



Submission to the Senate Select Committee into Jobs for the Future in Regional Areas

by

the Australian Geoscience Council Inc

'Geotourism - A Regional Development Opportunity for Australia'

4th September 2019

Further Information: Angus M Robinson FAusIMM (CP), Coordinator, National Geotourism Strategy
T: 0418 488 340 E: angus@leisuresolutions.com.au

Submission by the Australian Geoscience Council Inc

Geotourism - A Regional Development Opportunity for Australia

Purpose of the Submission

On 31 July 2019, the Senate resolved to establish a Select Committee into the 'Jobs for the Future in Regional Areas'. The committee will inquire and report on the following matters:

- **new industries and employment opportunities that can be created in the regions;**
- the number of existing jobs in regional areas in clean energy technology and ecological services and their future significance;
- lessons learned from structural adjustments in the automotive, manufacturing and forestry industries and energy privatisation and their impact on labour markets and local economies;
- the importance of long-term planning to support the diversification of supply chain industries and local economies;
- measures to guide the transition into new industries and employment, including: community infrastructure to attract investment and job creation;
- the need for a public authority to manage the transition;
- meaningful community consultation to guide the transition; and the role of vocational education providers, including TAFE, in enabling reskilling and retraining;
- the use of renewable resources in Northern Australia to build a clean energy export industry to export into Asia; and
- any related matters.

This submission provides background information that outlines the potential for new industries and employment opportunities through the development of major geotourism projects within Australia.

By way of comparison, the evidence from a 2012 study in Ireland demonstrated that the geotourism and geoheritage sector was a major contributor to the Irish economy, with total revenues (visitor expenditures) directly attributable to this sub-sector amounting to over €370 million in 2016, while the sector, directly contributes almost €240 million to Irish economy GVA/GDP. The sector supported 8,767 FTEs on an economy-wide basis, as well as €415 million in GVA and over €660 million in output (Source: An Economic Review of the Irish Geoscience Sector prepared by Indecon International Economic Consultants).

The Australian Geoscience Council and Geotourism

The Australian Geoscience Council Inc (AGC) is the Peak Council of geoscientists in Australia. It represents nine major Australian geoscientific societies with a total membership of over 8,000 individuals comprising industry, government and academic professionals in the fields of geology, geophysics, geochemistry, mineral and petroleum exploration, environmental geoscience, hydrogeology and geomorphology.

Under its current 2015-2020 Strategic Plan, as a geoscience advocacy opportunity, the AGC has decided to promote to facilitate a draft National Geotourism strategy to accommodate the orderly development of major geotourism projects and activities in line with overseas trends and domestic regional development imperatives. The AGC has developed a draft strategy and sees the development of a staged and incremental approach of this draft strategy as being essential to gain government endorsement at all levels. The development of a National Ecotourism Strategy in 1994 and subsequent state/territory-based initiatives is considered as a particularly useful precedent and guide. Of significance internationally is that the

development of geotourism in Australia lags behind many countries' approach, notwithstanding the fact Australia has taken the initiatives in a number of areas in development of the concepts underpinning geotourism.

In the process of advocating geotourism, the AGC has met with and made presentations to the Geoscience Working Group (GWG), a body representing all the state and territory geological surveys as well as the national Geoscience Australia agency.

AGC recognises that geotourism is a significant emerging and growing global phenomenon. Geotourism has been defined by a key AGC member, the Geological Society of Australia (GSA) as 'tourism which focuses on an area's geology and landscape as the basis for providing visitor engagement, learning and enjoyment'. It has links with adventure tourism, cultural tourism and ecotourism, but is not synonymous with any of these forms of tourism, although in broad terms it actually embraces them all (Appendix A).

Geotourism can be delivered through the development of both 'geotrails' and 'geoparks'. Whilst 'geotrail' development has gained favour from governments in Australia, the same cannot be claimed to date for the establishment of 'geoparks'.

Employment benefits through the adoption of a strategy to support and promote geotourism include the following.

- New domestic employment and consulting opportunities for natural/cultural heritage professionals – design of interpretation signage/boards, design of geotrails etc.
- Management roles in geoparks and mining parks, regional development and local government agencies.
- Flow-on employment in tour operations and townships resulting from increased tourism visitation.
- Opportunities for pastoralists to develop 'farm stay' and 'station stay' tourism operations e.g. Cheela Plains Station Stay in the Pilbara, Western Australia www.cheelaplains.com.au

Societal benefits for local communities include the following.

- A mechanism for celebrating and raising awareness of mining heritage, past and present.
- An opportunity to enhance community engagement and build value into 'Social Licence' considerations.
- By celebrating geological heritage, and in connection with all other aspects of the area's natural and cultural heritage, geotourism enhances awareness and understanding of key issues facing society, such as using our earth's resources sustainably.
- By raising awareness of the importance of the area's geological heritage in society today, geotourism gives local people a sense of pride in their region and strengthens their identification with the area.

In summary, the **over-riding socio-economic benefits** of geotourism include the following.

- Measurable economic benefits - additional visitors, direct and regional economic output, household income and wages, and local employment.
- Through establishment of a management entity, higher level of centralised coordination in areas of product development, travel and hospitality services, tourism promotion/branding.
- Maximisation of sustainable development and management of overtourism (an emerging issue in Tasmania).

- A framework for focus on the 10 UNESCO Topics e.g. culture, education, climate change, geoconservation, sustainable development etc.
- Through its defined mission, community engagement is maximised and measured.

Geotrails

A geotrail can deliver geotourism experiences through a journey underpinned by an area's geology and landscape. Geotrails are therefore best constructed around routes currently used by tourists i.e. geotrails should form logical journeys linking accommodation destinations.

Geotrails can comprise roads, walking and biking trails, and disused railway easements.

Geotrails should meld the geological heritage features of a region with a cohesive story and should incorporate in tourism packages, the biodiversity and cultural components (including mining heritage) of the region through which the geotrail traverses.

Geotrails do offer the advantages of having universal appeal, and do not compete with or impact on land management/access issues. They are relatively easy to establish and represent a very cost-effective means of enhancing regional development.

They are also an effective vehicle for promoting broader community interest in Geoscience and recognition of it as one of the four fundamental sciences along with Physics, Chemistry and Biology. As such there are long-term educational and cultural benefits in fostering the appreciation of how our Earth influences landscape, ecology, and our lifestyles.

More information about geotrails is detailed in Appendix B.

Geoparks

Geotourism attractions are now being developed around the world primarily as a sustainable development tool for the development of local and regional communities. A major vehicle for such development is through the concept of 'geoparks'. A geopark is a unified area with geological heritage of particular significance, where that heritage is being used to promote the sustainable development of the local communities who live there.

Unlike World Heritage Areas and national parks, geoparks can embrace both protected and any resource extraction areas, focusing on sustainable development objectives. Geoparks also focus on community engagement and ownership. In Australia, national parks focus generally only on biodiversity and more often than not with insufficient attention given to geological heritage.

At the international level, UNESCO Global Geoparks are single, unified geographical areas where sites and landscapes of international geological significance are managed with a holistic concept of protection, education and sustainable development. Whilst World Heritage Areas and national parks are created in perpetuity, the status of global geoparks are reviewed by UNESCO every four years.

While a geopark must demonstrate geological heritage of particular significance, the purpose of a geopark is to explore, develop and celebrate the links between that geological heritage and all other aspects of the area's natural, cultural and intangible heritages. It is about reconnecting human society at all levels to the planet we all call home and to celebrate how our planet and its 4,600 million years history has shaped every aspect of our lives and our societies. Geoparks are both a regional development concept as well as a

branding tool. They achieve these goals through conservation, education and geotourism. Geoparks can comprise both protected and non-protected areas and enable and celebrate sustainable development of primary industries such as mining, agriculture and forestry.

Geoparks can choose to evolve through a series of levels from 'aspiring', 'national', 'regional' (e.g. European or Asia-Pacific Regions) to 'global'. There are now hundreds of geoparks around the world. Support to individual geoparks is offered through the Global Geoparks Network Bureau which is currently representing 140 members from 38 countries. The original target of the Global Geoparks Network is to establish 500 geoparks around the world. The number is growing at a rate of about 10 new global geoparks per year. On 21st February 2019, the 4th open session of the International Geosciences and Geoparks Programme took place in Paris and determined that the new aspiring geopark applications for the UNESCO Global Geoparks to be evaluated during 2019 included 14 new applications (of which seven were from countries in our region i.e. Indonesia, Philippines, Vietnam, South Korea and China) and four were extensions to existing geoparks.

UNESCO member countries are entitled to nominate a maximum of two applications per year. In the case of Australia, the official channel is the UNESCO representative in Australia, and it is currently understood that any nomination needs to be reviewed by designated agencies in consultation with the Department of Foreign Affairs and Trade once approval of the respective State or Territory Governments has been obtained.

In 2018, following consultations with the national government geoscience agency, Geoscience Australia, it was recognised that a national approach was needed to better manage major geotourism projects to maximise these indicative benefits. More information about geoparks is detailed in Appendix C.

Geotourism Projects and the Proposed Draft National Geotourism Strategy

Currently the AGC is of the view that the establishment of a national geotourism strategy offers the best means of ensuring an orderly development of geotourism on the basis of having first gained government support and endorsement, recognising that each state and territory has individual needs and priorities. One of the issues under consideration is that a national geotourism strategy could establish a national set of administrative procedures for 'georegional' assessment to provide for potential geopark nomination at state and national levels and, as approved by governments, at an international, UNESCO Global Geopark level.

The Australian Geoscience Council submits that geotourism (Appendix A) can deliver, through the various mechanisms of establishing interpretation centres located at iconic geosites (e.g. Blue Mountains and The Age of Dinosaurs in Winton), geotrails (Appendix B), other georegional mechanisms (Appendix C and D) and 'National Landscapes' (Appendix E). These mechanisms can deliver considerable economic development for regional Australia. Geotourism offers the potential of generating new destination products and increased employment opportunities, not only for technically trained people, but right across the travel and hospitality supply chain, particularly in outback townships.



Dr Jon Hronsky OAM

Chair, Australian Geoscience Council Inc
4th September 2019

Attachments to the Submission

Appendix A Definition and Benefits of Geotourism

In summary, geotourism

- adds considerable content value to traditional nature-based tourism (the primary motivator of travel to Australia) as well as cultural tourism, inclusive of indigenous tourism, thus completing the holistic embrace of 'A' (abiotic – landscape and geology) plus 'B' (biotic – flora and fauna) plus 'C' (culture) aspects. It empathises an approach of increasing interest to protected area managers, particularly given the experience gained from the now discontinued Australian National Landscape programme;
- celebrates geoheritage and promotes awareness of and better understanding of the geosciences - of increasing interest to geological survey organisations;
- contributes to regional development imperatives in areas experiencing social and economic difficulties through increased tourist visitation, particularly from overseas – of increasing interest to local government authorities (LGAs) and state based, regional development commissions and agencies;
- creates professional and career development for geoscientists – of particular interest to the AGC and constituent member societies;
- provides a means of highlighting and promoting public interest in mining heritage – of particular interest to The Australasian Institute of Mining & Metallurgy, the Australasian Mining History Association and the Australian Institute of Geoscientists;
- provides the means of increasing public access to geological information through a range of new information and communication technology (ICT) driven applications e.g. smartphones, drones, 3D visualisation, augmented reality etc. – of increasing interest to geological survey organisations and visitor information centres; and
- Engenders an increasing awareness of the importance in geology as a fundamental science that has had and will continue to have major impacts on civilisations.

Geotourism promotes tourism through visits to geological features (geosites), use of 'geotrails' and viewpoints, guided tours, geo-activities (such as geological time trails, fossil walks, rock gardens etc.), and patronage of visitor centres and museums. Geotourism attractions are now being developed around the world primarily as a sustainable development tool for the development of local and regional communities.

In 2013, Cartoscope Pty Ltd, a NSW tourism publication company with links to the mining and exploration industry, received a TQUAL Grant under the Tourism Quality Projects program. This grant from the Department of Resources, Energy and Tourism supported innovative, sustainable and high-quality tourism projects and enabled Cartoscope to produce some 100,000 copies of a NSW Geotourism map identifying some 96 sites in NSW which are significant geological sites, museums or tours. There are short descriptions of the geology with map references and location flags on the map so the sites can be easily found. Both public and school teacher responses to the geotourism map and the media publicity has been very positive and has well exceeded expectations to the extent that a second edition was published and launched in 2018, and which received significant sponsorship from the NRMA, the AGC, the Geological Survey of NSW (GSNSW), various professional societies, Geoscience Australia, a number of Local Government Authorities amongst other sponsors.

Geotourism Resources can be located at:

- <https://www.gsa.org.au/Public/Geotourism/Public/Geotourism/Geotourism%20and%20Geotrails.aspx?hkey=754eb036-9266-452e-95b8-e135a1db04d1>
- <http://www.leisuresolutions.com.au/index.php/geotourism-industry-groups/>

A presentation delivered to the Sustainable Economic Growth Regional Australia Annual Conference (SEGRA 2019) held in Cobram-Barooga in August 2019 summarises the current status of geotourism developments in Australia <https://www.slideshare.net/leisuresolutions/strategic-directions-for-geotourism-development-in-australia>

Appendix B Geotrails

A geotrail can deliver geotourism experiences through a journey linked by an area's geology and landscape as the basis for providing visitor engagement, learning and enjoyment.

At the SEGRA 2015 conference convened in Bathurst, the development of a formative Red Centre Geotrail, of which Uluru is now a global iconic attraction, was considered.

The Gondwana Coast Fossil Walk Inc. illustrated how, that in recent years, the geotourism potential of the Ulladulla rock platforms had been developed by his team of volunteers into a successful tourist attraction. His project, including the Brodie Park Geological Time Walk, was awarded in 2016 the best tourist attraction on the NSW South Coast.

It is now realised that the concept of geotrails has provided an alternative and attractive approach to nurturing regional development by celebrating geotourism, geological and mining heritage. Geotrails can offer genuine potential by both adding a new dimension to a regional visitor experience and as a tool for encouraging extended travel time within the region.

The development of geotrails was also discussed at the Geotourism Workshop forming part of the Global Eco Conference of Ecotourism Australia held at Rottnest Island in 2015 and the Geotourism Spotlight Session of SEGRA 2016 held in Albany, Western Australia.

Featured at the 2016 Global Eco conference, the West Coast 'Living Earth' GeoTrail, a co-venture of Mineral Resources Tasmania, Department of State Growth Tasmania, and West Coast Council is currently undergoing continuing development with work being directed at enhancing the quality of the interpretation. This geotrail, connecting the mining centres of Zeehan, Rosebery and Queenstown, currently provides information to enable visitors to understand and appreciate the geological processes and landscapes which are featured throughout the geotrail. Each site has a roadside sign, either a large sign with information and explanations, or a small sign showing the relevant QR Code web-link to the Living Earth website.
<http://www.cradlecoast.com/literature/Cradle%20Coast%20GeoTrail%20FINAL.pdf>

A feasibility study undertaken for the 'Living Earth' GeoTrail indicated that the following markets and strategies will give the GeoTrail the best chance of achieving an increase in visitor stops and stays as well as associated revenue.

- Engaging the local communities of the Trail to build pride and referrals to family, friends and visitors through involvement in content development, familiarisations, progress reporting and ongoing promotion.

- Engaging the existing visitor market to increase the number of stops and stays through the development and promotion of online communications and a downloadable free mobile app.
- Engaging relevant specialist groups in the Trail experience through use of specific publications and newsletters.
- Engaging the potential education market through the development and promotion of a regional education package involving the Trail and other relevant experiences.

All the presentations from all SEGRA and Global Eco conferences referred to in this report can be downloaded from <http://www.leisuresolutions.com.au/index.php/geotourism-industry-groups/>

Queensland's 'Dig the Tropic' <http://www.digthetropic.com.au/> is an operating example of a formative geotrail. 'Dig the Tropic' is a themed journey linking the wonders of the Southern Great Barrier Reef with the mysteries of Queensland's Outback. Following the Tropic of Capricorn, visitors can experience a living museum created by ancient events left behind, visiting sites such as the Stone House Museum, Age of Dinosaurs Museum, Lark Quarry, the Sapphire Gemfields, Capricorn Caves and the Great Barrier Reef.

Active geotrails proposals are continuing to be being implemented or considered by various government agencies and/or university groups in Western Australia (Murchison, Geraldton, and John Forrest and Meckering Geotrails), Tasmania (West Coast Living Earth GeoTrail, Furneaux Islands Geotrail), Queensland (Brisbane Valley Rail Trail, Dig the Tropics, Boulder Opal), New South Wales (Port Macquarie – now completed), South Australia (various projects including the Brachina Gorge Geotrail), Victoria (Kanawinka/Great Ocean Road area), and Norfolk Island.

In the Northern Territory, there two well defined trans-continental 'road adventures' exist as self-drive geotours. These are the Explorers Way extending from Port Augusta to Darwin, and the Savannah Way which passes East-West from Cairns to Broome through the Gulf Country, Katherine Region, Victoria River District and the Kimberleys. In addition, the Red Centre Way (formative Red Centre Geotrail) is under reconstruction with government funding. A fourth major geotrail is the largely unsealed, 'Gold Rush Way' linking the historic Arltunga and Halls Creek (WA) gold fields via the Tamani region – a known and active gold producing area.

There are also a wide range of smaller, dedicated journeys along walking tracks, old rail easements etc. being deemed suitable for development as geotrails in NSW, Tasmania, Qld, WA and SA.

NSW's 'Modern Mining Trail' concept <https://www.visitnsw.com/destinations/country-nsw/parkes-area/parkes/attractions/nsw-modern-mining-trail> represents another formative geotrail example. This is a unique opportunity to travel through Central NSW on the Modern Mining Trail and explore Australia's mining – past, present and future.

Destination NSW is currently developing a pragmatic and actionable Concept Plan that can assist stakeholders (including the GSNSW and the AGC) in the development and marketing of the NSW Country and Outback regions geological and fossil highlights. Specifically, the concept plan is designed to:

- Identify new product and experience opportunities, connected by a 'geotrail'.
- Provide a practical guide for the ongoing development of each site to improve the visitor experience based on the existing infrastructure.
- Identify gaps from other industry sectors which could support the experiences at each site while maintaining the integrity of each site.
- Draw together the story of each site to create a broader region-wide experience.

Last year a collaborative geotrail project was led by the University of Newcastle and supported by Port

Macquarie-Hastings Council, the GSNSW, the NSW National Parks and Wildlife Service and Birpai Local Aboriginal Land Council. With an accompanying brochure, website and smartphone app, the Port Macquarie Coastal Geotrail is a four kilometre walk from Shelly Beach to Rocky Beach that tells the story of plate tectonics and how the Earth's crust was formed along the stretch of coastline over the past 460 million years.

Appendix C

Geoparks and UNESCO Global Geoparks

Geoparks can evolve through a series of levels from 'pre-aspiring', 'aspiring', 'national', 'regional' (e.g. European or Asia-Pacific Regions) to 'global'. In China, there are three levels of geoparks: provincial, national and global geoparks, as well as 72 mining parks. They are all managed by local county or municipal governments under the direct supervision of the Ministry of Land and Resources. Currently, there are over 320 provincial geoparks (originally labelled as 'scenic areas') in China, among which 200 have already gained national status. With 37 of these designated as global geoparks (including Hong Kong Geopark) having acquired global status, China manages by far the largest number of global geoparks in the world.

A decision to establish global geoparks as UNESCO sites was taken by Member States at the 38th UNESCO's General Conference, the governing body of the organisation, which met in Paris from 3-18 November 2015. This new branding formalises a relationship with Geoparks first established in 2001. Global Geoparks have become an increasingly important tool for UNESCO to engage Member States and their communities in the Earth Sciences and geological heritage. During the UNESCO's General Conference, Member States also decided to endorse the statutes of a new international programme: the International Geoscience and Geoparks Programme (IGGP). This allows the organisation to more closely reflect the societal challenges of Earth Science today and provides an international status to a former network of sites of geological significance.

On 18th January 2018, the New Zealand National Commission for UNESCO announced the establishment of a UNESCO Global Geoparks programme in New Zealand. The National Commission has appointed a Geoparks Expert Advisory Panel to encourage and support New Zealand nominations for UNESCO Global Geopark status and already one 'aspiring' global geopark nomination (Waitaki Whitestone) is currently under consideration by UNESCO.

The Global Geopark brands is a voluntary, quality label and while it is not a legislative designation, the key heritage sites within a geopark should be protected under local, regional or national legislation as appropriate. UNESCO offers support to Global Geoparks on an ad-hoc basis via requests from Member States. Geopark status at any level, including 'global' does not imply restrictions on any economic activity inside a geopark where that activity complies with local, regional or national legislation. The focus of geoparks is on promotion and appreciation of geological heritage, geology and landscapes. These earth heritage sites are part of an integrated concept of protection, education and sustainable development <http://www.unesco.org/new/en/natural-sciences/environment/earth-sciences/global-geoparks>

There are six UNESCO Global Geoparks in Europe that are geoparks specifically because of their mining history, and that mining continues in some of these territories.

In summary, a geopark achieves its goals through conservation, education and tourism. It seeks to conserve significant geological features and explore and demonstrate methods for excellence in conservation and geoscientific knowledge. This is accomplished through protected and interpreted geosites, museums, information centres, trails, mine sites, guided tours, school class excursions, popular literature, maps, educational materials and displays, and seminars. Geoparks are capable of being community driven. Geoparks stimulate economic activity and sustainable development through geotourism. By attracting increasing numbers of visitors, a geopark fosters local socio- economic development through the promotion of a quality brand linked with the local natural heritage. It encourages the creation of local enterprises and cottage industries involved in geotourism and geoproducts. The geopark concept is an iconic one, applicable across all continents. The value of the global geopark concept is explained in a journal article <https://www.geoexpro.com/articles/2017/03/unesco-global-geoparks>

An application area for a UNESCO Global Geopark has no stipulated size but its geographical boundaries must clearly embrace a contained area of land (both protected and non-protected); with private landowners having the option of not allowing geopark activities on their land, should they choose not to participate.

Even if an area has outstanding, world-famous geological heritage of outstanding universal value, UNESCO has determined that it cannot be a UNESCO Global Geopark unless the area also has a plan for the sustainable development of the people who live there. To succeed, a UNESCO Global Geopark nomination, lodged by an appropriately incorporated management body, must have the support of local communities.

By raising awareness of the importance of the area's geological heritage in history and society today, UNESCO Global Geoparks provides local people with a sense of pride in their region and strengthens their identification with the area. The creation of innovative local enterprises, new jobs and high-quality training courses is stimulated as new sources of revenue are generated through geotourism, while the geological resources of the area are protected.

Another major program of UNESCO is World Heritage sites. Of particular interest is a current nomination by the South Australian State Government for the Flinders Ranges to principally celebrate and protect the significant Ediacaran fossil fauna assemblage; hence the attractiveness of this site for global geotourism.

In a 2012 UK study, it was determined that of the three UNESCO programs (World Heritage Sites, Global Geoparks and Biospheres), the Global Geopark program generated the highest financial benefit per designation.

UNESCO Activity	Estimated financial benefit per year	Number of Sites if appropriate	Estimated financial benefit per designation
World Heritage Sites	61.1 M GBP	28	2.2 M GBP
Global Geoparks	18.8 M GBP	6.5	2.9 M GBP
UNITWIN/UNESCO Chairs	2.9 M GBP	16	0.18 M GBP
Biosphere Reserves	2.3 M GBP	6	0.38 M GBP
Everything Else	4.3 M GBP	n/a	
TOTAL	89.4 M GBP		

Wider Value of UNESCO to the UK (2012-2013): www.unesco.org.uk



UNESCO GLOBAL GEOPARKS Economic Impact Study 1: United Kingdom

The Economic value of Geoparks to regional development in China is detailed in a 2017 presentation by Dr Young Ng <https://www.slideshare.net/leisuresolutions/economic-impacts-of-geotourism-and-geoparks-in-china-dr-young-ng>

To facilitate geopark development, a geoparks representative body (known as Geoparks WA Inc). was established in 2018 with the principal object of 'supporting and promoting the development of geoparks, geotourism and geotrails in Western Australia'. There is currently no other body in place that performs a similar function nationally.

Appendix D

Other Emerging National Geotourism Destinations

Warrumbungle Volcanic Geotrails, New South Wales

The GSNSW is currently developing a geotrail network to interpret the volcano part of a chain along Eastern Australia. It is proposed to include geotrails within the Warrumbungle National Park following existing walking trails, with a regional driving trail linking related sites and services. This project will be carried out in collaboration with the Office of Environment and Heritage, regional councils, traditional owners and visitor centres.

GSNSW is also developing a geotrail along the Newcastle coastline and is evaluating geotrail proposals in various locations in Western NSW.

'Unearth the Etheridge' Scenic Region, Etheridge Shire Council, Far North Queensland

In 2017, a highly knowledgeable Geoscience and Mineral Reference Group undertook a considerable amount of work in defining the international significance of this region located west of the Atherton Tablelands in Far North Queensland, identifying some 20 key geosites in addition to the existing tourism attractions of Undara and Cobbold Gorge and the Talaroo Hot Springs area managed by the Ewamian Aboriginal Corporation. In addition, this reference group developed a sophisticated GIS map of the region with smartphone connectivity, as well as excellent geological content for the proposed Savannahlander rail geotrail. A heritage specialist also generated a fascinating overview of the mining heritage of the region.

These events have contributed to a fascinating diversity of geology, mineral resources and landscapes, which influenced the lives and customs of Aboriginal people and patterns of European settlement.

The assessment process included consultation with all key stakeholders (e.g. indigenous communities, national parks, tourism resorts) undertaking individual self-assessments; consultation with key State Government agencies; and community consultation including information bulletins, public meetings involving Shire Councillors.

The assessment identified the following natural and cultural assets.

- Geosites – In abundance with some 20 key geosites readily accessible to the public. Two geological events of Cainozoic age now feature as iconic geotourism attractions in the region, the most significant of which is the Undara Lava Tube system truly unique in the world based on consideration of age, preservation and lineal extent, as well as the geomorphological expressions within flat-lying sediments at Cobbold Gorge. Both of these landforms, as well as the other Proterozoic and Paleozoic landforms in the area have resulted in a diverse range of landforms with unique biodiversity characteristics including a rich assemblage of birdlife.
- 'Geo villages' – Four small townships, all with community engaged geosites (including agate, sapphire and gold fields); key established ecotourism resorts of Undara and Cobbold Gorge; and the indigenous Talaroo Hot Springs development.
- Geotrails – The Lava Tubes, Gems and Gorges Geotrail of the Savannah Way with connections to nearby mining heritage locations.
- National Parks – Undara Volcanic Park and four other park areas.
- TerrEstrial Mineral/Fossil Museum – the most significant mineral museum in regional Queensland.
- Many heritage mining sites and small gold mining operations underscores Etheridge's status of one Australia's most diversified mineralised areas.

A Geotourism Development Strategy for the Etheridge 'Scenic Area' has now been approved by Etheridge Shire Council that is committed to developing tourism along with agriculture and mining as the three-fold basis of their forward regional development planning. The Shire's regional development strategy captures the aspirations of the pre-existing 'Unearth Etheridge' tourism strategy, providing additional natural and cultural heritage content; and through collaboration with other adjacent Local Government Agencies, establishment of strong geotrail linkages with geotourism attractions outside of the Shire.

<https://www.etheridge.qld.gov.au/downloads/file/449/esc-geotourism-discussion-paperpdf>

In 2019, the Queensland State Government has committed substantial grant funding (\$2.3 million) for the development of the Talaroo Hot Springs attraction and for the building of a glass bridge across Cobbold Gorge. In addition, Etheridge Shire Council is planning a major upgrade of the TerrEstrial Visitor Centre/Museum and is reviewing the feasibility of constructing a linked Geology Time Trail based on the model established by Geoscience Australia adjacent to its headquarters in Canberra.

Destination Pagoda, Lithgow, New South Wales

The 'Gardens of Stone' region, on the western edge of NSW's Greater Blue Mountains World Heritage Areas has the opportunity to become a geotourism destination because of its internationally unique geomorphological wonderland and its other significant natural and cultural heritage.

In March 2019 the Gardens of Stone Alliance (Colong Foundation for Wilderness, Blue Mountains Conservation Society and Lithgow Environment Group) launched the visitors plan *Destination Pagoda* on how the regional township of Lithgow could be transformed into a world class geotourism destination. The Wiradjuri people share this vision.

Lithgow could become a gateway geotourism destination that provides a sustainable economic future for its workers, community and environment. *Destination Pagoda* affirms how Lithgow's "Gardens of Stone can become a world-class ecotourism and geotourism destination. It is based on the vision for the proposed establishment of a state conservation area reserve that allows the continuation of responsible underground coal mining.

Nilpena National Park, Flinders Ranges, South Australia

In support of the proposed World Heritage Area nomination over much of the Flinders Ranges, and within the financial support of the Foundation for National Parks and Wildlife and other parties, the South Australian Government has acquired much of Nilpena Station to secure protection of the type Ediacaran fossil assemblage and to develop this region as a major geotourism attraction.

Murchison Georegion, Western Australia

Western Australia's Midwest Development Commission (MWDC) is working with seven shire councils to establish WA's first major geotourism development to be built on a geotrail model, focused on the Murchison sub-region of WA. The MWDC believes that the ancient Murchison geology provides the ideal platform for unique, nature-based tourism experiences of global significance, particularly to the 'experience seeker / dedicated discoverer' market. The Mid West Tourism Development Strategy (2014) concluded that the region's iconic nature-based tourist attractions were not developed to their potential and that its visitor appeal was not fully realised. The Strategy identified geotourism in the Murchison sub region as a potential 'game changing' tourism initiative, with capacity to help the region realise its potential as a major tourism destination in its own right.

Pilbara Georegion, Western Australia

Embracing through geotourism, Western Australia's East Pilbara Georegion with its world-famous North Pole stromatolites, given this geosite's world class profile as the oldest living community fossils on the planet, has considerable potential in establishing Australia as a 'must see' destination for fossil-rich geoheritage visitation. Realisation of this potential, when combined with the parallel development of the truly unique Nilpena Ediacaran fossil assemblage site, as well as the established Age of Dinosaurs museum in Winton in Western Queensland, could well deliver for Australia an unparalleled positioning as a geotourism destination featuring major fossil assemblages.

Other Mining Regions

Overseas experience (e.g. in China and Europe) also demonstrates that new tourism destinations can be created around mining centres as a mechanism for stimulating economic activity and maintaining communities at the cessation of mining activity. In fact, in China, some 70 'mining parks' have been created around this concept.

One of the topics that has been discussed recently with the GWG is the provision of mechanisms for collaboration with providers of other areas of natural (bioregion) and cultural heritage content, inclusive of mining and resource industry heritage (e.g. mining companies, geological and mining museums, historical societies e.g. the Australasian Mining History Association), as well as specialist groups with interests in flora and fauna etc.)

Appendix E

Engagement with the Australian National Landscapes Programme

A number of the Geotourism Standing Committee's members have been actively involved in and have championed the Australian National Landscapes (ANL) Programme because of the opportunity to promote geotourism concepts. The Programme was the first time the tourism sector, nature conservation managers and tourism advocacy organisations had worked closely together to present Australia's top nature tourism experiences. The Programme facilitated coordinated tourism planning and management and provided a focus for international marketing. The Programme was delivered 'bottom up', with coordinating bodies for each ANL made up of land managers, regional tourism bodies and local government. The system is 'blind' to land tenure boundaries and in that sense, resembles the geopark structure. Three of the ANLs straddle state borders, demonstrating a unique level of cooperative management.

The Australian National Landscapes Programme included the following regions: Australian Alps (New South Wales/Victoria), Australia's Green Cauldron* (New South Wales/SE Queensland border region), Great Barrier Reef* and Wet Tropics* area (Queensland), Australia's Red Centre* and Australia's Timeless North* and Sydney Harbour (New South Wales), the Kimberley, Ningaloo-Shark Bay* and Great South West Edge (Western Australia), and Tasmania's Island Heritage*, noting that the National Landscapes identified by an asterisk embrace in part key sites included in World Heritage listings.

Unfortunately, in 2014, the two key participating Australian Government agencies advised that they had stepped back from a central coordination role and would instead encourage local steering committees and the tourism industry to further advance this concept. However, in 2017 the peak tourism industry lobby group, the Tourism and Transport Forum Australia, has released a white paper extolling the virtues of the ANL programme, a move that can only assist in promoting the development of geotourism

<https://www.ttf.org.au/wp-content/uploads/2017/08/TTF-Unlocking-our-Great-Outdoors-August-2017.pdf>