



Southwest Sky Country - Dark Sky Sanctuary Proposal

**Evaluating the Economic Value of
Protecting Dark Skies in Southwest
National Park, Lutruwita / Tasmania**

Dark skies, bright returns

Beyond the immeasurable value of cultural, public health and ecological benefits of a Dark Sky Sanctuary in Southwest National Park, in this report we demonstrate that the economic benefits alone justify the case for a Southwest Dark Sky Sanctuary.

Our economic analysis indicates that for every dollar spent on establishing and maintaining a Dark Sky Sanctuary in Southwest National Park, an estimated \$4.30 in benefits is generated for the surrounding region and Lutruwita / Tasmania.

Introduction

What are Dark Skies?

Dark skies refer to natural, unspoiled night skies (and environments) that are free from artificial light pollution. Protecting these skies is becoming increasingly important as light pollution affects our health, wildlife, and the natural beauty of the stars. Ensuring areas are free from light pollution offers not only environmental benefits but significant economic, social, and cultural advantages.

What is a Dark Sky Sanctuary?

A Dark Sky Sanctuary is a designated area where artificial light at night (ALAN) is minimized or eliminated to protect the integrity of the night sky. These sanctuaries, certified by Dark Sky International (DSI), serve as crucial sites for astronomy, cultural practices, education, and eco-tourism.

Where is Southwest National Park?

The Southwest National Park, located in Lutruwita / Tasmania, is one of the state's most ecologically diverse regions, recognised as part

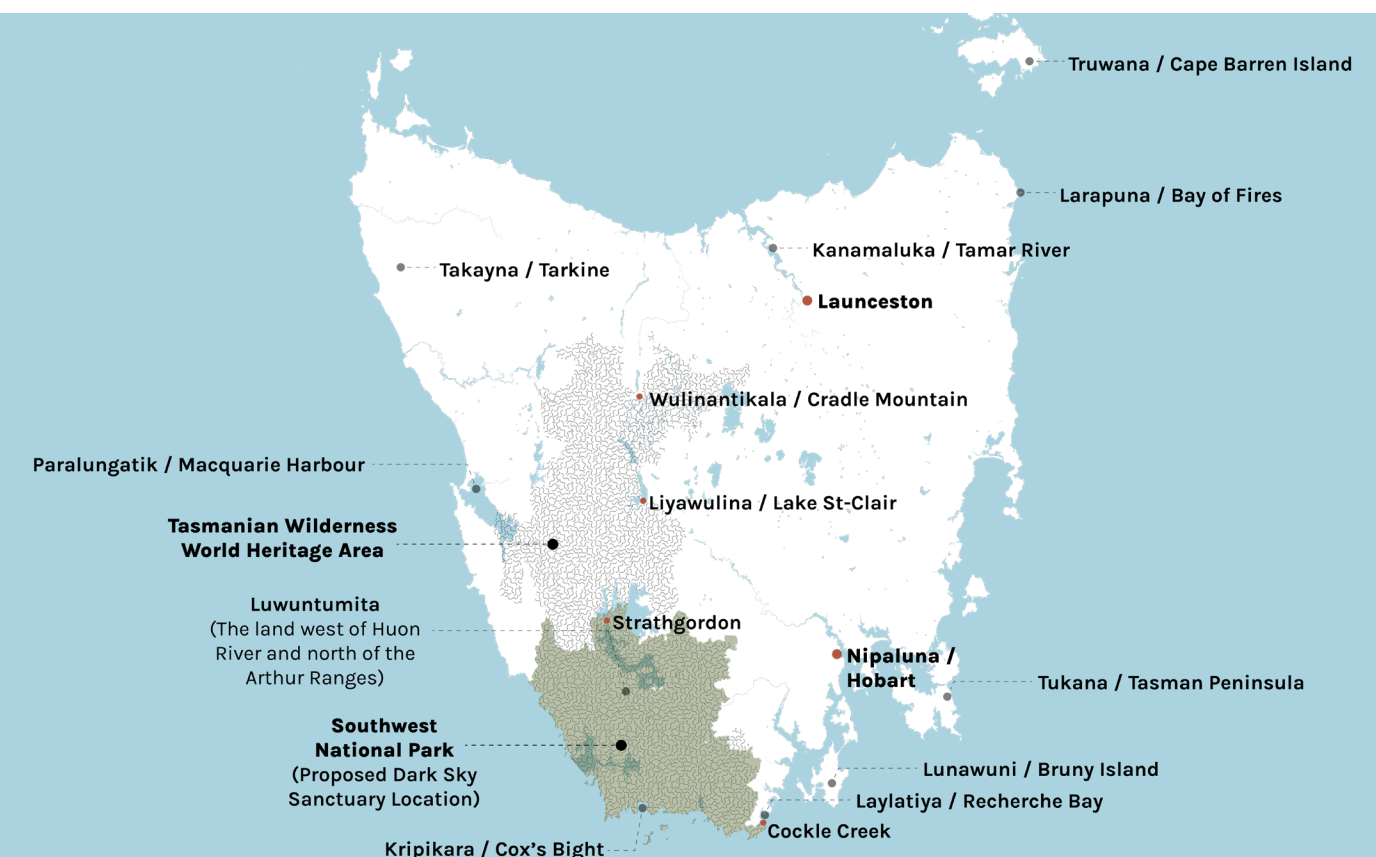
of the Tasmanian Wilderness World Heritage Area. It protects highly remote wilderness areas that are of great environmental, cultural, and social importance.

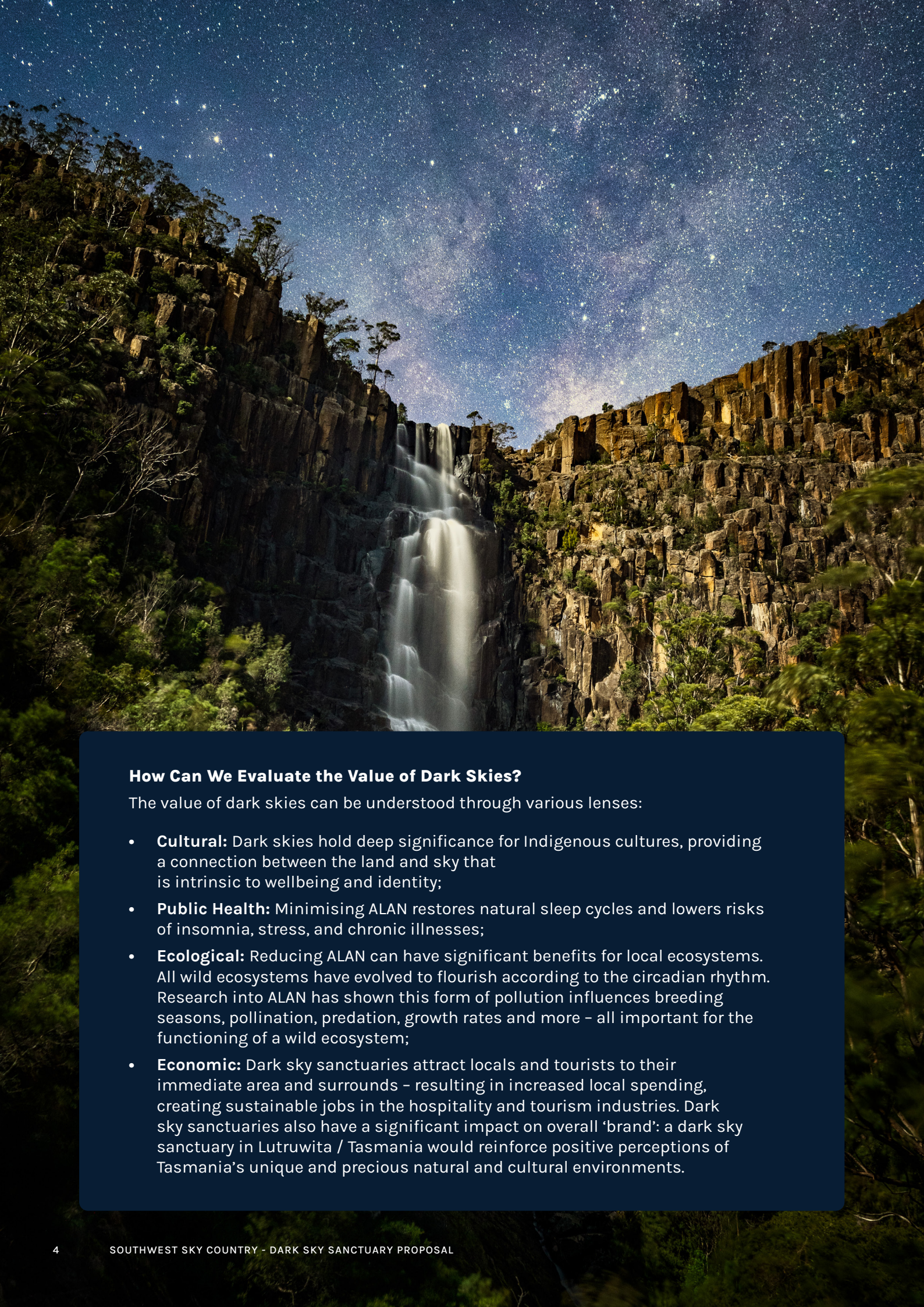
Why Southwest National Park?

The Southwest National Park is a logical first step for Sanctuary protection in Tasmania.

It has a straightforward land tenure arrangement to support an application, and it is a vast, important area - when it is protected, it will more than double the protected night skies in Australia, and make up almost 4% of land area of all protected night skies in the world.

The Destination Management Plan for Southern Tasmania identifies a Dark Sky Sanctuary as one of the key catalyst projects for creating accessible natural wilderness and cultural heritage experiences. The TWWHA Tourism Masterplan also identifies the opportunity for dark sky protection to improve and manage tourism within in the TWWHA.





The Cultural Value of Dark Skies

The Aboriginal cultural practice of reading Country has always been a part of well-known Aboriginal principles and value systems. What many people fail to understand is the breadth of that knowledge and the absence of boundaries surrounding it. Aboriginal people take knowledge from the land, from the oceans, the water and the sky – a method of holding ancient wisdom and weaving it through time and passing it into the future. Palawa connection to Sky Country is as deep and as long as the stars are old. Sky Country has always been an enriching and connective space used by Palawa to share story.

The stars help guide us to these stories, they are the illustrations, the backdrop to our teachings and the vessel for our songs. Palawa have always known that even in the dark spaces there is knowledge; the celestial scapes, the dark spaces formed between constellations become the weaving of story through the sky. In the darkness we find images that belong to the cultural story of Country, and through understanding the movement of the stars we too are woven

into the story. Through the learning of dark sky knowledge we build a cultural relationship with the night sky. The ability for this relationship to be maintained and strengthened is built on ensuring we can create culturally appropriate spaces to engage in story and to feel connected with Sky Country, including with the night sky. The protection of dark skies is culturally important for the continuation of cultural knowledge sharing.

The Southwest Dark Sky Country proposal is a method of protecting the cultural landscape and in turn protecting the cultural connection to our ancient knowledge and stories. The Southwest National Park, and the southern coastline it protects, is immensely important to Palawa people as it is the very place of creation, where Palawa began. Palawa were born from the stars, making this proposal a mechanism of protection for Palawa knowledge and culture both from ancient times, long into our future.

Sharnie Read – Palawa community member

How Can We Evaluate the Value of Dark Skies?

The value of dark skies can be understood through various lenses:

- **Cultural:** Dark skies hold deep significance for Indigenous cultures, providing a connection between the land and sky that is intrinsic to wellbeing and identity;
- **Public Health:** Minimising ALAN restores natural sleep cycles and lowers risks of insomnia, stress, and chronic illnesses;
- **Ecological:** Reducing ALAN can have significant benefits for local ecosystems. All wild ecosystems have evolved to flourish according to the circadian rhythm. Research into ALAN has shown this form of pollution influences breeding seasons, pollination, predation, growth rates and more – all important for the functioning of a wild ecosystem;
- **Economic:** Dark sky sanctuaries attract locals and tourists to their immediate area and surrounds – resulting in increased local spending, creating sustainable jobs in the hospitality and tourism industries. Dark sky sanctuaries also have a significant impact on overall ‘brand’: a dark sky sanctuary in Lutruwita / Tasmania would reinforce positive perceptions of Tasmania’s unique and precious natural and cultural environments.



Steps to Establishing a Dark Sky Sanctuary

Establishing a Dark Sky Sanctuary in Southwest National Park involves the Tasmanian State Government making an application to Dark Sky International and meeting their key requirements. These requirements include minor administrative costs such as an initial lighting audit and management plan, and ongoing monitoring and promotion of the Dark Sky Sanctuary once it is proclaimed.

While these costs are relatively minor – around \$1.15 million in initial investment – numerous sources in the Tasmanian State Government have stated that this is the only barrier to progressing an application and realising this incredible opportunity for protection and celebration of night time environments and

dark skies. All key parties recognise the value and importance of a Dark Sky Sanctuary in Lutruwita / Tasmania. There simply has not been the funding allocated to this exciting project.

In this economic report, we will demonstrate how cost-effective establishment of a Dark Sky Sanctuary would be, and outline significant long-term benefits and return on investment. Compared to the high costs of other large-scale tourism or development projects considered by the State Government - such as the Parks Privatisation (Expression of Interest) process or the proposed Tyndall Range walk development - this fantastic opportunity is low risk and high reward: and should be progressed without delay.

Global Examples of Dark Sky Success

Several global locations have demonstrated the tremendous potential of dark sky sanctuaries for tourism, local economic development, and environmental protection. Examples such as those shown below offer compelling case studies that demonstrate that the establishment of a Dark Sky Sanctuary in the Southwest National Park could result in substantial economic benefits.

Jasper National Park, Canada: Since its certification in 2011, Jasper has seen a 30% increase in dark sky tourism, with the annual Dark Sky Festival generating \$5 million in direct economic activity. Visitor spending contributes over \$50 million annually to the region’s economy⁵.

Aoraki Mackenzie, New Zealand: The world’s first International Dark Sky Reserve, Aoraki Mackenzie, has seen dark sky-related tourism grow by 30%. The region generates NZ\$10 million annually through tourism, with a significant portion of that coming from overnight stays relating to dark sky tourism⁶.

Namib Desert, Namibia: The Namib Desert, home to a UNESCO-recognized Dark Sky Reserve, generates approximately \$5 million annually from eco-tourism and stargazing tourism⁷.

Advantages of dark sky tourism

Establishing a Dark Sky Sanctuary in Southwest National Park offers several key benefits:

Low establishment cost: The costs to establish a sanctuary are modest compared to other major tourism projects.

Tourism boost: Dark sky initiatives encourage visitors to stay overnight, including during the off-season when tourism typically slows¹. This brings in much-needed revenue during less popular months².

Leveraging existing infrastructure: By leveraging nearby towns and their existing tourism infrastructure, a Dark Sky Sanctuary would enhance the offerings of surrounding communities without requiring major new investment³.

Quiet, low-impact tourism: Dark sky tourists are high value tourists. These types of visitors typically have a lower ecological impact, aligning well with sustainable tourism goals. These visitors also tend to have higher average spending per night, especially if they stay for several nights to engage with night time environments⁴.

Brand benefits: A Dark Sky Sanctuary would reinforce the nature-based brand of the island, attract international media attention, and generate long-term interest in low-impact-and-high-value visitation. These brand and reputational impacts - while not directly modelled economically in this report due to their broad nature - would have a significant long term benefit for Lutruwita / Tasmania’s economy.

¹ Moss, G., McGeorge, P., & Rubner, O. (2014). Design, marketing and financing of services in tourism and related fields. *Tourism Management*, 40, 194-210.

² Falchi, F., Cinzano, P., Duriscoe, D., Kyba, C. C., Elvidge, C. D., Baugh, K., ... & Furgoni, R. (2016). The new world atlas of artificial night sky brightness. *Science advances*, 2(6), e1600377.

³ Che, D. (2016). *New geographies of leisure, tourism, and mobilities*. Routledge.

⁴ Smith, J. W., Miller, Z. D., Miller, A. B., Lamborn, C. C., Beeco, A., & Anderson, S. (2023). Characteristics, management preferences, and spending profiles of night sky recreationists in Utah. Logan, UT: Institute of Outdoor Recreation and Tourism, Utah State University.

⁵ Parks Canada and Jasper Dark Sky Festival Economic Impact Report (2020)

⁶ Tourism New Zealand and Mackenzie District Council's Annual Reports.

⁷ Namibia Tourism Board and International Dark Sky Association (IDSA).

Economic Benefits of a Southwest Dark Sky Sanctuary

Economic Impact Assessment

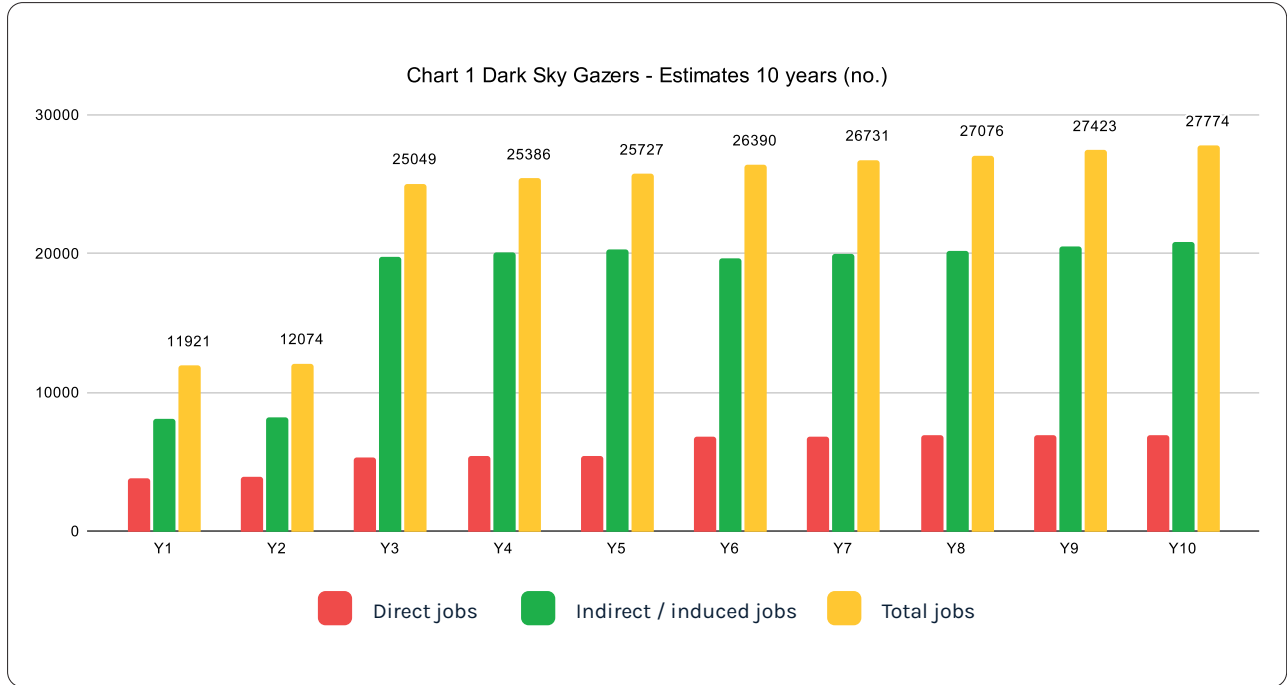
This report provides an indicative economic impact assessment of the proposed Southwest Dark Sky Sanctuary. This high level assessment models the potential visitors to the area directly seeking experiences within Southwest Dark Sky Sanctuary, with projections over a 10 year period (2027 - 2036).

Visitor numbers were modelled based on a number of assumptions in relation to tourist visitors (internationals, intrastate and interstate visitors) and local and regional residents. The assessment was undertaken by economic consultants Michael Connell & Associates (MCA).

The modelling for dark sky experiences (as shown in Chart 1) demonstrates:

- **Local and regional residents:** these increase from 4849 in year 1 to 7785 in year 10. It is assumed that these residents visit once per year;
- **Tourist visitors:** these increase from 8072 in year 1 to 20,830 in year 10. These tourist visitors are all are assumed to have an overnight stay in the region;
- **Total night time visitations:** increase from 11,921 in year 1 to 27,774 in year 10.

Visitor numbers grow over time as recognition of the Sanctuary and dark skies increases. Small businesses are likely to develop to service this increased visitor market. Examples could include: night sky guides; cultural experiences; astrophotography; accommodation and guide packages etc.



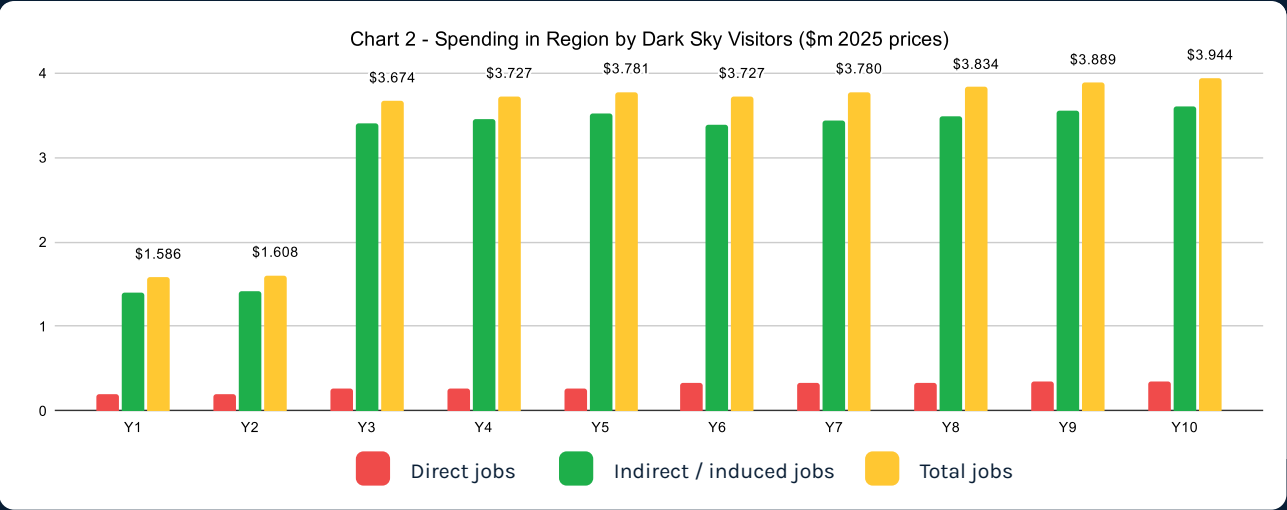
Source: MCA modelling and analysis, April 2025

Overnight Stays and Spending

As a night time experience in a National Park with no commercial accommodation (aside from boat expeditions), many visitors will camp in the National Park itself. However, many visitors will choose to stay overnight at commercial accommodation in the region before, during or after their visit to the Sanctuary in locations such as Dover, Franklin, Huonville, Maydena and Strathgordon. In the modelling we have assumed that 30%

of local and regional residents, and 70% of tourists will stay overnight in commercial accommodation in the region.

- Based on these assumptions there would be a total of 6805 overnight visitors year 1 increasing to 16,664 in year 10 as overall visitation grows;
- Total spending (constant \$2025 prices) in the region by overnight visitors increases from \$1.586 million in year 1 to \$3.944 million in year 10 (as shown in Chart 2).



Source: MCA modelling and analysis, April 2025

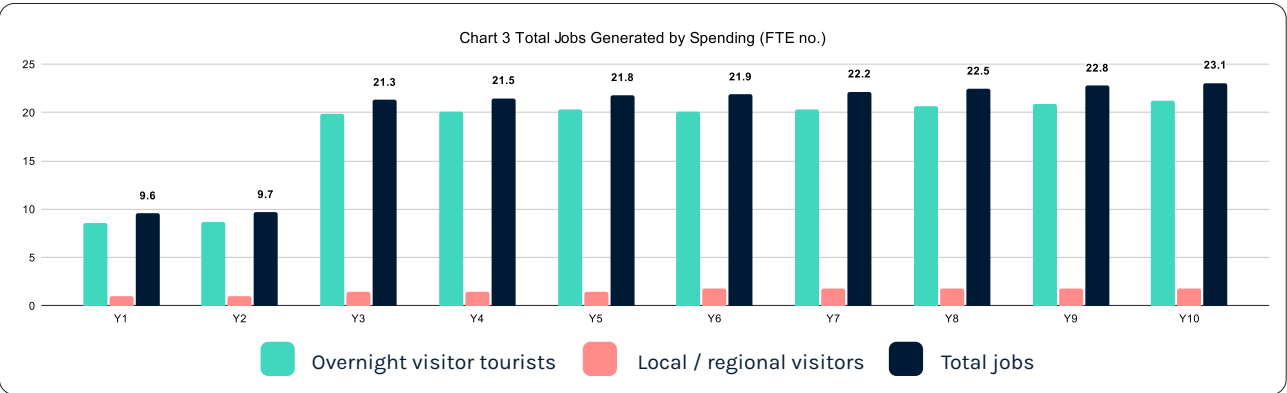
Job Creation & Regional Income Increase

The spending in the region generates a total of 9.6 full time equivalent jobs (6.7 direct and 2.9 indirect / induced jobs) in year 1 increasing over time to 23.1 FTE jobs in year 10 (16.1 direct and 7.0 indirect / induced jobs). Total Jobs are mainly generated by tourist visitors – 8.5 jobs year 1 and 21.2 jobs in jobs in year 10 (as shown in Chart 3).

Regional income increase: The spending in the region also generates an increase in

regional income through a broader regional economic benefit. Regional income (\$2025 prices) generated in year 1 is \$0.848 million (\$0.672 million direct and \$0.176 million indirect / induced). This increases to \$2.048 million in year 10 (\$1.623 million direct and \$0.425 million indirect / induced).

This results in a Regional Income Increase of \$17.396 million (in constant \$2025 prices) across 10 years - a substantial outcome from this opportunity.



Source: MCA modelling and analysis, April 2025

Cost-Benefit Analysis

Project Costs: The estimated costs of establishing the Southwest Dark Sky Sanctuary relate to the costs of completing and monitoring a successful application for a Dark Sky Sanctuary through Dark Sky International. These include \$750,000 establishment costs; and ongoing costs of \$200,000 per year. Total costs over 10 years are \$2.750 million (in constant \$2025 prices).

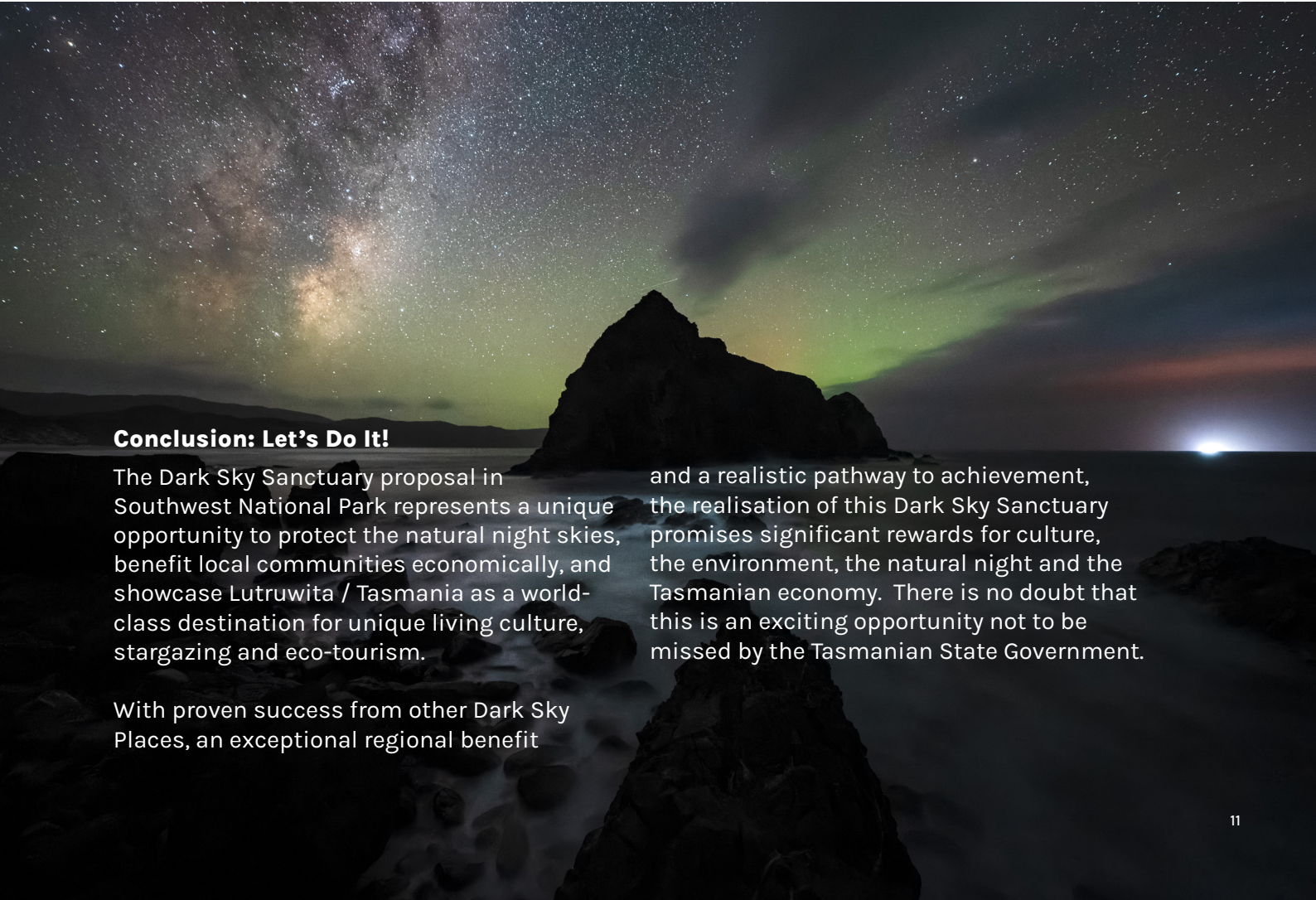
Benefit Cost Ratios: A strong benefit-cost ratio (BCR) of 4.3 (as shown in the table on the opposite page) reflects the significant regional benefits and relatively low cost of establishing and maintaining this Dark Sky Sanctuary. For every dollar spent on this project, an estimated \$4.30 in benefits is generated for the surrounding region and Lutruwita / Tasmania. As a rule of thumb, a BCR above 1.0 means a project’s benefits exceed its costs. A ratio of 4.3 is therefore highly favourable – indicating strong net benefits and value for money.

Dark Sky Sanctuary Costs	Costs <\$2025 Prices>	10 Year Costs <\$2025 Prices>
Establishment Costs		
Initial sky brightness survey	\$100,000	\$100,000
Lighting audit	\$80,000	\$80,000
Creation of lighting management plan	\$20,000	\$20,000
Upgrade of non-compliant lighting	\$500,000	\$500,000
Creation of signage and interpretation	\$50,000	\$50,000
Total Costs	\$750,000	\$750,000
Ongoing Costs		
Annual report and survey	\$150,000 pa	\$1,500,000
Annual event/comms	\$50,000 pa	\$500,000
Total Costs Annual & 10 Years	\$200,000 pa	\$2,000,000
Total Costs – 10 Years		
Total Project & Ongoing Costs -10 Years		\$2,750,000

Source: Tasmania – a dark sky sanctuary, Dark Sky Tasmania & Destination Southern Tasmania

Dark Sky Project 10 Years	Discount Rate
Regional Cost Benefit (\$2025 prices)	7%
A. Project Costs	
Capital Costs	\$750,000
Costs – Ongoing (10 years)	\$2,000,000
Total Costs	\$2,750,000
B. Benefits	
Regional Income Increase	\$17,396,817
Total Benefits	\$17,396,817
C. Cost Benefit	
Total Benefits (\$) Present Value	\$11,729,096
Net Present Value (\$) Total Benefits	\$8,979,096
NPV/Cost	3.3
Benefit Cost Ratio (BCR)	4.3

Source: MCA modelling and analysis, April 2025



Conclusion: Let’s Do It!

The Dark Sky Sanctuary proposal in Southwest National Park represents a unique opportunity to protect the natural night skies, benefit local communities economically, and showcase Lutruwita / Tasmania as a world-class destination for unique living culture, stargazing and eco-tourism.

and a realistic pathway to achievement, the realisation of this Dark Sky Sanctuary promises significant rewards for culture, the environment, the natural night and the Tasmanian economy. There is no doubt that this is an exciting opportunity not to be missed by the Tasmanian State Government.

With proven success from other Dark Sky Places, an exceptional regional benefit

Let's work together to create a Dark Sky Sanctuary in Southwest National Park. You can help by supporting the call for the dark skies and night time environment of the Southwest to be protected in a Dark Sky Sanctuary.

Get involved! Here are some direct and powerful actions that you can take:

- **Contact your local political representative** and encourage them to support the protection of dark skies. The creation of the Southwest Dark Sky Sanctuary makes economic sense, it needs political will and associated funding.
 - **Premier** – The Honourable Jeremy Rockliff MP (jeremy.rockliff@parliament.tas.gov.au)
 - **Minister for Environment** – The Honourable Madeleine Ogilvie MP (madeleine.ogilvie@parliament.tas.gov.au)
 - **Minister for Tourism, Hospitality and Events** – The Honourable Jane Howlett MP (jane.howlett@parliament.tas.gov.au)
 - **Minister for Parks** – The Honourable Nick Duigan MP (nick.duigan@parliament.tas.gov.au)
 - **Leader of the Opposition** – The Honourable Josh Willie MP (josh.willie@parliament.tas.gov.au)
 - **Shadow Minister for Environment, Parks & Climate Change** – Janie Finlay MP (janie.finlay@parliament.tas.gov.au)
- **Let the papers know:**
 - mercuryledletter@dbl.newsltd.com.au (South Tas)
 - editor@examiner.com.au (North Tas),
 - letters@theadvocate.com.au (North West Tas)
- **You can be part of the campaign:**
 - Participate in our 'Eyes on the Sky' citizen science project to record dark sky data in Southwest National Park.
 - Download our guide to experiencing the Southwest National Park at night – see wilderness.org.au/southwest-sky-county
 - Contact the Wilderness Society Tasmania at skycountry@wilderness.org.au
- **Follow along with Dark Sky Tasmania at:** www.darkskytasmania.org, www.facebook.com/DarkSkyTasmania, and @darkskytasmania
- **Experience the dark skies of Lutruwita / Tasmania for yourself** – and feel for yourself what they offer the natural and cultural values of the Tasmanian Wilderness World Heritage Area and the Southwest National Park.
- **Share your experiences widely.** Tell your friends and family what you saw. We always love hearing supporter stories. Tag the Wilderness Society #naturewelove on your online social channels. You can also write to us via the email above!

The Wilderness Society, Oct 2025

wilderness.org.au
facebook.com/WildernessSocietyTasmania

With support from Dark Sky Tasmania

Dark Sky Tasmania is a chapter of the International Dark Sky Association.

See: <https://www.darkskytasmania.org/dark-sky-sanctuary> for more about this campaign.

DISCLAIMER: Visitors should be aware that natural hazards occur in Lutruwita / Tasmania's wild places. The Wilderness Society accepts no liability for any injuries or damage resulting from such hazards.

All images: Luke Tscharke