Snowy Mountains Special Activation Precinct

NSW GOVERNMENT

Master Plan
July 2022

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Acknowledgement

We acknowledge Country and pay respects to the Monero Ngarigo people as the Traditional Owners and Custodians of the land and waters on which the Snowy Mountains Special Activation Precinct is situated and connected to via a broader landscape.

We recognise their continued connection to Country and that this connection can be seen through stories of place and cultural practices such as art, songs, dances, storytelling and caring for the natural and cultural landscape of the area.

We also recognise the continuing living culture of Aboriginal people, and the significance of the Snowy Mountains in that living culture. We recognise the contemporary stories of displacement and the cultural significance of Monero Ngarigo in the continued journey of self-determination in Australia.

We acknowledge all the people who have and will contribute their stories of Snowy Mountains and their connection to this place. We recognise the importance of telling the First story, first. All other stories of place come from and are woven into the First Story.

We recognise the importance of truth telling, a reckoning and the telling of the whole story. We acknowledge that the land on which the Snowy Mountains Special Activation Precinct stands was, is and always will be Aboriginal land.

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Snowy Mountains Special Activation Precinct Master Plan

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Executive summary

Vision

The Snowy Mountains is the rooftop of Australia where a unique alpine landscape meets a dramatic climate not found elsewhere on the continent. This is the high country, an unmissable destination where visitors from Australia and abroad are drawn year-round to the everchanging seasons and unparalleled outdoor experiences. The rich culture, authentic character, and endless opportunities of the region is why people call the Snowy Mountains home. A patchwork of local landscapes and connections that inspire exploration and provoke adventure mean your first visit is never your last.

What are Special Activation Precincts?

Special Activation Precincts are a new way of planning and delivering projects in certain areas of regional NSW to attract and grow businesses, provide more employment opportunities and stimulate the regional economy.

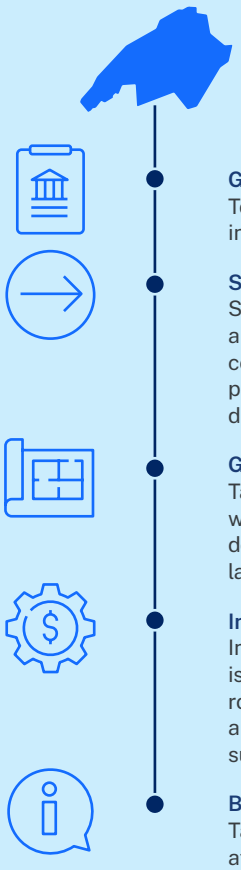
The NSW Government is supporting this approach by:

- leading the master planning that streamlines the planning pathway
- investing in and delivering enabling infrastructure that supports businesses to establish
- facilitating and supporting the establishment of new industries and businesses.

This means that businesses will be able to establish and grow with certainty and confidence knowing that the right planning framework is in place for streamlined approvals, and infrastructure is in place to support growth and development.

The creation of Special Activation Precincts is part of the NSW Government's 20 Year Economic Vision for Regional NSW and will be delivered as part of the $4.2 billion Snowy Hydro Legacy Fund.

Figure 1: Key elements of a Special Activation Precinct



Government-led studies
To create upfront strategic land use and infrastructure planning.

Streamlined planning
Streamlined planning and environmental approvals to provide certainty and confidence to business. This may include providing for land uses that suit complying development or approval exemptions.

Government-led development
Tailored master plans for each precinct with a delivery schedule that supports orderly development, sensitive to market drivers, landowners and infrastructure delivery.

Infrastructure investment
Investment into enabling infrastructure is made by the NSW Government into roads, water, power, digital connectivity, and other necessary infrastructure to support the precinct.

Business Concierge
Targeted business concierge services to attract investment and support businesses to establish and grow in each precinct.

The Snowy Mountains Special Activation Precinct

The Snowy Mountains Special Activation Precinct (the Precinct) was announced by the NSW Government in November 2019. The Precinct investigation area covered over 70,000 hectares, focusing on the Jindabyne town centre and areas of high tourism interest within Kosciuszko National Park.

The Precinct will leverage the region's environmental, cultural and landscape attributes and establish Australia's alpine capital as a resilient year-round tourism destination. The planning process is focused on improving transport connectivity, conserving important environmental and heritage values, and supporting Jindabyne's role as Australia's national centre for elite winter sports.

Purpose of the Master Plan

The Master Plan is an important part of the planning framework for the delivery of the Precinct. It is the statutory planning document that supports the *State Environmental Planning Policy (Precincts — Regional) 2021* (Precincts — Regional SEPP), *Snowy River Local Environmental Plan 2013* (Snowy River LEP), and the Kosciuszko National Park Plan of Management.

The Master Plan provides the vision and principles for the Precinct and is supported by structure plans and provisions to ensure the vision is achieved. It also describes matters that should be addressed in more detail as part of Delivery Plan/s and Development Control Plan/s, to be prepared in future stages. An overview of the planning framework for the Precinct and how the Master Plan fits within it is provided in Section 1.4.

The Master Plan will be reviewed every five years or as required under statutory obligations and to inform future strategic planning directions.

Note: It is acknowledged that Snowy Monaro Regional Council is currently undertaking work to prepare a consolidated Snowy Monaro LEP which will replace the Snowy River LEP.

Introduction

1

Strategic context

Credit: Thredbo Alpine Resort.

1.1 A unique opportunity for the Snowy Mountains

Credit: Thredbo Alpine Resort.

The Snowy Mountains is Australia's premier alpine and winter sports destination, with tourism the major economic driver and employer in the region. With a tourism economy geared towards winter, the Snowy Mountains is Australia's most seasonal tourism region. Today, the region's tourism attractions and ski resorts are heavily car dependent with traffic and parking bottlenecks negatively impacting the visitor experience, particularly during peak periods.

The reliance on snow-based tourism is also threatened by the effects of climate change, which is forecast to reduce the quality and length of the snow season. Like some other tourism hotspots, housing supply and affordability is a complex issue. Housing costs in Jindabyne are often much more than those of nearby towns, and permanent residents are increasingly said to be competing with short term rental accommodation for housing.

The Snowy Mountains is a sensitive natural environment, with a significant portion of the Precinct located within Kosciuszko National Park. This is an asset that presents opportunities, but also represents a challenge to ensure that future development and growth outcomes recognise and respect the National Park setting and the Kosciuszko National Park Plan of Management. This will be achieved by protecting and enhancing environmental values, driving sustainability and mitigating impacts.

To date, development has occurred within Kosciuszko National Park and Jindabyne on a case-by-case development application approach with limited implementation of strategic planning. This Master Plan will provide a strategic direction for the next 40 years with a focus on improving the attractiveness of key destinations and upgrading ageing infrastructure. These focus areas are an essential part of improving the visitor experience, as well as amenity for the people living in the region.

This Master Plan highlights diverse opportunities for both tourism and community growth around the precinct, from the urban development and public realm potential of Jindabyne to new activities along the shores of Lake Jindabyne, to the resorts and natural attractions of Thredbo, Perisher and Charlotte Pass in Kosciuszko National Park.

Annual visitors

1.35 million

by the year 2061

Annual visitor expenditure

$1.37 billion

by the year 2061

Resident population

11,828

by the year 2061

Precinct area

4,879 hectares

Figure 2: Snowy Mountains location

Curiosity Rocks, Jindabyne

Nuggets Crossing Shopping Centre, Jindabyne

1.1.1 The Jindabyne Precincts

As one of Australia's premier alpine destinations, Jindabyne's unique character provides visitors and residents with an array of opportunities to explore the everchanging seasons.

The Monero Ngarigo people are the Traditional Custodians and owners of the lands upon which Jindabyne has grown, the name itself is derived from a local Aboriginal word meaning 'valley'. The surrounding highlands have provided a gathering place for congregations and ceremonies for tens of thousands of years with sites across Jindabyne holding strong connections to Monero Ngarigo heritage including Curiosity Rocks and Cobbin Creek.

The original town of Jindabyne was settled in the 1840s on the banks of the Snowy River at the main river crossing for cattle travelling between the Monaro and Gippsland, with the area being characterised by sheep and cattle grazing. Throughout the 1900s growth in Jindabyne was shaped by the establishment of the Snowy Hydro Scheme. By the 1960s development of the Snowy scheme required the town to relocate to higher ground overlooking what would become Lake Jindabyne. Today, the Snowy scheme provides renewable energy that powers the eastern seaboard and some of Australia's largest cities.

Over the years Jindabyne has continued to thrive as the fastest growing local centre within the Snowy Monaro local government area. Growth in visitor and resident populations is expected to continue, creating increased demand for housing and accommodation, community and social services, infrastructure and high-quality public space.

While today's Jindabyne exhibits a strong sense of belonging, the development of a vibrant town centre with strong connections to the foreshore and opportunities for year-round tourism will create a more resilient and diversified local economy that is key to Jindabyne's long-term success.

1.1.2 The Alpine Precinct

The Alpine Precinct includes the alpine resorts of Perisher, Thredbo and Charlotte Pass, and much of the surrounding alpine destinations within the southern region of Kosciuszko National Park, the state's largest national park.

The Alpine Precinct contains some of Australia's most iconic natural environments, including the national heritage listed Australian Alps and a diversity of flora and fauna species which contribute to the outstanding environmental values of the Snowy Mountains. In addition to hosting Australia's premier alpine destinations, the region is home to Australia's highest peak, Mount Kosciuszko, and is the only place in NSW with consistent winter snow cover. It is an area which needs to be carefully managed by preserving its natural, cultural and heritage values, but also providing for the increasing number of visitors coming to experience this unique landscape.

The Master Plan seeks to facilitate a safe and sustainable increase in the amount and range of year-round recreation and accommodation offerings in anticipation of a future decline in snow-based recreation due to climate change and to address a sharply seasonal visitation profile.

Credit: Thredbo Alpine Resort.

Credit: NSW Office of Sport.

1.2 Monero Ngarigo cultural heritage

The Traditional Custodians of the Precinct are the Monero Ngarigo people whose lands stretch from the western slopes of the coastal ranges to the eastern side of the Kosciuszko plateau and include the peak of Mount Kosciuszko and the Snowy Ranges. Both Jindabyne and Kosciuszko National Park are highly significant cultural places within Monero Ngarigo Country, and where Monero Ngarigo and Traditional Owners from other groups met for Cultural and trade purposes.

Historical information on boundaries around the Snowy Mountains can be conflicting, as occurs throughout Australia due to displacement and the drawing of artificial boundaries in European studies. It seems that Aboriginal populations were severely affected, and numbers fell around the 1850s and 1860s due to colonial settlement. Many Monero Ngarigo people were forcibly removed from their Country, and resettled in Delegate, and later moved further to the NSW coast and into Victoria.

Despite this historical dislocation, there are still Traditional Owners living on Country, and all Monero Ngarigo people continue their Cultural connection to Country, and their obligation as Custodians of the land within the Precinct.

A key objective of this Master Plan is to recognise the living culture of the Monero Ngarigo people, and their connection to Country that goes back 20,000 years. This Master Plan seeks to make visible the living culture with better recognition and celebration of Monero Ngarigo culture and the ongoing connection to Country.

The Master Plan seeks to include principles to share the Monero Ngarigo story and to make sure that this process contributes to long term outcomes for Aboriginal people connected to and living on and around the Precinct.

The NSW Government will continue to engage with the Monero Ngarigo people and other interested Aboriginal stakeholders to better understand the ways in which the Precinct can celebrate the ongoing Aboriginal Culture of the region, create long term opportunities for Aboriginal people, facilitate the practice of Culture by Traditional Owners and better tell the Monero Ngarigo Cultural heritage story.

1.3 Snowy Mountains Special Activation Precinct context

1.3.1 Governance

Department of Regional NSW

The Department of Regional NSW is the lead agency for the Special Activation Precincts Program, as part of the $4.2 billion Snowy Hydro Legacy Fund. Overseeing the funding, planning and development of each precinct, the Department of Regional NSW works closely with the Department of Planning and Environment and the Regional Growth NSW Development Corporation to create Master Plans for each special activation precinct, identify and invest in common user enabling infrastructure, and provide ongoing concierge services to help investors establish and grow.

Department of Planning and Environment (the Department)

The planning of special activation precincts in regional NSW is the responsibility of the Department. The Department leads the master planning process, including the technical study process and community and stakeholder engagement.

Regional Growth NSW Development Corporation (the Corporation)

The Corporation is a NSW Government agency created to support economic development and job creation opportunities in regional NSW by facilitating the development of the special activation precincts. The Corporation is working with all levels of government, the private sector and the community to secure economic development and investment attraction opportunities to these unique areas. The Corporation will be responsible for the ongoing enhancement, coordination, implementation and delivery of economic development and job growth in these specialised enterprise hubs across regional NSW.

The Corporation is a one-stop-shop to support investors and will lead the delivery of enabling infrastructure, support the attraction and facilitation of investment in the Precinct, provide support on planning and environmental approval processes, and create strategic partnerships to foster education, training and collaboration opportunities.

NSW National Parks and Wildlife Service

NSW National Parks and Wildlife Service manages over seven million hectares of land across NSW, including more than 870 national parks and reserves, four World Heritage-listed sites, a number of Australian National Heritage sites and 17 Ramsar wetlands. These protected areas play a critical role in conserving biodiversity, as well as natural and cultural heritage.

The National Parks and Wildlife Service has been a key partner in the development of the Precinct and provided strategic and technical guidance, with a focus on the Alpine Precinct and matters related to biodiversity, cultural heritage, and alpine tourism.

Snowy Monaro Regional Council

The Precinct is located entirely within the Snowy Monaro Regional Council local government area, which covers 15,000 square kilometres of land stretching from the Australian Capital Territory to the Victorian border and has a population of over 21,000 residents.

Snowy Monaro Regional Council has been a key partner in the development of the Master Plan and will continue to have a regulatory and approval role for development in certain precincts within the Precinct. In addition, Snowy Monaro Regional Council's existing and future infrastructure, as well as advocacy and influence, will play a key role in realising the vision of the Precinct.

1.3.2 Land to which the Snowy Mountains Master Plan applies

The Precinct is made up of land in two jurisdictions:

- The Jindabyne Precincts comprising land within the Snowy Monaro LGA (but outside Kosciuszko National Park)
- The Alpine Precinct comprising land within Kosciuszko National Park.

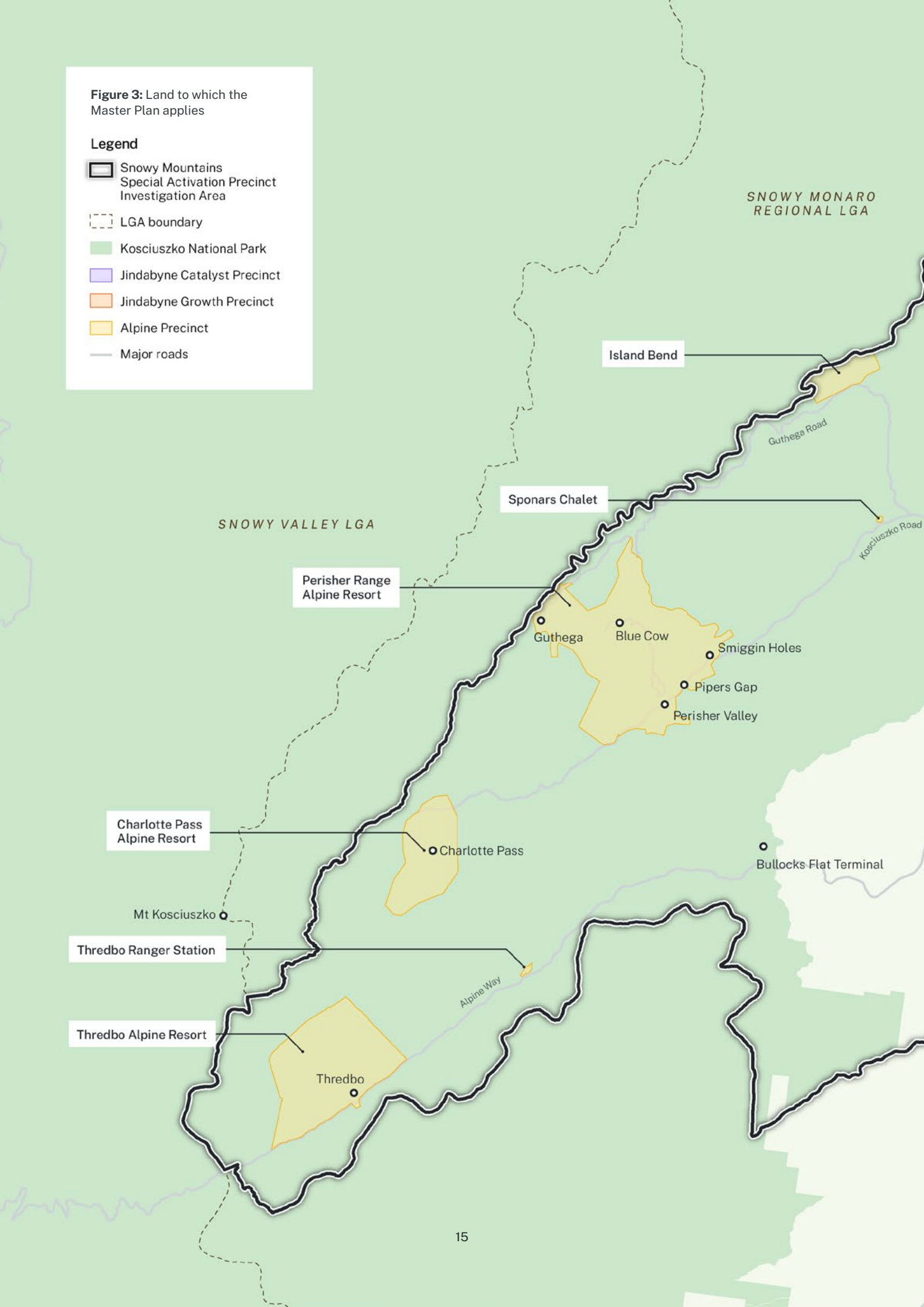
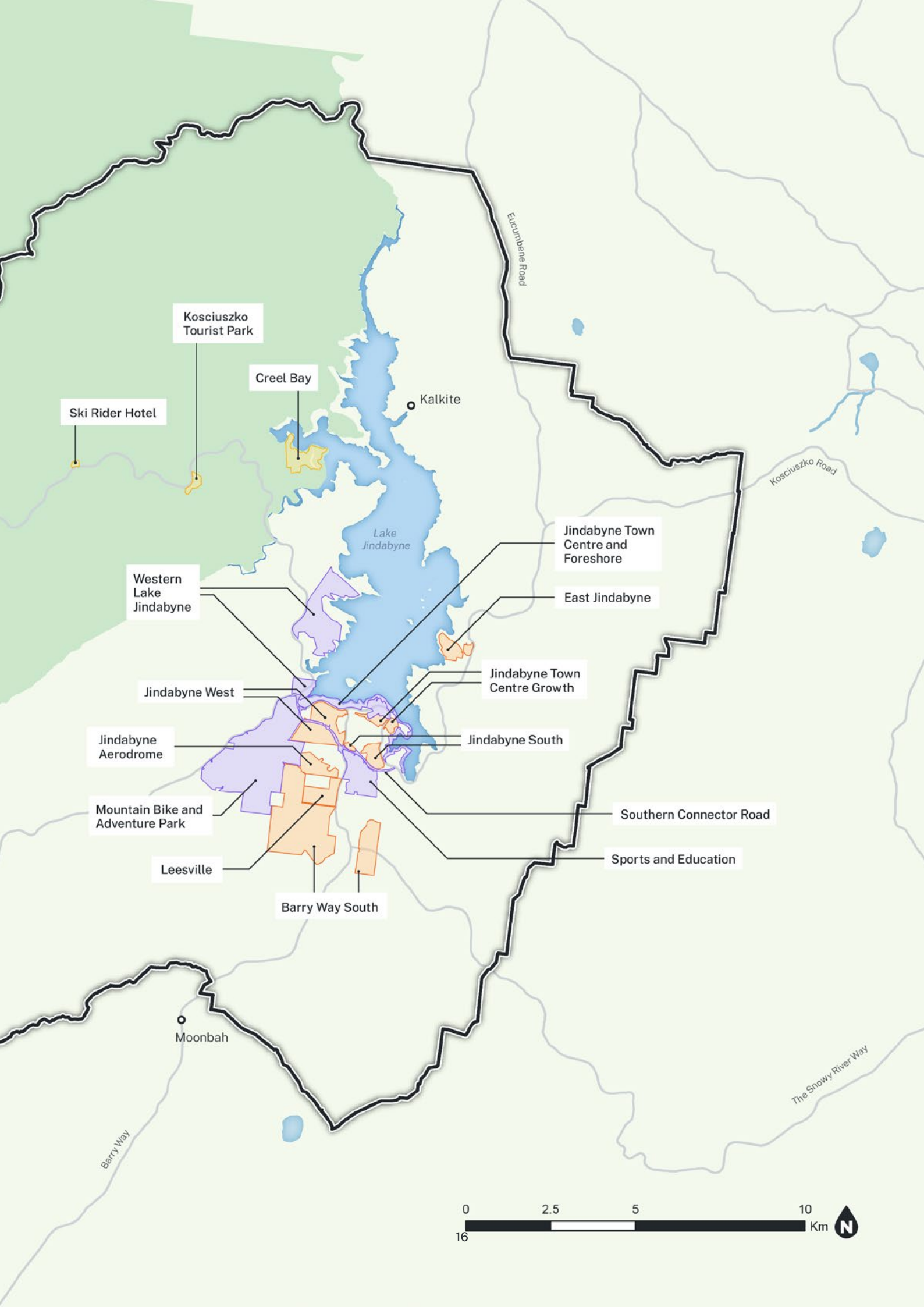


Figure 3: Land to which the Master Plan applies
Legend
Snowy Mountains Special Activation Precinct Investigation Area
LGA boundary
Kosciuszko National Park
Jindabyne Catalyst Precinct
Jindabyne Growth Precinct
Alpine Precinct
Major roads
SNOWY MONARO REGIONAL LGA
SNOWY VALLEY LGA
Island Bend
Guthega Road
Sponars Chalet
Kosciuszko Road
Perisher Range Alpine Resort
Guthega
Blue Cow
Smiggin Holes
Pipers Gap
Perisher Valley
Charlotte Pass Alpine Resort
Charlotte Pass
Bullocks Flat Terminal
Mt Kosciuszko
Thredbo Ranger Station
Alpine Way
Thredbo Alpine Resort
Thredbo


Kosciuszko Tourist Park
Creel Bay
Ski Rider Hotel
Kalkite
Lake Jindabyne
Eucumbene Road
Kosciuszko Road
Jindabyne Town Centre and Foreshore
Western Lake Jindabyne
East Jindabyne
Jindabyne Town Centre Growth
Jindabyne West
Jindabyne Aerodrome
Jindabyne South
Mountain Bike and Adventure Park
Southern Connector Road
Sports and Education
Leesville
Barry Way South
Moonbah
The Snowy River Way
Barry Way
0
2.5
5
10
Km
N

Jindabyne Visitor Centre

1.3.3 Work undertaken to date

Development of the Go Jindabyne Master Plan began in 2018 and sought to establish a vision to 2036 to revitalise the Jindabyne area into Australia's leading alpine destination. Feedback from the community and findings from technical studies highlighted a need to extend the Go Jindabyne scope to look at the wider Snowy Mountains region. As a result, the Precinct was announced in November 2019 to investigate an area of over 70,000 hectares, focusing on the Jindabyne town centre and areas of high tourism interest within Kosciuszko National Park.

A detailed assessment of the investigation area commenced in 2020 and technical experts including ecologists, engineers, stakeholders and town planners have tested and refined scenarios and ideas to create this Master Plan and support the planning pathways and subsequent development in the Precinct.

These investigations have assessed strategic and precinct-wide issues and investigated site-specific conditions to support high-quality design outcomes and to resolve critical constraints. Ongoing input and feedback from the community, landowners, businesses, and other key stakeholders has also informed the master planning process. Further investigations and updates were made to the Master Plan in response to submissions received during public exhibition.

Technical investigations undertaken for the Snowy Mountains Special Activation Precinct

- Structure plan
- Housing and accommodation
- Aboriginal cultural heritage
- Hydrogeology
- Aboriginal community engagement
- Planning recommendations
- Biodiversity
- Public space study
- Bushfire
- Renewable energy
- Carrying capacity framework
- Salt impact management plan
- Climate change adaptation
- Social infrastructure
- Ecologically sustainable development
- Traffic and transport
- Economic development
- Tourism
- Flooding
- Sports and education design investigation
- Geotechnical
- Utilities and infrastructure
- Historic heritage
- Town centre parking plan

1.4 Planning framework

1.4.1 Snowy River Local Environmental Plan 2013

Provisions from an amended Snowy River LEP will apply to land within the Jindabyne Growth Precinct:

- Jindabyne Town Centre Growth
- Jindabyne West
- Jindabyne South
- East Jindabyne
- Leesville
- Aerodrome
- Barry Way South

Development of these sub-precincts will be facilitated by Snowy Monaro Regional Council through the Master Plan and Development Control Plan/s.

1.4.2 State Environmental Planning Policy (Precincts — Regional) 2021

The Precincts — Regional SEPP contains provisions for precinct planning, which is a form of strategic planning applied to a specified geographic area. The Precincts in this SEPP are located in Regional NSW, outside the Greater Sydney Region Plan and include the former *State Environmental Planning Policy (Activation Precincts) 2020* (Activation Precincts SEPP) *and State Environmental Planning Policy (Kosciuszko National Park — Alpine Resorts) 2007* (Alpine SEPP).

Chapter 3 - Activation Precincts

Provisions from the Precincts — Regional SEPP Chapter 3 - Activation Precincts will apply to land within the Jindabyne Catalyst Precinct:

- Jindabyne Town Centre and Foreshore
- Mountain Bike and Adventure Park
- Western Lake Jindabyne
- Sports and Education

Development of these sub-precincts will be facilitated by the Corporation through the Master Plan and Delivery Plan/s.

Chapter 4 - Kosciuszko National Park and alpine resorts

Provisions from the Precincts — Regional SEPP Chapter 4 - Kosciuszko National Park and alpine resorts will apply to land within the Alpine Precinct:

- Alpine Resorts
- Alpine Accommodation

Development of these sub-precincts will be facilitated by the Department through the Master Plan and Alpine Development Control Plan.

1.4.3 Kosciuszko National Park Plan of Management

The Kosciuszko National Park Plan of Management provides a framework to guide the long-term management of the broad range of values contained in the park. It contains a suite of actions to be undertaken by the NSW National Parks and Wildlife Service and other organisations to protect and conserve the values of the park.

Amendments to the Kosciuszko National Park Plan of Management have been made to enable the core elements of the Precinct and adjust parkwide policy on built accommodation.

1.4.4 Planning framework for Special Activation Precincts

The planning framework shown in Figure 4: Planning framework ensures the right mechanisms are in place for industry and community to access and comply with a streamlined planning process for the effective delivery of the Precinct.

Note: Any reference to Special Activation Precinct in this Master Plan has the same meaning as Activation Precinct in the Precincts–Regional SEPP.

Figure 4: Planning framework

Snowy Mountains

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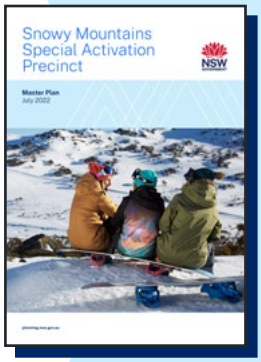


Special Activation Precinct Master Plan

- Made by the Department and approved by the Minister for Planning.
- Identifies the vision, aspirations and principles for the Precinct.
- Identifies performance criteria at a Precinct scale for amenity, environmental performance and infrastructure provision.
- Identifies the matters to be addressed by delivery mechanisms.

Environmental planning instruments

Snowy River Local Environmental Plan 2013

- Identifies the Jindabyne Growth Precinct.
- Provides zoning and land use controls.

State Environmental Planning Policy (Precincts—Regional) 2021

Chapter 3 - Activation Precincts

- Identifies the Jindabyne Catalyst Precinct.
- Provides zoning and land use controls.
- Identifies exempt and complying development pathways.

State Environmental Planning Policy (Precincts—Regional) 2021

Chapter 4 - Kosciuszko National Park and alpine resorts

- Identifies the Alpine Precinct.
- Provides land use and environmental controls.
- Identifies exempt and complying development pathways.

Delivery mechanisms

Jindabyne Growth Precinct Development Control Plan/s

- Prepared by the Department and approved by the Planning Secretary.

Jindabyne Catalyst Precinct Delivery Plan/s

- Prepared by the Corporation and approved by the Planning Secretary.

Alpine Precinct Development Control Plan

- Prepared by the Department and approved by the Planning Secretary.

2

Vision

The Snowy Mountains is the rooftop of Australia where a unique alpine landscape meets a dramatic climate not found elsewhere on the continent. This is the high country, an unmissable destination where visitors from Australia and abroad are drawn year-round to the everchanging seasons and unparalleled outdoor experiences. The rich culture, authentic character, and endless opportunities of the region is why people call the Snowy Mountains home. A patchwork of local landscapes and connections that inspire exploration and provoke adventure mean your first visit is never your last.

Backcountry, Kosciuszko National Park. Credit: Destination NSW.

2.1 Principles for the Snowy Mountains

The Department has worked in partnership with the Department of Regional NSW, the Corporation, NSW National Parks and Wildlife Service and Snowy Monaro Regional Council and consulted with relevant government agencies to develop guiding principles for the Master Plan.

These principles underpin the planning for the Precinct and will be considered in the assessment of applications for Activation Precinct Certificates and the issuing of development consents.

Economic development

- **Australia's Alpine capital** leveraging the existing strengths of the Snowy Mountains winter tourism industry and the Precinct's unique alpine environment to create a high-quality year-round destination that generates new jobs and economic development opportunities.
- A **world-class sustainable and resilient tourism Precinct** that attracts investors, boosts the region's economy and improves the quality of life for the Snowy Mountains community.
- The Precinct will host an exciting mix of **new tourism attractions and activities** to grow annual visitation to the Precinct from domestic and international visitor markets. Support for the arts and culture sector will see the expansion of local experiences, events and festival offerings.
- Foster relationships with local Aboriginal communities that incorporate **employment and economic development opportunities for local Aboriginal people** and businesses at all stages of the project.
- Provides a **strategic approach to managing growth** with developers and businesses having certainty about the planning process and expectations relating to streamlined assessments and determinations.

Infrastructure and transport

- Enable **equitable and efficient access arrangements** that prioritise sustainable mass transport modes and intelligent parking and transport systems to provide safe and efficient travel between Jindabyne and Kosciuszko National Park.
- Facilitate the timely development of the **Southern Connector Road** and supporting land uses, infrastructure and connections alongside **improvements to Kosciuszko Road** to connect the Town Centre and Foreshore.
- The Precinct will **integrate active transport opportunities** within the landscape and leverage place-making and wayfinding strategies to enhance the visitor experience at major transport hubs and trailheads.
- Create a legible street, walking and cycling network within the Precinct by establishing **highly connected** recognisable routes, intersections, and landmarks to help people find their way around safely.
- Continual improvement and analysis of the relationship between existing visitation, growth projections and impacts on **future transport and infrastructure** requirements, particularly increases in day visitation in Kosciuszko National Park.
- Utilities and services that meet the **current and future servicing needs** of the Precinct, while also minimising land impacts and maximising reliability, efficiency and sustainability.
- Green network enhancements for wastewater, renewable energy and water quality to deliver **environmentally sensitive solutions** to protect natural processes and environments and support sustainable growth and development in the Precinct.

Environment and sustainability

- The Precinct will **protect environmental values** including biodiversity, Aboriginal and European heritage and landscape character by limiting development to areas of existing disturbance within Kosciusko National Park and applying avoidance principles to development design across the Precinct.
- Prioritisation of **eco-tourism principles** to educate visitors on sustainability and promote the Precinct's landscape and biodiversity values, particularly those within the Kosciuszko National Park.
- Implementing a **best practice carrying capacity framework** integrated with ISO14001 Environmental Management to inform and ensure environmental and sustainable management within the Alpine Precinct.
- Developing adaptation measures to consider the **management of climate change risks** in future development within the Precinct and improve climate resilience to ensure the precinct is sufficiently prepared to respond to natural hazards and environmental emergencies.

Community

- Respect Monero Ngarigo people's rights, obligations, roles and connections to Country as Traditional Custodians of the land and waterways by **embedding Aboriginal cultural values and knowledge** in project delivery.
- The Precinct will foster residential uplift in strategic locations across Jindabyne to **boost available housing stock and enable affordable, low-cost and social housing choices** that cater for a variety of household types suitable for residents, seasonal workers and short-term visitors.
- The Precinct will provide a **modern community that supports future generations** with access to health, recreation and education facilities to meet the needs of people of all ages and abilities.

Place and landscape

- Enable Monero Ngarigo participation in **Caring for Country**, making decisions about Country, contemporary use of natural resources and Cultural knowledge transmission.
- The Precinct will include **high-quality public realm** with a pedestrian focused green street network within Jindabyne that prioritises safe connections and reflects the local landscape to connect businesses, residents and visitors.
- **Vibrant villages with a defined character** focus on high-quality, climatically appropriate design and built form which sensitively responds to local topography and environmental conditions.
- The Precinct will provide **high amenity public open space** including a new Town Square, upgrades and improvements to the Foreshore and new parks and open spaces within residential sub-precincts.
- Foster a mix of **compatible developments and uses** that work together to create viable places that respond to market and local needs.

3

Why Snowy Mountains

3.1 Key economic drivers

The Snowy Mountains tourism industry contributes significantly to the regional economy each year through visitor attraction and recreational opportunities. Currently, the tourism market is geared towards winter, with over half of all visitation occurring during the peak snow period, making the Precinct the most seasonal tourism location in Australia. This extends to the region's visitor economy where average winter spend levels considerably outperform those in summer.

The vision and principles set out in this Master Plan focus on achieving a step-change in non-winter visitation and positioning the Precinct as a unique and compelling year-round Australian alpine tourism destination. Development over the coming decades will focus on creating a resilient year-round tourism industry that leverages the iconic landscape, responds to a changing climate and supports the ongoing protection of the unique alpine environment of Kosciuszko National Park – NSW's largest National Park.

Growth in the Precinct will look to support new tourism attractions, enhance existing tourism locations and prioritise eco-tourism opportunities to create a year-round activity offering that supports a sustainable visitor economy. There is the potential to grow annual visitation from a wider range of domestic visitor markets and leverage international connections via Canberra Airport, however this is highly dependent on introducing new tourism offerings and improved access to, and within, the precinct.

Investment in the Precinct will build upon existing strengths in sport, environment, and hospitality to foster a visitor experience that is world-class, provides four-season employment, and empowers youth to gain the skills they'll need to lead a growing region into tomorrow. To achieve this, the Precinct aims to identify enabling infrastructure including roads, public transport, social and community infrastructure, and activate land suitable for tourism and residential uses. This will provide the foundations required to attract investment in the Precinct.

3.1.1 Tourism opportunities

The Precinct's tourism offering is centred around the Jindabyne town centre and foreshore and the major Alpine resorts located within Kosciuszko National Park. Potential exists to position the Precinct as Australia's Alpine Capital at the heart of the Snowy Mountains through strengthening and broadening the product base.

This Master Plan seeks to deliver an exciting mix of new and enhanced tourism and accommodation opportunities that will:

- Grow visitor yield and reduce seasonality
- Continue to protect the environment
- Strengthen social licence for tourism.

The Master Plan outlines a number of catalyst projects including the revitalisation of the Jindabyne town centre and foreshore, a new lakeside eco-precinct at Western Lake Jindabyne, and a world-class mountain bike and adventure park. These catalytic projects are seen as major drivers of stronger visitation and supporting the viability of other offerings including:

- Recreational fishing in Lake Jindabyne and alpine waterways
- Products and programming in the arts and culture industry
- Food and beverage including farm gate products and experiences
- Nature-based and adventure experiences in Kosciuszko National Park
- Diversified events calendar that supports a night-time economy.

3.2 Key environmental drivers

The Snowy Mountains is home to some of Australia's most iconic natural environments and seasonal landscapes. Kosciuszko National Park possesses an exceptional diversity of alpine plant communities, an iconic stream and river network, and habitats for several rare and threatened species.

While these landscapes are a key driver for tourism across the Precinct, they're also subject to the impacts of climate change, bushfire and increased visitation. To manage the effects of a growing resident and visitor population, future development and planning within the Precinct must respond to the vulnerability of the natural environment and the impact of a changing climate.

The vision and principles set out in this Master Plan seek to protect the local environment, remembering that the landscape of the Snowy Mountains is what draws visitors to the region. While this is an asset from which to build opportunities, it is also a challenge to ensure that future development and growth outcomes are sustainable, focus on eco-tourism, and 'tread lightly' on the environment.

Planning and design will advocate avoidance of environmentally sensitive areas and encourage locally sourced materials, water and energy efficiency, smart technologies and the incorporation of traditional Monero Ngarigo land management principles to ensure the built and natural environment can evolve in harmony.

3.2.1 Carrying Capacity Framework

The Precinct provides a unique opportunity to consider the regulatory and environmental management framework which underpins visitor activity in key areas of Kosciuszko National Park. It allows for a long-term view on the interactions between visitor growth and the infrastructure to support that growth while seeking to protect and enhance environmental, social and cultural values.

Alongside the master planning process, a carrying capacity framework has been selected as the most appropriate methodology to ensure a balanced approach to development and environmental protections in the Alpine Precinct.

A carrying capacity framework is a best-practice methodology used worldwide for managing visitors in a protected area. The framework has built upon and contributes directly to the master planning process by:

- Identifying suitable development in appropriate areas
- Identifying where hard capacity constraints exist
- Providing solutions to capacity constraints where possible and appropriate
- Identifying soft constraints, which are often not managed well under traditional assessment methodologies.

To do this, the framework needs to acknowledge the historical and modern day use of the park by the ski industry and the social and economic values this provides to the public and local community. It also needs to balance those interests with the protection, preservation and enhancement of heritage and environmental values. As such, the framework must consider the range of stakeholders and wide scope of interests and agendas, in developing and guiding appropriate outcomes.

3.3 Key social drivers

Social infrastructure incorporates facilities and services that are used for the physical, social, and cultural wellbeing of the community. Social infrastructure is the mix of 'hard' infrastructure (facilities and open spaces) and 'soft' infrastructure (services and programs) that impact on community wellbeing and quality of life.

Jindabyne is the main community hub within the Precinct, and most of the social infrastructure and community services are located in and around the town. Jindabyne also relies on Cooma for social infrastructure, particularly higher-level medical care and community services. There is a desire within Jindabyne to have more social infrastructure available locally to meet the needs of growth in resident and visitor populations.

This is particularly the case for schools, emergency services, and health services. Dedicated youth services and aged care services are lacking within the Precinct. Plenty of open space and recreation facilities are available, but there is a need to focus on increasing the quality of the spaces provided.

The fluctuating population, including seasonal workers and visitors, adds an additional layer of complexity to planning social infrastructure. Typically, social infrastructure is viewed as a facility and service for local resident populations. However, the Snowy Mountains has a high number of seasonal workers who will use social infrastructure, and tourists who may need access to social infrastructure while in the region, particularly healthcare and emergency services.

The master plan seeks to support the predicted growth in residents and visitors to create a quality place to live and visit. The provision of social infrastructure is focused on:

- developing a best-practice, future-focused sport and education precinct at Jindabyne Sport and Recreation Centre
- providing services and facilities for all population groups and users
- improving the quality and connectedness of open space and recreation
- fostering social sustainability by building community support and resilience.

The peak winter tourism season creates seasonal population fluctuations that challenge the availability of visitor and seasonal worker accommodation and the affordability of housing for local residents. This results in a critical under-supply during peak season that reduces options for residents.

Housing costs in Jindabyne are at times double those of nearby towns, and permanent residents are increasingly said to be competing with tourism accommodation such as AirBnB for housing. Accommodating a growing and transient population and workforce also poses challenges for housing in the Precinct.

The Master Plan aims to achieve a balanced approach to housing by increasing both diversity and supply across the Precinct. There will be more accommodation choices for residents, seasonal workers and visitors, including affordable, low-cost and social housing provision. Focusing additional residential development in and around Jindabyne will also support the local economy.

3.4 Staging development

A 40-year Vision

The master plan presents a vision for the precinct over the next 40 years. The Master Plan comprises three Precincts, comprising a total of 24 sub-precincts (see Figure 3). Staging and delivery of each sub-precinct will be driven by development enablers and public and private investment.

Jindabyne Catalyst Precinct

The Jindabyne Catalyst Precinct comprises five strategic sub-precincts containing catalyst opportunities to promote and facilitate the vision of the broader Precinct. Development of these sub-precincts will be facilitated by the Corporation through the Master Plan, Delivery Plan and amendments to the Precincts — Regional SEPP.

Staging should focus on:

- Creating key destinational attractions that appeal to a broad visitor audience
- Delivering on eco-tourism principles to develop an environmentally sustainable tourism offering
- Expanding attractions and amenity to deliver a year-round destination.

Jindabyne Growth Precinct

The Jindabyne Growth Precinct comprises seven sub-precincts that will support the visitor and population growth projected over the 40 years of the Master Plan. Development of these sites will be largely driven by private investment supported by government investment in development enablers across the Precinct. Development Applications will continue to be determined by Snowy Monaro Regional Council through the Master Plan, a new Development Control Plan, and amendments to the Snowy River LEP.

Staging should focus on:

- Residential areas within walking/active transport distance from current or planned infrastructure
- Residential areas within walking/active transport distance to open space
- Large unfragmented landholdings
- Provision of affordable and/or seasonal worker accommodation.

Alpine Precinct

The Alpine Precinct comprises 12 sub-precincts containing existing lease and licence areas focused on tourism attractions and accommodation. Development of these sites will be largely driven by private investment by existing lease and licence holders supported by the government investment in development enablers across the broader Precinct and improvements to visitor facilities by National Parks and Wildlife Service. Development will occur through the Master Plan, Kosciuszko National Park Plan of Management, Alpine Development Control Plan, and amendments to the Precincts — Regional SEPP.

Staging should focus on:

- Protection of the natural and cultural environment
- Activities and attractions that support year-round tourism
- Delivering ecologically sustainable development.

Development Enablers

The staging of development in the Precinct will be influenced by a number of factors including access to existing infrastructure, the attraction of investors to development drivers such as streamlined planning, rezoned land in Jindabyne, an increase in tourist accommodation in the Alpine Precinct and road network improvements including the new Southern Connector Road and changes to Kosciuszko Road and town centre.

Key enabling infrastructure will provide greater certainty on the nature and location of development over the life of the project. Priority infrastructure to support development in the first five years is outlined below:

- Utilities upgrades to support growth in Jindabyne
- Road network upgrades, parking and shuttle service enabling works to improve access to Kosciuszko National Park and support growth in Jindabyne
- Enabling works for catalytic tourism and recreational opportunities such as the Mountain Bike and Adventure Park and upgrades to the foreshore including the Claypits events space.

Jindabyne

4

Jindabyne Catalyst Precinct

Credit: Snowy Monaro Regional Council.

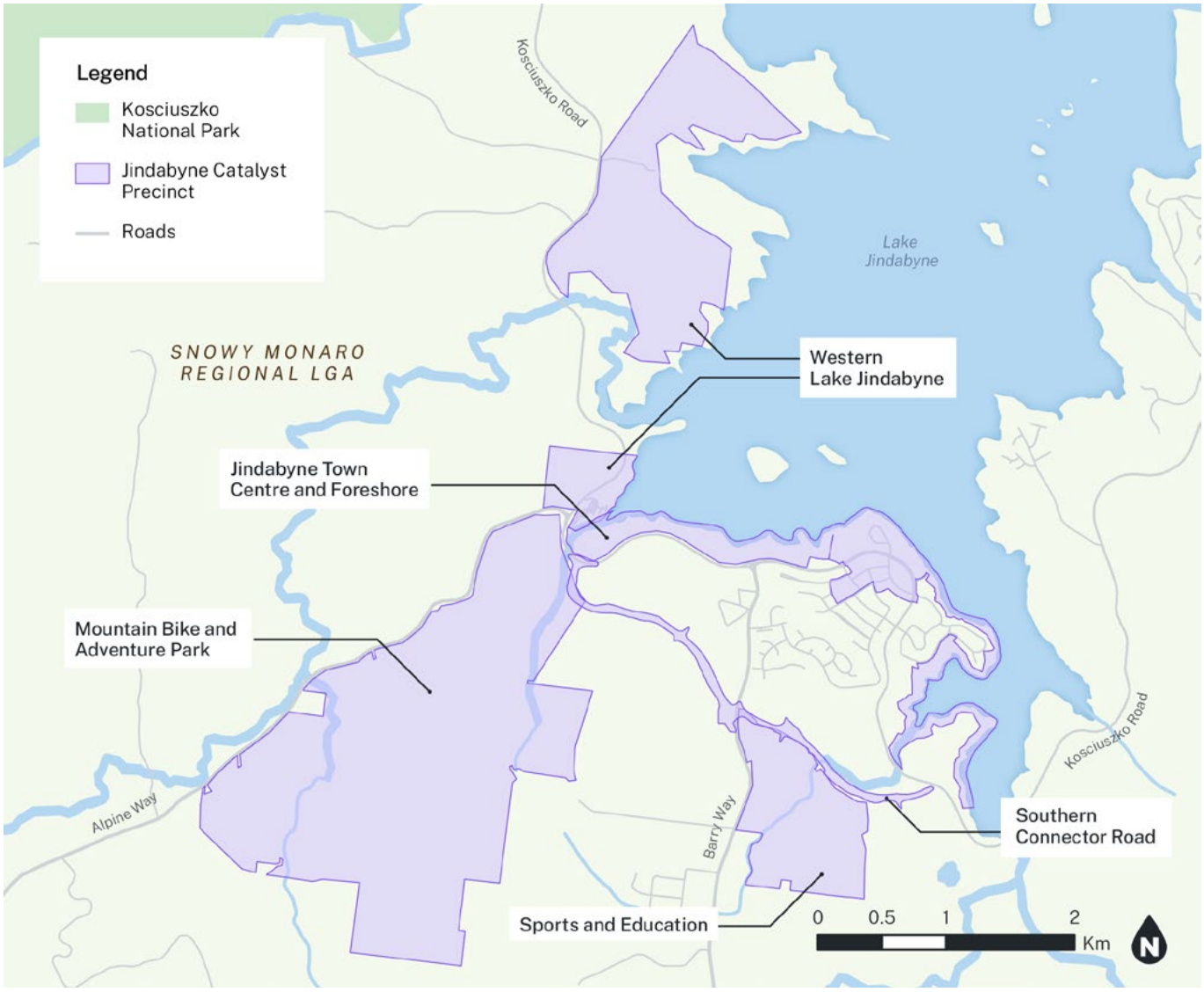


Figure 5: Jindabyne Catalyst Precinct

The structure plans

The resident and visitor population growth predicted as a result of the Precinct has been modelled on the activation of year-round tourism and employment opportunities, investment in the region's infrastructure and strengthening the visitor economy.

Specific catalyst sub-precincts have been identified as areas that will activate future new development while addressing environmental, social and economic considerations. The sub-precincts that have been identified include:

- Jindabyne Town Centre and Foreshore
- Southern Connector Road
- Sports and Education
- Mountain Bike and Adventure Park
- Western Lake Jindabyne

These sub-precincts include a range of development types and land uses, including both urban renewal and greenfield opportunities, along with housing, tourism, and sports and education uses.

Structure plans guide future development and identify the footprint and context of future development, infrastructure and other key features such as important environmental and heritage areas for protection and celebration. Future development will also be guided by Delivery Plan/s prepared by the Corporation following finalisation of the Master Plan.


Welcome
JINDABYNE
AUSTRALIA'S ALPINE PLAYGROUND
ELEVATION 920 METRES
Royalla
SNOWY MONARO REGIONAL COUNCIL
RESPECTING TRADITIONAL CUSTODIANS
LIONS INTERNATIONAL
COUNTRY WOMEN'S ASSOCIATION N.S.W.

4.1 Jindabyne Town Centre and Foreshore

The Jindabyne Town Centre and Foreshore sub-precinct is bound by the Lake Jindabyne foreshore and Kosciuszko Road to the north and east, Thredbo Terrace and Park Road to the south and Jindabyne Central School and Kurrajong Street to the west.

It is the centre of business and community activity in the Snowy Mountains and comprises the following key land uses:

- Public recreation - Lake Jindabyne foreshore
- Community services and facilities
- Commercial and retail
- Residential and tourist accommodation

Drivers for change include:

- Better connectivity to Lake Jindabyne and the foreshore that is currently impeded by a four-lane highway, and an often-congested Kosciuszko Road
- New, improved and refreshed public realm and recreational spaces on the Foreshore at existing and new nodes
- More and improved community and social infrastructure including aged care, library, community centre and youth hub
- Pedestrian and cycle friendly layout within the town centre balanced with adequate parking for residents and visitors
- New, improved and refreshed social and commercial infrastructure and buildings
- Better utilisation of open spaces.

4.1.1 Structure plan

The Town Centre and Foreshore structure plan defines the town centre, improves foreshore connectivity, revitalises public areas and focuses on strategic redevelopment and access improvements to create a more vibrant, attractive and integrated town centre. Jindabyne will become a regional alpine village that supports a thriving local community and year-round tourism.

The structure plan sets out a strategic overview of the land uses, key civic sites, redevelopment opportunities and transport connections to facilitate a balanced mix of commercial, tourist, housing and community uses and services.

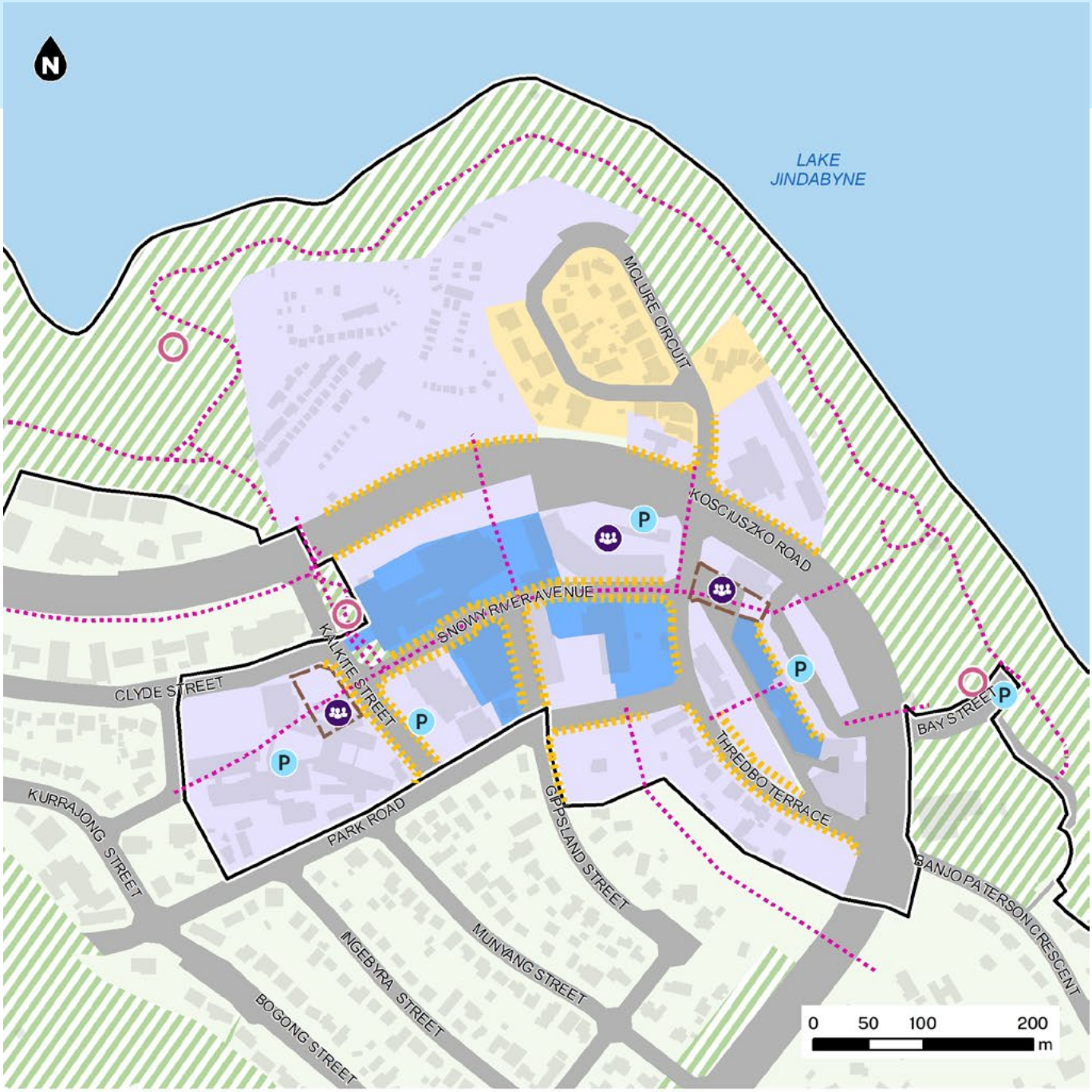


Figure 6: Jindabyne Town Centre structure plan

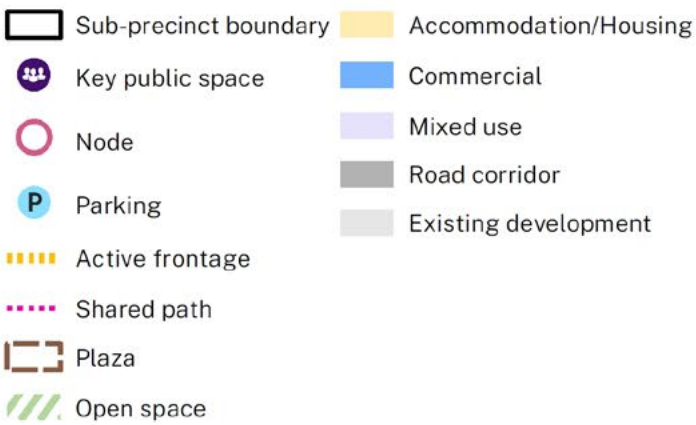


Figure 7: Lake Jindabyne Foreshore Park. Credit: Jensen PLUS

Lake Jindabyne Foreshore Park

The plan allows for the creation of an easy to access Lake Jindabyne Foreshore Park, at both high and low lake levels, to leverage this iconic public space and allow all users to benefit from its proximity to the town.

The long-term vision for the park is to connect Wollondibby Creek to East Jindabyne as a year-round destination for residents and tourists comprising a 16 kilometre shared use path and opportunities for development of key nodes.

Design of the foreshore concept has considered the varying lake levels and development of built form has been limited below the high-water line to ensure the use and enjoyment of this area is sustainable and resilient to operating lake levels and impacts of climate change.

1 Curiosity Rocks

Recognition and protection of Curiosity Rocks, a sacred site for the Monero Ngarigo people. This could include opportunity for celebration of this place with provision for viewing platforms and landscape rehabilitation

2 Mountain Bike and Adventure Park link

Key pedestrian and cycling link to the Mountain Bike and Adventure Park

3 Widows Creek

Redevelopment to improve access for land and water-based recreation and link to the Western Lake Jindabyne sub-precinct

4 Lake Jindabyne Sailing Club

Improvements to access and amenities including seating and wayfinding

5 Shared user path

A continuous three-metre-wide shared use path connecting the eastern and western extents of the foreshore in the Town Centre integrated with existing foreshore infrastructure and additional seating nodes

6 The Claypits

Creation of a year-round arts, culture and events space at The Claypits including a new access road, amenities, inclusive play space and stage area and upgrade to parking

7 Waterfront Urban Park

Provision of year-round access to Lake Jindabyne within a new waterfront urban park close to the town centre including opportunities for a promenade, terracing for lake access, and viewing platform or jetty. This may also provide access for tourism opportunities associated with recreational use of the lake

8 Banjo Paterson Park

Revitalisation of Banjo Paterson Park as the premier civic and ceremonial park with an upgraded youth hub comprising an upgraded skate park (currently being delivered by Snowy Monaro Regional Council), a new all-ages play space, integration of the existing tennis courts, and half-court basketball wall. An opportunity for a pump track between the Waterfront Urban Park and Banjo Paterson Park has also been identified

9 East Jindabyne

Development of a new recreational and environmental destination in East Jindabyne with access to the lake and open space via rehabilitated grasslands and open woodland

Jindabyne lakefront development

The Jindabyne lakefront development site, which includes the NRMA Jindabyne Holiday Park, is positioned in a key strategic location connecting the revitalised town centre and the foreshore linear park. As such, it presents a unique opportunity for redevelopment of a large area of lakefront land to create a connected foreshore experience.

Redevelopment of this site will complement the Lake Jindabyne foreshore park and provide an opportunity for a mixed use signature development to meet the demands of a premier year-round destination. Redevelopment could include retention of existing uses such as the caravan park to continue to provide affordable accommodation offerings in the Town Centre.

Streets for people

The streets and public spaces within the town centre and foreshore will be transformed into places for people:

- Kosciuszko Road will be transformed into a principal civic boulevard within the town centre, creating a new, unified experience that facilitates connections to Lake Jindabyne.
- Kalkite Street will become bi-directional over its full length facilitating easy movement into and out of the town centre. This includes a bus stop for the Park and Ride shuttle and a shared use path to provide pedestrian safety.
- Snowy River Avenue will be the pedestrian spine and civic and retail street within the town centre, becoming a destination in itself. It will be a key connection between Kalkite Street, the new town square, and Banjo Paterson Park with slow moving traffic and improved accessibility for people to walk and cycle. This will be achieved by making it a one-way eastbound road and through a raised plaza to prioritise pedestrians, active frontages, street lighting, furniture and tree plantings on both sides of the street to create an attractive boulevard. Snowy River Avenue could play host to markets and street events in the future.
- Gippsland Street will be a two-way slow speed street focused on pedestrian safety and priority. It will contain dedicated bike parking and act as a place for people to mingle, stop, spend, sit and enjoy the town centre.
- Thredbo Terrace will remain a two-way street linking Kosciuszko Road and Park Road to the wider Jindabyne and connecting people to Snowy River Avenue, the visitor centre and the new town square through a new shared use path.
- Park Road is a connecting street between the town centre and broader Jindabyne township, focused on the residential areas to the south and east of the town centre. Pedestrian access will be facilitated through a new shared use path between Kalkite Street and Thredbo Terrace.
- Prioritisation of active transport connections via the upgrade of footpaths and shared paths and provision of bike parking facilities.
- Bus stops for the Park and Ride shuttle including at Kosciusko Road, Kalkite Street and Munyang Street. During peak periods the shuttle can also act as a shuttle between the car park and town centre.
- Recognition of ongoing role of vehicular transport in a regional town and the need for ongoing parking supply including restoration of parallel parking on the northern side of Snowy River Avenue between Kalkite Street and Thredbo Terrace and within development of key sites.
- Improved wayfinding and smart transport technology to improve access and parking.

Artist's impression of the Jindabyne town centre street network. Credit: Aurecon.

Kosciuszko Road

Kosciuszko Road is proposed to change to a two-lane slow-speed, pedestrian scaled street with regular crossings to provide access between the town centre and foreshore. The proposed changes will occur to the section of Kosciuszko Road between Kalkite Street and the southern extent of Thredbo Terrace and comprise:

- Reduced speed limit
- Single lane of traffic in each direction
- Parking lane on each side
- Painted on-road bike lanes
- A series of raised paved shared space crossings
- Boulevard tree planting, landscaping and street furniture.

To achieve the vision to transform Kosciuszko Road, a new road is proposed – the Southern Connector Road. The Southern Connector Road will reduce through-traffic and heavy vehicles on Kosciuszko Road enabling a reduction to two lanes with regular pedestrian access points. Opportunities exist for delivery of the vision for Kosiouszko Road to be implemented as a trial or implemented during peak seasons and events.

Artist's impression of a new town square. Credit: Aurecon.

A new town square

The new town square will be the civic heart of Jindabyne, creating a welcoming, friendly and easy to access destination with community services and retail activity. The new town square will be positioned adjacent to the Memorial Hall between Thredbo Terrace and Kosciuszko Road. It will connect seamlessly to Snowy River Avenue, the visitor centre, and Nuggets Crossing through to Gippsland Street and Kalkite Street at the western end of the town centre.

The Town Square will form part of the pedestrian spine of the Town Centre and create a civic forecourt connecting the Memoria Hall and Library. It will provide additional public amenity including new toilets, seating and gathering spaces, raised pedestrian crossings and enhanced public domain opportunities including wayfinding signage, town information, interpretative public art and landscaping.

Corner of Snowy River Avenue and Thredbo Terrace

The corner of Snowy River Avenue and Thredbo Terrace is a key redevelopment site comprising a large corner block adjacent to the new town square. The site's current use does not align with the vision of the town centre and proposed future uses of this site include:

- Commercial and retail use for the growing population such as a second supermarket
- Community infrastructure and services such as allied health services
- Mixed use incorporating retail, hospitality and tourist accommodation.

Development of this site would need to include parking. Opportunities exist at the junction of Barry Way and Southern Connector Road and Leesville to establish large format commercial land uses in accessible locations.

Jindabyne Central School redevelopment

The Jindabyne Central School on Kalkite Street is relocating to the Sports and Education Sub-Precinct off Barry Way presenting an opportunity for redevelopment and re-use of this large area of land in the town centre. Redevelopment of this site may include a range of uses:

- Civic buildings and community services such as community centre and permanent library including repurposing the existing school hall as an arts and culture performance space or recreation centre and gym
- Indoor entertainment facilities such as bowling alley, indoor fun centre or rock climbing
- Residential and tourist accommodation in apartment style dwellings, including the provision of affordable housing
- Decked or multi-level parking integrated with the mixed use development to encourage 'park and walk' for the town centre and foreshore and reduce traffic movements on key streets.

Tourism opportunities

An important element of increasing year-round visitation and appeal for Jindabyne is the delivery of a diversity of tourism experiences to complement the adventure and eco-tourism opportunities on the lake and foreshore, outskirts of Jindabyne and within Kosciuszko National Park. There is also a need for a range of indoor entertainment and recreational opportunities.

Examples of tourism opportunities within the Town Centre include:

- Visitor Information
- Indoor Entertainment
- Arts and Culture (including Heritage Centre)
- Food and Beverage
- Night time economy.

Artist's impression of an open space node in front of Snowy Region Visitor Centre as viewed from Kosciuszko Road. Credit: Aurecon.

Visitor information

The Snowy Region Visitor Centre comprises a range of uses including a café, cinema and office space for National Parks and Wildlife Service staff. The building is in a prominent location within the town centre and exhibits strong alpine architecture through its materials and colour scheme.

A new open space node is proposed to extend the current forecourt in front of the visitor centre to capture connections and views to the Foreshore and integrate this into the visitor and resident experience while improving the public realm and providing space for gathering and events.

There is potential to repurpose or adapt this building for additional or new uses. This would be facilitated by repurposing the existing visitor centre space or the construction of a new centre or replacement offices on the adjacent northern car park. This building has a commanding presence in the town centre and has the potential to become a stronger visitor hub.

Arts and culture

Revitilisation of the town centre will support the expansion and strengthening of arts and culture within Jindabyne by providing:

- improved public realm with dedicated event and festival spaces
- opportunities for new and redeveloped buildings to house arts and culture
- increasing cultural engagement by improving accessibility for residents and visitors to arts and culture spaces and events

A modern, well located heritage centre is also proposed. The heritage centre could function as a key tourist attraction, information centre, and primary ticketing venue for visitor attractions. The centre may feature interactive information displays and year-round visitor attractions. These could celebrate the rich history of the region including Monero Ngarigo culture, the unique environment of the Kosciuszko National Park, alpine and winter sports, and the stories of the town of Jindabyne including agriculture, the formation of Lake Jindabyne and the Snowy Hydro Scheme. Potential locations suited to such development include:

- Co-location within the existing National Parks Visitor Centre.
- Within the Jindabyne Town Centre to leverage casual visitation to retail, hospitality and tourism-focused businesses.
- Co-location within the future Jindabyne Mountain Bike and Adventure Park.

Engagement with the aboriginal community identified a desire for separation of Aboriginal cultural heritage and historic heritage. Opportunities exist for this be done within a co-located space or in separate location.

Aged care

Jindabyne has demand for an aged care services to allow older people to remain in the area. These include both residential aged care and in-home aged care community support programs. There is also predicted growth in the 65 years and over age group for the next 40 years.

Snowy Monaro Regional Council is working to expand aged care services in the region including a new Aged Care facility located within proximity of the Town Centre and the provision of in-home aged care community support programs.

Urban renewal

The redevelopment and expansion of existing retail, commercial, residential and tourist accommodation sites. This may include:

- Mixed use developments on existing car parking sites with frontages to Kosciuszko Road and redevelopment opportunities on Thredbo Terrace
- Opportunities exist at the junction of Barry Way and Southern Connector Road to establish an Emergency Services Precinct
- Health Services including outreach mental health and allied health programs to service the needs of a growing population
- Medium scale tourist accommodation on McLure Circuit and Clyde Street
- Low rise attached dwellings and walk-up apartments along Park Road
- Renewal of older commercial sites on Gippsland Street

4.1.2 Desired future character

The Jindabyne Town Centre and Foreshore will transform Jindabyne into a modern 'alpine village' celebrating the stunning landscape associated with its position on the foreshore of Lake Jindabyne and as the gateway to the Australian Alps.

4.1.3 Sub-Precinct Provisions

Land Use

The Jindabyne Town Centre and Foreshore sub-precinct is the centre of business and community activity in the Region and revitalisation of the Town Centre is an important factor in the success of the Precinct. It is envisaged that this sub-precinct will be the heart of the Region, providing transformational development through infill and renewal, increasing density and improving access to the foreshore.

Aims

- Ensure Jindabyne is a vibrant attractive Alpine Village for both residents and visitors providing a hub for commercial, community and tourism activities.
- Ensure development integrates with and connects to the foreshore and does not detract from existing vistas to Lake Jindabyne.
- Support growth and demand for a range of tourist, seasonal and resident accommodation.
- Encourage redevelopment and adaptive re-use of buildings within the Town Centre.
- Introduce new or additional land uses along the foreshore to activate the area.

Performance Criteria

A. Development should be supported by high quality landscaping that integrates with existing open spaces and foreshore.

B. Development provides a range of floorplate sizes for non-residential land uses to accommodate a diversity of business types.

C. Development should support a range of commercial, retail, tourism and mixed use development to reinforce the role and function of the sub-precinct.

D. Development should consider views and vistas across Lake Jindabyne and the Snowy Mountains.

E. Development on the foreshore should provide opportunities for improved connections and activation.

F. Development should encourage the amalgamation of lots to enable a cohesive development layout that promotes a connected village.

G. Development should support a vibrant and attractive Alpine Village with a mixture of residential and tourism accommodation uses.

Consideration for future stages of development

- The Delivery Plan should:
  - include a staging plan to ensure the orderly and efficient development of the sub-precinct.
  - identify, design and establish new and upgraded enabling works that support the delivery of the sub-precinct, particularly those required for short term development.
  - protect utility infrastructure through easements.

Built Form and Landscape

The Town Centre will be transformed through the development of Catalyst projects, along with other redevelopment, renewal and infill development opportunities. The improvement of and connection to the Foreshore, public domain and pedestrian infrastructure will allow Jindabyne to be a walkable, desirable place.

Revitalisation of the sub-precinct will focus on activating the public realm and delivering high-quality urban form, while new and upgraded open space will connect the Town Centre to the Foreshore through increased walkability.

Aims

- Ensure the built form reflects the Alpine setting of Jindabyne to create a village atmosphere.
- Ensure there is a mix of building types and designs of high architectural merit.
- Promote increased bulk, scale and density in suitable locations.
- Integrate development into the topography of the land and promote the retention and planting of native vegetation corridors.
- Ensure development along the foreshore complements the scenic qualities of the locality and increases pedestrian access and usership.
- Promote active street frontages, including along Kosciuszko Road.
- Ensure development provides a diversity of design styles to promote visual interest.

Performance Criteria

A. New and upgraded streets should be active and green with a planned tree canopy to reduce heat island effects, improve human comfort, and promote walkability.

B. Buildings should be efficient, well designed and incorporate landscaping by:

   i. carefully siting buildings to activate street frontages, minimise impacts on existing vegetation, and provide opportunities for on-site landscaping.

   ii. providing appropriate scale, articulation, setbacks and building separation that responds to the topography of Jindabyne.

   iii. providing human-scale buildings that integrate public and private realms with building heights that complement street widths.

   iv. considering flexible building design to accommodate future uses and adaptive re-use.

   v. ensuring building bulk, orientation and design contribute to the energy efficiency of buildings.

   vi. encouraging preparedness for natural hazards and climate change.

   vii. considering views and vistas across Lake Jindabyne and to the Snowy Mountains.

C. Development along the foreshore area should orientate to and activate the foreshore and public realm, provide active and passive open space opportunities and provide an accessible and welcoming space for workers, residents and visitors.

D. Development should incorporate universal design principles.

E. Built form should orientate to and activate the street and public realm to provide surveillance to increase safety and activation of the public domain.

F. Development is to retain high levels of solar access to open spaces and/or public spaces.

G. Development is to provide new and upgraded pedestrian connections to link key sites within the Town Centre and the Foreshore.

H. Development is to integrate appropriate on-site car parking provision.

Consideration for future stages of development

- The Delivery Plan should include:
  - Design criteria for built form including guidance on building materials and colour selections to minimise visual impacts and reflect the sub-precinct's character
  - Controls for non-residential development which ensure built form is sympathetic to the sub-precinct's character
  - Guidance on the form, mass, scale, height and articulation of buildings to create a high quality and sustainable urban environment
  - Design guidance to ensure new development integrates effectively with the established uses in the sub-precinct
  - A public domain and landscaping strategy to provide guidance on how development should address streets and the foreshore, provisions for the use of footpaths and provisions on the integration of public and private realms.

Transport and Movement

The sub-precinct is primarily centralised along Kosciuszko Road with a number of local roads, such as Snowy River Avenue and Thredbo Terrace, providing street activation opportunities in the Town Centre. Currently Kosciuszko Road is the main arterial road for access to and from surrounding tourist destinations in the Region. It is envisaged that Kosciuszko Road will enable pedestrian and active transport movements that promote accessibility and walkability. The sub-precinct will also need to:

- provide car parking in strategic locations to meet growth projections
- provide bike parking facilities and upgrade active transport connections
- provide ride sharing parking space and electric vehicle charging infrastructure.

The Foreshore will also become a hub of activity. This will include an improved Lake Jindabyne shared trail, including upgraded facilities and amenities, and improved pedestrian and cycling facilities. The foreshore will also include a lakefront promenade that connects to other key sites within Jindabyne.

Aims

- Ensure the timely and orderly delivery of key transport infrastructure.
- Provide safe access for all users throughout the sub-precinct via all modes of transport.
- Provide facilities for an extended and improved public transit network.
- Provide active transport linkages between and within the Town Centre and key destinations.
- Ensure new development is designed to activate street frontages to create a pedestrian-friendly Town Centre and ensure a high quality, vibrant public realm.
- Provide functional, safe and efficient parking areas.
- Provide 'park and ride' facilities in new and existing car parks. Design networks and streets that incorporate smart solutions that enable future mobility, including provision for electric and smart vehicles, such as electric vehicle charging facilities.
- Provide efficient and reliable shuttle services to and from other key sites in the Precinct.
- Ensure car parks are designed to enable future adaptability and re-use opportunities.

Performance Criteria

A. The street network is to be augmented and upgraded to ensure the effective servicing, staging and orderly operation of the sub-precinct.

B. Pedestrian and cycle connections should be provided in the general locations shown in the structure plan.

C. Car parking should be provided in the general locations shown in the structure plan. Integrate car parking into new development and promote parking solutions that service multiple sites.

D. Car parking spaces must be designed in accordance with Australian Standard AS 2890.1.

E. Development must provide operational access and egress for emergency services and occupants.

F. The structure plan identifies the general locations of public transport stops to service the Jindabyne Precinct. Development should integrate public transport facilities and amenities at these locations.

G. Maximise the number of people that can access employment, tourist and community facilities by public and active transport.

H. Transport infrastructure, including shared paths, car parks and pathways, should support safety and road performance, future mobility (smart technology), equitable access and passive surveillance.

I. Car parking should be designed to enable future adaptability and re-use opportunities.

J. Car parking in mixed use and commercial development should incorporate smart technology and electric vehicle parking and charging stations.

K. Streets are planned to adapt to changing and emerging travel modes (such as e-bikes and e-scooters) and enable innovation and adaptive re-use (such as flex zones to promote street activation).

L. Incorporate smart parking principles and infrastructure in the design of new and redeveloped car parks, such as Wifi, CCTV, vehicle count sensors and app technology.

Consideration for future stages of development

- A street plan for the Town Centre and Foreshore sub-precinct to include:
  - street hierarchy
  - staging of delivery
  - street type, sections and reserve widths
  - methodologies and triggers for upgrades
  - long-term ownership and management.
- Provisions and design guidance for the delivery of ride sharing and electric vehicle charging facilities.
- Concept design plans for:
  - new pedestrian crossings, shared paths and active transport connections.
  - the upgrades to the foreshore walkway
- Development of car parking rates, including the provision of accessible parking spaces.

Credit: Robbie Duncan, No Bad Days Photography.

4.2 Southern Connector Road

The Southern Connector Road is a new road proposed to provide alternative access between the eastern and western extents of Jindabyne via Barry Way and enable public realm improvements and foreshore connecions in Jindabyne (via an upgraded Kosciuszko Road).

The Southern Connector Road is proposed to be two-lanes (one lane in each direction). A bike lane is proposed between the dam wall and the intersection with Barry Way to be located on the southern side of the road. It also provides access and egress to surrounding sub-precincts and residential developments.

A pedestrian overbridge is proposed to ensure connectivity across the Southern Connector Road and in particular between the town centre and Sports and Education Precinct. This will provide a safe connection, particularly for students of the primary and secondary schools. Pedestrian connections will also extend from the overbridge to the town centre and key neighbouring residential streets.

The intersection of Barry Way and the Southern Connector Road presents an opportunity to act as a local centre with significant corner sites that could all serve a variety of options with convenient access to Jindabyne town centre, to nearby residential and industrial areas, and to Kosciuszko National Park for visitors. The area is also crossed by the proposed shared use path along Barry Way connecting to schools and sporting facilities.

Further benefits of the Southern Connector Road are realised by the ability to provide additional access to other sub-precincts including the Sports and Education sub-precinct, park and ride facilities and residential growth areas.

Park and Ride

The proposed Park and Ride shuttle service would be anchored by a car park facility on the south west corner of the intersection of Barry Way and the Southern Connector Road. The proposed facility would include:

- Parking spaces with provision for motorcycles, cars with trailers and accessible car parking spaces
- Enclosed bus shelter with seating, kiosk, toilet amenities and bike/storage racks
- Raised median crossing on Barry Way for shared path connections
- Integration with 1000m contour track connecting to the Mountain Bike and Adventure Park

Figure 8: Artist's Impression Southern Connector Road. Credit: Jensen PLUS

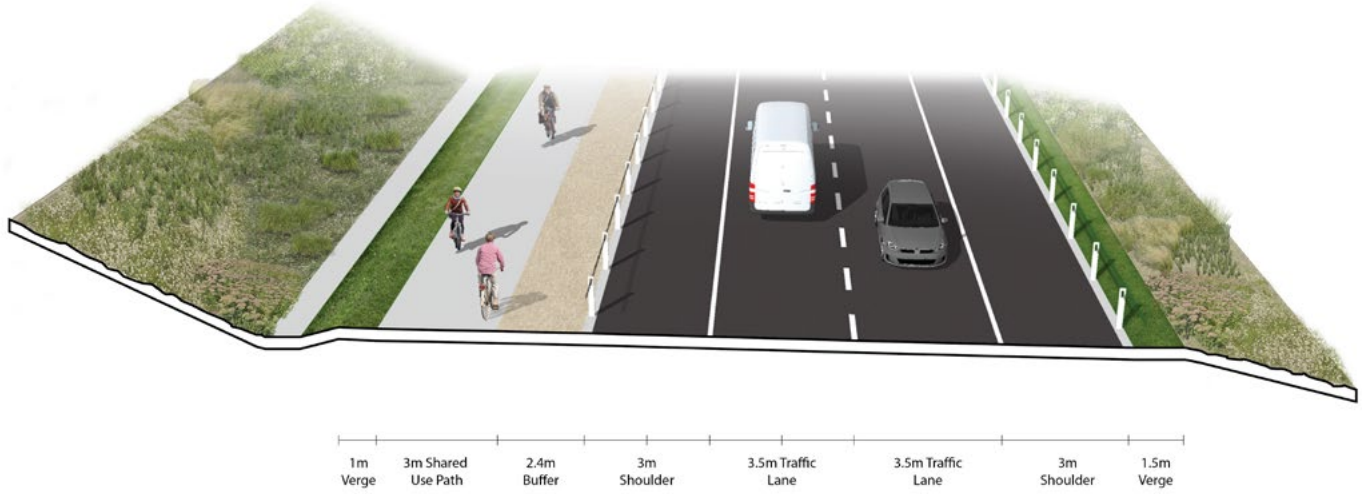


Figure 9: Southern Connector Road structure plan. Credit: Jensen PLUS

4.2.1 Sub-Precinct Provisions

Land Use

Aims

- Ensure the preservation of land for the Southern Connector Road.
- Provide a preferred alignment for transport infrastructure to ameliorate amenity and safety concerns with traffic on Kosciuszko Road in the Jindabyne Town Centre.

Performance Criteria

A. Development must consider the likely impacts to be generated through the construction and operation of the road, including traffic congestion, noise and road safety.

Consideration for future stages of development

- A staging plan for the timely and efficient development of infrastructure, including triggers, delivery and sequencing.

Built Form and Landscape

Aims

- Provide street landscaping that enhances both public and private realms.

Performance Criteria

A. Streets should be as active and green as possible to reduce heat island effects, improve human comfort and general walkability.

Consideration for future stages of development

- A public domain and landscaping strategy to outline provisions for the use of footpaths and the integration of public and private realms.

Transport and Movement

Aims

- Provide equitable and safe access for all users.
- Provide active transport linkages along and across the Southern Connector Road.
- Integrate road and transport infrastructure with services and utilities into the same infrastructure corridor/alignment.

Performance Criteria

A. Pedestrian and cycle connections should be provided along the Southern Connector Road.

B. Infrastructure development should provide separated active transport links that connect to the broader regional network.

C. Development should ensure a suitable number of access and egress points, to neighbouring lands along the Southern Connector Road, are provided to maintain road safety and performance.

D. Development must provide operational access and egress for emergency services and occupants.

E. Development should integrate road and transport infrastructure with services and utilities into the same infrastructure corridor.

Consideration for future stages of development

- Transport infrastructure concept design plans and guidance for:
  - new and upgraded shared paths, active transport connections and pedestrian crossings in the sub-precinct
  - infrastructure upgrades and integration with existing infrastructure and servicing networks.
  - methodologies and triggers for upgrades.
  - long-term ownership and management.
- A public domain strategy to provide guidance on how development should address the street and provisions for the use of footpaths and the public domain.

4.3 Sports and Education

The Sports and Education sub-precinct covers around 96 hectares of land and currently contains the Jindabyne Sport and Recreation Centre with a smaller area of Crown Land. The sub-precinct is located 1.3 kilometres from the town centre and will form an important community hub for Jindabyne.

The Jindabyne Sport and Recreation Centre currently accommodates high performance and community sport facilities, athlete accommodation, student camp accommodation and sports infrastructure. The Jindabyne Sport and Recreation Centre attracts over 17,000 users annually with a significant portion of those being for school camps or outdoor education programs.

The site has an open campus style setting with scattered trees and clusters of buildings representing key zones and activities. An internal road network connects the zones and accesses the local road network from Barry Way. The precinct is well positioned to gain access to the regional road network via the future Southern Connector Road to be located at the northern boundary of the precinct.

Drivers for change include:

- The need for a high-performance winter sports training centre in proximity to the alpine region
- Additional community sport and recreation facilities to address future population growth
- Establishment of supporting education, accommodation (self-contained, camp and student) and commercial uses to create a comprehensive offering
- The NSW Government commitment to build a new Primary, Secondary School and a TAFE NSW Connected Learning Centre.
- The NSW Government commitment to initial stages of a National Snow Sports Training Centre (currently under construction).

Credit: Office of Sport

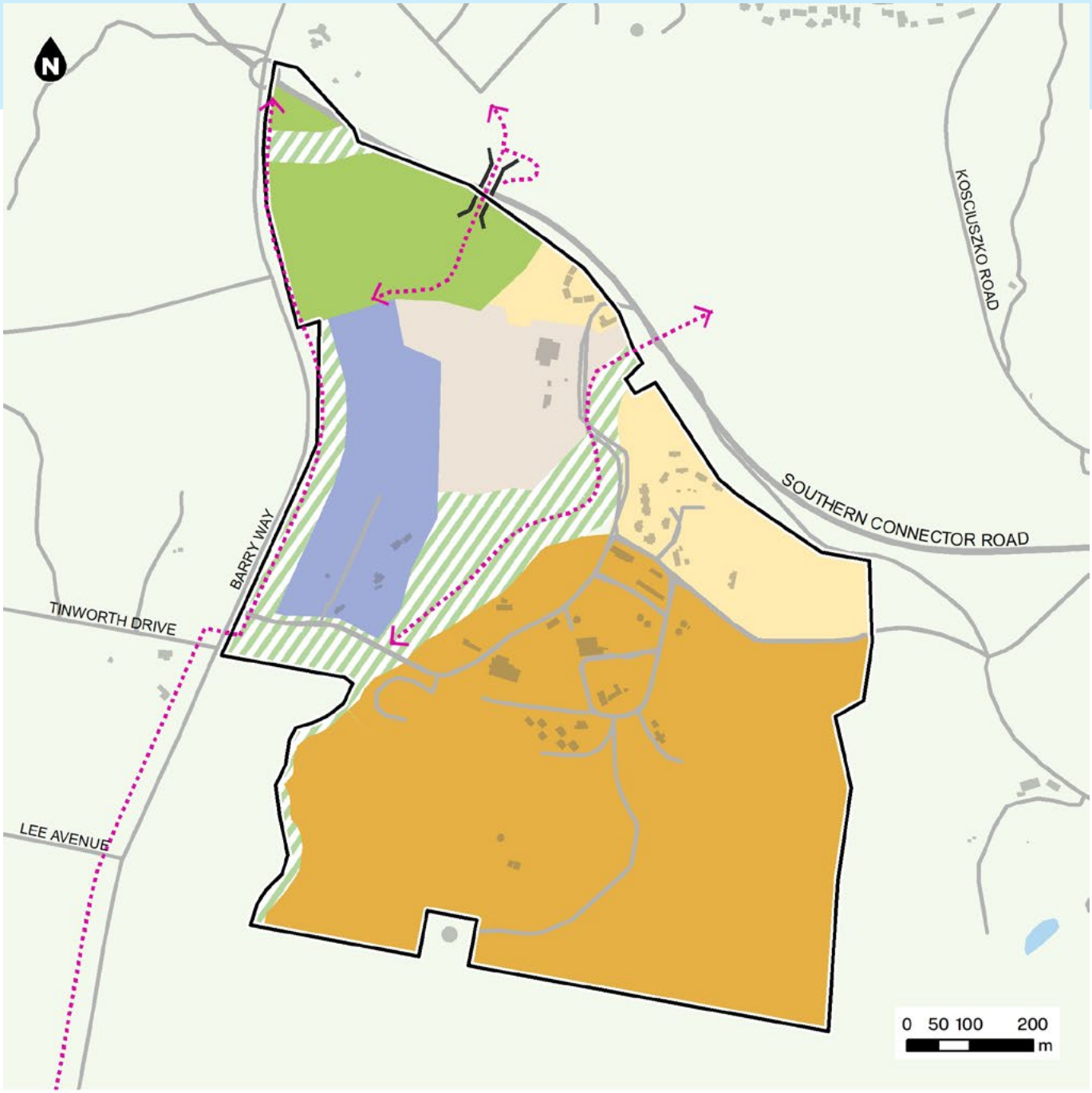
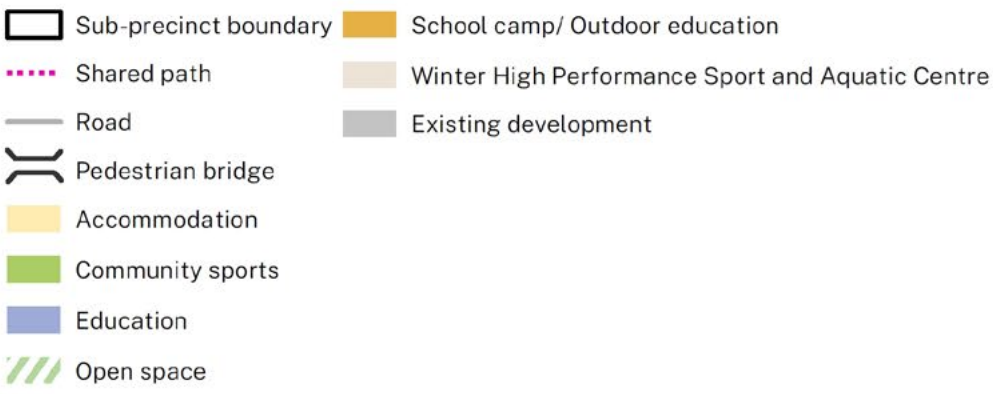


Figure 10: Sports and Education Precinct structure plan



4.3.1 Structure plan

The Sports and Education structure plan supports the redevelopment of the existing Jindabyne Sport and Recreation Centre site and adjacent Crown land into a hub that caters for multiple user groups, balancing the needs of high-performance athletes, school groups and the broader Jindabyne community.

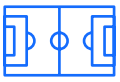
The new primary and secondary school, along with the Snowy Mountains Grammar School on Kosciuszko Road, will provide fit for purpose education facilities to support the growing population, including options for tertiary education within Jindabyne.

The site will accommodate green and blue infrastructure within areas of high biodiversity value and provide commercial opportunities co-located with new and upgraded accommodation for school and community groups, athletes and coaches, seasonal workers and commercial guests. Primary access to the site will occur via the Southern Connector Road with access to educational facilities provided from Barry Way. The precinct will be connected via internal green pedestrian links to ensure the regional setting of the site is maintained.

Key elements of the structure plan include:

High performing sporting facilities

- A new high-performance indoor training and administration facility
- Additional winter sports training facilities such as dry slope rails park and start gates, push track, ski flex dry slope area and a water development jump
- A new indoor sport and aquatic centre for community and high-performance use with heated pools, indoor courts, gymnastics facilities and a climbing wall
- Continued operation of existing facilities such as air bag and BMX track



Community sporting facilities

- Community oval and fields (AFL, cricket, rectangular pitches)
- Small grandstand with amenities (change rooms, club rooms, first aid, storage, small kiosk)
- Cricket nets
- Outdoor courts (netball, basketball and tennis)
- Opportunities for a future ice-skating rink

School camps and programs

- Upgrade of outdoor program area associated with school and community camps including a mountain bike skills park, archery range and recreation activity area
- Expansion of student accommodation facilities to provide contemporary accommodation for larger camp sizes
- New outdoor program facilities
- Upgraded outdoor sports facilities including enhancing the existing running track, inclusion of a cycling criterium and roller ski track, laser biathlon range and universal design amenities

Accessibility and connections

- New access from the Southern Connector Road
- Improved access from Barry Way
- Revised school bus routes and stops
- Restored riparian zone with pedestrian and cyclist links to Jindabyne

Education facilities

- A new primary and secondary school with some shared sports facilities for community use
- A new TAFE NSW Connected Learning Centre
- Opportunities for further education facilities including a country universities centre

4.3.2 Desired future character

The Sports and Education Precinct will deliver full-scale education facilities and flexible community recreation spaces alongside world-class sports infrastructure, positioning the site as Australia's leading winter sports training hub. This will create a diverse asset that can be enjoyed year-round by visitors and the growing Jindabyne community alike.

Credit: Office of Sport

4.3.3 Sub-Precinct Provisions

Land Use

It is envisaged that the Sports and Education sub-precinct will be redeveloped into a sports and education hub that caters for multiple user groups. The sub-precinct will also provide additional community sport and recreation facilities to address population growth, along with the provision of supporting education, accommodation and commercial uses.

The sub-precinct will also accommodate a high-performance sports training centre and a National Snow Sports Training Centre. The sub-precinct will also provide future education and training opportunities, with a new primary and secondary school and new tertiary education facilities.

Aims

- Ensure development supports the delivery of a Sports and Education sub-precinct which provides contemporary facilities and accommodation for high performance athletes, students, the community and tourists.
- Support the redevelopment of the existing Jindabyne Sport and Recreation Centre into a hub that caters for multiple user groups that balances the needs of high-performance athletes, school groups, and the broader Jindabyne community.
- Enable the expansion of the high-performance sports precinct to create a National Snow Sports Training Centre, providing year-round high performance facilities.
- Facilitate the provision of new and upgraded accommodation for school and community groups, athletes and coaches, seasonal workers and commercial guests.
- Enable the development of a new primary and secondary school, and TAFE and tertiary education facilities.

Performance Criteria

A. Redevelopment of the existing field and track site should include an AFL/cricket oval, open courts, biathlon/ criterium track and new change facilities.

B. Expansion of the existing self-contained accommodation area should provide a commercial accommodation precinct.

C. Development of a new indoor sport and aquatic centre should include heated pool, indoor courts, gymnastics facilities and a climbing wall.

D. Any future use of the Crown Reserve site (Reserve 130057) must have regard for the current Native Title status of the land at under the *Native Title Act 1993*.

E. Development should be designed to sensitively integrate into the landscape and demonstrate that it would not have an unacceptable visual impact on the scenic quality of the area.

F. In considering the suitability of the development, and consistency with the intent for each zone, the Issuing Authority must be satisfied that the development meets the performance criteria and development controls in this Master Plan and in the Delivery Plan.

G. Development in the Sports and Education sub-precinct should support the delivery of a range of sporting, recreation, community and education uses, including supporting high performance athlete, coaching and student accommodation.

H. Development of school camps and program facilities (southern portion) of the sub-precinct should be designated for:

   i. outdoor programs associated with the school camp and community users.

   ii. upgraded running and cycling tracks.

   iii. upgraded and expanded mountain bike skills park and tracks.

   iv. camp-fire site, archery range and activity area.

   v. amenities that incorporate universal design at the oval.

   vi. new and upgraded student accommodation and associated facilities.

I. Development of education facilities (western portion) of the sub-precinct, along Barry Way, should be designated for:

   i. the new primary and secondary school.

   ii. TAFE and other tertiary education facilities.

   iii. supporting recreational and community uses.

J. Development of high-performance sporting facilities (northern portion) of the sub-precinct, along the Southern Connector Road, should be designated for:

   i. high performance winter training facility, including the creation of a new National Snow Sports Training Centre.

   ii. supporting education, administration and commercial uses.

   iii. additional community sport, recreational and community uses.

   iv. new and upgraded accommodation for athletes, coaches and support staff.

K. Development of the community sporting facilities (north-west portion), at the intersection of the Southern Connector Road and Barry Way, should be designated for:

   i. community and recreational uses.

   ii. supporting facilities and amenities.

Consideration for future stages of development

- The Delivery Plan should:
  - include a Staging Plan to ensure the orderly and efficient development of the sub-precinct.
  - identify, design and establish the enabling works that support the delivery of the sub-precinct.
  - protect utility infrastructure through easements.

Built Form and Landscape

The built form of the sub-precinct should ensure that building siting, orientation and design is sensitive to the scenic qualities, views and topography of the site. Development should recognise and celebrate the regional setting of the sub-precinct and provide for the retention of vegetation and the creation of green connections.

Aims

- Provide an open campus style setting recognising and celebrating the regional alpine setting.
- Ensure sport and recreation facilities do not impact on the visual amenity of the locality.
- Promote increased bulk and scale in suitable locations.
- Integrate development into the topography of the land and promote the retention and planting of native vegetation corridors.
- Ensure development addresses and activates street frontages where required across the site.
- Ensure buildings are designed to respond to and enhance the positive qualities of the sub-precinct's setting, landscape and heritage, including Aboriginal cultural heritage.

Performance Criteria

A. Development should enhance the regional campus style setting of the sub-precinct.

B. Buildings should be well designed and incorporate landscaping by:

   i. siting buildings to minimise impacts on existing vegetation and providing opportunities for on-site landscaping.

   ii. providing appropriate scale, articulation and setbacks that responds to the topography of the site.

   iii. providing green connections that integrate public and private realms and existing areas of vegetation.

   iv. encouraging preparedness for natural hazards and climate change.

C. Development should address and activate street frontages.

D. Development should provide equitable and safe pedestrian and active transport connections.

E. Development must mitigate any visual amenity impacts through building design, colours, materials and landscaping.

F. New planting which reflects the landscape character of the area should be provided throughout the sub-precinct, including the riparian biodiversity protection area, to minimise the visual impacts of new development.

G. Development should minimise site earthworks and appropriately respond to the topography of the site.

Consideration for future stages of development

- A design guideline for the sub-precinct that includes:
  - the placement and interface of buildings, car parking and landscaping for each of the different clustering of facilities within the sub-precinct, including the formation of gateways to the sub-precinct along Barry Way and the Southern Connector Road
  - detailed design criteria for built form, including guidance on building materials, colour selections, architectural style, orientation, roof structures and how development responds to the topography of the site, minimises visual impacts and reflects the open campus style setting of the sub-precinct
  - setback provisions to improve amenity and walkability and provide for the activation of streets where required
  - provisions for managing cut and fill
  - requirements for demolition and decommissioning
  - best practice approaches to lighting design
  - design guidance for the re-use of heritage listed buildings and principles for the design of the heritage curtilage
  - a public domain strategy.
- A landscape and vegetation management plan that includes:
  - design solutions to integrate green connections across the sub-precinct
  - landscaping provisions, including gateway treatments for new and upgraded connections along Barry Way and the Southern Connector Road
  - riparian corridor design provisions and how development should interface with watercourses
  - the identification of local climate ready species
  - management and maintenance provisions
  - biodiversity offset arrangements.

Transport and Movement

The sub-precinct is connected to the regional road network via Barry Way and the new Southern Connector Road. The new entry point from the Southern Connector Road will be the gateway to sporting and community facilities. It will also reduce existing traffic conflicts with camp facilities.

The sub-precinct will provide strong pedestrian connections with a revegetation of the existing watercourse to form a green spine. Green infrastructure will be supported by walking and bike paths connecting different parts of the site. This will include a pedestrian overbridge across the Southern Connector Road to provide a safe and accessible connection back to the Town Centre and nearby residential areas. The sub-precinct will also provide connections to surrounding areas via a new shared path adjacent to Barry Way.

Aims

- Ensure the timely and orderly delivery of key transport infrastructure to support redevelopment and development sites in the sub-precinct.
- Provide equitable and safe access for all users throughout the sub-precinct via all modes of transport, with a focus on walkability.
- Facilitate connections to a public transport network.
- Provide active transport linkages between and within the sub-precinct and to key destinations.
- Provide active transport linkages to the Jindabyne Town Centre.
- Provide facilities for electric and smart vehicles, such as electric vehicle charging facilities.
- Provide functional, safe and efficient parking areas.

Performance Criteria

A. New and upgraded streets must generally be in accordance with the structure plan and must consider the effective servicing, staging and delivery of the sub-precinct's street network.

B. Pedestrian and cycle connections should be provided in the general locations shown in the structure plan.

C. Development should integrate public transport facilities and amenities into the broader transport network, where possible.

D. Development should prioritise the delivery of the shared path along Barry Way and the pedestrian overpass bridge across the Southern Connector Road.

E. Development should integrate green connections, and active transport and shared paths.

F. Development should integrate smart technologies into car park design, as well as electric vehicle charging stations.

G. Development should integrate onsite car parking to minimise on-street parking requirements and where possible should utilise shared parking solutions to service multiple development sites.

H. Car parking spaces must be designed in accordance with Australian Standard AS 2890.1.

I. Development of car parks should incorporate water sensitive urban design principles, where car parks may support drainage requirements across the sub-precinct

J. Development must provide operational access and egress for emergency services and occupants.

Consideration for future stages of development

- A street plan/s for the sub-precinct to include:
  - street hierarchy
  - staging of delivery
  - street type, sections and reserve widths
  - methodologies and triggers for upgrades
  - long-term ownership and management.
- Detailed designs of new intersections and road upgrades.
- An active transport network, including staging of delivery, designs and typical cross sections, and integration with existing infrastructure.
- Development of car parking rates, including the provision of accessible parking spaces.

Credit: Office of Sport

4.4 Mountain Bike and Adventure Park

The Jindabyne Mountain Bike and Adventure Park covers 500 hectares of undulating and rocky land at the western edge of Jindabyne accessed via Alpine Way. The sub-precinct is located around 3 kilometres from the town centre and is currently unused aside from electricity infrastructure located on the site.

Panoramic views of Lake Jindabyne, the town centre and Thredbo Valley are available from Widows Peak and the central ridge which rises from Lake Jindabyne. Dense wooded areas are present around Widows Creek which traverses through the western portion of the site discharging at Lake Jindabyne.

The sub-precinct represents an opportunity to develop a world-class mountain bike and adventure tourism hub in close proximity to Jindabyne. The Jindabyne Trail Stewardship initiated and identified the need to develop and manage mountain biking trails in and around Jindabyne.

Drivers for change include:

- Utilising land that is easily accessible and leveraging the stunning natural environment and elevation suitable for adventure activities
- Diversifying recreational experiences to significantly contribute to year-round tourism.

Artist's impression of the Mid Station. Credit: Aurecon.

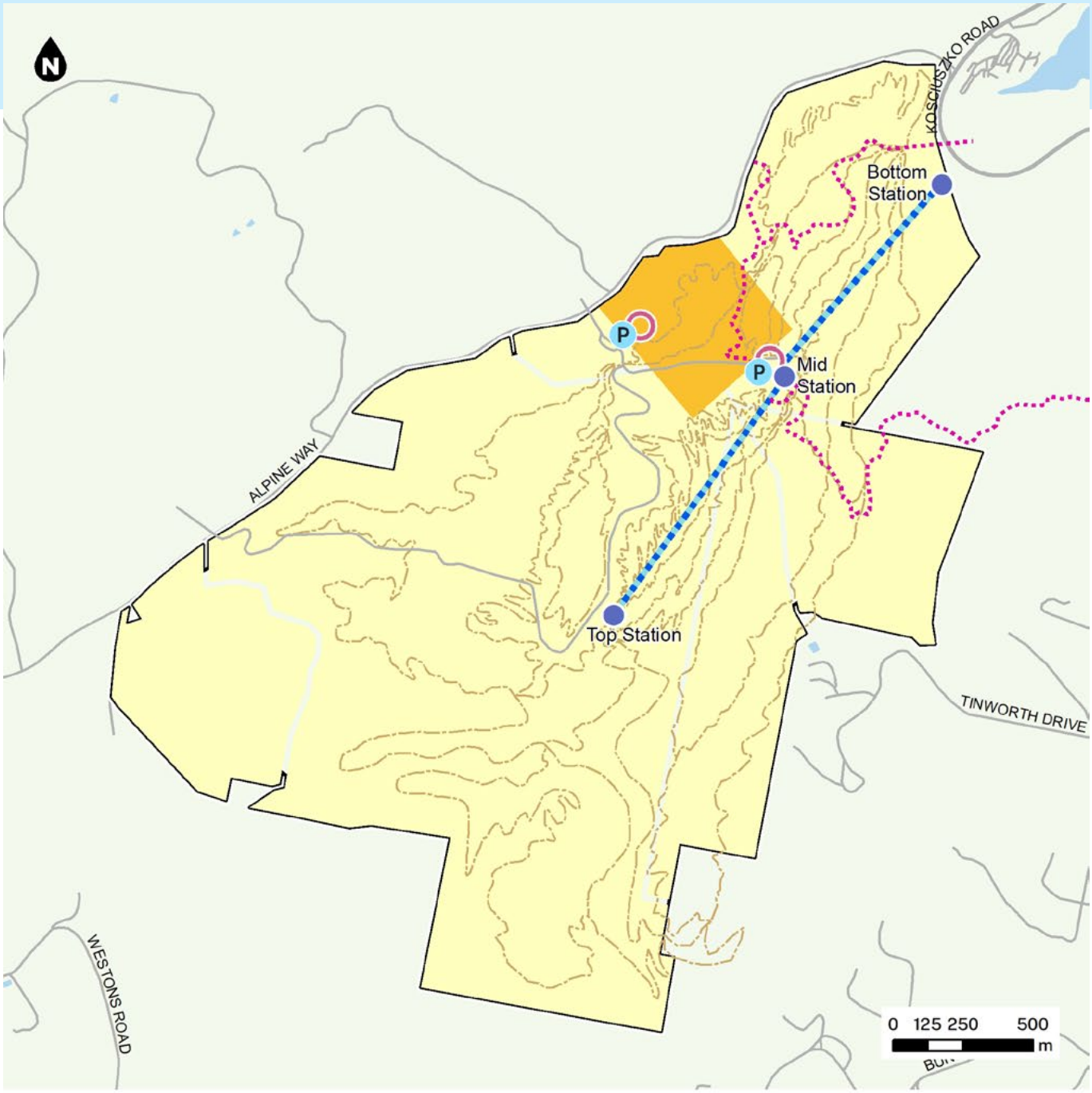


Figure 11: Mountain Bike and Adventure Park structure plan

Sub-precinct boundary
Adventure park
Gondola station
Mountain bike park
Node
Parking
Gondola
Mountain Bike Trail
Shared path
Road

4.4.1 Structure plan

The Mountain Bike and Adventure Park structure plan outlines a range of development opportunities including a conceptual trail network and general location of the adventure park, a gondola network and car park locations adjacent to the Alpine Way and the Southern Connector Road. The site's proximity to Jindabyne also enables an end-to-end user experience for trail riders.

The active use of this land will also enable improved environmental management and rehabilitation to enhance and protect the biodiversity of the sub-precinct including further investigations to determine if the site has the potential to contribute to environmental offsets.

Key elements of the structure plan include:

Accessibility and connections

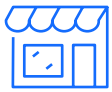
- Primary vehicle access via Alpine Way or the gondola/chair lift
- Trail and shared path connections to provide access by bike
- Secondary access points from the new Southern Connector Road and Tinworth Drive for emergency services and shuttle buses.

Mountain bike trails

- Over 100 kilometres of purpose-built mountain bike trails for different skill sets and mountain biking types
- Trail connectivity including with mountain bike trails at Bungarra Alpine Centre to the east and Lake Jindabyne Foreshore to the north.

Gondola/chair lift

- A unique tourist attraction to take in panoramic views to Jindabyne and the Snowy Mountains
- Providing access to and from the park with the potential for future expansion into the town centre and along the foreshore.



Ancillary facilities

- Car park
- Retail and commercial - cafes, bike hire and shops
- Access and activity nodes – opportunities for co-located access and activity nodes at the northern edge of the site.

Adventure park

A site for commercially operated adventure activities such as luge, mountain roller coaster and zip lining.

Heritage centre

Potential location for the proposed Heritage Centre.

4.4.2 Desired future character

A nationally significant Mountain Bike and Adventure Park that caters for all abilities with a range of trail types, with beginner, leisure, cross country, flow and gravity trails ensuring a broad spectrum of trail users are attracted to the region. As a world-class facility comparable in size to well-known national and international mountain bike parks, it will be a significant driver of year-round tourism.

Credit: Aurecon

4.4.3 Sub-Precinct Provisions

Land Use

Aims

- Ensure development supports the delivery of a Mountain Bike and Adventure Park which provides a broad range of tourism and recreational uses, along with supporting ancillary uses.
- Ensure development avoids unacceptable visual impacts and is sensitive to the scenic qualities of the locality.
- Provide scenic lookout opportunities in key areas in the sub-precinct.
- Ensure that development is low impact and protects and enhances the environmental values of the sub-precinct.

Performance Criteria

A. Development should be designed to sensitively integrate into the landscape and demonstrate that it would not have an unacceptable visual impact on the scenic quality of the area.

B. Development should enable a range of tourism and recreational uses such as such as luge, mountain roller coaster and zip lining.

C. An Activation Precinct Certificate should only be issued for food and drink premises, car parks, and other tourism uses which are ancillary to or support the main purpose of the Mountain Bike and Adventure Park sub-precinct, where:

   i. the uses are required to service the needs of the sub-precinct

   ii. non recreational uses, where possible, are low impact and are co-located to form nodes of activity that minimise the environmental impacts in the sub-precinct.

Consideration for future stages of development

- The Delivery Plan should:
  - include a Staging Plan to ensure the orderly and efficient development of the sub-precinct
  - identify, design and establish the enabling works that support the delivery of the sub-precinct, particularly those identified for short term development
  - outline how existing utility infrastructure easements will be protected.

Built Form and Landscape

The Mountain Bike and Adventure Park sub-precinct enjoys a picturesque landscape setting with steep hills and valleys with large clusters of native vegetation. The sub-precinct will be developed primarily for tourism and recreational purposes and aims to protect and enhance the environmental values of the site. Development in the sub-precinct will be sensitive to the scenic qualities and views of the area and topography.

Aims

- Develop a world-class Mountain Bike and Adventure Park sub-precinct with supporting infrastructure and ancillary uses.
- Ensure where possible that tourism and recreational facilities and infrastructure do not impact the visual amenity of the locality.
- Ensure buildings are clustered in key locations to reduce impacts on views to the sub-precinct.
- Integrate development into the topography of the land and promote the retention and planting of native vegetation.
- Ensure buildings are designed to respond to and enhance the positive qualities of the sub-precinct's environmental and landscape setting, including Aboriginal cultural heritage values.

Performance Criteria

A. Buildings are efficient, well-designed and incorporate generous landscaping. This will be achieved by:
   i. ensuring building bulk, orientation and design is low impact and responds appropriately to the topography of the site
   ii. carefully siting buildings to minimise the impact on existing vegetation.
   iii. incorporating preparedness for natural hazards and climate change into design.

B. Development of ancillary uses should be designed to sensitively integrate with the landscape and demonstrate that it would not have an unacceptable visual impact on the scenic qualities of the locality.

C. Development should minimise cut and fill in and around steep slopes and should minimise site earthworks.

D. Development should provide accessible and safe pedestrian and active transport connections.

E. New plantings that reflect the environmental setting of the area should be provided throughout the sub-precinct to minimise the visual impacts of new development.

Consideration for future stages of development

- A landscape and vegetation management plan that includes:
  - design solutions to integrate green connections across the sub-precinct, including shared and active transport paths
  - landscaping provisions
  - the identification of local climate ready species
  - management and maintenance provisions
  - biodiversity offset arrangements.
- A design guideline for the sub-precinct that includes:
  - the location of key nodes for buildings to support ancillary uses
  - detailed design criteria for built form including guidance on building materials, colour selections, architectural style, orientation, roof structures and how development responds to the topography of the site and minimises visual impacts
  - provisions for managing cut and fill
  - provisions for car parking and design solutions for how car parks can be integrated with buildings at key nodes.

Transport and Movement

The sub-precinct is connected to the regional road network via Alpine Way and the new Southern Connector Road. A new intersection on Alpine Way would be required to provide safe access to the sub-precinct. The sub-precinct will also connect to the Town Centre and Foreshore with a shared active transport path via a bridge or underpass at Kosciuszko Road. This access point would also provide direct access to the gondola station.

The sub-precinct will locate car parks in areas that minimise vegetation removal, will provide new bicycle parking, and will integrate ride sharing parking spaces and electric vehicle charging infrastructure, where possible. New trails will be established and constructed using best practices to allow the sub-precinct to provide world-class facilities.

Aims

- Ensure the timely and orderly delivery of key transport infrastructure to support development in the sub-precinct.
- Provide equitable and safe access for all users throughout the sub-precinct.
- Provide active transport linkages between and within the Mountain Bike and Adventure Park sub-precinct, and to key destinations
- Enable the provision of mountain bike trails and trail connectivity, including to mountain bike trails at Bungarra Alpine Centre to the east and Lake Jindabyne Foreshore to the north.
- Provide facilities for electric and smart vehicles, such as electric vehicle charging facilities.
- Provide active transport linkages to the broader Region, including direct links to the Jindabyne West sub-precinct and neighbouring tourist accommodation.
- Provide alternative shuttle bus access routes to provide connections to the peak for riders.
- Provide functional, safe and efficient parking areas that minimise vegetation removal.

Performance Criteria

A. New and upgraded streets and transport infrastructure should be generally in accordance with the structure plan and must consider the effective servicing and staging of the sub-precinct's connections.

B. Pedestrian and cycle connections should be provided in the general locations shown in the structure plan to provide direct access to the foreshore linking to the Lake Jindabyne Trail and to the gondola station.

C. Access roads to be designed and constructed to ensure emergency service vehicles can access key areas of the site.

D. Development must provide operational access and egress for emergency services and occupants.

E. Development of car parks and transport infrastructure must be sited and designed to avoid visual impacts.

F. Development should integrate on-site car parking to minimise vegetation removal.

G. Car parking spaces must be designed in accordance with Australian Standard AS 2890.1.

H. Development should integrate smart technologies and incorporate water sensitive urban design principles.

Consideration for future stages of development

- A comprehensive trail network plan and design guidance for the Mountain Bike and Adventure Park sub-precinct, including links and connections to the broader trail network such as the Bungarra Alpine Centre to the east and Lake Jindabyne Foreshore to the north. The trail network plan should be developed in direct consultation with local mountain biking clubs and other relevant sporting bodies or associations.
- Development of car parking rates, including the provision of accessible parking spaces.
- Detailed designs for:
  - new intersections and the pedestrian bridge or underpass over Kosciuszko Road
  - the gondola and stations.

Mountain bike trails adjacent to Lake Jindabyne.
Credit: Tourism Snowy Mountains

4.5 Western Lake Jindabyne

The western side of Lake Jindabyne has stunning views across Lake Jindabyne and limited development associated with existing rural residential and agricultural use. The Western Lake Jindabyne sub-precinct comprises land between Kosciuszko Road and Lake Jindabyne north of the intersection with Alpine Way up to and including Hatchery Bay and Hayshed Bay. The site lies within the Lake Jindabyne Scenic Protection Area requiring future development to limit visual impact on the scenic quality of the area.

The sub-precinct will contain a range of leisure, recreation and tourism uses. The driver for change at this location is the opportunity to meet demand for tourist attractions and accommodation set at the foothills of the Snowy Mountains with stunning views across the lake.

Credit: Snowy Monaro Regional Council

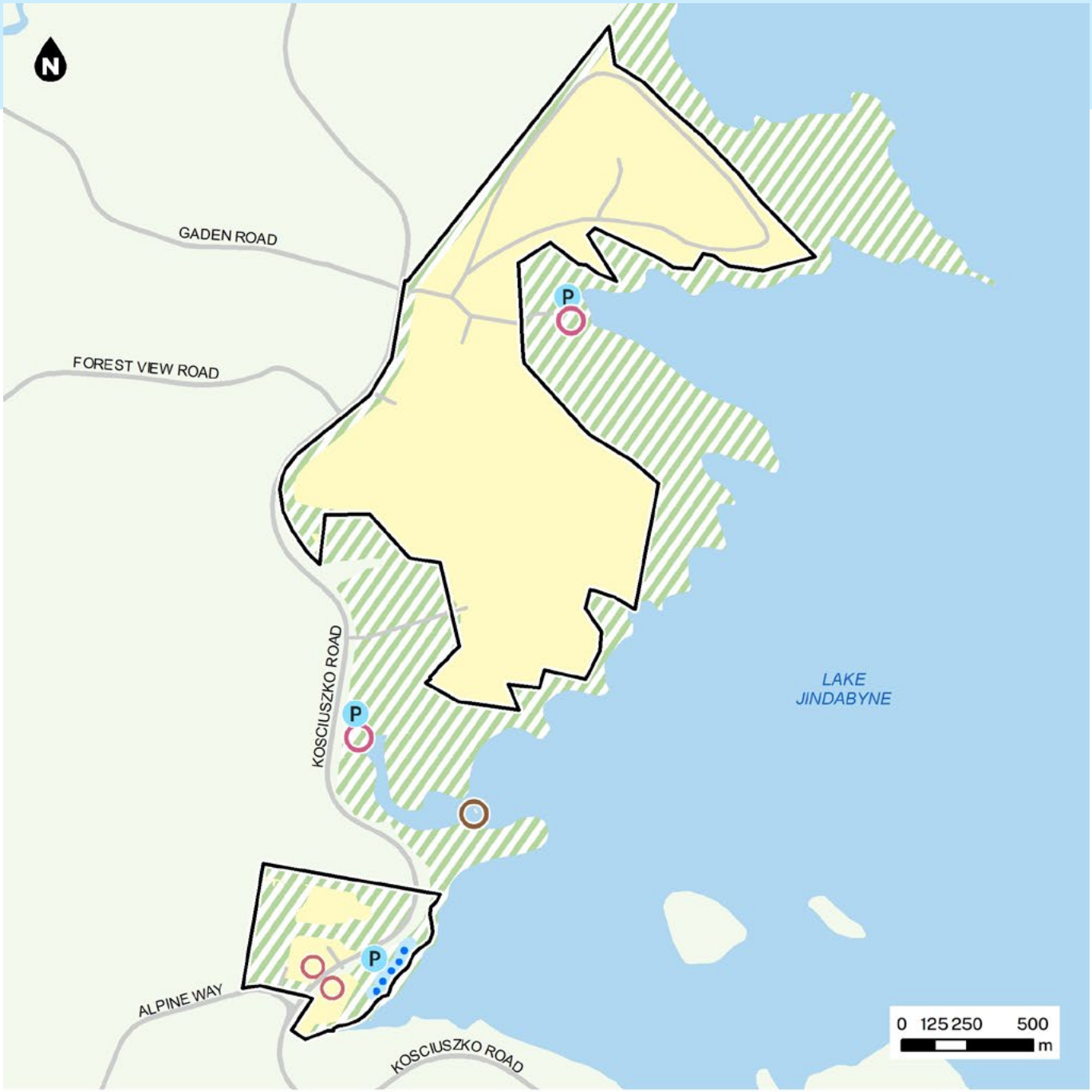


Figure 12: Western Lake Jindabyne structure plan

Sub-precinct boundary

P Parking

Node

Aboriginal Heritage Place

Water access

Open space

Tourism

4.5.1 Structure plan

Key elements of the structure plan include:

Accessibility and connections

- Upgrade Hatchery Bay Road to provide increased accessibility to future development
- New underpass at the intersection of Kosciuszko Road and Gaden Road to connect the foreshore to the Thredbo Valley Track (currently being delivered by Snowy Monaro Regional Council)
- New access point off Kosciuszko Road to service the sub-precinct
- Upgrade the Lake Jindabyne shared trail, ultimately connecting to the Lake Jindabyne Foreshore Linear Park.
- Access to Lake Jindabyne, including opportunities for a pontoon, associated car parking and water taxi or ferry service to the Jindabyne town centre.

Lake Jindabyne village

Lake Jindabyne Village is situated approximately two kilometres west of Jindabyne, on land known as Rabbits Corner, and comprises around 21 hectares. The site is located at the junction of a prominent intersection servicing Perisher and Thredbo Valleys and offers scenic views of Lake Jindabyne.

It is envisaged that Rabbit's Corner/Lake Jindabyne Village will include a range of self-catering tourism accommodation and medium density tourism accommodation focused around a small commercial node. An east-west green corridor will separate the self-catering tourism accommodation from the commercial node to ensure the site balances development with environmental and landscape features.

Holiday park

The establishment of a high-quality holiday park would offer an accommodation option that is truly geared towards families. The Master Plan identifies a development opportunity for destination holiday park towards the south-western end of Lake Jindabyne with access off Kosciuszko Road. This will include:

- Eco-cabins to meet the needs of visitors year-round
- Powered and unpowered camping and caravan sites
- Recreational facilities and amenities to support longer visitor stays, such as heated water play parks, slides, bike parks and play equipment areas.

Ecotourism resort

A lakeside ecotourism resort with a focus on health and wellness would be a destination drawcard for the region. This development opportunity could provide a new resort, conference and function centre, a health and wellness day spa and access to lake-based recreational activities.

Alternative tourism accommodation and attractions

The Western Lake Jindabyne sub-precinct also has the potential to include a range of alternative tourism accommodation and attractions, including:

- High quality tourism accommodation that could either be a standalone development or integrated as part of a resort complex
- An 18 hole signature golf course associated with the tourism accommodation
- Small scale tourist accommodation such as farm stays or lakeside cottages, possibly located in the less developed northern portion of the sub-precinct.

4.5.2 Desired future character

Future development of this sub-precinct will provide for continued recreational use of the lake foreshore while supporting the growth of tourism for Jindabyne and the Snowy Mountains. It will foster tourist accommodation and activities sympathetic with the natural beauty of its rural lakeside setting. This will ensure protection of the landscape and environmental values of this area, enable ongoing rural land uses balanced alongside strategic growth.

4.5.3 Sub-Precinct Provisions

Land Use

The Western Lake Jindabyne sub-precinct will transition into a destination for leisure, recreation and exploration of the lakeside. The Master Plan outlines new tourism redevelopment opportunities for a range of accommodation uses and attractions.

Aims

- Encourage tourism through the development of a range of accommodation options and attractions.
- Attract and encourage tourism and recreational opportunities with access to and along the Lake Jindabyne foreshore.
- Protect the landscape and environmental values of this area to enable ongoing rural land uses balanced alongside strategic growth.
- Recognise, protect and celebrate the Aboriginal cultural heritage values of the area.

Performance Criteria

A. Development should be designed to sensitively integrate into the landscape and demonstrate that it would not have an unacceptable visual impact on the scenic qualities of the area.

B. Development should enable and promote a range of accommodation offerings to a range of different users.

C. Development of tourism attractions must appropriately consider the environmental and Aboriginal heritage values of the area and ensure uses do not detract from the sensitive landscape setting of the sub-precinct.

D. Development should enable and promote a range of tourism attractions.

E. Development of accommodation and attractions should consider co-location opportunities to minimise environmental impacts.

F. Development of the Lake Jindabyne Village should be designated for self-catering and medium density tourist accommodation, a small commercial node and green infrastructure.

G. Development of accommodation and attractions should be staged concurrently to ensure year round sustainable tourism growth.

Consideration for future stages of development

- The Delivery Plan should:
  - include a Staging Plan to ensure the orderly and efficient development of the sub-precinct
  - identify, design and establish the enabling works that support the delivery of the sub-precinct, particularly those identified for short term development
  - outline how existing utility infrastructure easements will be protected.

Built Form and Landscape

The built form, siting and design of buildings across the Western Lake Jindabyne sub-precinct will vary depending on the accommodation offering. All tourism accommodation and attraction development should be sensitive to the scenic qualities and views of the sub-precinct.

Aims

- Integrate development into the topography of the land and promote the retention and planting of native vegetation and green corridors.
- Promote development that achieves best practice in ecologically sustainable development and enhances the natural values of the sub-precinct.
- Ensure the appearance of tourist accommodation does not detract from the visual amenity of the locality.
- Ensure the Lake Jindabyne foreshore is accessible to pedestrians and cyclists.
- Ensure the tourism accommodation and attractions integrate and activate the foreshore and provide access to the shared trail around Lake Jindabyne.
- Ensure development along the foreshore complements the scenic qualities of the locality and increases pedestrian access and usership.

Performance Criteria

A. Development should be sensitively integrated into the natural landscape and topography to minimise visual impacts and should consider views and vista across Lake Jindabyne and the Snowy Mountains.

B. Development should be designed using best practice ecologically sustainable design principles.

C. Buildings should be efficient, well-designed and incorporate generous landscaping by:

   i. ensuring building bulk, orientation and design contribute to the energy efficiency of buildings

   ii. carefully siting buildings to minimise impact on existing vegetation, provide opportunities for on-site landscaping and minimise large areas of impervious surfaces

   iii. incorporating preparedness for natural hazards and climate change into design.

D. Development should provide walking and cycling connections that integrate with and connect to the Lake Jindabyne shared trail.

E. Development should address and activate streets, where required. This can be achieved through the provision of active green spaces that have a planned tree canopy to reduce heat island effects, improve human comfort and general walkability.

F. Development should minimise earthworks, where possible.

G. New plantings and revegetation that reflect the landscape character area of the area should be provided throughout the sub-precinct.

Consideration for future stages of development

- A design guideline for the sub-precinct that includes:
  - design solutions for the different accommodation uses and tourism attractions.
  - detailed design criteria for built form, including guidance on how development responds to the topography of the site, minimises visual impacts and reflects the natural landscape setting
  - provisions for managing cut and fill
  - requirements for demolition and decommissioning
  - best practice approaches to lighting design.
- A landscape and vegetation management plan that addresses:
  - any early tree plantings that can be undertaken across the sub-precinct
  - design solutions to integrate green connections across the sub-precinct, including public and private realms, shared and active paths, and open spaces
  - landscaping provisions, including gateway treatments from Kosciuszko Road
  - riparian corridor design provisions and how development should interface with watercourses
  - the identification of local climate ready species
  - management and maintenance provisions
  - biodiversity offset arrangements.

Transport and Movement

The Western Lake Jindabyne sub-precinct is predominantly accessed from Kosciuszko Road, with the northern portion of the sub-precinct towards Hatchery Bay connected via an unsealed road. Road upgrades will provide greater connection across the sub-precinct.

The sub-precinct is also accessible from the Lake Jindabyne shared trail. An underpass across Kosciuszko Road, adjacent to Gaden Road, will extend the shared trails and active transport connections across the sub-precinct (this is being developed by Snowy Monaro Regional Council). The sub-precinct will also provide increased opportunities for lake-based transportation to the Jindabyne Town Centre with access to a pontoon and water taxi or ferry services.

Aims

- Provide active transport linkages within the sub-precinct to access nature-based recreation and adjoining areas including the Lake Jindabyne shared trail.
- Provide equitable and safe access for pedestrians and cyclists to the foreshore.
- Provide access to water-based recreation on Lake Jindabyne including a pontoon and associated car parking, and water taxi or ferry service to the Jindabyne Town Centre.
- Enable improved vehicular access to the sub-precinct off Kosciuszko Road adjacent to Gaden Road.
- Facilitate connections to a public transport network.
- Provide active transport linkages between and within the sub-precinct and to key tourism accommodation sites and attractions.
- Minimise visual and amenity impacts of car parking, loading and servicing on the public domain and the scenic qualities of the area.
- Provide functional, safe and efficient parking areas.

Performance Criteria

A. New and upgraded streets must generally be in accordance with the structure plan and must consider the effective staging, servicing and delivery of the sub-precinct street network.

B. Development must prioritise the delivery of the Lake Jindabyne shared trail to connect the sub-precinct to Jindabyne and support active transport and recreation, including water-based recreation and transport opportunities.

C. Pedestrian and cycle connections should be provided in the general locations shown in the the structure plan. These connections should be prioritised during the development of each stage of the sub-precinct. This includes integration with and connection to the Lake Jindabyne shared trail.

D. Development should encourage active street frontages to include new footpaths along existing roads and along the Lake Jindabyne shared trail.

E. Development should integrate public transport facilities and amenities into the broader network, where possible.

F. Development should integrate green connections, and active transport and shared paths.

G. Development must facilitate and incorporate an underpass across Kosciuszko Road, adjacent to Gaden Road, to extend and connect shared trails throughout the sub-precinct.

H. Development prioritises the safe and convenient movement of pedestrians and cyclists over vehicle movements.

I. Development of car parks should incorporate water sensitive urban design principles, where car parks may support drainage requirements across the sub-precinct.

J. Development should integrate on-site car parking to minimise on-street parking requirements and where possible should utilise shared parking solutions to service multiple development sites.

K. Car parking spaces must be designed in accordance with Australian Standard AS 2890.1.

L. Development must provide operational access and egress for emergency services and occupants.

Consideration for future stages of development

- A street plan/s for the sub-precinct to include:
  - street hierarchy
  - staging of delivery
  - street type, sections and reserve widths
- Detailed designs of new intersections, road upgrades, and new and upgraded transport infrastructure.
- Development of car parking rates, including the provision of accessible parking spaces.
- An active transport network, including staging of delivery, designs and typical cross sections, and integration with existing infrastructure.

Lake Jindabyne. Credit: Destination NSW.

5

Jindabyne Growth Precinct

Aerial view of Jindabyne.

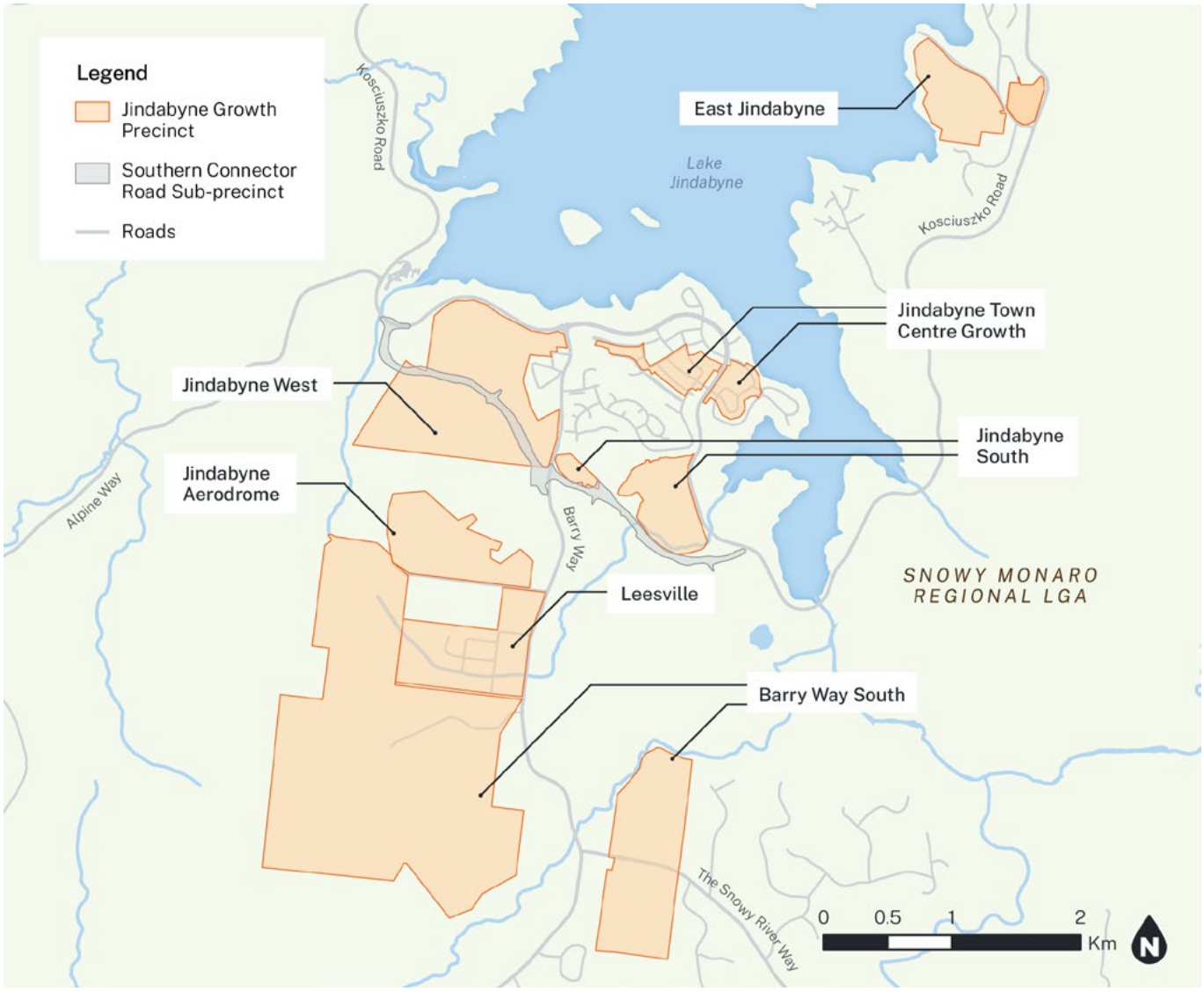


Figure 13: Jindabyne Growth Precinct

The structure plans

The resident and visitor population growth predicted as a result of the Precinct needs to be supported through new land releases and infill development for residential, tourist, commercial and industrial land uses. Specific growth sub-precincts have been identified as areas that will support future new development while addressing environmental, social and economic considerations.

The growth areas that have been identified include:

- Jindabyne Town Centre Growth
- Jindabyne West
- East Jindabyne
- Leesville
- Jindabyne Aerodrome
- Barry Way South
- Jindabyne South

Credit: Robbie Duncan, No Bad Days Photography.

5.1 Jindabyne Town Centre Growth

The Jindabyne Town Centre Growth sub-precinct comprises residential areas surrounding the town centre. The sub-precinct includes a number of residential streets accessed from Park Road and Gippsland Street and comprises mostly detached single storey dwellings. Some redevelopment has occurred with two and three storey buildings primarily for tourist accommodation due to the lake views and proximity to the town centre.

Credit: Robbie Duncan, No Bad Days Photography.

5.1.1 Structure plan

Redevelopment and expansion

The redevelopment and expansion of these existing residential and tourist accommodation sites have been addressed in the structure Plan. This includes:

- Medium scale tourist accommodation on Kurrajong Street, Bent Street and Clyde Street
- Low rise attached dwellings and walk-up apartments along Park Road.

5.1.2 Desired future character

Redevelopment of these areas is envisioned to provide a diversity of dwelling types and sizes for both residential and tourist uses including an increase in apartments and density to meet growing needs for housing affordability.

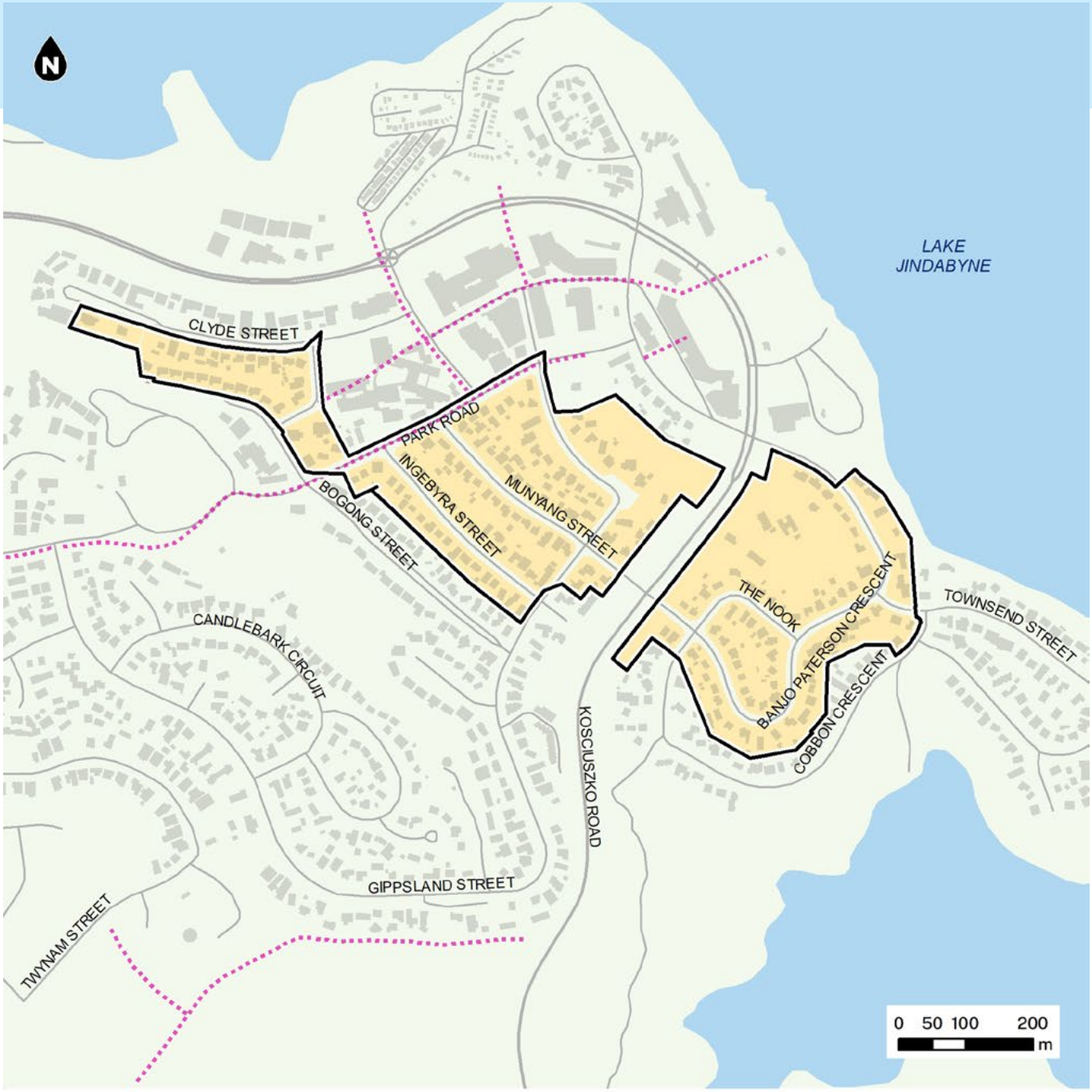


Figure 14: Jindabyne Town Centre Growth structure plan

Sub-precinct boundary

Road

Shared path

Accommodation/Housing

Existing development

5.2 Jindabyne West

The Jindabyne West sub-precinct covers around 123 hectares of undeveloped land to the west of the town centre representing the largest residential growth opportunity in Jindabyne. The sub-precinct is bound to the south by the future alignment of the Southern Connector Road and to the north by Kosciuszko Road and the Lake Jindabyne foreshore.

The existing landscape contains areas of high biodiversity value. Its elevated position provides views to Lake Jindabyne and the Snowy Mountains. As with other undeveloped parts of the lake foreshore, the site lies within the Lake Jindabyne Scenic Protection Area requiring future development to limit visual impacts on the scenic quality of the area.

Jindabyne West is well positioned to gain access to the regional road network via Barry Way, Kosciuszko Road and the proposed Southern Connector Road. Most of the sub-precinct is within one to two kilometres of the core of Jindabyne Town Centre and it is expected that access points and the internal road network will be developed as part of any future subdivision.

There are key considerations across the sub-precinct that need to be managed suitably, including:

- the nearby Jindabyne Aerodrome, including noise impacts and possible Australian Noise Exposure Forecast (ANEF) contours that may apply as the aerodrome grows over time
- Environmentally sensitive land with high biodiversity constraints identified across the site
- Some areas of the site which are steeply sloping that could be developed with appropriate engineering solutions
- Aboriginal cultural heritage values identified on the site.

The driver for change is to utilise vacant land in close proximity to the town centre and with access to existing transport and infrastructure to provide a diversity of housing options for the growing population of Jindabyne.

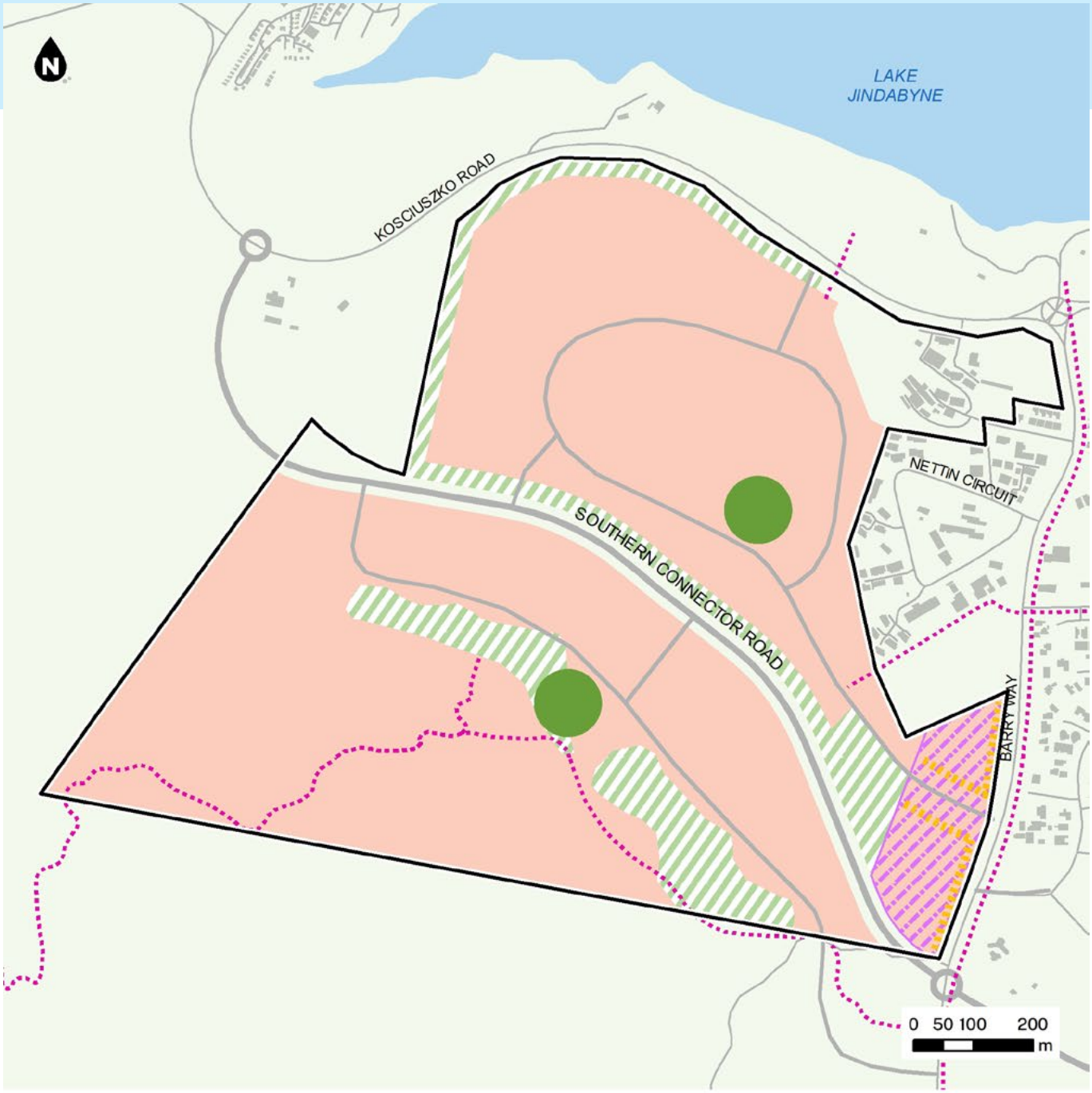


Figure 15: Jindabyne West structure plan

- Sub-precinct boundary
- Existing development
- Active frontage
- Shared path
- Road
- Commercial opportunity
- Open space
- Residential neighbourhood
- Public recreation

5.2.1 Structure plan

The Jindabyne West structure plan proposes a large, efficient and well-planned residential growth area. Future development focuses on creating a residential neighbourhood with established connections to the town centre, local open space, community services, and essential infrastructure.

Its position on the intersection of the proposed Southern Connector Road and Barry Way mean the site is well positioned to support commercial uses that complement the existing Town Centre and provide services to residents and users of the Southern Connector Road.

Key elements of the structure plan include:

Residential development with supporting mixed use

- Residential subdivision for a mix of housing types and densities which is likely to include some tourist accommodation given the connections to the town centre, Lake Jindabyne and Kosciuszko National Park
- A mixed use business and local service centre at Barry Way, with good access and visibility from the Southern Connector Road.

Connectivity

- A cohesive walking and cycling network to support active transport and local amenity including connection to the foreshore
- Easy connections for residents to services in and around Jindabyne as well as destinations within Kosciuszko National Park and the region via the Southern Connector Road

Green infrastructure

- A network of mature trees and vegetation will reduce the visual impact of development
- Two hilltop parks are planned within the green ridge to enhance local amenity
- Potential for a major green infrastructure resource including protection of high biodiversity values throughout and offsets south-west of the residential areas.

5.2.2 Desired future character

Jindabyne West is the largest urban expansion area identified in the Precinct. It presents a strategic opportunity to support the short, medium-and long-term growth of Jindabyne in a location close to town and close to the lake.

5.2.3 Sub-Precinct Provisions

Land Use

The Jindabyne West sub-precinct will provide a range of residential accommodation uses to support housing diversity. A small commercial area will provide local services and amenities to support this growth area.

Aims

- Ensure the staged release of land in Jindabyne West sub-precinct to support the growing population of Jindabyne.
- Provide a diverse range of dwelling types and densities to support housing growth including affordable and social housing.
- Provide commercial development to support the delivery of local services and amenities to the sub-precinct.
- Provide housing that is designed to be adaptable and accessible.
- Protect and enhance biodiversity values.
- Provide a green infrastructure network integrating walking and cycling paths to provide accessibility to open space.
- Provide an active transport network maximising access to the regional road network and proximity to Town Centre.

Performance Criteria

A. Development should provide a diverse range of dwelling types and densities.

B. The subdivision of land should consider:

   i. the internal street networkand access

   ii. lot sizes required to provide a range of housing types, including how lot size requirements may need to change over time

   iii. bushfire Asset Protection Zones (APZs) and integration into the road network

   iv. design solutions to minimise impacts on biodiversity values

   v. staging to ensure housing supply and demand is satisfied.

C. All buildings should be accessible by pedestrians via a safe, clear walkway.

D. Development should incorporate affordable and social housing including for residents and seasonal worker accommodation.

E. Non-residential uses should provide neighbourhood services and amenities only and not compromise the role and function of the Jindabyne Town Centre.

F. Development should be designed to sensitively integrate into the landscape.

Consideration for future stages of development

- A staging plan for the timely and efficient development of the sub-precinct.
- An Affordable Housing Strategy.
- An updated Snowy River Development Control Plan.

Built Form and Landscape

The Jindabyne West sub-precinct will predominantly contain residential uses which consist of one to two storey buildings, including a mixture of detached dwellings, dual occupancies, villas, townhouses and manor houses. Medium density residential uses are best located near open space, commercial zoned land and along collector roads such as the Southern Connector Road or Barry Way.

Development throughout the sub-precinct will need to consider the environmental values and topography. This will ensure protection of high value biodiversity and minimise visual impacts to protect views and vistas across Lake Jindabyne.

Aims

- Ensure a mix of residential building types and designs of high architectural merit.
- Promote increased bulk and scale in high amenity areas near open space, commercial area and along Southern Connector Road and Barry Way.
- Limit the visual impact of development and protect views and vistas across Lake Jindabyne.
- Minimise the impact on high value biodiversity.
- Integrate development into the topography of the land.
- Establish a well-connected, vibrant walkable neighbourhood with landscaped streetscapes and a high-quality public domain.
- Promote street activation in suitable areas.

Performance Criteria

A. Streets should be landscaped by providing tree canopy to reduce heat island effects and provide active transport infrastructure.

B. Residential and non-residential buildings should be efficient, well designed and incorporate landscaping by:

   i. carefully siting buildings to minimise impacts on existing vegetation, provide opportunities for on-site landscaping, protect solar access and privacy, and provide opportunities for passive surveillance

   ii. respond to the topography by providing appropriate scale, articulation, setbacks and building separation

   iii. integrate public and private areas by providing height, setbacks and street interfaces that complement the desired character of the area, and ensure building bulk, orientation and design contribute to the energy efficiency of buildings

   iv. encouraging the consideration of climate change in building design including preparedness for natural hazards

   v. considering views and vistas across Lake Jindabyne and to the Snowy Mountains and minimise impact on significant views.

C. Non-residential buildings should:

   i. provide an activate street frontage

   ii. consider flexible building design to accommodate future adaptive re-use.

D. Development should be designed to share infrastructure, including car parks, waste management areas and have a coordinated approach to landscaping,

E. Development should provide open space within a five minute walk of any dwelling.

F. Medium density residential uses must minimise visual amenity impacts by not being located on ridgelines or against escarpments.

G. Development must mitigate any visual amenity impacts through appropriate building design, colours, materials and landscaping.

H. Development should incorporate universal design principles.

Consideration for future stages of development

- An updated Snowy River Development Control Plan including:
  - Design criteria for built form including guidance on building materials and colour selections to minimise visual impacts and reflect the sub-precinct's character
  - Controls for non-residential development which ensure built form is sympathetic to the sub-precinct's character

- Guidance on the form, mass, scale, height and articulation of buildings to create a high quality and sustainable urban environment
- A landscape and vegetation management plan
- A public domain strategy

Transport and Movement

The sub-precinct is bounded by Kosciuszko Road to the north and Barry Way to the east. The Southern Connector Road bisects the sub-precinct and provides the main access points to residential development areas over time. Access into and movement around the sub-precinct must consider the undulating landform. The sub-precinct is also linked to the Town Centre and Foreshore through strong active transport connections.

The sub-precinct has been sited to take advantage of the key crossroads of Barry Way and the Southern Connector Road with the provision of some retail and commercial uses including service stations, ride and share facilities, car parks, and public and private transit infrastructure.

Aims

- Ensure the timely and orderly delivery of key transport infrastructure to support development in the sub-precinct.
- Provide equitable and safe access for all users throughout the sub-precinct via all modes of transport, with a focus on active transport connections.
- Ensure independent mobility for people of all ages and abilities.
- Facilitate connections to a public transport network.
- Provide active transport linkages between and within the sub-precinct and to key destinations, including the Town Centre and foreshore.
- Provide facilities for electric and smart vehicles, such as electric vehicle charging facilities.
- Provide functional, safe and efficient parking areas.

Performance Criteria

A. New transport infrastructure is to be provided in Jindabyne, such as the Southern Connector Road. Transport infrastructure should ensure integration with new and existing transport infrastructure generally in accordance with the structure plan.

B. Pedestrian and cycle connections should be provided in the general locations shown in the structure plan and should be prioritised.

C. Active transport connections should integrate with the broader regional active transport network.

D. Car parking should be integrated into developments to minimise on-street parking and should utilise integrated parking solutions to service multiple development sites, where possible.

E. Car parking spaces must be designed in accordance with Australian Standard AS 2890.1.

F. Transport infrastructure development, including shared paths, car parks and pathways, should support safety and road performance, future mobility (smart technology), equitable access and passive surveillance.

G. Car parking should be designed to enable future adaptability and re-use opportunities, including the provision of floor heights that allow for infrastructure provision and minimum ceiling heights.

H. Development must provide operational access and egress for emergency services and occupants.

Consideration for future stages of development

- An updated Snowy River Development Control Plan including:
  - a street plan is to be developed to include:
    - street hierarchy.
    - staging of delivery.
    - street type, sections and reserve widths.
  - development of car parking rates, including the provision of accessible parking spaces.
  - a plan for the staged delivery of an active transportation network
- Transport infrastructure concept design plans for:
  - new and upgraded shared paths, active transport connections and pedestrian crossings in the sub-precinct
  - infrastructure upgrades and integration with existing infrastructure and servicing networks.

5.3 East Jindabyne

The East Jindabyne sub-precinct covers 52 hectares of land overlooking Lake Jindabyne. The existing landscape is largely undeveloped, containing scattered native vegetation and expansive grasslands, including high biodiversity values. A large portion of the area falls within the Lake Jindabyne Scenic Protection Area under the Snowy River LEP, meaning future development will need to protect the site's visual qualities.

The sub-precinct is situated to the south of the existing East Jindabyne village which contains a mix of residential development catering to seasonal workers, tourists and permanent residents. Most of the existing housing in East Jindabyne is low density and oriented west towards the lake to take advantage of the attractive views. While close to the lake, East Jindabyne village has minimal to no formal access to the foreshore. It is planned that a foreshore shared trail will connect the village to Jindabyne. Pedestrian and vehicular connections will also connect residents in East Jindabyne to the foreshore and the shared trail.

The sub-precinct is situated on an elevated position with spectacular views and provides opportunities to provide for a new residential growth area and a major public park. The driver for change is to increase housing supply within close proximity of Lake Jindabyne and provide existing and future residents with high-quality open space and active connections.

Lake Jindabyne. Credit: Destination NSW

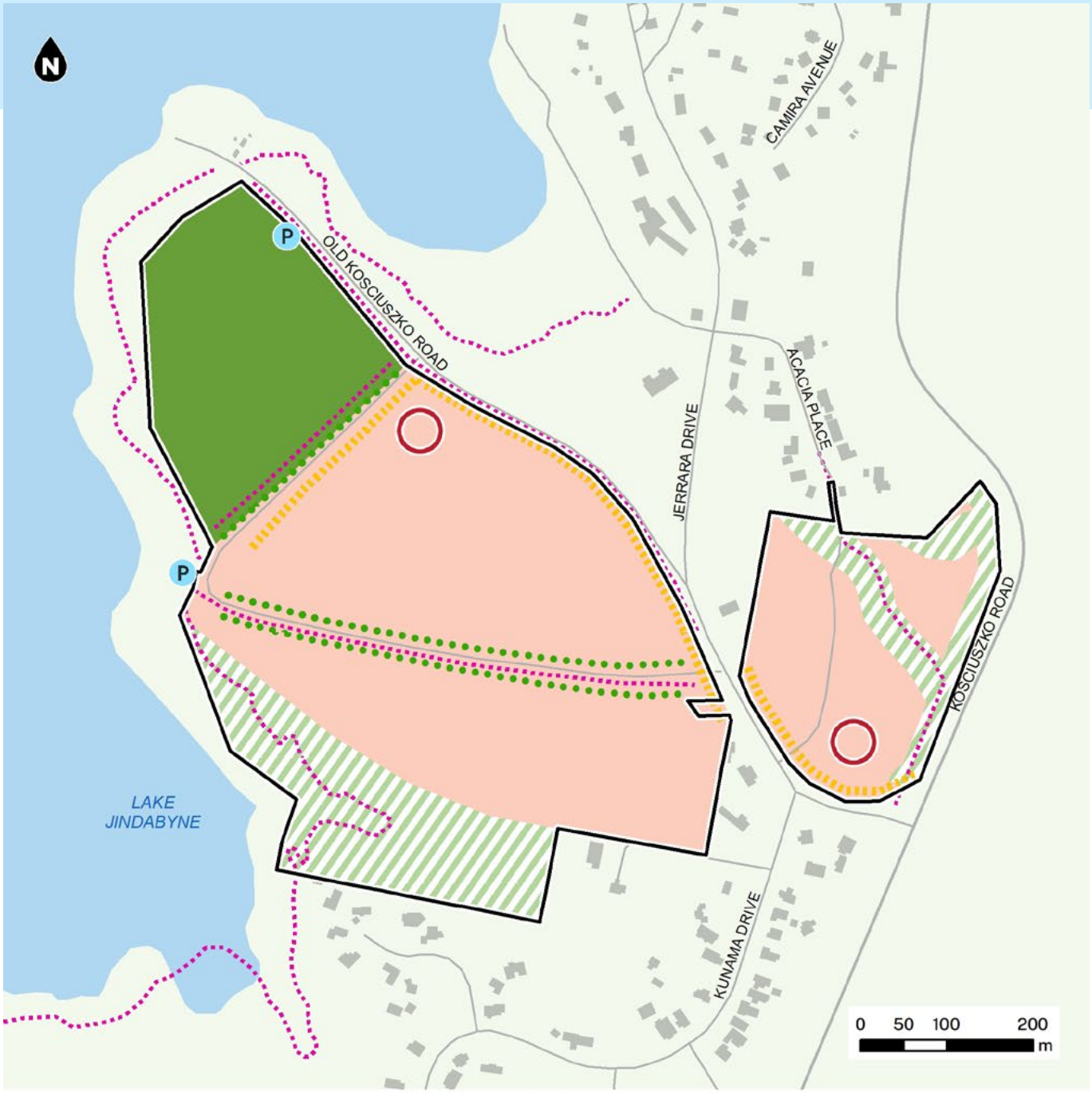


Figure 16: Jindabyne East structure plan

Sub-precinct boundary
Commercial node
Parking
Active frontage
Shared path
Trees
Road
Public recreation
Residential neighbourhood
Open space
Existing development

5.3.1 Structure plan

The East Jindabyne sub-precinct is located approximately seven kilometres from Jindabyne via Kosciuszko Road. It will focus on maximising housing, accommodation and lifestyle opportunities. The sub-precinct is located on a prominent area of undeveloped land adjacent to East Jindabyne Village and will provide residential options in close proximity to Jindabyne.

The East Jindabyne sub-precinct will comprise a well-structured residential neighbourhood with views to Lake Jindabyne and the town centre beyond. Increased densities will be concentrated along collector roads with a smaller residential neighbourhood situated to the west of Kosciuszko Road protecting existing vegetation and creeks.

The structure plan proposes commercial nodes adjacent to the new park for small business opportunities including restaurants and cafes, with an additional node located at the corner of Kosciuszko Road and Jerrara Drive focusing on convenience retail and local services. Small-scale commercial opportunities are also proposed in visible and accessible locations within the park with a preference for temporary uses or pop-ups.

An opportunity for increased height and density adjacent to the park has been identified, with the protection of views from other locations to be safeguarded. Sustainable design principles that align with the character of the region will underpin new development to target connected, compact and walkable streets and encourage active transport uptake.

Upgrades to the intersection of Kosciuszko Road and Jerrara Drive will be required to support the development of this sub-precinct.

East Jindabyne Park

A concept for a new lakeside park in East Jindabyne has been developed to form the eastern destination of the 16 kilometre Lake Jindabyne Foreshore Linear Park. The grassland area, anchored by Old Kosciuszko Road, will deliver a high-quality open space and provide lakeside access for residents and visitors. Access to the lake and foreshore would be provided by a central avenue between the Foreshore Park and residential development.

Park development would focus on rehabilitating grasslands and retaining vegetation. It would include passive recreation areas, walking and cycling trails, seating areas and small-scale nature play areas. Its addition would address a gap in local amenity for the people of East Jindabyne and Tyrolean Village, while also reducing the visual impact of additional housing from views across the lake.

The following facilities could be provided within the park:

- A regional, inclusive all-ages play space
- A central avenue and main entry to the park culminating at the foreshore with opportunity for lookout and terraced area, new boat ramp and car parking
- A large informal kickabout space with shelter structure and barbecues
- A secondary park entry at the end of Old Kosciusko Road
- Car parking along Old Kosciuszko Road
- A small retail hub located on the foreshore towards the end of Old Kosciuszko Road
- Interpretation opportunities to embed the history of the Monero Ngarigo people and the Snowy Hydro Scheme
- Opportunity for boardwalk and jetty to maximise foreshore access.

Artist's impression of East Jindabyne park. Credit: Jensen PLUS

5.3.2 Desired future character

East Jindabyne will position itself as a new 'lakeside village', providing a diversity of housing, accommodation and lifestyle opportunities overlooking Lake Jindabyne. The new East Jindabyne Park will connect residents and visitors to open space through high-quality landscape design and active transport connections.

5.3.3. Sub-Precinct Provisions

Land Use

Aims

- Ensure the staged release of land in the East Jindabyne sub-precinct to align with housing supply and demand.
- To create a new lakeside village that provides a range of residential housing options.
- Provide a mix of dwellings types with increased density focused along collector roads.
- Provide housing that is designed to be adaptable and accessible.
- Protect and enhance biodiversity values.
- To develop a new East Jindabyne Park that will provide a high quality open space for residents and visitors.
- Ensure any open space constructed as part of the first stage of development in the sub-precinct and is integrated with the Lake Jindabyne shared trail and residential development areas.

Performance Criteria

A. Development should provide a diverse range of housing types and densities.

B. The subdivision of land should consider:

   i. the internal street network and access

   ii. lot sizes required to provide a range of housing types, including how lot size requirements may need to change over time

   iii. bushfire Asset Protection Zones (APZs) and integration into the road network

   iv. design solutions to minimise vegetation removal in the sub-precinct

   v. design solutions to integrate public recreation and parkland areas

   vi. staging to ensure housing supply and demand is satisfied.

C. All buildings should be accessible by pedestrians via a safe, clear walkway.

D. Development should incorporate affordable housing.

E. Development should be designed to sensitively integrate into the landscape to minimise impacts to biodiversity valued land and to minimise visual amenity impacts.

F. Development of the East Jindabyne Park should be prioritised in the first stage to provide residents and visitors with access to high quality open space. The extent and distribution of the Park should align with the biodiversity values within the sub-precinct. The lakeside park should:

   i. provide a range of activities, including passive recreation, walking and cycling trails, seating nodes and small-scale nature play areas

   ii. be integrated with the Lake Jindabyne shared trail

   iii. consider relevant NSW Government policies when designing the open space, such as the *Everyone Can Play Guideline*.

G. Increased height and density to be located in areas where impacts to view corridors and vistas are minimiseds.

H. Provide commercial nodes adjacent to the new East Jindabyne Park with smaller scale commercial opportunities to be located in visible and accessible locations.

Consideration for future stages of development

- A staging plan for the timely and efficient development of the sub-precinct.
- An Affordable Housing Strategy
- An updated Snowy River Development Control Plan.

Built Form and Landscape

Residential uses in the sub-precinct will need to carefully consider and respond appropriately to the scenic qualities and views of the area. A mixture of residential housing, as well as seasonal worker and tourist accommodation, that takes advantage of the attractive lakeside setting are envisioned for the sub-precinct. The sub-precinct offers opportunities for increased height and density adjacent to East Jindabyne Park.

Aims

- Ensure a mix of residential building types and designs of high architectural merit.
- Provide a housing and tourism accommodation that maintains the lakeside village character of East Jindabyne.
- Limit the visual impact of development and protect views and vistas across Lake Jindabyne.
- Promote increased bulk and scale in suitable locations.
- Integrate development into the topography of the land and promote the retention and planting of native vegetation corridors.
- Promote active street frontages along existing roads.
- Ensure Lake Jindabyne foreshore is accessible.
- Establish a well-connected, vibrant walkable neighbourhood.

Performance Criteria

A. Streets should be as active and green as possible with a planned tree canopy.

B. Residential buildings should be efficient, well designed and incorporate landscaping by:

   i. appropriately siting buildings to minimise impacts on existing vegetation, provide opportunities for on-site landscaping, protect solar access and privacy, and provide opportunities for passive surveillance

   ii. providing appropriate scale, articulation, setbacks and building separation that responds to the topography of East Jindabyne

   iii. providing human-scale buildings that integrate public and private realms with building heights that complement street widths

   iv. ensuring buildings consider energy efficiency

   v. encouraging preparedness for natural hazards and climate change

   vi. considering views and vistas across Lake Jindabyne and to the Snowy Mountains

   vii. addressing and activating street frontages and open space.

C. Development should be designed to share infrastructure, including car parks, waste management areas and have a coordinated approach to landscaping.

D. Development should provide open space within a five minute walk of any dwelling.

E. Medium density residential uses must minimise visual amenity impacts by not being located on ridgelines, against escarpments or on prominent hills.

F. Development must mitigate any visual amenity impacts through building design, colours, materials and landscaping.

G. Development should incorporate universal design principles.

H. Provide landscape provisions for the entrance to East Jindabyne on Jerrara Drive to provide a gateway to the sub-precinct that respects the character of the lakeside village.

Consideration for future stages of development

- An updated Snowy River Development Control Plan including:
  - Design criteria for built form including guidance on building materials and colour selections to minimise visual impacts and reflect the sub-precinct's character
  - Controls for non-residential development which ensure built form is sympathetic to the lakeside village character
  - Guidance on the form, mass, scale, height and articulation of buildings to create a high quality and sustainable urban environment.
  - A landscape and vegetation management plan
  - A public domain strategy

Transport and Movement

The East Jindabyne sub-precinct is connected to the regional road network via Old Kosciuszko Road and Jerrara Drive. This connection to Kosciuszko Road is the only formal access point into and out of East Jindabyne.

New pedestrian and cycling infrastructure will be provided throughout the sub-precinct, including key linkages to the Lake Jindabyne shared trail. The Lake Jindabyne shared trail will provide walking and cycling connections to Jindabyne and the foreshore.

Aims

- Ensure the timely and orderly delivery of key transport infrastructure.
- Provide equitable and safe access for all users via all modes of transport.
- Provide active transport linkages to the existing East Jindabyne village and Jindabyne Town Centre via the Lake Jindabyne shared trail.
- Provide functional, safe and efficient parking areas.

Performance Criteria

A. Transport infrastructure should ensure integration with new and existing infrastructure generally in accordance with the structure plan.

B. Pedestrian and cycle connections should be provided in the general locations shown in the structure plan and should be prioritised during the development of each stage.

C. Prioritise the delivery of the Lake Jindabyne shared trail and active transport connections.

D. Car parking should be integrated into developments to minimise on-street parking.

E. Car parking spaces must be designed in accordance with Australian Standard AS 2890.1.

F. Transport infrastructure should support safety and road performance, future mobility (smart technology), equitable access and passive surveillance.

G. Development must provide operational access and egress for emergency services and occupants.

Consideration for future stages of development

- An updated Snowy River Development Control Plan that includes:
  - a street plan including:
    - street hierarchy
    - staging of delivery
    - street type, sections and reserve widths.
  - development of car parking rates, including the provision of accessible parking spaces.
- Transport infrastructure concept design plans for:
  - new and upgraded shared paths, active transport connections and pedestrian crossings
  - access and safety upgrades at the junction of Jerrara Drive and Kosciuszko Road
  - infrastructure upgrades and integration with existing infrastructure and servicing networks.

5.4 Leesville

The Leesville Industrial Estate is a key industrial and commercial area servicing Jindabyne and the wider Snowy Mountains region. It accommodates a range of light industries, landscape and material supplies, and manufacturing and commercial businesses, many of which support the region's ski and tourist industries. Currently only a small amount of land in the industrial estate is vacant with future lots approved at the western end of Percy Harris Street yet to be developed.

The estate is located three kilometres south of the Jindabyne Town Centre and is recognised as a valued contributor to the local economy. The industrial area contains over 45 allotments progressively developed for industry and commercial uses by Snowy Monaro Regional Council. The estate lies in a highly accessible location off Barry Way with generous road setbacks creating a well-screened interface with surrounding uses.

The site is located to the south of the Jindabyne Aerodrome and to the south-west of the Jindabyne Sport and Recreation Centre. A cluster of heritage listed sites including the Leesville Hotel, Cottage and Woolshed are located to the north of the sub-precinct, at the corner of Tinworth Drive and Barry Way. The sub-precinct is surrounded by a landscape buffer which contains areas of biodiversity significance. This aids in creating a suitable separation to surrounding uses.

The driver for change at Leesville Industrial Estate is to provide further industrial and commercial land to support the future growth of Jindabyne and the region in a central, easily accessible location with appropriate services and buffers from dense residential areas.

5.4.1 Structure plan

The Leesville sub-precinct supports growth and investment for local businesses and industries at Jindabyne's principal industrial estate. The sub-precinct supports a broad range of industrial and commercial land uses that will provide long term growth opportunities and that respond to market demand. It is envisaged that the sub-Precinct will contain businesses to service the ski and tourist industry, local service industries such as construction and new growth industries such as artisan food and drink businesses.

The sub-precinct comprises four growth areas to allow the expansion of existing industries and accommodate future employment growth. The additional industrial land identified in the sub-precinct includes the:

- Northern industrial growth area on the north side of Lee Avenue close to Barry Way.
- Southern industrial growth area south of Lee Avenue within the existing buffer area along Barry Way.
- Western industrial growth area at the western edge of the existing industrial estate off Percy Harris Street. This growth area already has development approval to allow expansion.
- Commercial growth area on the corner of Tinworth Drive and Barry Way including tourism and recreational development around the historic Leesville Hotel. Any development would need to appropriately consider the heritage values of the property.

The sub-precinct places an emphasis on green infrastructure and preservation of environmental and heritage values. This includes ongoing environmental management requirements and bushfire mitigation measures. A shared path along Barry Way will connect the sub-precinct to nearby rural residential and tourist land uses and the Sports and Education Precinct.

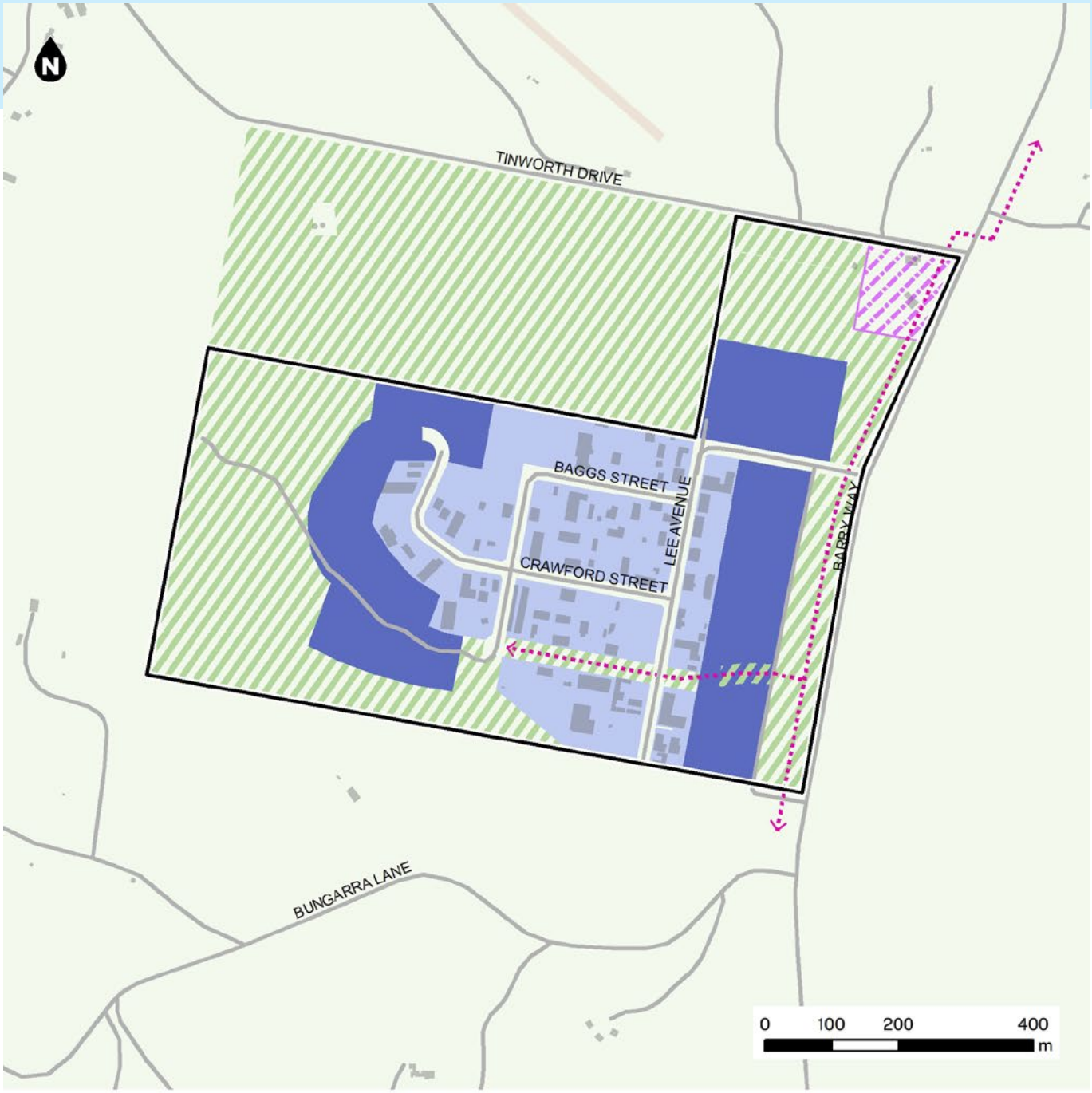


Figure 17: Leesville structure plan

- Sub-precinct boundary
- Shared path
- Road
- Existing industrial
- New industrial
- Open space
- Commercial opportunity
- Existing development

5.4.2 Desired future character

The Leesville Industrial Estate will continue to serve as the key location for diverse industrial development and large-scale commercial uses. Staged development will support the future growth of the Precinct. This site delivers a substantial growth opportunity to leverage the existing industry cluster and provide additional land to service the growing population of Jindabyne and long-term projected demand.

5.4.3 Sub-Precinct Provisions

Land Use

Aims

- Ensure the sub-precinct provides for a range of industrial and commercial uses that support and complement the role and function of Jindabyne Town Centre.
- Provide industrial land to support Jindabyne's growing population.
- Ensure development is sympathetic and responds appropriately to the heritage items located in the sub-precinct.
- Minimise land use conflict with nearby residential and education uses.

Performance Criteria

A. Development should provide a range of industrial, commercial and enterprise land uses which require larger lot sizes and floorplates.

B. Development should support and complement land uses in the Jindabyne Town Centre.

C. Development should recognise, protect and enhance the heritage items located within the sub-precinct.

D. Development should create appropriate buffers to surrounding residential and educational uses.

E. Development should be designed to sensitively integrate into the landscape and and limit visual impacts on the scenic quality of the locality.

F. Development should ensure integration with the established industrial estate.

Consideration for future stages of development

- A staging plan for the timely and efficient development of the sub-precinct.
- An updated Snowy River Development Control Plan.

Built Form and Landscape

The Leesville sub-precinct will largely contain industrial, enterprise and commercial uses with buildings sited and designed to reduce visual impacts. This includes the selection of appropriate building materials and colours to ensure development is sensitively integrated into the surrounding landscape.

The bulk and scale of new buildings in the sub-precinct is expected to be generally consistent with the existing built form of the industrial estate. The sub-precinct will contain a mixture of contemporary, high quality building types, with green corridors and street tree plantings integrating the sub-precinct with the regional setting of the area. Green buffers along Barry Way and Tinworth Drive will appropriately screen new and existing buildings to nearby residential and educational uses.

Aims

- Ensure the design and siting of new buildings integrates with the surrounding landscape.
- Ensure a mix of contemporary, high quality building types and sizes are provided to support employment opportunities.
- Integrate development into the topography of the land and promote the retention and planting of native vegetation corridors.
- Promote street activation in key locations.
- Ensure development responds to the intended scale and character of the sub-precinct.
- Achieve attractive streetscapes by ensuring the scale and bulk of buildings, even those with larger footprints, is suitable when viewed from the public domain.

Performance Criteria

A. Streets should be as active and green as possible to improve human comfort, amenity and walkability.

B. Buildings should be efficient, well-designed and incorporate generous landscaping by:

   i. carefully siting buildings to minimise impacts on existing vegetation, provide opportunities for on-site landscaping and minimise hardstand areas, wherever possible.

   ii. providing appropriate scale, articulation and setbacks that is compatible with the intended use of the building.

   iii. incorporating preparedness for natural hazards and climate change into design.

   iv. ensuring building bulk, scale and orientation contributes to the energy efficiency of buildings.

   v. minimising the potential visual impact of development to adjoining development.

   vi. providing suitable indoor and communal open space, and informal recreation areas for worker amenity.

C. Development should provide vegetated screening and appropriate buffers between the industrial and commercial uses and adjoining uses, including along Barry Way.

D. Development should be appropriately sited and designed to recognise, protect and enhance the heritage items located in the sub-precinct.

E. Heritage-listed items in the sub-precinct should be considered for re-use as community, cultural, education or retail uses to create a community node and ensure the ongoing enjoyment and maintenance of these buildings.

F. Building height must not obstruct the Obstacle Limitation Surfaces to ensure adequate access to the Jindabyne Aerodrome is maintained.

G. Development, including larger format buildings, must provide good architectural design and contemporary finishes to reduce bulkiness and built form interest.

H. Development should encourage flexible building design to ensure buildings can be converted for a range of uses over time.

I. Development must only incorporate ancillary offices and industrial retail outlets that are directly related to the primary industrial or enterprise use.

Consideration for future stages of development

- An updated Snowy River Development Control Plan including:
  - design criteria for built form including guidance on building materials and colour selections to minimise visual impacts and reflect the sub-precinct's character
  - Guidance on the form, mass, scale, height and articulation of buildings to create a high quality and sustainable industrial environment design guidance to ensure new development integrates effectively with the established uses in the sub-precinct.
  - A landscape and vegetation management plan
  - A public domain strategy

Transport and Movement

The Leesville sub-precinct is bounded by Barry Way to the east and Tinworth Avenue to the north. Lee Avenue provides the main egress point into the sub-precinct and also connects to the regional road network providing a direct route to Jindabyne to the north.

Aims

- Ensure the timely and orderly delivery of key transport infrastructure to support industrial development in the sub-precinct.
- Ensure roads and transport infrastructure is designed, constructed and maintained to allow for the safe and efficient movement of both heavy vehicles and local traffic.
- Provide equitable and safe access for all users throughout the sub-precinct.
- Ensure independent and safe mobility for people of all ages and abilities.
- Provide active transport linkages between and within the sub-precinct, key destinations and along Barry Way.
- Provide functional, safe and efficient parking areas.

Performance Criteria

A. Transport infrastructure should ensure integration with new and existing transport infrastructure generally in accordance with the structure plan to ensure the effective servicing, staging and orderly operation of the sub-precinct.

B. Pedestrian and cycle connections along Barry Way should be prioritised during the initial stages.

C. Active transport connections should integrate with the broader regional active transport network.

D. Development must ensure adequate provisions for heavy vehicle movements, including suitable access arrangements, sufficient turning circle areas and loading and unloading areas.

E. Development should locate loading and unloading areas to the side or rear of buildings or should appropriately screen these areas from the public domain.

F. Development must ensure the design and layout of car parking and vehicular access is safe and functional.

G. Car parking spaces must be designed in accordance with Australian Standard AS 2890.1.

H. Development should incorporate landscaping into vehicular access and car parking areas to minimise visual amenity impacts.

I. Transport infrastructure development, including shared paths, car parks and pathways, should support safety and road performance, future mobility (smart technology), equitable access and passive surveillance.

J. Development must provide operational access and egress for emergency services and occupants.

Consideration for future stages of development

- An updated Snowy River Development Control Plan including:
  - A street plan for to include:
    - street hierarchy
    - staging of delivery
    - street type, sections and reserve widths
  - Development of car parking rates, including the provision of accessible parking spaces.
  - Transport infrastructure concept design plans for:
    - new and upgraded shared paths, active transport connections and pedestrian crossings in the sub-precinct
    - infrastructure upgrades and integration with existing infrastructure and servicing networks.

Kosciuszko Road leading to Lake Jindabyne

5.5 Jindabyne Aerodrome

Jindabyne Aerodrome is located 3 kilometres southwest of the Jindabyne town centre. It provides an operational and emergency response base for NSW National Parks and Wildlife Service, Snowy Hydro Limited and NSW Rural Fire Service, as well as recreational aviation facilities for helicopters and light aircraft.

The Aerodrome comprises a gravel runway, associated hangers, club house and an on-site Avgas aviation fuel facility and aerial fire retardant shed. It is maintained and operated by the not-for-profit Jindabyne Aero Club and is currently utilised by government agencies for emergencies and a range of commercial flying operations including aerial surveys, aerial weed spraying, charter flights and flying clubs.

Canberra Airport will remain the international gateway to the Snowy Mountains alongside Snowy Mountains Airport providing air access from interstate and capital city markets. The Jindabyne Aerodrome can support this with strong potential for future air transport including sustainable aviation technology and fuels, advanced air mobility and commercial aviation, adding another dimension to the Precinct and region by enabling connections with the Snowy Mountains and wider region.

The driver for change at Jindabyne Aerodrome is to continue to support emergency responses, and commercial and recreational aviation, while maintaining the aerodrome's role search and rescue and firefighting.

5.5.1 Structure plan

The Jindabyne Aerodrome sub-precinct supports ongoing aviation uses including ancillary developments for that purpose. The sub-precinct supports community and commercial aviation that supports the growth of Jindabyne, enables emergency and operational aviation services, and complements the year-round tourism objectives of the Precinct. It is envisaged that the sub-precinct would facilitate upgrades and development that supports these objectives and may include:

- Improvements, sealing and/or extension of the runway, taxiways and parking areas to provide safe access and enable a larger range of aircraft types to use the aerodrome
- Enhancements to and/or development of additional hangers and aviation services such as refuelling facilities to secure and service aircraft
- Development of ancillary facilities such as a terminal building to provide facilities for aircrew and passengers.

Development within the sub-precinct will require consideration of potential impacts on surrounding residential, community and educational uses in particular potential noise, vibration and emissions.

5.5.2 Desired future character

The Jindabyne Aerodrome sub-precinct will continue to serve as a key community and commercial aviation asset to Jindabyne and the Snowy Mountains region. The site provides opportunities to explore sustainable and future aviation technology as growth in its community and commercial uses occurs alongside continued interstate and international gateways provided by surrounding Airports.

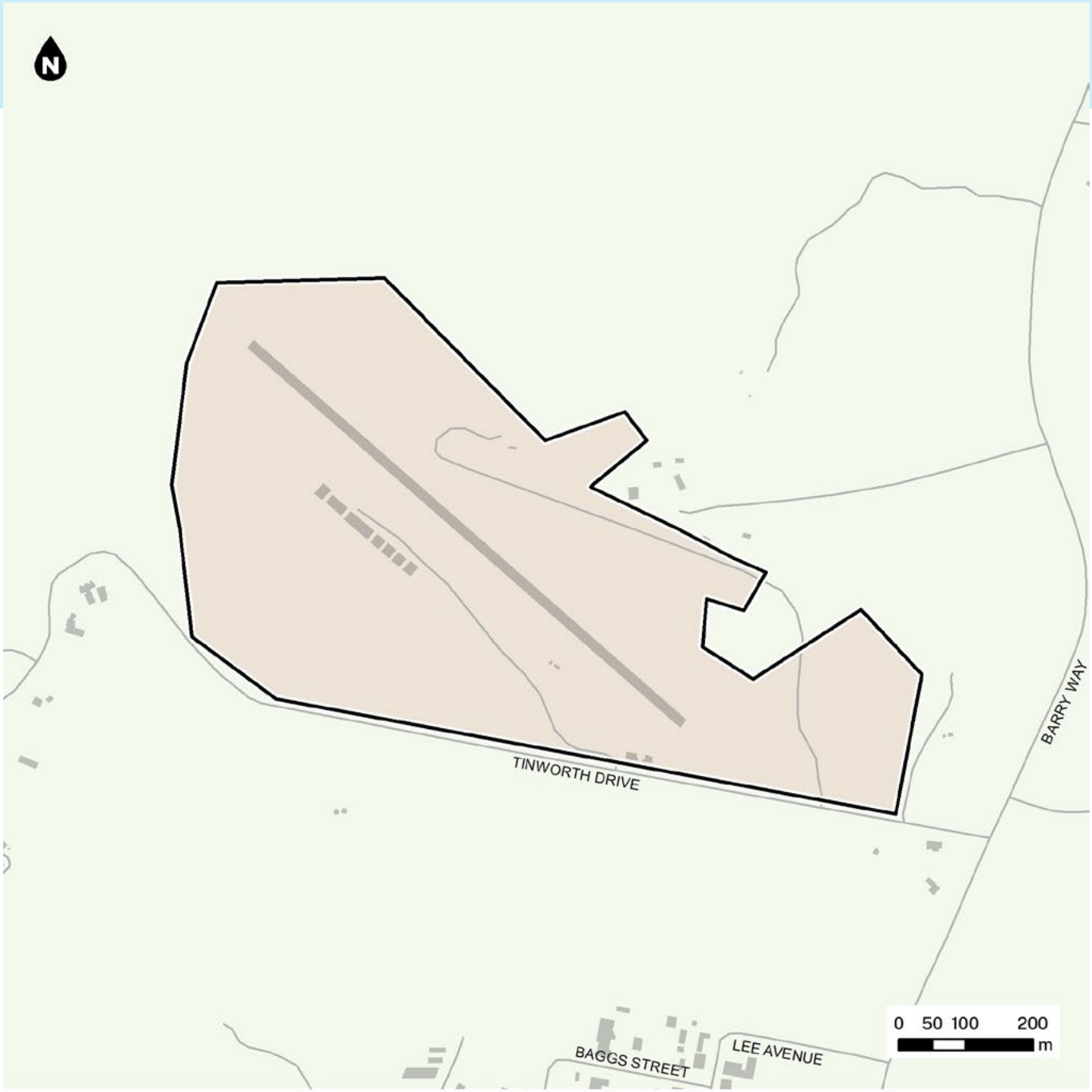


Figure 18: Jindabyne Aerodrome structure plan

Sub-precinct boundary

Road

Aviation

Existing development

5.5.3 Sub-Precinct Provisions

Land Use

Aims

- Enable the continued use of the sub-precinct for aviation and tourism uses (such as flying school and scenic charter flights).
- Ensure the aviation activities in the sub-precinct do not adversely impact the growth of surrounding residential neighbourhoods.

Performance Criteria

A. Aviation uses must not adversely impact the growth of surrounding residential neighbourhoods, or the educational facilities within surrounding areas.

B. Development must consider the likely impacts that uses, or activities may pose through the introduction of Australian Noise Exposure Forecast (ANEF) contours which may apply in the future.

C. Development should provide for an expanded range of aviation and tourism uses which contribute to developing a year-round tourism economy.

Consideration for future stages of development

- A staging plan for the timely and efficient development of the sub-precinct.
- An updated Snowy River Development Control Plan.

Built Form and Landscape

The Aerodrome sub-precinct contains the Jindabyne Community Airstrip and a few buildings where local aviation businesses and the Jindabyne Aero Club operate. Any new buildings should be sensitively integrated into the landscape and should provide contemporary, high quality buildings.

Aims

- Ensure the design and siting of new buildings integrates with the surrounding landscape.
- Ensure contemporary, high quality buildings types to support an expansion of aviation uses.
- Ensure development responds to the intended scale and character of the sub-precinct.

Performance Criteria

A. Buildings should be efficient, well-designed and incorporate generous landscaping by:

   i. minimising impacts on existing vegetation and provide opportunities for on-site landscaping and screening.

   ii. providing appropriate scale, articulation and setbacks that are compatible for aviation uses.

   iii. minimising the potential visual impact of development to adjoining development.

Consideration for future stages of development

- An updated Snowy River Development Control Plan including:
  - Design criteria for built form including guidance on building materials and colour selections to minimise visual impacts and reflect the sub-precinct's character
  - Guidance on the form, mass, scale, height and articulation of buildings to create a high quality and sustainable sub-precinct
  - Design guidance to ensure new development integrates effectively with the established uses in the sub-precinct.
  - A landscape and vegetation management plan
  - A public domain strategy

Transport and Movement

Aims

- Ensure the sub-precinct provides equitable and safe access for all users to the sub-precinct.
- Provide functional, safe and efficient parking areas.
- Provide active transport linkages along Barry Way.

Performance Criteria

A. Transport infrastructure should ensure integration with new and existing transport infrastructure to ensure the effective servicing, staging and orderly operation of the sub-precinct.

B. Pedestrian and cycle connections along Barry Way should be prioritised.

C. Development must provide operational access and egress for emergency services and occupants.

Consideration for future stages of development

- Transport infrastructure concept design plans for:
  - Infrastructure upgrades and integration with existing infrastructure and servicing networks.

A view over Jindabyne and its airport

5.6 Barry Way South

A number of locations along Barry Way, between the Sports and Education sub-precinct and Leesville sub-precinct and Moonbah have been identified for rezoning to continue to support the growth associated with the Precinct.

The semi-rural area is accessed from Barry Way (or alternatively Snowy River Way) and accommodates a diversity of rural residential and tourist accommodation uses within an undulating landscape which includes Cobbin Creek and bushland vegetation.

5.6.1 Structure plan

This area has been identified as supporting the future growth of Jindabyne for resident and tourist populations. The sub-precinct will enable the growth clustered around key areas, including the Bungarra Precinct and The Station. The sub-precinct also supports the growth of existing country setting resorts, such as the Jindabyne Zen Retreat and Adventist Alpine Village. The Master Plan focuses on providing pedestrian and cycling connectivity via new trails and paths connecting to the proposed shared path on Barry Way and the Mountain Bike and Adventure Park. .

Bungarra Precinct

- The Bungarra Precinct will enable the expansion of seasonal worker and tourist accommodation and activities, including eco-tourism, camping, outdoor and education activities. These uses would require the development of Bungarra Lane as a formal public road.
- A trail will link Bungarra Precinct with the Mountain Bike and Adventure Park to support school camp programs and recreational activities.

The Station

- The Station is a significant tourist accommodation property located off Snowy River Way. The sub-precinct enables The Station to expand to the north to accommodate both tourist and seasonal worker accommodation.
- Land to the south of The Station supports rural residential development. This land has already been zoned and will continue as a rural residential use in the Master Plan.
- Land surrounding Cobbin Creek will remain open space and include protection of associated environmental and heritage values

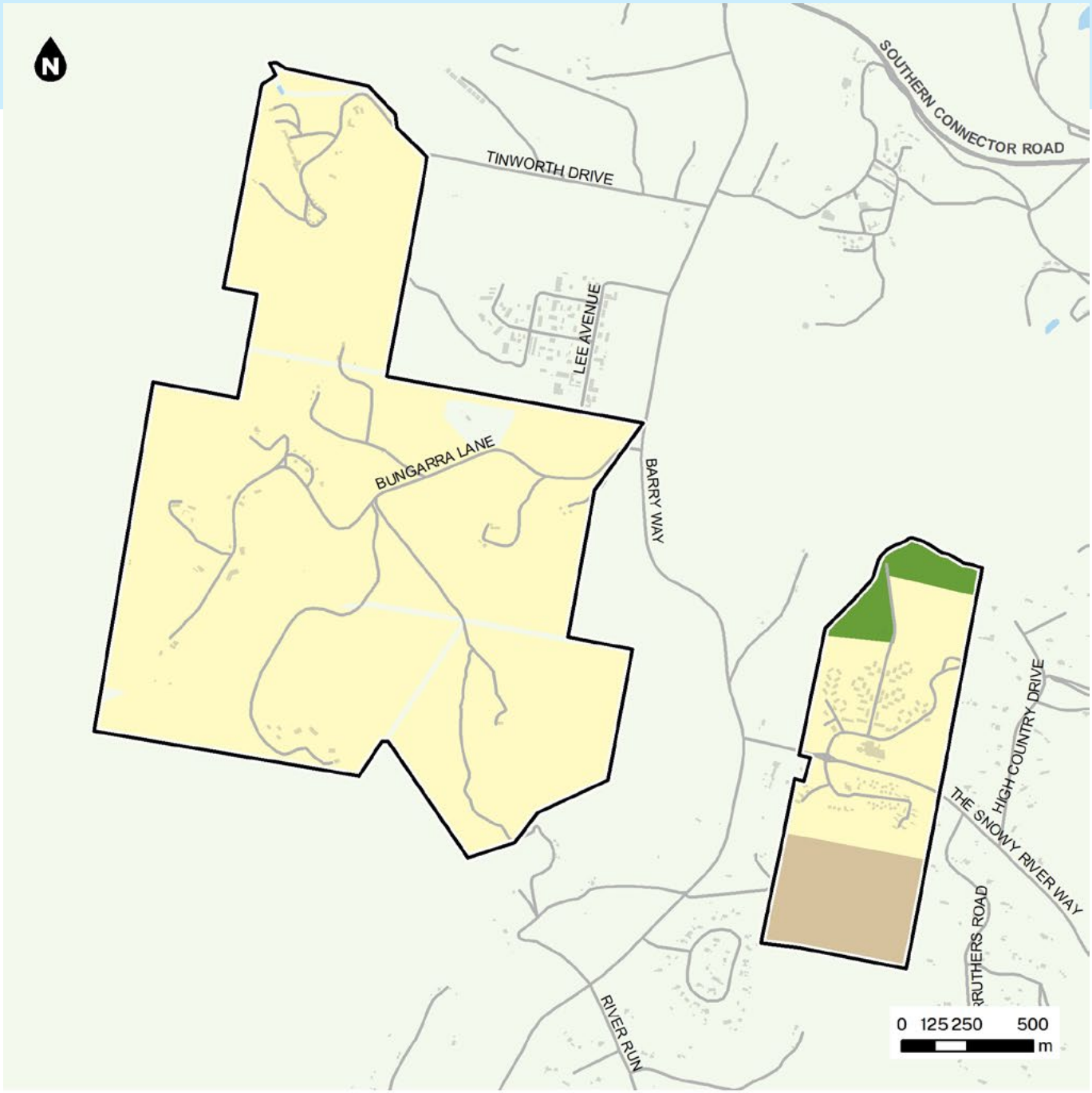


Figure 19: Barry Way South structure plan

Sub-precinct boundary

Road

Rural residential

Development area

Public recreation

Existing development

5.6.2 Sub-Precinct Provisions

Land Use

Aims

- Enable expansion of tourist and seasonal worker accommodation and activities in the sub-precinct.
- Ensure development responds to the intended scale and character of the sub-precinct.
- Ensure development avoids unacceptable visual impacts.
- Limit the development of rural residential housing.
- Protect the environmental values, including green infrastructure corridors and areas bordering Cobbin Creek.
- Recognise, protect and enhance heritage values.

Performance Criteria

A. Development should provide a diverse range of tourist and seasonal worker accommodation, including a mixture of dwelling types, and tourism activities that respond to the intended scale and character of the sub-precinct.

B. Development of tourist and seasonal worker accommodation should be designed to sensitively integrate into the landscape and interface with established tourist accommodation and activities in the sub-precinct.

C. Where development of rural residential housing occurs, lot sizes must be suitable to the rural landscape setting.

D. Development should increase access to high quality passive open space and green infrastructure corridors.

E. Development must recognise, protect and enhance environmentally sensitive land, particularly areas bordering Cobbin Creek and riparian corridors.

Consideration for future stages of development

- A staging plan for the timely and efficient development of the sub-precinct.
- An updated Snowy River Development Control Plan.

Built Form and Landscape

The Barry Way South sub-precinct includes larger tourism accommodation in a rural setting and some rural residential development. Its location south of Jindabyne provides a transition into the rural hinterland of the Jindabyne Region. The built form of the sub-precinct will ensure development is sensitively integrated into the rural landscape setting of the locality.

Aims

- Integrate development into the topography of the land and promote the retention and planting of native vegetation corridors.
- Ensure development sensitively integrates into the landscape and limits visual amenity impacts to surrounding uses.
- Create appropriate interfaces between established land uses and new development.
- Ensure a mix of building types and designs of high architectural merit.
- Promote active street frontages along existing roads.

Performance Criteria

A. Buildings should be efficient, well designed and incorporate generous landscaping by:

   i. carefully siting buildings to minimise impacts on existing vegetation, responding appropriately to the topography of the area, and be located an appropriate distance from a major roads (such as Barry Way and Snowy River Way) to maintain the semi-rural setting of the sub-precinct.

   ii. providing appropriate scale, articulation, setbacks and building separation that responds to the topography of the area.

   iii. providing human-scale buildings that suitably interface with established land uses.

   iv. ensuring building bulk, orientation and design contributes to the energy efficiency of buildings.

   v. encouraging preparedness for natural hazards and climate change.

   vi. considering views and vistas across the Region.

B. Where possible, development should be designed to share infrastructure including car parks, waste management areas and have a coordinated approach to landscaping.

C. Development, including tourist and seasonal worker accommodation and rural residential housing, should incorporate universal design principles.

D. Development should provide vegetated boundary screening to protect the amenity of surrounding land uses.

E. Development should be designed to sensitively integrate into the landscape.

Consideration for future stages of development

- An updated Snowy River Development Control Plan including:
  - Design criteria for built form including guidance on building materials and colour selections to minimise visual impacts and reflect the sub-precinct's character
  - Controls for non-residential development which ensure built form is sympathetic to the sub-precinct's character
  - Guidance on the form, mass, scale, height and articulation of buildings to create a high quality and sustainable urban environment design guidance to ensure new development integrates effectively with the established uses in the sub-precinct.
  - A landscape and vegetation management plan
  - A public domain strategy

Transport and Movement

The Barry Way South sub-precinct will be connected to Jindabyne by a new shared path along Barry Way and with direct connections to the Mountain Bike and Adventure Park and other nearby infrastructure. A loop trail along Cobbin Creek to Snowy River Way could also provide access and recreation in the area.

Aims

- Ensure the timely and orderly delivery of key transport infrastructure to support development.
- Provide equitable and safe access for all users throughout the sub-precinct.
- Provide active transport linkages to the Mountain Bike and Adventure Park and other nearby infrastructure.
- Enable the development of Bungarra Lane as a formal public lane.
- Ensure independent mobility for people of all ages and abilities and safe access for all users.

Performance Criteria

A. Transport infrastructure should ensure integration with new and existing transport infrastructure generally in accordance with the structure plan to ensure the effective servicing, staging and orderly operation of the sub-precinct.

B. Pedestrian and cycle connections should be provided in the general locations shown in the structure plan and should be prioritised.

C. Development should provide a loop trail along Cobbin Creek to Snowy River Way to provide access and recreation opportunities.

D. Development should ensure Bungarra Lane becomes a formal public lane to support growth and enable better access and infrastructure provision.

E. Car parking spaces must be designed in accordance with Australian Standard AS 2890.1.

Consideration for future stages of development

- An updated Snowy River Development Control Plan including:
  - a street plan/s is to be developed to include:
    - street hierarchy.
    - staging of delivery.
    - street type, sections and reserve widths.
  - development of car parking rates, including the provision of accessible parking spaces.
- A plan for the staged delivery of an active transportation network including footpaths and cycleways in the sub-precinct.
- Transport infrastructure concept design plans for:
  - new and upgraded shared paths, active transport connections and pedestrian crossings in the sub-precinct
  - infrastructure upgrades and integration with existing infrastructure and servicing networks.

5.7 Jindabyne South

The Jindabyne South sub-precinct covers around 40 hectares of undeveloped land to the south of Jindabyne town centre. The sub-precinct comprises two land parcels which are bound to the south and west by the future alignment of the Southern Connector Road, to the east by Barry Way and to the north by existing residential areas of Jindabyne.

The existing landscape is known to contain areas of high biodiversity and heritage values which would need to be avoided as much as possible in future development.

Jindabyne South is well positioned to gain access to the regional road network via the proposed Southern Connector Road and Barry Way. Pedestrian and cycling connections will connect residents to the town centre and Sports and Education sub-precinct both of which are within close proximity to Jindabyne South. These vehicular and pedestrian access points and the internal road network will be developed as part of future subdivision.

There are key considerations across the sub-precinct that need to be managed suitably including:

- The proposed Southern Connector Road and potential noise impacts.
- Environmentally sensitive land with biodiversity and heritage values identified across the site.
- Areas of the site which are steeply sloping that could be developed with appropriate engineering solutions.

The driver for change here is to increase the potential development yield of an existing subdivision in close proximity to the town centre, with access to existing transport and infrastructure while also retaining environmental values to provide supply and diversity of housing options for the growing population of Jindabyne.

5.7.1 Structure plan

The Jindabyne South structure Plan proposes to support an increase in density for an existing residential growth area. Future development focuses on retention of environmental values and local open space and appropriate active and vehicular transport connections to Jindabyne and the Region.

Its position on the edge of Jindabyne in close proximity to key infrastructure including the proposed primary and secondary school, as well as the proposed Park and Ride Shuttle terminus mean the site is well positioned to support a diversity of residential and seasonal worker accommodation.

Access and connectivity

Active transport connections to the town centre and Sports and Education sub-precinct and direct connectivity to the regional and local road network.

Housing and diversity

A range of lot sizes to respond to environmental and topographical features and provide a mix of dwelling types.

Green infrastructure

Steep terrain retained as green infrastructure (revegetation and walking trails) while also providing a buffer to Kosciuszko Road.

Community services

The existing development includes a Child Care Centre on the corner of Barry Way and Jillamatong Street.

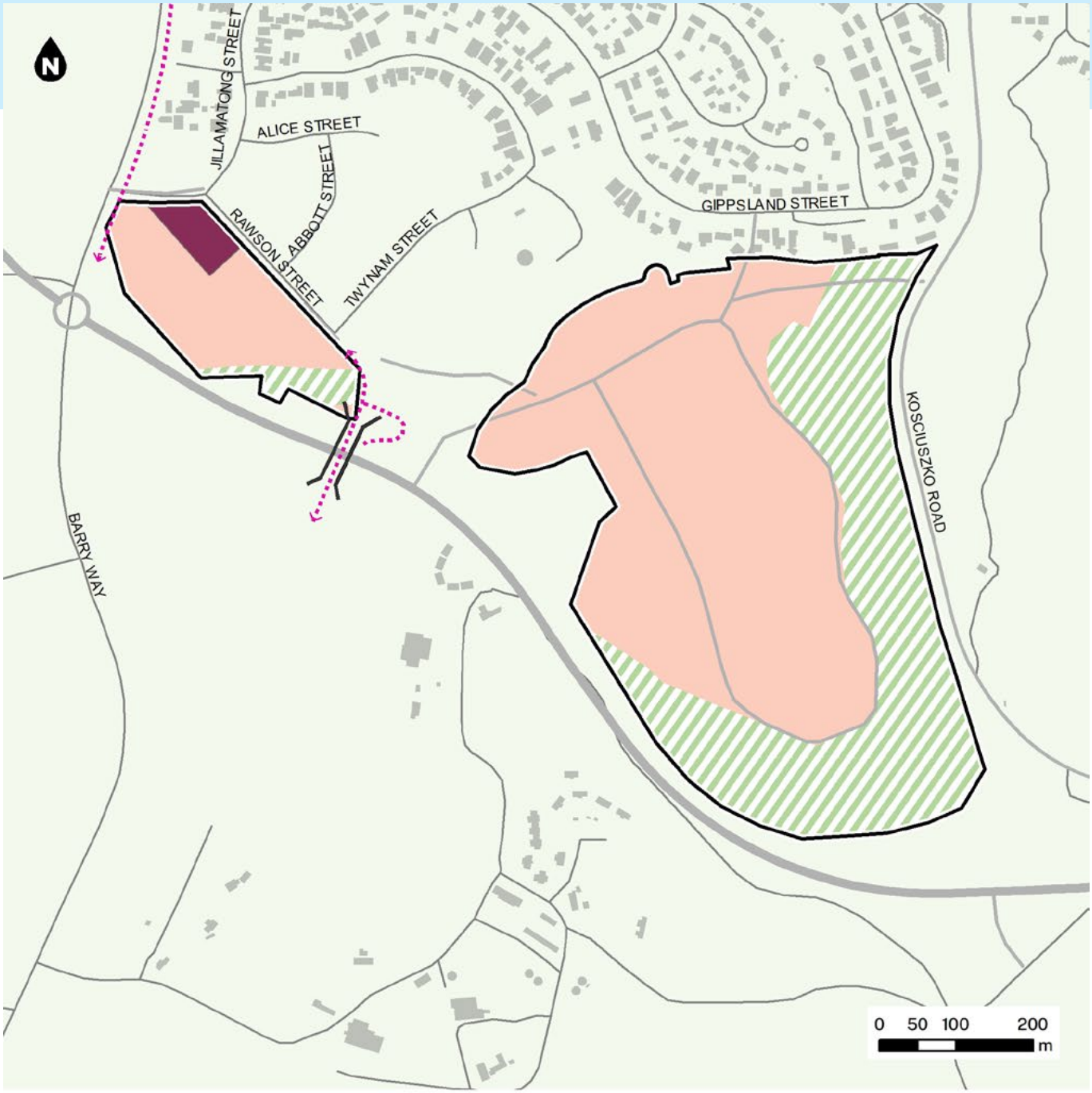


Figure 20: Jindabyne South structure plan

- Sub-precinct boundary
- Pedestrian bridge
- Shared path
- Road
- Community
- Open space
- Residential neighbourhood
- Existing development

5.7.2 Desired future character

Jindabyne South is the central residential growth area in the Precinct. It presents a strategic opportunity to support the short, medium and long term growth of Jindabyne in a location close to town, education and community sports facilities.

5.7.3 Sub-Precinct Provisions

Land Use

The sub-precinct will provide an expanded range of residential accommodation and diverse housing mix to support growth across Jindabyne.

Aims

- Ensure the staged release of land in the Jindabyne South sub-precinct to align with housing supply and demand.
- Support and enable the growth of a range of diverse residential housing options for the growing population of Jindabyne.
- Provide housing that is designed to be adaptable and accessible.
- Protect and enhance biodiversity values.
- Provide a green infrastructure network integrating walking and cycling paths across the sub-precinct.
- Ensure the uses in the sub-precinct directly support housing growth in Jindabyne.

Performance Criteria

A. Development should provide a diverse range of housing types and densities.

B. The subdivision of land should consider:

   i. the internal street network and access

   ii. lot sizes required to provide a range of housing types, including how lot size requirements may need to change over time

   iii. bushfire Asset Protection Zones (APZs) and integration into the road network

   iv. design solutions to minimise vegetation removal

   v. staging to ensure housing supply and demand is satisfied.

C. All buildings should be accessible by pedestrians via a safe, clear walkway.

D. Development should incorporate affordable housing.

E. Development should be designed to sensitively integrate into the landscape.

Consideration for future stages of development

- A staging plan for the timely and efficient development of the sub-precinct.
- An Affordable Housing Strategy
- An updated Snowy River Development Control Plan.

Built Form and Landscape

The Jindabyne South sub-precinct will predominantly contain residential uses which consist of one to two storey buildings, including a mixture of dwelling types. Development will need to consider the environmental and heritage values and varying topography.

Aims

- Ensure a mix of residential building types and designs of high architectural merit.
- Integrate development into the topography of the land and promote the retention and planting of native vegetation corridors.
- Establish a well-connected, vibrant walkable neighbourhood with landscaped streetscapes and a high-quality public domain
- Ensure development minimises visual impact and reflects the character of the area

Performance Criteria

A. Streets should be as active and green as possible with a planned tree canopy to reduce heat island effects.

B. Residential buildings should be efficient, well designed and incorporate landscaping by:

   i. carefully siting buildings to minimise impacts on existing vegetation, provide opportunities for on-site landscaping, protect solar access and privacy, and provide opportunities for passive surveillance

   ii. providing appropriate scale, articulation, setbacks and building separation that responds to the topography

   iii. providing human-scale buildings that integrate public and private realms and building heights that complement street widths

   iv. ensuring building bulk, orientation and design contributes to the energy efficiency of buildings

   v. encouraging preparedness for natural hazards and climate change

   vi. activating both primary and secondary street frontages and adjoining public space.

C. Development should be designed to share infrastructure, including car parks, waste management areas and have a coordinated approach to landscaping, where possible.

D. Development should provide open space within a five minute walk of any dwelling.

E. Development, particularly medium density residential uses, must minimise visual amenity impacts by not being located on ridgelines or against escarpments. Development must mitigate any visual amenity impacts through building design, colours, materials and landscaping.

F. Development should incorporate universal design principles.

Consideration for future stages of development

- An updated Snowy River Development Control Plan including:
  - Design criteria for built form including guidance on building materials and colour selections to minimise visual impacts and reflect the sub-precinct's character
  - Controls for non-residential development which ensure built form is sympathetic to the sub-precinct's character
  - Guidance on the form, mass, scale, height and articulation of buildings to create a high quality and sustainable urban environment design guidance to ensure new development integrates effectively with the established uses in the sub-precinct
  - A landscape and vegetation management plan
  - A public domain strategy.

Transport and Movement

The sub-precinct is bounded by Kosciuszko Road to the east and Barry Way to the west, while the Southern Connector Road will provide the sub-precinct's southern boundary. Access into and movement around the sub-precinct must consider the undulating landform. The sub-precinct is also linked to the Sports and Education and Town Centre sub-precincts through strong active transport connections.

Aims

- Ensure the timely and orderly delivery of key transport infrastructure
- Provide equitable and safe access for all users via all modes of transport, with a focus on active transport connections.
- Ensure independent mobility for people of all ages and abilities and safe access
- Facilitate connections to a public transport network.
- Provide active transport linkages between and within the sub-precinct and to key destinations, including the Sports and Education and Town Centre sub-precincts.
- Provide transport supportive of facilities in the mixed use area.
- Provide facilities for electric and smart vehicles, such as electric vehicle charging facilities.
- Provide functional, safe and efficient parking areas.

Performance Criteria

A. New transport infrastructure is to be provided in Jindabyne, such as the Southern Connector Road.

B. Transport infrastructure should ensure integration with new and existing transport infrastructure generally in accordance with the structure plan.

C. Pedestrian and cycle connections should be provided in the general locations shown in the structure plan and should be prioritised

D. Active transport connections should ensure integration with the regional active transport network.

E. Car parking should be integrated into developments to minimise on-street parking and should utilise integrated parking solutions to service multiple development sites, where possible.

F. Car parking spaces must be designed in accordance with Australian Standard AS 2890.1.

G. Transport infrastructure development, including shared paths, car parks and pathways, should support safety and road performance, future mobility (smart technology), equitable access and passive surveillance.

H. Car parking should be designed to enable future adaptability and re-use opportunities, including the provision of floor heights that allow for infrastructure provision and minimum ceiling heights.

I. Development must provide operational access and egress for emergency services and occupants.

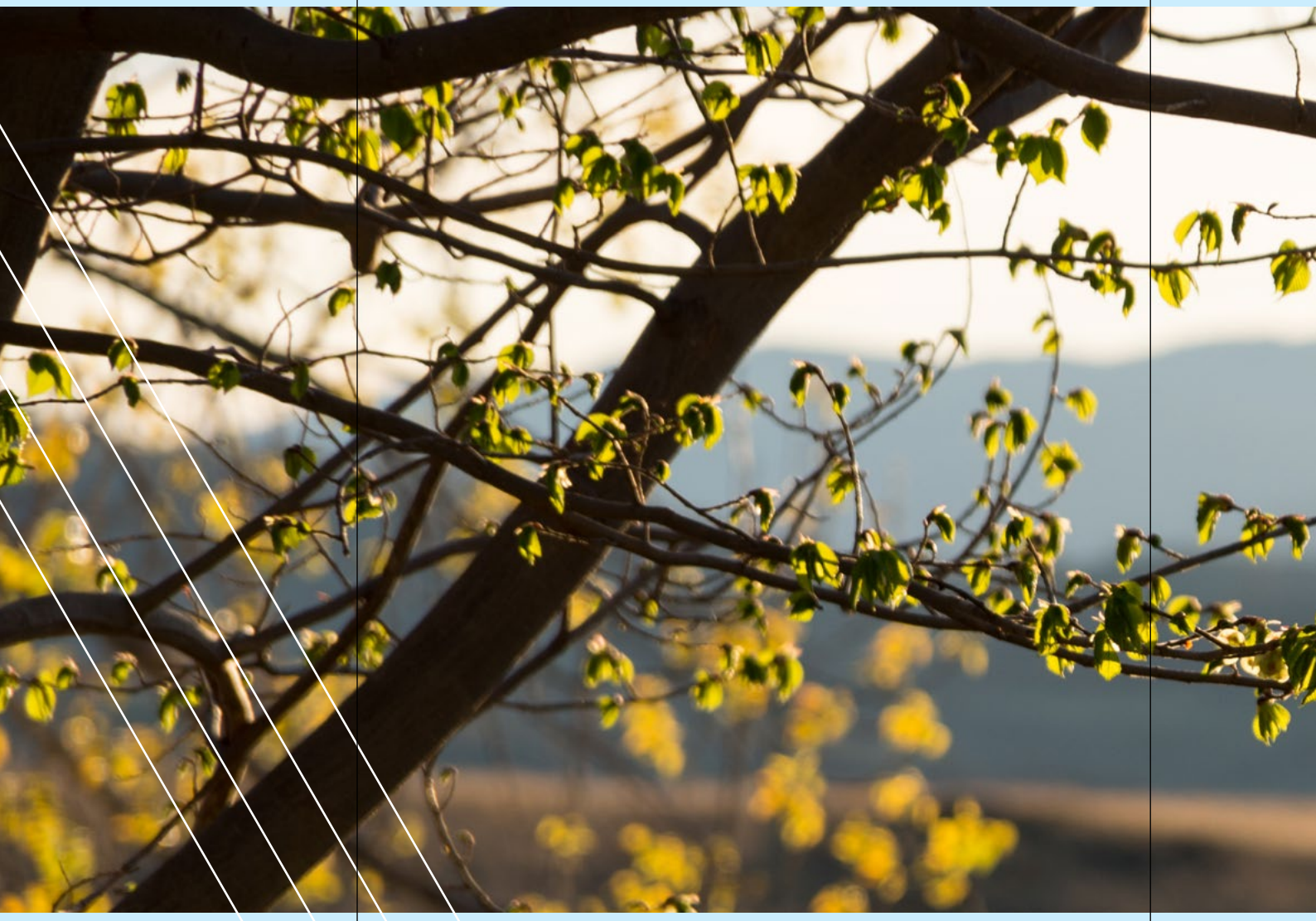
Consideration for future stages of development

- An updated Snowy River Development Control Plan including:
  - a street plan is to be developed to include:
    - street hierarchy.
    - staging of delivery.
    - street type, sections and reserve widths.
  - development of car parking rates, including the provision of accessible parking spaces.
- A plan for the staged delivery of an active transportation network
- Transport infrastructure concept design plans for:
  - new and upgraded shared paths, active transport connections and pedestrian crossings in the sub-precinct
  - infrastructure upgrades and integration with existing infrastructure and servicing networks.

Credit: Robbie Duncan, No Bad Days Photography.

6

Environment and sustainability



6.1 Biodiversity

The Precinct has a rich and diverse biodiversity which reflects the range of climates, altitudes, landforms, soil, and geology present. This includes a diversity of alpine and sub-alpine plant communities, including threatened ecological communities and habitat for a number of rare and threatened species.

Specifically, the Jindabyne Region includes areas of areas of significant existing native vegetation consisting of grassy subalpine woodlands and native grasslands. The woodland areas meet the definition of a critically endangered ecological community Monaro Tableland Cool Temperate Grassy Woodland in the South Eastern Highlands Bioregion. The vegetation is characterised by stands of Snow Gum (Eucalyptus pauciflora), Black Sallee (Eucalyptus stellulata), Candlebark (Eucalyptus rubida) and Mountain Gum (Eucalyptus dalrympleana) with areas of native grassland. Much of this existing native vegetation is of high conservation significance. These areas also include Natural Temperate Grassland of the Southern Tablelands which are listed as endangered.

An evidence based approach has been adopted to determine the best outcome for the Precinct and to provide a clear pathway appropriate development, in the right locations. This process seeks to avoid and minimise impacts to biodiversity with a focus on mapping areas best suited to future development and expansion.

The Master Plan has developed a risk-based approach to protect biodiversity across the Precinct, including the following principles:

- avoid impacts on biodiversity
- minimise impacts on biodiversity
- mitigate impacts on biodiversity though the use of a range of mitigation measures
- ensure any impacts are appropriately offset.

The Master Plan has identified and ranked biodiversity constraints across the Precinct. This criteria is listed in Table 1.

Table 1: Biodiversity constraints

Biodiversity constraint	Explanation
High biodiversity constraint	Native vegetation corresponding to Threatened Ecological Communities listed under the relevant legislation; known habitat for threatened species, namely grassland flora and fauna.
Moderate biodiversity constraint	Disturbed versions of Threatened Ecological Communities (including poor condition, regeneration, revegetation areas); native plant communities and habitat for threatened species not included above.
Low biodiversity constraint	Disturbed or poor condition vegetation zones that are not consistent with Threatened Ecological Communities; isolated trees within existing development areas.

Aims

- To protect and enhance the Precinct's landscape and biodiversity values.
- To avoid or minimise impacts to threatened ecological communities, threatened species and their habitats.
- To preserve and rehabilitate natural waterways and groundwater-dependant ecosystems.
- To prioritise new development in areas of low biodiversity constraint and minimise impacts within undisturbed areas.

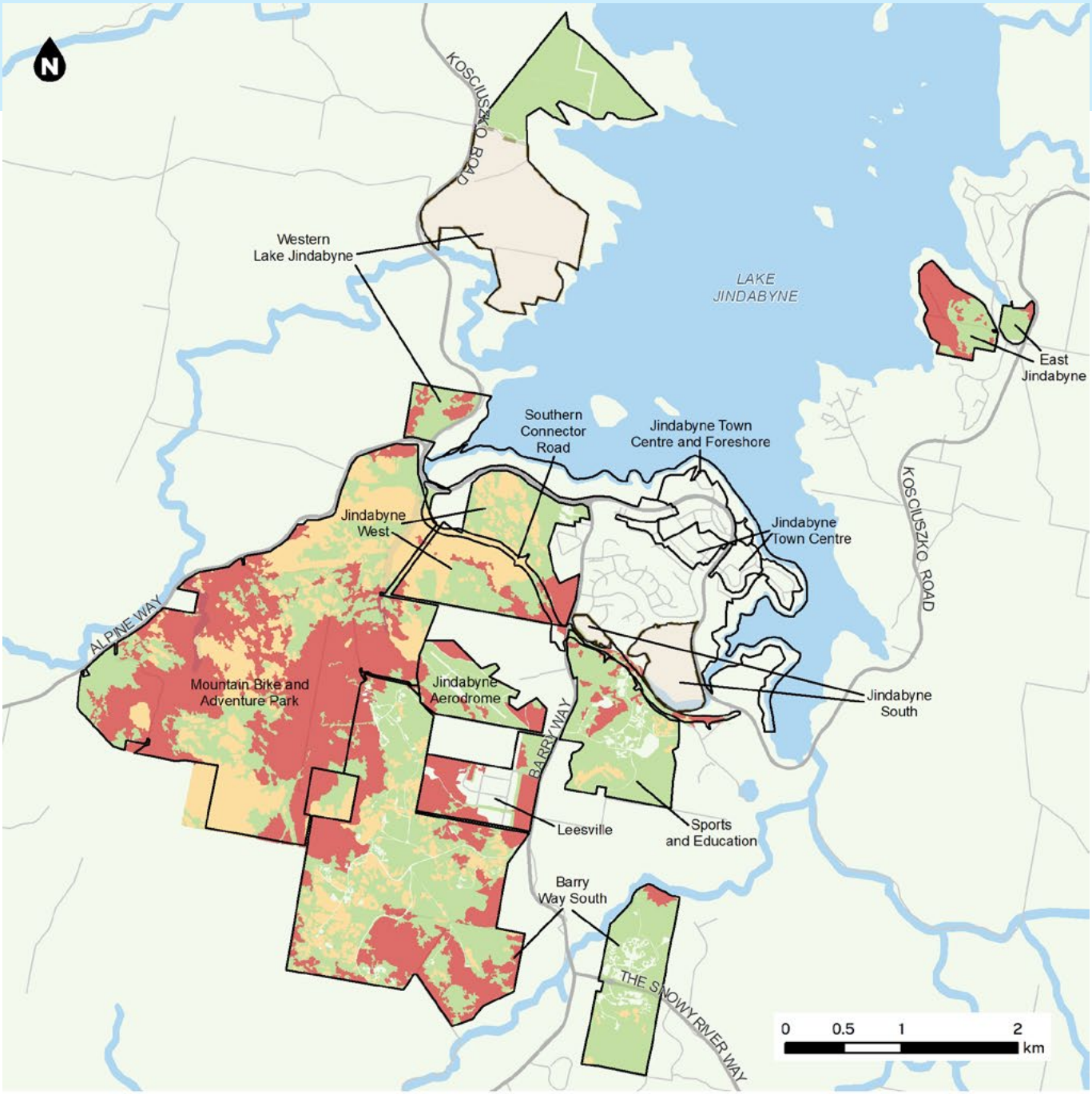


Figure 21: Biodiversity - Jindabyne

- Sub-precinct boundary
- Road
- High biodiversity constraint
- Moderate biodiversity constraint
- Low biodiversity constraint
- Unsurveyed land forms

Performance Criteria

A. Areas of high biodiversity constraint (Figure 21) should not be removed. Development may occur in these areas if it is for essential infrastructure or where it can be demonstrated that impacts are minimal and will be appropriately offset.

B. The subdivision of land may allow for the removal of some areas of high ecological value. The subdivision of land should consider the future uses of land and how biodiversity values can be retained. This may include the provision of vegetation links, the enhancement of riparian corridors and the retention and integration of smaller remnant vegetation areas and paddock trees with green infrastructure and active transport connections.

C. Development should be designed to be sympathetic to the biodiversity constraints.

D. Development should be designed to ensure connectivity through the landscape including corridors linking the lake foreshore with areas of high altitude.

E. To minimise the impacts on biodiversty values, development should be:

   i. concentrated in and around already disturbed areas

   ii. focused on co-location and infill development

F. Where possible, development should provide a suitable buffer between areas of high ecological values and buildings and structures.

G. Development should minimise the clearing of vegetation, such as existing native vegetation and paddock trees, and important habitat areas, such as rocky outcrops.

H. Tree plantings of local species is encouraged to create green networks that support wildlife corridors and vegetation stepping stones for fauna movement. These species should be from a genetic source (usually seed) that have been assessed as being able to grow comfortably in the conditions projected from the present day to the end of the life of the tree.

I. Riparian corridors must be preserved and revegetated where possible. Setbacks to the corridors are to be provided in accordance with the *Guidelines for Controlled Activities on Waterfront Land* (2018, NRAR).

Consideration for future stages of development

- Design guidance should be provided to identify how high biodiversity constraint areas will be protected during the short-term construction phase of development and in the long-term use of the area.
- Further assessment for threatened biodiversity should be undertaken when specific impacts are known for sites that have not been surveyed and/or where there is potential habitat for threatened species.
- A Management Plan that incorporates the biodiversity aims should be developed as part of the Delivery Plan or Development Control Plan. This plan should address:
  - the retention and maintenance of existing native vegetation and areas of high biodiversity constraint
  - additional planting and the creation of connections, wildlife corridors and vegetation stepping stones, where possible
  - areas for new public open spaces, publicly accessible areas or paths, including appropriate management strategies for these areas
  - riparian corridors, setbacks and design objectives for development interfacing with watercourses
  - plantings along road reserves that address visual amenity, public amenity considerations and road safety
  - the mitigation of urban heat island impacts, particularly in the Town Centre
  - Connection and Return to Country through landscape design.
  - site-based setbacks, landscaping and public domain requirements
  - how vegetation clearing and biodiversity offsets will be managed.

6.2 Geotechnical

The Jindabyne Region is the gateway to Australia's high country with its landscape characterised by undulating lands. Lake Jindabyne provides an impressive backdrop for many of the locations in the sub-precincts to take advantage of panoramic views across the Lake and the Snowy Mountains.

Aims

- Provide development on sloping sites that are appropriately designed and respond to the site's topography, minimise the loss of views and amenity from public and private spaces.
- Ensure sloping sites are integrated into green networks and connections that are usable places.

Performance Criteria

A. Development should respond to the slope of the site to minimise the loss of views and amenity from public and private spaces.

B. Development on sloping sites should be designed to step and integrate into the topography of the site, minimise undercrofts and voids, orient towards street frontages or views, and promote usable connections and public spaces.

Consideration for future stages of development

- Design and landscaping guidance on how development can appropriately respond to steep sloping sites.
- Engineering solutions where infrastructure will be constructed on steep sloping sites.

Intersection of Kosciuszko Road and Alpine Way. Credit: Destination NSW.

6.3 Flood risk management

The Precinct includes the Snowy River Catchment which includes the sub-catchment areas of Perisher Creek and its tributaries, Thredbo River and its tributaries, Lake Jindabyne and its tributaries of Lees Creek, Wollondibby Creek, Rushes Creek, Widows Creek and Mowamba River.

Snowy Hydro Limited operate Lake Jindabyne as a storage to supply water to their power stations as part of the Snowy Hydro Scheme. Lake levels are controlled by Snowy Hydro Limited and are subject to inflows from the Snowy River, Eucumbene River, Thredbo River and many minor tributaries.

Aims

- Minimise the flood risk to life, property and the environment associated with the use of the land in the sub-precincts.
- Allow development on land that is compatible with the flood hazard and flood function of that land considering projected changes as a result of climate change.
- Maintain the existing flood behaviour, flood function and the environment.
- Ensure safe and appropriate uses of the land.
- Enable safe evacuation from the land.

Performance Criteria

A. The Flood Planning Level is the 1% AEP plus 500mm freeboard to ensure consistency across the Precinct as shown in Figure 22. Development must generally occur outside the Flood Planning Level unless it can demonstrate that risks can be suitably managed. This allows for the maintenance of flood function and to avoid adverse effects on flood behaviour to the detriment of other properties or the environment of the floodplain.

B. Development within the Flood Planning Level should demonstrate that:

   i. all structures are constructed with flood compatible building components below the 1% AEP flood level plus 500mm freeboard

   ii. all structures are designed to withstand the forces of floodwater, debris and buoyancy up to 1% AEP flood plus 500mm freeboard.

C. Development within the Probable Maximum Flood (PMF) area should demonstrate that:

   i. all emergency and evacuation infrastructure is to be constructed with flood compatible building components below the PMF level plus 500mm freeboard

   ii. all emergency and evacuation infrastructure structures are to be designed to withstand forces of floodwater, debris, and buoyancy up to the PMF plus 500mm freeboard.

D. Development must be sited, designed and located to avoid or mitigate the flood risk to people, property and infrastructure such that:

   i. flood risk is managed through site-specific built form and design

   ii. sensitive, vulnerable and critical uses are avoided in the floodplain.

E. Development should mitigate the impacts of local overland flooding through the provision of adequate site drainage systems.

F. Development must consider and plan for emergency evacuation situations to ensure the safety of all areas within the PMF extent.

G. The Southern Connector Road is to be designed and constructed to provide for flood immunity up to 1% AEP plus 500mm freeboard. This allows for changes in the extent, height and hazard of flooding due to climate change for the design life of roads.

H. Development in the Jindabyne Town Centre and Foreshore sub-precinct ensures activities and enabling infrastructure does not increase flood risk on-site or elsewhere. The Issuing Authority will determine if this performance criteria is applicable to development, where development may cause a substantive change to the flood risk of the land. This includes development that may subdivide, erect a building, carry out a work, demolish a building or work, or change the use of the land. Where it is deemed that development may have a substantive impact to the flood risk of the land, the development must demonstrate:

   i. how activities and works are located above the PMF

   ii. mitigation infrastructure proposed addresses flood risk

   iii. how development does not increase flood risk within and outside the development site.

Figure 22: Flood - Jindabyne

Sub-precinct boundary

Road

1% AEP Flood

Probable Maximum Flood (PMF)

Consideration for future stages of development

- A flood risk strategy must be prepared that outlines the evacuation and emergency strategies in flood events up to and including the PMF. The strategy must be in accordance with the *Technical flood risk management guideline* prepared by the Australian Institute for Disaster Resilience H1-H6 classification system (as modified) to determine the design for any buildings that are to be used for shelter in place provisions located within the floodplain.
- A stormwater management strategy must be prepared that identifies:
  - site level controls for stormwater detention and re-use
  - the flood planning levels and design requirements (including emergency response) for development within the Flood Planning Level area, including the emergency response requirements in the PMF area (Figure 22)
  - the monitoring and reporting process for ensuring that the stormwater will not have an adverse impact on the environment, including the health of Lake Jindabyne, waterways and groundwater
  - how engineering solutions may modify flood prone land enabling development opportunities through stormwater mitigation.
- Design guidance for local roads and drainage infrastructure that will allow for higher flood immunity to mitigate the impact of flooding in Jindabyne.

Lake Jindabyne. Credit: Destination NSW.

6.4 Water quality

Water quality is incredibly important within the Precinct, as water is used for recreation (as snow for snow sports, as water for lake uses) and power generation across the Precinct.

While the large size of Lake Jindabyne means water quality, is not a common issue for the lake, the urban areas on its foreshore discharge directly into the lake. Untreated stormwater run-off from urban areas can detract from the recreational uses of the foreshore. Future planning should consider the complete water cycle and promote stormwater quality management.

Aims

- Ensure regular stormwater flows are maintained across the Jindabyne Catalyst Precincts for environmental flow purposes for waterways in and downstream from the Precincts.
- Ensure stormwater run-off quality is appropriately managed across the Jindabyne Catalyst Precincts.
- Ensure the condition of waterbodies and their riparian zones are protected.
- Improve water quality and reduce stormwater run-off.
- Promote integrated water cycle management.
- Capture and re-use stormwater at the source
- Implement stormwater quality treatment at the source

Performance Criteria

A. Maintain or improve the ecological condition of waterbodies and their riparian zones in catchments over the long term.

B. Development should implement on-site water management and water quality systems through:

   i. the capture and re-use of water on-site

   ii. the treatment of water on-site with any water discharged back into catchments having a neutral or beneficial effect on water quality

   iii. incorporating water sensitive urban design principles into the development's-built form and landscaping.

C. The quality of water discharged into receiving catchments must be pre-development quality or better in relation to pH, total suspended solids, total phosphorus, total nitrogen and gross pollutants. The quality of water should aim to meet the following targets:

   i. Total Suspended Solids: 85% reduction

   ii. Total Phosphorus: 60% reduction

   iii. Total Nitrogen: 45% reduction.

D. The quality of water discharged into receiving catchments should maintain electrical conductivity levels. Water quality should aim to maintain an electrical conductivity below the 30 µS/cm ANZG 2018 Guideline Value for upland rivers of South-East Australia.

E. Erosion and sediment control should be managed during construction to ensure impacts to waterways are minimized in accordance with Managing Urban Stormwater Soils and Construction, also known as the Blue Book (current edition). Consideration should be given to limiting the amount of exposed excavated soil to a particular area during construction.

F. Discharge of wastewater and/or contaminated storm water to watercourses or waterways is not permitted unless otherwise specified in an environmental protection licence issued under the *Protection of the Environment Operations Act 1997*. Development must obtain the appropriate water licenses in accordance with the *Water Management Act 2000* and consider the relevant Water Sharing Plan.

Consideration for future stages of development

- Guidance on erosion and sediment management to inform Construction Management Plans for individual developments,
- Design guidance on how development should incorporate water sensitive urban design principles for the management of water quality and efficiency.
- Monitoring and reporting processes to measure the water quality of catchments.

6.5 Bushfire

Bushfire is a key consideration and design requirement in the development of the Master Plan. The Precinct includes large areas which are mapped as bush fire prone. The Master Plan has implemented strategic planning approaches to bushfire that will ensure development appropriately responds to bushfire hazards and can be appropriately mitigated through the design and coordination of future development.

All new development on bushfire prone land will also need to comply with the NSW Rural Fire Service's *Planning for Bushfire Protection 2019* (PBP 2019). PBP 2019 focuses on ensuring developments are provided with appropriate bushfire protection measures.

Aims

- Provide for the protection of human life and minimise impacts on property from the threat of bushfire, while having due regard to development potential, site characteristics and protection of the environment.
- Provide a bushfire protection measures to reduce the impact of a bushfire.
- Ensure land is suitable for development in the context of bushfire risk, and protection measures are governed by the degree of risk posed to a development and the vulnerability of occupants.
- Provide adequate infrastructure and access/egress associated with emergency evacuation and firefighting operations.
- Facilitate appropriate ongoing land management practices.

Performance Criteria

A. Development should appropriately respond to the level of bushfire risk through:
   i. minimising perimeters of the development exposed to the bushfire hazard
   ii. minimising vegetated corridors that permit the passage of bushfire towards development
   iii. providing for the siting of future development away from ridge-tops and steep slopes, within saddles and narrow ridge crests
   iv. ensuring capacity of existing infrastructure (such as roads and utilities) can accommodate the increase in demand during emergencies as a result of the development.

B. Asset Protection Zones (APZs) are to be provided and maintained between a bushfire hazard and future development in accordance with PBP 2019 and are designed to address the relevant bushfire attack mechanisms.

C. Adequate access is to be provided from all properties to the wider road network for residents, emergency services and to provide access to hazard vegetation to facilitate bushfire mitigation works and fire suppression.

D. Development in more remote areas are to minimise levels of radiant heat, localised smoke and ember attack through increased APZ, development design and siting.

E. The subdivision of land should consider the future uses of land and the inclusion of roads into APZs.

Consideration for future stages of development

- Fire safety planning including a precinct wide emergency and evacuation plan.
- Access and utility requirements to ensure the safety of residents, the community and firefighters.

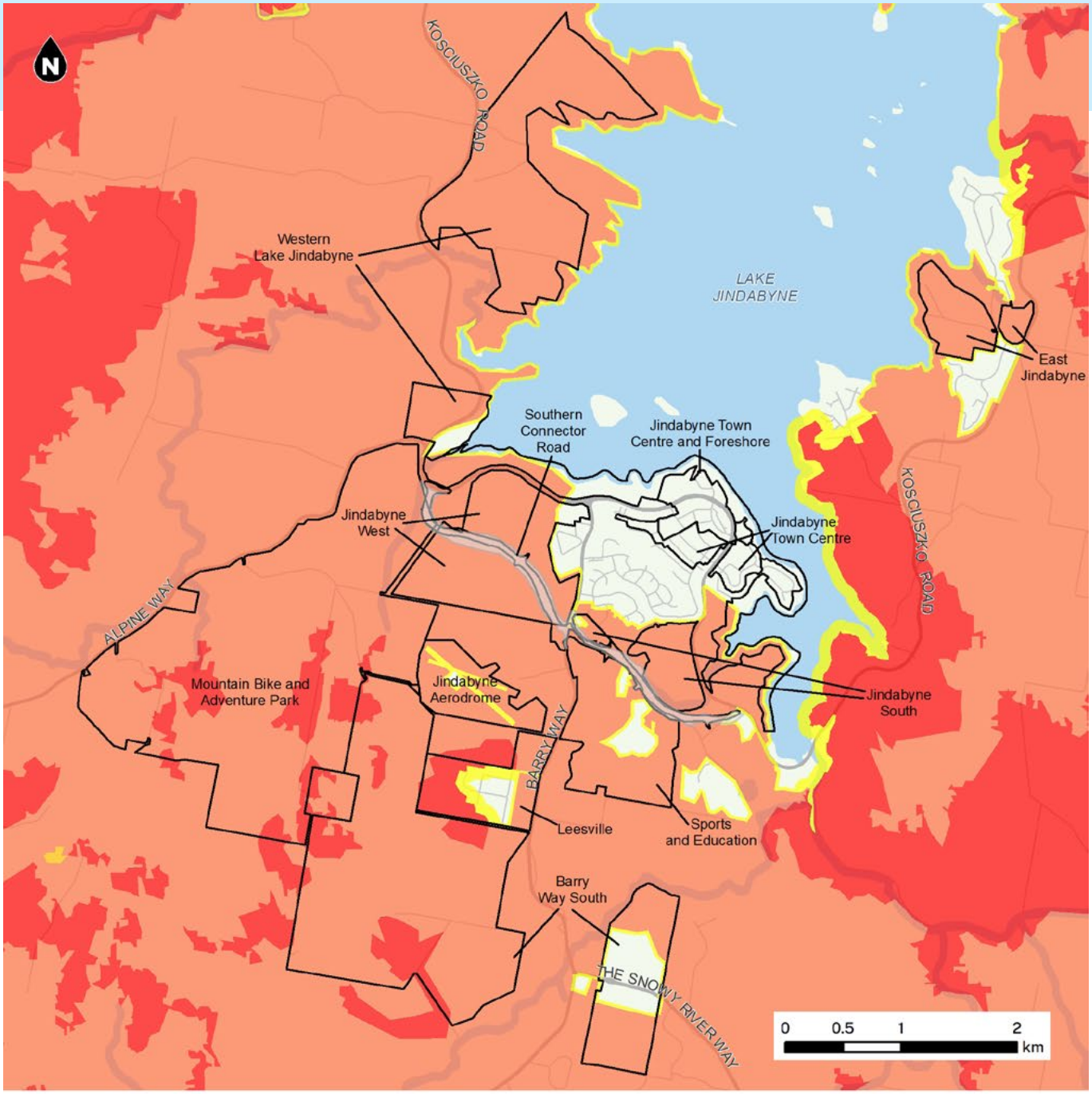


Figure 23: Bushfire - Jindabyne

Sub-precinct boundary

Category

Vegetation Category 1

Vegetation Category 2

Vegetation Category 3

Vegetation Buffer

Road

6.6 Sustainability and climate change

The Master Plan has been prepared to ensure development maximises sustainability opportunities that contribute to the Snowy Mountains fulfilling its vision of becoming a year-round sustainable tourism destination.

Climate change refers to long-term shifts in temperatures and weather patterns. These shifts may be natural, such as through variations in the solar cycle. But since the 1800s, human activities have been the main driver of climate change, primarily due to burning fossil fuels like coal, oil and gas.

Climate change has the potential to increase temperatures, resulting in fewer cold nights and an increase in hot days, reduced snow conditions and increased bushfire risk and intensity unless adequate mitigation measures are implemented.

There are a range of tools, organisations and programs available to support sustainability and climate change management within the Precinct including:

- ISCA Rating Tool
- Sustainability Advantage (a NSW Government program that provides organisations with sustainability initiative support)
- Green Star Rating
- BASIX Energy and Water
- NABERS

The NSW Government has set an ambitious policy framework including the Climate Change Strategy, Net Zero Plan Stage 1, and is leading the development of other supporting strategies such as the 20-Year Waste Strategy and Clean Air Strategy for NSW. These strategies will be important resources for guiding initiatives and development within the Precinct.

Aims

- The design and operation of businesses within the Precinct should showcase leading practice in the application of sustainability concepts.
- To support the establishment of the Precinct as an internationally recognised sustainable tourism destination supporting year-round activation, eco-tourism and wellness, environmental performance and collaboration.
- To support Snowy Monaro Regional Council and businesses in the Precinct to maximise efficiencies, reduce emissions and collaborate on net zero aspirations.
- To ensure development prioritises avoidance and mitigation of environmental impacts.
- To prioritise active transport and support NSW Government to promote efficient transport modes.
- To facilitate the design, construction, and operation of environmentally sustainable buildings, including renewable energy, efficient resource and energy use, resource re-use and reduced emissions and waste.
- To encourage the use of tools and programs to support sustainability goals for the Precinct.
- To consult with Monero Ngarigo people regarding the integration of cultural land management practices.
- To ensure climate change risks and mitigation measures are recognised to support an adaptable community resilient to climate change.

Performance criteria

A. Development must be inclusive and sustainable and promote year round use.

B. Development should preserve the Precincts landscape, cultural, heritage and biodiversity values by avoiding and minimising impact.

C. Development should support sustainable and active transport opportunities and integrate open space. Buildings are to express a strong commitment to environmentally sensitive design principles and incorporate passive design, optimal orientation, effective sun shading, cross ventilation and open plan living. This should be evident in the external architectural expression.

D. Development should comply with applicable sustainability tools and programs for design, construction and operation.

E. Consideration must be given to climate responsiveness and resilience. Climate change risks, hazard and opportunities must be considered in the design, construction and operation of development within the Precinct.

Consideration for future stages of development

- The applicable Delivery Plan or Development Control Plan should provide examples and guidance for businesses on how to prepare and implement an Environmental Management System.
- Building design should demonstrate how it aligns with applicable tools, programs and rating schemes to ensure developments embed a range of sustainability measures across the lifecycle of assets.
- Implement the recommendations of the Climate Change Adaptation Plan where applicable to the Precinct.
- Consultation with Monero Ngarigo people regarding the integration of cultural land management practices.

7

Place and landscape

7.1 Aboriginal cultural heritage

Aboriginal cultural heritage sites within the Jindabyne Region have the potential to be impacted by development and will be managed according to NSW law and in consultation with traditional custodian representatives. Wherever possible culturally significant artefacts, places, vegetation, and view-scapes will be protected, maintained and enhanced to conserve their significance.

The Traditional Custodians of the Snowy Mountains are the Monero Ngarigo people, in connection with the Walgalu, Ngunnawal, and Bidhawal people. The boundaries of the Monero Ngarigo extend from the western slopes of the coastal ranges to the eastern side of the Kosciuszko plateau and further north, between the coastal ranges and the mountains on the banks of the Murrumbidgee River. The tribal boundaries also include the peaks of Mount Kosciuszko and the Snowy ranges. Monero-Ngarigo allowed and encouraged passage of other tribes through their Country to visit the high mountains and share in its resources and spirituality.

The Aboriginal Cultural Heritage Assessment report that has informed this Master Plan has focused on key development areas and aimed to identify opportunities to protect, conserve and enhance significant Aboriginal cultural heritage items, places and values and to devise strategic mapping to enable streamlined planning.

The Master Plan vision and controls have been developed to incorporate Aboriginal culture and values. The Precinct aspires to achieve a 'sense of place', history and spirit within the precinct, one which can be passed on to the next generation.

The Master Plan comprises strategic mapping which indicate zones of high, medium, and low Aboriginal Cultural Heritage (ACH) potential to guide strategic planning and to help scope development proposals.

The Master Plan comprises of two components addressing Aboriginal cultural heritage:

1. Identification known of items, places and areas of Aboriginal cultural heritage. This will be included as part of the environmentally sensitive areas map within the Environmental Planning Instruments.
2. Strategic performance based mapping indicating areas of high, medium and low Aboriginal cultural heritage (ACH) potential impact.

The Master Plan focuses on an avoidance hierarchy, with development best located on already disturbed land which minimises the impact to Aboriginal cultural heritage values. The Master Plan includes performance criteria on how development should be considered in each of the ACH potential impact areas. ACH areas have been based on the criteria listed in Table 2.

Table 2: ACH potential

ACH potential	Explanation
High potential areas	Areas where Aboriginal sites have been previously recorded or landforms that are flat, close to water, and close to known sites. Development on 'high ACH potential' areas should have an impact assessment undertaken. This assessment would include a visual inspection, possibly test excavation if warranted, and participation from the Aboriginal community.
Moderate potential areas	Landforms with a gentle gradient either close to a waterway or along an elevated landform such as a spur overlooking a waterway. Development within 'moderate ACH potential' areas should have an impact assessment undertaken. This assessment would include a visual inspection, possibly test excavation if warranted, and participation from the Aboriginal community.
Low potential areas	Sloping landforms or elevated landforms distant to water. Development within 'low ACH potential' areas should be assessed at a time when the impacts are known by following the appropriate assessment guidelines, currently the Due Diligence Code of Practice for the Protection of Aboriginal Objects in NSW. This assessment may involve a visual inspection of the impact area, test excavation if warranted, and the involvement of the Aboriginal community
Disturbed lands	Development on 'disturbed land' can generally proceed without further assessment, however, any development will need to consider the likelihood for subsurface archaeological deposits present below areas of disturbed land and carry out test excavation if required. As Aboriginal objects are still possible in 'disturbed lands' any work in these areas should follow an unanticipated finds protocol to manage the unlikely event that Aboriginal objects are noted during work

Aims

- Ensure the Snowy Mountains Special Activation Precinct celebrates and protects its history and landscape values, particularly its occupation by Aboriginal people and their connection to the land.
- Ensure Aboriginal culturally significant places and artefacts are protected, maintained and enhanced.
- Allow and promote development and Precinct design that recognises Connection and Return to Country.
- Build relationships with Monero Ngarigo Traditional Custodians at all stages of development, and in accordance with the Government Architect NSW draft Connecting with Country framework.
- Celebrate Monero Ngarigo culture, values, and heritage in future development.
- Enable formal Monero Ngarigo participation in Caring for Country, making decisions about Country, contemporary use of natural resources and Cultural knowledge transmission, and protection of key geographical features.
- Respect Monero Ngarigo people's rights, obligations, roles and connections to Country as Traditional Custodians of the land and waterways by embedding Aboriginal cultural knowledge in project delivery.
- Provide Traditional Custodians with opportunities to Return to Country and enhance the Aboriginal community's sense of belonging across the Precinct.
- Support Aboriginal employment and business opportunities across the Precinct and to develop interpretation and tourism experiences that enhance the broader community's understanding and enjoyment of Aboriginal culture.

Performance Criteria

A. Areas of Aboriginal cultural heritage should not be developed. Development may occur in these areas if it is for essential infrastructure and where further Aboriginal cultural heritage assessment will be undertaken to appropriately mitigate and manage any impacts to Aboriginal cultural heritage items, places or areas.

B. Aboriginal culturally significant places and sites should be integrated with areas of environmental significance and green space (where appropriate) across the Precinct. This may continue to evolve as greening opportunities across the Precinct are established

C. Development in areas where surveys have not been undertaken require further Aboriginal cultural heritage assessment. These assessments must be carried out in accordance with Guide to investigating, assessing and reporting on Aboriginal cultural heritage in NSW (as modified from time to time) prior to any development on this land. These assessments must include a visual survey of the land. Once suitably assessed, any land identified as having Aboriginal cultural heritage significance should be included on the Environmentally Sensitive Areas map. Development is to be assessed against the mapped zones of archaeological potential as required by the following:

   i. development within areas identified as 'disturbed land' do not require any further investigation beyond considering the potential for subsurface archaeological deposits. If current disturbances are considered to cover intact archaeological deposits, further investigation should take place that may include test excavation. Should development encounter any unexpected finds during construction, the procedures under the relevant unexpected finds protocol should be followed

   ii. development within areas identified as 'moderate ACH potential' or 'high ACH potential' should be avoided. Where development will impact these areas, further Aboriginal cultural heritage assessment must be undertaken. This assessment should include a visual inspection, possibly test excavation if warranted, and participation from the Aboriginal community.

D. Development planned on land in which an Aboriginal object is located should be supported by a heritage impact assessment which should be prepared to assess the extent to which a proposed development would harm Aboriginal objects.

E. If impact to an Aboriginal object is unavoidable, an Aboriginal Heritage Impact Permit (AHIP) under Part 6 of the *National Parks and Wildlife Act 1974* would be required.

Design guidance should consider how building design, siting and materials could form part of a broader interpretation strategy, including consideration of Connection to Country and Return to Country.

Consideration for future stages of development

- An Aboriginal Cultural Heritage Management Plan that includes:
  - How Aboriginal cultural heritage areas will be integrated with areas of high ecological value and green connections
  - A protocol for unexpected finds during construction.

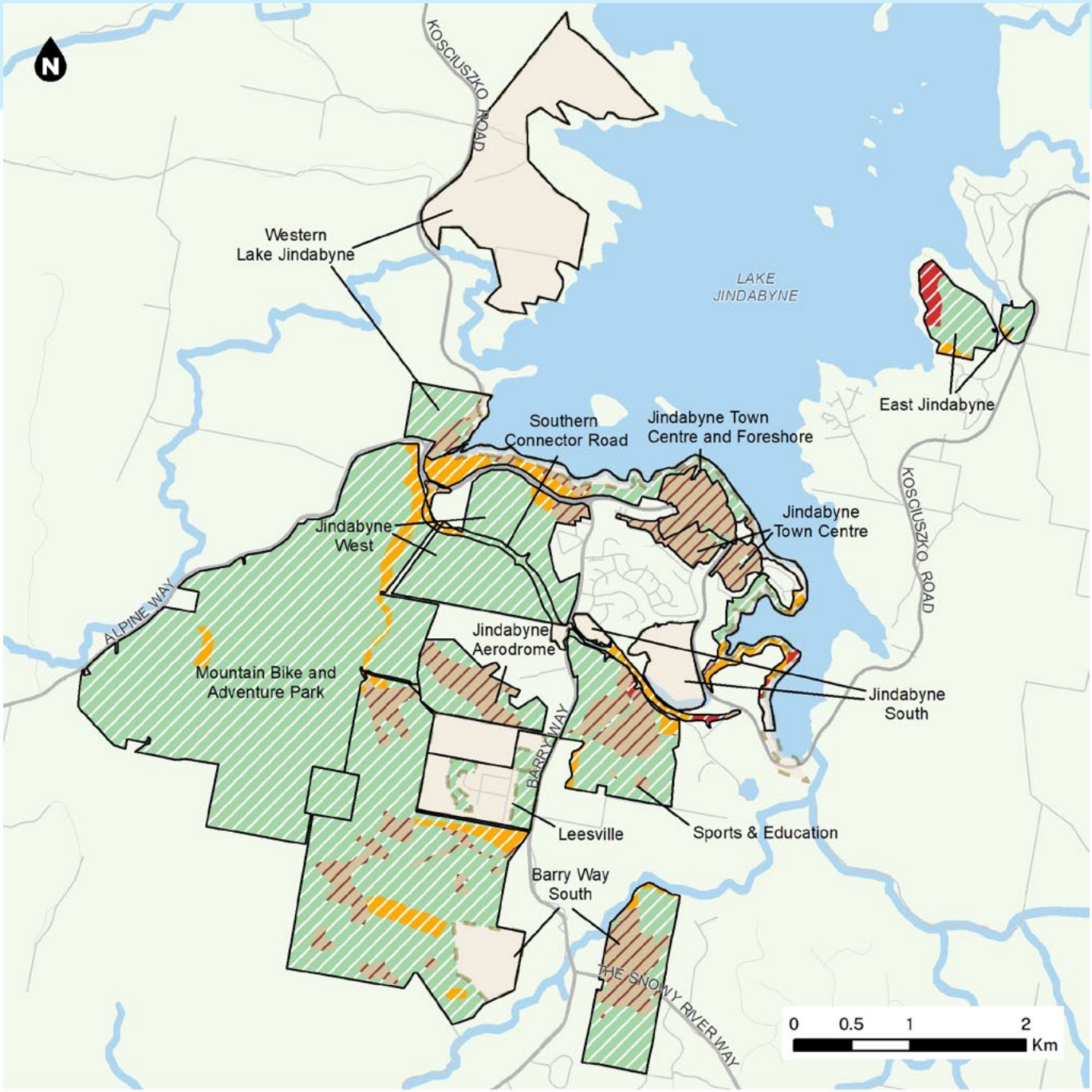


Figure 24: Aboriginal heritage

- Sub-precinct boundary
- Road
- ACH high potential
- ACH moderate potential
- ACH low potential
- Disturbed land
- Unsurveyed landforms

7.2 Historic heritage

The region known as the Monaro was first accessed by Europeans in 1823 when Currie and Ovens crossed the Bredbo River and noted the rolling grassy plains to the south. The original town of Jindabyne was settled in the 1840s on the banks of the Snowy River at the main river crossing for cattle travelling between the Monaro and Gippsland. Tourism was a major source of growth in the region from 1909 when the area became a popular destination for trout fishing after brown and rainbow trout were introduced into the local streams.

The Snowy River LEP lists places that have been assessed as having local heritage values and are therefore protected by the *Heritage Act* 1977. In addition, 'Lake Jindabyne' is listed as a Conservation Area.

Aims

- Ensure historic heritage places are protected, maintained and enhanced
- Identify areas where future development should not occur due to historic significance
- Ensure that development adjacent to heritage items complements, is designed and is sited to protect the heritage significance of the item and its setting
- Identify where development could take place while conserving historic values
- Ensure that broader heritage values such as the town design of central Jindabyne is conserved
- Determine how historic heritage can be incorporated into the 'visitor experience' of the region.

Performance Criteria

A. Development in areas defined as 'disturbed land' can occur without further historic heritage investigation however must consider neighbouring heritage items and broader heritage values such as the town plan and character of Jindabyne.

B. Development on land where a heritage item is situated, that is a heritage item or is on land adjacent to a heritage item must prepare a statement of heritage impact.

C. Development in areas defined as 'high risk' or 'moderate risk' requires further heritage assessment where the development is likely to materially have a major affect on a heritage item or its value. Development is considered to have a materially major affect if it involves:

   i. the full or partial demolition of a building

   ii. major alterations or additions

   iii. major adverse impacts, such as the removal of significant fabric, obscuring key views or dominating a heritage item, or the removal of evidence of significant historical associations;

   iv. impact to significant archaeological deposits.

D. Development in areas defined as 'high risk' or 'moderate risk' require further heritage assessment where the development is likely to materially have a minor affect on a heritage item or value. Development is considered to have a minor affect if it involves (but is not limited to):

   i. Repairs or restoration to fabric

   ii. Installation of fire safety equipment

   iii. Installation of disabled access

   iv. Replacement of awnings, balconies, etc

   v. Installation of signage or fencing

   vi. Excavation of areas without archaeological potential

   vii. Erection of temporary structures

   viii. Installation of safety and security equipment.

E. Where development is likely to materially have a major effect on a heritage item or value, further heritage assessment is required. This heritage assessment includes:
    i. a visual inspection to determine the existing heritage values
    ii. an archaeological assessment (if appropriate)
    iii. preparation of a statement of heritage impact.

F. Where development will have a minor effect on a heritage item or value, a heritage assessment may be required. This heritage assessment may include:
    i. a visual inspection to determine the existing heritage values
    ii. an archaeological assessment (if appropriate)
    iii. use of a previously prepared heritage study if applicable.

G. Development that is likely to have a materially major or minor effect on a heritage item or its value must
    i. identify the impacts to the heritage values of an item or place
    ii. demonstrate the need for the impact and how alternatives to the impact have been considered
    iii. demonstrate how the adverse impacts will be minimised or mitigated

H. Development adjacent to a heritage item should ensure impacts to the heritage item are minimised, including through the provision of appropriate curtilages. There may be opportunities to reduce the curtilage to some heritage items if it can be demonstrated the development will not have a significant impact on the heritage item or its value.

I. Heritage items must be used for purposes that are appropriate to their heritage significance, including adaptive re-use where appropriate.

J. Development is to ensure long-term heritage conservation outcomes are retained or interpreted to reflect the history of heritage items and places.

K. Development should through redevelopment or upgrades remove inappropriate or unsympathetic alterations and additions to heritage items and reinstate significant missing details and building elements, where possible.

Consideration for future stages of development

- A strategy for the re-use of heritage listed buildings and principles for the design of heritage curtilages that should be provided.
- If heritage listed items are being integrated as part of a broader development scheme, design guidance for how new development or redevelopments can sympathetically respond to heritage listed items.
- A Heritage Management Plan to be developed as part of the Delivery Plan and Development Control Plan that includes:
    - how historic heritage areas will be integrated with areas of high ecological value and green connections
    - protocol for unexpected finds during construction.
- Design guidance for development in the Sport and Education Sub-Precinct that sympathetically responds to, acknowledges and strengthens the heritage values and natural landscape of the site. This should incorporate best practice guidance from the Design Guide for Heritage prepared by the Heritage Council of NSW and the NSW Government Architect.

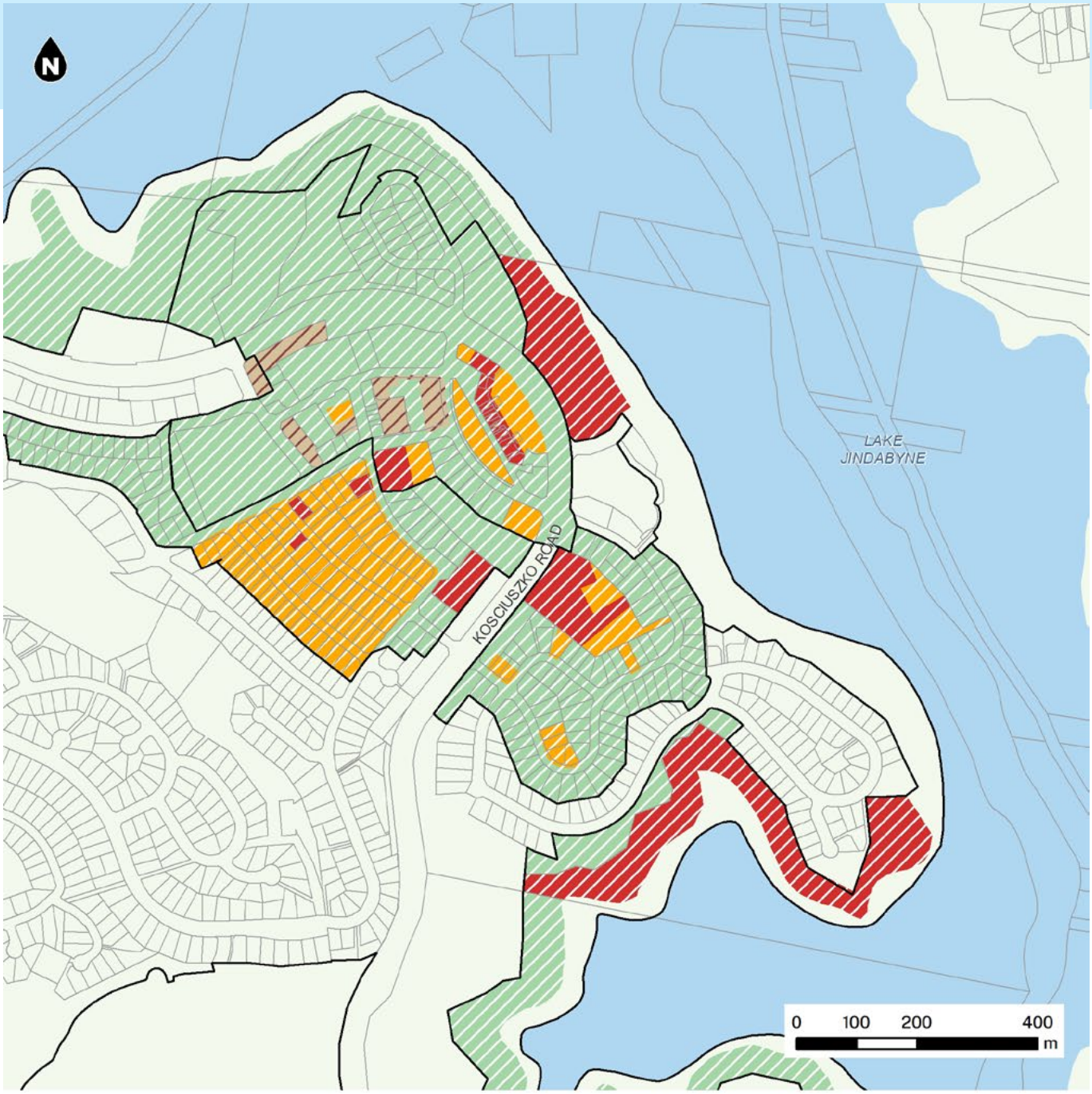


Figure 25: Historic heritage - Jindabyne Town Centre

- Sub-precinct boundary
- Road
- Historic heritage - high risk
- Historic heritage - moderate risk
- Historic heritage - low risk
- Disturbed land

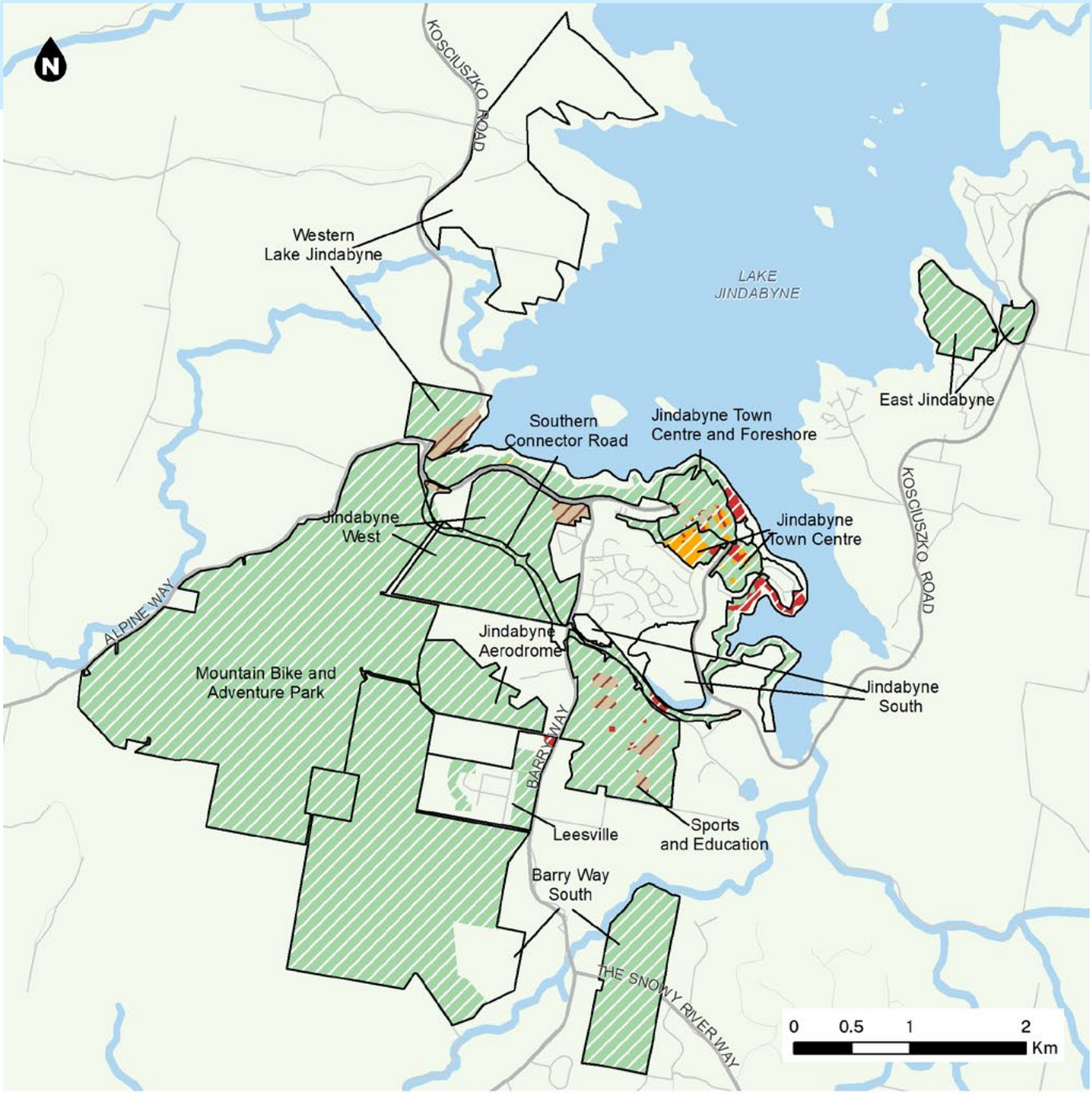


Figure 26: Historic heritage - Jindabyne

- Sub-precinct boundary
- Road
- Historic heritage - high risk
- Historic heritage - moderate risk
- Historic heritage - low risk
- Disturbed land

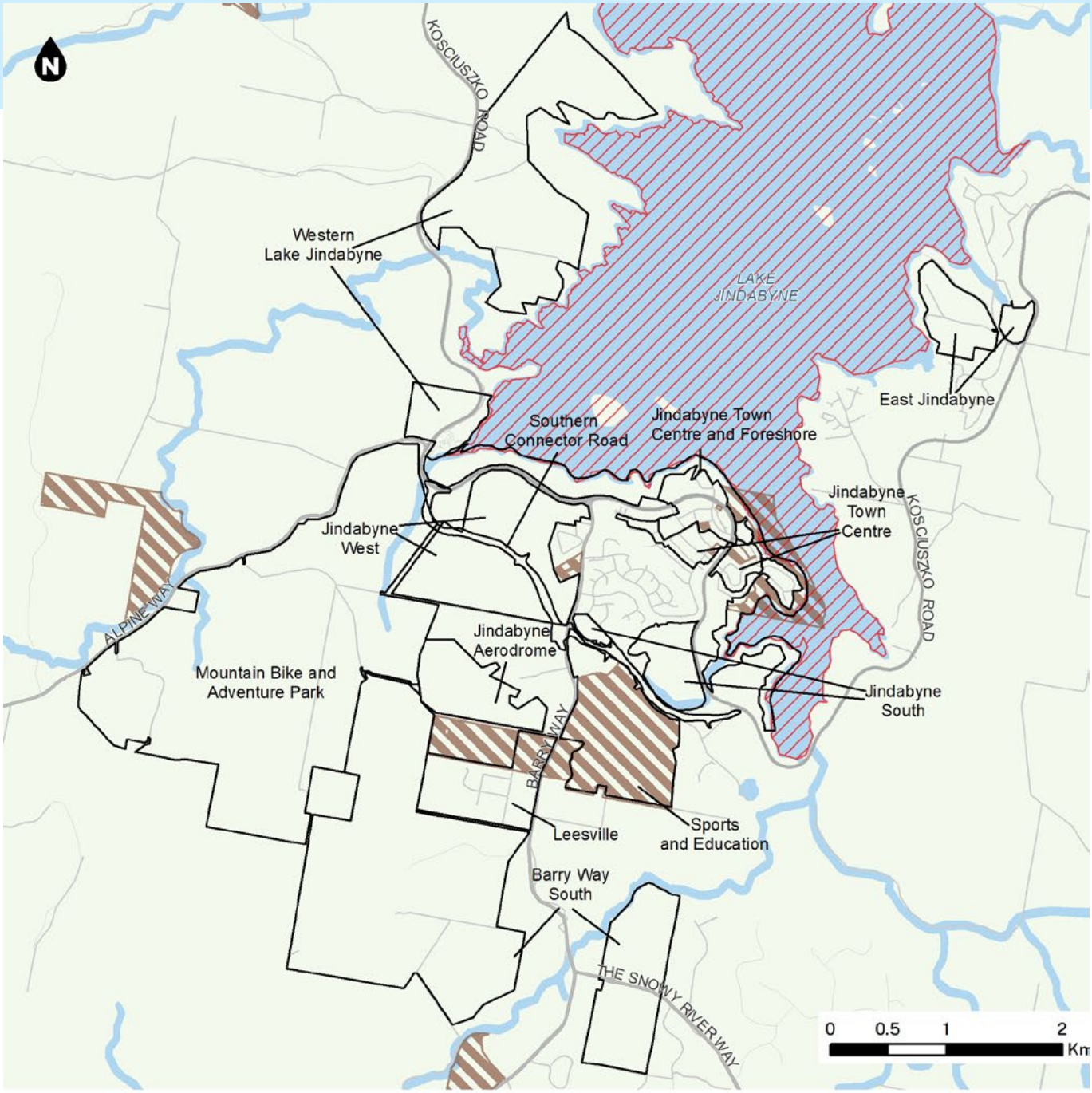


Figure 27: EPI heritage - Jindabyne

Sub-precinct boundary

Road

EPI Heritage Item

EPI Heritage Conservation Area

7.3 Landscape, character and open space

Aims

- Create an interconnected network of public green infrastructure
- Provide landscaping and public open space that responds to the topography of the Jindabyne Region and provides opportunities for visual amenity.
- Provide high-quality and high-performing multifunctional green spaces that deliver social, environmental, and economic benefits.
- Provide increased tree canopy to encourage use of pedestrian networks and active transport by improving visual amenity and providing shade
- Integrate stormwater management and passive open space.
- Provide open space that is attractive and useable for residents and visitors.
- Provide plantings that are compatible with the local climate and environment.
- Promote the design of landscapes and public open space that incorporates Monero Ngarigo culture.

Performance Criteria

A. Landscaping and public open spaces should include tree plantings of local species. These species should be from a genetic source (usually seed) that have been assessed as being able to grow comfortably in the conditions projected from the present day to the end of the life of the tree.

B. Landscaped areas and public open space should respond appropriately to the topography of Jindabyne, recognising and celebrating its undulating form.

C. New residential development should be within a five-minute walking distance of high-quality open space for passive and active recreation.

D. New development areas must protect the natural environment through corridors, reserves, buffers and parks.

E. Development should integrate stormwater management infrastructure with both public and private open spaces, where possible.

Consideration for future stages of development

- A landscape and vegetation management plan
  - landscaping treatments and plantings for active and passive open space
  - landscaping treatments and plantings for shared trails and paths
  - design guidance on how landscapes and public open space can incorporate Monero-Ngarigo culture
  - design guidance for how stormwater management infrastructure can be integrated with open spaces.

8

Infrastructure

Jindabyne Dam

8.1 Utilities and services

Growth planned for Jindabyne, requires upgrades and extensions to facilitate redevelopment. This may include upgrades to potable water, sewer, and stormwater systems, as well as to telecommunications, electrical and gas infrastructure as shown in the next two pages.

Aims

- Ensure infrastructure, particularly water, sewer and stormwater, is provided upfront to service the delivery of new residential, tourism and industrial land in a coordinated approach.
- Promote sustainable water conservation and re-use practices and water demand management.
- Ensure the discharge of stormwater does not impact nearby waterbodies and catchments.
- Provide precinct-scale utility and services infrastructure to align with the sustainability objectives.
- Encourage the coordinated, effective and efficient delivery of infrastructure and services.
- Encourage innovative and sustainable utility and servicing to promote effective and efficient delivery of services.
- Ensure the construction of utility services and infrastructure provision occurs in a logical and staged manner, and in sequence with development.

Performance Criteria

A. Precinct-wide utility infrastructure and services to be designed to provide for the ultimate growth and development of the Jindabyne sub-precincts.

B. Utilities and services should be integrated with existing infrastructure and where possible integrated or aligned with road or public/active transport networks.

C. Development within the sub-precincts must have access to water, wastewater, telecommunications (including digital connectivity), energy (electricity/gas) and drainage infrastructure.

D. Development within the sub-precincts should incorporate renewable energy opportunities (such as solar on rooftops) and sustainable water management practices (such as water recycling and re-use), where possible, to achieve sustainability and circular economy principles.

E. Infrastructure is adequately protected from development.

F. Development near a utility service must be in accordance with the relevant service authority's guidelines and requirements.

G. Development of new and refurbished utilities should apply construction management best practices, technologies and methods.

Consideration for future stages of development

- Details of the provision, design and function of new and upgraded infrastructure and services.
- A staging plan for the coordinated, timely and efficient delivery of infrastructure and services, including:
  - design guidance, concept designs and typical cross sections for new and upgraded infrastructure and services
  - stormwater and water quality management provisions.

Figure 28: Utilities and services - water

- Sub Precinct Boundary
- Proposed water main
- Existing water main
- Road
- Existing pump
- Existing reservoir
- Proposed water servicing site

Figure 29: Utilities and services - waste water

- Sub Precinct Boundary
- Proposed sewer main
- Existing stormwater line
- Existing wastewater line
- Road
- Proposed wastewater treatment upgrade
- Proposed wastewater site

Figure 30: Utilities and services - power/electric/telecom

- Sub Precinct Boundary
- Proposed electrical transmission line
- Proposed telecommunications line
- Existing electrical transmission line
- Existing telecommunications line
- Road
- Proposed power supply site

Alpine

9

Alpine Precinct

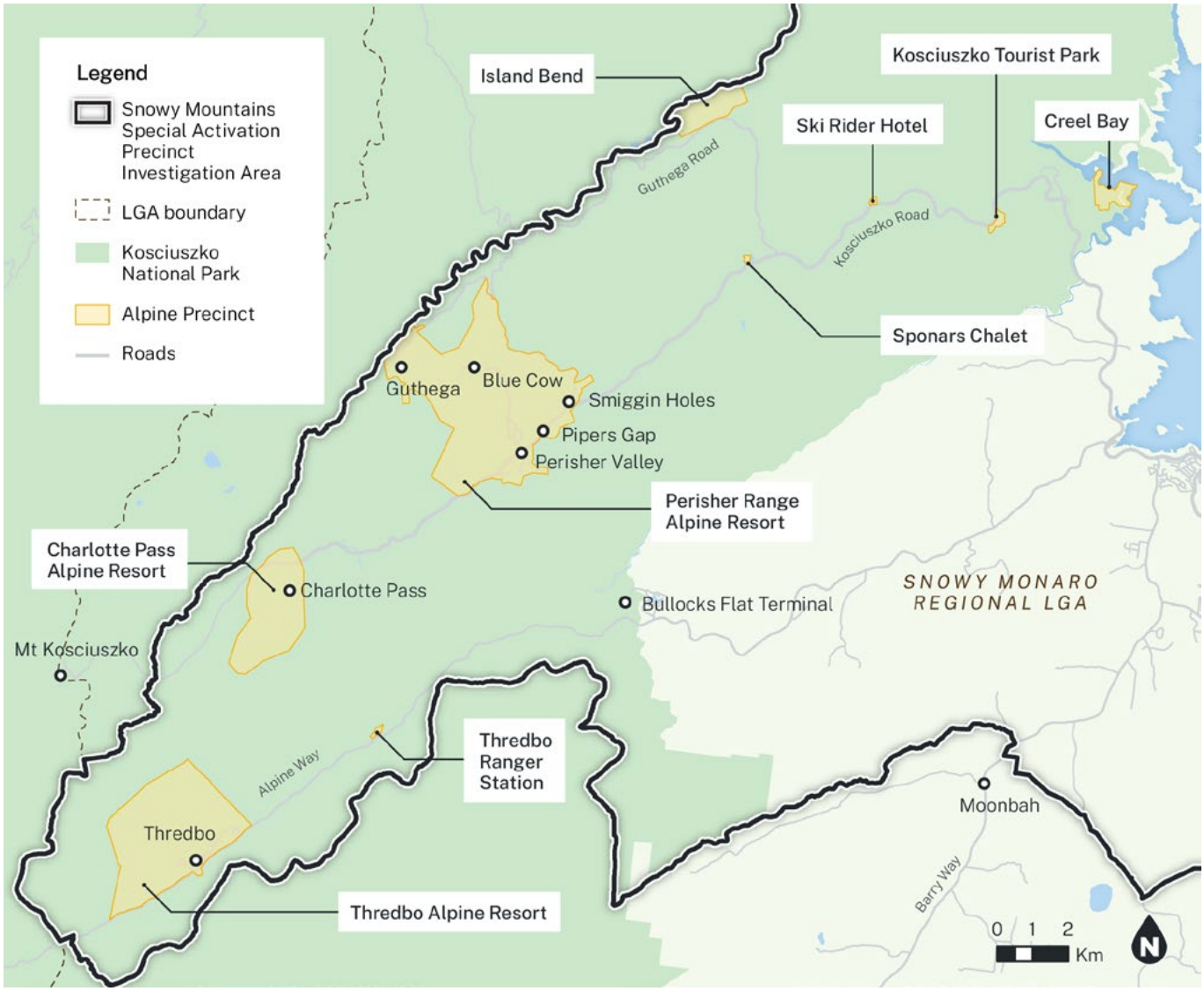


Figure 31: Alpine Precinct

The structure plans

Structure plans have been prepared for the alpine resorts of Thredbo, Perisher Range and Charlotte Pass, as well as alpine accommodation and alpine camping locations. The purpose of the structure plans is to illustrate the strategic planning intent for each Alpine sub-precinct identified in Kosciuszko National Park.

They provide a guide for future development to be assessed in accordance with the Kosciuszko National Park Plan of Management and Precincts — Regional SEPP. Future development will also be guided by an Alpine Development Control Plan.

Charlotte Pass. Credit: Destination NSW.

Thredbo lodges

9.1 Alpine Resorts

9.1.1 Thredbo

Thredbo is located 30 kilometres south-west of Jindabyne and lies in the valley of the Thredbo River at the foot of the Ramshead Range, with access via the Alpine Way. It exhibits a strong alpine village form and feel, surrounded by forested slopes which provide significant views and vistas characteristic of the valley landscape.

Thredbo's topography offers a significantly greater vertical drop and longer runs than other resorts and includes Australia's longest ski run, the Crackenback Supertrail. The village and valley floor lie within disturbed areas of vegetation, interspersed with pockets of montane forest and subalpine woodland which contain high biodiversity values.

During winter months, Thredbo's valley terrain affords visitors of all ages and abilities a high-quality snow experience complemented by landmark events and activities within the village. In summer, Thredbo attracts an increasing visitor base for mountain biking and fishing activities and access for hikers to a range of high quality hiking trails, including the Mount Kosciuszko summit.

Structure plan

The structure plans for Thredbo Village East and Thredbo Village West aim to leverage the resort's existing village character, facilitate growth in day and overnight visitors and build upon the most successful components of its current offering, while addressing constraints associated with bushfire, transport, infrastructure and protection of the environment. Thredbo provides significant opportunities for infill development in the main village, with some low-density expansion focused in the west on disturbed land at the golf course.

The success of the current form of the village will be maintained and enhanced. In addition to infill redevelopment, improvements to pedestrian access are prioritised. A new footbridge, separation of day and overnight parking and improvements to the pedestrian experience through the implementation of active frontages and new plazas will make Thredbo a more connected environment.

While this proposal seeks to increase accommodation provision in Thredbo, all future development must be guided by the capacity of skiable terrain, supporting infrastructure, protection of the environment and visitor amenity to avoid a depletion in the on-mountain experience.

Thredbo Village East

Key features of development proposed at Thredbo Village East include:

Mixed use redevelopment

Mixed use redevelopment of the existing car park at Friday Flat to create an arrival gateway including:

- Multi-deck car park
- Park and ride shuttle bus stop with shelter
- Commercial and accommodation facilities fronting Friday Drive
- Pedestrian bridge linking to existing commercial hub.

Connections

Connections from the gateway to Thredbo Alpine Village via a looping bus route and interchange overlooking the watercourse with pedestrian connections to the Thredbo Valley Track.

Renewal and expansion

Opportunities for renewal and expansion of buildings within surrounding lease areas.

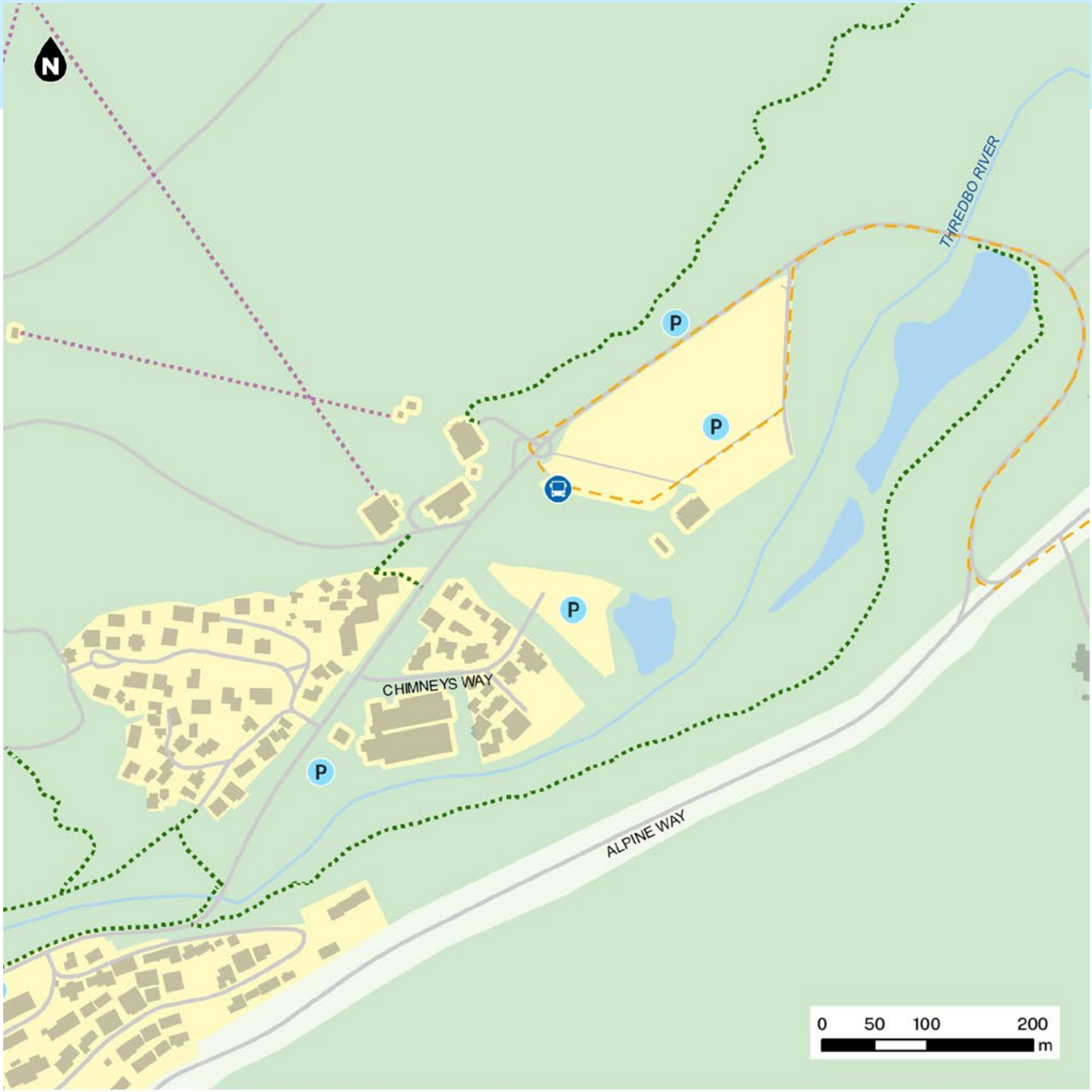


Figure 32: Thredbo Village East structure plan

Bus stop
Parking
Bus route
Ski lift
Trail
Road
Development area
Existing development
National park

Thredbo Village West

Key features of development proposed within Thredbo Village West include:

Accommodation

New tourist accommodation at key disturbed sites including:

- The existing tennis courts
- Lot 768
- Expansion of the Thredbo Alpine Hotel over the existing car park
- Golf course

Valley terminal

Redevelopment of valley terminal to include ski facilities, offices and accommodation.

Public realm enhancements

Public realm enhancements to the existing urban square and to connect north to new development over the Thredbo River.

Renewal and redevelopment

Renewal and redevelopment of older parts of the village including ski lodges to self-catering apartments and other forms of accommodation including within Thredbo Village and Crackenback Ridge.

Environmental protection

Environmental protection works including riparian works, water sensitive urban design and buffers to the river and local streams, and the exclusion of development in highly sensitive areas.

Desired future character

Thredbo is the densest alpine village among the alpine resorts, meaning future infrastructure improvements will focus on pedestrian connectivity within the resort and long-term public transport solutions at the Alpine Precinct scale. Developments and renewal within the village will continue to support a strong alpine design character, village heart and year-round uses.

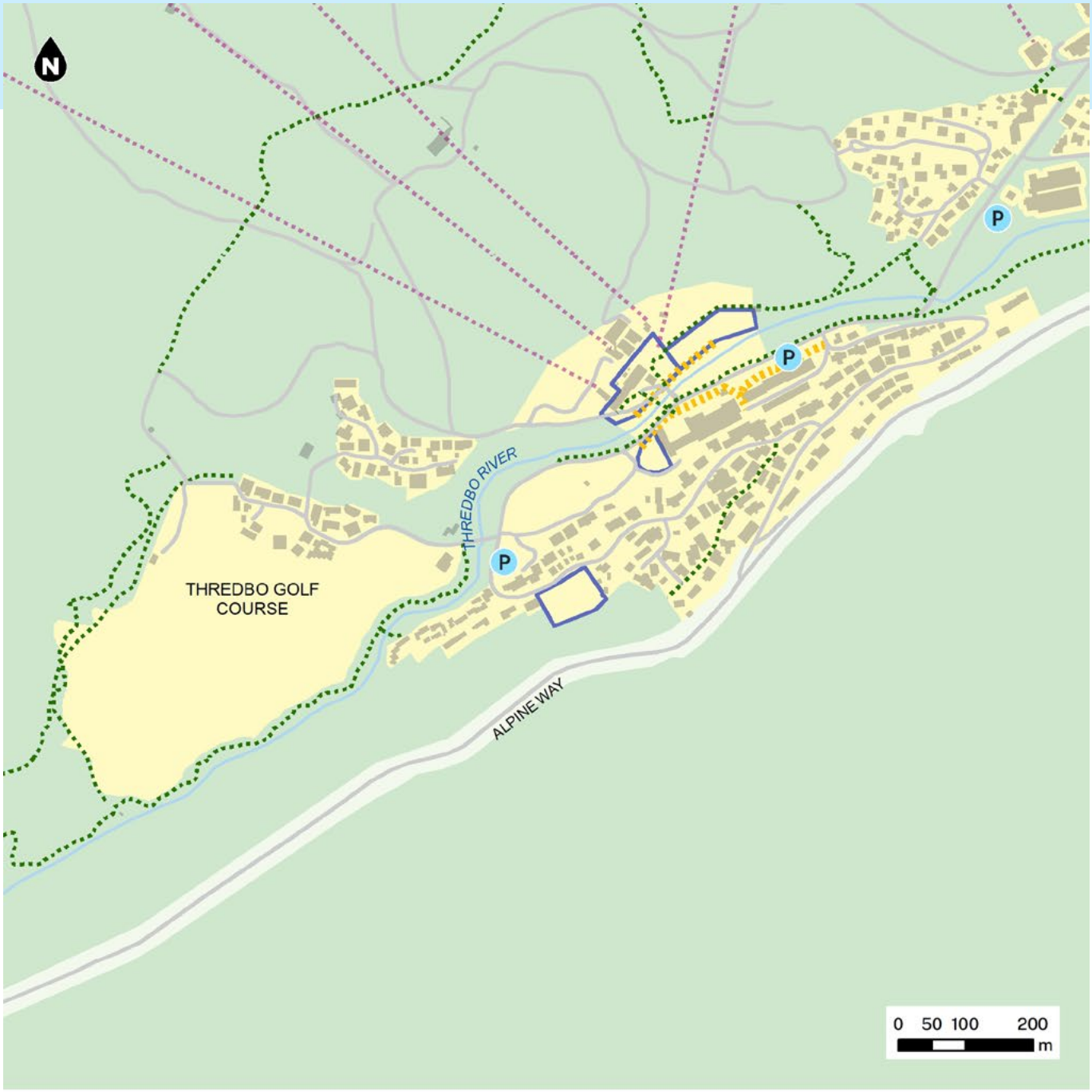


Figure 33: Thredbo Village West structure plan

- P Parking
- Ski lift
- Trail
- Road
- Active frontage
- Existing development
- Development area
- Key development site
- National park

9.1.2 Perisher Range

Perisher Range is located 19 kilometres west of Jindabyne with access to the Perisher Valley and Smiggin Holes via Kosciuszko Road, and Guthega and backcountry areas via Guthega Road. It is principally a winter destination providing services and accommodation for visitors accessing the site's 1,250 hectare ski slopes and cross-country ski trails. Perisher Range encompasses the villages of Guthega, Smiggin Holes, and Perisher Valley which forms the central visitor and access hub.

The villages are connected by an extensive ski lifting network that spans the slopes of the broader Perisher Range making it the largest ski resort in the Southern Hemisphere and a key destination for visitors to the Alpine Precinct. The Skitube terminal co-located with extensive car parking at Bullocks Flat provides access to Perisher Valley and Blue Cow.

Development opportunities identify sites suitable for expanding accommodation and commercial uses, transport connections, and public spaces to support the establishment of a vibrant village centre. The location and type of future development will be informed by existing environments, and seeks to preserve key values within Perisher Range while also delivering on the desired future character of each individual site.

Growth across the range will focus on increasing accommodation provision in line with the carrying capacity framework.. An uplift in day visitation will also be pursued by enhancing the year-round visitor experience. Structure plans for each site focus on delivering a co-ordinated strategic direction that supports the long-term prosperity of the Perisher Range, with cohesion and connectivity in mind.

Structure plans have been developed for the following sub-precincts within Perisher Range:

- Perisher Valley
- Smiggin Holes
- Pipers Gap
- Guthega

Sunrise over Blue Cow. Credit: Perisher.

Perisher Valley

Perisher Valley is the key arrival node and visitor destination within the Perisher Range and anchors the surrounding villages and ski fields. Perisher Valley is located within the sub-alpine and alpine landscape, comprising steep topography which accommodates an extensive network of ski fields and supporting infrastructure. The location and altitude of Perisher Valley results in a period of extended snowfall requiring additional considerations for snow clearing, wind impacts and the oversnow interface. While accommodation is available year-round, the site largely operates as a winter destination attracting significant tourist activity and supporting commercial and employment opportunities across the Alpine Region.

Tourist services are generally concentrated around the Perisher Centre connecting visitors to recreation activities, accommodation and commercial and hospitality options. Vehicular access is provided via Kosciuszko Road with the eastern portion of Perisher Valley dominated by open car parking. The centrally located Skitube terminal connects visitors to Bullocks Flat and Blue Cow.

Structure plan

The Perisher Valley structure plan consolidates development to deliver a mixed use core that supports winter activities and provides a vibrant village centre. The structure plan seeks to improve connectivity with the Skitube terminal and a new bus interchange to position these locations as key focal points for visitor services and activity. Significant expansion is proposed to deliver a 'village feel' with the activation of streets, plazas and public space. Formalised pedestrian linkages will support movement within the village streets and public space alignments.

Redevelopment will focus on existing sites, including infill within existing lease areas. This approach reflects the high biodiversity and cultural heritage values present across the valley and ensures the clearing of habitat to facilitate new development is avoided. The structure plan also seeks to deliver an increase in visitor accommodation within Perisher Valley to improve the current 'bed to skier' ratio. Future ecologically sustainable development must be guided by the capacity of skiable terrain, supporting infrastructure, protection of the environment and visitor amenity to avoid a depletion in the on-mountain experience.

This consolidation approach is intended to support a diverse range of tourism activities, community uses and sports facilities that utilise the western portion of the existing car parking area for redevelopment. While this development will result in reduced car parking capacity, the long-term strategic goal for Perisher Valley is directed by an increase in public transport uptake and an increase in overnight visitors, both of which will result in reduced rates of private car use, lessening the daily parking demand and supporting a more sustainable access pattern. Additional car parking is also proposed to be formalised along Kosciuszko Road and new car parking available at Pipers Gap and Smiggin Holes.

Desired future character

As a key visitor destination, Perisher Valley will continue to anchor sites across the Perisher Range and foster a diverse range of activities complemented by an alpine village feel. Growth in Perisher Valley will deliver an expanded accommodation offering supported by diverse commercial uses centred in a thriving village centre. Improving walking, cycling and driving connections between Perisher Range resorts and to nearby destinations will support the investment in year-round accommodation.

Development will prioritise year-round activation with Perisher Village Square functioning as a central attraction for both day and overnight visitors. The square and surrounding street network will be pedestrian friendly with active frontages enhancing visitor connections between the ski fields and Perisher's vibrant public spaces.

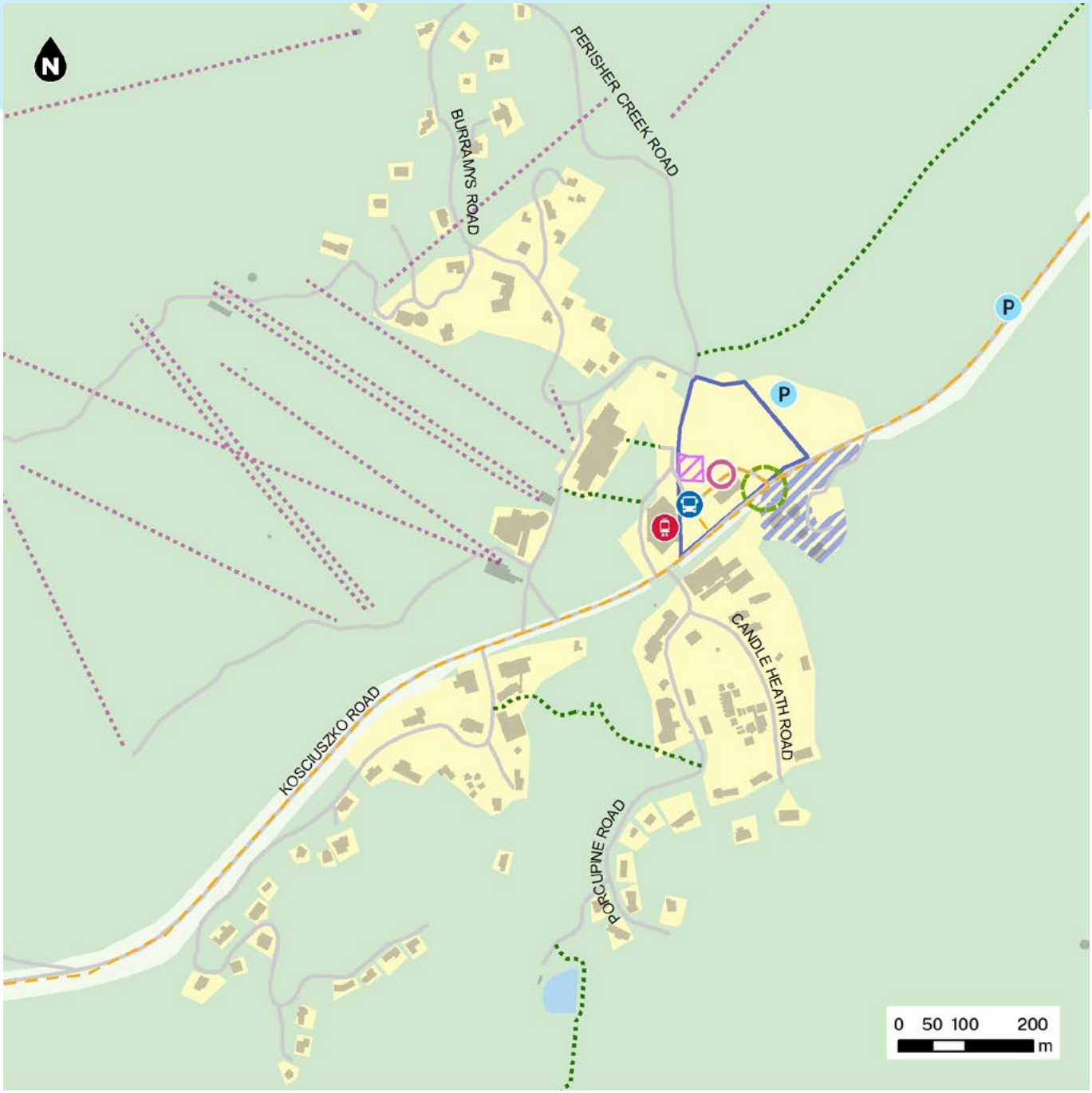
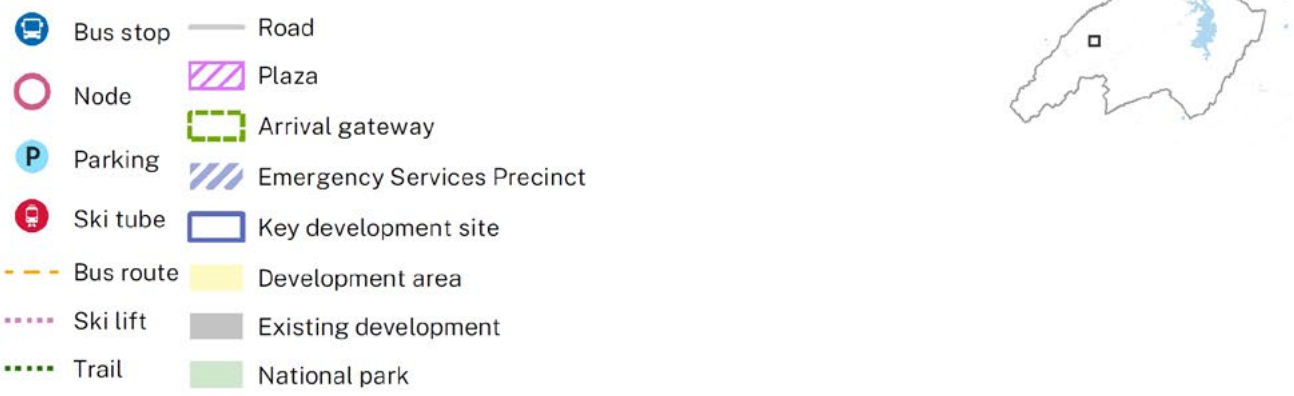


Figure 34: Perisher Valley structure plan



Pipers Gap

Pipers Gap is located between Perisher Valley and Smiggin Holes, and is directly accessible from Kosciuszko Road. The site is proposed to accommodate a multi-use hub comprising the following features and facilities:

- Car parking for day visitors in winter and summer
- Park and Ride Shuttle terminus
- Shelters and transit amenities
- Dedicated recreational snow play area in winter
- Provision for small scale retail and/or food and beverage offering

Pipers Gap will improve safety and access by providing designated transportation, parking and recreation areas for visitors to the Alpine region.

Figure 35: Pipers Gap structure plan

Smiggin Holes

Smiggin Holes is a family-friendly resort located two kilometres north-east of Perisher Village and comprises small scale lodge and chalet accommodation within a low-density landscaped setting. The site is accessed via Kosciuszko Road, with ski lifts connecting the site to the broader Perisher Range slopes.

Regarded as one of the best beginners' ski resort areas in the southern Snowy Mountains, Smiggin Holes is centred around a 'snow bowl' which is often sheltered from the harsher weather experienced across the wider Snowy Mountains. These moderate conditions mean the village is suited to 'learn to ski' activities, while also catering for all levels of ability.

Structure plan

Smiggin Holes has not been identified as a location for significant redevelopment given that future growth is to be largely concentrated within the nearby Perisher Valley. The structure plan does however outline opportunities to build upon existing development within established lease areas and strengthen the family-friendly appeal of the location.

The Smiggins Hotel and Chalet Apartments provide a large, disturbed site with the potential to increase accommodation provision. No new development is suitable on greenfield land due to environmental constraints and relative concentration of activity in Perisher Valley, instead the expansion or refurbishment of existing development is the preferred growth model.

A key opportunity proposed in the structure plan involves repurposing the existing workshop located adjacent to the site's entrance from Kosciuszko Road and creating a tourist development node, car parking and new gateway to the resort. Alternative locations for the existing workshop will be explored in further detail during delivery phases.

Desired future character

Smiggin Holes will maintain its low-density village character and family friendly atmosphere. While the site will not undergo significant growth, sensitively designed redevelopment opportunities exist to enhance accommodation and commercial offerings while retaining the site's valley views and woodland setting.

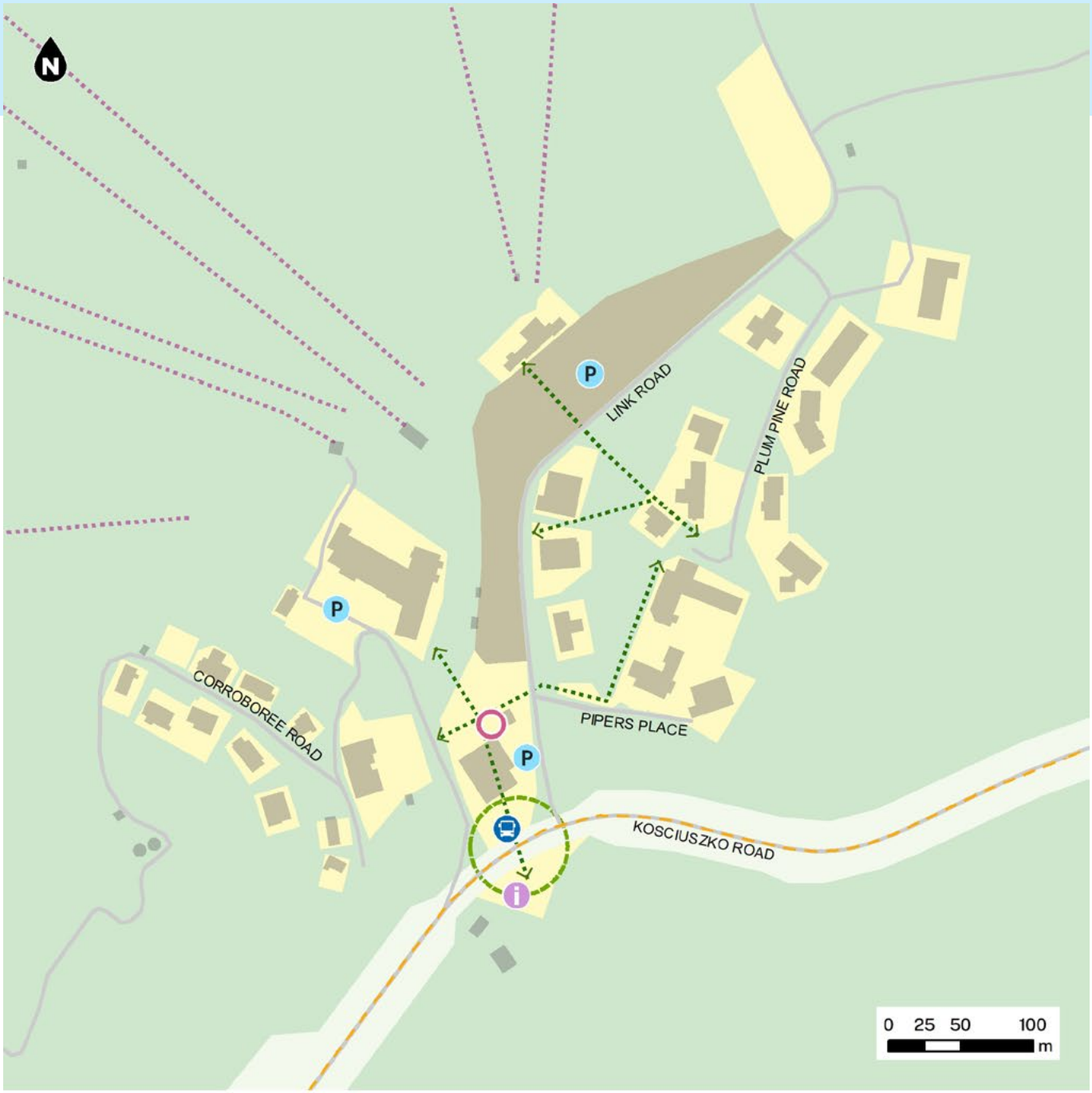


Figure 36: Smiggin Holes structure plan

Guthega

Located four kilometres north-east of the Perisher Village, on the western rim of the Perisher Range, Guthega comprises a modest collection of lodge and chalet accommodation. Guthega is Perisher Range's smallest and most remote village, characterised by its isolated location and connection to backcountry ski areas. This creates a unique a point of difference in visitor experience when compared to other locations within the broader Perisher Range.

The Guthega and Snowy Rivers converge at the Guthega Dam, the highest part of the Snowy Hydro Scheme which is afforded expansive views to the surrounding mountain range. Vehicular access is provided via Guthega Road, with ski lifts connecting the site to the Perisher Range ski slopes at the northern and southern edges of the site. The Illawong Track and Snowies Alpine Walk (currently under construction) connect visitors to the high country and summer hiking routes including the Main Range and Charlotte Pass. Trailheads for other overnight walks to nearby historic huts are a short drive away.

Structure plan

The Guthega structure plan focuses on modest upgrades to encourage additional year-round visitation without compromising the site's unique character, which is influenced by its small size and relative isolation. The site exhibits biodiversity, environmental values and bushfire risk, each constraining opportunities for new development and limiting land uses to accommodation upgrades and expansion within current lease boundaries.

The structure plan recommends enhancing links to existing and proposed hiking trails including the Snowies Alpine Walk and a potential walk along the Snowy River to Lake Jindabyne. Road upgrades connecting the site to destinations within the Perisher Range are also proposed including sealing Guthega Road westwards from the Guthega Power Station to Guthega Village.

To support year-round activation in Guthega and to position the site as a destination for day visitors, the provision of amenities, picnic facilities, information signage and other low-key infrastructure are recommended. The existing Guthega Centre has been identified as a suitable location given its proximity to existing parking areas and the availability of space for enhanced visitor services.

Desired future character

Guthega is one of the Perisher Range's hidden gems at the gateway to the Kosciuszko National Park backcountry. Low impact development will ensure the site's environmental and heritage values are preserved and its peaceful character retained.

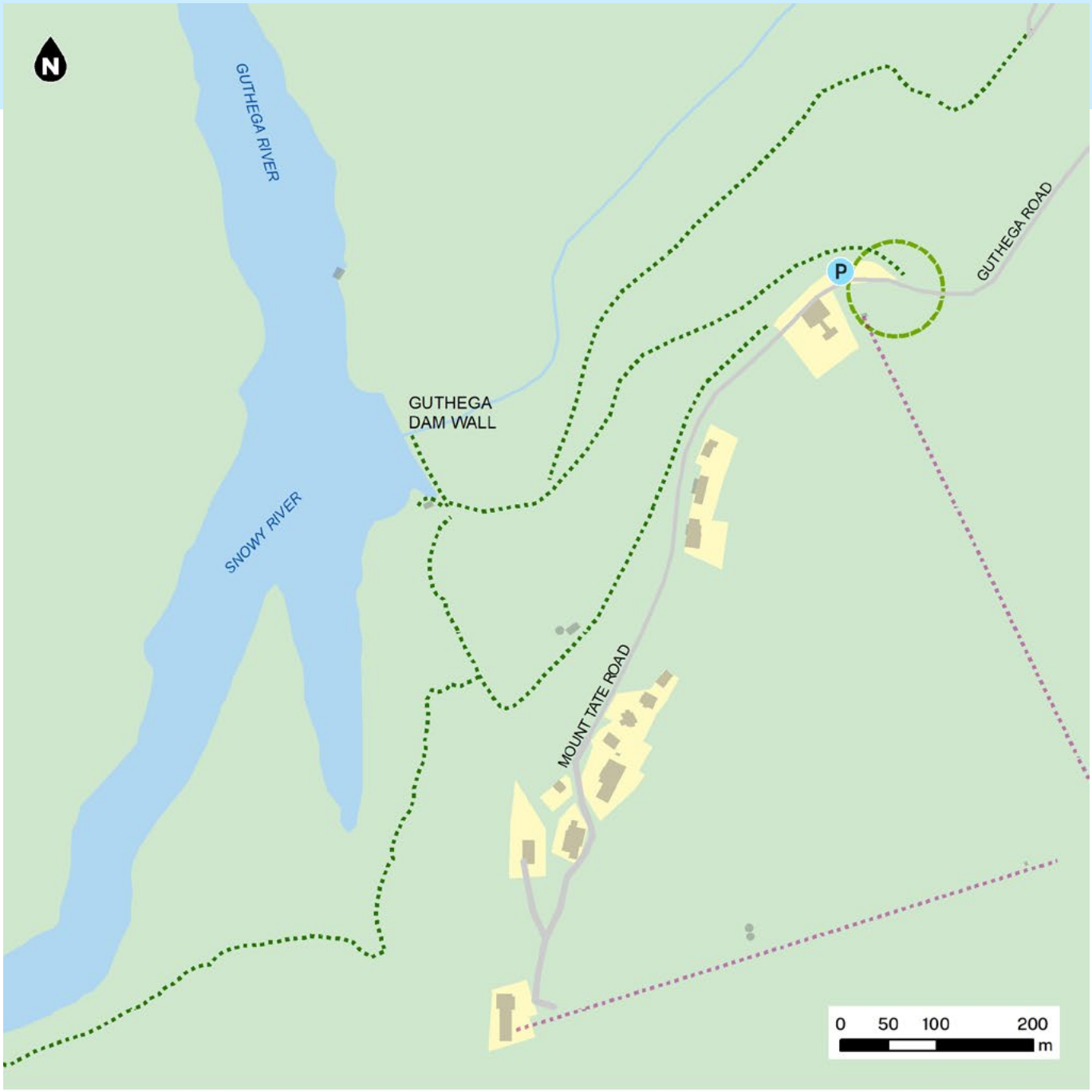


Figure 37: Guthega structure plan

- P Parking
- Ski lift
- Trail
- Road
- Arrival gateway
- Existing development
- Development area
- National park

9.1.3 Charlotte Pass

Located 26 kilometres west of Jindabyne, at an altitude of 1765m, Charlotte Pass is the highest base resort in Australia making it an important gateway to the Main Range of Kosciuszko National Park. The resort also provides a key access route for hikers to the Mount Kosciuszko summit walking trail. The resort's remote village atmosphere, set in an amphitheatre-shaped valley, offers visitors ski-in ski-out accommodation, relatively uncrowded ski slopes and clear views to the western mountain range and Mount Kosciuszko. Spencers Creek traverses the site providing a natural separation between the village to the east and ski slopes and associated infrastructure to the west.

The resort's alpine and sub-alpine vegetation contributes to the unique landscape setting and provides important habitat for rare fauna species including populations of the endangered Mountain Pygmy Possum. Charlotte Pass is within and adjacent to a range of terrestrial and riparian ecosystems of conservation importance. These waterways are of high catchment value for downstream users including hydro electrical generation and are part of an endangered ecological community.

During winter, road access between Perisher and Charlotte Pass is closed to the public, with visitor and service access provided via oversnow transport from the Perisher Skitube terminal. In summer, Kosciuszko Road provides access from Jindabyne for day visitors, hikers and cyclists.

Arrival at Charlotte Pass is centred around the Kosciuszko Chalet Hotel, a listed heritage item that illustrates the growth of skiing as a leisure sport during the early 1900s. The majority of the resort's visitor services and hospitality offerings are located both within and around the Chalet Hotel, positioning it as the site's anchor destination.

Charlotte Pass Ski Resort. Credit: Destination NSW.

Structure plan

The Charlotte Pass structure plan identifies opportunities for public realm, access and parking improvements, and the establishment of visitor gathering points. A limited number of new accommodation development sites are also recommended based on considerations of environmental and heritage values.

A gateway entry plaza, accessed from Charlotte Way, will incorporate a signage and wayfinding strategy to assist in defining the 'village' entry, safely guide pedestrian and vehicle access throughout the site, and improve the visual attractiveness of the resort in summer. The existing storage services area is to be relocated from the entry to a central location and screened from view to improve resort amenity.

The gateway entry plaza will connect to a new shuttle bus and over-snow access node featuring sheltered waiting areas and facilities for short-term and day use visitors. The establishment of this node will support a range of vehicle types and sizes to improve access from Jindabyne and other alpine villages. Formalised day visitor parking will be established adjacent to the entry plaza providing access to the trailhead for the Kosciuszko Summit Walk, Main Range Track and Snowies Alpine Walk which will provide new walking tracks to Guthega as well as Perisher Village. Interpretation exhibitions and pathways will be designed to attract, engage and guide visitors through the arrival plaza and the resort's broader tourism catchment.

The structure plan proposes a new village square to facilitate increased summer activity including performances and events that reflect the resort's character and respond to the changing seasons. An open amphitheatre to the west of the square, will feature picnic facilities and a viewing area for visitors to enjoy events in the square. To enable this, existing staff accommodation may be relocated to a new building.

The structure plan identifies opportunities to redevelop existing lodges and extend or refurbish others for additional, high quality accommodation. The form of new development will be driven by existing precedents including the Kosciuszko Chalet Hotel.

Expansion in Charlotte Pass is limited by environmental constraints, specifically the sensitive habitat located to the east of the village which is largely excluded from the growth area. All future development is to be informed by the design capacity of the ski fields, supporting infrastructure, environmental conditions and visitor amenity to avoid a depletion in the on-mountain experience.

Further detail on the improvements proposed at the Charlotte Pass Turning Circle are addressed in the Visitor Attractions section.

Desired future character

Charlotte Pass will become a year-round destination offering visitors access to alpine landscapes and quality public space. The resort will continue to grow its profile as a high altitude winter destination while increasingly becoming a key summer node for visitors to the Kosciuszko Summit Walk and Snowies Alpine Walk.

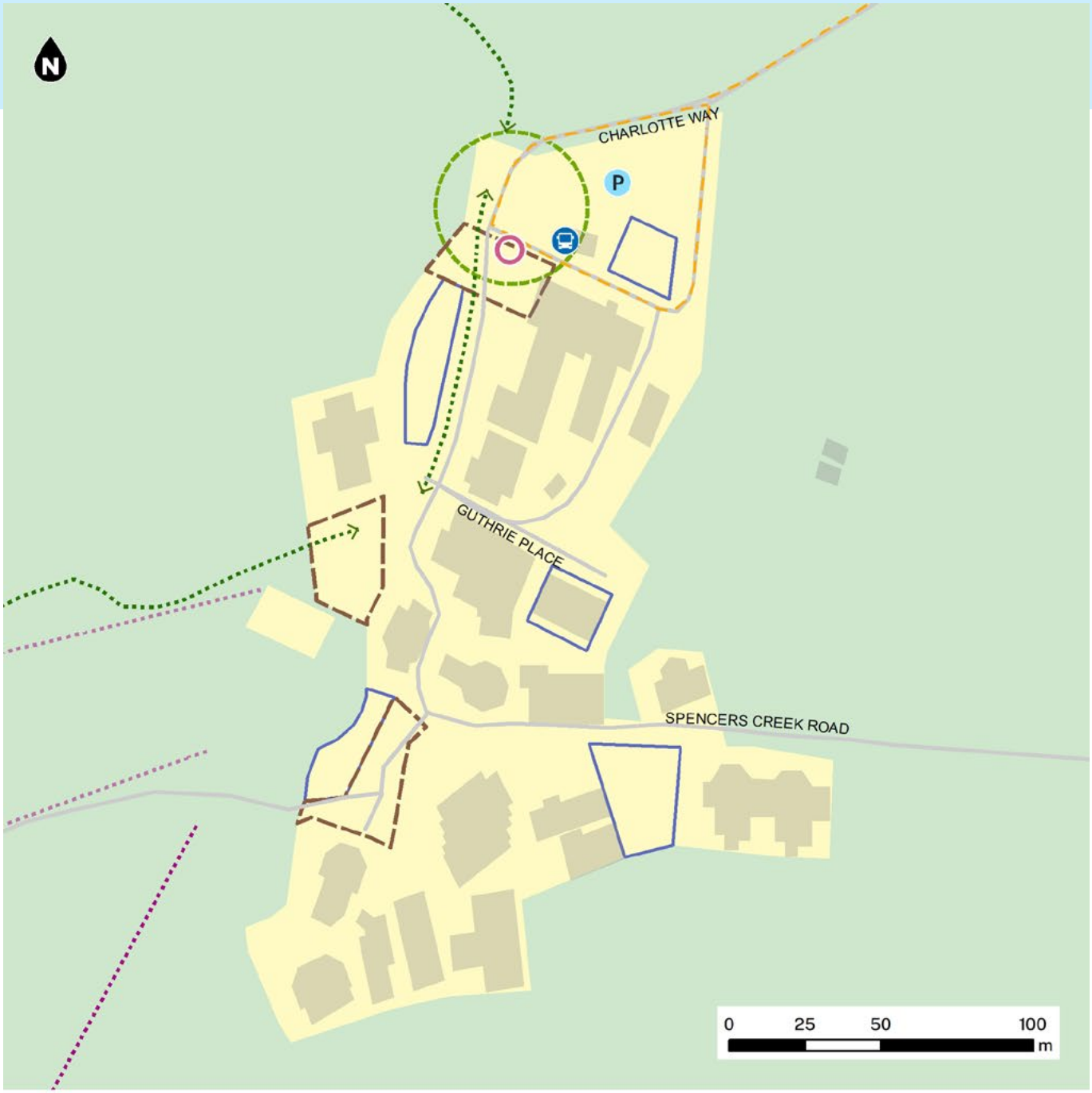


Figure 38: Charlotte Pass structure plan

9.2 Alpine Accommodation

9.2.1 Thredbo Ranger Station

The Thredbo Ranger Station is located 24 kilometres west of Jindabyne and is bound by the Alpine Way and the Thredbo River corridor. The site comprises cleared areas along the river and around the buildings with a ribbon of woodland vegetation through the centre of the site.

The existing Ranger Station and associated service buildings are currently unused, however the site currently supports general National Parks and Wildlife Service operations. The main building was part of the bottom station precinct supporting the former Charlotte Pass chairlift, at the time the world's longest chairlift, stretching from the Ranger Station to Charlotte Pass Village. Disturbed areas within the site provide a sound opportunity to centralise development and reduce the need for site preparation works while also limiting environmental impacts.

The site is linked to existing utility services and is in a highly accessible location given its proximity to Thredbo Village. Vehicular access is provided via a sharp entry from the Alpine Way which will require consideration as part of any future development.

The site presents a strong development opportunity for sustainable tourism suitable for both summer and winter activity that benefits from its proximity to the Thredbo River's renowned fishing locations and existing shared use biking and walking trail.

Structure plan

The Thredbo Ranger Station structure plan outlines development opportunities for sensitively designed eco-tourism accommodation that leverages the site's established landscaped setting.

Development options comprise a centrally-located fishing lodge offering approximately twenty rooms designed specifically for visitors with an interest in fly fishing in the Thredbo River and surrounding tributaries. Up to twenty self-contained camping 'pods' will extend east and west parallel to the Thredbo River providing an immersive accommodation experience.

Upgrades to the historic Ranger Station building will allow for reception, administration, and interpretation facilities that respond to the site's historic heritage significance. There is also potential for the main building to comprise additional uses to support the site's development intent including storage, utilities, and services.

The site can benefit from an onsite food offering such as an informal lounge bar with indoor and outdoor seating that responds to the changing seasons. Facilities for visitors to self-cater should also be explored to enhance the experience of those partaking in fishing activities.

Desired future character

The Thredbo Ranger Station will provide a high-quality development connecting visitors to the landscape through thoughtful design that responds to the natural topography and character of the Alpine Precinct.

The site's unique setting will be a fundamental part of its visitor appeal in providing significant views to the mountain ridgeline and direct access to the Thredbo River for both active recreation and passive enjoyment. The siting and design of future development will foster a connection to the changing seasonal landscape. Visitors will have an inherent appreciation for the river and be drawn to the site for its uninterrupted access and quality fishing activities.

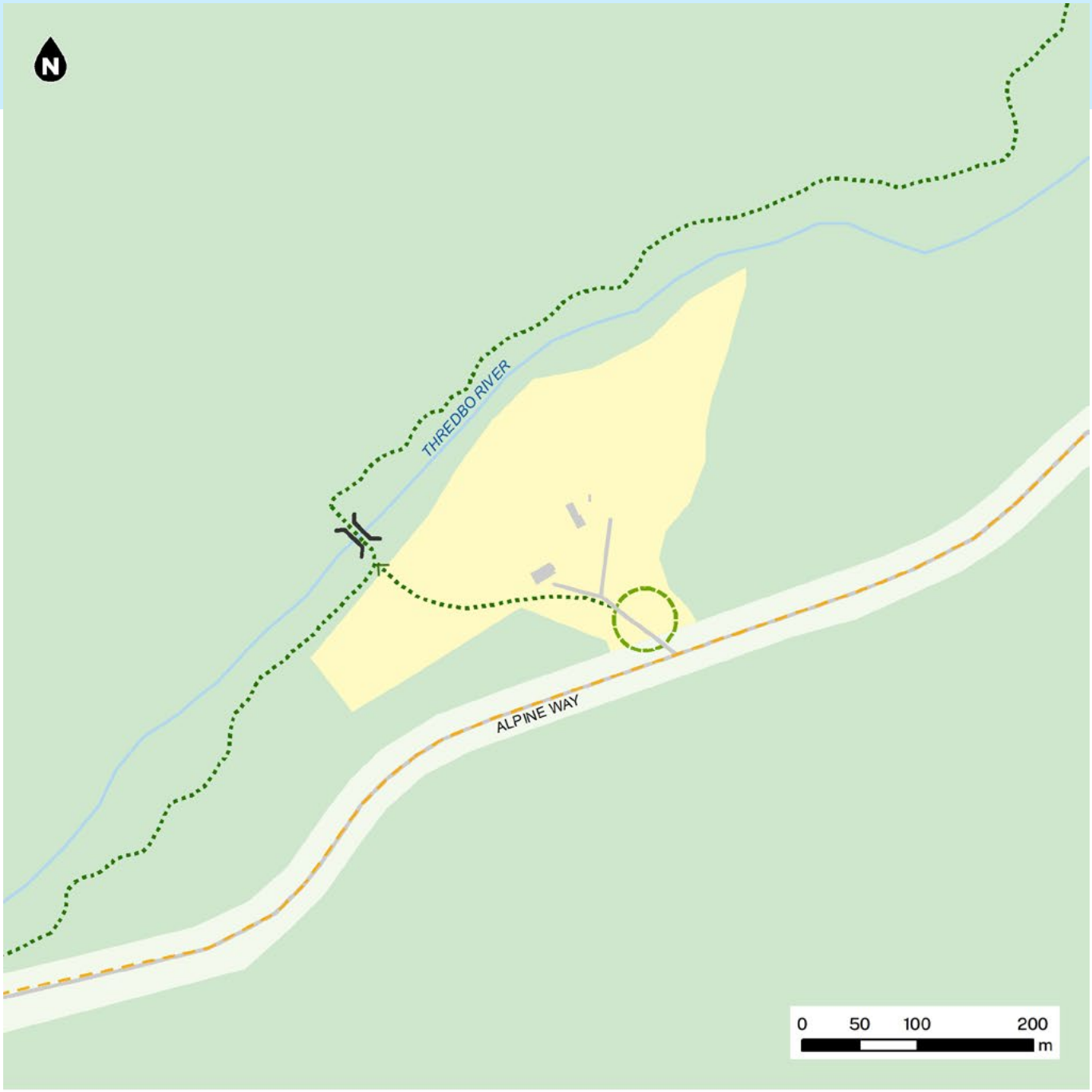


Figure 39: Thredbo Ranger Station structure plan

Pedestrian bridge
Bus route
Road
Trail
Existing development
Arrival gateway
Development area
National park

9.2.2 Sponars Chalet

The Sponars Chalet is located 14 kilometres north-west of Jindabyne and is accessed directly from Kosciuszko Road providing connections to the nearby alpine villages of Smiggin Holes and Perisher Valley. The chalet is located within the Wilson Valley's sub-alpine environment surrounded by snow gums, with a treeless valley floor. Sponars Lake is located to the east of the chalet and is connected to Rainbow Lake, the site's principal water source, by Diggers Creek.

The chalet is a remnant of the original Hotel Kosciuszko, the first tourist accommodation built in the Alpine Precinct in 1909 for skiers and summer tourists. The grand building was the hub of skiing in NSW until it was destroyed by fire in 1951. Sponars Chalet was opened in 1961 using the shell of the staff quarters from the old hotel and is a listed heritage item that forms a key part of Australia's alpine history. The chalet currently operates during the winter ski season, however the site's location and landscape features also lend it to summer activation, with disturbed areas not subject to heritage constraints suited to potential expansion.

Structure plan

The Sponars Chalet structure plan proposes upgrades to existing accommodation and facilities, with potential for future expansion doubling the modest number of beds currently provided. Strategic revegetation and screen planting and rehabilitation will enhance the landscape and environmental qualities of the resort and its surrounds.

Upgrades to site access, internal roads and general site amenities will be required to support increased visitation. Telecommunication upgrades are also required as limited mobile and internet service at the site impacts the current visitor experience.

To facilitate summer activation, new walking trails are proposed, including a loop walk around Sponars Lake. Activation of the lake will be supported by the construction of a watercraft landing or jetty for seasonal activities and water sports. The structure plan also identifies opportunities for additional commercial space, best suited to an enhanced hospitality offering and conference facilities.

Desired future character

Sponars Chalet will remain an iconic visitor destination that celebrates the region's alpine heritage. The setting of the resort is characterised by the prominence of the chalet on account of its location within a clearing, the backdrop of the steep, subalpine terrain to the west and the building's unique architectural style.

Lake activation and enhanced walking and cycling connections will attract visitors year-round, establishing the site as a hub for active travellers. Commercial development will centre around conference facilities to enable the chalet to deliver a full-service offering.

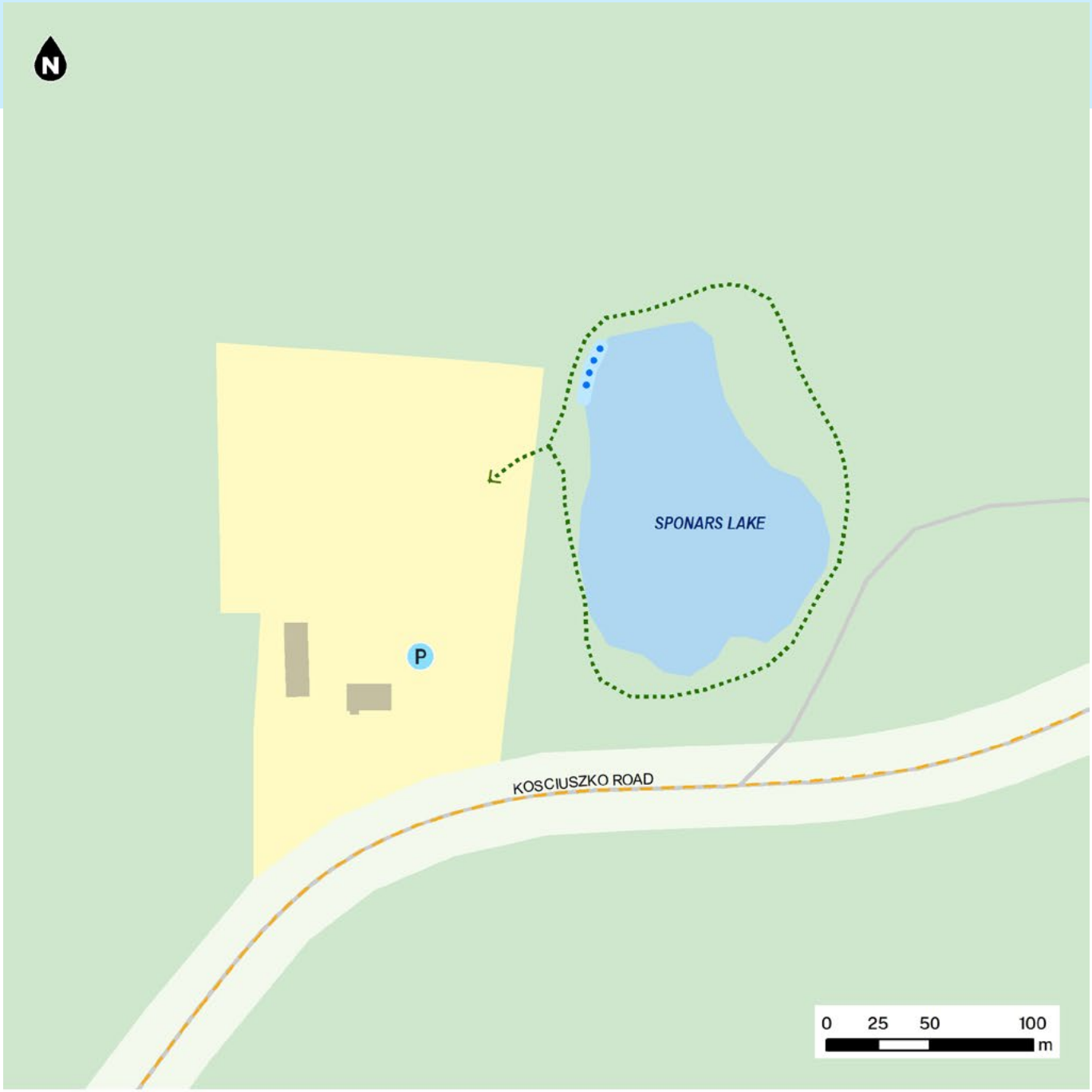


Figure 40: Sponars Chalet structure plan

- P Parking
- Bus route
- Trail
- Road
- Water access
- Existing development
- Development area
- National park

9.2.3 Ski Rider Hotel

Located 11 kilometres north-west of Jindabyne, the Ski Rider Hotel is the largest hotel in the Kosciuszko National Park with 339 guest beds providing a significant contribution to accommodation within the park. The site has direct access from Kosciuszko Road to connect visitors to Perisher and the Jindabyne town centre.

The site is located at Wilsons Valley and is surrounded by natural bushland that slopes northwards towards Sawpit Creek. The site exhibits lower biodiversity values than other locations within the Kosciuszko National Park given much of the site has been previously disturbed.

Visitor services and facilities are generally located within the main hotel reception building at the site entrance with a collection of accommodation blocks situated throughout the remainder of the site, connected by car parking and internal access paths.

Ski Rider has positioned itself as a fully-serviced accommodation provider with equipment hire, restaurants, bars, and entertainment available on-site. Guests are provided with shuttle access to Smiggin Holes or Perisher during peak ski season making it an attractive option to a range of visitor groups.

Structure plan

The structure plan for the Ski Rider Hotel focuses on enhancing the existing accommodation offering through upgrades to the site's bar and bistro facilities, and the development of a new staff accommodation block. Redevelopment at the site will require improvements to vehicular access points, internal roads, general site amenities and supporting infrastructure including the on-site sewage treatment facility.

An increase in shuttle services is proposed to better connect the site to the Kosciuszko National Park and surrounds, and to support sustainable visitor movement within the park. No increase in on-site parking is proposed. Improved access to the site itself will focus on establishing a logical arrival path for public and private transport modes.

Desired future character

Ski Rider Hotel will continue to provide a fully serviced accommodation offering suitable for large group tours. An upgrade of facilities and access will ensure protection of environmental values and safe egress while improving overall visitor amenity.

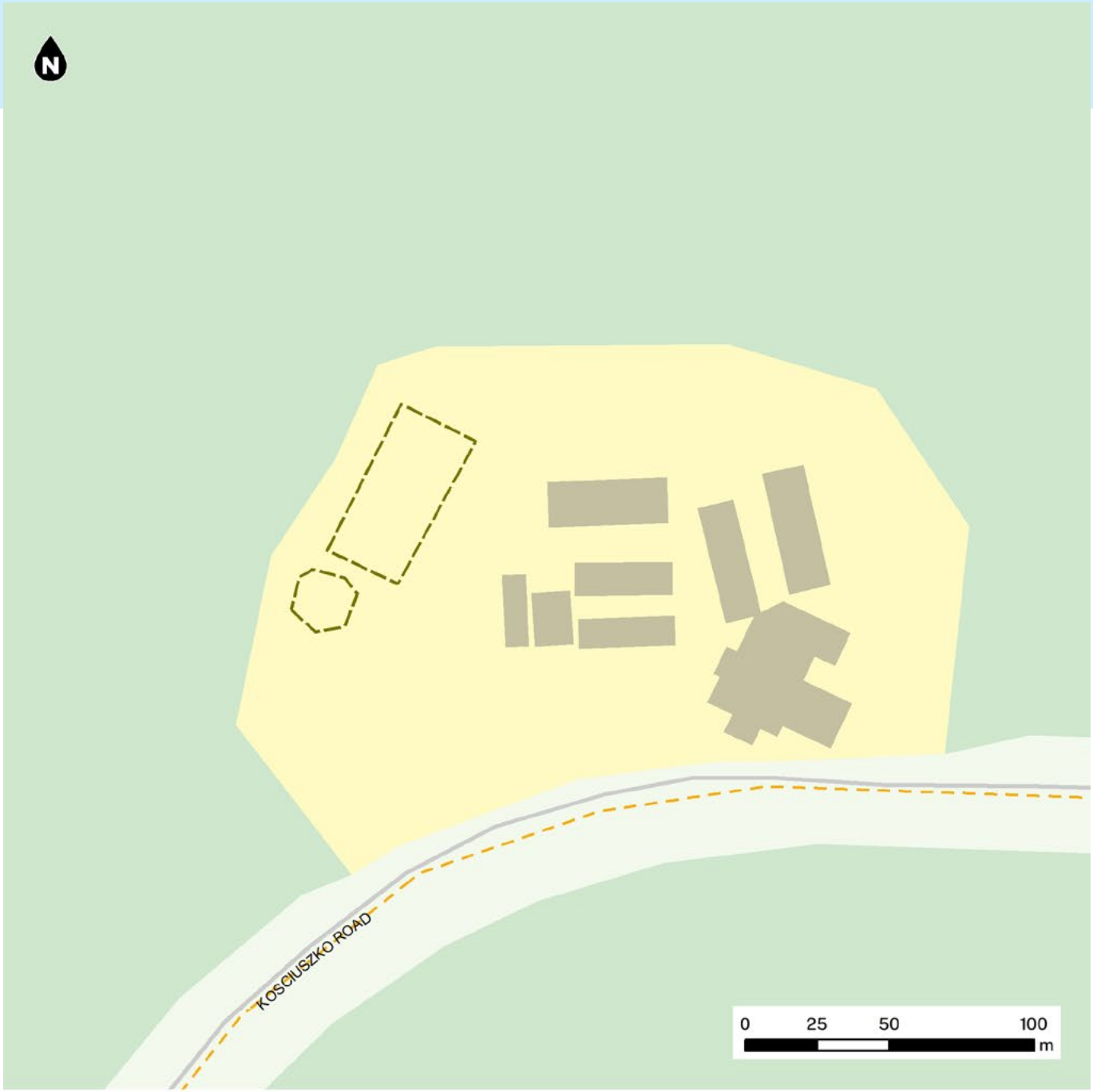


Figure 41: Ski Rider Hotel structure plan

- Bus route
- Road
- Sewage treatment ponds
- Existing development
- Development area
- National park

9.2.4 Creel Bay

Creel Bay is located eight kilometres north west of Jindabyne with access to Creel Bay Road via Kosciuszko Road. The site is situated on the shores of Lake Jindabyne at the confluence of the Thredbo and Snowy rivers. Vegetation comprises woodland, grassland and taller forest areas with fluctuating water levels, creating a varied shoreline to Lake Jindabyne.

The site comprises the National Parks and Wildlife Service works depot towards Waste Point and a collection of cottages historically used as staff accommodation. Creel Lodge, located to the west of the site, is identified as having notable heritage significance and has been opened for accommodation to the broader public since 2011.

Access within the site is via Waste Point Road, a sealed road connected to a network of gravel access roads and a public boat ramp situated at the edge of Creel Bay. The National Parks and Wildlife Service has recently expanded existing cottage style accommodation providing on-park visitor accommodation and additional year-round opportunities adjacent to Lake Jindabyne.

Structure plan

The structure plan for Creel Bay will see future development align with the National Parks and Wildlife Service 2019 Creel Bay Master Plan which proposes additional cottages, day use areas and possibly camping. New accommodation will seek to deliver a point of difference and provide visitors with experiential and nature-based accommodation leveraging the bay's natural setting.

Opportunities exist to pursue the adaptive re-use of the existing Creel Bay Cottages and align accommodation options to both winter and summer periods. Such development is suited to a long-term proposal as some cottages have been recently refurbished and are now open to the public as tourist accommodation.

The site will deliver unique non-snow experiences and expand the location's visitor appeal through arts, culture and education. Such experiences can include the establishment of a sculpture trail, interpretive walking experiences, heritage interpretation and an adventure activities hub at the boat ramp. The site will benefit from improved connections to nearby trail networks which follow the Thredbo and Snowy Rivers.

Future development at Creel Bay will require consideration of its proximity to Lake Jindabyne and potential impacts on water quality as well as biodiversity constraints associated with native vegetation communities present at the site.

Desired future character

The National Parks and Wildlife Service 2019 Creel Bay Master Plan established the following vision statement for the site:

"Provide year-round, sustainable, nature-based accommodation and facilities that respects the site's history and enables the user to experience and learn about the site and its surroundings."

Figure 42: Creel Bay structure plan

- P Parking
- Water access
- Trail
- Road
- Existing development
- Development opportunity
- National park

9.3 Alpine Camping

9.3.1 Island Bend

The Island Bend campground is located 16 kilometres from the Jindabyne town centre and 11 kilometres east of Guthega village. The site is bound to the south by Guthega Road and provides campers with direct access to the Snowy River to the north and west.

Historically, the site was a significant township that supported the construction of the Snowy Mountains scheme and was used over a 20-year period by workers and their families. The central township comprised housing, a school, shops and multiple churches, with the broader area accommodating an airstrip, workshops, barracks and a quarry associated with the scheme.

Today, the National Parks and Wildlife Service managed campground contains a nominal 70 sites, however due to the large area of cleared land and lack of formalised site markings, it is suitable for expanded camping capacity. Existing facilities are limited to a number of pump-out toilets, fire pits and picnic tables.

Large sections of the Island Bend area are closed due to the presence of asbestos, resulting from the demolition of the Island Bend township. These large, disturbed areas provide opportunities for expanded camping following appropriately managed remediation, similar to that undertaken in areas currently open to the public.

Structure plan

The structure plan for Island Bend expands existing camping facilities to incorporate a central camp kitchen and hot showers and connects visitors to a potential new walk linking Guthega and Lake Jindabyne. The plan aims to rehabilitate the natural environment and provide interpretation of local Aboriginal and Snowy scheme history.

The structure plan outlines opportunities for an enhanced site entry from Guthega Road complemented by a landscaped gateway and formalised wayfinding markers. Such expansion will follow site remediation works within the existing township area to ensure site suitability and user safety.

Future development will benefit connections to the management trail network for gravel riding enthusiasts. The establishment of lookouts and improved connections between campsites and the potential new walking trail are also proposed.

Desired future character

Campers, hikers and cyclists alike will arrive at Island Bend seeking natural connections to the Snowy River and uninterrupted access to diverse recreation activities. The site's trail network will enable visitors to appreciate its rich history, connection to the Snowy scheme, and unique connection to Country.

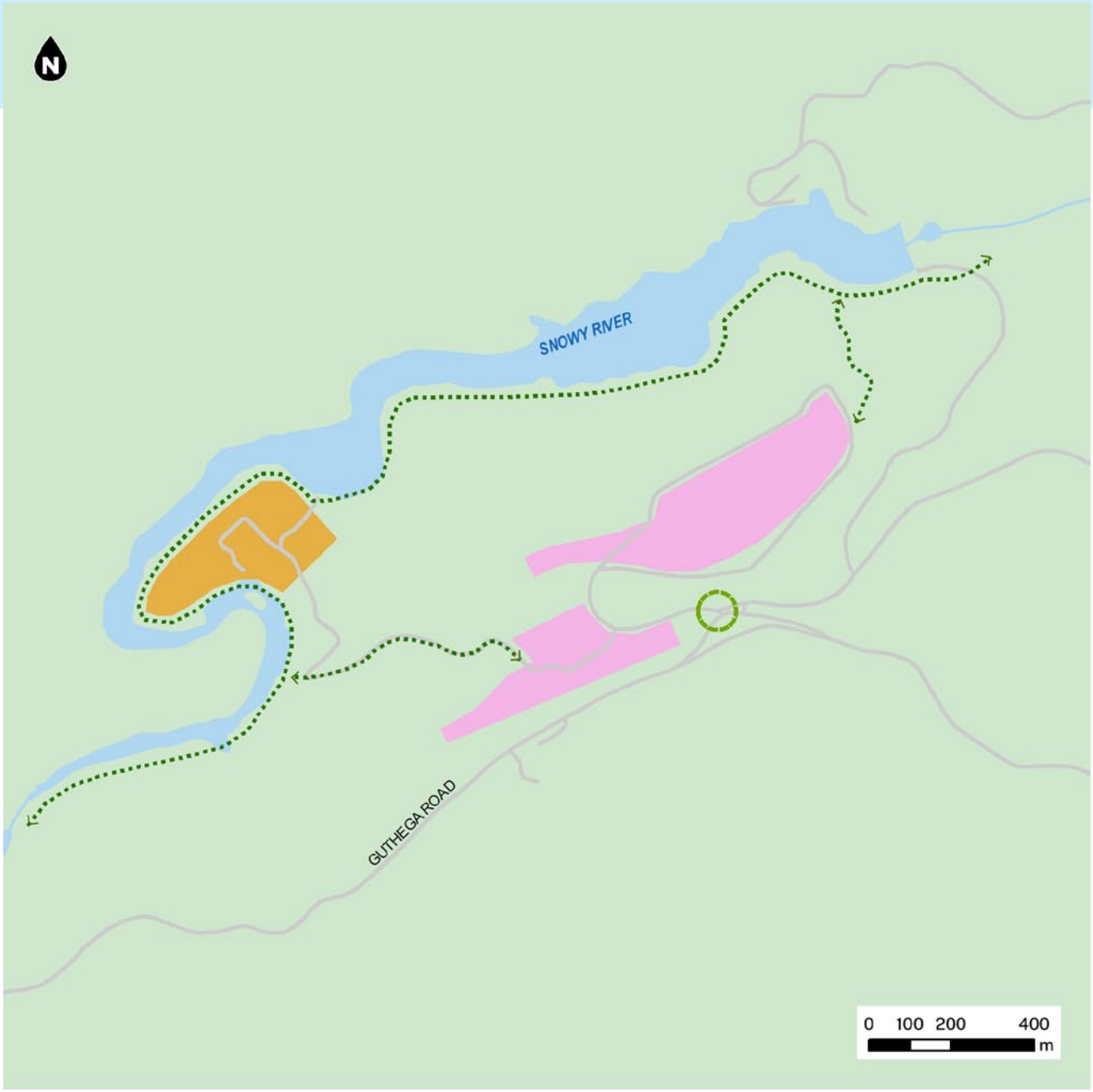


Figure 43: Island Bend structure plan

Road
Trail
Existing campground
New campground opportunity
Arrival gateway
National park

9.3.2 Kosciuszko Tourist Park

The Kosciuszko Tourist Park is located approximately midway between Perisher (15 kilometres) and the Jindabyne town centre (10 kilometres). The site is bound to the west by Kosciuszko Road, to the north and east by Sawpit Creek and is located within montane forest.

The park provides a range of low-scale accommodation options including cabins and caravan and camping sites, complemented by communal facilities. The site is located at the trailhead of the Sawpit, Pallaibo and Waterfall walking tracks and adjoining picnic area. Direct access from Kosciuszko Road provides road connections to alpine villages and upper Lake Jindabyne.

The park is located near the Kosciuszko Education Centre, a learning facility providing school groups with access to interactive activities focusing on Australian wildlife, Aboriginal heritage, natural and historic heritage, and national park management.

Structure plan

The Kosciuszko Tourist Park structure plan outlines development opportunities within the existing lease area with a focus on improvements and expansion of the park's existing accommodation offering and nearby education centre.

The structure plan proposes the addition of new 3-star accommodation in the form of sensitively designed eco-cabins in addition to the upgrade and refurbishment of existing cabin and camping facilities.

Park and ride services or shuttle bus parking will connect the site to key Kosciuszko National Park destinations including alpine resorts for winter recreation activities. Additional overnight parking for Charlotte Pass guests could be provided at Sawpit Creek, with a shuttle service to connect to the oversnow vehicle. In summer, visitor experience benefits from links to local walking trails including Sawpit Walking Track, Waterfall Walk, and Pallaibo Walk.

Desired future character

Kosciuszko Tourist Park will continue to provide a range of low-scale accommodation options with further diversity of affordable accommodation options through the addition of eco-cabins. These, alongside existing cabins, will be a desirable option for hiking and mountain bike visitors and provide for year-round use.

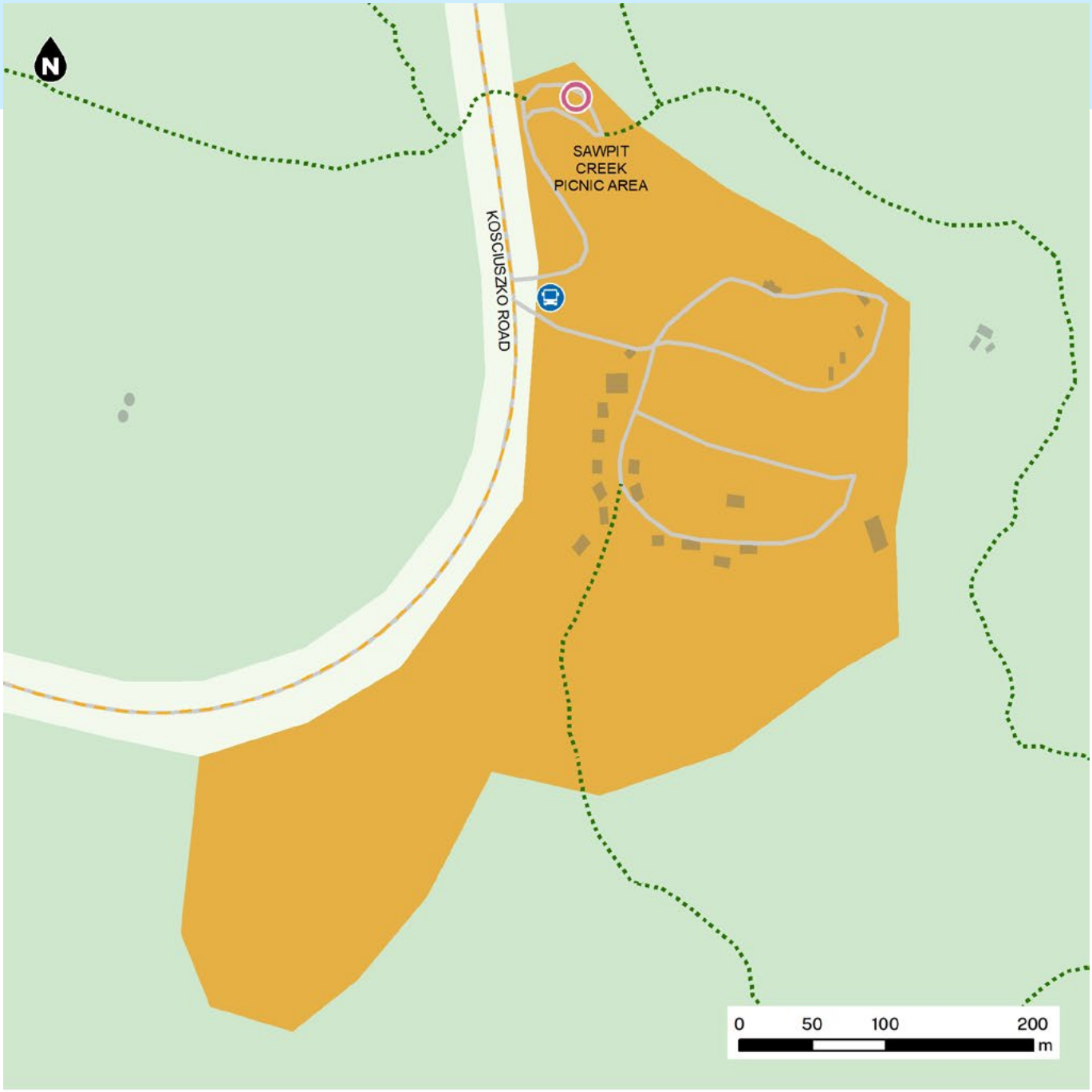


Figure 44: Kosciuszko Tourist Park structure plan

Bus stop

Node

Bus route

Trail

Road

Campground improvements

Existing development

National park

9.4 Alpine Experience

This Master Plan intends to facilitate innovation and encourage bold thinking from tate agencies and the private sector to invest and develop solutions which focus on the visitor experience and positive impacts on the environment.

Kosciuszko National Park is an asset in and of itself. This Master Plan aspires to improve amenity and access within the region and connecting visitors to the landscape and existing experiences, rather than creating new attractions.

It is recognised that improvements to the experience of visitors and amenity within the region is required to support continued economic outcomes. Ease of access and the experience while in transit to experiences needs immediate improvement. At present all year round the major mode of transport is private vehicle. This causes congestion, safety issues for pedestrians and is not consistent with the aspirations of the Precinct.

Critical to improving customer experiences is the need to provide more options for transit, which will improve access throughout the precinct. This includes connections with strategic locations such as Snowy Mountains and Canberra airports.

Thredbo Valley Track, Kosciuszko National Park

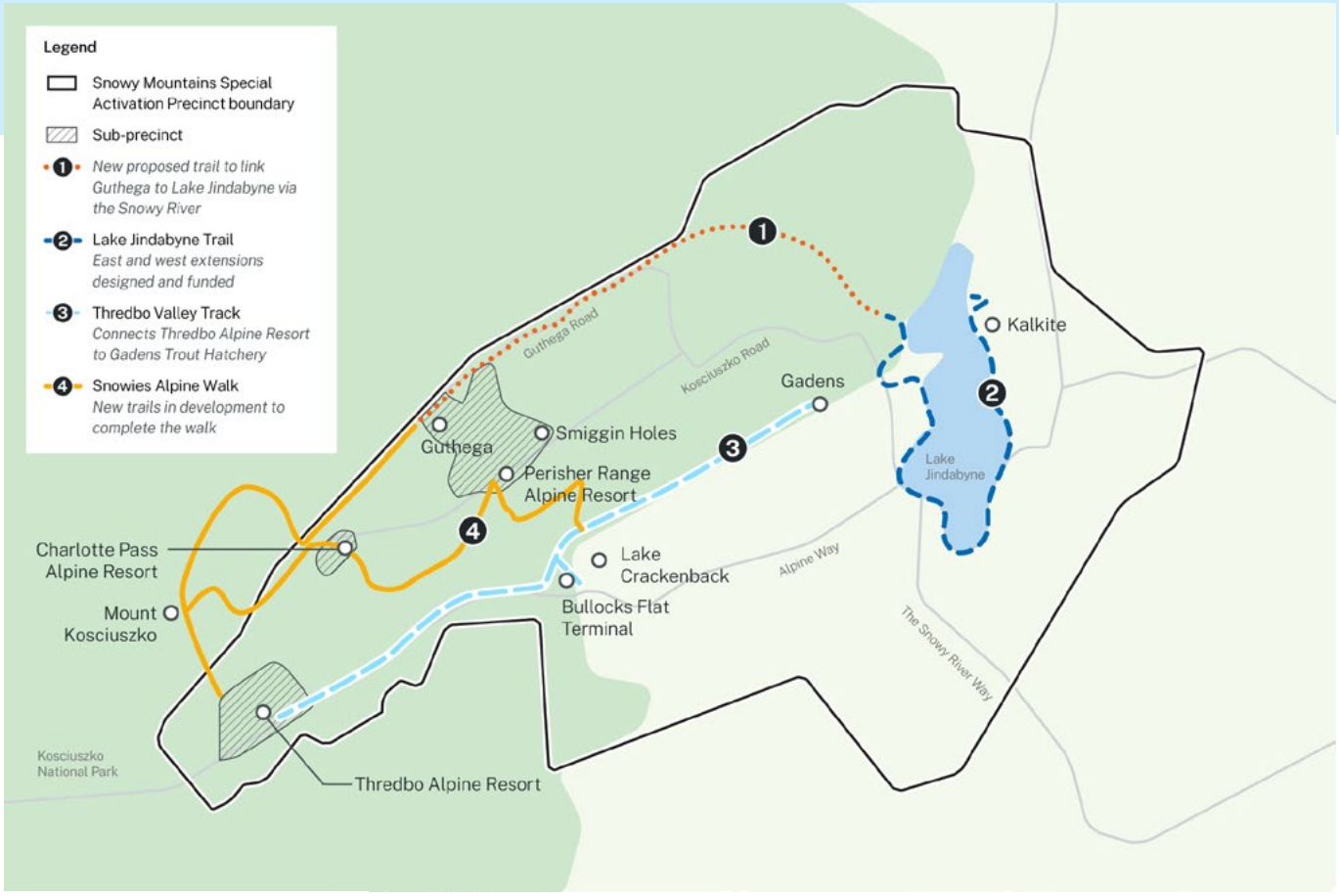


Figure 45: Walking trails

9.4.1 Kosciuszko National Park active connections

The Snowy Mountains are a popular destination for year-round activity including hiking and cycling. Kosciuszko National Park has numerous walks along the Main Range, around Perisher and hiking and cycling trails accessed from Guthega and Bullocks Flat. Hiking trails to reach Australia's highest peak, Mount Kosciuszko, start at both Charlotte Pass and Thredbo.

To ensure continued interest in these walks and an optimal visitor experience additional track head facilities, connections and links between trails and other attractions and the operation of the park and ride shuttle will be necessary.

An overview of trails available through the park are summarised as follows:

- The Main Range Walk is a very popular 22 kilometre loop to the summit of Mount Kosciuszko from Charlotte Pass. Mount Kosciuszko can also be accessed from the top of the Kosciuszko Express Chairlift at Thredbo.
- The Thredbo Valley Track runs from Thredbo, past Crackenback to the Gaden Trout Hatchery near Lake Jindabyne. The Track will soon extend to Kosciuszko Road and on to Creel Bay.
- The Snowies Alpine Walk is being developed to connect existing tracks to provide a 44 kilometre walk linking the resorts of Charlotte Pass, Guthega, Perisher and Lake Crackenback, with an extension to Thredbo. This walk is proposed to be completed in 2023 with the first stage of construction already completed.
- A new walking trail is proposed to link Guthega to Lake Jindabyne via the iconic Snowy River and provides an important Aboriginal cultural route and interpretation opportunities.
- The Australian Alps Walking Track, a 655km long distance walking trail connecting the alpine areas of Victoria, New South Wales and ACT also traverses the Park. The track commences at Walhalla, Victoria, runs through to Tharwa, ACT and ascends Mount Kosciuszko.

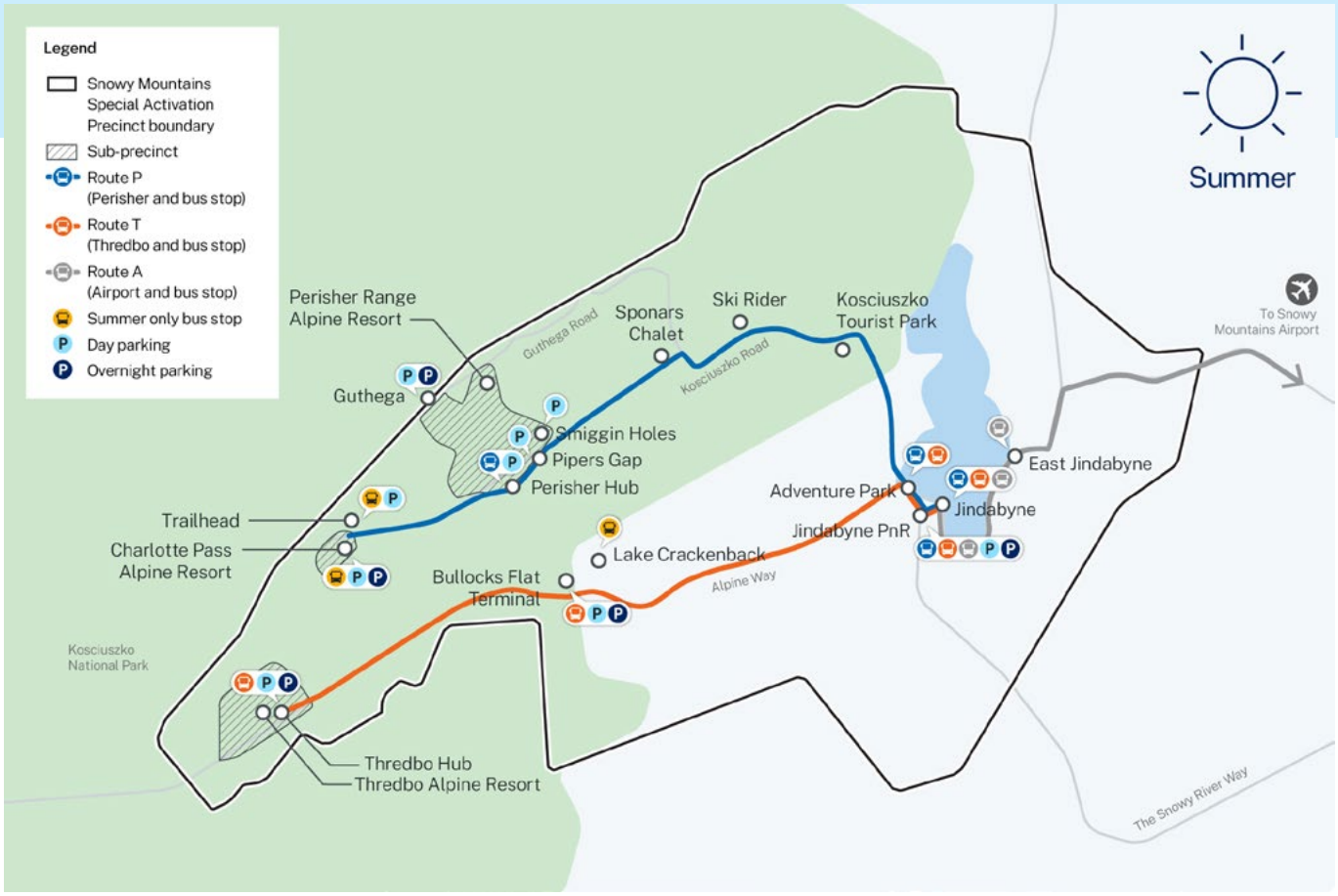


Figure 46: Summer shuttle

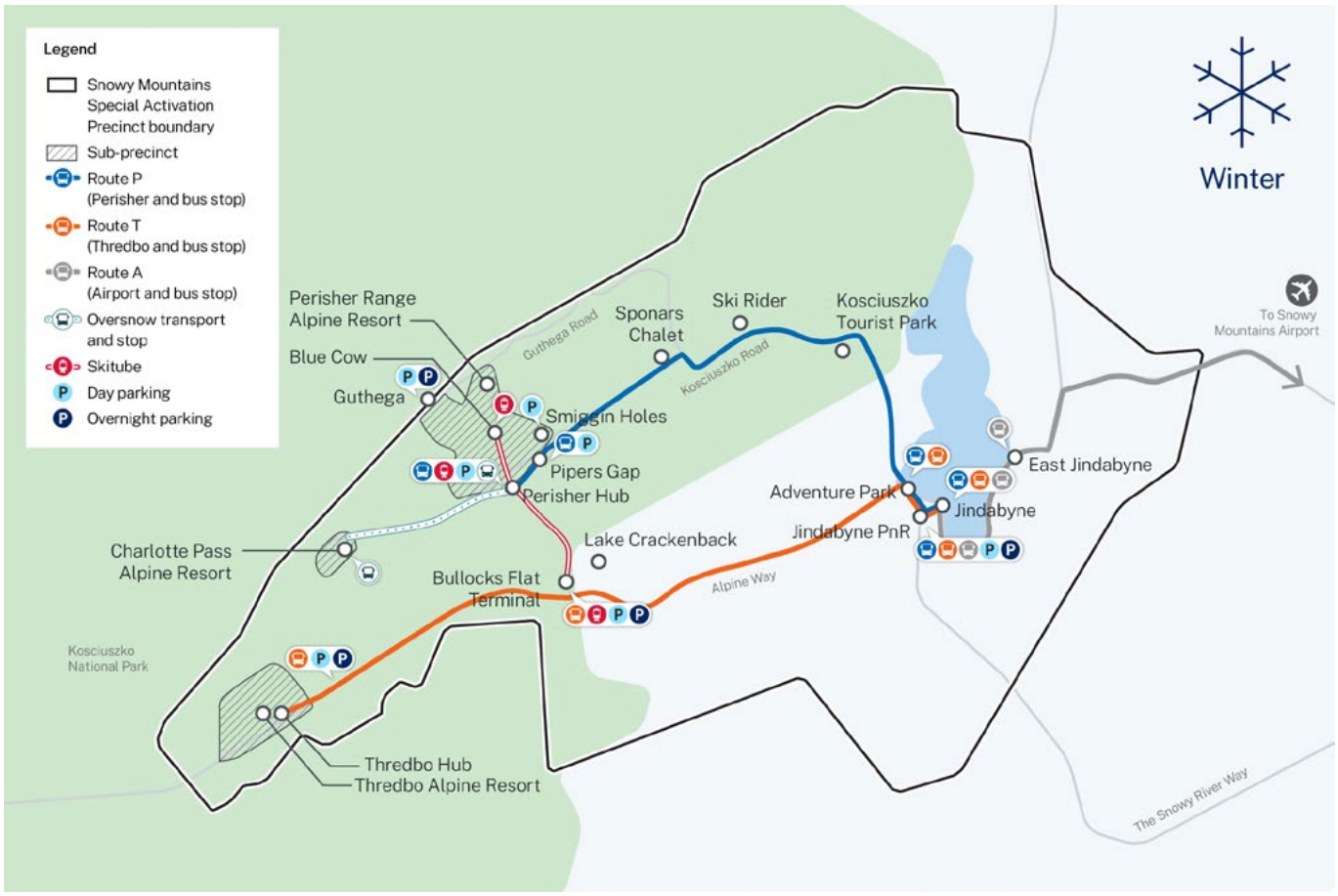


Figure 47: Winter shuttle

9.4.2 Park and ride shuttle service

The proposed bus network is focused on transporting people quickly, sustainably and safely from Jindabyne to the alpine villages of the Kosciuszko National Park. The proposed network is serviced by a limited stop shuttle service that aims to compete with cars in terms of travel time, efficiency and reliability.

Development of park and ride facilities can be staged to meet changing demand, providing the land is secured initially. The delivery of the facility should be timed in conjunction with the shuttle bus service and the Southern Connector Road.

Initially, shuttle services are proposed to connect the Jindabyne town centre to Thredbo and Perisher Resorts during the snow season. Once the park and ride facility is established, additional services to the resorts will commence.

9.4.3 Car parking

Parking within the alpine resorts is in high demand from both day visitors and overnight guests. Improvements to parking have been considered across the three major resorts alongside the operation of the Skitube and park and ride shuttle service. These interventions also seek to improve the management of vehicles and pedestrians in inclement weather to ameliorate safety and queuing issues. These will need to be implemented in a staged approach and following successful implementation of the park and ride shuttle service it is envisaged that some parking areas can be redeveloped for other uses.

Table 3: Parking

Resort and season	Current parking and access	Future parking and access
Perisher Range (Winter)	• Day parking available at Perisher Valley and Smiggin Holes. No overnight parking allowed to enable snow clearing. • Informal day parking also known to occur along Kosciuszko Road creating safety issues. • Limited overnight parking available at some accommodation. • Majority of overnight visitors arrive via the Skitube parking at Bullocks Flat.	• Day parking to be increased at Perisher Valley and Smiggin Holes. • New day parking to be provided at Pipers Gap and formalised on Kosciuszko Road to address safety issues. • Overnight visitors can continue to utilise Skitube or the new park and ride shuttle.
Perisher Range (Summer)	• Limited visitation during summer. Existing parking meets demand.	• Parking increases as per above. • Access also provided via park and ride shuttle.
Charlotte Pass (Winter)	• No private vehicular access. • Day and overnight visitors arrive on oversnow via Skitube parking at Bullocks Flat.	• No parking or access changes for winter. • Additional overnight guest parking could be provided at Sawpit Creek and connect via shuttle service.
Charlotte Pass (Summer)	• Limited parking available. • Overflow known to occur from the Charlotte Pass turning circle.	• Additional parking to be provided at Charlotte Pass and the turning circle. • Access also provided via park and ride shuttle.
Thredbo (Year round)	• Day and overnight visitor parking available.	• Additional day and overnight visitor parking to be provided. • Access also provided via park and ride shuttle.

9.4.4 Charlotte Pass turning circle

The Charlotte Pass turning circle, located at the head of Kosciuszko Road, is a popular and often busy starting point for summit walks and other trails. It is also a destination for day visitors who can park at Charlotte Pass and enjoy views via a short board-walk to the Mount Kosciuszko and Main Range Lookout.

Formal parking is limited to a small number of short term and disabled spaces with walkers typically parking informally along Kosciuszko Road. On busy days cars are parked for over a kilometre back from the road head, causing local congestion and pedestrian safety concerns.

The Master Plan proposes formalised roadside parking and access for day visitors along Kosciuszko Road, concentrating parking spaces on the northern verge for improved safety. A new shuttle bus stop will provide multi-day visitors with an alternative transport connection to Charlotte Pass and day visitor parking at Charlotte Pass Resort will also reduce demand on Kosciuszko Road verge parking and support commercial opportunities at the resort. Access to the trail heads from the resort areas are proposed to occur via the existing chair lift and a connecting hiking trail. During summer there is also the opportunity to utilise the parking available at Perisher Village with access to the trail head provided by the park and ride shuttle.

Improved wayfinding and signage (including real-time parking information signage) is also proposed to direct visitors to park at Charlotte Pass Resort, rather than on Kosciuszko Road. This will be supported by improved trail connections between the resort and Main Range walking trails.

The redevelopment of the turning circle will deliver improved integration to Charlotte Pass Resort with enhanced access from new shuttle buses and safe, formalised parking on Kosciuszko Road. These improvements will support summer visitation to Charlotte Pass while at the same time managing impacts on roads and the environment.

9.4.5 Skitube

The Skitube is a Swiss designed rack-rail train that takes passengers from Bullocks Flat on the Alpine Way through an underground tunnel in the Ramshead Range to the Perisher Valley. The first stop is the underground station at Perisher Valley and it continues through to Blue Cow. Since the commencement of services in 1987, the Skitube has carried over four million passengers making it a vital and strategic asset in the Alpine Precinct transport network.

Travel times are approximately 10 minutes from Bullocks Flat to Perisher and approximately five minutes from Perisher to Blue Cow. The platforms have been constructed with sufficient length to accommodate four carriages with a maximum capacity of 225 people per carriage and 4,500 people per hour.

Anticipated growth in Perisher visitation will require future planning for Skitube operations to ensure the required capacity can be achieved. The asset owners have identified that the skitube can continue to operate across the life of the Master Plan with some limited potential for increases to capacity. The current lease for the land on which the Skitube operates is due to expire in 2030 which provides a useful horizon for an investigation into the continuation of the service, maintenance needs and upgrades to increase capacity.

9.5 Prospective developments

A number of strategic developments were also identified during preparation of the Master Plan but require further investigations and analysis before they would be considered as viable opportunities for the Precinct.

9.5.1 Gondola

Cable transit, such as a gondola, is emerging as an alternative to traditional modes of travel particularly in areas with difficult terrain and sensitive environments where tourism is a key purpose for the travel. There is an opportunity for cable transit to play a larger role within the precinct.

Merrits Gondola has improved amenity for skiers by providing faster and more efficient access to the surrounding ski field. Cable travel can provide improved mass transit, however it is also a customer experience. The alpine environment and vistas can obviously be appreciated with a bird's eye view.

As technology improves a gondola could provide a catalytic transformation within the Precinct. Routes that could be considered in the short term is an extension of the proposed Mountain Bike and Adventure Park gondola along the foreshore, into the town centre. Longer term, a gondola could provide an alternative mass transit option into and around the National Park, such as from Jindabyne to the alpine resorts or from Bullocks Flat to Thredbo.

9.5.2 Future ski terrain

During consultation, stakeholders and resort operators indicated a desire to provide additional skiable terrain to increase the capacity of the existing ski network and provide high amenity experiences to visitors. To incorporate additional skiable terrain in the Master Plan, sufficient commercial viability and detailed consideration of environmental constraints including requirements of Commonwealth and State legislation would be required.

At this stage, no additional ski terrain has been identified within the Master Plan however should winter activities continue to increase over the next five to ten years there may be enough commercial benefit in considering the expansion of skiable terrain in proximity to established resort areas.

It is acknowledged that the Kosciuszko National Park environment is both highly sensitive and vulnerable and is home to a number of threatened plants and animals. It is considered that additional skiable terrain would be more viable in the short to medium term as climate change is expected to reduce winter activities on the mountain beyond 2040. Strategic indicators for this development will rely on the uptake of year-round activities, climate change resilience and the potential to utilise existing disturbed areas or avoid significant environmental impacts. The carrying capacity framework would also need to demonstrate the capacity of the resort to accommodate such a development. To make informed recommendations for the location and design of additional skiable terrain within the alpine resorts, additional investigations are required.

The intent of this Master Plan and amendment to the Precincts — Regional SEPP is to streamline activities within the existing resorts that would enable more efficient access to the mountain for skiers. Improving lift capacity and technology should reduce wait times and improve the customer experience and future upgrades of assets would benefit from a streamlined planning process.

The Alpine Development Control Plan will include design guidance and a staging plan for the on-the-mountain activities, including ski slopes, chair lifts and trails. The Alpine Development Control Plan will also ensure that planning provisions demonstrate environmental protection and resilience to preserve the unique landscape of Kosciuszko National Park.

9.5.3 Air connections

Currently, the Precinct is serviced via Snowy Mountains Airport located in Cooma which connects visitors from the east coast of Australia, and Canberra Airport which connects visitors from across Australia and has capacity for international flights. The aerodrome in Jindabyne also provides a connection for charter flights and helicopters.

To better leverage the Canberra connection, existing transport and access arrangements must improve, and high-quality mass-transit services providing direct access to resorts and accommodation in Jindabyne will be required. The NSW Government will need to consider the strategic importance of road connections from Canberra Airport to the precinct as this will become an important transit corridor and international gateway.

There is an opportunity to ensure Snowy Mountains Airport is well serviced all year round, and while it is not envisaged that NSW Government would fund future upgrades, its strategic link to the precinct is an important consideration. Moving forward 20 to 40 years from now there is potential for vertical take-off and landing planes and helicopters to move directly between Cooma and Jindabyne and provide connections to Canberra.

Technical studies which inform this Master Plan explored the potential for an additional airport in the precinct. Findings suggest that limited commercial need is present, and the environmental challenges associated with such development would make it difficult to proceed. Therefore, it is considered that Canberra Airport is the international gateway and Snowy Mountains Airport the domestic gateway to the precinct in the short term. Should the viability change and future demand arise, the Master Plan could be amended to identify a suitable location. Before this would be finalised the following would need to be satisfied:

- Commercial need
- Environmental constraints to be overcome
- Social licence through public engagement
- Land-use compatibility

10

Alpine Precinct provisions

Kosciuszko Summit Walk

10.1 Land use

To facilitate the vision identified in the Alpine sub-precinct structure plans, land uses permitted within the Alpine Region are prescribed under Chapter 4 'Kosciuszko National Park and alpine resorts' of the Precincts — Regional SEPP. These uses are consistent with the applicable aims and objectives of the Precincts — Regional SEPP, and the vision and principles of the Master Plan.

New sub-precincts are proposed in addition to the alpine resorts and accommodation already prescribed in the Precincts — Regional SEPP.

Aims

- To ensure development is consistent with the *Kosciuszko National Park Plan of Management*, including compliance with environmental management systems and leasing requirements.
- Foster a diversification of tourism land uses that facilitate year-round activity within Kosciuszko National Park.
- Ensure development is appropriate within the setting of a National Park.
- Concentrate development on disturbed land and avoid areas of high environmental value.
- Deliver development that aligns with infrastructure provision and market demand.
- Minimise land use conflict and environmental and heritage impacts.

Performance Criteria

A. Development is to be permissible and consistent with the Master Plan, Precincts — Regional SEPP, Alpine Development Control Plan, Kosciuszko National Park Plan of Management, and the *National Parks and Wildlife Act*.

B. In considering the suitability of the development, the consent authority must be satisfied that the development meets the performance criteria and development controls in this Master Plan and in the Alpine Development Control Plan.

Appropriate locations for alpine development

C. Development consent can only be issued for development in the Alpine Precinct where:

   i. the uses will support the diversification of the Alpine Precinct's tourism offering and year-round economic viability.

   ii. the uses will not compromise the environmental, heritage and cultural values of the Alpine Precinct.

   iii. the uses will not exceed the established carrying capacity of the Alpine Precinct.

D. The location of future development should align with the relevant structure plan and be focused on land marked 'Development area'. Where development is proposed on land outside these areas, additional technical investigation may be required.

E. Development for new or upgraded accommodation will meet the indicative sub-precinct yields and visitor thresholds set out in the *Kosciuszko National Park Plan of Management* and leasing arrangements. Refer also to Chapter 14 of this Master Plan.

Consideration for future stages of development

- The Alpine Development Control Plan must include:
  - a detailed description of the preferred types development to occur in each sub-precinct.
  - development provisions to accommodate and control appropriate accommodation uses.
  - development provisions to accommodate and control commercial uses within village centres.
  - development provisions to support new and upgraded ski lift facilities, snowmaking facilities and areas for sporting and recreational uses, such as mountain biking and shared trails.
  - defined non-developable areas to:
    - limit impacts on cultural and environmental heritage, biodiversity, and natural processes.
    - mitigate risks associated with environmental hazards, and the safe occupation of, and the evacuation from, any land so affected.

10.2 Alpine Resorts

Charlotte Pass Ski Resort. Credit: Destination NSW

These provisions are specific to development within the following Alpine Resort sub-precincts:

- Charlotte Pass
- Perisher Range
- Thredbo

Aims

- Facilitate safe and sustainable year-round recreation and accommodation offerings in the Alpine Resorts.
- Recognise and celebrate the Alpine Resorts role and function within the Kosciuszko National Park as the Alpine Region's premier visitor destinations.
- Ensure ecologically sustainable development in the Alpine Resorts appropriately responds to the unique sensitive natural environment and landscape.
- Integrate environmental resilience into the future growth of the Alpine Resorts.

Performance Criteria

A. Development should contribute to visitor attraction and village experience through:

   i. the prioritisation of infill development.

   ii. improvements to pedestrian and active transport connections.

   iii. creation and implementation of active street frontages.

B. Development should integrate public transport opportunities and should create gateways and nodes to create a sense of place and community in Alpine Resort sub-precincts.

C. Development should provide a range of tourist accommodation offerings and seasonal worker accommodation.

D. Development should be designed to reduce on-site power consumption and improve environmental performance.

E. Development should be designed to contribute to the alpine character of the Alpine Resorts and reflect the alpine landscape and natural environment.

Consideration for future stages of development

- Design guidance and criteria on integration of accommodation, tourism activities and on-the-mountain activities (ski slopes, chair lifts and mountain biking and hiking trails) to reflect the resort's connected alpine village character.
- A staging plan and design solutions for the on-the-mountain activities, including ski slope areas, chair lifts, gondolas, mountain biking, and hiking and shared trails. This plan will need to consider visitor growth and expectations, and requirements relating to transport, parking and supporting amenities and facilities.
- Design guidance and solutions for development and buildings to promote sustainability and environmental resilience.

10.3 Alpine Accommodation

Summer camping, Kosciuszko National Park. Credit: Tourism Snowy Mountains

These provisions are specific to development within the following Alpine Accommodation sub-precincts:

- Ski Rider
- Sponars Chalet
- Thredbo Ranger Station
- Creel Bay
- Kosciuszko Tourist Park
- Island Bend

Aims

- Recognise the role and function of Alpine Accommodation sub-precincts to provide a range of supporting accommodation options and unique accommodation experiences including eco cabins and camping within the Kosciuszko National Park.
- Ensure development in the Alpine Accommodation sub-precincts responds to and celebrates the unique sensitive natural environment and landscape.
- Ensure development provides adequate on-site services, amenities and car parking.
- Support year-round tourism activation through site access upgrades, improved site amenities, and new shared trails and paths.

Performance Criteria

A. Development should be sensitively designed and integrated into the sensitive environment and landscaping, appropriately responding to the topography of the Alpine terrain.

B. Development should incorporate public transport opportunities, where possible, and provide adequate on-site parking.

C. Development should provide adequate on-site amenities and services.

D. Development should be designed to support and enable the ultimate growth in each Alpine Accommodation sub-precinct, including the design and provision of infrastructure and services.

E. Development should connect to and improve shared trail and year-round recreational activities.

Consideration for future stages of development

- Design guidance and solutions for the integration of development with visitor attractions.
- Design guidance and solutions for development and buildings to promote sustainability and environmental resilience.

10.4 Alpine Experience

Kosciuszko National Park. Credit: Tourism Snowy Mountains.

It is recognised that improvements to visitor experience and amenity within the Alpine Precinct is required to support continued economic outcomes and ecologically sustainable development. Ease of access and the experience while in transit needs immediate improvement.

Aims

- Improve visitor transportation and recreation experience into and within the Kosciuszko National Park.
- Provide for transport connections that are safe, quick and sustainable.
- Provide new and upgraded shared trails and connections in the Kosciuszko National Park, including adequate facilities and amenities.
- Ensure development is sensitively designed to minimise impacts to the unique landscape and environment of the Alpine Region.

Performance Criteria

A. Public transport or mass transit connections should be integrated into the design of new developments, particularly in Alpine Resort and Alpine Accommodation sub-precincts.

B. Transport development must provide safe, reliable and accessible connections into and around the Kosciuszko National Park.

C. Development should be designed and staged to support and enable the ultimate growth of accommodation and attractions in the Alpine Region.

D. Development of new and upgraded shared trails and paths should provide appropriate facilities and amenities.

E. Development should provide adequate car parking as part of a range of transport solutions (including the provision of accessible parking spaces).

F. Visitor attractions must be supported by appropriate amenities, facilities and car parking and must minimise its impact to the natural environment.

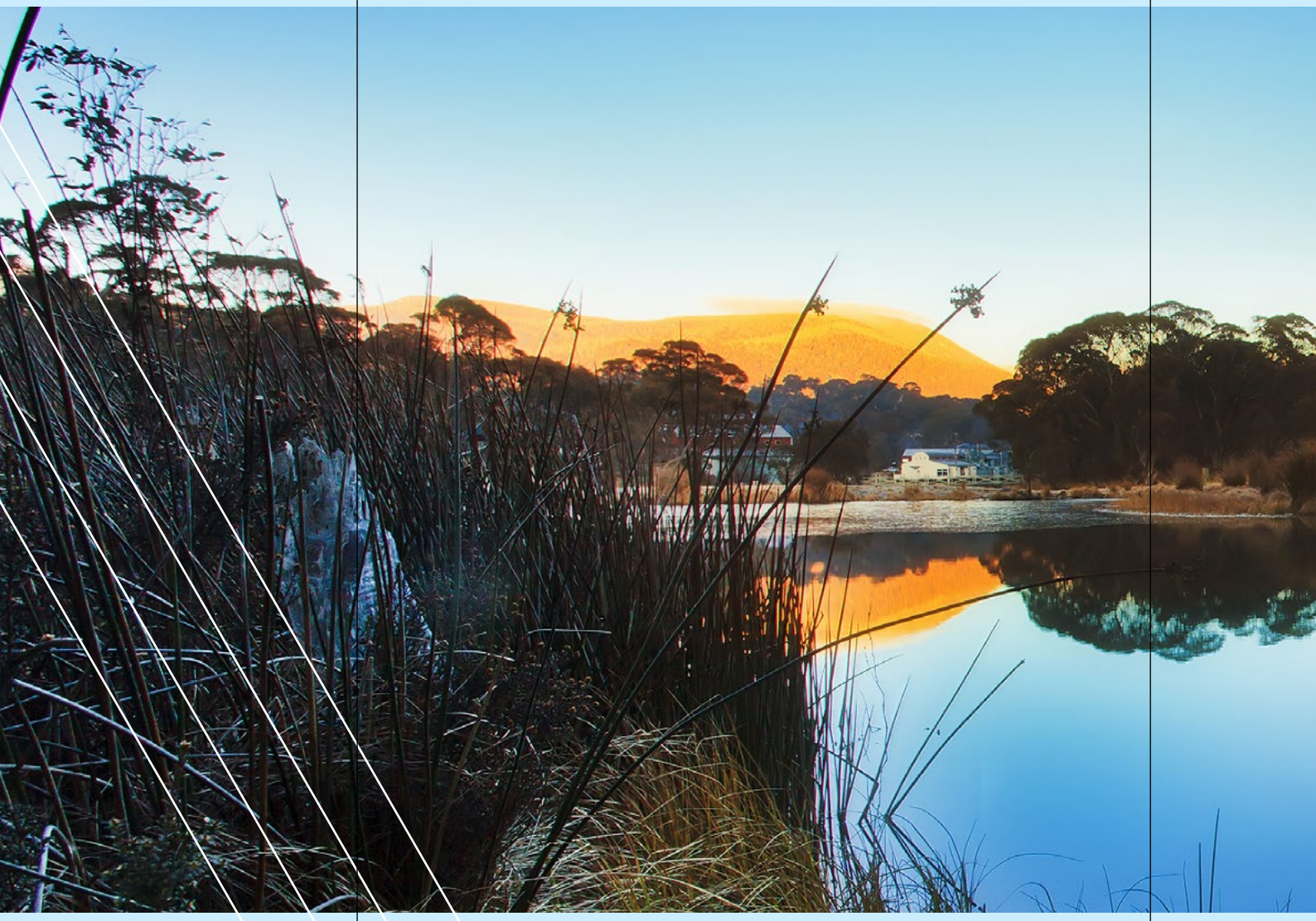
G. Visitor attractions should be designed and staged to support and enable the ultimate growth of attractions in the Alpine Region.

Consideration for future stages of development

- Design guidance and solutions for development to sensitively integrate into the natural landscape.
- Provisions for car parking areas, including the provision of accessible parking spaces.
- Design guidance and provisions for supporting facilities and amenities required for visitor experiences.
- Design guidance and solutions for visitor experiences to promote sustainability and environmental resilience.

11

Environment and sustainability



Lake Crackenback

11.1 Biodiversity

The Precinct has rich and diverse biodiversity which reflects the range of climates, altitudes, landforms, soil, and geology present. This includes a diversity of alpine and sub-alpine plant communities, including threatened ecological communities and habitat for a number of rare and threatened species.

Kosciuszko National Park, the largest National Park in NSW, is the central segment of the Australian Alps Bioregion containing the highest mountains in Australia. The National Park possesses a diversity of alpine plant communities, including threatened ecological communities (TECs) providing habitat for rare and threatened species including the Mountain Pygmy-Possum, Alpine She-oak Skink and Guthega Skink. The park contains most of the alpine species found on the Australian mainland. Many of these species only occur within the Alpine areas of Kosciuszko National Park.

An evidenced based approach has been adopted to determine the best outcome for the Alpine Precinct and to provide a clear pathway for appropriate development, in the right locations. This process seeks to avoid and minimise impacts to biodiversity with a focus on mapping areas best suited to future development and expansion.

The Master Plan has developed a risk-based approach to protect biodiversity across the Alpine Precinct, including the following principles:

- avoid impacts on biodiversity
- minimise impacts on biodiversity
- mitigate impacts on biodiversity though the use of a range of mitigation measures
- ensure any impacts are appropriately offset.

The Master Plan has identified and ranked biodiversity constraints across the Alpine Precinct. This criteria is listed in Table 3.

Table 4: Biodiversity constraints

Biodiversity constraint	Explanation
High biodiversity constraint	Native vegetation corresponding to Threatened Ecological Communities listed under the relevant legislation; known habitat for threatened alpine species, such as the Mountain Pygmy-possum, Guthega Skink and Alpine she-oak Skink habitat.
Moderate biodiversity constraint	Disturbed versions of Threatened Ecological Communities (including poor condition, regeneration, revegetation areas); native plant communities and habitat for threatened species not deemed high biodiversity constraint.
Low biodiversity constraint	Disturbed or poor condition vegetation zones that are not consistent with a Threatened Ecological Communities; isolated trees within existing development areas.
Disturbed areas	Disturbed areas that are not consistent with native plant community types; on-native vegetation which is unlikely to provided habitat for Threatened fauna.

Aims

- To preserve the Precinct's unique landscape and biodiversity values.
- To avoid impacts to threatened ecological communities, threatened species and their habitats.
- To minimise the removal of existing native vegetation wherever possible.
- To preserve and rehabilitate natural waterways, bogs and fens which contribute to the Precinct's character and biodiversity.
- To improve water quality and reduce stormwater run-off particularly to sensitive habitats.
- To prioritise development in areas of low biodiversity constraint (and disturbed areas) and minimise impacts within undisturbed areas of Kosciuszko National Park (high biodiversity constraint).
- To minimise impacts to important habitats such as rocky boulder fields, unburnt areas of old growth Snow Gum woodland, bogs and fens.
- To avoid impacts to threatened species and the habitats they exist within, including Mountain Pygmy Possum, Guthega Skink and Alpine she-oak Skink.
- To ensure that any impacts within Kosciuszko National Park are offset through direct management measures within the Park and should be related to the biodiversity impacted.

Performance Criteria

A. All development is to apply the avoid, minimise and offset methodology.

B. Development is to avoid threatened ecological communities and threatened species habitat; such vegetation should not be removed. Development may occur in these areas if it is for essential infrastructure.

C. Development should be focused on colocation and infill to minimise biodiversity impacts.

D. Development should be concentrated in and around already disturbed areas. Where possible, development should provide a buffer between areas of high ecological value and buildings and structures.

E. Development should consider the biodiversity impacts of bushfire asset protection zones (APZ) and associated vegetation management.

F. Development must offset any impacts to biodiversity through direct management measures within Kosciuszko National Park and should be related to the biodiversity impacted.

G. Riparian corridors must be preserved while ensuring consistency with the proposed Flooding and Drainage Strategy for the Precinct.

H. Any revegetation or planting within Kosciuszko National Park should follow the Rehabilitation Guidelines for the Resort Areas of Kosciuszko National Park.

Consideration for future stages of development

- Design guidance should be provided to identify how these areas will be protected during the short-term construction phase of development and in the long-term use of the area. Design guidance for each sub-precinct identifying how biodiversity aims will be addressed should include:
  - The retention and maintenance of existing native vegetation and areas of high biodiversity constraint.
  - Additional planting and areas for new public open spaces, publicly accessible areas or paths, including appropriate management strategies.
  - Riparian corridors, setbacks and design objectives for development interfacing with watercourses.
  - Plantings along road reserves that address visual amenity, public amenity considerations and road safety.
  - Species which are local to the Alpine Region.
  - Site-based setbacks, landscaping and public domain requirements.
  - How vegetation clearing and biodiversity offsets will be managed (either across the Precinct, by sub-precincts or on a development-by-development basis).

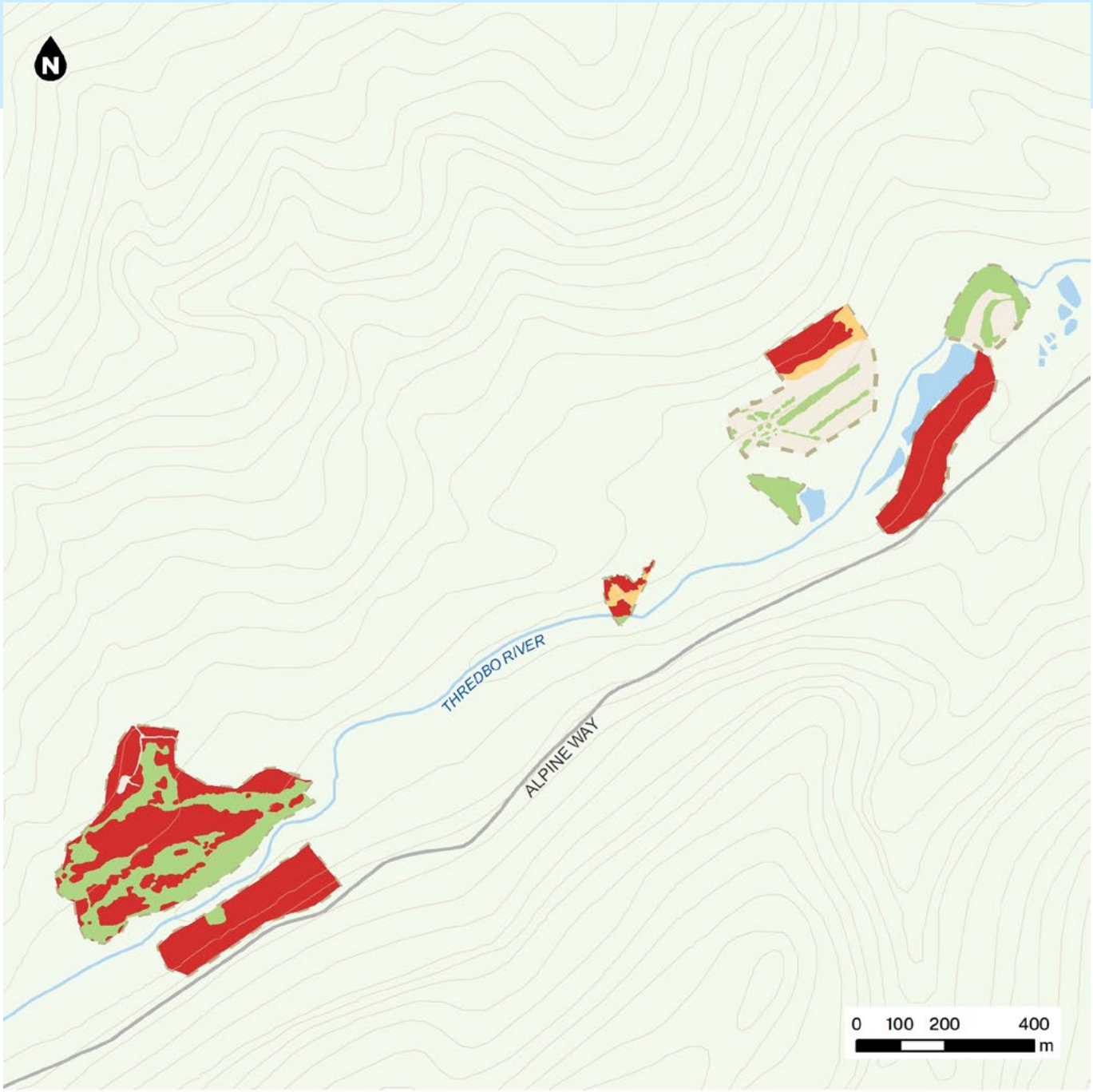


Figure 48: Biodiversity - Thredbo

Road
Contour
Waterway
High biodiversity constraint
Moderate biodiversity constraint
Low biodiversity constraint
Surveyed area

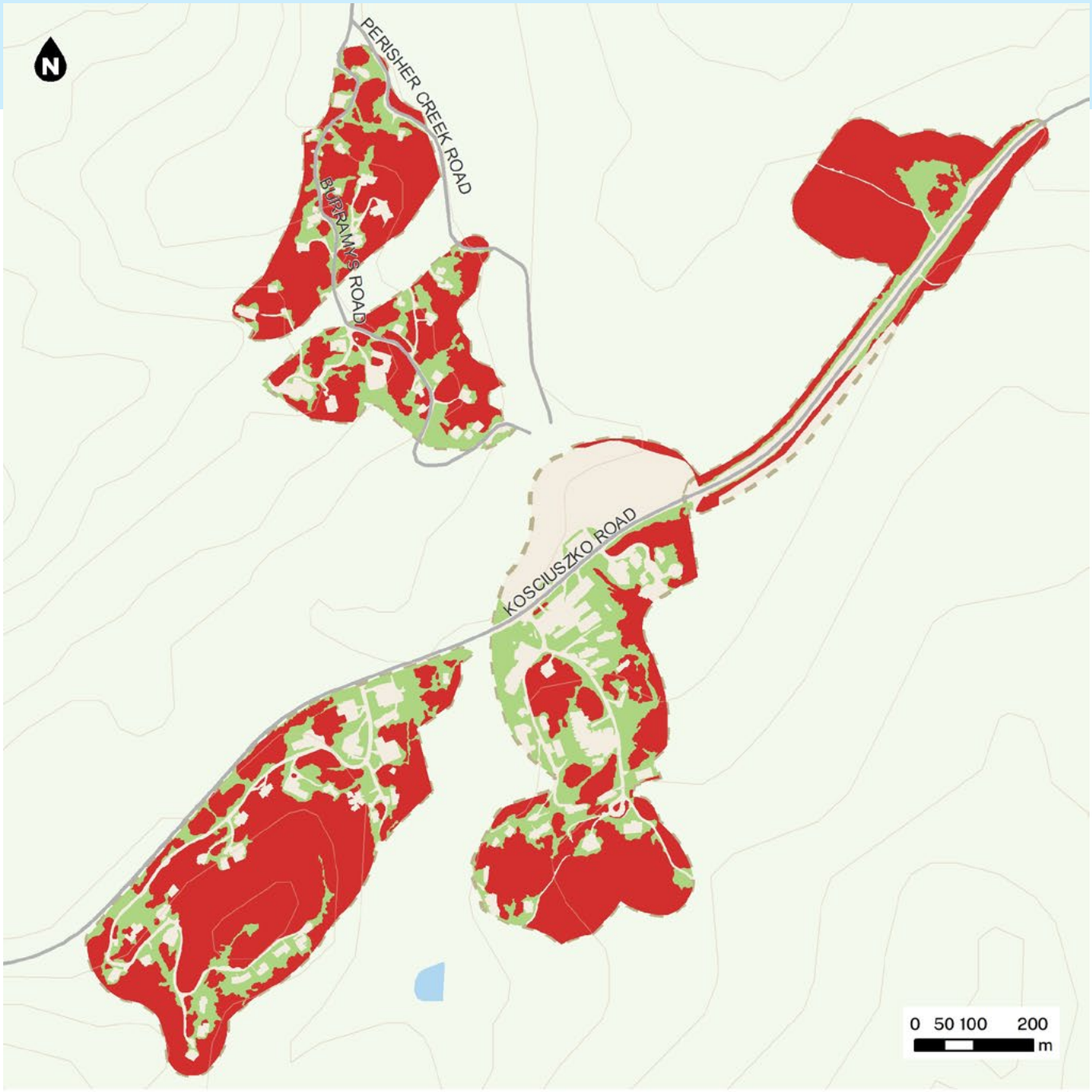


Figure 49: Biodiversity - Perisher Valley

Road
Contour
High biodiversity constraint
Low biodiversity constraint
Surveyed area

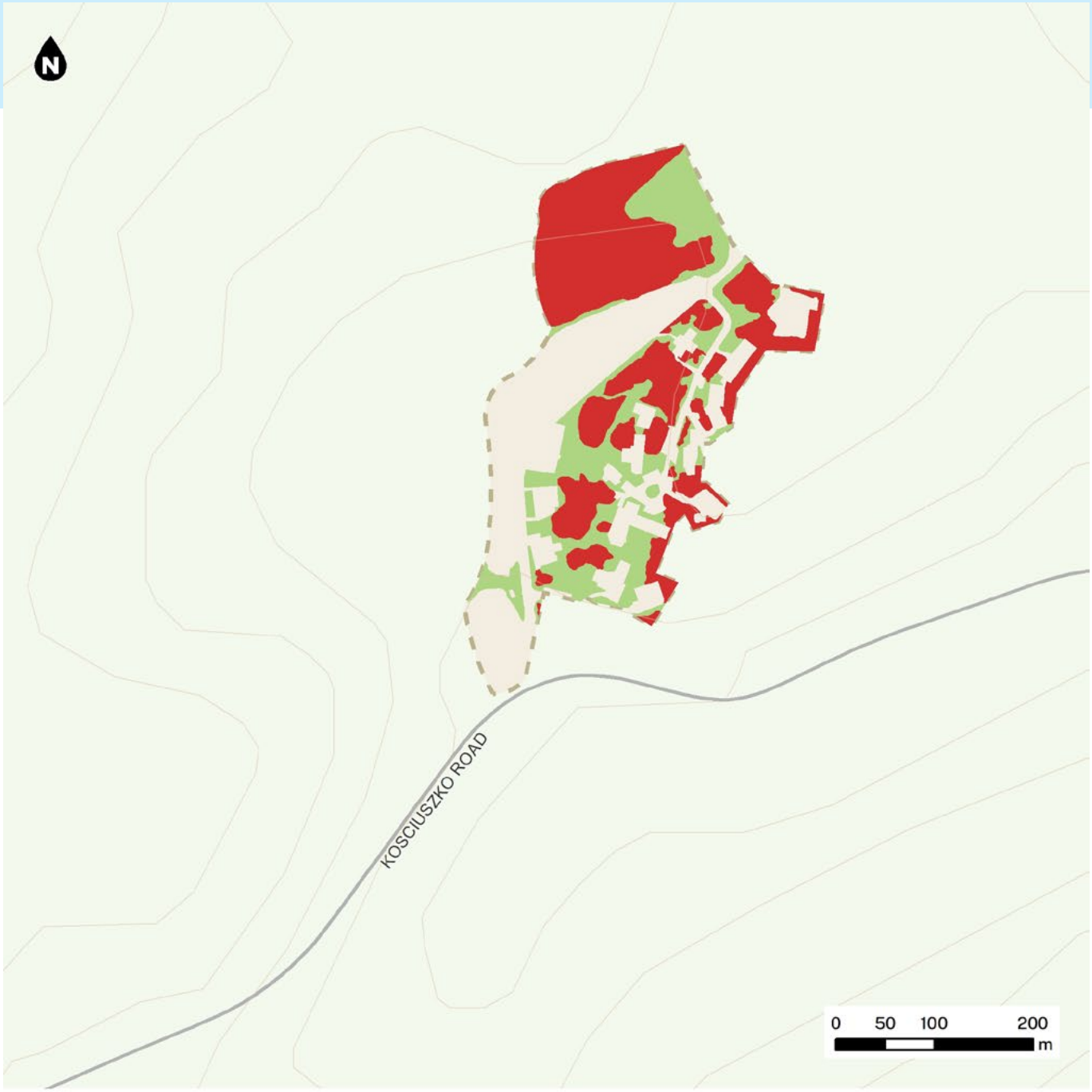


Figure 50: Biodiversity - Smiggin Holes

Road
Contour
High biodiversity constraint
Low biodiversity constraint
Surveyed area

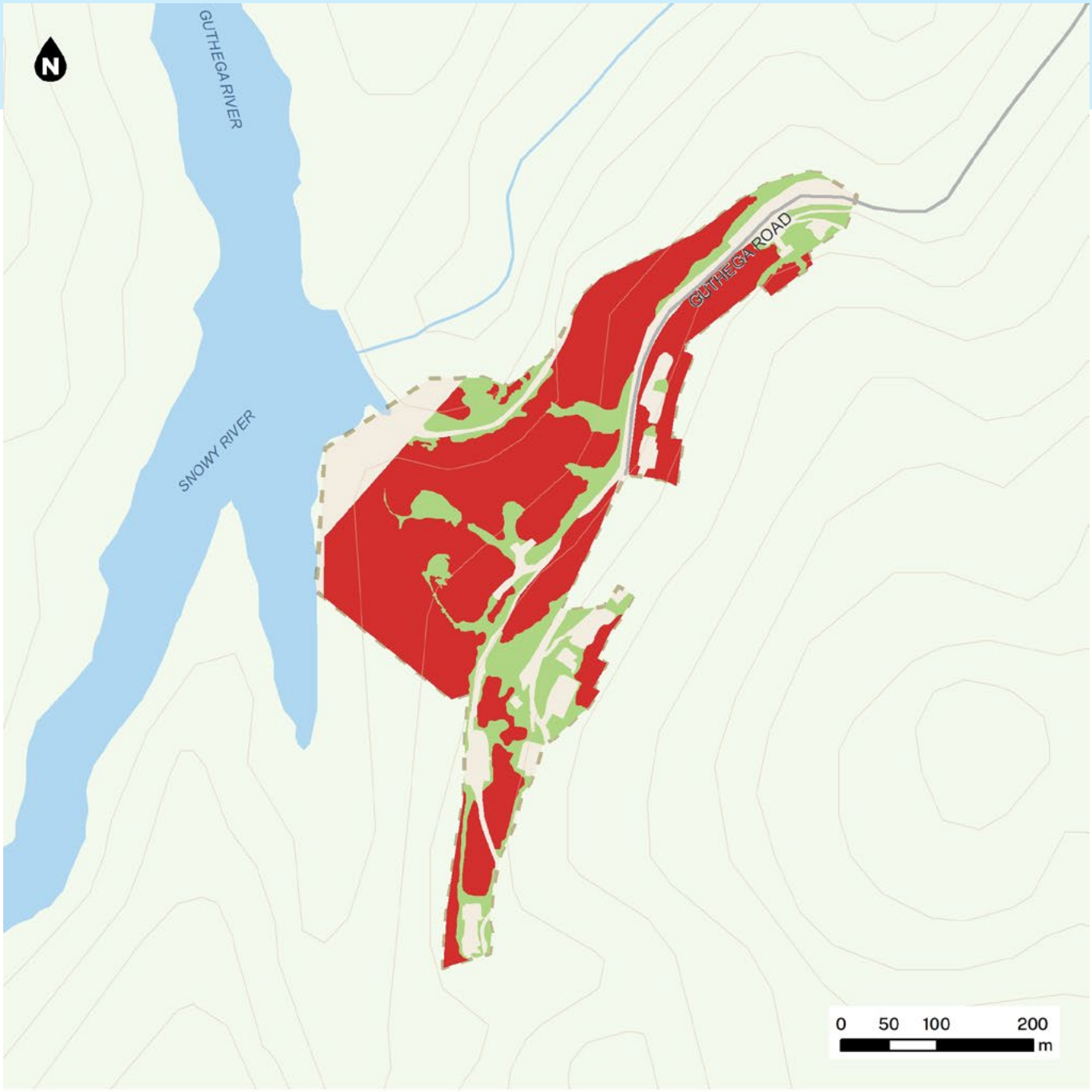


Figure 51: Biodiversity - Guthega

- Road
- Contour
- Waterway
- High biodiversity constraint
- Low biodiversity constraint
- Surveyed area

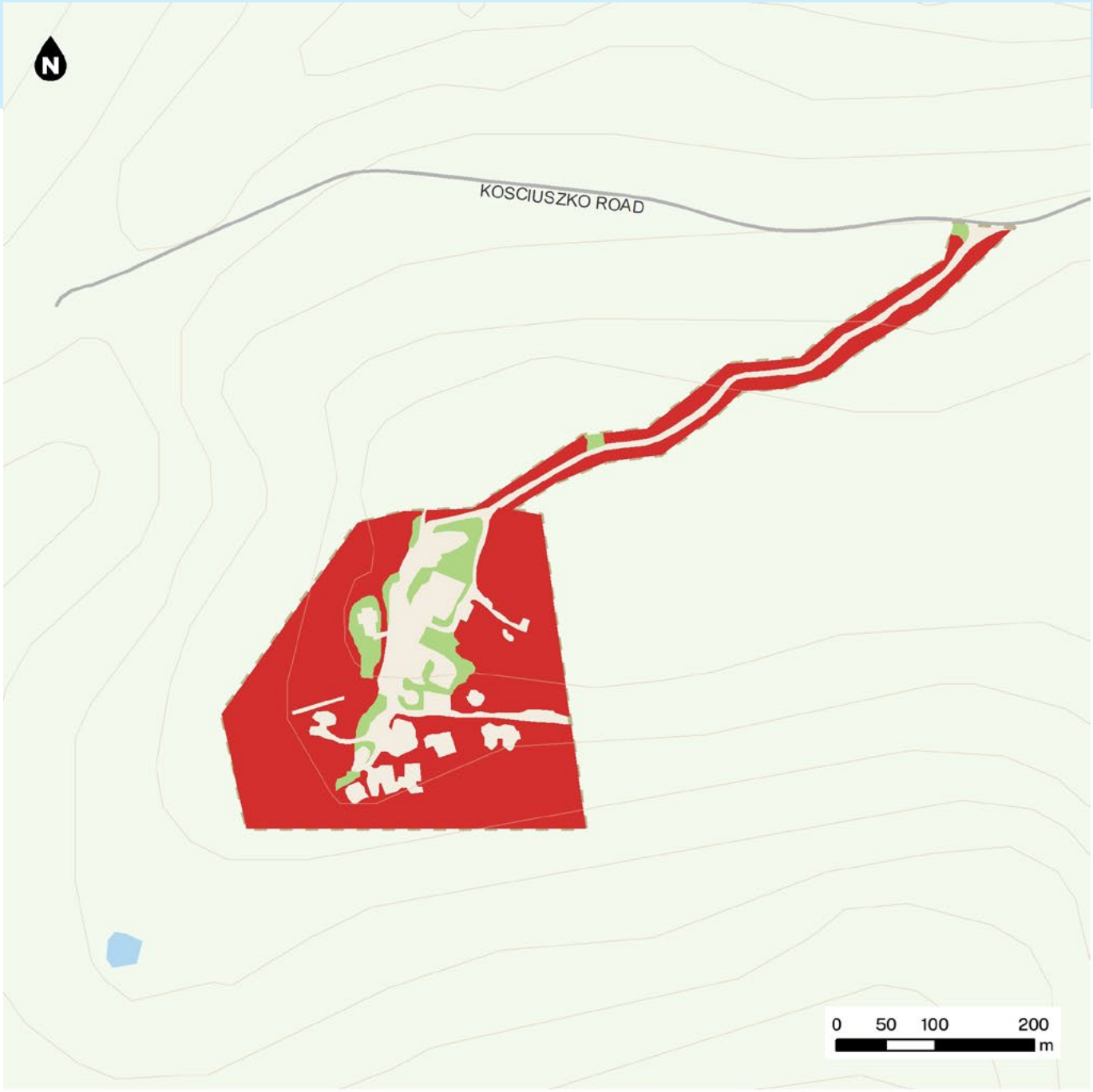


Figure 52: Biodiversity - Charlotte Pass

Road
Contour
High biodiversity constraint
Low biodiversity constraint
Surveyed area

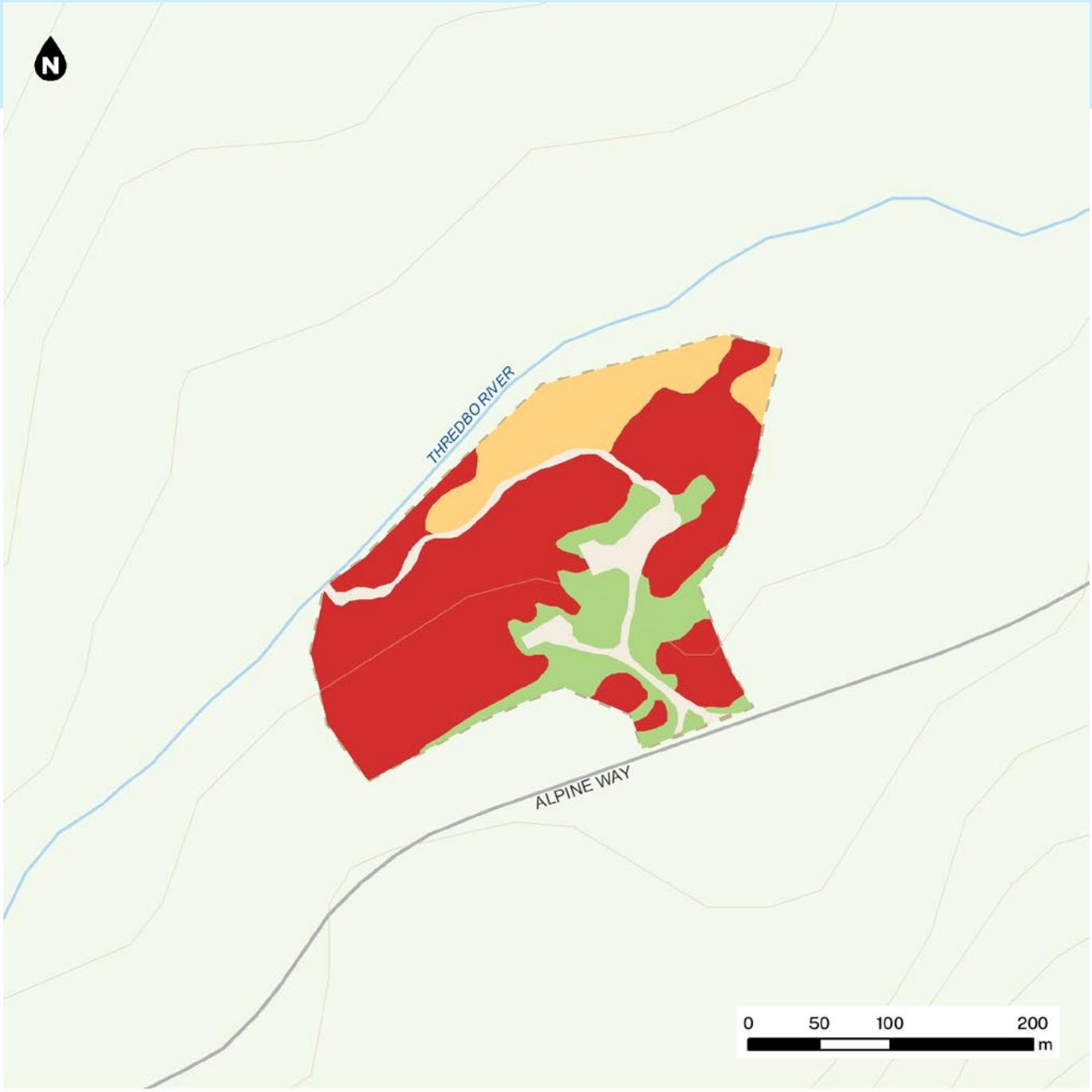


Figure 53: Biodiversity - Thredbo Ranger Station

- Road
- Contour
- Waterway
- High biodiversity constraint
- Moderate biodiversity constraint
- Low biodiversity constraint
- Surveyed area

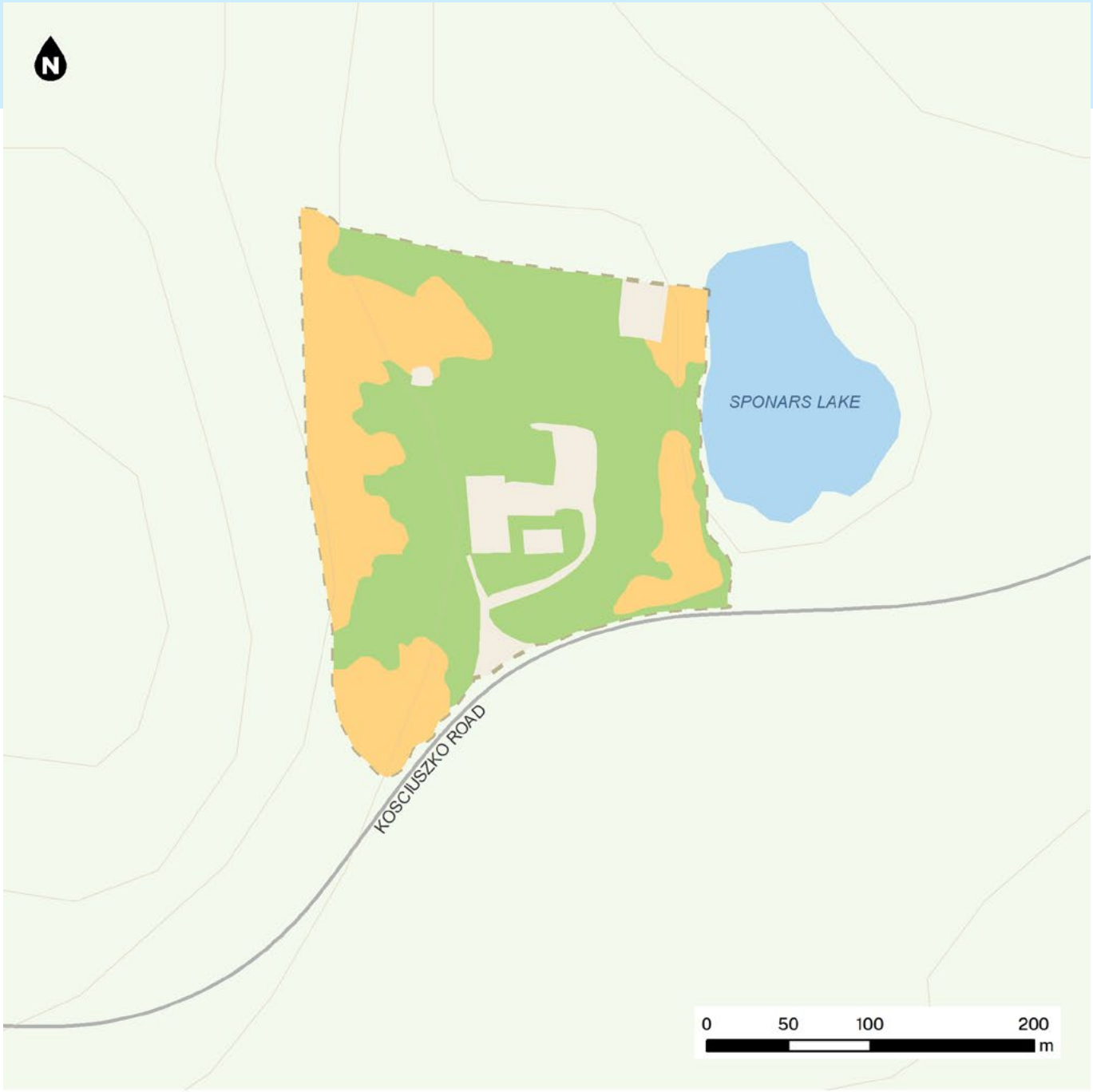


Figure 54: Biodiversity - Sponars Chalet

Road
Contour
Moderate biodiversity constraint
Low biodiversity constraint
Surveyed area

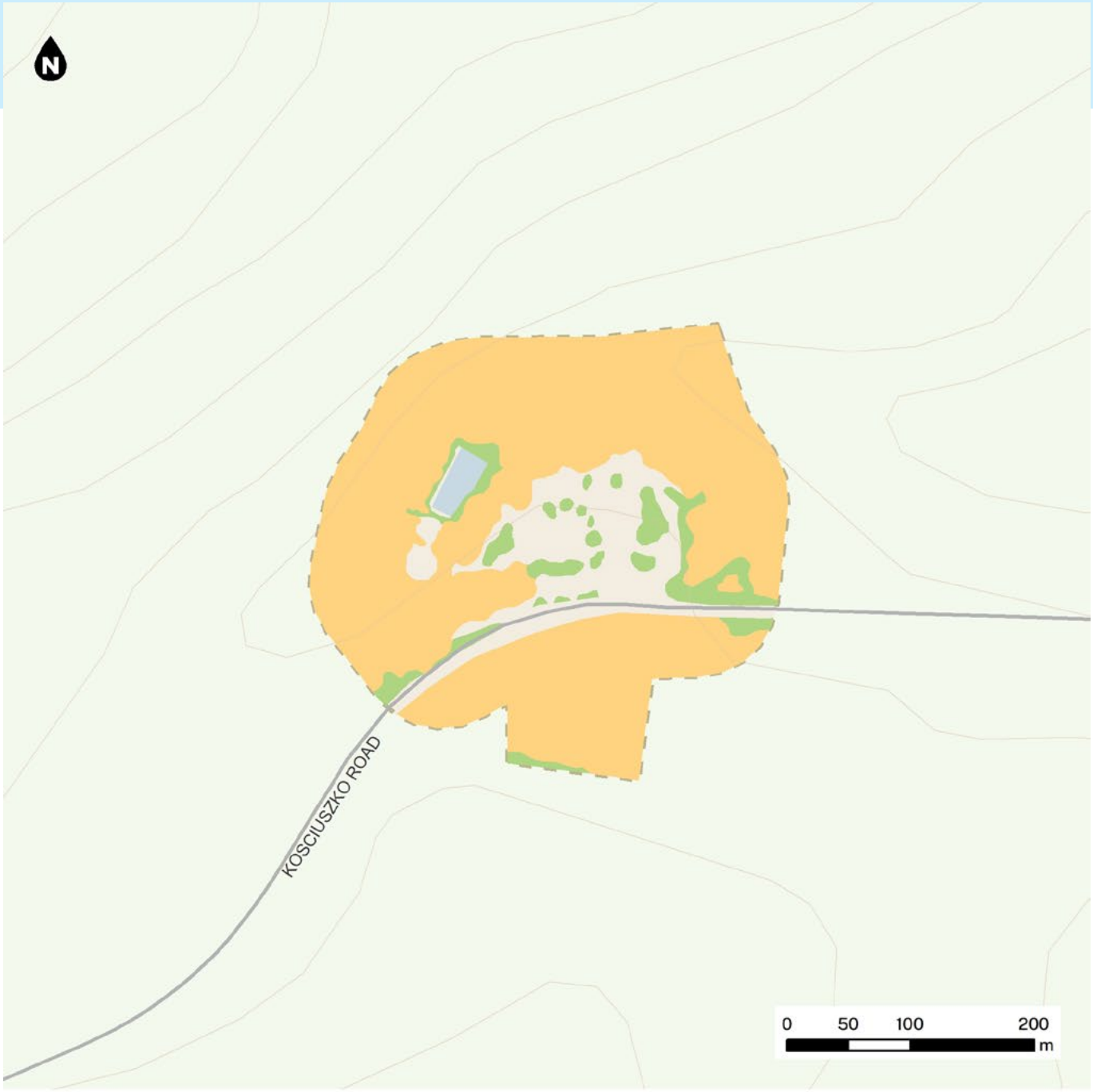


Figure 55: Biodiversity - Ski Rider Hotel

Road
Contour
Moderate biodiversity constraint
Low biodiversity constraint
Surveyed area

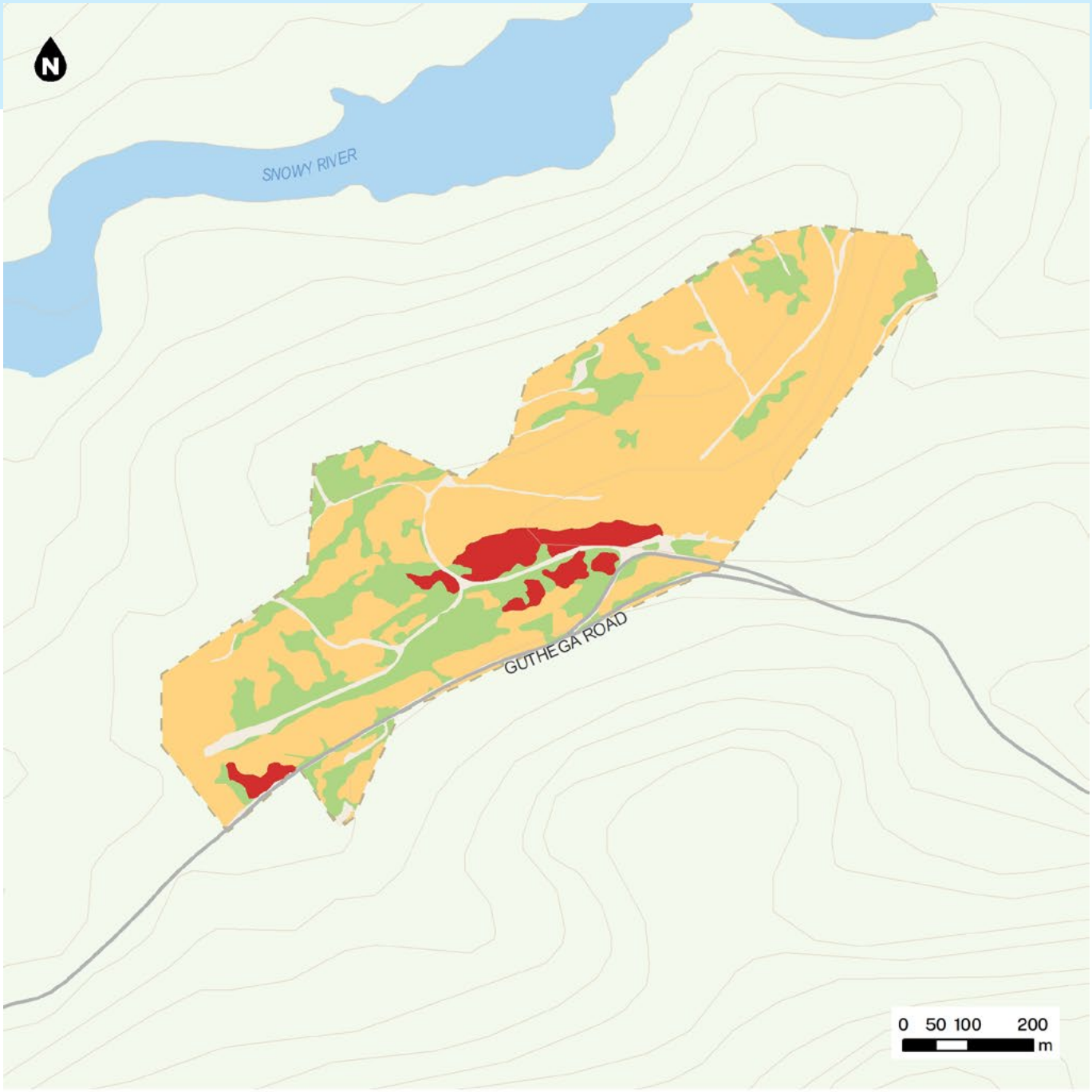


Figure 56: Biodiversity - Island Bend

- Road
- Contour
- Waterway
- High biodiversity constraint
- Moderate biodiversity constraint
- Low biodiversity constraint
- Surveyed area

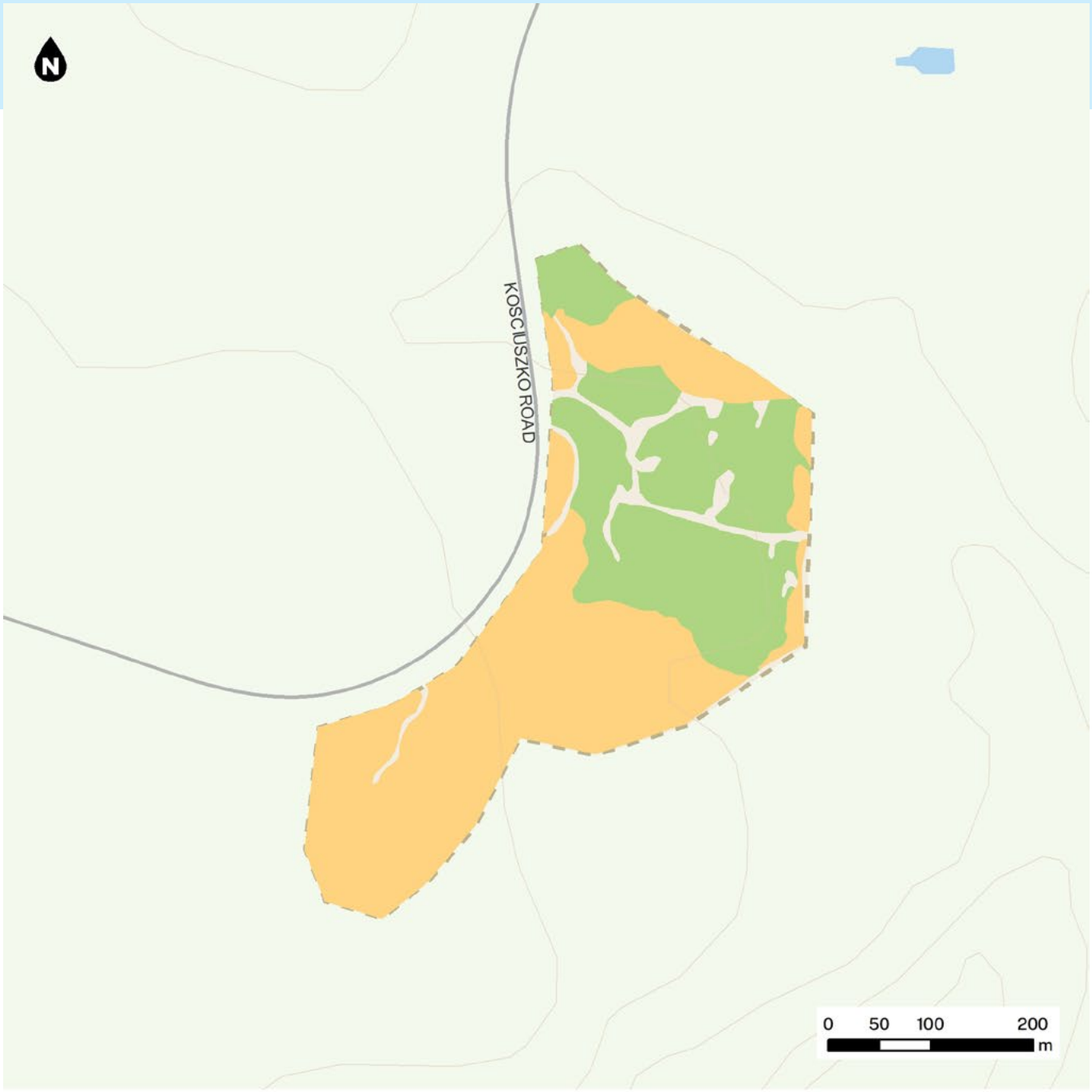


Figure 57: Biodiversity - Kosciuszko Tourist Park

Road
Contour
Moderate biodiversity constraint
Low biodiversity constraint
Surveyed area

11.2 Geotechnical

The geological setting of the Alpine Precinct present numerous challenges to overcome when planning or designing development activities and infrastructure delivery. The following aims and performance criteria should be read in conjunction with the existing Geotechnical Policy for the Kosciuszko Alpine Resorts.

Aims

- Prioritise new development in areas of no or low geotechnical risk susceptibility.
- Ensure the design and construction of new development and redevelopment is informed by appropriate geotechnical investigations.
- Ensure that the geotechnical risk associated with development is understood and appropriately managed.
- Ensure that any excavation works consider the appropriate stabilisation methods.

Performance Criteria

A. Development must address the requirements of the Geotechnical Policy – Kosciuszko National Park (DPNIR, 2003). This includes:

   i. development on land covered by the geotechnical maps, under the above policy must ensure the requirements of the policy are met.

   ii. development on land not covered by the geotechnical maps under the above policy must ensure the requirements of the policy are met and should also use the risk susceptibility mapping to inform the requirements and design of development.

B. Development must include an assessment of geotechnical risks.

C. Buildings and structures must be designed to accommodate the specific geotechnical risks identified for the site.

D. Excavations required for new developments must consider the potential to cause widespread slope instability and ensure appropriate mitigation measures are implemented to minimise and manage risk.

Consideration for future stages of development

- Design guidance for development on land identified on the geotechnical maps under the Geotechnical Policy – Kosciuszko National Park, including how development responds appropriately to sloping sites and integrates with existing development.
- Engineering solutions for infrastructure and services where excavation, footings and stabilisation may be required.

11.3 Flood risk management

The Precinct includes the Snowy River Catchment which includes the sub-catchment areas located within Kosciuszko National Park.

Aims

- To minimise the flood risk to life, property and the environment associated with the use of the land in the Alpine Precinct.
- To allow development on land that is compatible with the flood hazard and flood function of that land considering projected changes as a result of climate change.
- To maintain the existing flood behaviour, flood function and the environment.
- To ensure safe and appropriate uses of the land and enable safe evacuation from the land.

Performance Criteria

A. The Flood Planning Level is the 1% AEP plus 500mm freeboard to ensure consistency across the Precinct. Development must generally occur outside the Flood Planning Level unless it can demonstrate that risks can be suitably managed. This allows for the maintenance of flood function and to avoid adverse effects on flood behaviour to the detriment of other properties or the environment of the floodplain.

B. Development within the Flood Planning Level should demonstrate that:

   i. all structures are constructed with flood compatible building components below the 1% AEP flood level plus 500mm freeboard.

   ii. all structures are designed to withstand the forces of floodwater, debris and buoyancy up to 1% AEP flood plus 500mm freeboard.

C. Development within the Probable Maximum Flood area should demonstrate that:

   i. all emergency and evacuation infrastructure is to be constructed with flood compatible building components below Probable Maximum Flood level plus 500mm freeboard.

   ii. all emergency and evacuation infrastructure structures are to be designed to withstand forces of floodwater, debris, and buoyancy up to Probable Maximum Flood plus 500mm freeboard.

   iii. development must be sited, designed and located to avoid or mitigate the flood risk to people, property and infrastructure such that:

      - flood risk is managed through site-specific built form and design.
      - sensitive, vulnerable and critical uses are avoided in the floodplain.

D. Development should mitigate the impacts of local overland flooding through the provision of adequate site drainage systems, where possible.

E. Development must consider and plan for emergency evacuation situations to ensure the safety of all areas within the Probable Maximum Flood extent.

Consideration for future stages of development

- A flood risk strategy must be prepared that outlines the evacuation and emergency strategies in flood events up to and including the Probable Maximum Flood.
- The strategy must be in accordance with the *Technical flood management guideline* prepared by the Australian Institute for Disaster Resilience H1-H6 classification system (as modified from time to time) to determine the design for any buildings that are to be used for shelter in place provisions located within the floodplain.
- A stormwater management strategy must be prepared that includes:
  - site level controls for stormwater detention and re-use.
  - the flood planning levels and design requirements (including emergency response) for development within the Flood Planning Level, including the emergency response requirements for the Probable Maximum Flood area.
  - the monitoring and reporting process for ensuring that the stormwater will not have an adverse impact on the environment, including the health of Lake Jindabyne, waterways and groundwater.
  - how engineering solutions may modify flood prone land enabling development opportunities through stormwater mitigation.
- Design guidance for local roads and drainage infrastructure that will allow for higher flood immunity to mitigate the impact of flooding in the Alpine Resorts.

11.4 Water quality

Water quality is incredibly important within the Precinct, as water is used for recreation (as snow for snow sports, as water for lake uses) and power generation across the Precinct. The quality of the water throughout the Precinct is seen as vital to the health of the Kosciuszko National Park. The preservation of the waterways and treatment of the water that enters them should also be considered part of the system of preservation.

Aims

- To ensure regular stormwater flows are maintained across the Alpine Precinct for environmental flow purposes for waterways in and downstream from the Precinct.
- To ensure stormwater run-off quality is appropriately managed across the Alpine Precinct.
- To ensure the condition of waterbodies and their riparian zones are protected.
- To improve water quality and promote integrated water cycle management.
- To ensure salt management strategies consider water sensitive environments during application.
- To ensure that stormwater management systems consider alternative strategies for de-icing salts.

Performance Criteria

A. Maintain or improve the ecological condition of waterbodies and their riparian zones in catchments over the long term.

B. Development in the Alpine Precinct should implement on-site water management and water quality systems through:

   i. the capture and re-use of water on-site.

   ii. the treatment of water on-site with any water discharged back into catchments having a neutral or beneficial effect on water quality.

   iii. incorporating water sensitive urban design principles into the development's-built form and landscaping, where possible.

C. The quality of stormwater discharged into receiving catchments must be pre-development quality or better in relation to pH, total suspended solids, total phosphorus, total nitrogen and gross pollutants. The quality of water should aim to meet the following targets:

   i. Total Suspended Solids: 85% reduction.

   ii. Total Phosphorus: 60% reduction.

   iii. Total Nitrogen: 45% reduction.

D. The quality of water discharged into receiving catchments should maintain electrical conductivity levels. Water quality should aim to maintain an electrical conductivity below the 30 µS/cm ANZG 2018 Guideline value for upland rivers of South-East Australia.

E. Monitor macroinvertebrates to ensure they are consistently within Band A of the NSW AUSRIVAS model.

F. Erosion and sediment control should be managed during construction to ensure impacts to waterways are minimised in accordance with *Managing Urban Stormwater Soils and Construction*, also known as the Blue Book (current edition).

G. Discharge of wastewater and/or contaminated stormwater to watercourses or waterways is not permitted unless other specified in an environmental protection licence issued under the *Protection of the Environment Operations Act 1997*. Development must obtain the appropriate water licenses in accordance with the *Water Act 1912* and the *Water Management Act 2000* and consider the relevant Water Sharing Plan.

Consideration for future stages of development

- Guidance on erosion and sediment management to inform Construction Management Plans for individual developments.
- Design guidance on how development should incorporate water sensitive urban design principles for the management of water quality and efficiency.
- Monitoring and reporting processes to measure the water quality of catchments.

11.5 Bushfire

The Alpine Precinct contains designated bushfire prone land. All new development on bushfire prone land needs to comply with the NSW Rural Fire Service' document *Planning for Bushfire Protection 2019* and/or any agreed policy as agreed by the relevant NSW Government agencies.

Aims

- To provide for the protection of human life and minimise impacts on property from the threat of bushfire, while having due regard to development potential, site characteristics and protection of the environment.
- To provide a suite of bushfire protection measures to reduce the impact of a bushfire.
- To ensure land is suitable for development in the context of bushfire risk, and protection measures are governed by the degree of risk posed to a development and the vulnerability of occupants.
- To provide adequate infrastructure and access/ egress associated with emergency evacuation and firefighting operations
- To enable appropriate ongoing land management practices.

Performance Criteria

A. Development is to:
   i. minimise perimeters exposed to the bushfire hazard.
   ii. minimise vegetated corridors that permit the passage of bushfire towards development.
   iii. provide for the siting of future development away from ridge-tops and steep slopes, within saddles and narrow ridge crests.
   iv. ensure capacity of existing infrastructure (such as roads and utilities) can accommodate the increase in demand during emergencies as a result of the development.

B. Asset Protection Zones are to be provided and maintained between a bushfire hazard and future development and are designed to address the relevant bushfire attack mechanisms.

C. Adequate access is to be provided from all properties to the wider road network for park users emergency services and to provide access to hazard vegetation to facilitate bushfire mitigation works and fire suppression.

D. Development is to minimise levels of radiant heat, localised smoke and ember attack through development design and siting.

E. The subdivision of land and location of developments should consider the future uses of land and the inclusion of roads into Asset Protection Zones.

Consideration for future stages of development

- Fire safety planning including a precinct wide emergency and evacuation plan.
- Access and utility requirements to ensure the safety of residents, the community and firefighters.

11.6 Sustainability and climate change

The Master Plan has been prepared to ensure development maximises sustainability opportunities that contribute to the Snowy Mountains fulfilling its vision of becoming a year-round sustainable tourism destination.

Climate change refers to long-term shifts in temperatures and weather patterns. These shifts may be natural, such as through variations in the solar cycle. But since the 1800s, human activities have been the main driver of climate change, primarily due to burning fossil fuels like coal, oil and gas.

Climate change has the potential to increase temperatures, resulting in fewer cold nights and an increase in hot days, reduced snow conditions and increased bushfire risk and intensity unless adequate mitigation measures are implemented.

There are a range of tools, organisations and programs available to support sustainability and climate change management within the Precinct including:

- ISCA Rating Tool
- Sustainability Advantage (a NSW Government program that provides organisations with sustainability initiative support)
- Green Star Rating
- NABERS

The NSW Government has set an ambitious policy framework including the Climate Change Strategy, Net Zero Plan Stage 1, and is leading the development of other supporting strategies such as the 20-Year Waste Strategy and Clean Air Strategy for NSW. These strategies will be important resources for guiding initiatives and development within the Precinct.

Aims

- The design and operation of accommodation, services and attractions within the Precinct should showcase leading practice in the application of sustainability concepts.
- To support the establishment of the Precinct as an internationally recognised sustainable tourism destination supporting year-round activation, eco-tourism and wellness, environmental performance and collaboration.
- To support National Parks and Wildlife Service and businesses in the Precinct to maximise efficiencies, reduce emissions and collaborate on net zero aspirations.
- To ensure development prioritises avoidance and mitigation of environmental impacts
- To prioritise active transport and support NSW Government to promote efficient transport modes
- To facilitate the design, construction, and operation of environmentally sustainable buildings, including renewable energy, efficient resource and energy use, resource re-use and reduced emissions and waste.
- To encourage the use of tools and programs to support sustainability goals for the Precinct
- To consult with Monero Ngarigo people regarding the integration of cultural land management practices
- To ensure climate change risks and mitigation measures are recognised to support an adaptable community resilient to climate change

Performance criteria

A. Development must be inclusive and sustainable and promote year round use.

B. Development should preserve the Precincts landscape, cultural, heritage and biodiversity values by avoiding and minimising impact.

C. Development should support sustainable and active transport opportunities and integrate open space. Buildings are to express a strong commitment to ESD principles and incorporate passive design, optimal orientation, effective sun shading, cross ventilation and open plan living. This should be evident in the external architectural expression.

D. Development should comply with applicable sustainability tools and programs for design, construction and operation.

E. Consideration must be given to climate responsiveness and resilience. Climate change risks, hazard and opportunities must be considered in the design, construction and operation of development within the Precinct.

F. Operators, lessees and licensees within the Precinct must prepare and maintain an Environmental Management System in accordance with ISO14001:2015 – Environmental management systems and the requirements of the Plan of Management for Kosciuszko National Park.

Consideration for future stages of development

- Building design should demonstrate how it aligns with applicable tools, programs and rating schemes to ensure developments embed a range of sustainability measures across the lifecycle of assets.
- Implement the recommendations of the Climate Change Adaptation Plan where applicable to the Precinct.
- Consultation with Monero Ngarigo people regarding the integration of cultural land management practices.

12

Place and landscape

Credit: Tourism Snowy Mountains.

12.1 Aboriginal cultural heritage

Aboriginal Cultural Heritage sites within the Alpine Region potentially impacted by development will be managed according to NSW law and in consultation with traditional custodian representatives. Wherever possible culturally significant artefacts, places, vegetation, and view scapes will be protected, maintained and enhanced to conserve their significance.

The Traditional Custodians of the Snowy Mountains are the Monero Ngarigo people, in connection with the Walgalu, Ngunnawal, and Bidhawal people. The boundaries of the Monero Ngarigo extend from the western slopes of the coastal ranges to the eastern side of the Kosciuszko plateau and further north, between the coastal ranges and the mountains on the banks of the Murrumbidgee River.

The Aboriginal Cultural Heritage Assessment Report that has informed this Master Plan has focused on key development opportunity areas within the Snowy Mountain Special Activation Precinct's sub-precincts (approximately 330 ha) including areas near Jindabyne and several locations within the Kosciuszko National Park with the aim of identifying opportunities to conserve significant Aboriginal cultural heritage values within the Special Activation Precinct and to devise strategic mapping to enable streamlined planning.

The Master Plan proposals and controls have been developed to incorporate Aboriginal culture and values. The project aspires to achieve a 'sense of place', history and spirit within the precinct, one which can be passed on to the next generation. The Master Plan comprises strategic mapping which indicate zones of high, medium, and low Aboriginal cultural heritage (ACH) potential to guide strategic planning and to help scope development project proposals

With a focus on avoiding and minimising impacts on Aboriginal cultural heritage, development is best suited to 'disturbed land' where cultural heritage values may no longer exist and where impacts are unlikely to harm Aboriginal cultural heritage values. Development in areas with the highest ACH potential should be avoided or minimised. ACH areas have been based on the criteria listed in Table 4.

Aims

- Ensure the Snowy Mountains Special Activation Precinct celebrates and protects its history and landscape values, particularly its occupation by Aboriginal people and their connection to the land.
- Ensure Aboriginal culturally significant places and artefacts are protected, maintained and enhanced.
- Allow and promote development and Precinct design that recognises its Connection and Return to Country.
- Build relationships with Traditional Custodians at all stages of development, and in accordance with the Government Architect NSW draft Connecting with Country framework.
- Celebrate Monero Ngarigo culture, values, and heritage in future development.
- Enable formal Monero Ngarigo participation in Caring for Country, making decisions about Country, contemporary use of natural resources and Cultural knowledge transmission, and protection of key geographical features.
- Respect Monero Ngarigo people's rights, obligations, roles and connections to Country as Traditional Custodians of the land and waterways by embedding Aboriginal cultural knowledge in project delivery.
- To provide Traditional Custodians with opportunities to Return to Country and enhance the Aboriginal community's sense of belonging across the Precinct.
- To support Aboriginal employment and business opportunities across the Precinct and to develop interpretation and tourism experiences that enhance the broader community's understanding and enjoyment of Aboriginal culture.

Performance Criteria

A. Areas of Aboriginal cultural heritage (included as part of the environmentally sensitive areas map) should not be developed. Development may occur in these areas if it is for essential infrastructure and where further Aboriginal cultural heritage assessment will be undertaken to appropriately mitigate and manage any impacts to Aboriginal cultural heritage items, places or areas.

B. Aboriginal culturally significant places and sites should be integrated with areas of environmental significance and green space (where appropriate) across the Precinct. This may continue to evolve as greening opportunities across the Precinct are established

C. Development in areas where surveys have not been undertaken require further Aboriginal cultural heritage assessment. These assessments must be carried out in accordance with Guide to investigating, assessing and reporting on Aboriginal cultural heritage in NSW (as modified from time to time) prior to any development on this land. These assessments must include a visual survey of the land. Once suitably assessed, any land identified as having Aboriginal cultural heritage significance should be included on the Environmentally Sensitive Areas (ESA) map. Development is to be assessed against the mapped zones of archaeological potential as required by the following:

    i. development within areas identified as 'disturbed land' do not require any further investigation beyond considering the potential for subsurface archaeological deposits. If current disturbances are considered to cover intact archaeological deposits, further investigation should take place that may include test excavation. Should development encounter any unexpected finds during construction, the procedures under the relevant unexpected finds protocol should be followed.

    ii. works within areas identified as ''moderate ACH potential' or 'high ACH potential' should be avoided. Where development will impact these areas, further Aboriginal cultural heritage assessment must be undertaken. This assessment should include a visual inspection, possibly test excavation if warranted, and participation from the Aboriginal community.

D. Development planned on land in which an Aboriginal object is located should be supported by a heritage impact assessment which should be prepared to assess the extent to which a proposed development would harm Aboriginal objects.

E. If impact to an Aboriginal object is unavoidable, an Aboriginal Heritage Impact Permit (AHIP) under Part 6 of the National Parks and Wildlife Act 1974 would be required.

Consideration for future stages of development

- An Aboriginal Cultural Heritage Management Plan will be developed as part of the Alpine Development Control Plan that includes:
    - where possible, ongoing management and maintenance practices for areas of Aboriginal cultural heritage
    - how Aboriginal cultural heritage areas will be integrated with areas of high ecological value and green connections
    - protocol for unexpected finds during construction.

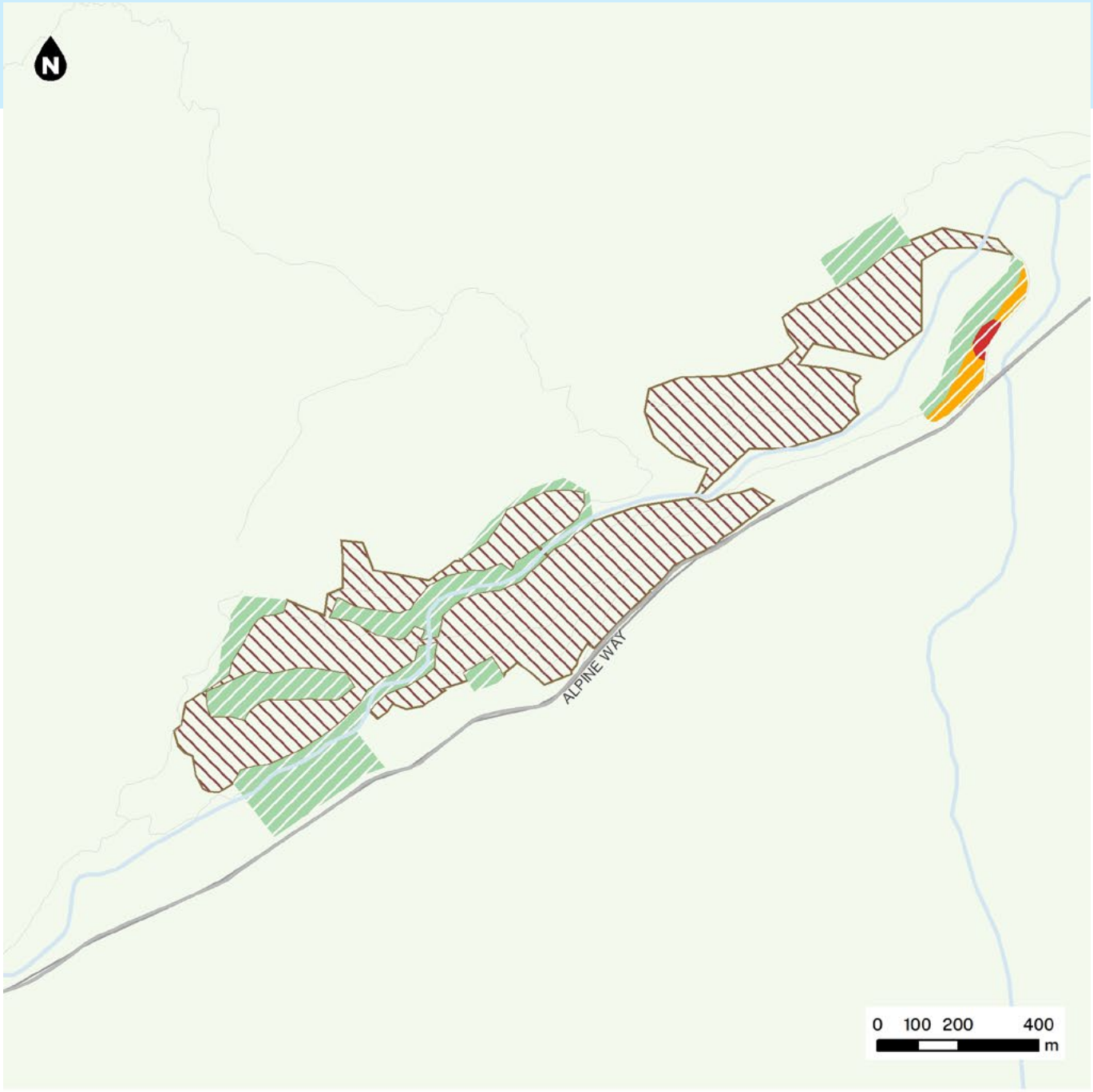


Figure 58: Aboriginal Cultural Heritage (ACH) potential - Thredbo

Road
Waterway
ACH high potential
ACH moderate potential
ACH low potential
Disturbed land

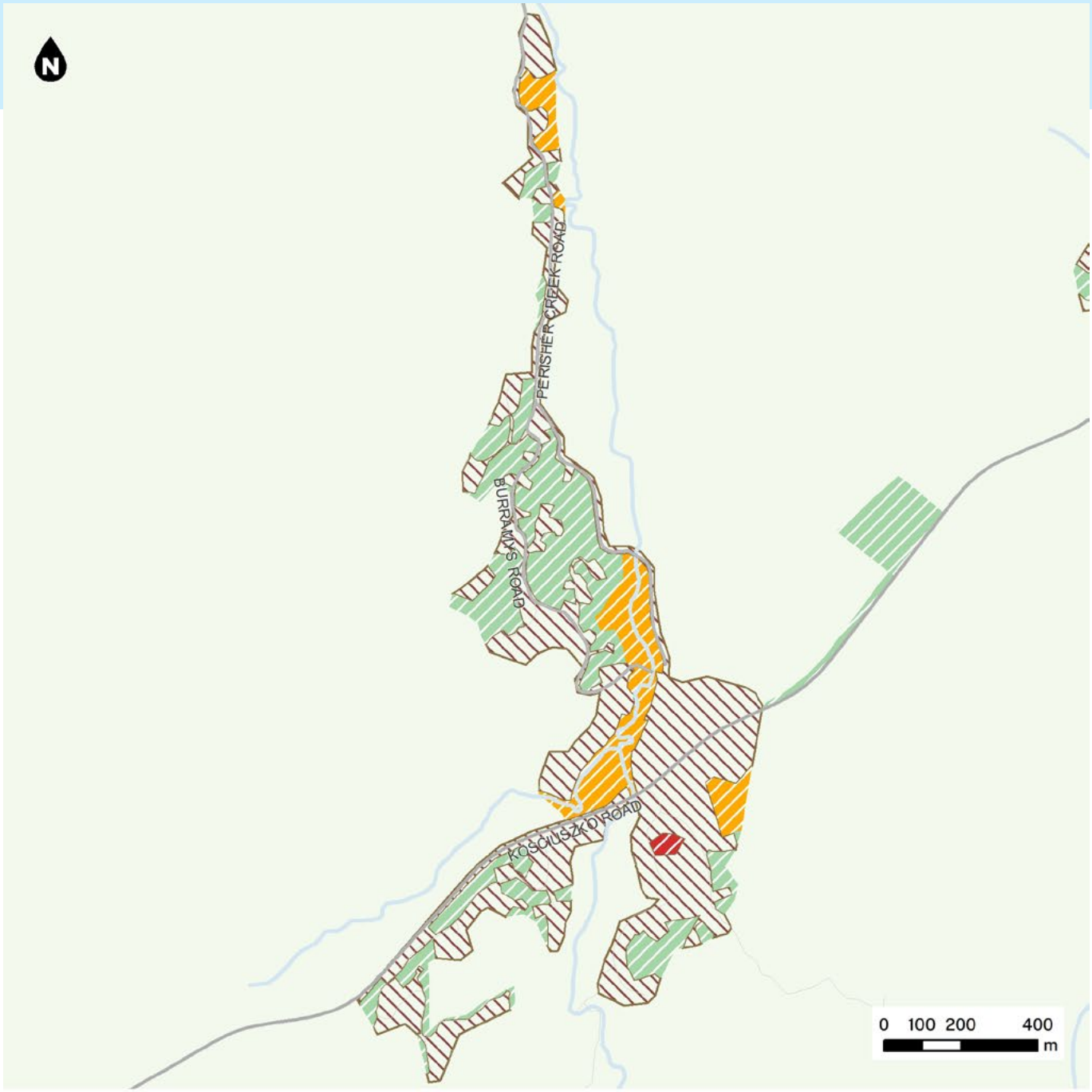


Figure 59: Aboriginal Cultural Heritage (ACH) potential - Perisher Valley

Road
Waterway
ACH high potential
ACH moderate potential
ACH low potential
Disturbed land

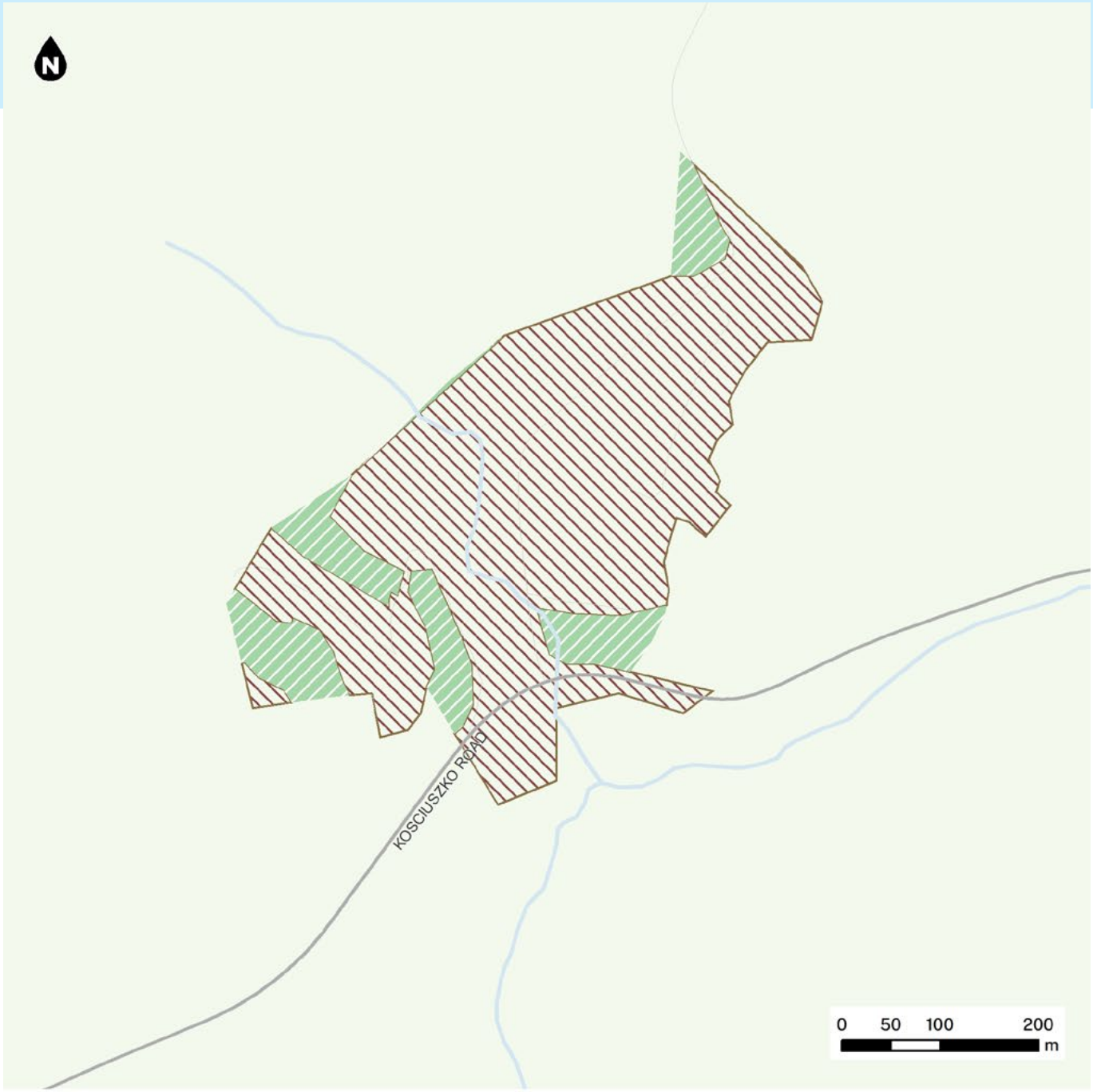


Figure 60: Aboriginal Cultural Heritage (ACH) potential - Smiggin Holes

Road
Waterway
ACH low potential
Disturbed land

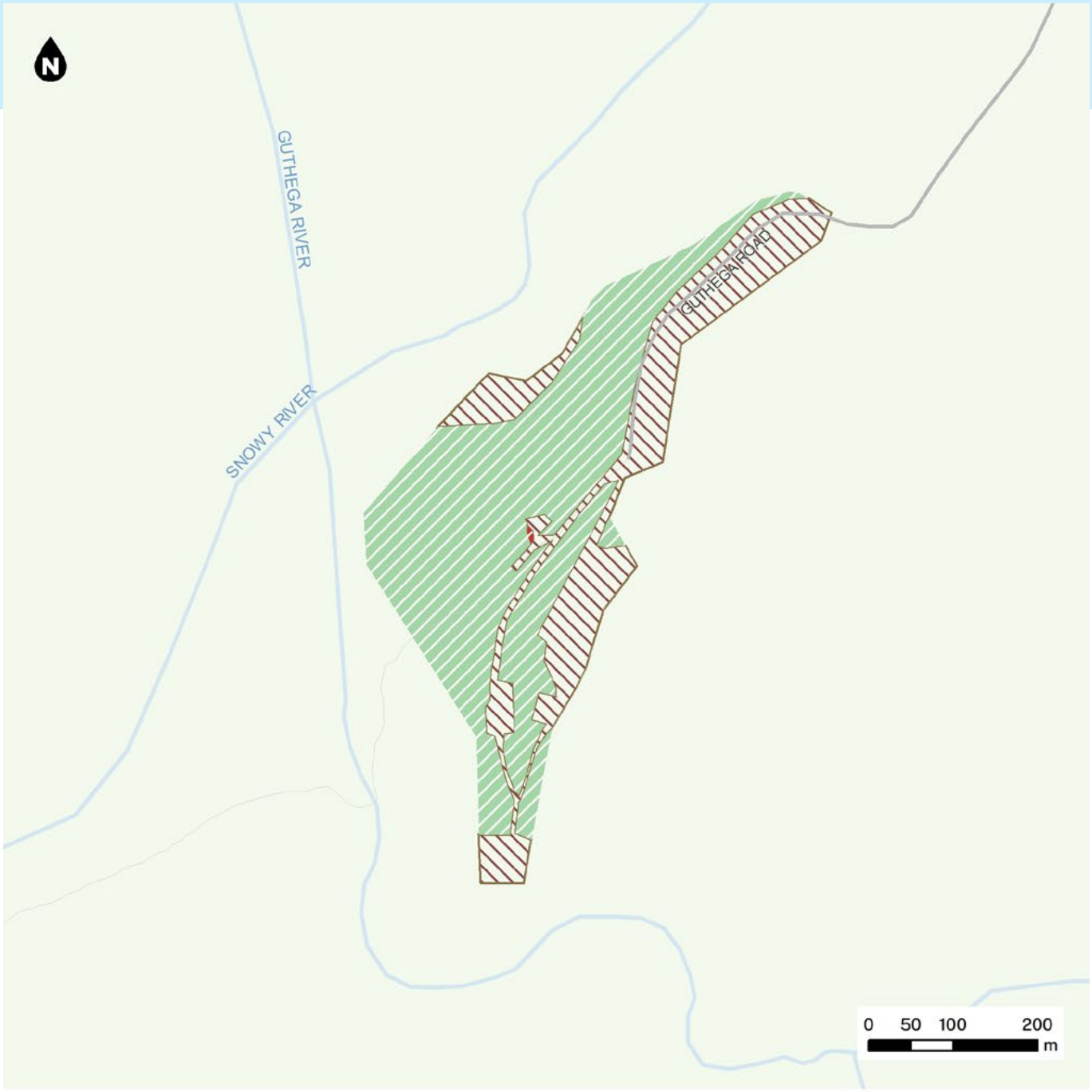


Figure 61: Aboriginal Cultural Heritage (ACH) potential - Guthega

Road
Waterway
ACH high potential
ACH low potential
Disturbed land

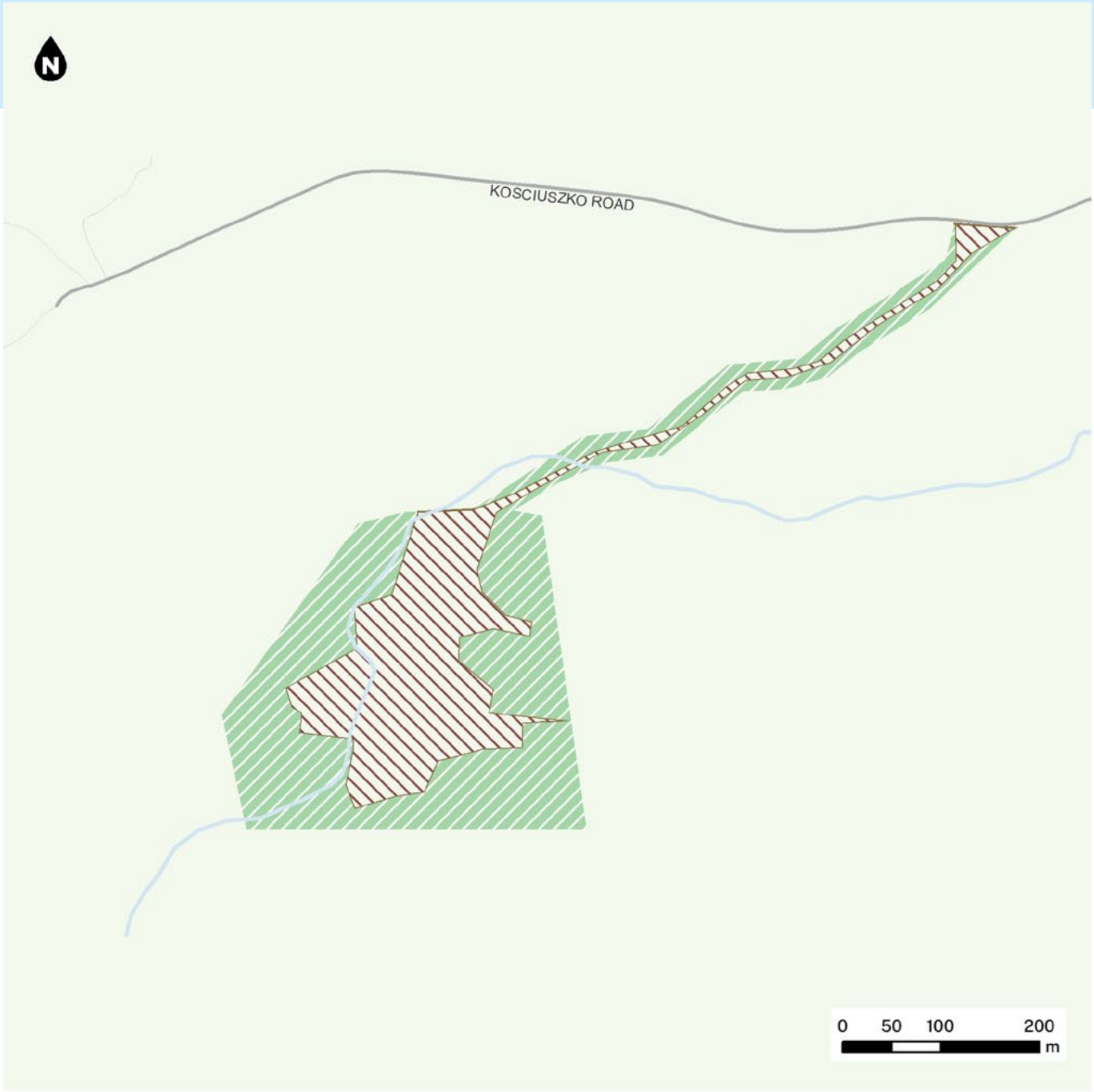


Figure 62: Aboriginal Cultural Heritage (ACH) potential - Charlotte Pass

Road
Waterway
ACH low potential
Disturbed land

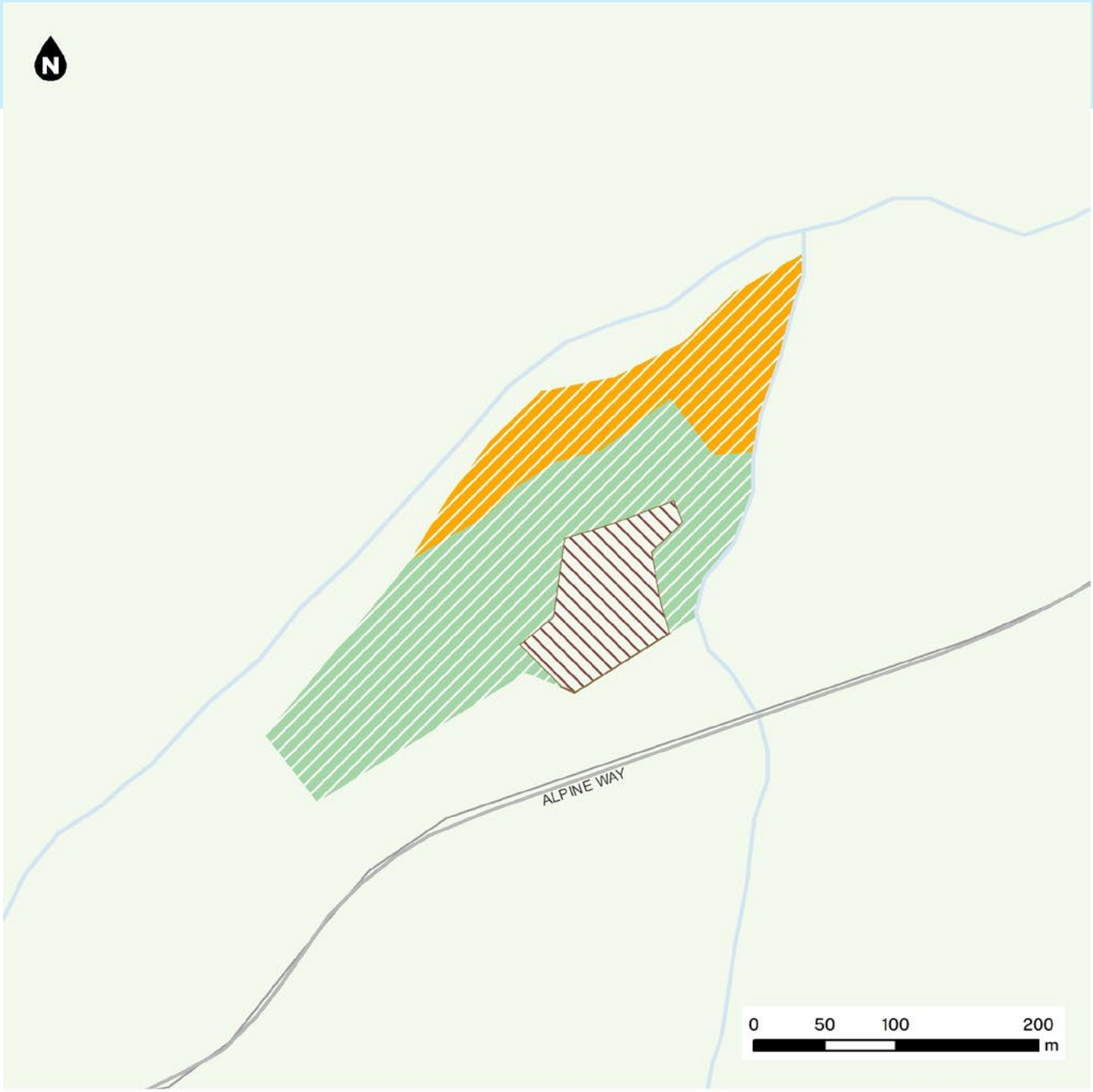


Figure 63: Aboriginal Cultural Heritage (ACH) potential - Thredbo Ranger Station

Road
Waterway
ACH moderate potential
ACH low potential
Disturbed land

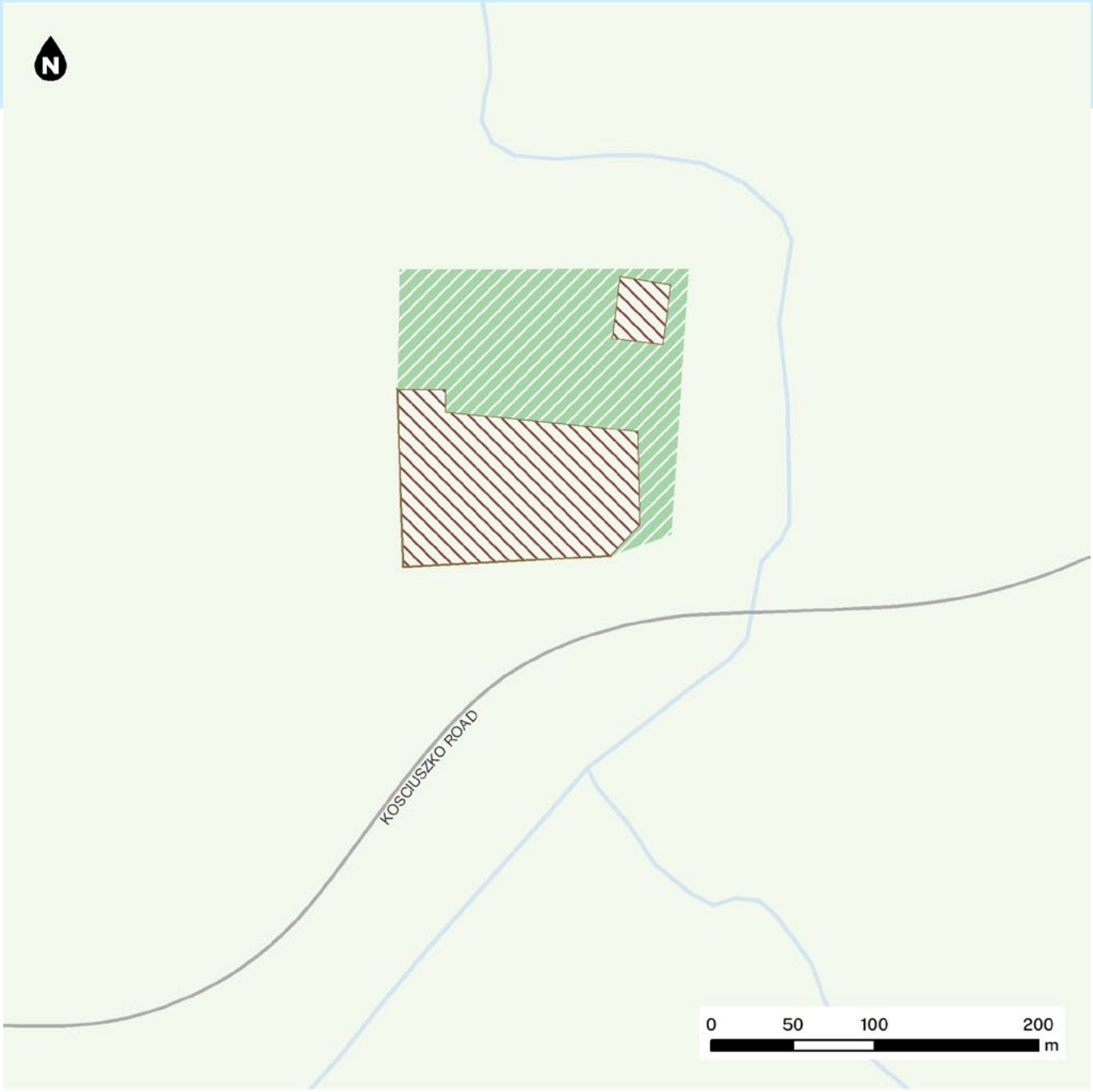


Figure 64: Aboriginal Cultural Heritage (ACH) potential - Sponars Chalet

Road
Waterway
ACH low potential
Disturbed land

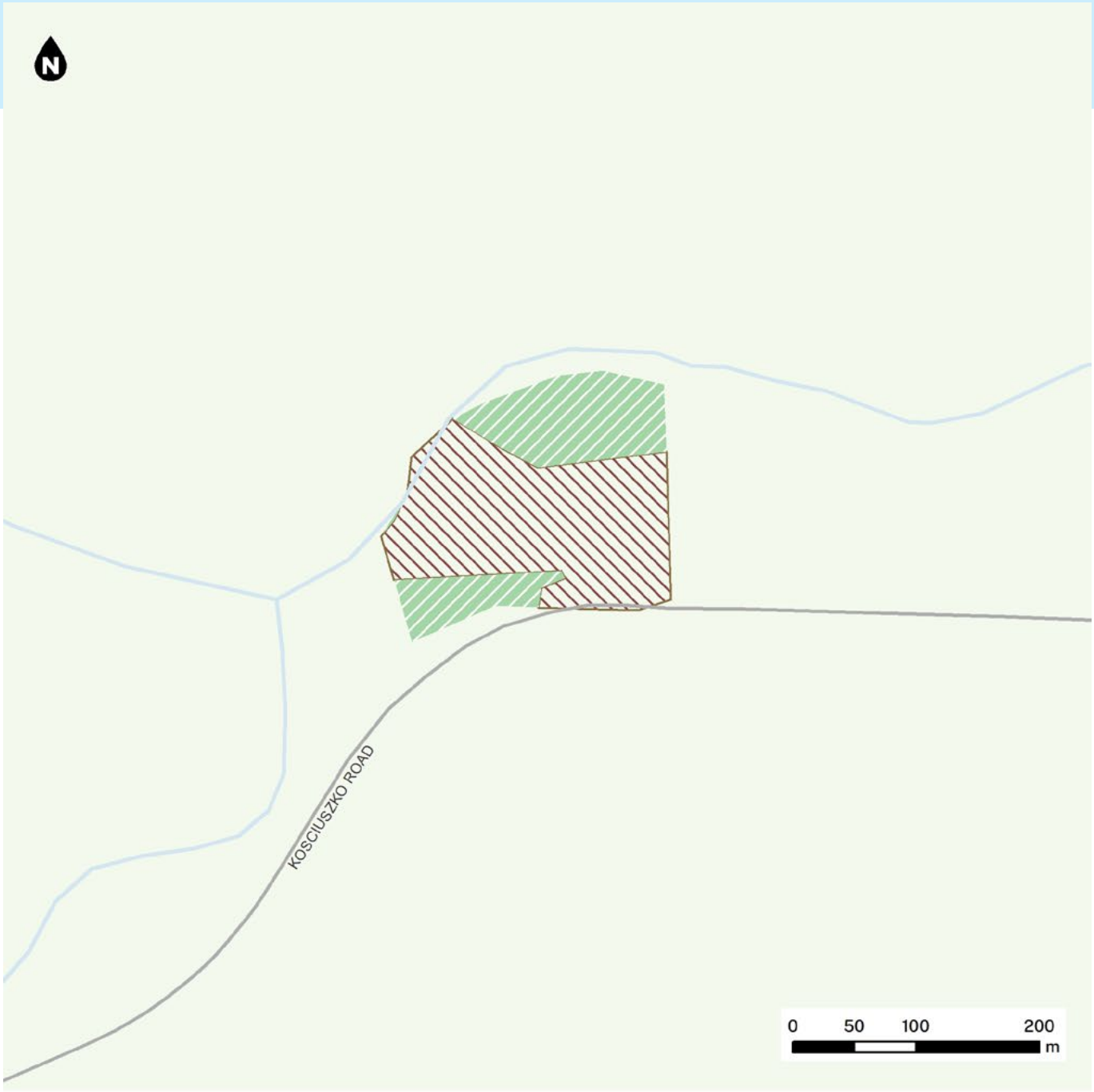


Figure 65: Aboriginal Cultural Heritage (ACH) potential - Ski Rider Hotel

Road
Waterway
ACH low potential
Disturbed land

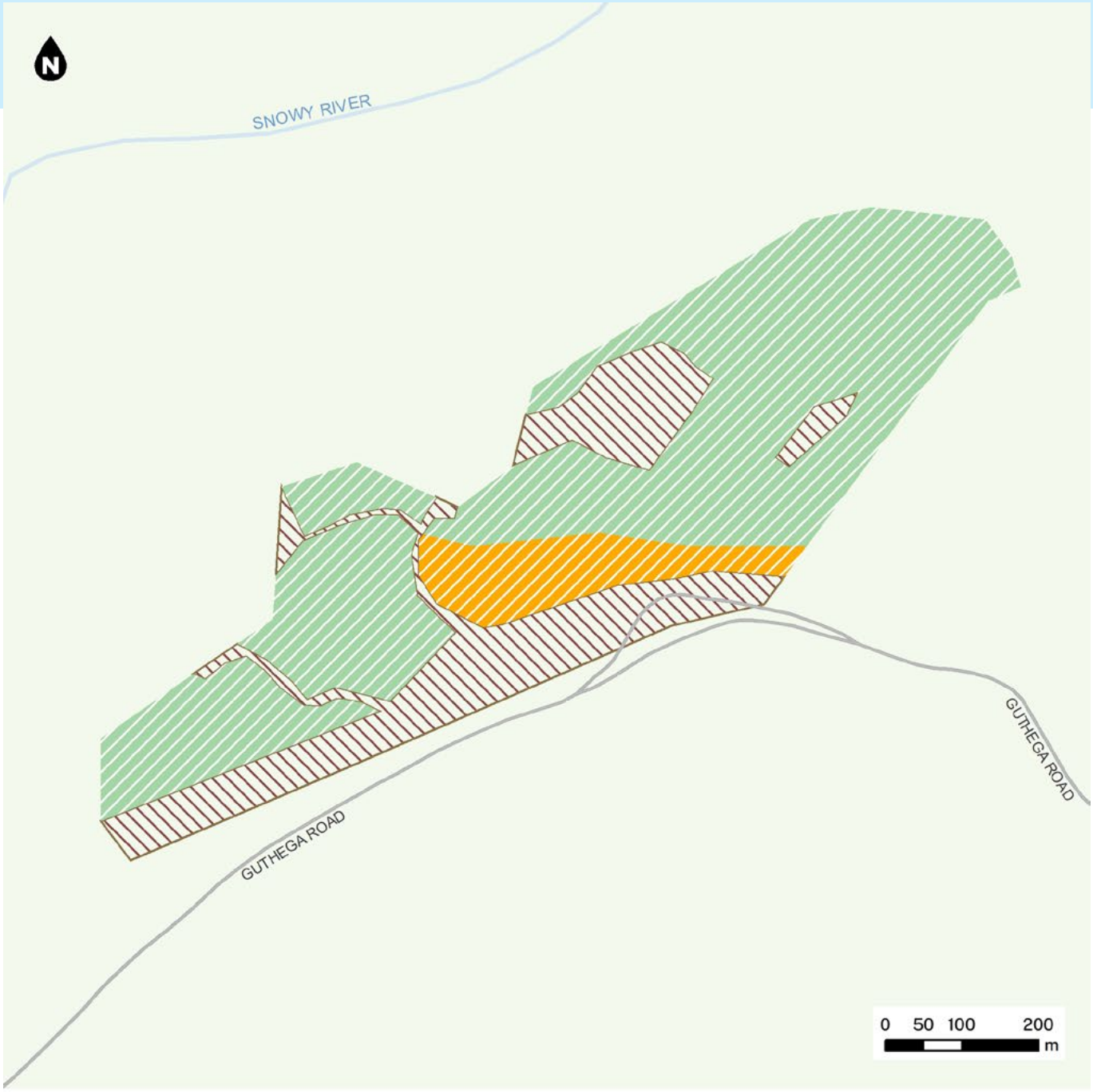


Figure 66: Aboriginal Cultural Heritage (ACH) potential - Island Bend

Road
Waterway
ACH moderate potential
ACH low potential
Disturbed land

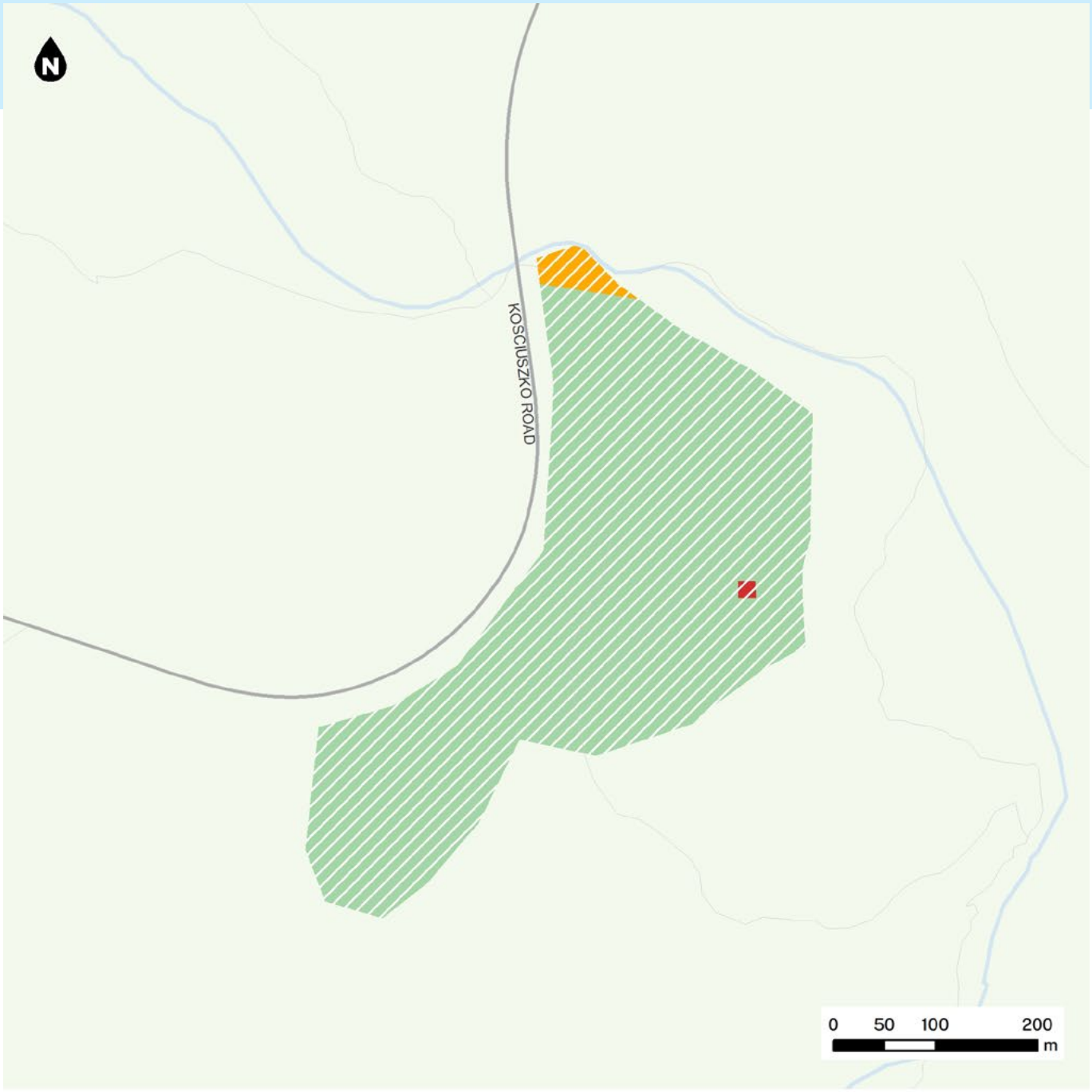


Figure 67: Aboriginal Cultural Heritage (ACH) potential - Kosciuszko Tourist Park

Road
Waterway
ACH high potential
ACH moderate potential
ACH low potential

12.2 Historic heritage

The region known as the Monaro was first accessed by Europeans in 1823 when Currie and Ovens crossed the Bredbo River and noted the rolling grassy plains to the south. Tourism was a major source of growth in the region from 1909 when the area became a popular destination for trout fishing after brown and rainbow trout were introduced into the local streams. The establishment of Perisher Blue (established from 1939) and Thredbo skiing resorts (post 1957) resulted in further growth of the town for tourism purposes.

The Precincts-Regional SEPP lists places that have been assessed as having local heritage values and are protected by the *Heritage Act 1977.*

Aims

- Ensure historic heritage places are protected, maintained and enhanced.
- Identify areas where future development should not occur due to historic significance.
- Ensure that development adjacent to heritage items complements, is designed and is sited to protect the heritage significance of the item and its setting.
- Identify where developments could take place while conserving historic values.
- Ensure the broader heritage values such as the character of each alpine village is conserved.
- Determine how historic heritage can be incorporated into the 'visitor experience' of the region.

Performance Criteria

A. Development in areas defined as 'disturbed land' can occur without further historic heritage investigation however must consider neighbouring heritage items and broader heritage values.

B. Development on land where a heritage item is situated, that is a heritage item or is on land adjacent to a heritage item must prepare a statement of heritage impact.

C. Development in areas defined as 'high risk' or 'moderate risk' requires further heritage assessment where the development is likely to materially have a major affect on a heritage item or its value. Development is considered to have a materially major affect if it involves:

   i. the full or partial demolition of a building.

   ii. major alterations or additions.

   iii. major adverse impacts, such as the removal of significant fabric, obscuring key views or dominating a heritage item, or the removal of evidence of significant historical associations; and

   iv. impact to significant archaeological deposits.

D. Development in areas defined as 'high risk' or 'moderate risk' requires further heritage assessment where the development is likely to materially have a minor affect on a heritage item or value. Development is considered to have a minor affect if it involves (but is not limited to):

   i. repairs or restoration to fabric.

   ii. installation of fire safety equipment.

   iii. installation of disabled access.

   iv. replacement of awnings, balconies, etc.

   v. installation of signage or fencing.

   vi. excavation of areas without archaeological potential.

   vii. erection of temporary structures.

   viii. installation of safety and security equipment.

E. Where development is likely to materially have a major effect on a heritage item or value, further heritage assessment is required. This heritage assessment includes:

   i. a visual inspection to determine the existing heritage values.

   ii. an archaeological assessment (if appropriate).

   iii. preparation of a statement of heritage impact.

F. Where development will have minor effect on a heritage item or value, a heritage assessment may be required. This heritage assessment may include: a visual inspection to determine the existing heritage values.

   i. an archaeological assessment (if appropriate).

   ii. use of a previously prepared heritage study if applicable.

G. Development that is likely to have a materially major or minor effect on a heritage item or its value must:

   i. identify the impacts to the heritage values of an item or place.

   ii. demonstrate the need for the impact and how alternatives to the impact have been considered.

   iii. demonstrate how the adverse impacts will be minimised or mitigated.

H. Development adjacent to a heritage item should ensure impacts to the heritage item are minimised, including through the provision of appropriate curtilages. There may be opportunities to reduce the curtilage to some heritage items if it can be demonstrated the development will not have a significant impact on the heritage item or its value.

I. Heritage items must be used for purposes that are appropriate to their heritage significance, including adaptive re-use where appropriate.

J. Development is to ensure long-term heritage conservation outcomes are retained or interpreted to reflect the history of heritage items and places.

K. Development should through redevelopment or upgrades remove inappropriate or unsympathetic alterations and additions to heritage items and reinstate significant missing details and building elements, where possible.

Consideration for future stages of development

- A strategy for the re-use of heritage listed buildings and principles for the design of heritage curtilages that should be provided.
- If heritage listed items are being integrated as part of a broader development scheme, design guidance for how new development or redevelopments can sympathetically respond to heritage listed items.
- Design guidance for development in the Alpine Precinct that sympathetically responds to, acknowledges and strengthens the heritage values and natural landscape of the site. This should incorporate best practice guidance from the Design Guide for Heritage prepared by the Heritage Council of NSW and the NSW Government Architect.
- A Heritage Management Plan that includes:
  - how historic heritage areas will be integrated with areas of high ecological value and green connections
  - protocol for unexpected finds during construction.

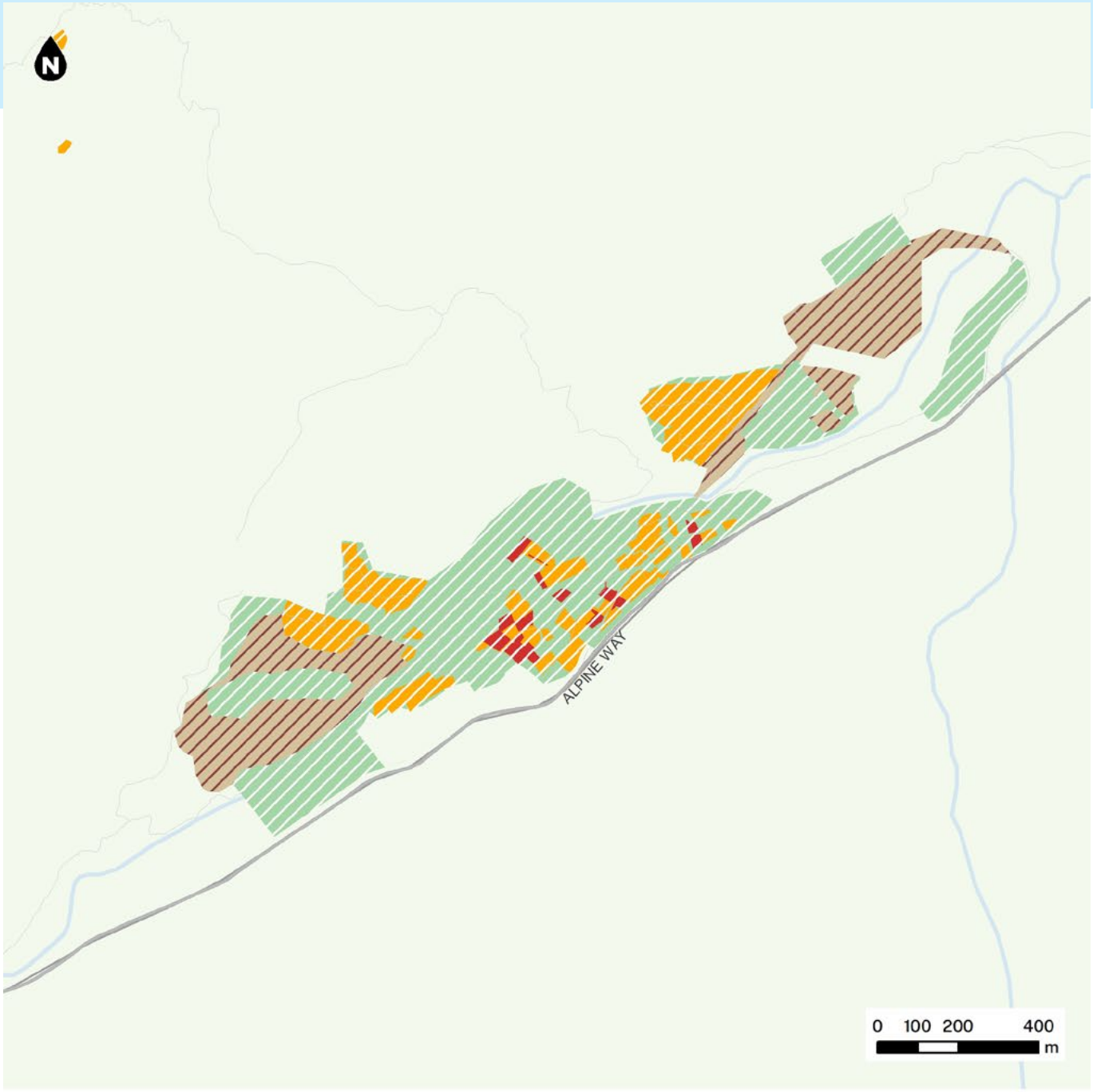


Figure 68: Historic heritage - Thredbo

Road
Waterway
Historic heritage - high risk
Historic heritage - moderate risk
Historic heritage - low risk
Disturbed land

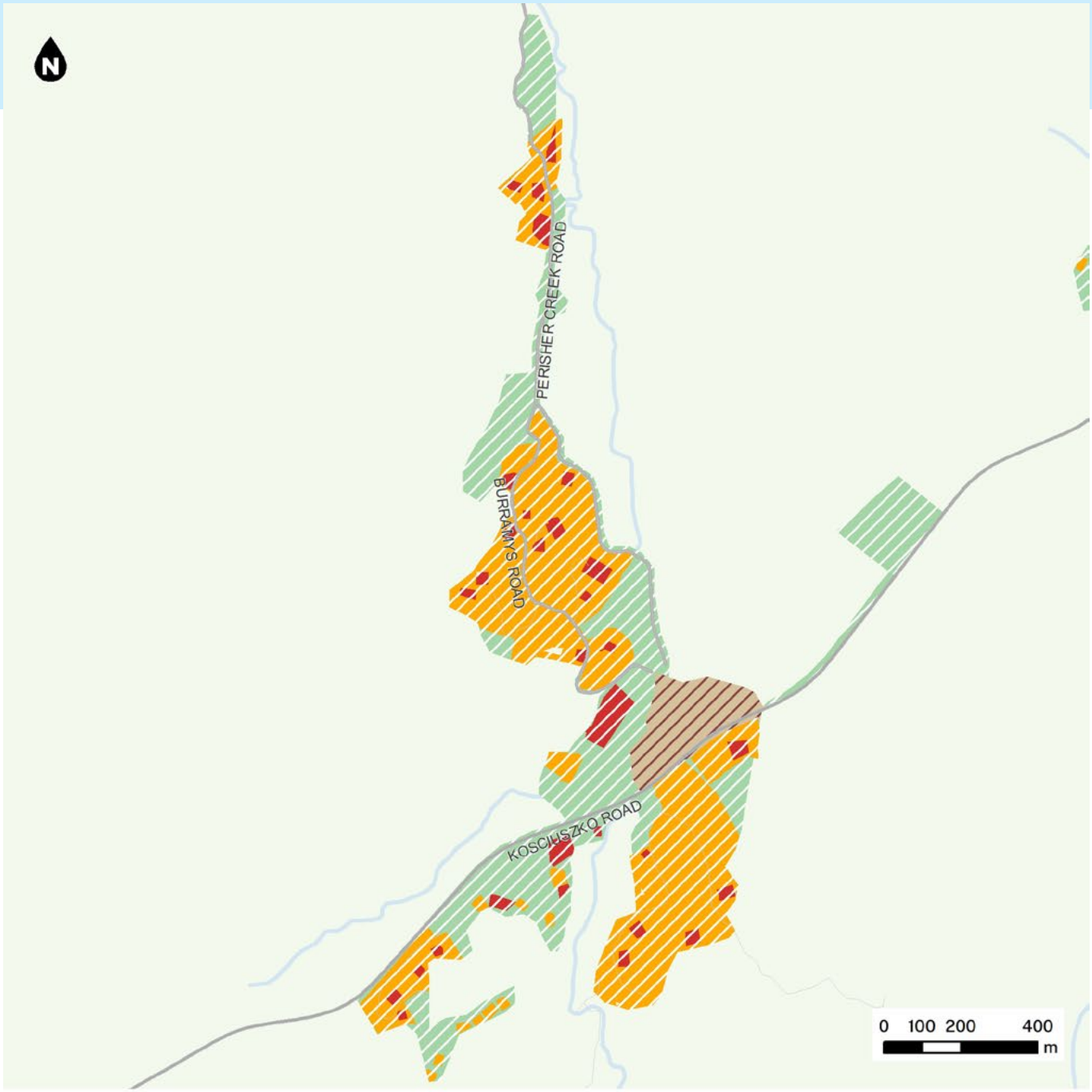


Figure 69: Historic heritage - Perisher Valley

- Road
- Waterway
- Historic heritage - high risk
- Historic heritage - moderate risk
- Historic heritage - low risk
- Disturbed land

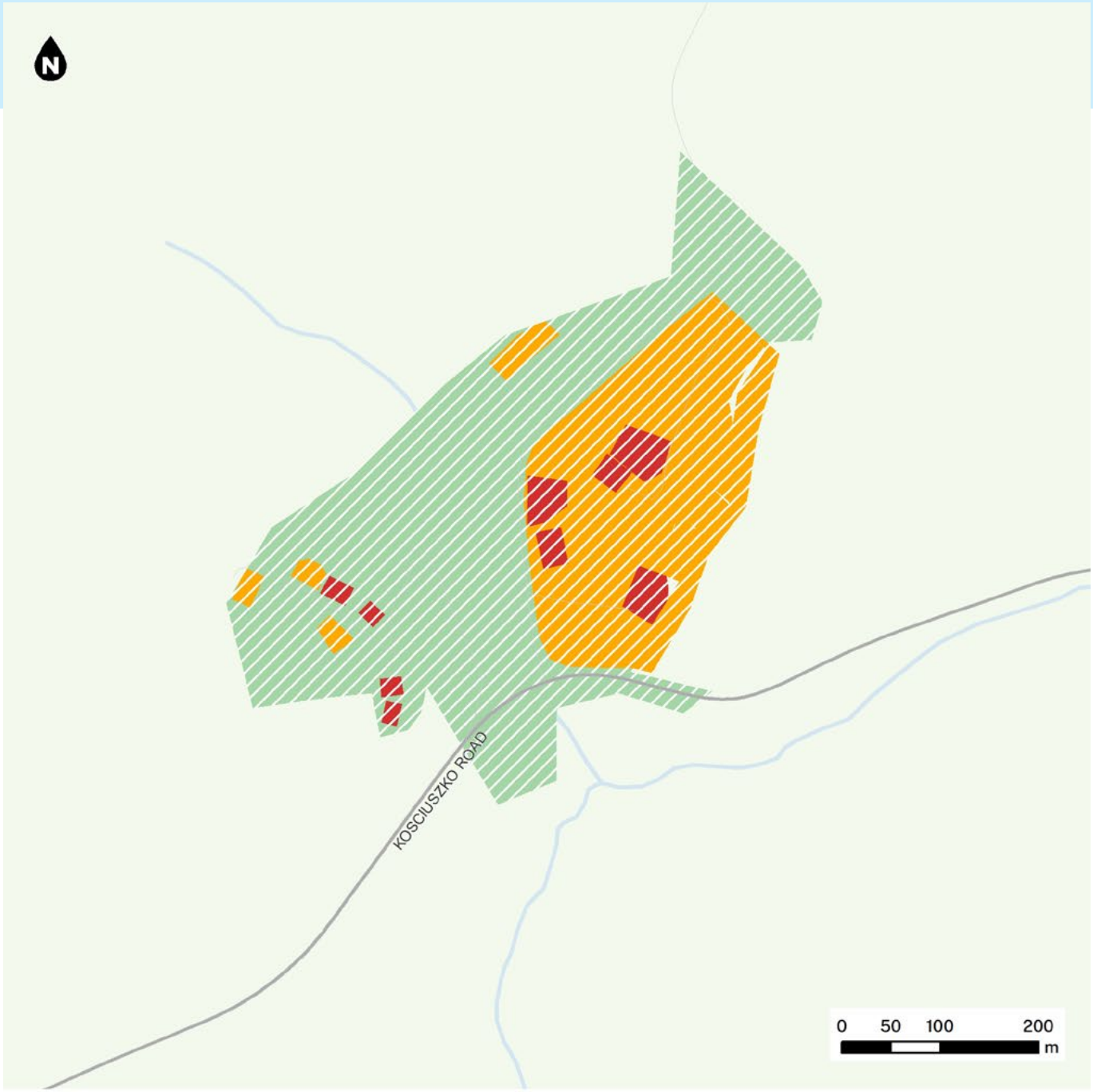


Figure 70: Historic heritage - Smiggin Holes

Road
Waterway
Historic heritage - high risk
Historic heritage - moderate risk
Historic heritage - low risk

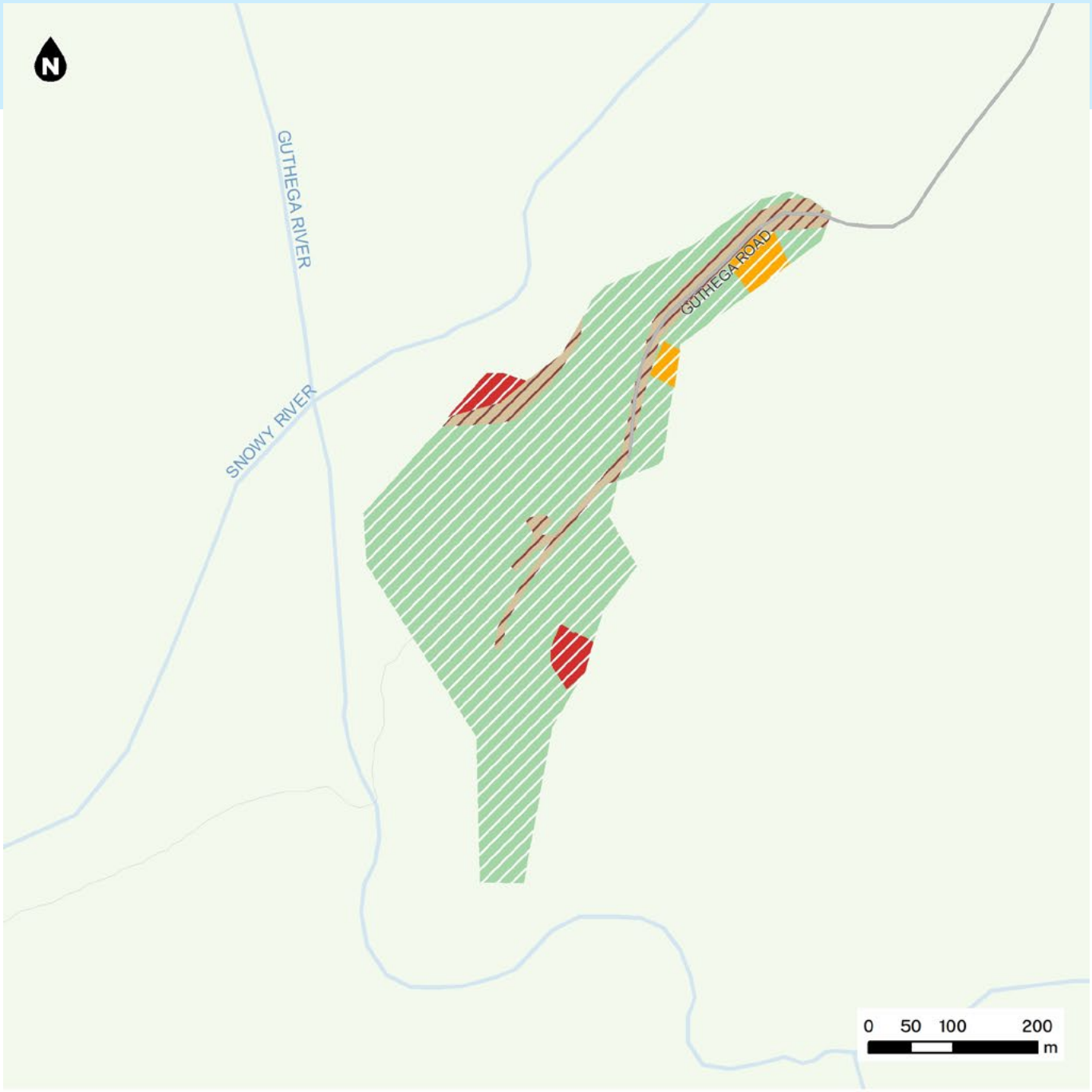


Figure 71: Historic heritage - Guthega

- Road
- Waterway
- Historic heritage - high risk
- Historic heritage - moderate risk
- Historic heritage - low risk
- Disturbed land

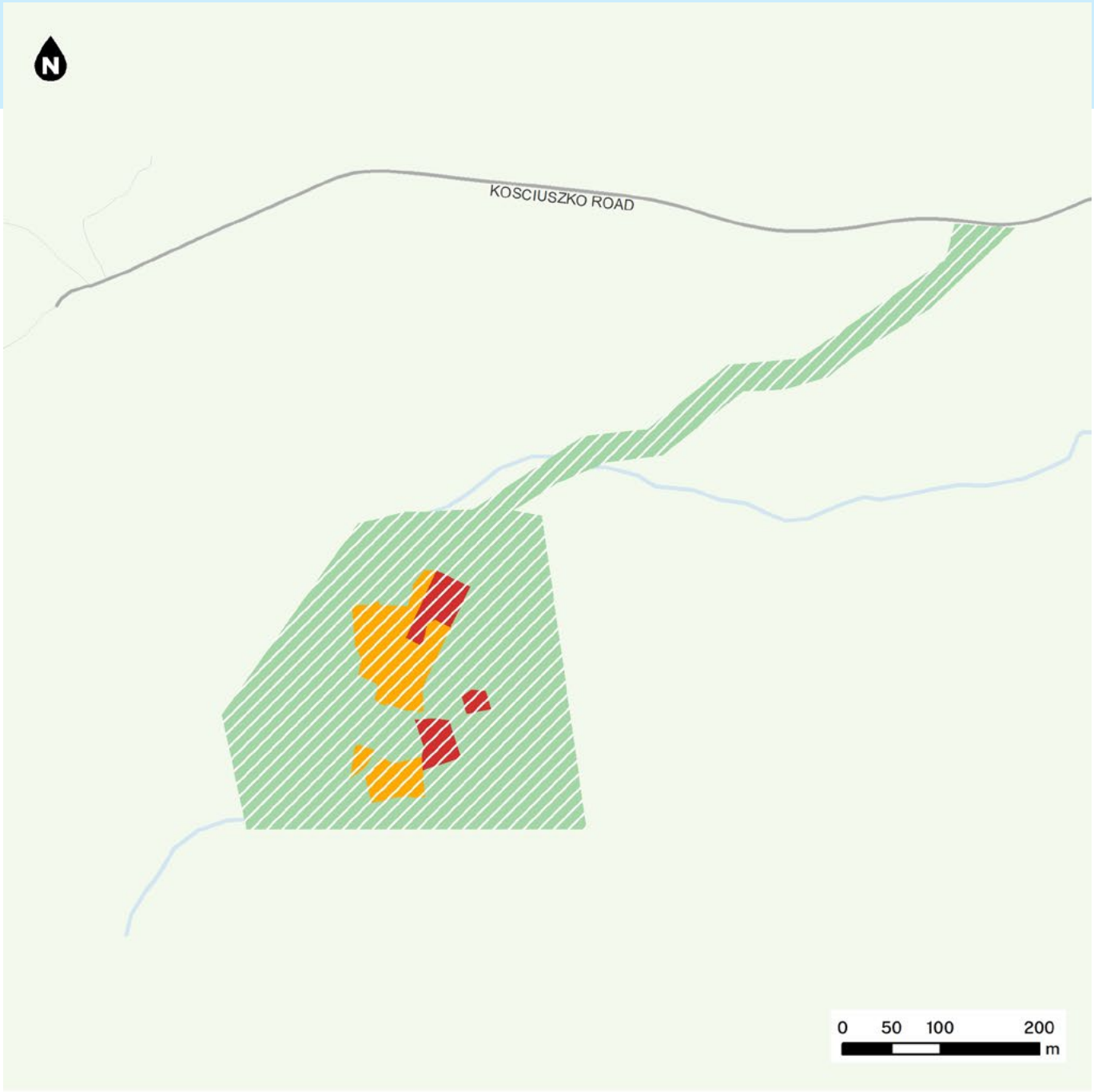


Figure 72: Historic heritage - Charlotte Pass

Road
Waterway
Historic heritage - high risk
Historic heritage - moderate risk
Historic heritage - low risk

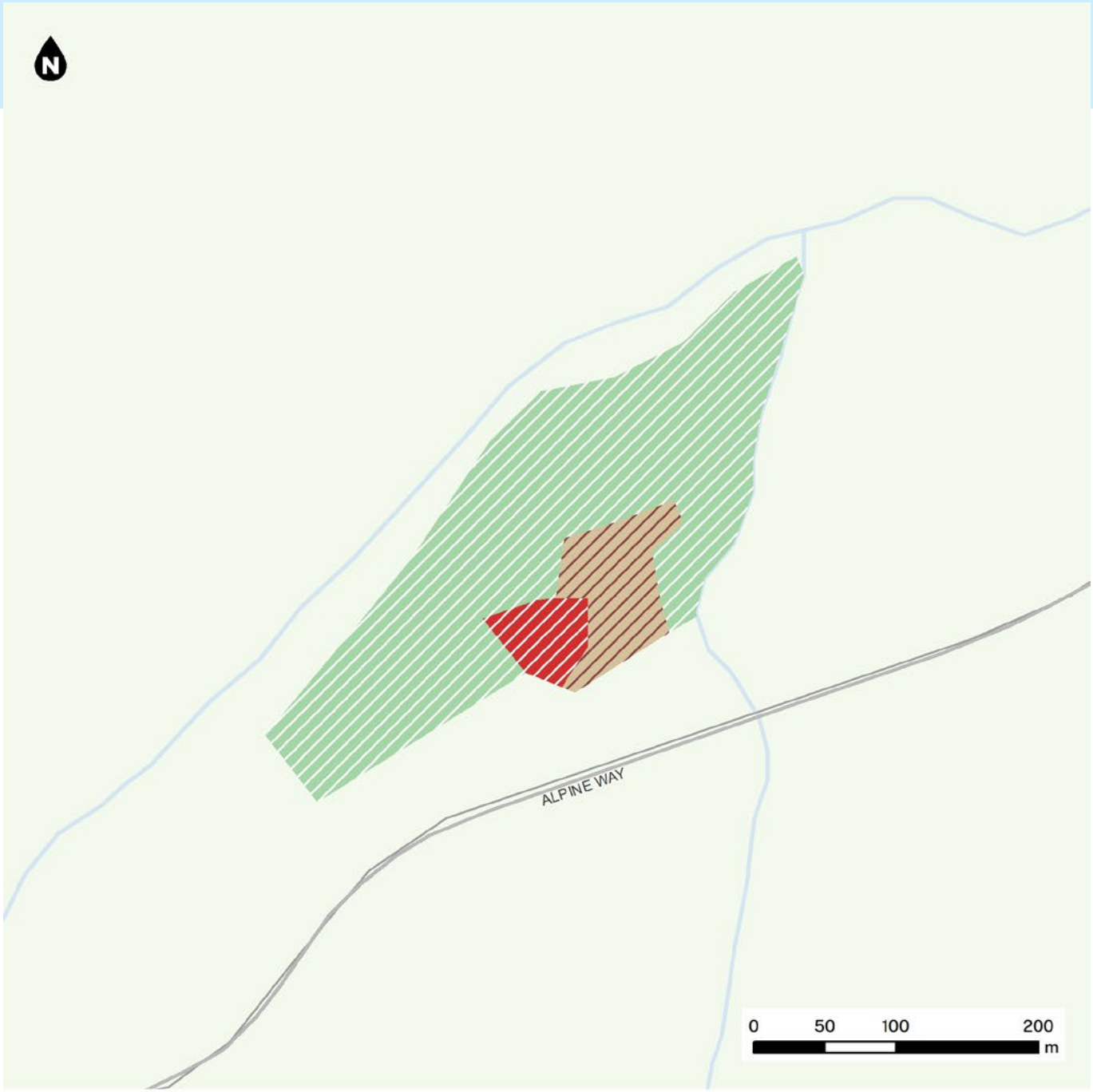


Figure 73: Historic heritage - Thredbo Ranger Station

Road
Waterway
Historic heritage - high risk
Historic heritage - low risk
Disturbed land

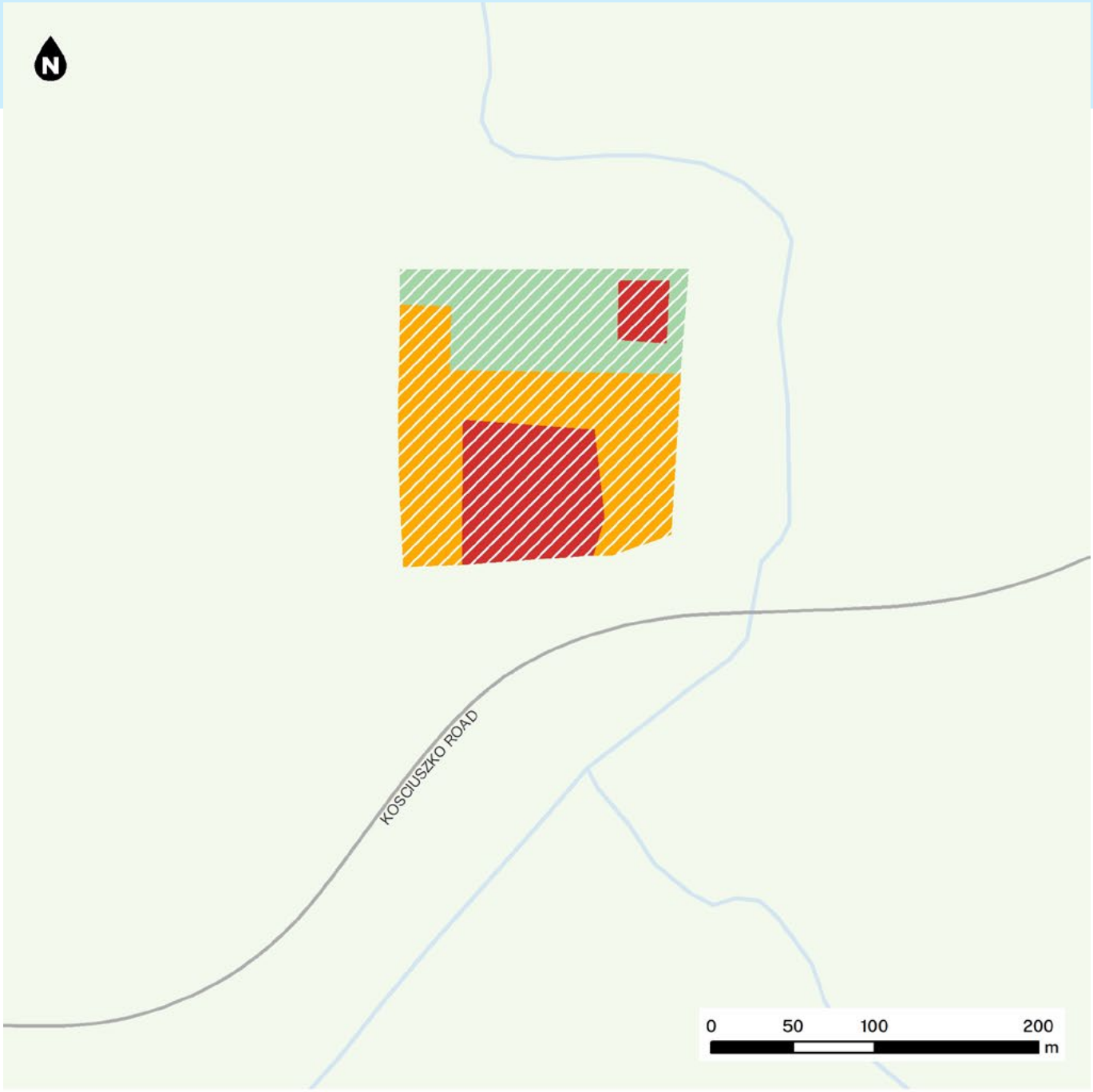


Figure 74: Historic heritage - Sponars Chalet

Road
Waterway
Historic heritage - high risk
Historic heritage - moderate risk
Historic heritage - low risk

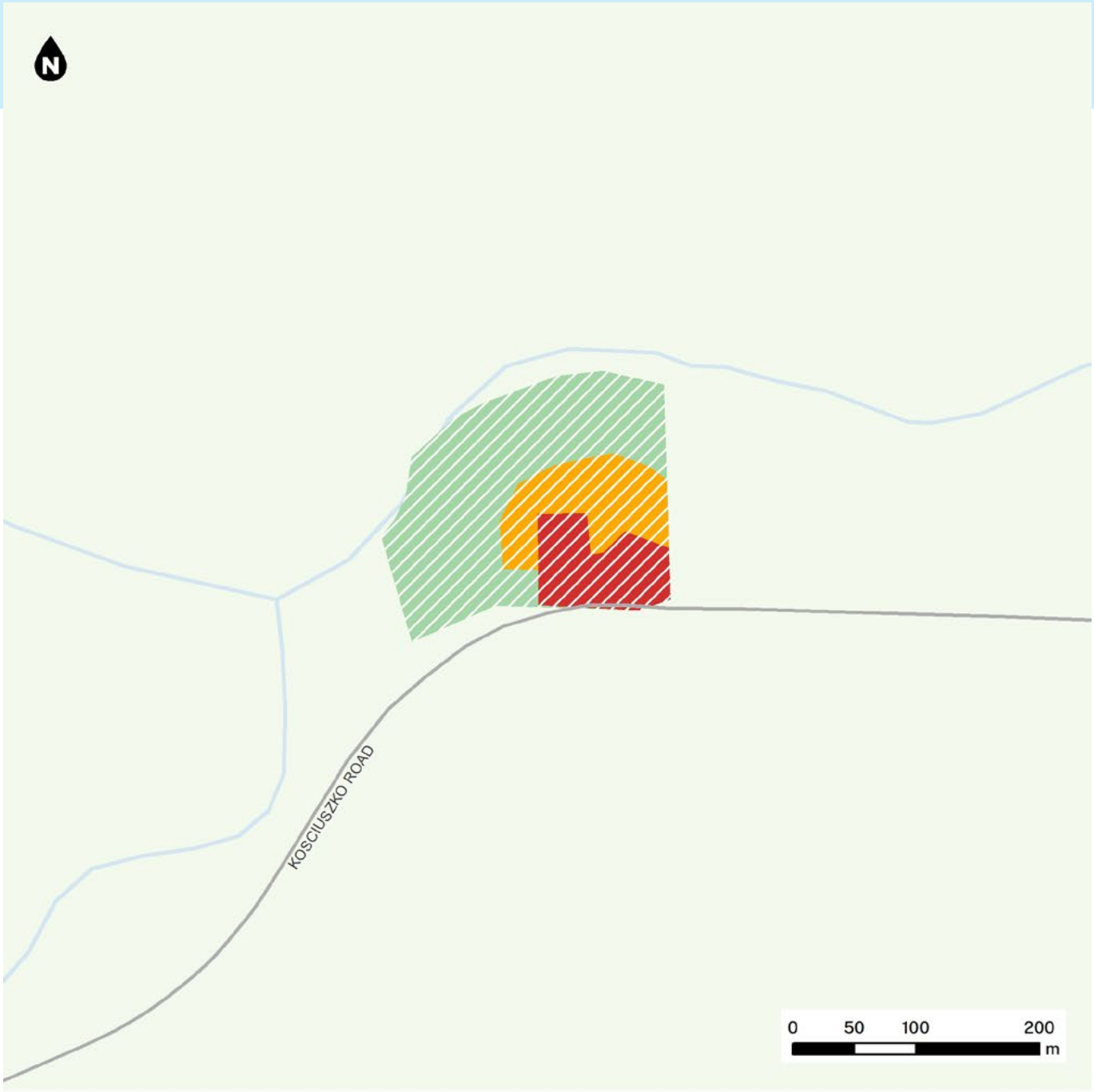


Figure 75: Historic heritage - Ski Rider Hotel

Road
Waterway
Historic heritage - high risk
Historic heritage - moderate risk
Historic heritage - low risk

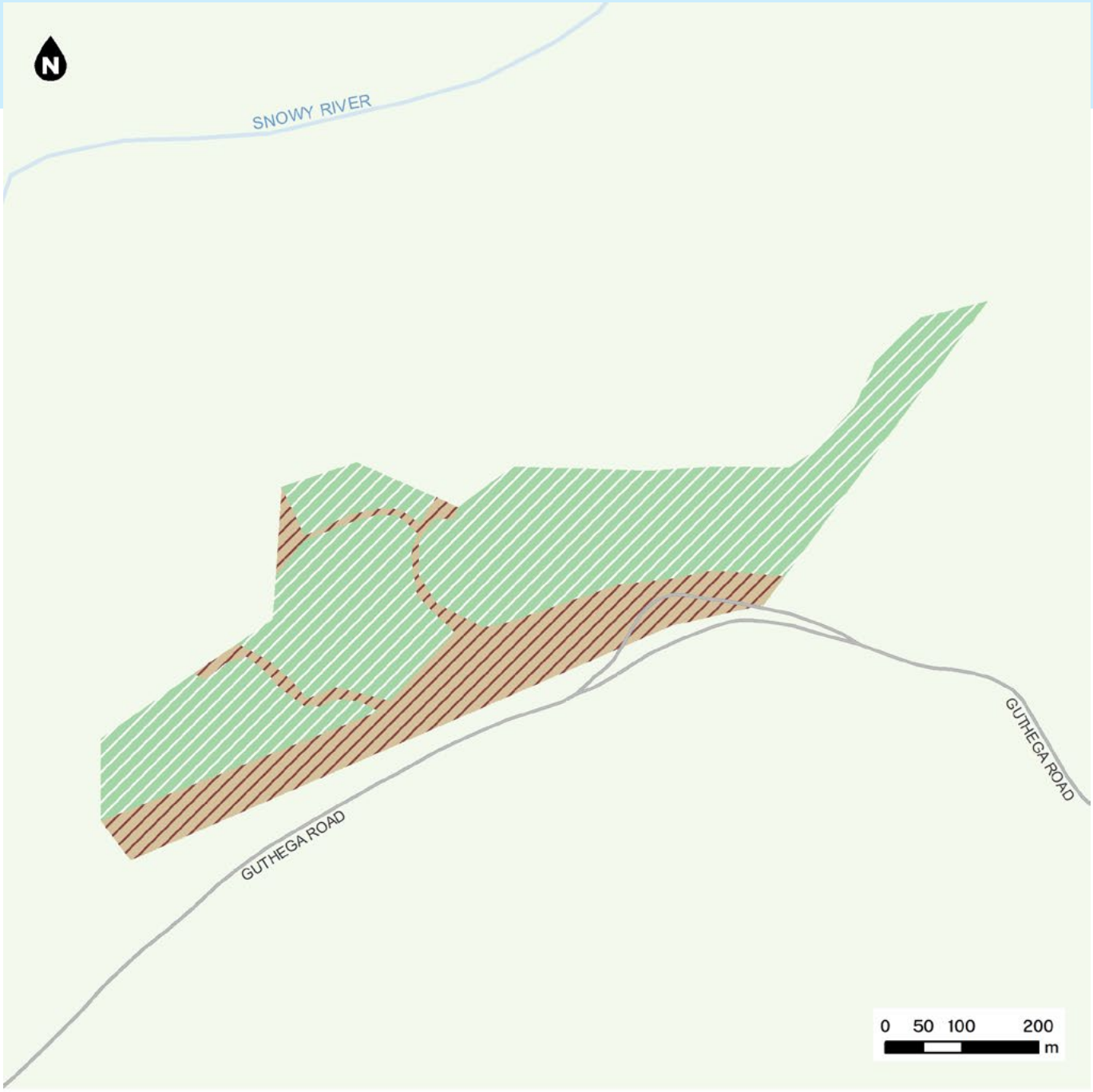


Figure 76: Historic heritage - Island Bend

Road
Waterway
Historic heritage - low risk
Disturbed land

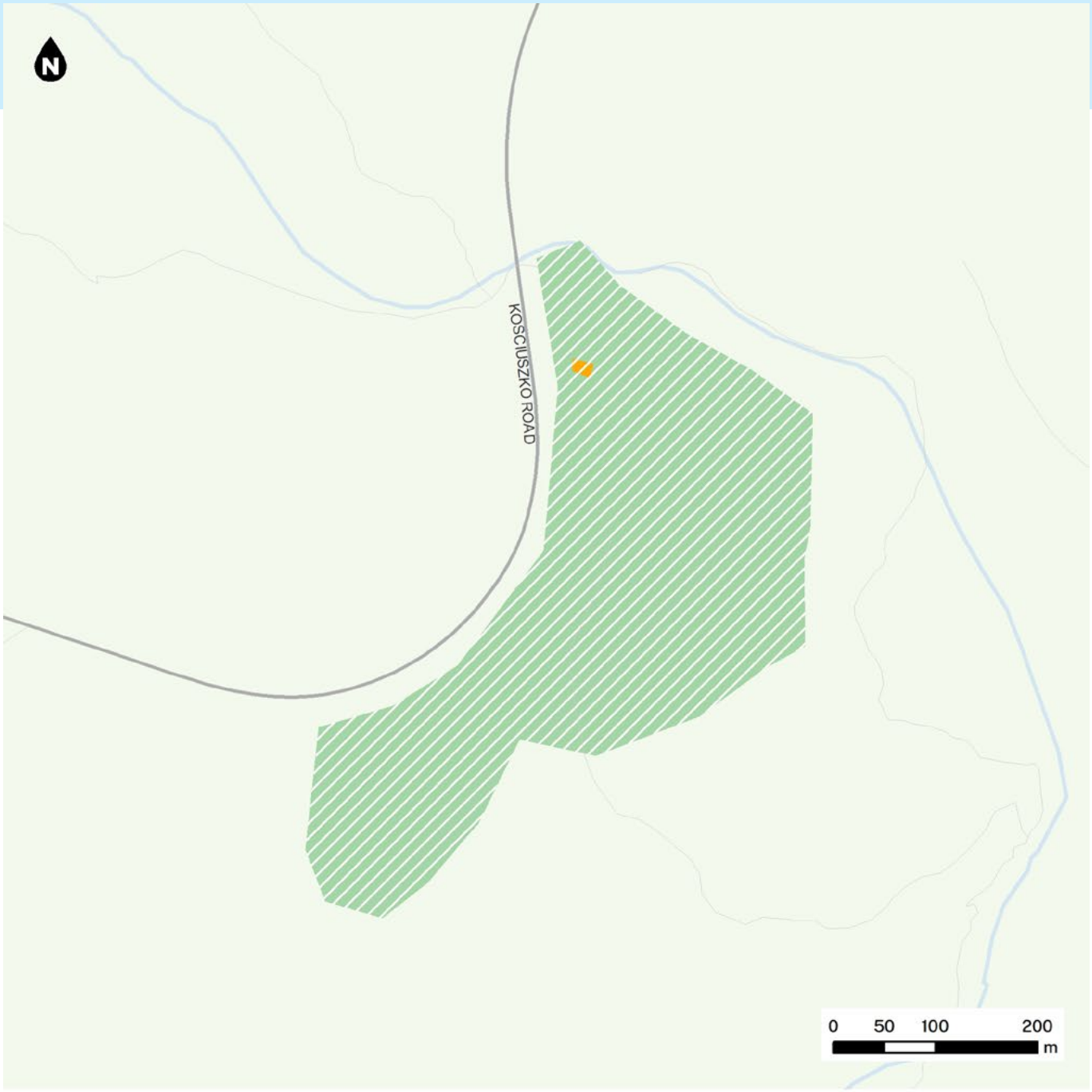


Figure 77: Historic heritage - Kosciuszko Tourist Park

Road
Waterway
Historic heritage - moderate risk
Historic heritage - low risk

12.3 Landscape, character and open space

Aims

- Create an interconnected network of green infrastructure.
- Provide landscaping and public open space that responds to the topography of the Alpine Region.
- Provide high-quality and high-performing multifunctional green spaces that deliver social, environmental, and economic benefits.
- Integrate stormwater management infrastructure with open spaces.
- Create a sense of arrival at key destinations and create attractive, high amenity public spaces that are attractive to visitors.

Performance Criteria

A. Development should be designed to sensitively integrate into the landscape and should respond appropriately to the topography and climate of the Alpine Precinct.

B. Development should protect, conserve and enhance the Alpine Precinct's natural environment and create a green infrastructure network, where possible.

C. Landscaping and public open spaces should include plantings of native species found in surrounding plant communities, which aim to achieve the re-establishment of biodiversity in addition to aesthetic appeal and enhancement of the functionality of an area.

D. Revegetation and new plantings should follow the Rehabilitation guidelines for the Resort Areas of Kosciuszko National Park.

E. Development should integrate stormwater management infrastructure with open spaces, where possible.

Consideration for future stages of development

- A landscape and vegetation management plan including:
  - landscaping treatments and plantings for active and passive open space.
  - landscaping treatments and plantings for shared trails and paths.
  - design guidance for how stormwater management infrastructure can be integrated with open spaces.

Credit: Robbie Duncan, No Bad Days Photography.

12.4 Built form

Aims

- Prioritise and concentrate development within disturbed areas to minimise environmental impacts.
- Prioritise infill development and consolidation within established villages and to activate the public domain and street frontages in the alpine villages.
- Ensure the typology, height, bulk, scale, and materiality of built form is compatible with, and sympathetic to, the Alpine landscape and the National Park setting.
- Ensure development qualities are consistent with the Precinct's design character and responds appropriately to the Region's environmental, cultural and historic heritage values.
- Protect views to (and from) significant vistas, landscape elements, and heritage items including consideration of light spill to enhance visual amenity and sense of place.
- Suitably integrate development with site topography and natural landforms.
- Ensure development is designed and sited to respond to environmental considerations, including bushfire, biodiversity valued land, geotechnical, erosion, flooding, and cultural heritage.
- Ensure development is sited to protect water sources, such as riparian corridors and creeks.
- Promote and enhance the retention of biodiversity, native vegetation corridors and natural waterways.

Performance Criteria

General criteria for all development in the Alpine Region

A. Buildings should be efficient, well designed and successfully integrated with the surrounding landscape. This will be achieved by:
   i. ensuring building bulk, orientation and design contributes to the energy efficiency of buildings, particularly with respect to thermal comfort.
   ii. ensuring new buildings are located within existing disturbed areas to minimises impacts on vegetation and natural processes.
   iii. siting development within existing disturbed areas to limit clearing and the expansion of new development areas.
   iv. incorporating climate resilient design principles in new development.
   v. applying suitable rehabilitation and native landscaping.
   vi. incorporating preparedness for natural hazards and climate change into development design. ensuring development creates activated public domain spaces and provides safe and accessible pedestrian connections between buildings, appropriate for all seasons.

B. Site earthworks must respond to local topography and geotechnical characteristics and be appropriate for the intended land use.

For village centres and public domain

A. Development should create an integrated streetscape where active frontages promote movement between the private and public realms.

B. Building entries should connect to an accessible (providing equitable access to all pedestrians) pedestrian network through design features, wayfinding, and landscape treatments.

C. Development should integrate and provide public seating, shelter and lighting to contribute to increased activity and safety in the public realm.

D. Development should provide human-scale buildings ensuring building envelopes allow adequate solar access and views, including ensuring significant views to natural features are protected.

E. Development should provide for year-round weather protection that reduces the impacts of wind and snow accumulation in winter and provides adequate shade in summer.

F. Development should provide clearly defined and separate pedestrian and vehicle entries to minimise conflicts.

G. Development should allow for snow clearing and adequate interface with oversnow vehicles, where appropriate.

Consideration for future stages of development

- The Alpine Development Control Plan should include:
  - detailed design criteria for siting, scale and building envelopes for different development types across each sub-precinct.
  - detailed design provisions for roof form, building materials and colours, public domain, active frontages, landscaping, advertising and signage.
  - detailed landscaping and public domain treatments, including guidance on how development should address and activate the street and provisions for the use of footpaths and the public domain.
  - Best practice approaches to design in bushfire prone areas and be supported by a bushfire report which addresses performance criteria.

13

Transport and infrastructure

Alpine Way.

13.1 Transport network

Aims

- Improve transport connectivity between Jindabyne and the Alpine Precinct through improved infrastructure and service frequencies.
- Provide and ensure safe and efficient vehicle movements for visitors, public transport, private vehicles, active users (cyclists and hikers) and freight vehicles, including the provision of destination facilities that accommodate visitors for year-round activities.
- Provide and ensure safe and efficient movements for active users (skiers, hikers, cyclists) and oversnow vehicles.
- Reduce reliance on private vehicle use and promote and encourage sustainable mass transit options.
- Promote active transport connections between the Alpine villages.
- Support independent mobility for people of all ages and abilities.
- Ensure visitor access to the Alpine Precinct is commensurate with the established carrying capacity.
- Ensure transport infrastructure and streets can implement new technologies, such as electric vehicles and electronic checkpoints.
- Ensure the transport network provides for the safe access and egress of emergency services.

Performance Criteria

A. Transport infrastructure should integrate the public transport network with the existing road network by:

   i. ensuring public transport stops are strategically located and provide adequate all-weather shelter and accessibility.

   ii. minimising vehicle conflict with active transport and public transport routes.

B. Development must provide operational access and egress for emergency services and occupants.

C. Development should integrate active transport connections that promote movements between the Alpine resorts, where possible.

D. New development must provide and integrate new technologies, such as electric vehicle charging and electronic checkpoints, where possible.

Consideration for future stages of development

- A Precinct-scale plan indicating existing and proposed walking, cycling and shared trails and paths.
- Detailed design guidance for the treatment of walking, cycling and shared trails and paths, including landscaping. This should include detailed design guidance on:
  - trail types, cross sections and reserve widths.
  - staging.
  - methodology and triggers for upgrades.
  - maintenance and management.
  - site-specific requirements for over-snow transportation.
- A Precinct-scale plan showing existing and proposed public transport infrastructure and service locations.

13.2 Utilities, services and infrastructure

Aims

- Provide for infrastructure and services that meet the future growth requirements of Alpine areas and align with the sustainable growth of visitors to Kosciuszko National Park.
- Ensure the timely, orderly and coordinated delivery of utilities and services.
- Ensure utilities and services are appropriately located and protected.
- Provide adequate drainage infrastructure across the village centres and public domain.
- Establish full water cycle management and re-use opportunities, and sustainable energy solutions in the Alpine Region, where possible.
- Provide world-class digital connectivity in the Alpine Region.

Performance Criteria

A. Development within the site must have access to water, wastewater, digital connectivity and telecommunications, energy and drainage infrastructure.

B. Utilities and services must be integrated with existing infrastructure and services, where possible.

C. Utilities and services should be integrated into road reserves, active transport corridors or the public domain, where possible.

D. Infrastructure and services must be designed to provide for the ultimate growth and development in Alpine Resorts.

E. Development should provide and integrate water cycle management and renewable energy solutions into the design of buildings and structures, where possible.

Consideration for future stages of development

- Details of the provisions, design and function of new and upgraded infrastructure and services.
- A staging plan for the coordinated, timely and efficient delivery of infrastructure and services, including:
  - design guidance, concept designs and typical cross sections for new and upgraded infrastructure and services.
  - stormwater and water quality management provisions.
  - management, mitigation and maintenance of infrastructure and services.

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Development uplift summary

The structure plans included within this Master Plan illustrate the strategic planning intent for the Precinct and guide future development, land uses, and supporting infrastructure. The structure plans and associated development yields have been developed with consideration of key design principles aimed at preserving the environmental, heritage and amenity values of the Precinct.

Tables 5 and 6 provide a summary of proposed development yields as indicated visually by the structure plans.

Table 5: Proposed development yields - Jindabyne

Sub-precinct	Tourist accommodation dwellings	Seasonal worker dwellings	Residential dwellings	Additional commercial floor space (m2)
Jindabyne Catalyst Precinct				
Jindabyne Town Centre	412	59	118	88,750
Western Lake Jindabyne	689	36	0	1,200
Jindabyne Growth Precinct				
Jindabyne Town Centre Growth	153	31	123	0
Jindabyne West	130	43	693	30,000
Jindabyne South	21	0	186	10,000
East Jindabyne	47	0	264	5,000
Barry Way South	200	100	180	0

Quantified yields

For the purpose of this yield analysis, dwellings can be quantified as follows:

1. Tourist accommodation dwellings: 2.3 bedrooms per dwelling AND 2 persons per bedroom
2. Seasonal worker dwellings: 2.5 beds per dwelling
3. Residential dwellings: 2.2 persons per dwelling

Sports and Education Sub-Precinct

An additional 690 beds are proposed for the Sports and Education Sub-Precinct which would be used for athletes and coaching and support staff but could also provide accommodation for tourists and/or seasonal workers.

Additional residential yield

20% of residential dwellings needed to meet demand are expected to be met by rural residential or residential development located outside the Precinct.

Table 6: Proposed development yields - Alpine

Resort	Existing bed limit	Proposed tourist bed increase	Proposed staff bed increase	Proposed bed limit	Additional commercial floor space (m2)
Alpine resorts					
Thredbo	4,820	1,361	274	6,455	2,035
Perisher Village	3,541	1,677	52	5,270	2,662
Smiggin Holes	1,016	177	0	1,193	1,200
Guthega	330	0	0	330	–
Charlotte Pass	611	238	0	849	2,010
Alpine accommodation					
Thredbo Ranger Station	–	100	0	100	–
Sponars Chalet	116	122	0	238	500
Ski Rider Hotel	339	0	0	339	–
Creel Bay	–	108	0	108	–
Kosciuszko Tourist Park	72	50	0	122	–
Alpine camping					
Structure plans do not provide a provision for the establishment of bed limits within alpine camping areas. Upgraded camping facilities will be designed to meet capacity requirements of the proposed number of campsites.					

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Glossary

Alpine Way.

Active transport

Transport that is human powered, such as walking, cycling or using a wheelchair.

Affordable housing

Housing for very low and low-income households where rent or mortgage payments are below 30 per cent of gross household income or the household is eligible to occupy rental accommodation under the National Rental Affordability Scheme.

Biodiversity

Biodiversity describes the variety of life on Earth. The life forms, the different plants, animals and microorganisms, the genes they contain and the ecosystems they form. It is usually considered at three levels: genetic diversity, species diversity and ecosystem diversity.

Biodiversity corridor

An identified area of land that connects flora and fauna populations, separated by human developments and activities, for the purpose of increasing the biodiversity of an area.

Biodiversity offsets

Management actions that are undertaken to achieve a gain in biodiversity values on areas of land in order to compensate for losses to biodiversity values from the impacts of development.

Carrying capacity framework

A method for managing visitors in a protected area, taking into consideration what are appropriate levels of impact based on a series of selected values, and responding when those values are impacted.

Circular economy

A model which redesigns current linear systems (take-make-waste) to a closed loop or circular system which maximises resource efficiencies, reduces waste and improves natural systems.

Climate change

A change in the state of climate that can be identified by changes in the mean and/or the variability of its properties, and that persists for an extended period, typically decades or longer (Garnaut Review, 2008).

Delivery Plan

A statutory plan that provides the specific development controls for development on land within the Jindabyne Catalyst Precinct.

Enabling infrastructure

Essential services that are required for a development to occur, such as water supply, energy supply, waste water systems, stormwater drainage and vehicular access.

Existing urban areas

Land zoned for an urban purpose, excluding greenfield release areas.

Greenfield housing

Refers to new housing developments on land that has not been previously developed or used for other urban purposes. Release areas typically include greenfield housing.

Green infrastructure

The network of green spaces, natural systems, and semi-natural systems that support sustainable communities and includes waterways; bushland; tree canopy and green ground cover; parks; and open spaces that are strategically planned, designed, and managed to support a good quality of life in an urban environment.

Habitat

An area or areas occupied, or periodically or occasionally occupied, by a species, population or ecological community, including any biotic or abiotic component.

Housing affordability

Refers to the capacity of individuals or households to enter the rental and privately owned housing markets.

Housing choice

The types of housing available to meet the current or future needs of the community. Types include single dwellings, boarding houses, dual occupancies, group homes, hostels, multi-dwelling housing, residential flat buildings, secondary dwellings, semi-detached dwellings, seniors housing and shop top housing.

Housing density

A measure of how intensively a residential area is developed. It is normally measured as the number of dwellings per hectare. Housing density can be low (<15dw/ha), medium (16-60 dw/ha) or high (>60dw/ha).

Housing diversity

Refers to the mix of housing types such as detached dwellings, boarding houses, dual occupancies, group homes, hostels, multi-dwelling housing, residential flat buildings, secondary dwellings, semi-detached dwellings, seniors housing and shop top housing.

Household size

The average number of people living in a dwelling in a State, region or locality.

Infill development

Development in areas already used for urban purposes. This includes the re-use of a site within the existing urban footprint for new housing, businesses or other urban development.

Local Plans (Local Environmental Plans or Development Control Plans)

Statutory and non-statutory plans prepared by council for a local government area to guide planning decisions by local councils. Through the use of land zoning and other development controls, a local plan is typically the main mechanism for determining the type and amount of development which can occur on each parcel of land in NSW. Local plans are the main planning tool that shapes the future of communities and ensures local development is appropriate.

Mixed use area

Areas that facilitate a mixture of commercial, retail, residential and other land uses.

Nature-based tourism

Tourism based on the natural attractions of an area. Examples include birdwatching, photography, stargazing, camping, hiking, hunting, fishing, scuba diving, skiing, snowboarding, mountain biking, wakeboard and water skiing.

Public space (public domain/public realm)

Places publicly owned or of public use, accessible and enjoyable by all for free and without a profit motive. These include:

- Public open spaces: active and passive (including parks, gardens, playgrounds, public beaches, riverbanks and waterfronts, outdoor playing fields and courts, and publicly accessible bushland);
- Public facilities: public libraries, museums, galleries, civic/community centres, showgrounds and indoor public sports facilities; and
- Streets: streets, avenues and boulevards, squares and plazas, pavements, passages and lanes, and bicycle paths.

Resilience

Resilience is the capacity of individuals, communities, businesses and systems within a city to survive, adapt and thrive no matter what kinds of chronic stresses and acute shocks they experience (100 Resilient Cities).

Smart Technology

Self-Monitoring Analysis and Reporting Technology, which is technology that provides cognitive awareness to objects, by making use of advanced technologies like internet of things, artificial intelligence, machine leaning and big data.

Social housing

Rental housing provided by not-for-profit, non-government or government organisations to assist people who are unable to access suitable accommodation in the private rental market. Social housing includes public and community housing, as well as other services and products.

State Environmental Planning Policies (SEPP)

Environmental Planning Instruments prepared by the Department of Planning and Environment dealing with land use and urban and regional development in a state-wide context.

Sustainability

Meeting the needs of the present without compromising the ability of future generations to meet their own needs.

Visitor economy

The production of goods and services for consumption by visitors, including the industries that directly serve visitors, such as hotels, transport providers, tour companies and attractions, as well as intermediaries and those involved indirectly, such as retailers and food producers.

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