



Snowy Monaro Regional Council Michelago Master Plan

Prepared by WSP for Snowy Monaro Regional Council

Strategy Development

2021

Adopted: 21 October 2021



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Michelago Master Plan

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Table of contents

Glossary and abbreviations.....	iv
Acknowledgement of country.....	v
Executive summary	vi
1 introduction	1
1.1 Michelago Context.....	1
1.2 Study area	2
1.3 Demographics.....	3
1.4 Overview of the master plan.....	5
2 Evidence Base.....	7
2.1 The planning framework.....	7
2.2 Transport Roads and access.....	12
2.3 Economy	12
2.4 Open space, recreation and community facilities.....	12
2.5 Constraints	14
2.6 Character.....	25
2.7 Civil infrastructure	27
2.8 Opportunities for Michelago.....	28
2.9 Economy and Future Growth	28
2.10 Community and village life.....	29
2.11 Access and movement, infrastructure and assets.....	30
2.12 Landscape and public domain	31
2.13 Environment and sustainability.....	32
3 growth scenarios	33
3.1 Preferred Scenario.....	33
3.2 From Scenario to Master Plan.....	35
3.3 Specific Areas within Michelago Surrounds	36
4 Consultation	38
4.1 Key messages from consultation.....	38
4.2 Next steps	39

5	Sustainable Settlement Principles	40
5.1	Features of the Master Plan.....	41
6	Master plan place-based actions.....	43
6.1	Master Plan Action Map	44
6.2	Master Plan Action Table	45
7	DELIVERY AND IMPLEMENTATION	52
7.1	Infrastructure and Services	52
7.2	Advocacy Opportunities.....	59
8	Limitations.....	61

LIST OF TABLES

TABLE 1.1	SNOWY MONARO REGIONAL POPULATION PROJECTIONS FOR CANBERRA CORRIDOR (2019)	4
TABLE 2.1	COOMA MONARO LEP 2013 LAND USE ZONES	10
TABLE 7.1	INFRASTRUCTURE AND SERVICES	52
TABLE 7.2	RECREATION FACILITIES.....	56
TABLE 7.3	ADVOCACY AND SUPPORT OPPORTUNITIES	59

LIST OF FIGURES

FIGURE 1.1	REGIONAL CONTEXT	1
FIGURE 1.2	MICHELAGO VILLAGE EXTENT AND SURROUNDS	3
FIGURE 1.3	THE MICHELAGO ABS CATCHMENT, 2016 CENSUS	4
FIGURE 1.4	CANBERRA CORRIDOR	5
FIGURE 1.5	EXISTING LAND USE ZONES AND PROPOSED INVESTIGATION AREAS	6
FIGURE 2.1	MICHELAGO LAND USE ZONES	11
FIGURE 2.2	MINIMUM LOT SIZE	11
FIGURE 2.3	KEY CONSTRAINTS.....	15
FIGURE 2.4	COOMA-MONARO LEP 2013 HERITAGE LISTINGS AT MICHELAGO	16
FIGURE 2.5	ASSESSMENT OF LANDFORMS FOR POTENTIAL ABORIGINAL CULTURAL HERITAGE.....	17
FIGURE 2.6	IDENTIFIED HIGH ENVIRONMENTAL VALUES.....	18
FIGURE 2.7	COMPARISON OF THE 1%AEP AND PMF EVENT HAZARD CLASSIFICATIONS	20
FIGURE 2.8	PREVIOUS BUSHFIRE PRONE LAND AROUND MICHELAGO	21
FIGURE 2.9	CURRENT MICHELAGO BUSHFIRE PRONE LAND	21
FIGURE 2.10	BIOPHYSICAL STRATEGIC AGRICULTURAL LAND.....	22
FIGURE 2.11	MICHELAGO-TINDERRY LANDSCAPE AREA.....	23
FIGURE 3.1	LOCATION OF SCENARIOS 1 AND 2.....	33
FIGURE 3.2	DESIGN DRAFTING PROCESS FOR PREFERRED SCENARIOS	35
FIGURE 3.3	INDICATIVE ROAD ALIGNMENT AND INTERSECTION WITH RYRIE STREET.....	36

LIST OF PHOTOGRAPHS

PHOTO 2.1	PLAYGROUND AND CRICKET OVAL AT MICHELAGO PARK.....	13
PHOTO 2.2	RYRIE STREET CHARACTER – HIGHWAY APPROACH TO MICHELAGO SCHOOL.....	25
PHOTO 2.3	HERITAGE LISTED MICHELAGO RAILWAY STATION.....	26
PHOTO 2.4	MICALAGO ROAD CHARACTER – HIGHWAY APPROACH TO RAILWAY BRIDGE AND FUTURE RYRIE STREET LINK	27

LIST OF APPENDICES

APPENDIX A CONSULTATION OUTCOMES
APPENDIX B SUPPORTING REPORTS
APPENDIX C GROWTH SCENARIOS

GLOSSARY AND ABBREVIATIONS

DCP	Development Control Plan
DPIE	Department of Planning, Industry and Environment
LEP	Local Environmental Plan
LSPS	Local Strategic Planning Statement
MRCA	Michelago Region Community Association
SEPP	State Environmental Planning Policy
SMRC	Snowy Monaro Regional Council
SETRP	South East and Tablelands Regional Plan
TfNSW	Transport for NSW

ACKNOWLEDGEMENT OF COUNTRY

We acknowledge the Ngarigo people as the first people of this land and traditional custodians of the region around Michelago. We pay respect to knowledge holders and community members of the land and to Elders past, present and future.

EXECUTIVE SUMMARY

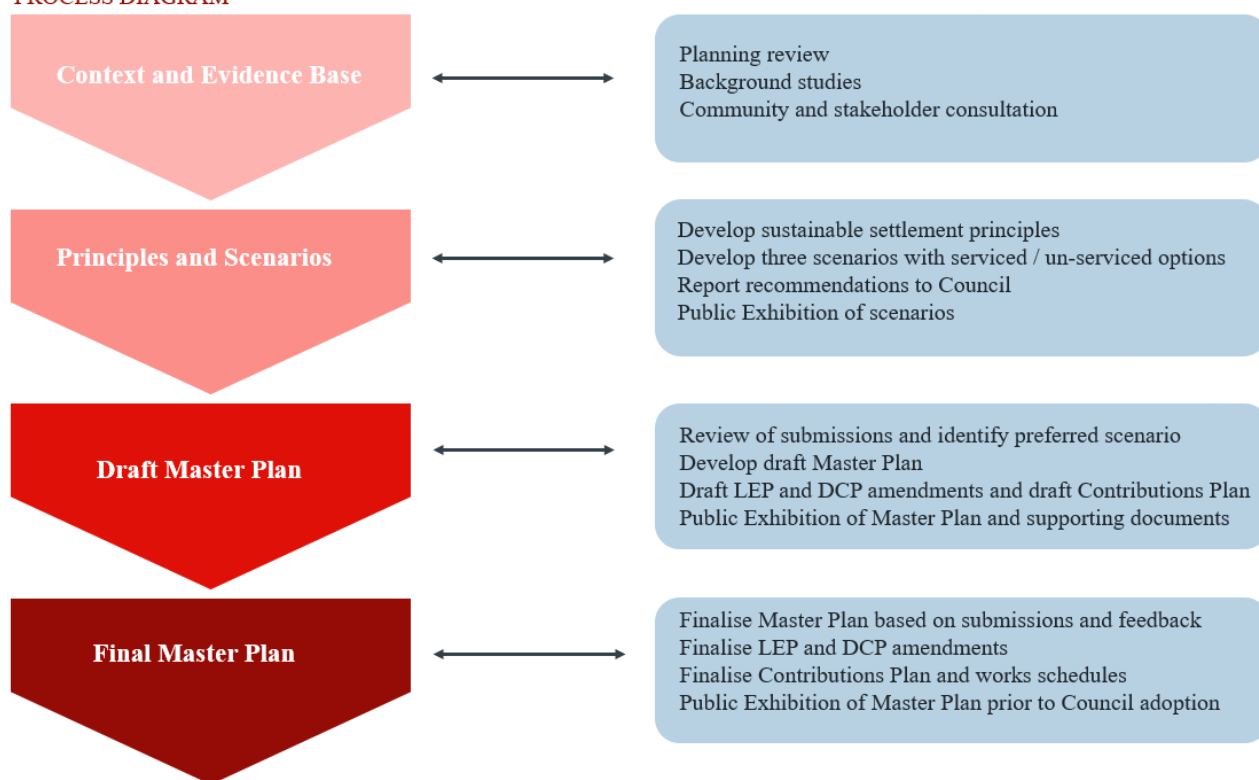
The Michelago Master Plan has been prepared by WSP Australia for the Snowy Monaro Regional Council (Council) in consultation with the Michelago community and key stakeholders.

The project brief required investigation in to whether substantial new growth is appropriate, serviceable and supported by community, and to provide a clear planning basis to guide planning proposals received by Council in the future.

Sustainability is a key consideration: Michelago village is already seen as self-sufficient in many ways, with potential for enhancements through appropriate levels of servicing and infrastructure, streetscaping, and new community facilities such as active recreation, local employment opportunities and a flexible work hub space.

The diagram below sets out the four stages in the development of the master plan for Michelago and outlines the timing and types of consultation activities undertaken by the project team and Council.

PROCESS DIAGRAM



The issue of servicing emerged as a critical consideration for Michelago and Council, it was decided to publicly exhibit a range of scenarios to gather additional community and stakeholder feedback during development of the Master Plan. A number of options for the reticulated supply of water have been investigated, and there is yet to be a workable solution. Similarly, the provision of reticulated sewer is contingent on a sustainable water supply and irrigation areas impact on terrestrial biodiversity.

The development of the Master Plan has involved an examination of status quo, low growth and medium growth scenarios over the next 20 years. These were developed in response to constraints and opportunities analysis, specialist investigations and community and stakeholder consultation.

On the 4 March 2021, Council considered the growth scenarios and decided to obtain more community feedback before selecting the preferred growth scenario. The scenarios were publicly exhibited in April–May 2021 and responses

demonstrated a majority preference for a combination of Scenarios A and B, being the unserviced options, as an appropriate direction for the Master Plan. The Master Plan was exhibited in July-August 2021 and submissions sought from government authorities and the community. This document has been prepared after considering submissions and incorporating suggestions that improve and clarify certain matters.

This document sets out the principles, spatial arrangement and implementation measures to guide the sustainable development of Michelago. It references residents' and Council's aspirations for the village and is intended to guide the delivery of Council's planning and decision making for Michelago in the short and medium terms. LEP and DCP provisions will promote the appropriate scale of development in Michelago.

The plan aims to ensure that the things people love about Michelago – its village feel, open rural vistas and views to the Tinderry Range, heritage buildings and sense of community – are preserved and enhanced into the future. The purpose of the Master Plan is to provide a vision and framework that allows for the future sustainable growth of Michelago while retaining the unique character and identity of the existing settlement.

At time of preparation, a rail trail in Michelago appears to be likely in the long term, however, the design does not preclude the railway re-opening should the NSW Government decide either way. Council have written a letter of support to the NSW Government regarding the rail trail and could consider applying for relevant state/federal government grant programs for the Michelago south section of the rail trail to assist detailed design and planning. A rail trail will enhance Michelago in terms of local access and tourism potential along the Monaro Highway corridor.

The Master Plan incorporates an introduction to the village, a spatial plan, recommended planning controls and measurement criteria in the following sections:

1. Introduction

The site context and location, demographics and purpose of the Master Plan

2. Evidence Base

The planning and policy framework, constraints and opportunities.

3. Growth Scenarios

Overview of preferred scenarios based on Public Exhibition responses

4. Consultation

Key messages and next steps

5. Sustainable Settlement Principles

Features of the Master Plan

6. Place Based Actions

Spatial Master Plan and explanatory table

7. Delivery and Implementation

The Master Plan does not replace the need for a Planning Proposal process to be undertaken as identified in the *Environmental Planning and Assessment Act 1979*. This should be supported by site specific studies confirming the suitability or otherwise of the proposed development, and once adopted by Council, will also need to demonstrate consistency with the Master Plan.

Development applications which do not require rezoning will need to demonstrate consistency with Environmental Planning Instruments and DCP.

1 introduction

1.1 Michelago Context

Michelago is located in the north of the Snowy Monaro LGA, approximately 50 km to the south of Canberra and is situated between the Murrumbidgee River to the west and the Tinderry Range to the east. The Monaro Highway is the key transport corridor linking Michelago with surrounding settlements as shown in Figure 1.1.

Although the ACT border is approximately 6 km to the east of Michelago, the Murrumbidgee River and topography is a significant barrier. Public road access to the Smiths Road area and Clear Range/Namadgi National Park is either to the north of Tharwa (ACT) or the south of Bredbo NSW, and the Smiths Road community does not identify as part of Michelago despite being located nearby 'as the crow flies'.

Michelago village is located between the Monaro Highway and the disused Goulburn-Bombala Railway Line. The village is currently accessed from the Monaro Highway along Ryrie Street. Burra Road south and Tinderry Road are accessed via Ryrie Street, while Micalago Road is accessed from the Monaro Highway, with no direct connection to Michelago village. A crossing of Michelago Creek linking Ryrie Street with Micalago Road is planned by Council as a separate project to rectify this.



Urban Area	Population (2016 ABS – State Suburbs)	Travel Time/ Distance
Canberra Airport	103	42min/55.6km
Tuggeranong, ACT	85,154 (SA3, no SS option)	31min/42km
Cooma	6,681	45min/65km
Googong	2,690	30min/40km
Jindabyne	2,629	1hr 27min/127km
Braidwood	1,651	1hr 27min/122km
Goulburn	22,419	1hr 35min/146km

Source: Google Maps, 2021

Figure 1.1 Regional context

1.2 Study area

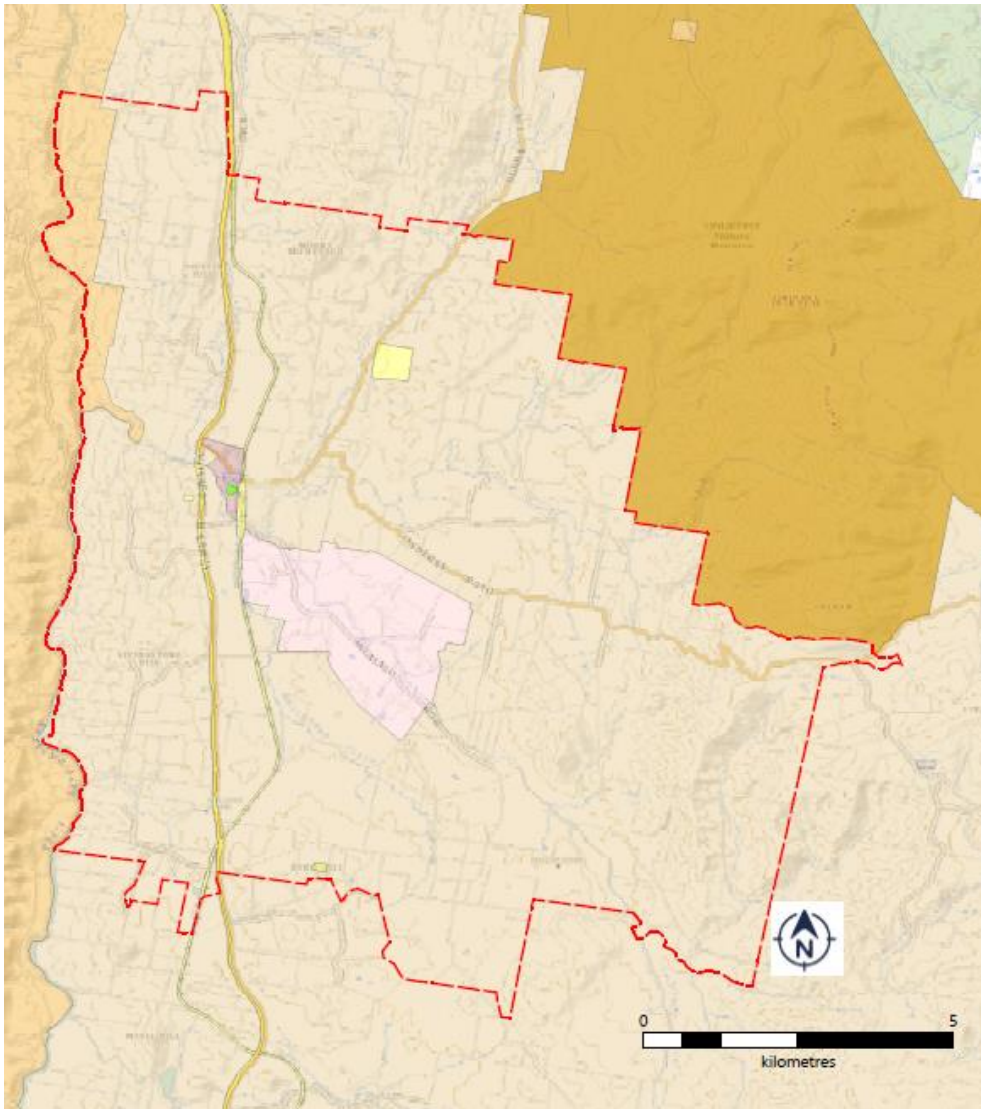
Council had previously identified land for staged growth to the north of Michelago, adjacent to the highway and railway line¹. This was reviewed as part of the constraints analysis and planning policy background studies and a more modest footprint identified. The original brief from Council included Smiths Road area across the Murrumbidgee, however during consultation and investigation it was found that the community do not identify with Michelago and prefer to remain separate rather than be connected by a bridge or other crossing. For this reason, Smiths Road does not appear in the Master Plan.

The physical extent of the village (see Figure 1.2) has been identified is the area currently zoned RU5, part of the RU1 area to the north and the current RU1 area between Michelago Creek and the Monaro Highway. In order to shape a more compact, walkable village centre through the Master Plan growth scenarios, the area zoned R5 Large Lot Residential to the south is considered as Michelago Surrounds.

Michelago village currently has one general store that also functions as a post office, and one service station as the extent of currently operating commercial services. There is a local rural fire station, town hall, local police station, de-commissioned train station (still used by the community for events) and a public school within the village. Michelago Primary School is a public school and had 40 (K-6) students across two multi-stage classrooms at the end of 2020.

The village has a large RE1 zoned open space area in the southern part of Ryrie Street, opposite the Railway Station. This includes Tennis Courts and club house, a Cricket Oval and a Playground. There are several local Heritage Items and State Heritage Listed items within the Village and Surrounds, and these are highly valued by the community.

¹ Michelago Structure Map in Snowy Monaro Local Strategic Planning Statement



Source: SMRC

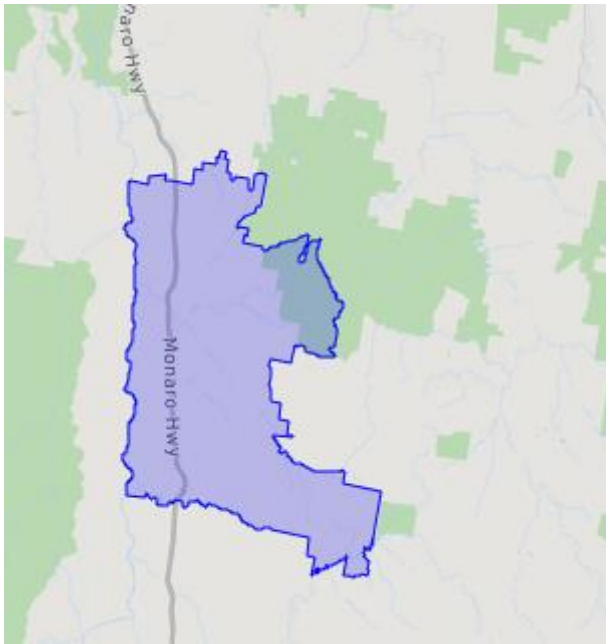
Figure 1.2 Michelago village extent and surrounds

1.3 Demographics

The Michelago area (SSC12598) had a population of 562 people at the 2016 Census made up of 139 families with an average of 2 children per couple². This population includes both the village and surrounding areas as shown in Figure 1.3, while the current population within the village itself is estimated at between 200–300 people.

Within the Michelago and surrounds area the 2016 Census found there were 213 dwellings of which 171 dwellings (98.3%) were single dwellings. There were 86.6% occupied dwellings and 13.4% unoccupied and family households made up 78.5% (139 households) of the population with single or lone households being 19.8% (35 households). The ratio of people per dwelling at the 2016 Census was 2.88 and this is used as an assumption throughout this report.

² 2016 Census QuickStats ABS, Michelago SSC12598
https://quickstats.censusdata.abs.gov.au/census_services/getproduct/census/2016/quickstat/SSC12598?opendocument



Source: ABS QuickStats, 2016

Figure 1.3 The Michelago ABS catchment, 2016 Census

The population of Snowy Monaro Regional LGA is projected by the Department of Planning, Industry and Environment to gradually decline from around 20,000 to 17,600 over the period 2016-2040. These projections, prepared in 2019 do not account for recent trends such as COVID-19 and uplift in regional housing markets, nor do they provide detailed information by sub-locality. Council population projections (reproduced in Table 1.1) suggest that the area known as the Canberra Corridor could experience a population increase of almost 1,500 residents in the next 20 years (*draft Snowy Monaro Development Vision 2019*).

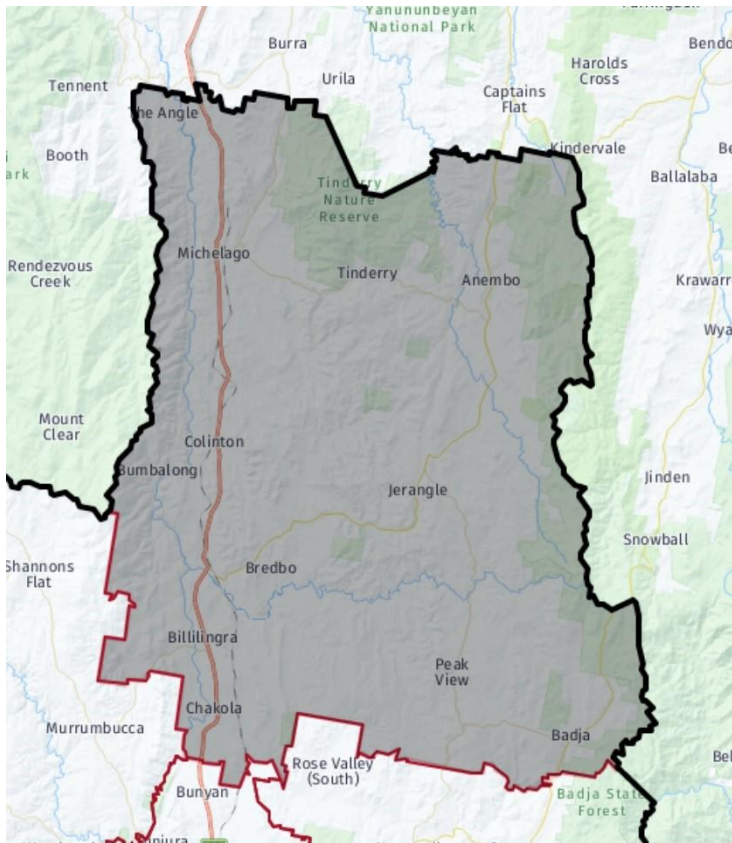
Table 1.1 Snowy Monaro Regional Population Projections for Canberra Corridor (2019)

2016 Population	2041 High Projection	2041 Main Projection	2041 Low Projection
1,081	5,106	2,660	1,854
Change	4,025	1,579	773
Proportional Growth	372%	146%	72%

Source: Draft Snowy Monaro Development Vision (2019), SMRC

This will create local induced demand for commercial, industrial and general employment needs. It has been estimated that a further 13.3 ha is required to accommodate new non-residential development by 2041³. It should be noted that the Canberra Corridor includes the localities of Anembo, Bredbo, Badja, Colinton, Michelago, Williamsdale and The angle as shown in Figure 1.4. The combined population of these areas was 1,081 in 2016, and the range of potential population growth over the next 20 years varies from a low of 773 additional people (72% increase) to a high of 4,025 people or a 372% increase.

³ Rural and Employment Lands Study for SMRC, 2019, Elton Consulting



Source: *Profile.id*

Figure 1.4 Canberra corridor

1.4 Overview of the master plan

The Master Plan sets out the short and medium sustainable and appropriate growth in response to the identified constraints, village character and input from community and other stakeholders. The objectives of the Master Plan are to:

- Provide a more sustainable and adaptive development pattern guided by the NSW Government’s South East and Tablelands Regional Plan.
- Expand nature-based adventure and cultural tourism in appropriate locations and enhance visitor experiences.
- Protect and enhance the high value environmental and agricultural land around Michelago.

The Master Plan as illustrated in Figure 1.5:

- Identifies the areas and extent of future growth, catering for a population increase of up to an additional 470 people in an additional 160 new dwellings.
- Promotes development that contributes to the unique character of the village.
- Describes the form of new development including enhancements to public realm and streetscapes and suggests appropriate locations for non-residential uses that support village life and provide amenity.
- Avoids areas that are constrained by flood, stormwater flow, easements and such and preserves views to the Tinderry Range.
- Protects important resources and land that supports primary production, value adding, environmental assets and tourism.
- Makes recommendations for LEP amendments to facilitate change.
- Identifies sustainable design measures that can be implemented in new and infill development areas in Council’s DCP.

- Provides a framework for Council to allocate funds to providing and enhancing public assets and infrastructure including open space, and recreation areas for residents and visitors.

Figure 1.5 Existing land use zones and proposed investigation areas



Zone

B1	Neighbourhood Centre
B2	Local Centre
B3	Commercial Core
B4	Mixed Use
B5	Business Development
E1	National Parks and Nature Reserves
E2	Environmental Conservation
E3	Environmental Management
E4	Environmental Living
IN1	General Industrial
R1	General Residential
R2	Low Density Residential
R5	Large Lot Residential
RE1	Public Recreation
RE2	Private Recreation
RU1	Primary Production
RJ3	Forestry
RU5	Village
SP2	Infrastructure

2 Evidence Base

This section outlines the evidence base from which the principles, development scenarios and Master Plan have been developed.

During preparation of the Master Plan, the following activities were undertaken:

- Site visit and inception meeting, assessment of village character.
- Desktop studies of heritage, ecology, infrastructure, planning and policy, transport, economics and demographics.
- Consultation with community, Council and key stakeholders.
- Preparation of three growth scenarios.

A summary of the context and consultation activities follows with further information provided in Appendix A Consultation Report.

2.1 The planning framework

Local planning is guided by a hierarchy of plans and strategies. Since the amalgamation of three LGAs into Snowy Monaro Regional Council there are still three LEPs operating. Council is in the process of preparing a comprehensive suite of planning instruments to inform an amalgamated LEP. For the purposes of this Master Plan, it is recommended that the current Cooma Monaro LEP 2013 and DCP are amended as an interim measure.

2.1.1 Strategic planning framework

2.1.1.1 South East and Tablelands regional plan

At a regional level, the Department of Planning, Industry and Environment has prepared a regional plan for growth in the south east of NSW around the ACT, the *South East and Tablelands Regional Plan 2036*. Within this there are some key principles for Snowy Monaro Regional Council:

- Cooma is the strategic centre, with new housing to be directed to Jindabyne, Cooma and Bombala
- Agricultural land is to be protected from fragmentation
- Appropriately leverage proximity of Michelago to Canberra.

2.1.1.2 Local Strategic Planning Statement (LSPS)

Council's LSPS reflects the tensions around growing Michelago sustainably while preserving character; also raising non-planning issues of land management in relation to lot sizes around Michelago. Council's LSPS reflects the Regional Plan through best practice planning for Michelago village and surrounds. A 'Sustainable rural lifestyle hub' is suggested, capitalizing on proximity to Canberra.

Settlement Strategy SMRC's 2016 Settlement Strategy Discussion Paper indicates Council's commitment to investigating further growth and extension of water and sewer to Michelago:

- It is suggested that Michelago could be a larger community with the extension of services
- Opportunities are to investigate the potential for enhancement and some growth of Michelago
- Constraints to further growth are natural hazards, servicing costs and inconsistent policy settings.

2.1.2 State Planning Framework

2.1.2.1 Exempt and Complying State Environmental Planning Policy

State Environmental Planning Policy (Exempt and Complying Development Codes) 2008 applies to the Cooma Monaro LGA. This policy identifies two categories of development, exempt and complying. Exempt development is that which has minimal or no environmental impact and does not require any approval. Complying development has minimal environmental impact and, provided pre-determined criteria can be met, does not require development consent from Council but rather certification by an accredited certifier. There are a range of complying development criteria for residential, commercial and industrial development.

As there is no requirement for a development application for complying development, there is no 'trigger' to make reference to or to consider development guidelines in a DCP. The Department of Planning, Industry and Environment has recently published a draft guideline for the preservation of Local Character which would possibly operate to lift exempt and complying provisions from applying to special areas, and has recently exhibited a draft clause for a local Character Overlay in the Standard LEP template. Michelago may meet the criteria for preservation of local character. It is recommended that SMRC pursue this exemption – if appropriate – as part of its broader LEP review process.

2.1.2.2 Proposed Design and Place State Environmental Planning Policy

The draft Design and Place SEPP is part of a broader SEPP review aiming to simplify and consolidate the delivery of good design in NSW. The SEPP will be relevant to all new developments in NSW and will supersede SEPP 65 Design Quality of Residential Apartment Development (2002) and the Building Sustainability Index BASIX SEPP (2004), with the content of these SEPPs relocated to the Design and Place SEPP⁴. The changes to BASIX aim to:

- Improve customer experience and promote innovation through regular tool updates and by recognising emerging technologies
- Include updated sustainability targets and provide flexibility in the available assessment pathways
- Continue to drive energy and water efficiency, and sustainability commitments for housing in NSW⁵.

The EIE also notes that the relationship between the existing Codes SEPP and the new Design and Place SEPP is yet to be determined, and states that *'The types of development currently permitted through the Codes SEPP will remain unchanged, but the requirements will be aligned with the principles of the Design and Place SEPP to enable this type of development to contribute to a greener, well designed built environment.'*⁶

The Design and Place SEPP will also establish a new Urban Design Guide (UDG). This will establish a range of design principles and matters for consideration and application requirements that respond to each of the principles.

The currently proposed principles are as follows:

- **PRINCIPLE 1: Design places with beauty and character that people feel proud to belong to.** Through a considered response to context, character, heritage, culture and Country, well-designed buildings and spaces create places people can engage and connect with. Attractive built environments are attractors, and powerful tools for economic growth.

⁴ Design and Place SEPP Frequently asked questions, NSW DPIE, December 2020

⁵ Explanation of intended effect for a Design and Place SEPP, DPIE, February 2021

⁶ Explanation of intended effect for a Design and Place SEPP, DPIE, February 2021, p. 39

- **PRINCIPLE 2: Design inviting public spaces to support engaged communities.** High-quality public spaces are inviting, accessible, diverse and comfortable. They encourage a healthy public life for our communities, fostering active lifestyles and social connections.
- **PRINCIPLE 3: Develop productive and connected places to enable thriving communities.** Places with sufficient densities, and sustainable and active transport connections to a wider network of jobs, services and attractors, enhance local economies and communities, enabling them to thrive.
- **PRINCIPLE 4: Design sustainable and greener places for the wellbeing of people and the environment.** Environmentally sustainable places reduce emissions; adopt water, energy and material efficiency; and integrate green infrastructure, including urban tree canopies, to support the health and wellbeing of present and future communities and natural systems, including habitat for biodiversity.
- **PRINCIPLE 5: Design resilient and diverse places for enduring communities.** Resilient places are designed with adaptive capacity to respond to shocks, chronic stresses, and climate change. Diverse, compact neighbourhoods support inclusive, socially resilient communities and ageing in place.

The Design and Place SEPP will also introduce different requirements for different scales of development including precincts and significant development. The new SEPP is draft only and may change prior to finalisation. However, the key relevant requirements are set out below.

PRECINCTS AND SIGNIFICANT DEVELOPMENT

Precinct considerations will apply in the following circumstances:

- Wherever a requirement for 'precinct plan', 'precinct study' or 'master plan' is specified in another instrument
- To any planning proposal under s.3.33 of the EP&A Act greater than 10 ha or 1,000 people
- To any community scheme subdivision or subdivision into more than 50 lots
- To areas identified for local strategic planning including amendments to LEPs (that are not planning proposals)
- To any other similar plan or spatial arrangement greater than 10 ha or 1000 people.

Significant development considerations will apply to:

- Development on a parcel of land
 - Within a precinct or on a site bounded by streets on all sides
 - On a site greater than 4,000 m² or 500 people
 - On a site greater than 1,500 m² in a metropolitan centre
- State significant development (SSD), as declared in the State and Regional Development SEPP, on urban land
- Regionally significant development, as declared in the State and Regional Development SEPP, on urban land
- State significant infrastructure (SSI) on or adjacent to urban land.

A precinct structure plan will be required for all precincts and significant development – including a green infrastructure map, public spaces map, heritage map, movement and place map and local character area map, and design documentation and phasing or staging plans (where applicable).

2.1.3 Local Planning Framework

2.1.3.1 Cooma-Monaro LEP 2013

The principal planning controls for Michelago are in the Cooma Monaro LEP 2013, and DCP 2014. As Snowy Monaro Regional Council is an amalgamated Council, a range of studies are being prepared to inform and prepare a comprehensive LEP and DCP for the new Council area. The relevant provisions for Michelago are:

- The RU5 village zone applies to Michelago, with the exception of Michelago Park being zoned RE1 and the railway line and infrastructure being zoned SP2 Infrastructure.
- The RU5 village zone provides for a range of development being a mix of residential and retail/commercial land uses. The zone is broad providing enough flexibility to enable the range of permissible uses to be located throughout the village rather than be directed to certain localities.
- The RU5 zone is applied using merit assessment to determine the appropriateness of development on a case by case basis. Also, the minimum lot size (MLS) for housing is 1,800 m². This lot size minimum reflects the requirements for on-site effluent disposal. The R5 Large Lot Residential zone applies to the 'Tinderry Estate' Micalago Road subdivision, with an 8 ha MLS.
- Specific controls for particular development apply through the LEP, such as flood planning, preservation of views to the Tinderry Range, groundwater vulnerability, terrestrial biodiversity and environmental heritage. These local provisions include mapping to illustrate areas that have special requirements or constraints.

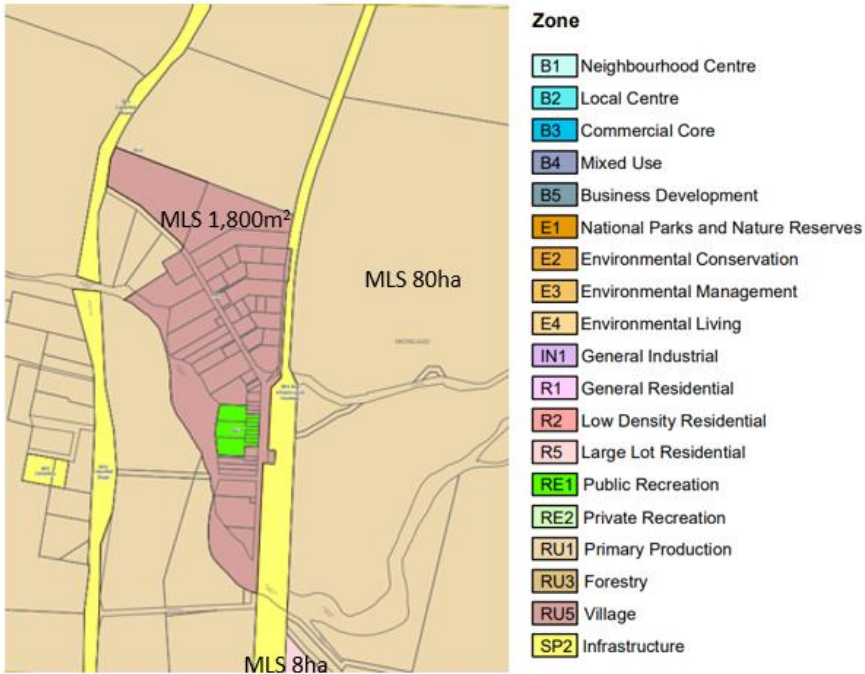
ZONING AND MINIMUM LOT SIZE

As noted the village is zoned RU5 village, with the 'Tinderry Estate' zoned R5 Large Lot Residential by the Cooma Monaro LEP 2013, as shown in Figure 2.1 The following table briefly describes each land use zone, lot sizes where applicable, land use tables and relevant local provisions. Figure 2.2 shows the current minimum lot size.

Table 2.1 Cooma Monaro LEP 2013 Land Use Zones

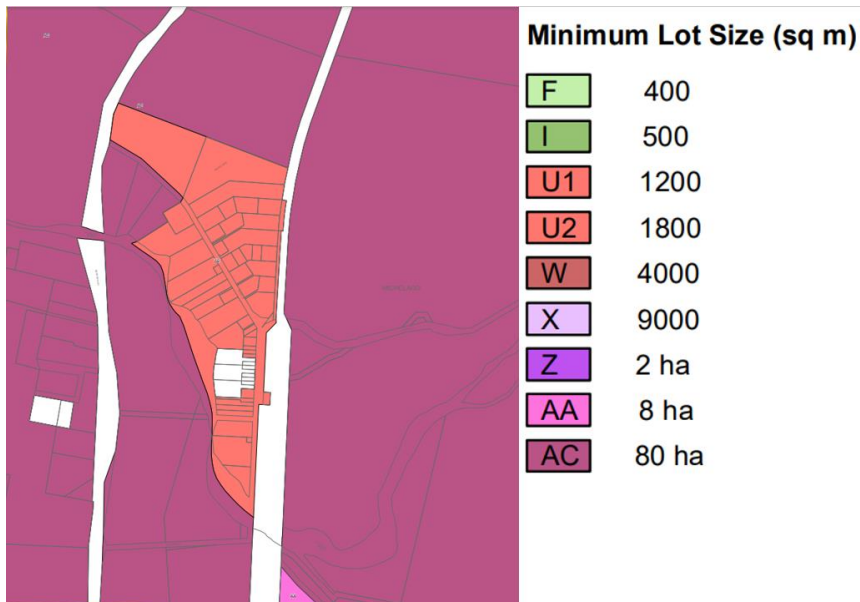
Zone	Lot Sizes	Land Use permissibility and additional comments
RU1 Primary Production	80 ha 'lot averaging' is permitted, enabling minimum area of 20 ha	The Land use table permits a wide range of land uses such as heavy industrial storage establishment, industries, registered clubs, retail premises, service stations, tourist and visitor accommodation as well as uses associated with primary production and housing (dwelling houses, dual occupancies, rural workers dwellings, secondary dwellings).
RU5 village	1,800 sqm	Applies to Michelago and permits a wide range of urban residential, recreation, industrial and commercial development typical to rural villages.
R5 Large Lot Residential	8 ha Lot averaging clause applies to minimum of 2 ha	Applied over the Micalago Road estate to the south east of Michelago. Permits a range of residential accommodation as well as agricultural produce industries, eco-tourist facilities, freight transport facilities, industrial retail outlets, retail premises.
SP2 Special use zone	No MLS	Applies over railways land, classified roads, telecommunications, cemetery, gas facility.
RE1 Public recreation	No MLS	Recreation land including oval and parklands
E1 National parks and nature reserves	No MLS	Applied over Tinderry Nature Reserve
E3 Environmental management	80 ha	The E3 zone is more restrictive than the RU1 zone; permitted development includes dwelling houses, secondary dwellings, extensive and intensive agriculture. Applied to land west of the Murrumbidgee River in the Smiths Road area.

Local provisions	6.9 Scenic protection area – refers to the Scenic Protection Map. Considerations for consent authority concerning visual impact. Applies to the Monaro highway corridor near Michelago.
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Source: Cooma-Monaro LEP 2013

Figure 2.1 Michelago land use zones



Source: Cooma-Monaro LEP 2013

Figure 2.2 Minimum lot size

2.1.3.2 Development control plan 2014

The Cooma Monaro DCP provides further guidelines for particular development in certain areas. In assessing an application for development, Council is required to consider the DCP before determining the outcome. Council is in the process of preparing a new DCP as part of the amalgamated LGA. For Michelago, the Cooma Monaro DCP has specific controls regarding scenic view protections to the Tinderry Range from the highway; and requirements for flood assessment and access to land on Ryrie Street.

The Master Plan makes recommendations for amendments to the DCP to incorporate further provisions for Michelago.

2.2 Transport Roads and access

- The main road network consists of the Monaro Highway, Ryrie Street, Micalago Road, Burra Road and Tinderry Road.
- Constraints to access are topography, flood prone land, the railway corridor and the Murrumbidgee River.
- Public transport, formal parking, pedestrian and cycling activity are limited.
- There are road safety issues at the Monaro Highway intersection.
- The rail corridor can be seen as a constraint or an opportunity for the future.
- It can be expected that there will be conflicting priorities between different transport modes if Michelago grows.
- The construction of a causeway or bridge over the Michelago Creek at Ryrie Street and Micalago Road is seen as an important way to improve access between the village and rural residential area⁷.

2.3 Economy

- Snowy Monaro Regional Council has a diversified economy and a significant infrastructure pipeline; it is more resilient than many other regional LGAs.
- COVID-19 has caused disruptions but has introduced potential benefits in economic restructuring.
- Most feasible industries are freight transport, professional services and small manufacturing or engineering services – automated and high-technology.
- Key sectors are agriculture, accommodation and food services, tourism and utility infrastructure.
- Population increase alone will not drive meaningful employment or value-add activity due to proximity to Canberra.
- Michelago is expected to generate demand for over 7 ha of employment land in the immediate term (*Snowy Monaro Employment Lands and Rural Lands Analysis*) *.
- Council should provide incentives to maintain and attract small and medium enterprises (SMEs). Such as artisan food and drink premises, distillery/brewery, and food and fibre processing⁸.

2.4 Open space, recreation and community facilities

Open space and recreation facilities are currently centred primarily on Michelago Park, which supports a cricket ground, tennis courts, clubhouse and play equipment, and services the village and surrounds. There are also pony club grounds and a yoga studio located on the western side of the Monaro Highway.

⁷ WSP Transport review 2020

⁸ Sustainable East Background Review, Michelago Master Plan, and *Snowy Monaro Employment Lands and Rural Lands Analysis*

* *This is unlikely to be as high as 7 ha now that an unserviced lower growth scenario has been identified.*

Community facilities at Michelago are:

- Primary school
- Church
- Memorial hall
- RFS shed
- Police station
- Cemetery
- Railway station precinct.

There are opportunities to enhance existing infrastructure and facilities to improve amenity for example:

- Extend paths and link elements of the village with a walking track or loop incorporating the Michelago Creek
- Tree establishment along streets, improve the entrance to the village and the village heart around the General Store
- Potentially utilise rail infrastructure for tourist activities including a rail trail.

Constraints will be managing the flood hazard and obtaining access to Crown land.

The Master Plan seeks to enhance existing facilities and infrastructure to improve liveability for residents and tourism experience for visitors.



Source: Nita Scott, November 2020

Photo 2.1 Playground and Cricket Oval at Michelago Park

2.5 Constraints

The Michelago area is affected by physical constraints which are set out in Figure 2.3 below. The constraints are generally flooding, groundwater vulnerability and bushfire risk. High biodiversity values are found in the locality as grasslands on slopes and remnant vegetation along watercourses and upper slopes. Much of this land is zoned RU1 Primary Production and is managed by private landholders. The Tinderry Range is zoned E1 National Parks and Nature Reserves and is managed by the NSW Government. The Tinderry Range is also a valued scenic asset for Michelago, and the LEP and DCP contain provisions to protect views to the Tinderry Range from Michelago.

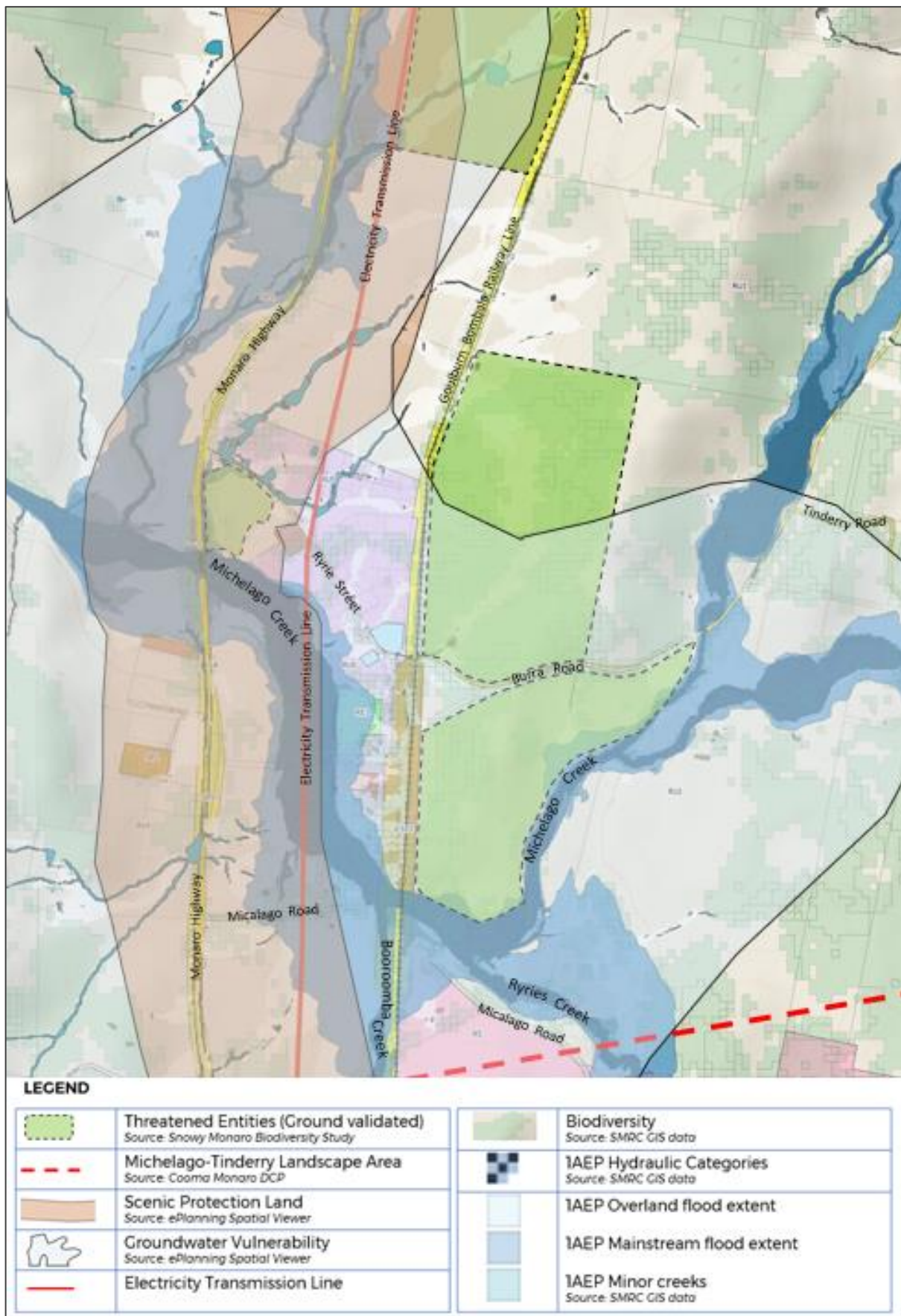


Figure 2.3 Key constraints

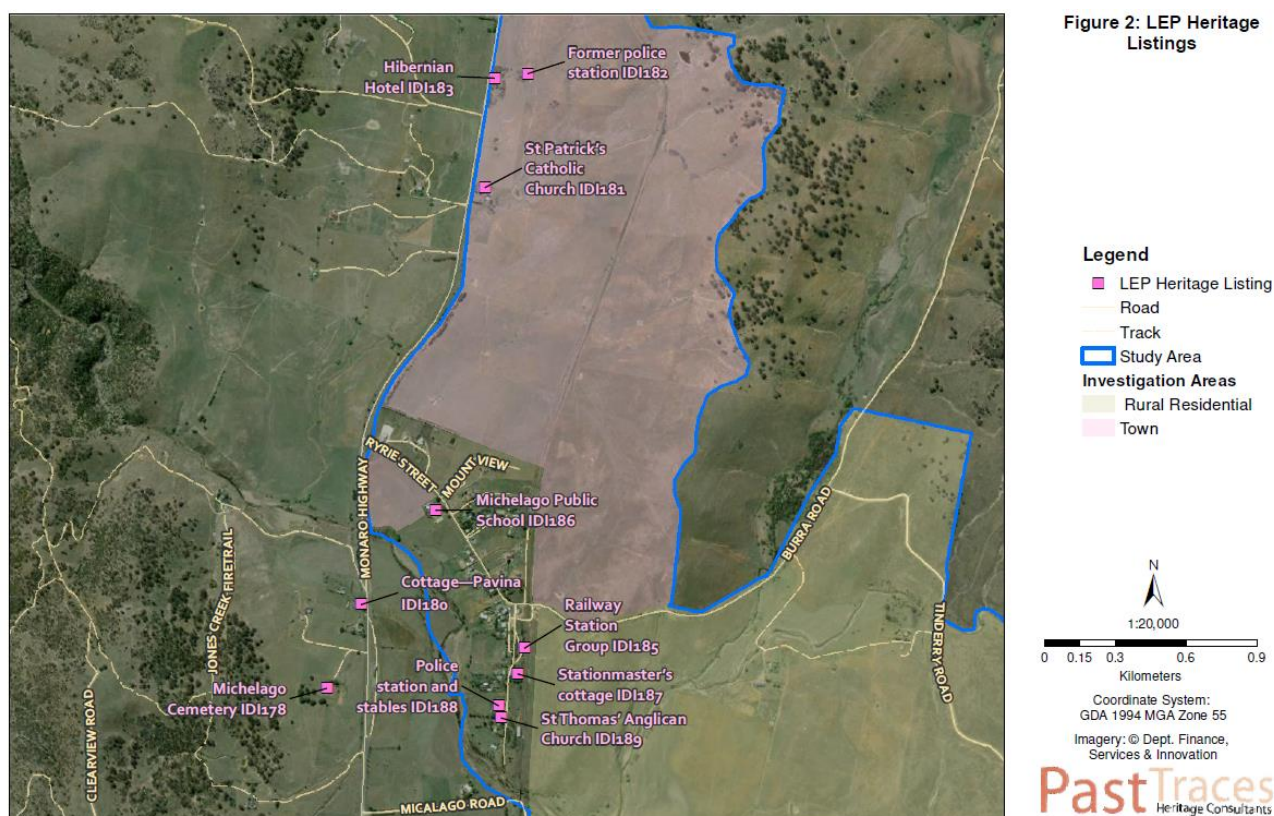
2.5.1 Heritage

A desktop heritage study was undertaken by Past Traces Heritage Consultants for the Michelago area to inform the Master Plan development. It is acknowledged that a whole of LGA Aboriginal Cultural Heritage study to assess Regional Landscape scales would be a valuable addition, however this is beyond the scope for the Master Plan project.

2.5.1.1 Historical Heritage

There are a number of local heritage items in and around Michelago. These present opportunities for restoration and reuse and are highly valued by the local community. In summary:

- There are 15 heritage listings within the investigation area (including LEP listings shown in Figure 2.4).
- Existing heritage items provide an opportunity to highlight Michelago's character in any new development.
- There are historical items listed on the State Heritage Register (SHR) which will trigger the requirements of the NSW Heritage Act should redevelopment occur in the vicinity. These are:
 - Michelago rail bridge over Ingelara Creek (SHR listing number 01048)
 - Michelago Railway Station Group (SHR listing number 01192).
- Heritage items provide an **opportunity** to highlight Michelago's character in any new development, for example the Hibernian Inn and former police station.
- There is an opportunity for a village Heritage Trail and redevelopment of the railway and buildings into a rail-trail.
- There is potential for a heritage precinct in Michelago, with DCP controls to guide the look and feel of the area.
- Creek lines are predictive with moderate to high potential for aboriginal sites⁹.



Source: Figure 2: LEP Heritage Listings, Past Traces Heritage Consultants, 2020

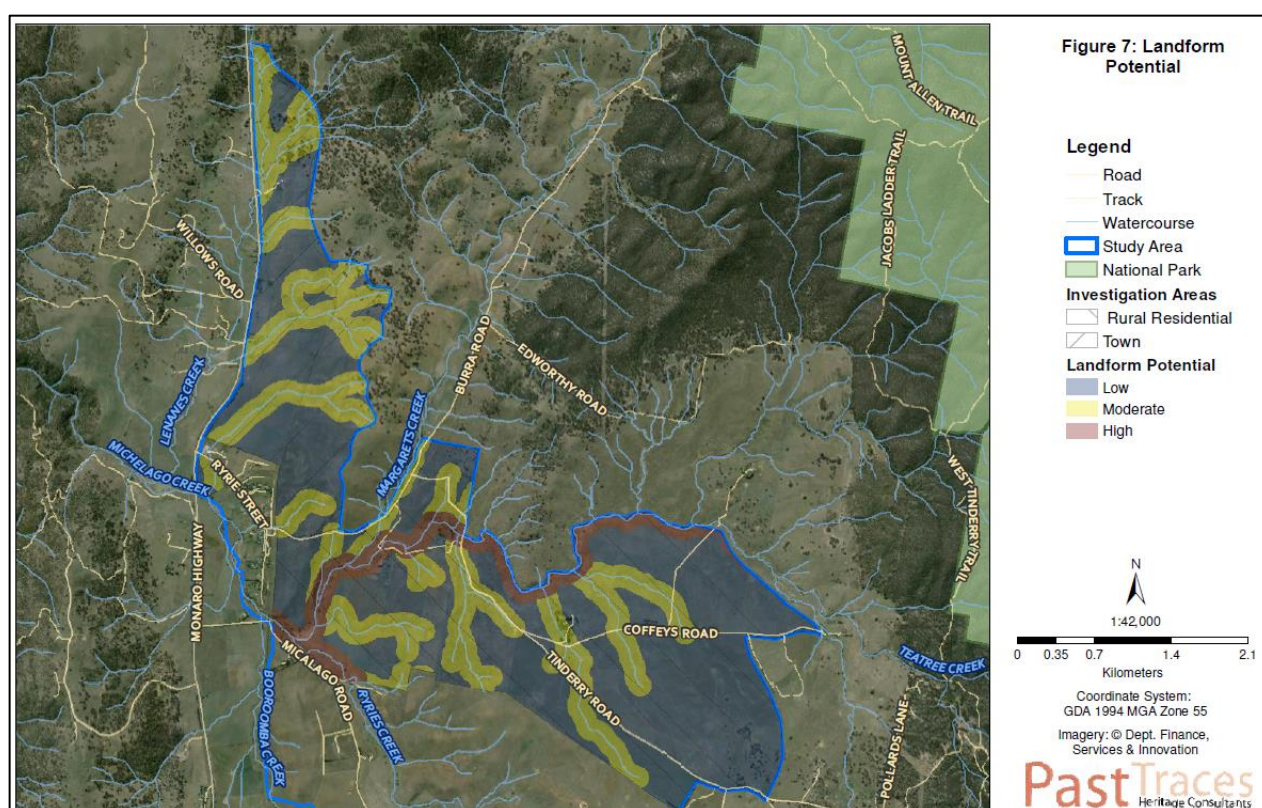
Figure 2.4 Cooma-Monaro LEP 2013 Heritage Listings at Michelago

⁹ Past Traces Heritage Consultants, 2020

2.5.1.2 Aboriginal Cultural Heritage

Michelago is located on Ngarigo country which covers most of the Monaro Tablelands and extends into the Australian Alps covering the area of Mt Kosciusko and Jindabyne.

- No known Aboriginal heritage sites are present within the investigation area and no known areas of Potential Archaeological Deposit (PAD) were identified within the project area based on a review of previous reports and landform modelling.
- Areas of moderate and high potential for unrecorded Aboriginal sites are present within the investigation area along creek lines based on landform modelling and are shown in Figure 2.5. This model focuses on the use of the intermittent 1st order creek lines and more permanent water sources within the investigation areas and the lower slopes and terrace forms which have been identified from previous heritage studies to have a higher incidence of site presence.
- As areas of historical heritage constraint and potential for unrecorded Aboriginal heritage sites are present within the investigation area detailed field survey will be required prior to any planning approvals or construction.



Source: Figure 7: Landform Potential, Past Traces Heritage Consultants, 2020

Figure 2.5 Assessment of landforms for potential Aboriginal Cultural Heritage

2.5.2 Biodiversity

- There are areas of high environmental value (HEV) surround Michelago including Threatened Ecological Communities which were ground-validated during the *Snowy Monaro Biodiversity Study* (Molonglo Consulting).
- It is important to protect and enhance, avoid and minimise impacts on areas with high environmental values.
- The valley floor including Michelago village once supported Monaro Dry Grassland.
- There are areas of high condition grassland that may be consistent with Natural Temperate Grasslands (Critically Endangered Ecological Community).
- The Box-Gum Woodland Threatened Ecological Community may also occur.

- Field verification via detailed assessment of the biodiversity values of investigation sites is required prior to rezoning land. Similarly validated areas of HEV will need to be avoided and protected in accordance with the South East and Tablelands Regional Plan 2036¹⁰.
- Removal of significant native vegetation should be avoided¹¹.

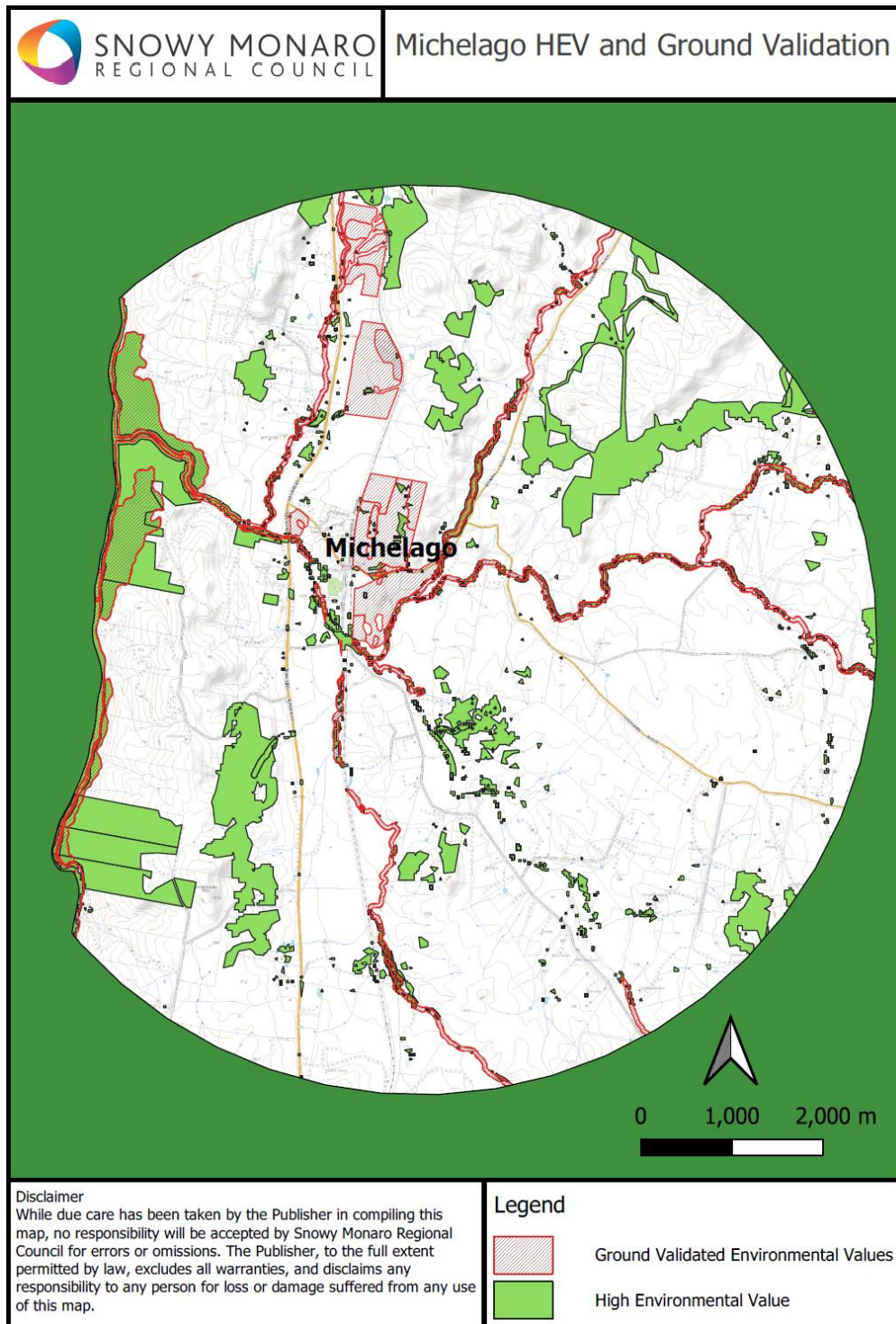


Figure 2.6 Identified High Environmental Values

¹⁰ NSW DPIE advice, August 2021

¹¹ WSP Biodiversity Report

2.5.3 Flooding

Flood studies and floodplain risk management studies were undertaken for several towns within the Snowy Monaro LGA including Michelago by SMEC and GRC Hydro. The draft was available during preparation of the Master Plan and found that Michelago:

*'has relatively little flood affectation compared to other towns with most areas of Michelago Creek's floodplain away from dwellings and roads. While in very rare events (e.g. 0.2% AEP) very few dwellings are directedly affected by creek flooding, there is potential for severe inundation across the town in the Probable Maximum flood (PMF). Flooding issues are limited to areas of overland flow adjacent to Ryrie Street, and isolation of properties outside of Michelago due to roads cut off due to flooding. The Average Annual Damage for Michelago is estimated to be \$137,000.'*¹²

Key considerations from the Study include:

- Michelago does not have an existing warning system or flood intelligence specific to the town.
- SES primarily carry out the emergency response during a flood. The closest SES Regional Operations Centre is in Queanbeyan, and the closest Centre in the LGA in Cooma at Polo Flat.
- Creek flooding and overland flow can occur simultaneously or separately.
- Overland flow paths to Michelago Creek could limit infill opportunities within the village.
- Michelago School is flood free for events up to and including the 0.2% AEP event, however, is affected with high hazard and depths exceeding 2 m during the PMF event and would require evacuation during extreme flood events.
- Several roads experience hazardous flow (i.e. knock over pedestrians or transport cars off the road) during a 5% AEP flood event. These are Ryrie Street near Monaro Highway and petrol station, Micalago road at Booroomba Creek, and Micalago Road at Michelago Creek (near the railway track).
- Consideration is required to avoid creating dwellings and sensitive receivers (e.g. children and elderly) on land that is isolated during a flood event.

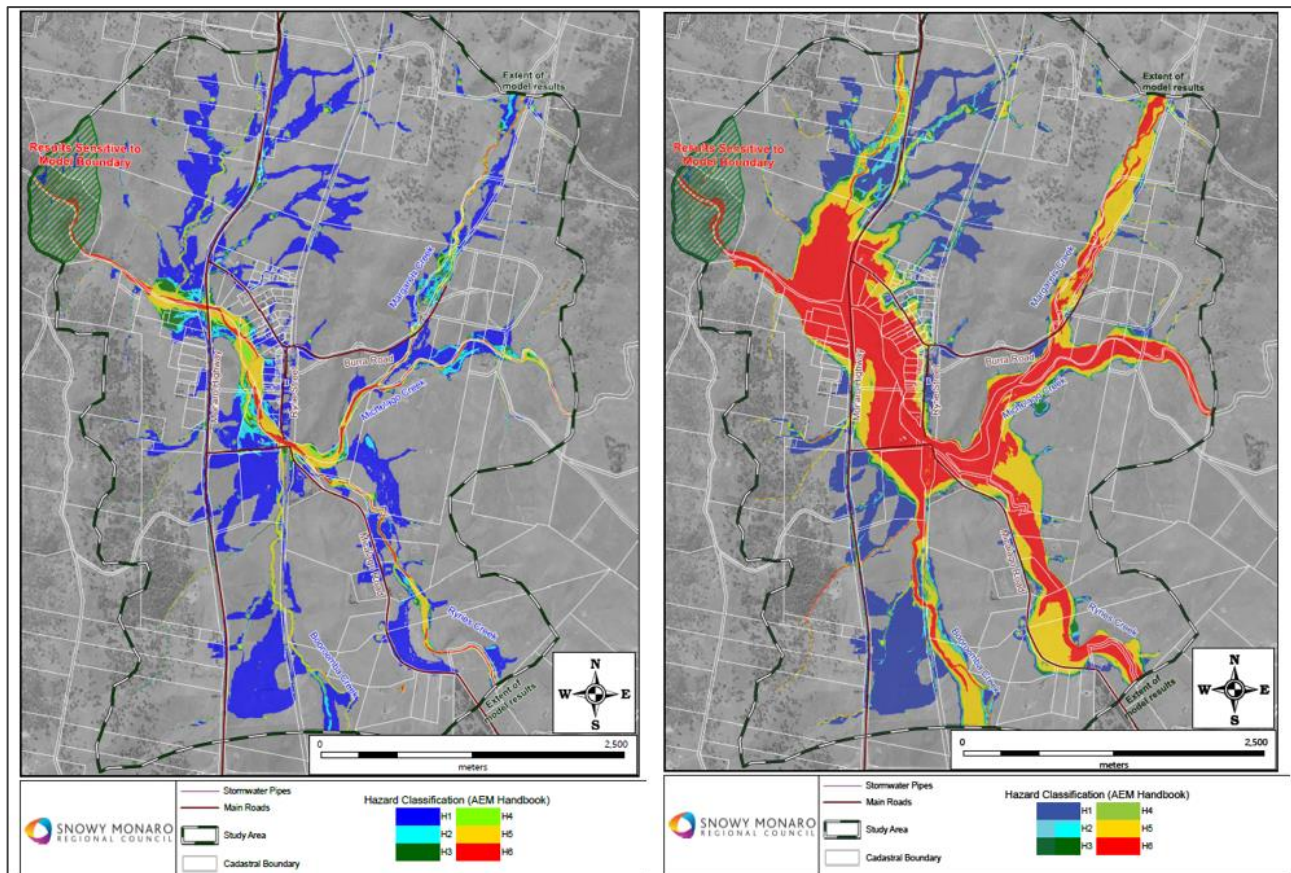
The key constraints map shows the 1AEP (1 in 100-year flood) extent. Within the flood extent, darker areas signify higher hydraulic velocity (and flood hazard) during a 1AEP flood event.

The extents of the Probable Maximum Flood (PMF) is extensive and includes much of the existing village.

Recreational and agricultural uses are proposed on the main flood plain areas.

Cumulative impact assessment was undertaken to determine the flood behaviour impact on changed catchment conditions (using 30% imperviousness for residential areas and 80% imperviousness for industrial/commercially zoned land). This found that on-site stormwater detention (OSD) development controls to manage the cumulative impact on flooding are unlikely to be required, however Michelago may benefit from an OSD strategy to manage downstream erosion and water quality.

¹² SMEC and GRC Hydro, Floodplain Risk Management Studies and Plans Draft Report March 2020



Source: Appendix D: Michelago Maps, showing hydraulic hazard classification, Snowy Monaro Regional Council Flood and Floodplain Risk Management Studies Draft Report 2020, SMEC and GCR Hydro

Figure 2.7 Comparison of the 1%AEP and PMF event hazard classifications

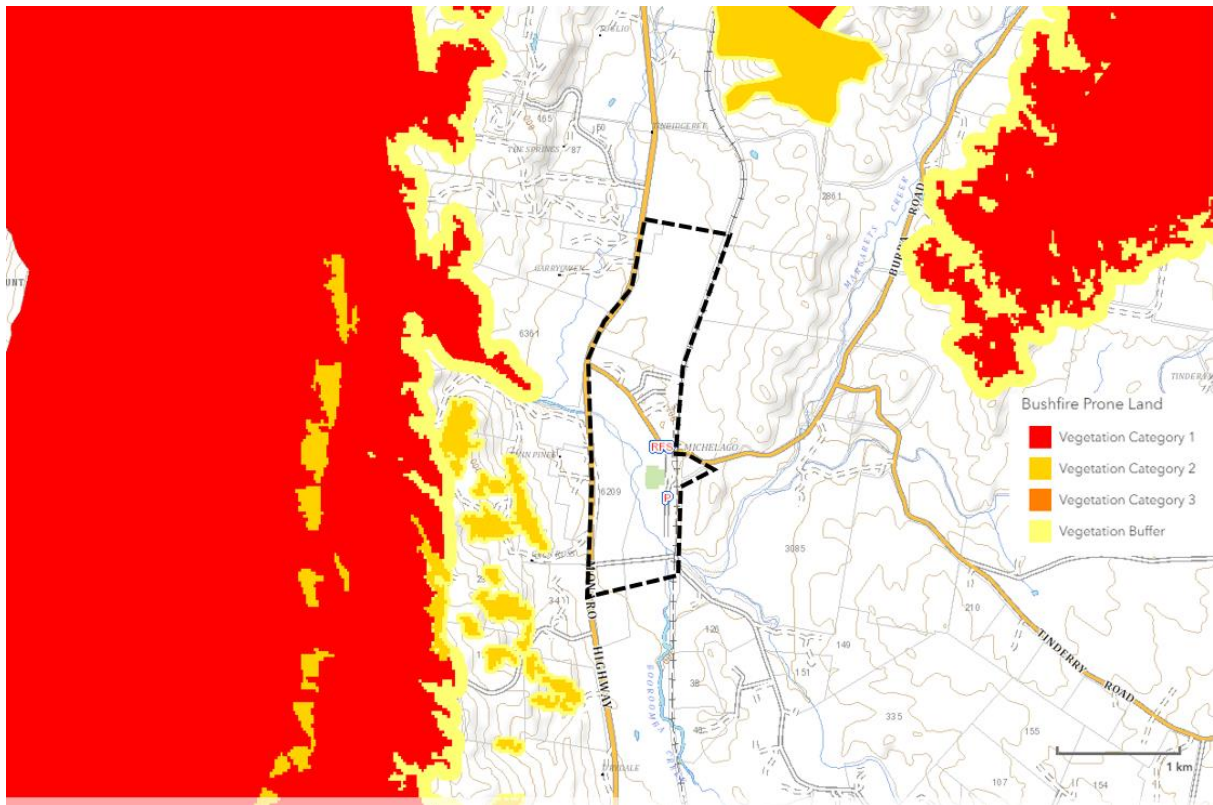
2.5.4 Bushfire

The Michelago Surrounds are impacted by bushfire, particularly the area to the south and west of Smiths Road shown as Vegetation Category 1 on the following images from the DPIE Spatial Viewer. The core village area of Michelago is not considered bushfire prone. The Final Report of the NSW Bushfire Inquiry (2020) sets out recommendations for a more strategic approach to land use planning and the management of bushfire prone land, particularly in peri urban areas. Council will need to prepare a Bushfire Strategic Study under the guidelines set out in Section 4.2 of Planning for Bushfire Protection 2019 to assess whether new development via intensification of settlement is appropriate in the context of bushfire hazard.

A revised Bushfire Prone Land (BFPL) Map for the Snowy Monaro LGA was certified by the Commissioner of the NSW RFS on 1 June 2021¹³. This map recognises the bushfire risk posed by grasslands as per the categorisation in 'Planning for Bushfire Protection 2019' and identifies all land outside of the core village area as BFPL. Any development (including minor works) on properties impacted by the BFPL mapping will require an assessment under Planning for Bushfire Protection Guidelines and relevant construction standards. Any future development will also need to be the subject of a Bushfire Strategic Study¹⁴ prepared by Council and part of a coordinated response to regional fire management.

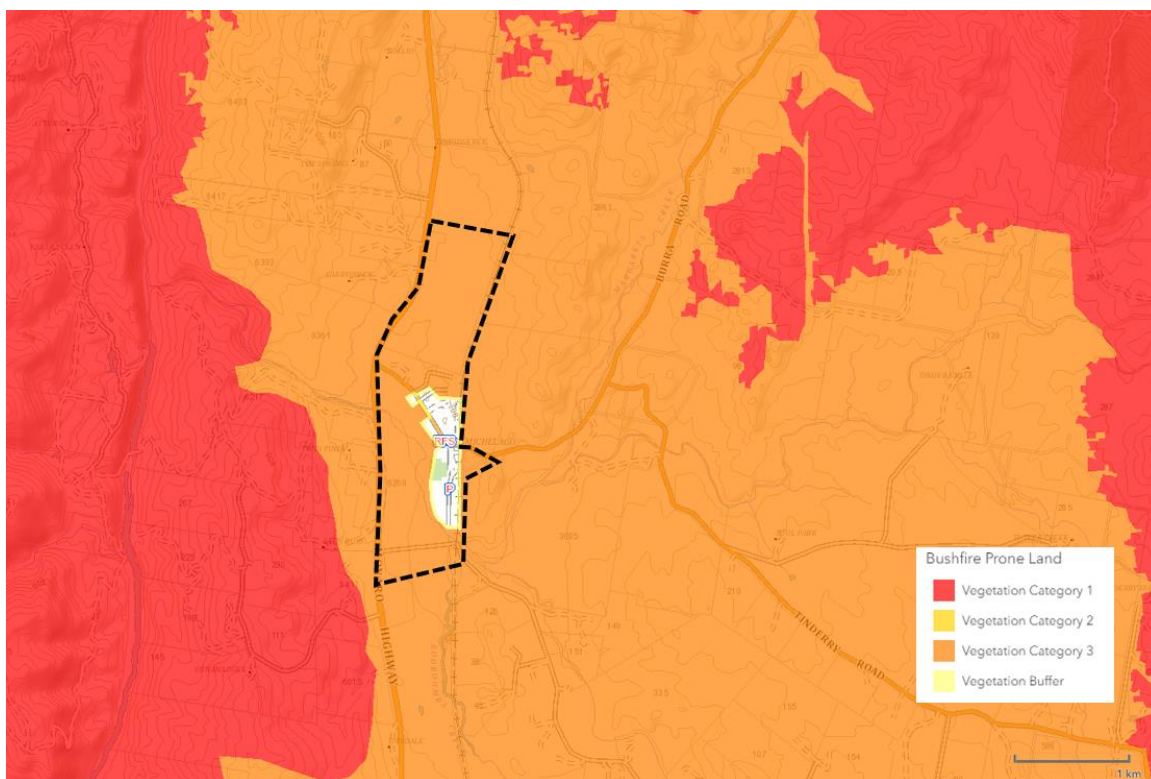
¹³ Snowy Monaro Civic Alerts, Bush Fire Prone Lands Mapping Update, 17 June 2021
<https://www.snowymonaro.nsw.gov.au/CivicAlerts.aspx?AID=1064>

¹⁴ Advice from NSW RFS, August 2021



Source: e-Planning spatial viewer, February 2021

Figure 2.8 Previous bushfire prone land around Michelago



Source: e-Planning spatial viewer, 21 June 2021

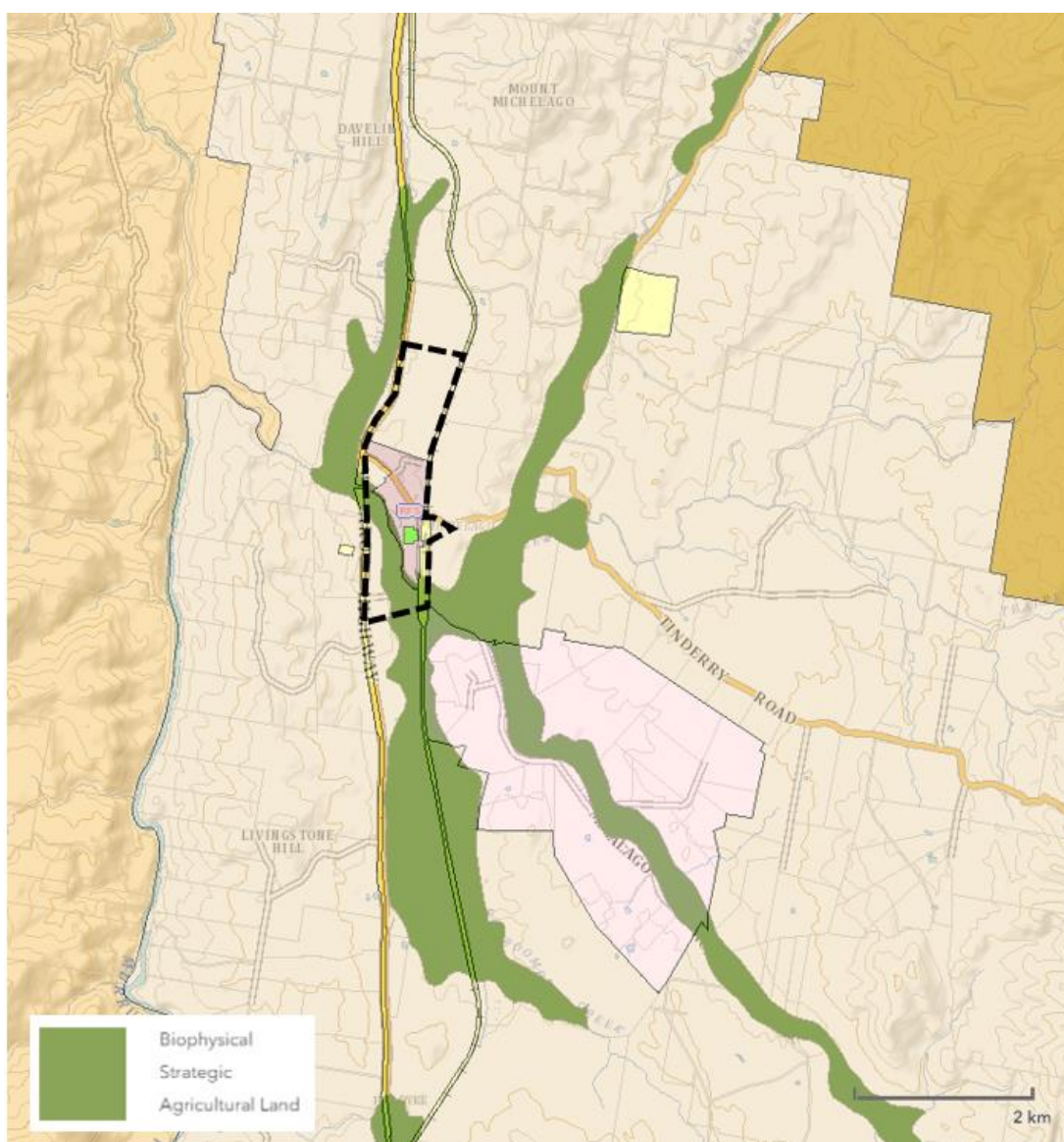
Figure 2.9 Current Michelago bushfire prone land

2.5.5 Groundwater vulnerability

The Cooma Monaro LEP map CL1_010 shows most of the land at Michelago with groundwater vulnerability. This has development implications and the purpose of the mapping is to make better informed judgements on where to locate potentially polluting activities so as to minimise the risk to groundwater. This is particularly relevant when lots are unserviced as there is potential for on-site effluent disposal to contaminate groundwater. Impacts can also be cumulative and both greenfield and infill development will need detailed on-site land and water capability assessments to determine suitability of systems and appropriate lot sizes.

2.5.6 Biophysical Strategic Agricultural Land

Biophysical Strategic Agricultural Land (BSAL) is defined under the NSW Mining SEPP and is mapped to guide development to avoid adverse impacts to valuable agricultural land. Michelago has a limited amount of BSAL land shown in Figure 2.10. This should be preserved for rural use and not used for residential development.



Source: ePlanning Spatial Viewer SEPP (Mining, Petroleum Production and Extractive Industries) 2007, and Land Zoning layers

Figure 2.10 Biophysical Strategic Agricultural Land

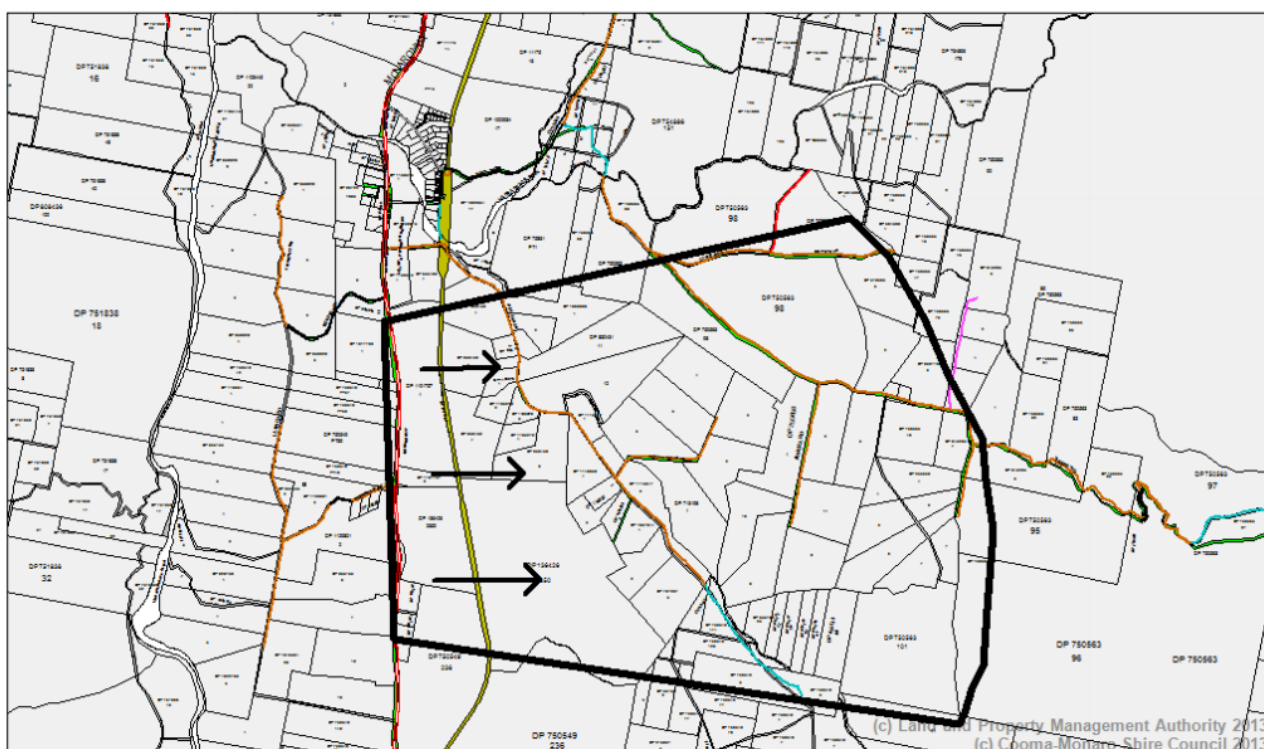
2.5.7 Rural land use conflict

At this stage the Cooma Monaro LEP zones the land around Michelago for primary production purposes using the RU1 Primary Production zone (sheets LZN_101 and LZN_010A). The benefit of this is that there is a 'hard' boundary between rural and village development, which reduces potential for issues associated with encroachment of urban land uses onto productive rural land. For example, there have been reports of dog attacks and fences being cut on rural properties around the region and ongoing issues with the spread of weeds. It is important that clearly defined boundaries and separation of land uses continue to maintain and separate potentially conflicting land uses. This is achieved by the implementation of appropriate minimum lot sizes and allocation of zones. Council is preparing a comprehensive LEP which addresses the issue of rural land management. This Master Plan recommends for the continuation of the current lot size and zone allocation around Michelago.

2.5.8 Views along Monaro Highway and to Tinderrys

There is an 800 m wide view corridor identified in the LEP along Monaro highway (Sheet SCP_010), with a buffer extending approximately 370 m each side of the road. Development can occur within this buffer, with considerations for maintenance of visual amenity contained in clause 6.9 of the Cooma Monaro LEP.

There is a vista between the Monaro Highway and Tinderry Range protected in the DCP (6.10 Important Views and Vistas – areas with high landscape value). The vista extends from approximately 800 m south of the Micalago Road intersection with the Monaro Highway, a further 3,500 m south along the highway and extends toward the east in a slightly fanned shape overlooking the railway line, Micalago Road, and Tinderry Road. The entire vista area is south of the identified Michelago village extent. There is merit in considering expanding the vista to the area including and north of Michelago for consistency.



Source: Figure 15, Cooma Monaro DCP

Figure 2.11 Michelago-Tinderry landscape area

Concerns have been raised that the scenic protection area identified in the Cooma-Monaro DCP do not protect scenic values from the village rather views from the Monaro Highway south of the village. While protection of the view vista south of the Village is considered important, protecting view corridors from the village east to Station Hill and the Tinderry ranges. It is recommended that the DCP controls are amended to expand the scenic protection area north to incorporate land directly east of the village as shown in figure 2.11 below.

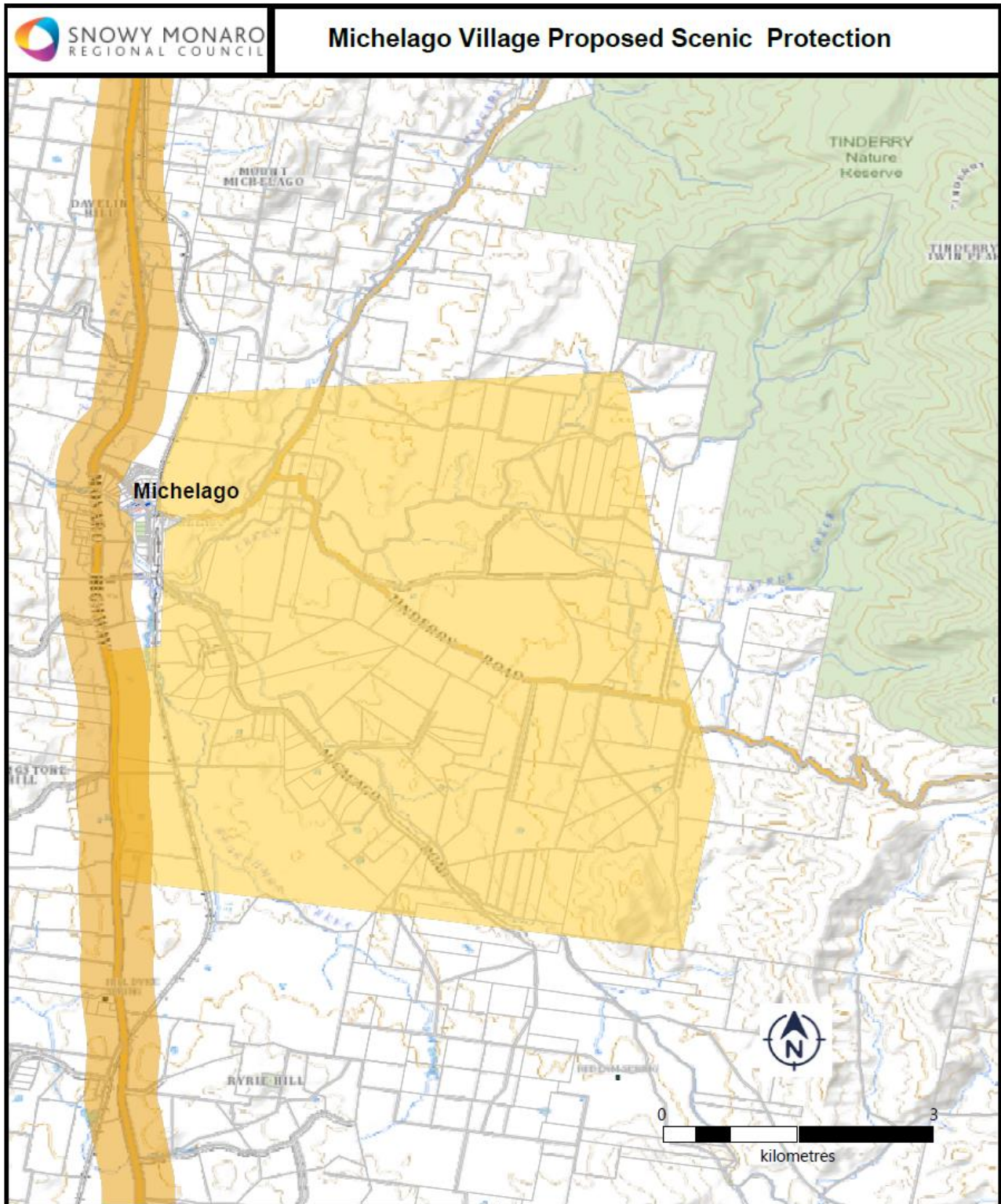


Figure 2.11 Michelago-Tinderry landscape area

2.6 Character

Michelago does not have a consistent streetscape and has been described as 'having a personality'.

The existing lot layouts along Ryrie Street make infill difficult, particularly flood-affected lots west of Ryrie Street. The lot layout also constrains road and pedestrian/bicycle linkages to the north and along/across the Railway line.

The entrance to Ryrie Street from Monaro Highway was improved with some tree plantings – generally smaller deciduous species, however is not obviously a main tourist entrance to the Snowy Monaro Region, and does not immediately indicate its Main Street status, being open and grassy, with overhead power lines, no footpaths, and scattered trees.



Photos: Nita Scott, November 2020

Photo 2.2 Ryrie Street Character – Highway approach to Michelago School

Heritage buildings are a key character aspect for Michelago, with the Railway Precinct buildings at the heart of the village.



Photos: Nita Scott, November 2020

Photo 2.3 Heritage Listed Michelago Railway Station



Photos: Nita Scott, November 2020

Photo 2.4 Micalago Road Character – Highway approach to Railway Bridge and future Ryrie Street link

Tall poplars line Micalago Road and draw the eye to the historic railway bridge and dramatic view of Tinderry Range beyond.

2.7 Civil infrastructure

Council has planned to upgrade infrastructure in Michelago as follows:

- Causeways at Ryrie Street and Tinderry Road along with upgrades to Burra, Micalago and Tinderry Roads to be incorporated into a development contributions plan for Michelago (LSPS, 2020).
- Implement flood planning controls based on a flood risk management plan.
- Investigate a water and wastewater options study for Michelago¹⁵.

¹⁵ LSPS

As noted, Michelago is constrained by topography, flooding, the Murrumbidgee River, and physical barriers such as the Monaro Highway and railway corridor.

Currently Michelago is not serviced with reticulated water supply or sewerage. Options around sourcing and funding water supply are set out in a study prepared by GHD (2020) and included rainwater harvesting, the Murrumbidgee River and Googong Dam. This report was reviewed by WSP as part of the background research for this project, with the finding that the preferred option to supply raw water to Michelago was from the Murrumbidgee River. It is noted that the water supply from the Murrumbidgee may only be suitable for a 'low to medium' growth strategy. An environmental study of the available water draw from the Murrumbidgee in this area should be undertaken to examine the limits of this water supply option.

A Growth Scenarios Report was prepared by WSP in early 2021 which set out a range of static, low and low-medium growth scenarios for Michelago based on assumptions for servicing. This report is found in Appendix C.

The report found that water and sewer are both possible in Michelago, with a range of costs involved that generally decreased with higher land yields as expected. However, it has been decided by Council and the community to adopt a growth scenario that did not include extension of services for the purposes of the Master Plan.

Rainwater harvest, as per the existing system in Michelago may remain suitable for low growth scenarios, but may be unsuitable for medium to larger growth within the village, particularly with further development of any commercial hubs.

It is important that any future rezoning of land in Michelago considers the potential cumulative impact of an increased number of on-site effluent disposal systems, particularly in the areas of groundwater vulnerability.

Other matters for consideration are stormwater runoff to downstream catchments, with opportunities to formalise existing overland flow paths and flood prone land as drainage reserves, potentially coordinated with open space and ecological buffers¹⁶.

The GHD report suggests a hybrid solution of wastewater re-use and rainwater harvesting, but states that extensive community consultation should be undertaken in the first instance. A submission from Michelago Region Community Association (MRCA) prepared in response to Council's Draft Settlements Strategy in January 2021 indicates that investigation of innovative alternative eco-friendly methodologies for wastewater would be welcomed and 'consistent with the eco-village vision described by Michelago and region residents in consultation with Council'.

2.8 Opportunities for Michelago

Community consultation and engagement activities in 2020 combined with the specialist desktop reports and input from the planning team have been distilled into the following opportunities for Michelago. Implications for the Master Plan are provided as guidance for the development of sustainable settlement guidelines in Chapter 5.

2.9 Economy and Future Growth

- The leading economic contribution in the Michelago Region comes from primary production. The area has a diverse economy that represents the significant environmental values, recreation and tourism as well as agricultural productivity.

¹⁶ WSP Civil Infrastructure Report for Michelago

- Michelago can attract enabling industries to support wider growth. Opportunities are in freight transport, professional services to support infrastructure development as well as potential small manufacturing engineering services.
- Long term structural changes could allow Michelago to capitalise on less commuting and more remote work.
- The community is generally supportive of further economic development.
- The General Store locality in Ryrie Street provides a base for further small businesses to co-locate.
- Michelago is in close proximity to Canberra and being located in the 'Canberra Corridor' positions the village between current and future economic anchors.
- Future opportunities in small and medium sized businesses (SMEs) should be explored.
- Traffic flow to ski fields is an opportunity.
- Providing for appropriate development in locations that will enhance Michelago for residents and visitors.
- The existing RU5 village land use zone under the Cooma Monaro LEP 2013 already permits a range of commercial activities such as light industries, neighbourhood shops, tourist and visitor accommodation etc.

The Employment Lands study recommends identifying 7 ha of land for industrial development for immediate needs.

2.9.1 Implications for the Master Plan

- The area around and near the General Store provides a village focus or 'heart' for intensification of development. A free Wi-Fi/hub for remote work could be provided in the village centre.
- Access to a range of open space and recreational opportunities in the village and more broadly with the Snowy ski-fields and surrounding landscape offering options for 'nature tourism' and economic/employment opportunities.
- There needs to be strengthened protections for adjoining rural land for continued economic, amenity and environmental contribution.
- The Michelago Park, Railway buildings, Michelago Hall, RFS sheds, church, police station and General Store precinct are preserved and enhanced as part of the village centre and focal point for enterprise and cultural activities, creating a 'spill out' area for community activities and events, with parking overflow situated on land to the east of the rail corridor.
- Opportunities to provide land for industrial and/or employment generating uses are investigated, potentially to the south of the village.
- Nature-based tourism opportunities are pursued to capitalise on the ski fields, mountain sports and proposed rail trail, such as artisanal food and beverage producers, accommodation providers, cafes, pubs, etc.
- The entry to the Village at 1-2 Ryrie Street off the Monaro Highway are critical to the presentation of Michelago and needs to be managed with an appropriate scale of development and urban design including landscaping.

2.10 Community and village life

- A growing but aging population is dispersed within the village and immediate surrounds including Michelago and Burra Road.
- Housing is predominantly detached single dwellings on large lots, with recent village style development located in 'battle axe' subdivisions.
- Both the Community and Council support some population growth while maintaining character, particularly focused on the 'railway precinct' near the General Store and RFS sheds.
- Ideally more community services are provided such as childcare and aged care in proximity to the village centre.
- People live and work in the village centre, using remote working opportunities to support existing and future businesses.

- The RU5 village zone permits a range of residential development including seniors housing and dual occupancies that can already cater for changing household size and requirements.
- The Smiths Road community to the north west is physically close but identifies with Canberra, being unable to formally cross the Murrumbidgee River.

2.10.1 Implications for the master plan

- Increased housing choice can be provided in Michelago's existing RU5 zoned area and new growth front (possibly RU5 or change to R2 Low Density zones) if services are economically available.
- Important factors are proximity to social and cultural infrastructure such as the school and General Store. The formalising of a village heart in the 'railway precinct' can be a central community space.
- Lot sizes and dwelling types provide diversity as permitted with servicing limits.
- Transport links are provided such as a formalised bus stop in Michelago near the railway station.
- Recreation opportunities can be enhanced along Michelago Creek; improved walkability around streets and potentially using the 'rail trail' if feasible.
- It is suggested that Council initiate and fund road upgrade from main users and limit future rural residential development.
- Urban and rural boundaries need to be clearly defined: the existing zone boundary provides demarcation along major infrastructure routes.

2.11 Access and movement, infrastructure and assets

- Existing essential infrastructure provided is electricity, roads, telecommunications.
- Michelago school, Community Hall, RFS sheds and railway station precinct are valuable community assets. Heritage items provide opportunities to capitalise for tourism and local cultural benefit. Rail trail investigations are in progress.
- Large parcels of Crown Land along the Michelago Creek corridor and west of the Monaro Highway provide potential for community use including a vantage point to view the Tinderry Range.
- The Michelago's Rural Residential land is located to the south east on Michelago Road. The estate is over 800 ha in area and zoned R5 Large Lot Residential with an 8ha minimum lot size. There is a large amount of potential supply for future subdivision. Access to Michelago will be improved with a crossing over the Michelago Creek to Ryrie Street and road upgrade.
- The village is not serviced by town water or sewerage. Water supply options identified in GHD's Water and Wastewater Scoping Study range from possible to prohibitively expensive. Groundwater vulnerability will constrain development density and typology if servicing is not provided.
- Flood prone areas of village restrict both access and development potential.
- RFS sheds are located in the centre of the village in a prime position for community use, however, it is noted that one of these sheds is proposed to be used for a 'bank of bins' for waste management. This use is incompatible with the desired village heart character.

2.11.1 Implications for the Master plan

- New infrastructure is necessary to bring basic services to Michelago such as the proposed bridge over the Michelago Creek at the northern end of Ryrie Street, waste management and recreation facility upgrades. The entrance to the village with the Monaro Highway can be enhanced to attract visitors.
- Formalising of parking and traffic management in the 'heart' of Michelago is required to allow safe traffic flow for increased visitors, and when events and gatherings occur.

- There are a range of plausible commercial opportunities available to Michelago as the result of location and access to ‘nature-based tourism’ including a rail trail.
- The electricity easement will restrict development under the power lines but may permit other activities such as active travel pathways.
- Connecting Michelago village with a network of walking and cycling paths through open space and along streets. Pedestrian safety should be prioritised, and a formalised bus parking bay on Ryrie Street provided near the school.
- Investigate opportunities to create a loop walking track around Ryrie Street and the Michelago Creek corridor and linking to the village heart precinct via Michelago Park, noting the need to manage flood hazard.
- Accessing the railway reserve land and buildings for tourism purposes as well as local pedestrian and cycling access in the event a rail trail is developed. In the long term, pedestrian and cycling access will also be provided to future greenfield areas along the rail corridor.
- The southern end of Ryrie Street will be connected to Micalago Road via a crossing over the Michelago creek (Council initiative/funding bid in place).

2.12 Landscape and public domain

- There is a demand for improvements in the central heart of Michelago, bringing people together to work, visit, relax, be active, shop and socialise, most likely around the General Store within close proximity to the railway precinct.
- The current RU5 zoned land extent enables walkability and cycling.
- There are active community groups and members in Michelago.
- The character of the built environment is increasingly unique in close proximity to a capital city.
- As with all rural communities, there is a range of ages, but also a generally ageing population.
- More shade, trees, greenery, seating to improve the amenity of public and open spaces and streets is required.
- The entrance to Michelago at the Monaro Highway at 1-2 Ryrie Street and along Ryrie Street can be enhanced with landscaping.
- Preservation of significant buildings, trees, railway structures and landscape elements that contribute to Michelago’s unique rural heritage character is important.

2.12.1 Implications for the Master plan

- Potential to substantially enhance the public domain, built and natural environment with landscaping, more facilities in community spaces, walkable neighbourhoods, joint use of public space.
- Housing diversity needs to cater for all stages of life, with the services to support seniors ageing in place.
- Potential for landscaping to improve the built environment and create cool, shaded places.
- New housing should be provided largely through infill development and carefully planned, location-appropriate new releases, limiting urban sprawl and maintaining walkability and avoiding constraints.
- Michelago’s rural heritage is expressed within the public realm through well integrated landscape design, infrastructure and signage. There should be appropriate integration between old and new structures, respecting the heritage values of the village centre and railway precinct and the buildings on the Monaro highway.
- Walkability should be enabled through a relatively compact urban form.
- Upgrade to key building form and function desirable especially for existing disused hotel building at the entrance to Michelago – privately owned.

2.13 Environment and sustainability

- Conserving and protecting natural and cultural heritage, high environmental values and important biodiversity corridors and views are critical.
- Protecting agricultural land from urban encroachment is essential.
- Avoiding or mitigating the impacts of natural hazards such as bushfire and flooding and the implications of climate change through locating new growth in the right location.
- Bushfire is a constraint and needs to be carefully managed. Planning for Bushfire Protection (RFS) guides best practice strategic land use allocation and should be applied.

2.13.1 Implications for the Master plan

- Clear land use zones and provisions should be in place to protect agricultural land from village activities and vice versa.
- Constraints are avoided or managed, guided by best practice planning.
- Views of the Tinderry Range from the Monaro highway and village are protected by restricting development on the eastern side of the railway reserve.
- Green corridors within and around Michelago are enhanced, allowing native fauna to move through the landscape from the Tinderrys, Michelago Creek to the Murrumbidgee River.

3 growth scenarios

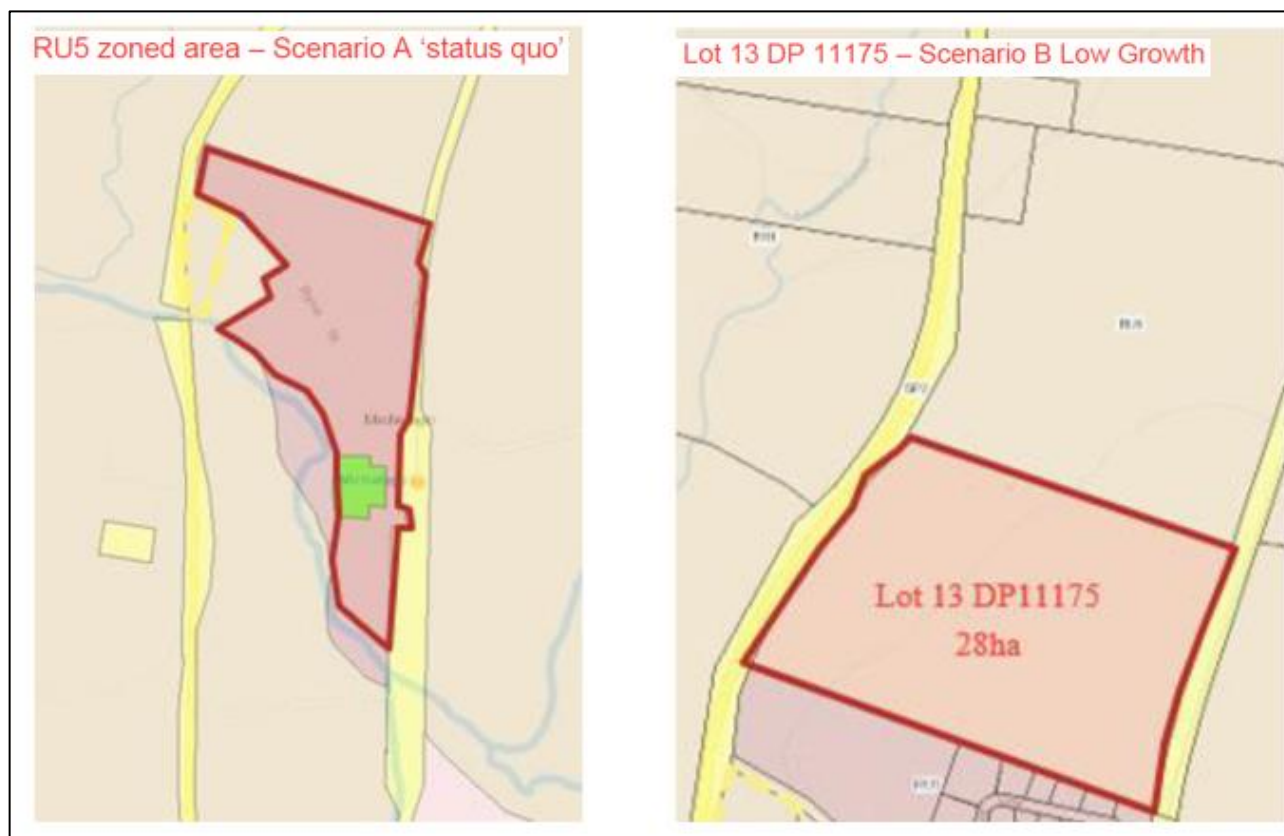
As part of the brief to prepare a Master Plan for Michelago, Council required the preparation of three growth scenarios as options for consideration. Development of the scenarios was guided by the government's policy framework, and logically fall into the following categories:

- 1 Status quo/infill
- 2 Low growth (detailing both serviced and un-serviced options)
- 3 Moderate growth.

The scenarios and costings are available at Appendix C.

3.1 Preferred Scenario

During consultation on the scenarios a preference emerged for the Status Quo scenario combined with the Low Growth un-serviced scenario option. The areas identified in Scenarios 1 and 2 are shown in the figure below.



Source: Michelago Master Plan: Development Principles and Growth Scenarios Briefing Paper, WSP 2021

Figure 3.1 Location of Scenarios 1 and 2

A summary of the **preferred combination of Scenarios 1 and 2** (un-serviced) and considerations for the Master Plan is outlined below.

3.1.1 Scenario 1: Status quo – infill existing zoned land

Under this option, development would be contained to the RU5 zoned area of Michelago village. In this scenario, you could expect roughly 152 new people in 53 new dwellings. This is in line with the current projected growth rate for Michelago:

- Dwellings would most likely be of similar size to existing homes. The types of houses you could expect to be developed would likely be two to four-bedroom detached family homes.
- The costs associated with connecting water and sewer services would be borne by the landowner, with no associated increase to rates by Council.
- Given there is limited growth in this scenario, there would be limited visual impacts on the Tinderry Range and surrounding rural land.
- However, opportunities for improvements to recreational facilities and the village centre would be limited, with the potential for small upgrades to existing facilities.

3.1.1.1 Risks and considerations

- Groundwater vulnerability may preclude further development with onsite effluent disposal.
- Riparian land restrictions may limit lot yield further than estimated.
- The linear layout of most lots may not be appropriate for ‘battle axe’ style subdivision.
- Non-residential development is also permissible in the zone, and if realised could reduce the residential yield.
- Intensification of residential land use and efficient use of services is government policy. However, the current lack of servicing also restricts housing diversity such as seniors housing, semi-detached (not permissible in RU5 zone) and multi dwelling housing, as well as tourist and visitor accommodation such as backpacker’s accommodation, eco tourist facilities and caravan parks.

3.1.2 Scenario 2: Low growth option (Un-serviced)

This scenario presented two low growth development options, but only the un-serviced option is summarised here. Access to new residential developments would be via Ryrie St, with a new road between the service station and Mount View Road. This can be seen at Figure 3.3.

UN-SERVICED GREENFIELD RELEASE

- In this scenario, you could expect 319 additional people in 111 new dwellings. This would still be classified as ‘low density residential development’.
- Rainwater collection and onsite effluent disposal would be the responsibility of each new dwelling owner.
- The new dwellings likely to be a similar type and size to existing homes.

Opportunities for improvements in this scenario could include:

- Small improvements to the public domain and formalisation of the village centre (near the general store).
- Potential for limited new recreational facilities such as a walking loop.
- Improvements to existing recreation facilities.

3.1.2.1 Risks and considerations

- This option presumes that the most logical new area for residential growth that is contiguous with Michelago on RU1 Primary Production zoned land directly adjoining the village (Lot 13 DP11175, being approximately 28 ha in area).

- When services are **not available** issues for consideration are the same as Scenario 1: constraints from groundwater vulnerability, flooding, access routes, electricity easement and continued preservation of views, as well as appropriate scale and density. In keeping with the current style of development, the RU5 zone would be extended north.
- It will be critical for un-serviced lot sizes, to be of a size that maintains village character, particularly in the event that subdivision into dual occupancy development is permitted. An LEP clause requiring a minimum lot size of 5,000 m² and 1 ha for dual occupancy development where reticulated sewerage and sustainable water supply are not provided should be applied.
- Access to Lot 13 will need to be gained from Ryrie Street and not the Monaro highway. Internal roads should be designed to a single lane standard that allows landscaping in the reserve, and relatively informal construction that allows shared use for pedestrians and cyclists.
- Heritage items need to be protected with substantial buffers around curtilages. Development controls for building setbacks and landscaping should be implemented through the DCP.
- The electricity easement provides a constraint but also a potential opportunity to use the land for open space and pedestrian access.

3.2 From Scenario to Master Plan

Upon review of comments and submissions collected during consultation, the low growth un-serviced opportunity area has been re-shaped to better meet identified principles, and community and stakeholder objectives. An example of this design process is shown in Figure 3.2 below.

The re-scoped low growth scenario area comprising part Lots 13 and 14 DP11175 has an approximate area of 30 ha, so the estimated population increase of 319 more people in 111 dwellings (based on approximately 28 ha) is considered to remain valid.

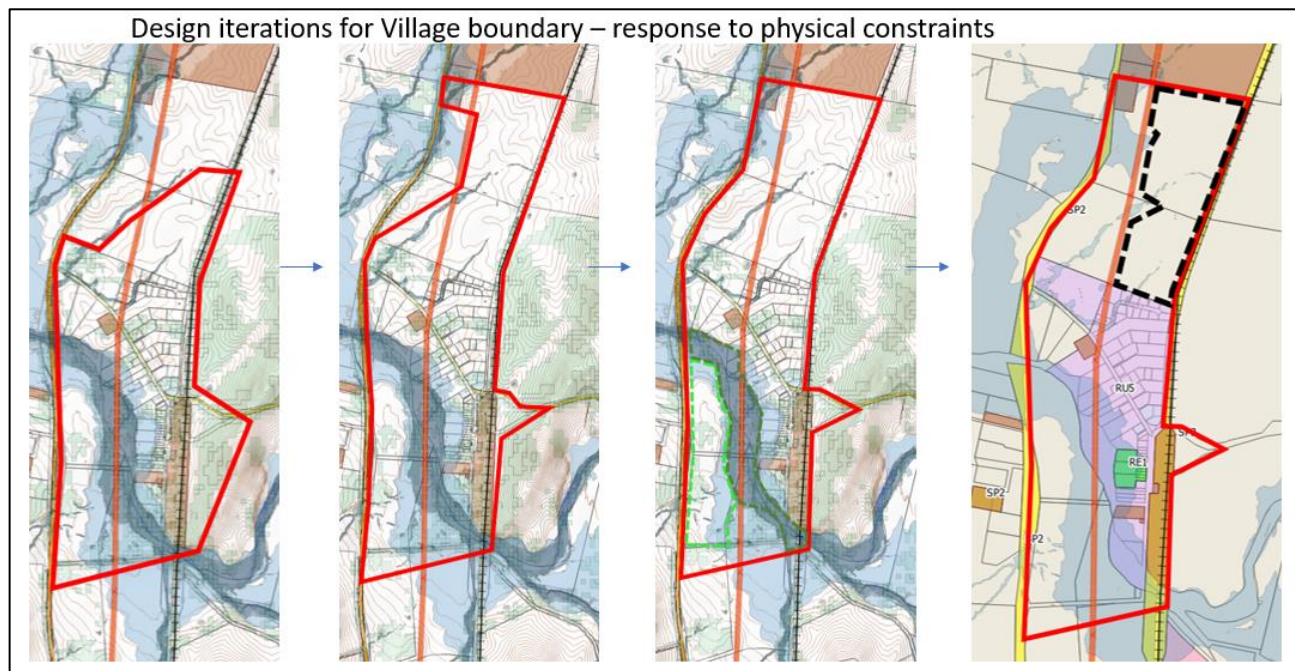


Figure 3.2 Design drafting process for preferred scenarios

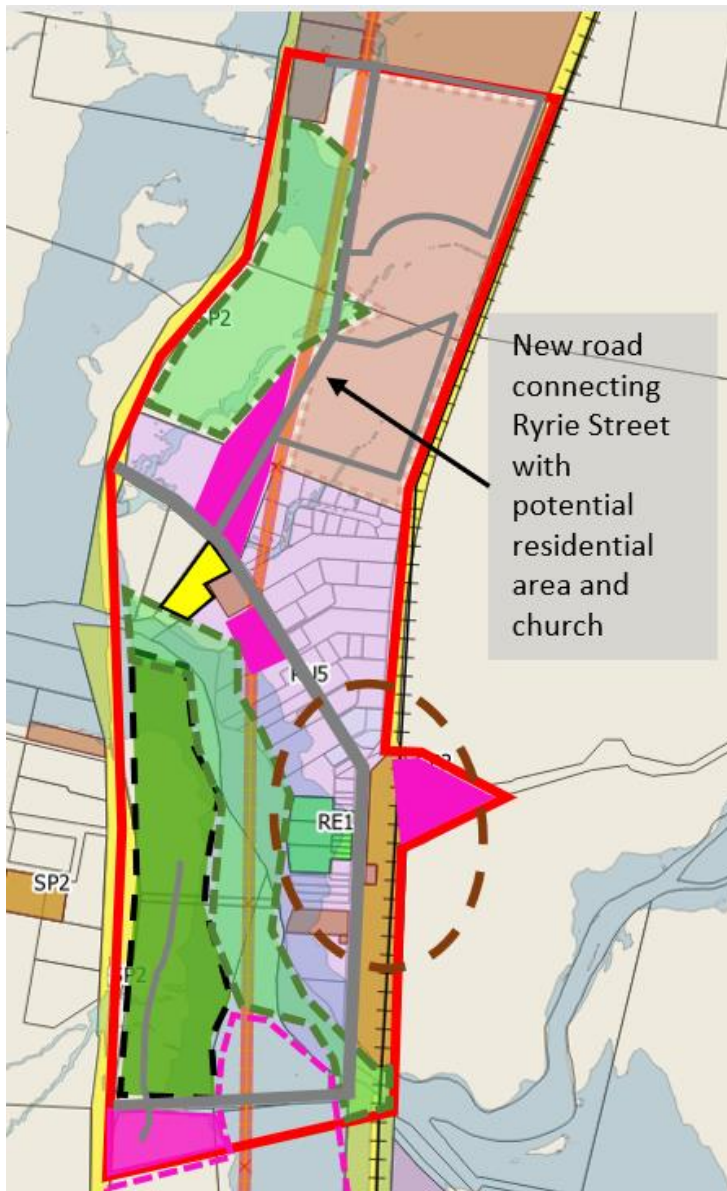


Figure 3.3 Indicative road alignment and intersection with Ryrie Street

3.3 Specific Areas within Michelago Surrounds

3.3.1 Eastern side of Queanbeyan-Bombala railway reserve

Looking at Michelago holistically, it appears logical to incorporate land to the east of the Railway Station to consolidate the form of Michelago village around a central 'heart' and provide for some economic land uses such as low-density business or other community uses. This is broadly not recommended for a range of reasons, mainly ecological constraints and slope, aside from the identified 4 ha (approx.) triangular parcel between the RFS Shed and Burra Road (#8 on the Action Map and Plan).

It is possible under the current Cooma Monaro LEP RU1 Primary Production zone to develop Eco-tourist facilities and some tourist and visitor facilities. There may be potential to locate this type of development near the railway line and the village boundary as part of the promotion of nature-based tourism opportunities.

3.3.2 Rural residential – Micalago Road R5 zone

It is noted that the R5 Large Lot Residential zoned land on Micalago Road is 821ha in area and currently supports 36 rural residential properties of varying size. The Cooma Monaro LEP 2013 minimum lot size for the R5 zone is 8 ha, ostensibly permitting (conservatively) 80 new lots. At this stage there is no justification to provide more land for rural residential style development.

It is recommended that Council monitor development of the Rural Residential area along Micalago Road. If further rural residential is considered necessary over the 20 year horizon of this plan, this should be provided within the existing R5 Larger Lot Residential footprint. Council may consider planning proposals in this area which reduce the minimum lot size if:

- Development proposed does not pose an adverse risk to the area's ecology.
- If the proposal can demonstrate the risks posed by natural hazards (flood, drought and bushfire) can be effectively managed.
- If the proposal can demonstrate adequate road access.
- The minimum lot size (MLS) proposed is not below 2ha.

4 Consultation

Community engagement has informed the vision for Michelago. Consultation activities undertaken to date were:

- Early Consultation - online survey, Councillor workshop, and face to face workshop with community members during November – December 2020.
- Scenarios Consultation – online survey, public exhibition of scenarios briefing paper, kitchen table discussion guide, two face to face community workshops (run by Council) during April-May 2021.
- Community and government agency consultation on Master Plan – July- August 2021

A brief overview of the key messages received from the community, Council and government stakeholders so far are set out in this section. The Consultation Outcomes Report can be viewed in full in appendix A of this plan.

4.1 Key messages from consultation

4.1.1 Community

- Maintain rural village look and feel, protect heritage buildings, increase services and provision/upgrades of amenities including recreation facilities.
- Improve access and connectivity of village (including Michelago Creek crossing) and create a town centre.
- Keep growth low and un-serviced, with larger lot sizes.
- Protect views to the Tinderry Range along length of Monaro Highway not just to the south of Michelago. Restrict development on Station Hill (currently zoned RU1 Primary Production with an 80ha minimum lot size).
- The construction of a rail trail will bring an economic boost to Michelago, as will the use of the railway precinct and promotion of local heritage items and character of Michelago.
- Upgrade community facilities in the ‘heart’ of Michelago is supported, particularly the relocation of the waste management area at the old RFS shed.
- It is preferable to manage the railway reserve land as a Section 355 Committee through Council, allowing the Michelago Region Community Association to raise funds and manage the precinct.
- Clarify the expansion of the Michelago Public School onto private land.

4.1.2 Council

- Does not appear to be financially feasible to service Michelago, and no acceptable alternative water source identified.
- Support small un-serviced growth with associated upgrades to roads (including flood access) and community facilities.
- Improve the entrance to the town (and region) from the highway; attract people in transit to the ski fields.

4.1.3 NSW Government

- Growth at Michelago is only supported with a viable water source. Drawing water from the Murrumbidgee is unlikely to be supported due to ecological impacts.
- Comprehensive ecological and Aboriginal Cultural Heritage assessments to verify High Environmental Value land required. Any areas with HEV will be subject to the ‘avoid, minimise and offset’ hierarchy in accordance with Direction 14 of the SETRP.
- Flood risk needs to be verified with reliable flood information, particularly for sites identified for village infill and the rural tourism area as well as the Michelago Creek Path Loop and Ryrie Street -Michelago Road Loop to enable emergency access during times of flood.

- Clarify the potential expansion of the Michelago Public School onto ‘adjoining land’ to the south east, noting constraints offered by a high voltage power line and easement. It is unclear if more land is required for school expansion based on the ‘low growth’ scenario. Encourage sustainable and active travel in Michelago through footpaths, cycling lands and an improved bus stop access.

4.1.4 ACT Government

- Drawing water from the Murrumbidgee is unlikely to be supported due to ecological impacts.
- Concerns about a dormitory commuter settlement and the transport burden to ACT, support self-contained growth where employment and services accompany population increase.

4.1.5 Rural Fire Service

- A Bushfire Strategic Study is required with any planning proposal to assess whether new development via intensification of settlement is appropriate in the context of the bushfire hazard. A Strategic Bushfire Study must include at a minimum, the components identified in Table 4.2.1 of Planning for Bushfire Projection 2019.

4.2 Next steps

The Master Plan has been publicly exhibited with recommendations for future amendments to the LEP and DCP. The Master Plan also makes recommendations for a future Contributions Plan. Submissions have been reviewed and incorporated into the final version and will be presented to Council for adoption. This is anticipated to occur later in 2021 noting the postponed Snowy Monaro Regional Council elections.

5 Sustainable Settlement Principles

The Michelago Master Plan is guided by the consultation outcomes and relevant documents and policies, including Snowy Monaro Regional Council's (SMRC) *Draft Settlement Strategy*, *Local Strategic Planning Statement* and associated evidence base, the Department of Planning, Industry and Environment's *South East and Tablelands Regional Plan* and *Neighbourhood Planning Principles*. The most appropriate benchmarks and principles have been incorporated into the basis for the Michelago Master Plan, summarised below:

MANAGING FUTURE CHANGE AND GROWTH:

- Design new residential releases so they are environmentally sustainable, socially inclusive, and accessible.
- Support jobs growth and local business; attract investment that complements Michelago.
- Provide housing choice for different needs, ages and incomes, facilitated by innovation in design, purpose-designed lots and dwellings.
- Mandate lot sizes that enhance village character, permit onsite effluent disposal or enable future infill development if servicing is provided.
- Prioritise new release areas that are an extension of and contiguous with Michelago.

COMMUNITY AND VILLAGE LIFE:

- Provide the right mix of housing, open space, commercial and community facilities within a sustainable, inclusive and compact urban form.
- Respect and support the local village character through built form controls and public realm design that are uniquely 'Michelago'.
- Strengthen the village heart with a range of facilities, open space and services to reinforce the place and feel of the village including upgrades to public facilities.
- Attract visitors with new tourism opportunities for economic stimulus and employment generation.

LANDSCAPE AND THE PUBLIC REALM:

- Enhance the visual amenity of the Ryrie Street entrance to Michelago from the Monaro Highway.
- Encourage streetscaping and landscaping of public open space for amenity and climate comfort.
- Retain views and vista corridors to the Tinderry Range and surrounding agricultural land.
- Protect and enhance indigenous and non-indigenous heritage items.
- Provide for active and passive recreation opportunities near and along Michelago Creek.

ACCESS AND MOVEMENT:

- Upgrade local roads and creek crossing over Michelago Creek to improve access and safety.
- Provide a public transport link and connections in the village and improve traffic circulation and parking.
- Upgrade the Michelago Road entrance to Michelago from the Monaro Highway.
- Promote active recreation and wellbeing with walking and cycling links allowing people to shop, attend school, work and community events.
- Consider using Crown land along Michelago Creek for active recreation.

ENVIRONMENT AND SUSTAINABILITY

Manage the impacts of natural hazards, including climate change:

- Protect areas with high environmental values and/or cultural heritage value and important biodiversity corridors.
- Protect the region's surface and groundwater water supply and the environmental qualities of rivers and streams.
- Identify a sustainable water supply and reticulated servicing.

- Protect important agricultural land to capitalise on its potential to produce food and fibre for the current and future generations and minimise potential for land use conflict.
- Avoid exposure to natural hazards of flooding and bushfire, incorporate responses to climate change impacts in design.

The Action Plan for Michelago in Chapter 6 provides the place-based recommendations based on the preferred growth scenario. It is noted that the Sustainable Settlement Principles refer to some matters that are not being pursued due to the lower growth scenario.

5.1 Features of the Master Plan

The framework for the Michelago Master Plan is based on:

- Ensuring that Michelago continues to develop into the future as an environmentally sustainable, and economically and socially resilient village.
- Identifying initiatives and opportunities to enhance the natural and built environment and unique character based on the Michelago community's and Council's views.
- Ensuring flexibility to accommodate change, consistent with the community's aspirations, based on sustainable settlement guidelines and planning best practice.
- The rural landscape is protected by keeping working lands viable and conserving natural lands, avoiding natural hazards and constraints.
- Ensuring that new growth and development is located and constructed to preserve and enhance the unique rural character of Michelago.
- Providing actions for implementation through Council's strategic and statutory policy and plans and other informal means.
- Ensuring that the costs of new growth are fairly distributed.

The NSW Planning system generally requires that any expansion of new development to be justified by a land use strategy. The Master Plan will provide the justification for the expansion of Michelago in accordance with the planning policy framework and outlines the principles to guide future development. Any planning proposal for the extension of the village will need to include detailed investigations into the cumulative impacts on groundwater following the decision to not provide services.

5.1.1 Criteria for Site Identification and Development

In addition to addressing the Ministerial Directions and information required to be provided in a Planning Proposal as set out by the Department of Planning and Environment in the Guideline to Preparing Planning Proposals, the following criteria must be applied for site identification and development across all zones.

Location

The site is within the area identified for expansion in the Michelago Village Master Plan as adopted by Council.

The site location supports a logical and contiguous development with the existing Village settlement.

The area can be connected to the existing sealed road network by sealed roads but not directly access the Monaro Highway.

The site has potential be connected to water and sewer infrastructure if available in the future.

The site has minimal or limited impact on matters of biodiversity or heritage.

The site will not result in the fragmentation of biodiversity corridors.

The site is unconstrained by flood and has flood free access out of the locality.

Development should avoid Biophysical Agricultural Land and Important Agricultural Land.

The proposal will preserve and enhance riparian corridors as open space networks and utilise for active travel connections. Development around riparian corridors is to be in accordance with guidelines for waterfront land defined by the NSW Office of Water DPI.

Avoid residential development on the eastern side of the railway reserve and western side of the Monaro Highway.

The site can be managed to reduce bushfire hazard and provides for evacuation in accordance with the NSW Planning for Bushfire Protection Guideline.

The proposal is consistent with the requirements of Primary Production and Rural Development SEPP.

Any unserviced development needs to demonstrate that it will not adversely impact on the groundwater system.

New development should have regard to the surrounding agricultural land use and must provide a buffer to avoid land use conflict.

Housing and Use

The development reinforces and enhances the existing residential character.

Development should contribute to housing affordability, choice and diversity appropriate for the anticipated demographic profile of the LGA.

Development will not result in land use conflicts particularly with agriculture and primary industries.

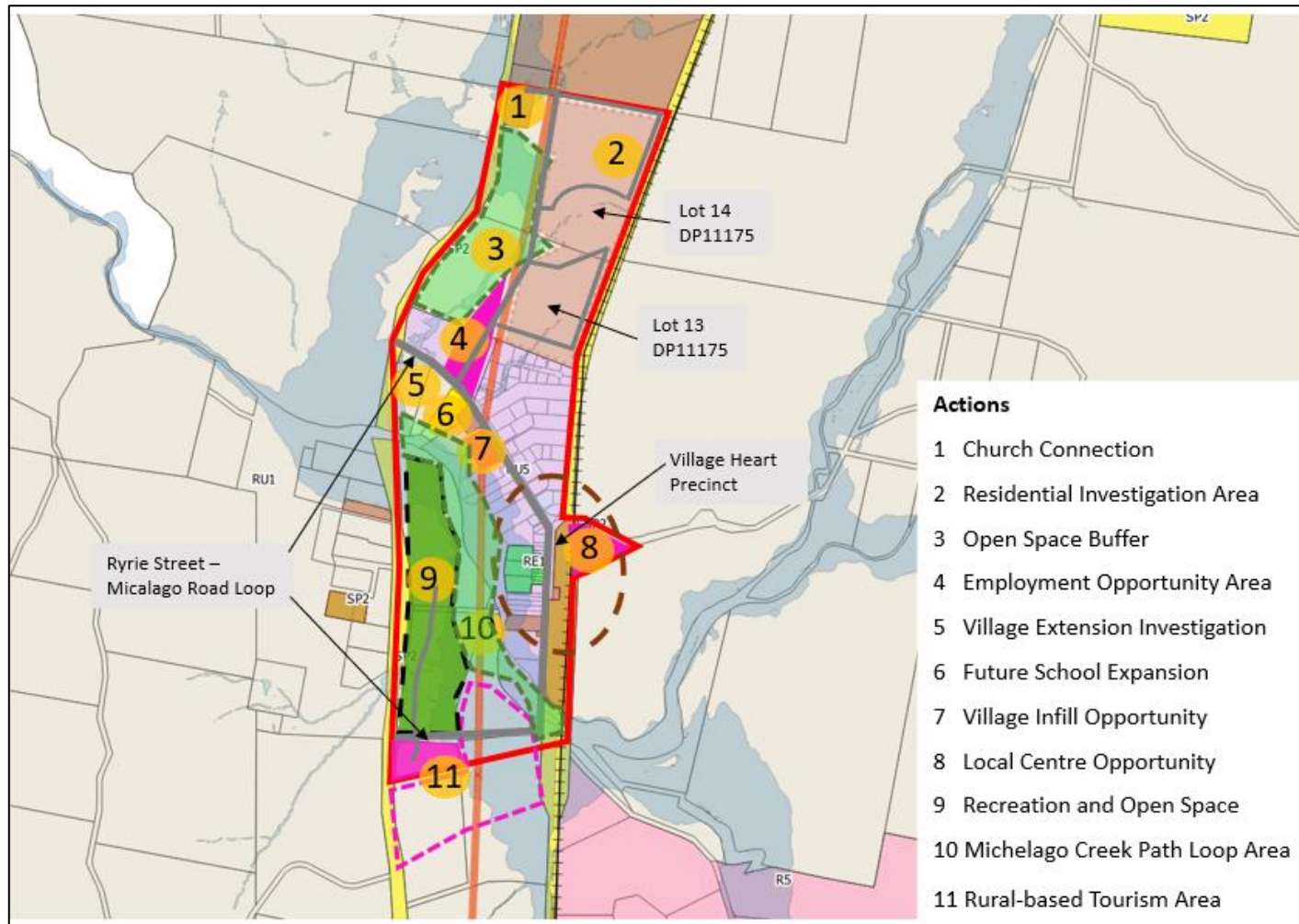
Development must have access to a sustainable water supply.

6 Master plan place-based actions

Actions for the Master Plan are presented in the following Action Map and Action Table.

Recommended implementation measures are addressed in Chapter 7 of the Master Plan.

6.1 Master Plan Action Map



6.2 Master Plan Action Table

Sustainable settlement principles and map ref.	Potential opportunity* * Subject to detailed site – specific investigations	Target outcomes
1 Church Connection — Landscape and public realm — Access and movement	— Protection of historic buildings and connection to the village. — Emergency services (only) vehicle access to Highway via current Church driveway. — Indicative road layout to be included in amended DCP. — Retain RU1 zone and ensure heritage curtilage is maintained around Church.	— Pedestrian and road connection between village and historic Catholic Church. — Pedestrian Heritage trail north to Hibernian Inn and former Police Station, with appropriate heritage curtilage around all sites. — Potential to allow adaptive reuse subject to heritage impact assessment.
2 Residential Investigation Area — Managing Future Change and Growth — Environment and sustainability	— Lots 13 and 14 DP11175 (part) potentially approx. 30 ha village-scale residential development. — RU1 zone, propose to rezone to appropriate low density residential zone (subject to landowner-initiated planning proposal). — Assumption that railway will not be reopened, and rail trail is developed. — Opportunity for a walking path off the rail-trail through Michelago via historic buildings and village heart to re-connect with rail-trail at the Railway Station.	— Village style residential growth accessed via Ryrie Street (through 1 Ryrie Street). — Low density subdivision and housing, onsite effluent disposal on lots 1,800 sqm. — Riparian restoration and stormwater management. — Open space, active travel and active recreation links through and along eastern and western boundary, potentially utilising rail reserve and rail trail. — Ensure lots situated to mitigate impacts from pedestrian/bike access along rail reserve.

Sustainable settlement principles and map ref.	Potential opportunity* * Subject to detailed site – specific investigations	Target outcomes
3 Open Space Buffer — Landscape and the public realm — Access and movement	— Lots 13 and 14 DP11175 (part). — Investigate for Pony Club relocation. — RU1 zone, propose dedication to Council to be used for RE1 Public recreation. — Must also function as a vegetated buffer between Monaro Highway and future development. — Must manage flooding through protection and enhancement of riparian corridor. — Opportunity to support low key rural activities such as horse agistment. — Continue to preserve views to the Tinderry Range	— Open space, active travel and active recreation links. — Flood and stormwater management. — Ecological protection as appropriate (pending detailed site investigation). — Electricity easement has potential for open space/active recreation links. — Councils DCP extends Tinderry view preservation to the area adjacent to and north of Michelago Village (amend Cooma Monaro DCP Figure 15) (noting the 400m buffer still within the Cooma Monaro LEP 2013)
4 Employment Opportunity Area — Managing Future Change and Growth — Community and village life — Landscape and the public realm — Access and movement	— 1 Ryrie Street and part Lot 13 DP11175. — RU5 zone, currently supports Service Station, Motel, Pub. — Approx. 6.5 ha (3.5 ha new development potential). — Street plantings on Ryrie Street to enhance entry. — Investigate appropriateness of proposed new ‘employment zones’ or ‘supporting zones’ currently exhibited by NSW Government to update the Standard Instrument LEP.	— Gateway to Michelago. — Mix of shops, tourist and visitor accommodation. — Residential potential at 1 Ryrie Street. — Investigate for Aged Care/smaller assisted living development opportunities. — Essential to incorporate vehicle access and pedestrian/bicycle link to #2 off Ryrie Street.

Sustainable settlement principles and map ref.	Potential opportunity* * Subject to detailed site – specific investigations	Target outcomes
5 Village Extension Investigation — Managing Future Change and Growth — Community and village life — Landscape and the public realm — Access and movement	— 2 Ryrie Street (Lots 27, 28 & 29). — RU1 zone, currently vacant. — Approx. 6.9 ha (5 ha new development potential) identified as Future Residential Growth Area under Mining SEPP but previously not supported by DPIE for rezoning. — Key sites at the entrance to Michelago from Monaro Highway — Requires further investigations into ability to support extension of village zone or recreation before rezoning. — Walking loop along Michelago Creek – investigate route alignment with access to Ryrie Street.	— If rezoning supported to RU5 or appropriate low-density zone, important to sensitively manage entry to Michelago as per #4. — Gateway to Michelago. Landscaped areas and development buffers provided to the Monaro Highway. — Could support low scale tourism and residential uses including low density aged care or assisted living housing. — Potential for School expansion into area immediately adjacent (Lot 27) if required by School Infrastructure NSW. If not required, include in investigations for RU5 zone as per Lots 28 and 29). — Pedestrian and bicycle link between Ryrie Street and Michelago Creek Path loop via easement.
6 Future School Expansion — Community and village life	— 14 Ryrie Street (Lot 27 DP11158), RU1 zone. — Open space buffer around school to reserve space for future expansion if required. — Potential location of pedestrian and bicycle link between Ryrie Street and Creek Path loop.	— Potential for School expansion onto land that is not impacted by Electricity Easement or flooding. — Stormwater management essential to manage flooding. — Formalise bus parking bay at Michelago Public School. — Potential to allow access to Creek Path Loop via easement or other through Lot 27
7 Village Infill Opportunity — Managing Future Change and Growth — Community and village life — Access and movement	— 2 Ryrie Street (Lots 25,26). — RU5 zone. — Approx. 3.2 ha (1.8 ha new development potential), as site is impacted by Electricity Easement and flooding. — Walking loop along Michelago Creek – investigate alignment along creek on Crown Land.	— Infill development of RU5 subject to site specific investigations. — Investigate for shops and services. — Acceptable alignment of Creek Path Loop out of flood hazard.

Sustainable settlement principles and map ref.	Potential opportunity* * Subject to detailed site – specific investigations	Target outcomes
8 Local Centre Opportunity — Access and movement — Community and village life	— Part Lot 17 DP 1002934. — Triangular 1.7 ha parcel bounded by Railway reserve, Burra Road and road reserve with potential for ‘local centre’ uses including parking overflow <i>Not intended for light industrial, residential or large-scale commercial development.</i> — Zoned RU1; consider rezoning to appropriate zone in the long term such as B1 or proposed new ‘employment zones’ or ‘supporting zones’ currently exhibited by NSW Government to update the Standard Instrument LEP.	— Part of village Heart over railway reserve. — Parking overflow in short term. — Low scale tourist/service business opportunities into long term , subject to economic assessment. — Overflow parking for events/parking for historic and nature walks and rail trail. — Views to Tinderry Range preserved through height at village scale (6 m).

Sustainable settlement principles and map ref.	Potential opportunity* * Subject to detailed site – specific investigations	Target outcomes
Village Heart Precinct — Community and village life — Access and movement	— Lot 5405 DP 1244970 (SP2 zone), Lots 5-15 DP 11158 (RE1 zone), part Crown Land parcel (RU5 zone), RFS Shed (RU5 and SP2 zones) and Community Hall (RU5 zone). — Existing facilities not well connected, particularly for pedestrian/cycle access. — Opportunity to locate other sports facilities within and immediately adjacent to Michelago Park. — Opportunities to strengthen ‘sense of place’, pride and belonging in Michelago for residents, tourists, school students and new residents. — Retain RU5 zone and ensure desired land uses are facilitated in land use tables OR consider rezoning to B1 Neighbourhood Centre or a new equivalent zone proposed by DPIE. — Rezone the railway corridor from SP2 in accordance with DPIE’s practice note on zoning. — Investigate potential for work/study hub – requiring internet service. — Investigate potential for a Heritage Conservation Area extending from the Railway Station to St Thomas’ Church, taking advantage of rail trail if/when eventuates	— Village Heart that supports tourist attractors and places for locals such as hosting markets and events on the railway precinct reserve. — Provides space for local jobs to reduce commutes to Canberra. — Formalise parking, traffic flow, and pedestrian access around the precinct containing the Hall, RFS shed, Michelago Park and General Store. Focus on walking not cars. — Permit a mix of uses in either new or adaptive reuse including an agile workplace, tourist accommodation, residential accommodation, low scale neighbourhood commercial and employment generating uses. — Capitalise on rail trail if developed as tourism focus of the precinct — Promotion of local heritage values of Michelago including potentially a heritage conservation area — Connection to Creek Path loop and open space via Michelago Park to increase activity and recreation opportunities.

Sustainable settlement principles and map ref.	Potential opportunity* * Subject to detailed site – specific investigations	Target outcomes
9 Rural-based Tourism Area <ul style="list-style-type: none"> — Managing Future Change and Growth — Community and village life — Landscape and the public realm — Environment and sustainability 	<ul style="list-style-type: none"> — Lot 1 DP 1150315 (RU1 zone). — Approx. 8 ha investigation site potential to rezone to RE1 or RE2 for passive and active recreation/rural events use. — Grass cover, line of trees along drainage contour; partly mapped BSAL and/or flood affected and should be avoided. — Opportunity for somewhere to stay and do adventure day trips to Tinderry Range etc. — RU1 zone permits camping grounds and horse agistment. — <i>Not intended for light industrial or commercial uses.</i> — Consider using Additional Permitted Use (APU) to confine development types to specific land. — Vehicle access via Micalago Road. — Investigate long term potential pedestrian/equestrian/bicycle access across Michelago Creek. — Opportunity for rural based tourism as described in #11. 	<ul style="list-style-type: none"> — Passive and Active recreation facilities and rural events capability. — Investigate for potential low impact tourist activities such as camping ground with infrastructure located above flood planning level. Any buildings must not impede view corridor to Tinderry Range. — Retain RU1 zone at this stage.
10 Michelago Creek Path Loop <ul style="list-style-type: none"> — Community and village life — Landscape and the public realm — Access and movement — Environment and sustainability 	<ul style="list-style-type: none"> — Part Crown Land parcel (RU5 zone), Part Lot 1 DP575718, Lot 5 DP131300, Part Lot 1 DP1150315 (private ownership). — Opportunity to locate walking path within Crown Land boundaries out of high-risk floodway. — Site is flood affected and biophysical strategic agricultural land (BSAL) under Mining SEPP. — Opportunity to locate other sports facilities within and immediately adjacent to Michelago Park. 	<ul style="list-style-type: none"> — Restore and enhance riparian habitat – Land Care Group, ‘chain of ponds’ concept involving new plantings and removal of weeds. — New facilities along Creek Path loop e.g. active recreation including walking and bike track, outdoor fitness, seating, interpretive signage (geology, ACH and local stories, biodiversity) — Pedestrian/bicycle/equestrian crossing of Creek to directly link #5, #6, #9. — Final Creek Path alignment is subject to detailed investigations into flood risk

Sustainable settlement principles and map ref.	Potential opportunity* * Subject to detailed site – specific investigations	Target outcomes
11 Rural-based Tourism Area <ul style="list-style-type: none"> Managing Future Change and Growth Community and village life Landscape and the public realm Environment and sustainability 	<ul style="list-style-type: none"> Part Lot 1 DP 1150315 south of Micalago Rd for rural based tourist/services complementary to landscape. Part Lot 1 DP575718 and part Lot 1 DP653489 for supporting uses e.g. market gardens, farm-stay experience etc. Parts are mapped BSAL and/or flood affected and should be avoided. Currently RU1 zone. <i>Not intended for light industrial or commercial uses.</i> Consider using Additional Permitted Use (APU) to confine development types to specific land. 	<ul style="list-style-type: none"> Scenic entry to Michelago – avenue of Poplars, views to Tinderry Range. Development screened from Monaro Highway and views to Tinderry Range preserved. Upgraded highway access and sealed road, access #9, #10, #11 via Micalago Road. Tourist/service businesses, opportunities for local employment to reduce commutes to Canberra. Retain RU1 zone – may need to review the range of permissible development in the land use tables. Detailed flood investigations are carried prior to rezoning and land use allocation
Ryrie Street – Micalago Road Loop <ul style="list-style-type: none"> Community and village life Access and movement Landscape and the public realm Environment and sustainability 	<ul style="list-style-type: none"> Crown Land/Ryrie Street road reserve. Separate Council project to connect Ryrie Street and Micalago Road. Bridge or Causeway must include safe separated pedestrian/cycle lane. 	<ul style="list-style-type: none"> Road access over Creek creates a loop road for tourists and locals. New picnic and passive recreation area with formalised parking linked to Creek Path loop. Upgrade amenities in park. Plant trees for shade and shelter along Ryrie Street and in Michelago Park. Maintain oval. Links to Creek Path loop approx. 3km long including Ryrie Street section, with multiple entry/exit points to enhance usage and accessibility. Detailed flood risk investigations to inform alignment

7 DELIVERY AND IMPLEMENTATION

Planning controls for LEP and DCP amendments are a crucial part of delivering the vision for Michelago and ensuring that development is not delivered in a way that is inconsistent with the rural character of the locale. There are separate documents containing specific recommendations for amendments to the Cooma Monaro LEP and DCP that will be finalised following public exhibition of the Master Plan to capture and respond to submissions.

7.1 Infrastructure and Services

7.1.1 Community Priorities

The following list of infrastructure, services and facilities has been drawn from the Michelago Resident Community Association (MRCA) submission on the Michelago Master Plan Scenarios. The priorities outlined are consistent with feedback received through other consultation activities to date. As a lower growth scenario was preferred, there is unlikely to be sufficient contributions funds available to enable delivery of all community priorities.

Further consultation to identify priorities and timing is recommended once potential costings are known.

7.1.1.1 Infrastructure and Services

Table 7.1 Infrastructure and Services

Works	Rationale	Indicative costings	Recommended implementation mechanism
Connection of Micalago Road to Ryrie Street via a bridge or causeway	The village of Michelago and the rural residential area to the south along Micalago Road are divided. Road, pedestrian and cycling connection can only currently be achieved via the Highway which can be dangerous particularly at busy times or times with low visibility. Providing a connection over Michelago Creek connecting Micalago Road to Ryrie Street will connect Micalago road residents to the social and community infrastructure located in the village and provide a through route for passing motorists.	\$872,161 (Grant Funded)	Council proceeds with this project as a priority project. Significant steps have already been taken by Council and the community to deliver this project.
Sealing Micalago Road from Monaro Highway to Railway Bridge	There is 665 m of unsealed road in this section which forms part of the through loop of Michelago. This section of road is subject to flooding which can isolate residents along Micalago Road and other branch roads.	\$200,000 approx.	Sealing this section of Micalago Road should be incorporated into the local infrastructure contributions plan as a high priority.

Works	Rationale	Indicative costings	Recommended implementation mechanism
Sealing Micalago Road from Railway Bridge to Karinya Plains Road	<p>Micalago Road is an important collector road in the Michelago Road network servicing the rural residential area of Michelago south of the village.</p> <p>While traffic volumes may not currently warrant sealing of the road, its usage and the expectations of residents make this an expensive asset for Council to maintain. The potential increase of up to 80 dwellings in this area over the next 20 years adds to the need to upgrade this section of Micalago Road.</p>	\$1,000,000 approx.	Sealing of this section of Micalago Road should be incorporated into a local infrastructure contributions plan.
Sealing Burra Road between Tinderry Road and the LGA Boundary at Burra	<p>Burra Road is an important alternative connection north to Googong, Queanbeyan and on to Canberra. As Googong grows it is expected this may offer services which may be desirable to Michelago Residents.</p> <p>Upgrading this connection could potentially contribute to the resilience of this community providing alternative access in case the Monaro Highway north of Michelago is closed or for egress in a bushfire.</p> <p>Of the approximately 15 km of Burra Road in the LGA 13 km is unsealed. It should be noted parts of Burra Road in QPRC are also unsealed.</p>	\$6,000,000 approx.	<p>Advocate to the NSW Government regarding the upgrade of this road and seek grant funding to facilitate the staged upgrade of this road.</p> <p>It is not recommended to include this project in a development contributions plan for Michelago at this time as the costs is prohibitive to realistically achieve through this mechanism and there is a limited nexus demonstrated by this project.</p>
A new road and pedestrian connection that connects St Patrick's Catholic Church to the village	<p>As the identified potential village expansion areas extend north to this point it is considered that this road would be provided through the subdivision layout, this should be reflected in the DCP. Access to the highway should then be for emergency services only.</p>	Costs borne by development	<p>It is recommended that this road is incorporated into the site-specific development control plan for Michelago.</p> <p>Once constructed, public access to the highway should be prevented, although it is recommended this access point is maintained for emergency services only.</p>

Works	Rationale	Indicative costings	Recommended implementation mechanism
Traffic calming features provided through design of streets	As noted above the movement and place framework principles should be implemented as Michelago grows. Traffic calming measures such as pedestrian crossings help facilitate positive outcomes. Bus parking bay at Michelago Public School		Best subdivision practice should be followed for all new subdivisions. Controls are contained in DCP. Funding from State Government sought for bus parking bay.
Improvements to footpath network	Requirements for new footpaths serving the village should be identified in the site specific DCP. Other path projects include the Creek Loop trail and Monaro rail trail which should be incorporated into the village's footpath network.	TBC	Specific projects may be incorporated into contributions plan for the provision of local infrastructure. General footpaths requirements form part of the DCP, and costs are borne by development.
Provide equestrian access alongside residential streets and through open space areas	Part of the rural village character sought to be maintained is the ability to ride a horse throughout the village. The incorporation of this via a DCP should facilitate this outcome.		Incorporate equestrian access controls in site specific DCP.
Pedestrian crossings of Ryrie Street at the School and Railway Station	Considering the movement and place framework it is important to provide pedestrian infrastructure for the local community in appropriate locations.	\$100,000 approx.	Incorporate these projects into a local infrastructure contributions plan.
Lighting provided to paths likely to be frequented after hours	To provide safety for users and encourage use of the paths in an efficient manner.		Lighting standards outlined in the DCP.

Works	Rationale	Indicative costings	Recommended implementation mechanism
Flood mitigation measures outlined for Michelago in Council's Flood Risk Management Plans	<p>Michelago is subject to flooding from rising waterways particularly from Michelago Creek.</p> <p>Flooding can leave communities and individuals isolated and in extreme events cause a severe risk to human life and property.</p> <p>Council with support from DPIE have undertaken a flood study and flood risk management plan (FRMP) for Michelago.</p> <p>The FRMP recommends flood mitigation and safety measures for Michelago.</p>	\$700,000	Projects identified in the FRMP for Michelago are incorporated into local infrastructure contributions plan to ensure they are delivered in a timely manner.
Improved waste collection facilities for the Michelago region	<p>As Michelago grows, appropriate waste facilities are vital.</p> <p>It is noted that Council is rolling out kerbside collection in the village and a bank of bins to surrounding rural landowners. It is expected that further development in the village or expansion of the village will be serviced by kerbside collection.</p> <p>Relocation of the bank of bins is likely to be required in the short term of this plan. It is considered that this could be designed and incorporated into the employment lands within the village heart precinct east of the railway line, or if the Pony Club is relocated, the bank of bins could be located at the former Pony Club site west of the Monaro Highway.</p>	\$360,000 approx.	Identify a suitable location for bank of bins and container deposit scheme design and co-locate these facilities, in the near future. Incorporate this project into the local infrastructure contributions plan.

Works	Rationale	Indicative costings	Recommended implementation mechanism
The establishment of a rail trail	Council is exploring options regarding the creation of a rail trail from Queanbeyan to Bombala along the rail reserve. It is anticipated this could have a significant tourism benefit to the region and Michelago would be well positioned to leverage from this development. It is considered that the section of railway reserve adjacent to the existing village and a potential future expanded village could act as a recreational path to service the village.	Queanbeyan – Michelago section \$6,846,580 As per Monaro Rail Trail Feasibility Study. \$1,100,000 can be directly attributed to infrastructure at Michelago	Incorporate rail trail section adjacent to the village and construction of a bridge for the trail over Michelago Creek in local infrastructure contributions plan.
Upgrades to Highway intersections with Ryrie Street and Micalago Road	The Monaro Highway is a vital connecting route for Michelago connecting many people to employment and services offered in Canberra and Cooma. It is also a vital highway for South East Australia connecting many to the snow and coast. Improving safety is vital to community resilience.		Council advocate for and work with TfNSW to provide safety upgrades to the intersections of the Monaro Highway at Ryrie Street and Micalago Road.

7.1.1.2 Recreational Facilities

Table 7.2 Recreation Facilities

Works	Rationale	Indicative costings	Recommended implementation mechanism
Additional sporting codes accommodated within Michelago Park	The Michelago community would like additional recreation facilities to provide for a wider range of sports and a location for events. It is considered that based on expected population an upgrade of the existing oval and surrounding space to support a greater variety of sport and events.	\$900,000	Provide additional elements to Michelago Oval and existing recreational areas part of a development contributions plan.

Works	Rationale	Indicative costings	Recommended implementation mechanism
Re-location of the Pony Club to east of the Monaro Highway	Pony Club is an important recreational asset for Michelago but is currently difficult and dangerous to access as it is the western side of the highway.	TBC	Consider and encourage options to relocate Pony Club east of the Highway. Work with Pony Club to ensure suitability of any new site.
Other sporting facilities, for example: <ul style="list-style-type: none"> — Basketball court — Skateboard park — Pump track for bicycles — Outdoor exercise stations 	<p>Due to the limited expected growth in Michelago the provision of all of these facilities is unlikely to occur over the planning horizon of this document. Limited availability of water and the cost of maintenance means a swimming pool is not viable.</p> <p>Some additional sporting facilities could be provided around the existing oval and by co-locating facilities where possible.</p>	\$1,000,000	<p>It is recommended that sports facilities are co-located where possible.</p> <p>Focus should be on low-maintenance facilities.</p> <p>Leverage funds through development contributions and apply for grants where appropriate.</p>

7.1.1.3 Heritage Maintenance and Protection

Council should consider opportunities to protect and leverage the following heritage items:

- St Patrick's Catholic church
- St Thomas' Anglican church
- The Historic Michelago Railway Station precinct
- The railway bridge over Micalago Road.

7.1.1.4 Employment Opportunities and Services

The following land uses have been identified by the community and should be encouraged within Michelago:

- Retirement village
- Preschool
- Medical facilities e.g. Pharmacy and GP
- Licensed restaurant
- Public bar
- Arts and craft precinct
- Farmers' market precinct
- 'Nature tourism' development, e.g. bike hire

7.1.2 Development Contributions

Local infrastructure development contributions are vital for the efficient and effective provision of local infrastructure to help service new developments. Local infrastructure contributions are levied under sections 7.11 and 7.12 of the *Environmental Planning and Assessment Act 1979*. These contributions are based on the principle of reasonableness

which has two core elements, 'apportionment' and 'nexus'. Apportionment is the principle the development should pay for its proportion of demand for that infrastructure. Nexus is the principle that the money levied from a development should be spent on infrastructure that benefits that development.

A draft development contributions plan is being prepared separately. As outlined above local infrastructure, such as roads, footpaths, recreation facilities and community facilities may warrant inclusion into a development contributions plan. It is noted based on the growth that occurs only a certain amount works are likely to occur, and the works schedule should reflect what may be achievable over the next 20 years. Only a certain amount (as per the apportionment rate) can be levied on new development and other funding sources make up shortfall.

7.2 Advocacy Opportunities

Some community wishes and priorities for place-based actions in Michelago relate to outcomes or activities that do not fall under Snowy Monaro Regional Council's direct area of control. These priorities call for action and discussions with government, private interests and not-for-profit organisations in delivering projects and initiatives that benefit the community, set out in the Table below:

Table 7.3 Advocacy and support opportunities

Economy and tourism	
Creation of a town centre with tourist attractions, working hub	Council to investigate creating internet and 'hot desk' facility for community and tourist use in the centre of Michelago near the General Store.
Creation of a heritage walk incorporating Ryrie Street	Council to apply for grant funding and link heritage items with other open space initiatives.
Cafés/restaurants/wine bar and/or events venues	Council to promote and market Michelago as a tourist destination alongside the Snowy Mountains ski fields attractions.
Railway precinct	Advocate to TfNSW for dedication of railway buildings and land as part of a rail trail and repurposing for community events such as markets, working hub etc., to be managed by Council as a Section 355 Committee.
Housing and community	
Preservation of village character – not turning into Googong style development	Council to meet with major landowners to discuss the desired form and scale of development in Michelago.
Streetscape Plan	Council to include site specific planning controls in DCP. Objectives: to provide visual amenity and temperature regulation to mitigate impacts of climate change and also provide an attractive entrance to Michelago at 1-2 Ryrie Street.
Renewable energy initiatives	Council to advocate for identification of opportunities for retrofitting existing public buildings with renewable energy, and investigate opportunities to establish a renewable energy source for Michelago.
More health and aged care services	Advocate and facilitate development of aged care and appropriate housing in Michelago for older people and people with a disability.
Recreation and events	
Improvements to existing social spaces	Council to prioritise funding for public realm upgrades and promote events in Michelago, formalise parking arrangements around the central core.
Access to the Murrumbidgee River and recreation facilities	Investigate feasibility and desirability for formal access to the River and provision of a basic recreation area, subject to environmental investigations.
Infrastructure and services	
Full time police presence	Advocate for government funding for a permanently staffed police station.
Toilets, BBQs and lighting at Michelago Park	Council to apply for grant funding and ensure Plan of Management is up to date for Michelago Park.

Upgrade both entrances to town from Monaro Highway	Liaise with TfNSW on options to increase visibility, safety and capacity for residents and visitors.
Repurposing Hibernian Inn as a commercial or public space	Council and community liaise with owner to discuss options for redevelopment including a commercial venture such as a pub, restaurant etc.
Crown land	
Walking and cycling loop around town	Liaise with Lands and DPIE (Water) regarding the dedication of a walking track on Crown land along the Michelago Creek. Council to investigate grants for provision of equipment within the corridor e.g. outdoor fitness stations.
Michelago Creek Riparian restoration	Council and community liaison with Land Care and DPIE (Environment, Energy and Science) to restore and revegetate the banks and areas adjacent to Michelago Creek in public ownership.

Source: Community consultation December 2020

8 Limitations

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