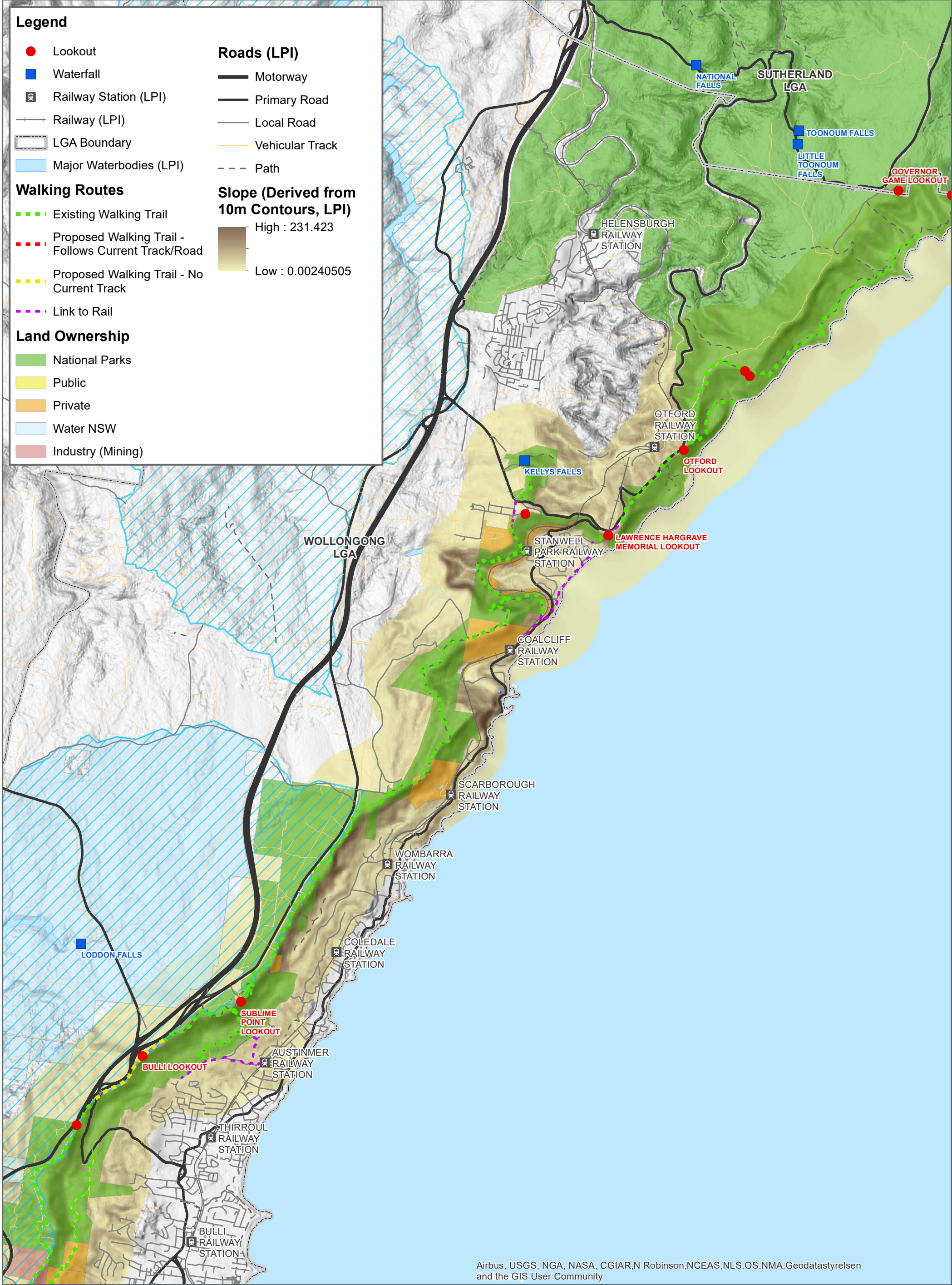
| Report | Year | Destination Sydney Surround South | Citation | Relevance | Author | Comment |
|--------|--------|---|--|---|------------------------------|---|
| 30 | Jan-86 | Mgmt. Strategy Illawarra Escarpment & Cambewarra Range NSW_Jan 1996 | Cultural relevance-read through | Detailed information. Useful | Adrian Davey & James Weirick | This is an extensive report for the management strategy for the Illawarra escarpment and Cambewarra range prepared for the IROC group. It considers the geology of the escarpment, the protection of trees, the landowners and has reviewed the potential stakeholders along the track. |
| 10 | 1997 | Illawarra Escarpment Walk - The Route(1) | The proposed route from Otford to Nowra | Detailed information. Useful | Illawarra Region of Councils | This detailed report entails a thorough analysis completed in 1997 regarding the potential track options as well as determining some of the potential constraints that could come up. |
| 1 | | 2Rivers pt 1 | Section between Shoalhaven River and Clyde River | No relevance, past Nowra | | |
| 2 | | 2Rivers pt 2 | | No relevance, past Nowra | | |
| 3 | | 2Rivers pt 3 | | No relevance, past Nowra | | |
| 4 | | 2Rivers pt. 4 | | No relevance, past Nowra | | |
| 5 | | 2Rivers pt. 4 Sect 1 | Shoalhaven River to Yalwal | No relevance, past Nowra | | |
| 6 | | 2Rivers pt. 4 Sect 2 | Yalwal to Braidwood road | No relevance, past Nowra | | |
| 7 | | 2Rivers pt. 4 Sect 3_4 | Braidwood Road to Tianjara Ck & Tianjara Ck to little forest | No relevance, past Nowra | | |
| 8 | | 2Rivers pt. 4 Sect 5 | Little Forest to Yadboro | No relevance, past Nowra | | |
| 9 | | Great Eastern Centenary Walking Track (SYD-CAN)_Proposal For Coastal Route_Nov 97 | Sydney to Canberra route. | Some relevance, Illawarra Escarpment walk is mentioned but not in detail. No information for Lit review | | |
| 11 | | Illawarra Escarpment Walk - The Route | | Double up | | |
| 13 | | Illawarra Escarpment Walk_small | | Pictures Only | | |

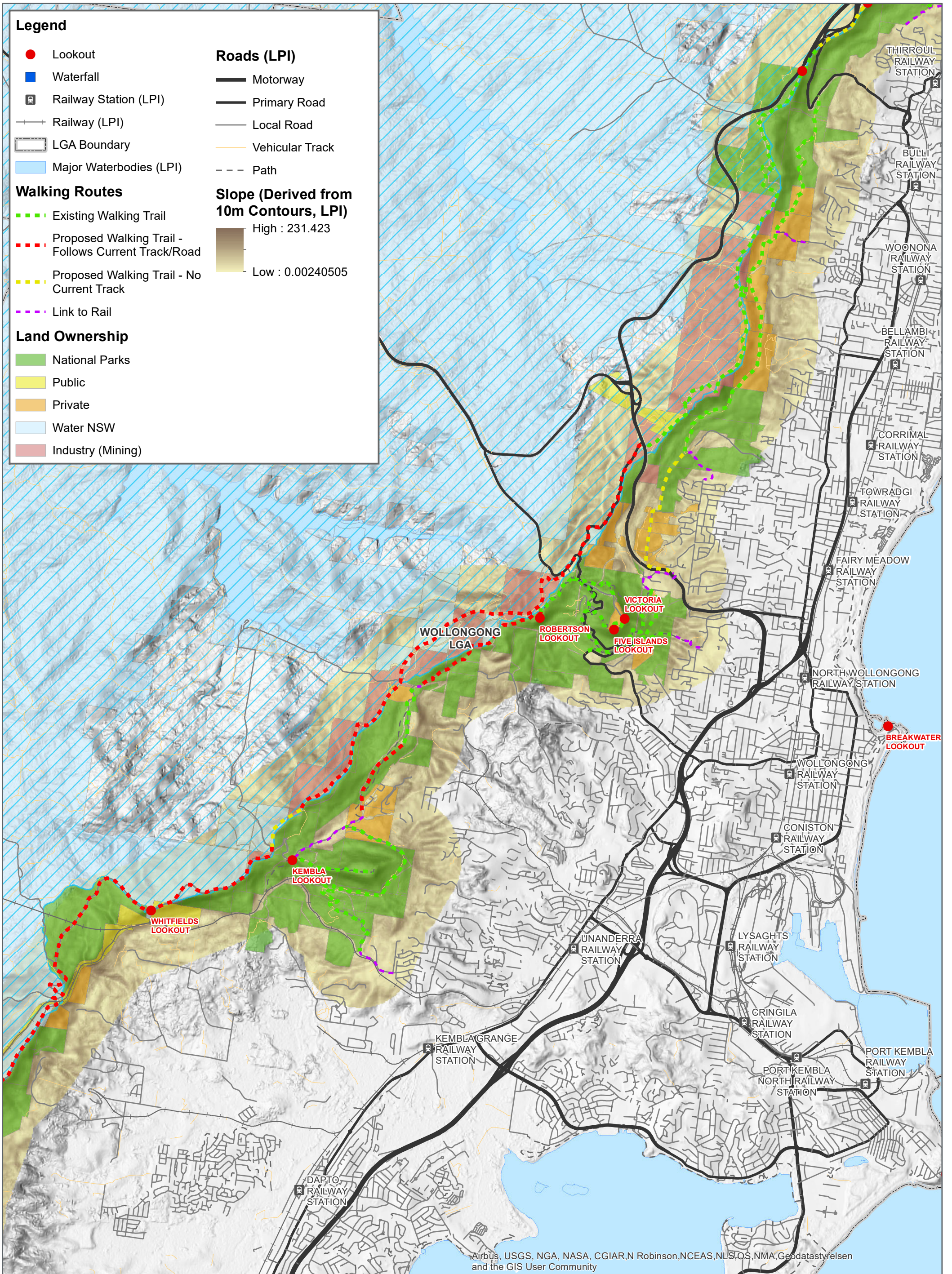
| Report | Year | Destination Sydney Surround South | Citation | Relevance | Author | Comment |
|--------|------|---|-------------------------------------|-----------------------------------|--------|---------|
| 14 | | Illawarra Escarpment Walking Trail | | Pictures Only | | |
| 15 | | Illawarra Walking Trail May 2019 | | Pictures Only | | |
| 16 | | IllawarraEscapment_pg1_20 | Exact same information as previous. | Ignore. Double up | | |
| 17 | | IllawarraEscapment_pt2 | Exact same information as previous. | Ignore. Double up | | |
| 18 | | IllawarraEscapment_pt3 | Exact same information as previous. | Ignore. Double up | | |
| 19 | | IllawarraEscapment_pt4 | Two Rivers Track information | No relevance, past Nowra | | |
| 24 | | IROC Slides for the Mt Kembla - Mt Murray Walk | | No relevance, just form | | |
| 26 | | IROC_Merrigong A Cultural Map of the Illawarra Escarpment | Cultural relevance-read through | | | |
| 34 | | The Illawarra's Escarpment Walking Tack - Photos, Maps, Notes + Brochures Overheads | small doc | Double up of previous information | | |
| 35 | | The Two Rivers Track | | No relevance, Past Nowra | | |

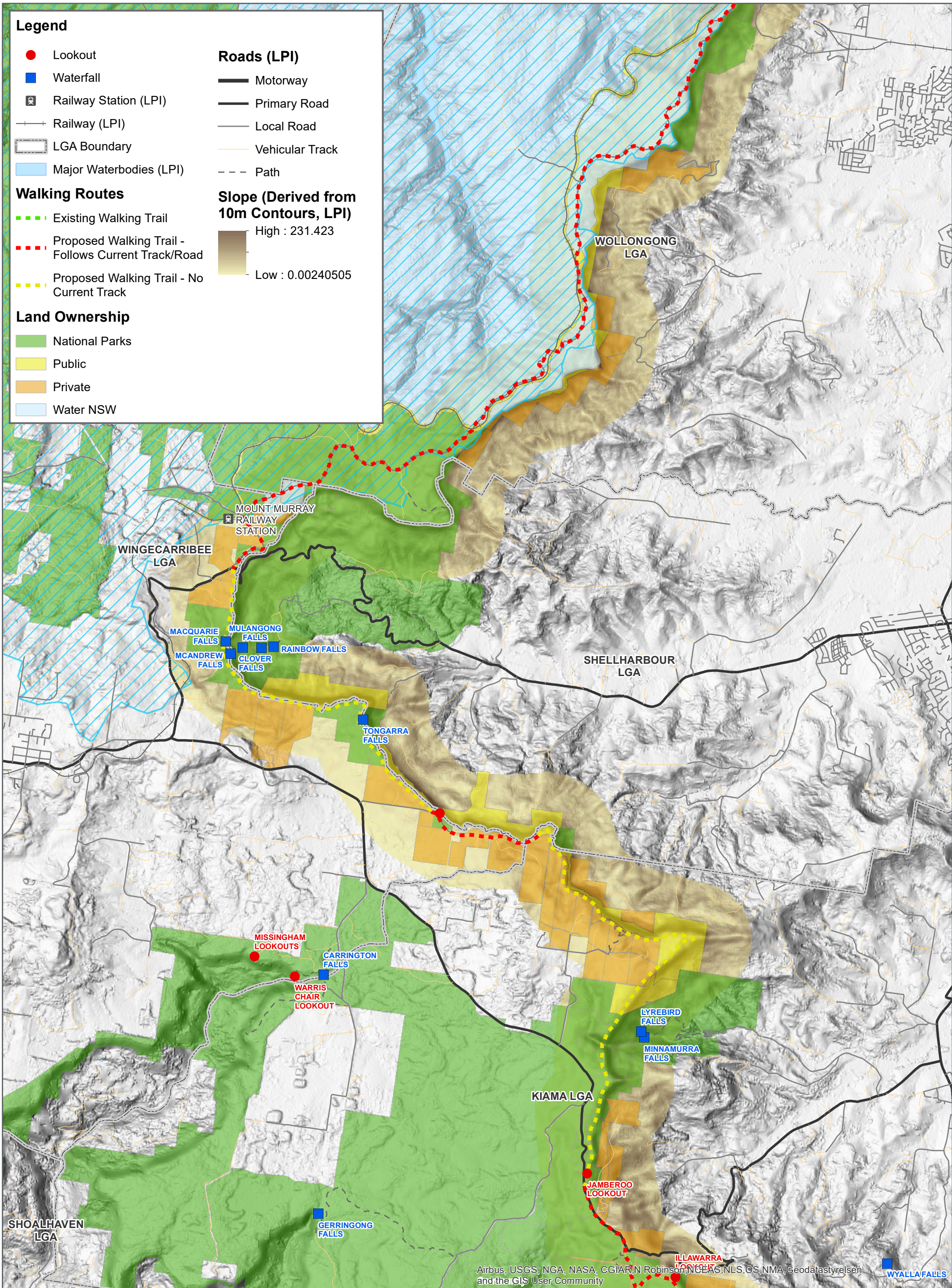
APPENDIX

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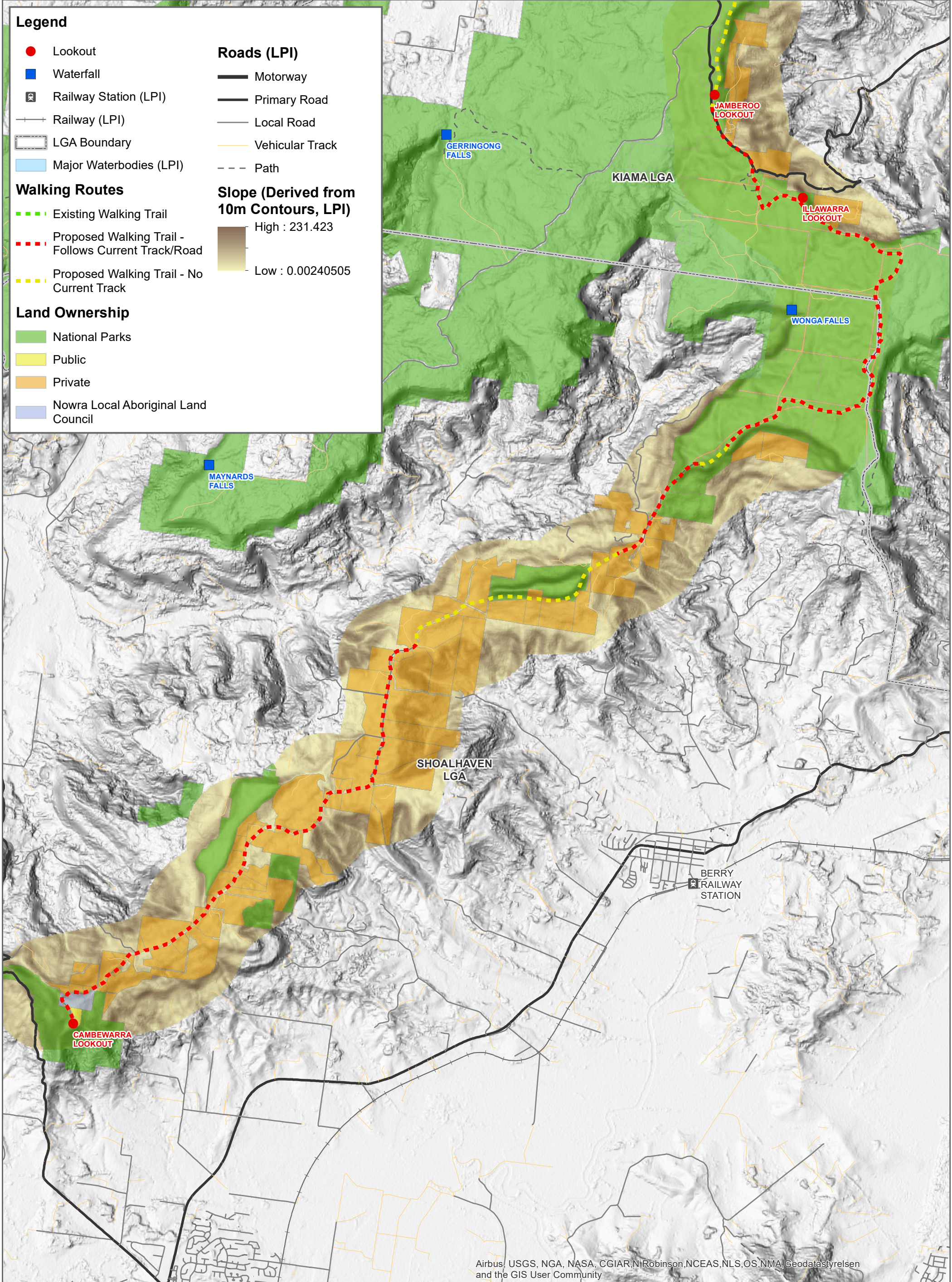
GIS MAPPING ANALYSIS







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