

BUSINESS PAPER

PUBLIC EXHIBITION COPY

Ordinary Council Meeting 18 March 2021

CONFLICTS OF INTEREST

A conflict of interest arises when the Mayor or Council staff are influenced, or are seen to be influenced, in carrying out their duties by personal interests. Conflicts of interest can be pecuniary or non-pecuniary in nature.

A pecuniary interest is an interest that a person has in a matter because of a reasonable likelihood or expectation of a financial gain or loss.

A non-pecuniary interest can arise as a result of a private or personal interest, which does not relate to money. Examples include friendship, membership of an association or involvement or interest in an activity.

The Mayor or staff member who considers they may have a conflict of interest should read Council Policy.

The responsibility of determining whether or not the Mayor or Council employee has a pecuniary or non-pecuniary interest in a matter, is the responsibility of that individual. It is not the role of the Mayor or Chief Executive Officer, or another Council employee to determine whether or not a person may have a conflict of interest.

COUNCIL CODE OF CONDUCT

The Council Code of Conduct is a requirement of Section 440 of the Local Government Act 1993, which requires all councils to have a code of conduct to be observed by the Mayor and Council employees attending a Council meeting or a meeting of a committee of Council.

The code of conduct sets out the responsibilities of the Mayor and Council employees attending a Council meeting or a meeting of a committee of Council. The code also sets out how complaints against a Council employee, the Mayor or Chief Executive Officer are to be made.

COUNCIL CODE OF MEETING PRACTICE

The Council Code of Meeting Practice is a requirement of Section 360(3) of the Local Government Act 1993, which requires all councils to have a code of meeting practice. The code of meeting practice is to be observed by the Administrator, members of staff, delegates of the Council and members of the public attending a Council or a meeting of a committee of Council.

Acknowledgement of Country

Council wishes to show our respect to the First Custodians of this land the Ngarigo, Walgalu, Ngunnawal and Bidhawal people and their Ancestors past and present.

Webcasting

Council meetings are recorded and live streamed to the internet for public viewing. By entering the Chambers during an open session of Council, you consent to your attendance and participation being recorded and streamed on Council's website www.snowymonaro.nsw.qov.au

ORDINARY COUNCIL MEETING TO BE HELD IN COUNCIL CHAMBERS, 81 COMMISSIONER STREET, COOMA NSW 2630

ON THURSDAY 18 MARCH 2021 COMMENCING AT 5:00PM

BUSINESS PAPER

1.	OPENING MEETING	
2.	ACKNOWLEDGEMENT OF COUNTRY	
3.	APOLOGIES AND APPLICATIONS FOR LEAVE OF ABSENCE BY COUNCILLORS	
4.	CITIZENSHIP CEREMONIES	
5.	DISCLOSURE OF INTEREST (Declarations also to be made prior to discussions on each item)	
6.	MATTERS DEALT WITH BY EXCEPTION	
7. 7.1 7.2 7.3	CONFIRMATION OF MINUTES Ordinary Council Meeting held on 18 February 2021 Closed Session of the Ordinary Council Meeting held on 18 February 2021 Extraordinary Council Meeting held on 4 March 2021	
8. Nil	PLANNING AND DEVELOPMENT APPLICATION MATTERS	
9.	OTHER REPORTS TO COUNCIL	
9.1	KEY THEME 1. COMMUNITY	
9.1.1	Bombala Exhibition Ground and Bredbo Hall Management Committee minutes	3
9.1.2	Monthly funds management report - February 2021	12
9.1.3	Nimmitabel Public School - Snowy Mountains PSSA Cross Country	19
9.1.4	Work Health and Safety Policy and Statement	21
9.2	KEY THEME 2. ECONOMY	
9.2.1	Section 355 SMRC Tourism Advisory Committee December 2020 Minutes	28
9.3	KEY THEME 3. ENVIRONMENT	
9.3.1	Draft Snowy Monaro Regional Council Waste Management Strategy for Public	35
	Exhibition	33

	Highdale Carpark Improvements - Design Endorsement and Approval to	
	Implement	243
9.3.4	Post Exhibition Report Land Use Strategies	255
9.3.5	Bundarra Road - Completion of Council Actions 258/19 and 386/19	285
9.3.6	Adaminaby Sewage Treatment Plant Augmentation - Funding Request	290
9.3.7	Nomination of Councillor to NSW Asbestos Coordination Committee	293
9.4	KEY THEME 4. LEADERSHIP	
9.4.1	Grants Applications - Activity Synopsis as at 28 February 2021	305
9.4.2	Nomination of Councillors for Cooma Saleyards Committee	312
9.4.3	Development of Rates Structure (Harmonisation)	314
9.4.4	Answers to questions with notice	348
9.4.5	Resolution action sheet update	355
10.	NOTICE OF MOTION	
11.	MAYORAL MINUTES	
11. 12.	QUESTIONS WITH NOTICE	
		. 472
12.	QUESTIONS WITH NOTICE	. 472
12. 13.	QUESTIONS WITH NOTICE Confidential matters	. 472
12. 13.	QUESTIONS WITH NOTICE Confidential matters Cooma Sports Hub Detailed Design Tender Approval Item 13.1 is confidential in accordance with s10(A)(2)(c) of the Local Government Act because it contains information that would, if disclosed, confer a commercial advantage on a person with whom the Council is conducting (or proposes to conduct) business and discussion of the matter in an open meeting would be, on balance,	. 472

9.1.1 BOMBALA EXHIBITION GROUND AND BREDBO HALL MANAGEMENT COMMITTEE MINUTES

Record No:

Responsible Officer: Chief Strategy Officer

Author: Governance Officer

Key Theme: 1. Community Outcomes

CSP Community Strategy: 1.3 Recreation, sporting and leisure facilities encourage all ages to

live in an active and healthy lifestyle

Delivery Program Objectives: 1.3.3 Council's recreational facilities, parks and public open spaces

are safe, well managed and accessible

Attachments: 1. Minutes - Bombala Exhibition Ground s355 Management

Committee Meeting held 11 November 2020

2. Minutes - Bombala Exhibition Ground s355 Managment

Committee Meeting held 9 December 2020

3. Minutes - Bredbo Hall s355 Managment Committee meeting

held 17 February 2021

EXECUTIVE SUMMARY

Council has received minutes of the meetings from the following management committees:

- Bombala Exhibition Ground, meeting held on 11 November and 9 December 2020
- Bredbo Hall, meeting held 17 February 2021

These minutes are attached for Councils information.

The following officer's recommendation is submitted for Council's consideration.

OFFICER'S RECOMMENDATION

That Council receive the minutes of Bombala Exhibition Ground and Bredbo Hall management committees meetings.

Minutes Bombala Exhibition Ground Section 355 Management Committee Meeting

Address: CWA Room, Wellington Street, Bombala NSW 2632 Date: 11th November, 2020 Time: 7.00pm

Present:

Position Member (Name) Present/Apology Neil Hennessy Chair Present Anne Caldwell Secretary Present Treasurer Graham Hillyer Present **Bookings Officer** Committee Member Clare Trevanion Present Committee Member Richard Peadon Absent Committee Member Colin Ryan Present Committee Member Bronwyn Podger Present Committee Member Anita Walder Present Committee Member George Power Absent Committee Member Michael Sullivan Absent

1. Opening of the Meeting

The Chair, Neil Hennessy opened the meeting at 7.35pm.

2. Apologies

Moved:

Apologies for the meeting were received by Anne Caldwell from Michael Sullivan and George Power .

Seconded:

3. Adoption of Previous Minutes

Minutes of the meeting held on 14th October, 2020 are confirmed as a true and accurate record of proceedings with the following corrections.

Colin Ryan

Carried

Blaizeaid's application for rent of the facility has been successful. \$1000 a month not \$100. An apology for the October meeting was received by Neil Hennessy from Bronwyn Podger.

Anne Caldwell 4. Business Arising from Previous Minutes

1. Cricket pitch in.

- 2. Neil still investigating repairs for pump.
- 3. Light installation has been completed.
- 4. Still looking for a skimmer for the deep fryer.

Moved: Colin Ryan Seconded: Anita Walder Carried

5. Correspondence

email from Snowy Monaro Regional Council Cherie McNair- Caretaker's Cottage email from Snowy Monaro Regional Council Erin Donnelly - Webinar Draft Manual email from Snowy Monaro Regional Coouncil - recycle division - user garbage removal

Out:

Moved: Clare Trevanion Seconded: **Bronwyn Podger** Carried

Treasurer's Report (Management Committee Bombala Exhibition Ground) 1/10/2020 - 31/10/2020 Expenditure Income

Nil

Nil

Balance as at 1/10/20

\$32,579.37

Income

\$ Nil

Expenditure

\$ Nil

Balance as at 31/10/20

\$32,579.37

Term Deposit

\$14239.69

Moved by Treasurer: Graham Hillyer

Seconded:

Colin Ryan

Carried

6. General Business

- 1. The meeting was attended by Cherie McNair and Glen Hines to discuss the demolition of the caretaker's
- 2. David Russell, a volunteer who mowed the grass at the exhibition ground, passed away last Monday.
- 3. Blaizeaid finish this week as they cannot get any more volunteers.
- 4. Committee to make a decision concerning the demolition of the caretaker's cottage. Neil will phone members for their thoughts.
- 5. Neil to discuss the mowing of the grounds with Alan Mustard.
- 6. Australia Day Committee has applied for a Grant through the Council Donor and Sponsorship Program for sheep panels and concrete for the sheep pavilion.
- Letter to Council concerning 355 Committee Manual issues raised;
 - Handwashing facilities at food handling stalls.
 - 2. Who is responsible for supplying the hand wash when hiring to groups?
 - 3. Provision for advising the hirer that excess applies to a claim.
 - 4. Who supplies first aid kits?
 - 5. Are Expression of Interest and Agreement forms available?
 - 6. Does Council absorb some of the electricity costs for lighting at other grounds?

Anita Walder Carried Seconded: Moved: **Bronwyn Podger** 8. Date of next Meeting The next meeting will be held at 7.30pm on 9th December, 2020 in the CWA Rooms. 9. Close of Meeting There being no further business the meeting concluded at 8.50pm. 11th November, 2020 DATE **CHAIRPERSON**

Minutes Bombala Exhibition Ground Section 355 Management Committee Meeting

Address: CWA Room, Wellington Street, Bombala NSW 2632

Date: 9th December, 2020

Time: 7.30

Present:

Position Member (Name) Present/Apology Chair Neil Hennessy Present Secretary Anne Caldwell Present Treasurer Graham Hillyer Absent **Bookings Officer** Committee Member Clare Trevanion Committee Member Absent Richard Peadon Committee Member Absent Colin Ryan Committee Members Present Bronwyn Podger Committee Members Absent George Power Committee Members Present Michael Sullivan Absent

Opening of the Meeting

The Chair, Neil Hennessy opened the meeting at 7.00pm.

Apologies

Apologies for the meeting were received by Neil Hennessy from Graham Hillyer and Michael Sullivan.

Adoption of Previous Minutes

Minutes of the meeting held on 11^{th} November, 2020 are confirmed as a true and accurate record of

Will not be passed until February Meeting.

Moved:

Seconded:

Carried

4. Business Arising from Previous Minutes

- 1. Pump quotes received from Agri West Cooma repair maximum \$4700, new \$6800, Irrigation Warehouse Group Pty Ltd pump replacement \$5900 and Land & Water new pump\$4736.39. Council has been advised. Committee will probably purchase the pump.
- 2. Caretaker's Cottage. Committee prefer to retain a cottage on site. Looking into prices of transportable.
- 3. Volunteer mowing Alan Mustard can be inducted but may be required to work. Approach Neville Brotherton.

Moved:

Colin Ryan

Seconded: George Power

Carried

5. Correspondence

letter supporting Bombala Show email quote from Land & Water Verbal quote from Agri West Cooma

email quote from Irrigation Warehouse Group Pty Ltd

Out: email Jean Monique Hawkins

Moved:

George Power

Seconded:

Colin Ryan

Carried

1

9.1.1 BOMBALA EXHIBITION GROUND AND BREDBO HALL MANAGEMENT COMMITTEE MINUTES ATTACHMENT 2 MINUTES - BOMBALA EXHIBITION GROUND \$355 MANAGMENT COMMITTEE MEETING

ATTACHMENT 2 MINUTES - BOMBALA EXHIBITION GROUND \$355 MA	ANAGMENT COMMITTEE MEETING
HELD 9 DECEMBER 2020	Page 7

	er's Report (Management Co	mmittee Bombala	Exhibition	Ground) 1/11/20	20 – 30/11/2020		
Treasure	er's Report (Management Co	Illillittee bollibars	Expenditu	re			
Income			present his report at the next meeting. 5/11/20 SMRC Garbage \$ 1,257.75				
As Graham	Hillver was absent at the last	meeting he will p	resent nis	report at the next	\$ 1,257.75		
As Granam	,		3/11/20				
			6/11/20	Origin Electricity	\$ 177.50		
			6/11/20	SMRC Garbage	\$ 1,093.37		
			6/11/20	Origin Gas	7 2,000		
Tatal		Total					
Total Balance as a	ıt.						
Income	\$						
Expenditure			Ter	m Deposit	\$14239.69		
New Balanc	e		10.	, = - ,			
		Seconded:		Carried			
Moved by 7	Treasurer:	Jeconaca.					
2. Stov 3. Light 4. Grou	rai Business Jum Cleaner needs replacing. Nes —Ovens hard to light and are ts are good. Junds are being used several times. Junds are being used several times. Junds are being used several times. Junds are being used several times.	nes a week. Cleaner		ed because of COVI			
Moved by		Seconde	d: C	olin Ryan	Carried		
7. Date The n	e of next Meeting lext meeting will be held at 7.30	Dpm on 10 th Februa	ry, 2021 in t	the CWA Rooms.			
8. Clos	se of Meeting e being no further business the	meeting concluded	l at 8.15 pm	ı.			
			10 th F	ebruary, 2021			
	CHAIRPERSON			DATE			





General Meeting Minutes

Held at the Bredbo Hall, Monaro Highway, Bredbo 17 February

Commencing at 7pm

Present:

Position	Member (Name)	Present/Apology
Chair	Karen Porter	Apologies
Deputy Chairperson	Muriel Stockheim	Present
Secretary	Debra Menzies	Present
Treasurer	Michelle Henkel	Present
Booking Officer	Louise Barron	Present
Committee Member	Louise Bowerman	Present

1 Opening of the Meeting

The Deputy Chair, Muriel Stockheim, opened the meeting at 7:06pm.

2 Apologies

Karen Porter

3 Adoption of Previous Minutes

Minutes of the meeting held on 25 Nov 2020 are confirmed as a true and accurate record of proceedings. Moved: Muriel Stockheim, Seconded: Louise Bowerman

4 Reading Reports

4.1 Chairperson

Committee Minutes

- Essential Energy has released the Community Hall Program, and is open to halls run by Councils section 355 committees.
- Applications for the Community Hall Program are now open and close midnight Sunday 28 March.
 Through the program, eligible halls will receive a \$200 donation to put towards general maintenance costs for the hall. To view the criteria and apply for this grant is it: https://www.essentialenergy.com.au/community-hall.
- Volunteer to fill out the form this was discussed and Muriel Stockheim and Michelle Henkel are looking at completing the form.
- Erin said our \$1000 will come this week bit delayed this year.
- Australia Post is still looking to install a locker at the hall but have a more mobile version that they
 are looking at.
- The hall is desperate for a clean, suggest to have a working bee to have the hall and area cleaned date is to be 13 Mar 2021.
- The Markets are looking to start back up again To start on 28 Feb 2021
- I am not sure if a Council rep is coming but it would be good to have an update on our maintenance program for our urgent items.

4.2 Secretary

Nil to report

4.3 Treasurer

Current Bank Balance is \$4679.79.

An issue has arisen on the fees and charges as they are different to what is in Council paperwork. It was discussed that Louise Barron would redone the amounts and they are as follows:

MEETINGS \$8.00

SMALL FUNCTION \$19.00

DAY FUNCTION (7am-5pm) \$43.00

EVENING FUNCTION (5pm+) \$70.00

WEEKEND (1-2 DAYS) \$65.00 per day

3 CONSECUTIVE DAYS (3 or more) \$52.00 per day

COMMERCIAL GAIN FUNCTION \$22.00 per 2 hours

STORAGE \$24.00 per day

EQUIPMENT HIRE

CHAIRS (plastic) \$2.00 TRESTLE TABLES (not white ones) \$2.00 FOLD UP WHITE TABLES \$10.00 \$3.60/DOZEN **CROCKERY CUTLERY** \$3.60/DOZEN HOT WATER URN (Electric) \$10.00 **FOODWARMER** \$20.00 **BAIN MARIE** \$20.00 PA SYSTEM (Outdoor Type) \$25.00

5 Business Arising from Previous Minutes

5.1 Hall roof inspection and investigation on cost

SNOWY MONARO REGIONAL COUNCIL

Committee Minutes

The Hall Committee recommends that the council have the hall roof checked. Due to indication of rust, currently no leaks have been detected in the hall.

5.2 Blaze Aid contribution for use of the Hall

Nothing has been heard on this and Muriel is going to chase this up.

5.3 Blaze Aid contribution for use of electricity for the Hall

Nothing has been heard on this and Muriel is going to chase this up.

6 Other Business

Approval has been given to CWA to place their plaque inside the hall, due to it being vandalized outside the hall. We also discussed the organ and the shelf in the hall, even though not on the agenda, we did a walk around in the hall and feel that these two items could be sold or moved to another area. Louise Baron was going to check with Shorty who donated the organ and see if he is happy for us to try to sell it and possibly we could move the shelf to the cricked shed.

7 Items for Council Action

An email was received from Teena Paterson – Coordinator Land & Property, outlining some of the council maintenance for the Hall. As

The following items are to remain on the Minutes and reviewed at each meeting, until they are completed.

The Section 355 Committee's recommendations are submitted for Council's consideration.

7.1 High Priorities:

7.1.1 Hall Side Door needs urgent replacement on Cosgrave St

Council have completed this work and we like to thank them for this.

7.1.2 The external kitchen door and step needs work

Council's builder is meeting with a supplier at the site in order to progress awning options for the kitchen entry point.

7.1.3 Downpipes need connection to a water tank or a better place to drain

Council's maintenance staff attended Bredbo Hall on Monday of this week to scope options for rectifying the roof stormwater/downpipe run off and suitable treatment options for the kitchen greywater disposal. Development of these plans will inform cost estimates to guide future budget planning (grant sourcing etc)

7.1.4 Back door to supper room on Cosgrove Street needs to be looked at.

As confirmed to the S355 Committee in October 2020, as a result of Bredbo Hall's designation as a Neighbourhood Safer Place (NSP), a range of upgrades are scheduled - including draft seals at the base of external doors, filling of gaps, gauze screens for vent openings and some eave flashing installs. This week we've again sought confirmation from the RFS as to the delivery timing for these works, which will be funded by the RFS

7.1.5 Internal Walls need repairing and gap filling between boards

As confirmed to the S355 Committee in October 2020, as a result of Bredbo Hall's designation as a Neighbourhood Safer Place (NSP), a range of upgrades are scheduled - including draft seals at the base

SNOWY MONARO REGIONAL COUNCIL

Committee Minutes

of external doors, filling of gaps, gauze screens for vent openings and some eave flashing installs. This week we've again sought confirmation from the RFS as to the delivery timing for these works, which will be funded by the RFS

Louise Bowerman is going to follow up all RFS funded items with Fire Control.

7.2 Medium Priorities:

7.2.1 Concertina doors need replacing – estimated cost \$5000

<u>ENVIRONMENTAL RISK</u> - Concertina doors at back of stage have been damaged – a tradesman has suggested could be due to stumps moving under the stage from damage to the foundations. These doors have been damaged for a long time and mean that we can't heat the supper room adequately.

7.3 Low Priorities:

7.3.1 The Hall needs to be painted inside and out – estimated cost \$5000

ENVIRONMENTAL - The Hall is in need of painting – inside and out.

7.3.2 The heat lamps need an upgrade – estimated cost \$300

<u>ENVIRONMENTAL</u> - we have the elements for the heat lamps Heat lamps / heating needs an upgrade, waiting for local electrician to come out and replace elements.

7.3.3. Solar panels to be placed on the hall or the toiled block roof – estimated cost \$4000

<u>ENVIRONMENTAL</u> - The hall consumes a lot of electricity, particularly with the safety light that switches on all night, solar panels would reduce our power consumptions and could be placed on the toilet block.

All of the above items are what the Section 355 Committee's recommendation and would like Council to come out and review these items as soon as possible to provide us with a way ahead to ensure the health, safety and security of our community members in the use of our wonderful Bredbo Hall.

8 Date of next Meeting

The next meeting will be held at 7:00pm on 24 March 2021 at Bredbo Hall.

There being no further business the meeting concluded at 900pm

9 Close of Meeting

	22 February 2021
CHAIRPERSON	DATE

9.1.2 MONTHLY FUNDS MANAGEMENT REPORT - FEBRUARY 2021

Record No:

Responsible Officer: Chief Financial Officer

Author: Finance Officer

Key Direction: 7. Providing Effective Civic Leadership and Citizen Participation

Delivery Plan Strategy: DP7.6 Increase and improve Council's financial sustainability.

Operational Plan Action: OP7.18 Effective management of Council funds to ensure financial

sustainability.

Attachments:

Cost Centre Financial Services
Project Funds Management

Further Operational Plan Actions: OP7.2 Completion of reporting requirements in accordance with

legislation.

EXECUTIVE SUMMARY

The following report details the funds management position for the reporting period ending 28 February 2021.

Cash and Investments are \$71,113,816.

Certification

I, Nicholas Byrne, Responsible Accounting Officer of Snowy Monaro Regional Council hereby certify, as required by Clause 212 of the Local Government (General) Regulation 2005, that investments as detailed in this report have been invested in accordance with Section 625 of the *Local Government Act 1993*, the Regulations and Council's Investment Policy.

OFFICER'S RECOMMENDATION

That Council:

- A. Receive the report indicating Council's cash and investments position as at 28 February 2021; and
- B. Receive the Certificate of the Responsible Accounting Officer.

BACKGROUND

Council's Cash and Investments 28 February 2021:

Cash at Bank	\$1,041,812
Investments	\$70,072,004
Total	\$71,113,816

The cash at bank figure is not an indication of the long term available cash to fund the Council's operations, instead only what was held at that point in time to manage the short term cash flows. This report provides information on how the overall cash held is being managed.

QUADRUPLE BOTTOM LINE REPORTING

1. Social

Total Cash and Investments are available to provide services and infrastructure to the community in accordance with the 2021 budget, Council resolutions and other external restrictions.

2. Environmental

It is considered the recommendations contained herein will not have any environmental impacts.

3. Economic

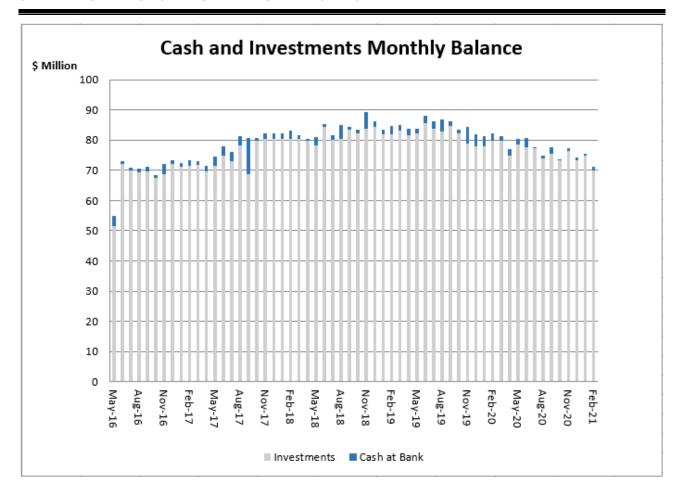
Total investments for Snowy Monaro Regional Council were \$70,072,004 on 28 February 2021.

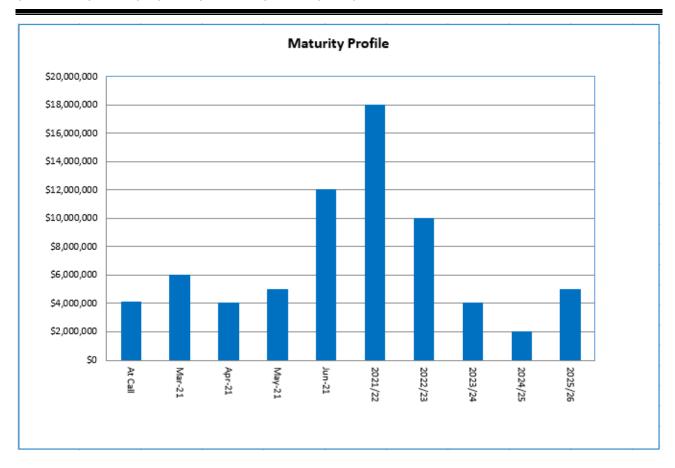
Investment Register – 28 February 2021:

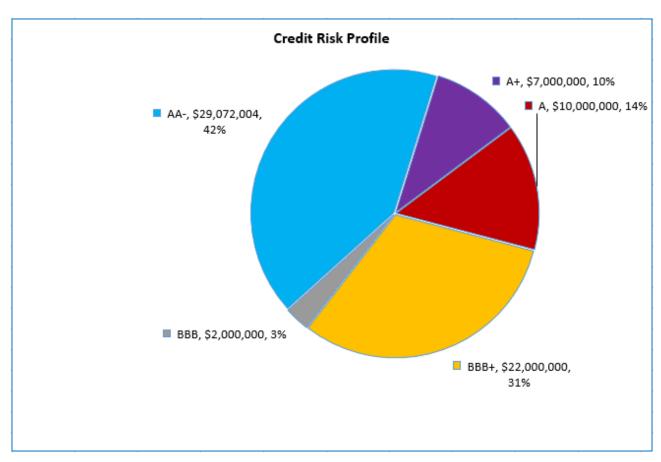
		Short-	Long-				
DATE		Term	Term		CURRENT	INTEREST	
INVESTED	FINANCIAL INSTITUTION	Rating	Rating	TYPE	INVESTMENT	RATE	MATURITY
n/a	National Australia Bank - At Call*	A1+	AA-	At Call	4,072,004	0.65%	At Call
23-Mar-16	ING Bank	A1	Α	TD	1,000,000	3.66%	22-Mar-21
23-Jun-16	Commonwealth Bank	A1+	AA-	TD	4,000,000	1.11%	23-Jun-21
26-Jun-17	Bank of Queensland	A2	BBB+	TD	4,000,000	3.30%	25-Jun-21
29-Aug-17	Westpac Bank	A1+	AA-	TD	4,000,000	0.97%	29-Aug-22
15-Sep-17	Westpac Bank	A1+	AA-	TD	1,000,000	0.92%	15-Sep-21
29-Jun-18	National Australia Bank	A1+	AA-	TD	4,000,000	0.92%	29-Jun-23
11-Sep-18	RaboDirect	A1	Α	TD	2,000,000	3.33%	08-Sep-23
17-Dec-18	Rabobank Australia	A1	Α	TD	2,000,000	3.15%	16-Dec-22
27-Aug-19	ING Bank	A1	Α	TD	3,000,000	1.44%	31-Aug-21
17-Sep-19	Bank of Queensland	A2	BBB+	TD	1,000,000	1.85%	19-Sep-23
23-Oct-19	Bank of Queensland	A2	BBB+	TD	1,000,000	1.80%	23-Oct-23
03-Dec-19	Australian Military Bank	A2	BBB+	TD	1,000,000	1.72%	02-Dec-21
06-Mar-20	ING Bank	A1	Α	TD	1,000,000	1.45%	05-Mar-21
12-Mar-20	Rural Bank Limited	A2	BBB+	TD	4,000,000	1.20%	17-Mar-22
17-Mar-20	ING Bank	A1	Α	TD	1,000,000	1.63%	17-Mar-25
19-Mar-20	ME Bank	A2	BBB	TD	2,000,000	1.25%	19-Mar-21
20-Mar-20	Bank of Queensland	A2	BBB+	TD	1,000,000	1.85%	19-Mar-25
22-Jun-20	National Australia Bank	A1+	AA-	TD	4,000,000	0.95%	22-Jun-22
25-Jun-20	Bendigo and Adelaide Bank	A2	BBB+	TD	4,000,000	0.75%	29-Jun-21
31-Aug-20	Suncorp Bank	A1	A+	TD	2,000,000	0.70%	01-Mar-21
03-Sep-20	Macquarie Bank Limited	A1	A+	TD	3,000,000	0.35%	08-Apr-21
07-Sep-20	Rural Bank Limited	A2	BBB+	TD	4,000,000	0.60%	19-May-21
09-Sep-20	National Australia Bank	A1+	AA-	TD	3,000,000	0.75%	09-Sep-21
24-Nov-20	Suncorp Bank	A1	A+	TD	1,000,000	0.38%	23-Apr-21
30-Nov-20	Macquarie Bank Limited	A1	A+	TD	1,000,000	0.25%	31-May-21
17-Dec-20	Bendigo and Adelaide Bank	A2	BBB+	TD	2,000,000	0.45%	12-Jan-22
27-Jan-21	National Australia Bank	A1+	AA-	TD	5,000,000	0.80%	27-Jan-26
					70,072,004		

Cash and Investments Charts:

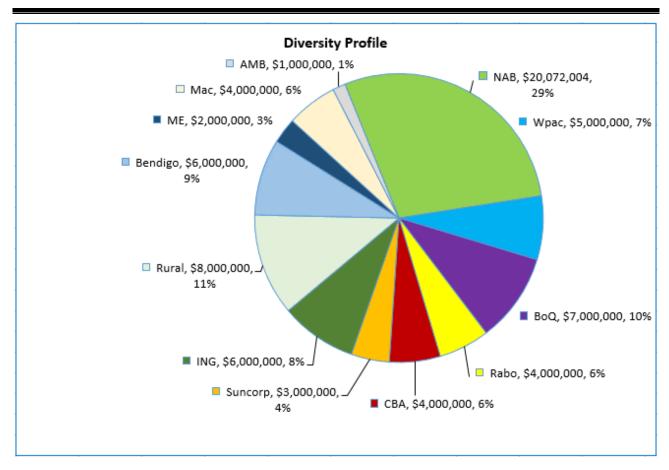
9.1.2 MONTHLY FUNDS MANAGEMENT REPORT - FEBRUARY 2021







9.1.2 MONTHLY FUNDS MANAGEMENT REPORT - FEBRUARY 2021



Investment Portfolio Return:

Benchmarking is used by Council as a gauge for the performance of its portfolio against its investing universe (*universe*: securities sharing a common feature – liquidity, return patterns, risks and ways to invest). A suitable benchmark to review the return on Council's portfolio is the Bank Bill Swap Rate (BBSW), or Bank Bill Swap Reference Rate – a short-term interest rate used as a benchmark for the pricing of Australian dollar derivatives and securities – most notably floating rate bonds.

Month	YTD Annualised Return	Monthly Average Interest Return	90 Day Bank Bill*	Margin
February	1.35%	1.24%	0.02%	1.23%
January	1.35%	1.19%	0.01%	1.18%
December	1.38%	1.23%	0.01%	1.22%
November	1.41%	1.31%	0.02%	1.29%
October	1.44%	1.37%	0.06%	1.31%
September	1.46%	1.29%	0.09%	1.20%
August	1.55%	1.47%	0.09%	1.38%
July (2020)	1.62%	1.62%	0.10%	1.52%

*The Australian Financial Market Association (AFMA)

Understanding Ratings:

Credit ratings are one tool used by Council when making decisions about purchasing fixed income investments. Credit ratings are opinions about credit risk.

Standard & Poor's ('S&P') is considered one of the Big Three credit-rating agencies, which also include Moody's Investors Service and Fitch Ratings. S&P publishes financial research and analysis on stocks, bonds and commodities. S&P is known for its stock market indices such as the U.S. based S&P 500, the Canadian S&P/TSX, and the Australian S&P/ASX 200. S&P ratings express their opinion about the ability and willingness of an issuer, such as a corporation, to meet its financial obligations in full and on time. Credit ratings are not absolute measure of default probability. Since there are future events and developments that cannot be foreseen, the assignment of credit ratings is not an exact science.

Credit ratings are not intended as guarantees of credit quality or as exact measures of the probability that a particular issuer will default. S&P issues both short-term and long-term credit ratings. Below is a partial list based, on Council's Investment Register.

Short-term credit ratings (term less than 1 year)

S&P rates the issuer on a scale from A1 to D. Within the A1 category it can be designated with a plus sign (+). This indicates that the issuer's commitment to meet its obligation is very strong.

A1: obligor's (a person or corporation who owes or undertakes an obligation to another by contract or other legal procedure) capacity to meet its financial commitment on the obligation is strong.

A2: is susceptible to adverse economic conditions however the obligor's capacity to meet its financial commitment on the obligation is satisfactory.

Long-term credit ratings (term greater than 1 year)

S&P rates the issuer on a scale from AAA to D. Intermediate ratings are offered at each level between AA and CCC (for example; BBB+, BBB).

AA: has very strong capacity to meet its financial commitments. It differs from the highest-rated obligors (rated AAA) only to small degree. Includes AA-.

A: has strong capacity to meet its financial commitments but is somewhat more susceptible to the adverse effects of changes in circumstances and economic conditions than obligors in higher-rated categories.

BBB: has adequate capacity to meet its financial commitments. However, adverse economic conditions or changing circumstances are more likely to lead to a weakened capacity of the obligor to meet its financial commitments.

Ratings from 'AA' to 'CCC' may be modified by the addition of a plus (+) or minus (-) sign to show relative standing within the major rating categories.

Source: S&P Global Ratings

4. Civic Leadership

In accordance with Regulation 212 of the Local Government (General) Regulation 2005, a report setting out details of money invested must be presented to Council in the following month.

Council's Fund Management Reporting exceeds minimum regulatory requirements and demonstrates a commitment to accountability and transparent leadership. It provides the Council, Executive and Community with timely, accurate and relevant reports on which to base decisions.

9.1.3 NIMMITABEL PUBLIC SCHOOL - SNOWY MOUNTAINS PSSA CROSS COUNTRY

Record No:

Responsible Officer: Chief Operating Officer

Author: Project Specialist

Key Theme: 1. Community Outcomes

CSP Community Strategy: 1.3 Recreation, sporting and leisure facilities encourage all ages to

live in an active and healthy lifestyle

Delivery Program Objectives: 1.3.3 Council's recreational facilities, parks and public open spaces

are safe, well managed and accessible

Attachments: 1. Notice of Intention to Organise an Event (Under Separate

Cover)

2. Police Traffic Management Plan (Under Separate Cover)

3. Risk Assessment (*Under Separate Cover*)

4. Schedule 1 and Check List (Under Separate Cover)

5. Nimmitabel PS Cross Country - Traffic Control Plan - Signed

(Under Separate Cover)

6. Responses from LTC Members (*Under Separate Cover*)

Cost Centre Infrastructure Administration

Project Snowy Monaro Local Traffic Committee

EXECUTIVE SUMMARY

Nimmitabel Public School will once again hold the Snowy Mountains Primary School Sports Association Cross Country. This will be the third year that Nimmitabel Public has hosted this event.

To ensure the safety of students and spectators the School is requesting the temporary closure of a section of two roads in the vicinity of the School. They are:

- Miller Street from approximately 280 metres from the Monaro Highway to the corner of Wolfe Street, and
- Wolfe Street from approximately 75 metres from the corner with Miller Street.

The School has requested that the roads be temporarily closed from 6:00 am to 3:00 pm on 24 March 2021.

The following officer's recommendation is submitted for Council's consideration.

OFFICER'S RECOMMENDATION

That Council approve the request from Nimmitabel Public School for temporary road closures from 6:00 am to 3:00 pm on 24 March 2021 associated with conducting the Snowy Mountains Primary School Sports Association Cross Country for the following roads:

- Miller Street from approximately 280 metres from the Monaro Highway to the corner of Wolfe Street, and
- Wolfe Street from approximately 75 metres from the corner with Miller Street.

BACKGROUND

QUADRUPLE BOTTOM LINE REPORTING

1. Social

By approving this event, Council is contributing towards supporting large scale sporting events for the benefit of our small schools.

2. Environmental

No impact

3. Economic

No impact

4. Civic Leadership

Council will be seen to be supporting our "village" areas and not just the larger towns.

9.1.4 WORK HEALTH AND SAFETY POLICY AND STATEMENT

Record No:

Responsible Officer: Chief Workforce Officer

Author: Workforce Administration Support Officer

Key Theme: 4. Leadership Outcomes

CSP Community Strategy: 10.4 Council will manage service delivery in an efficient and

sustainable way as an employer of choice

Delivery Program Objectives: 10.4.2 Council provides a workplace that ensures the health,

safety and wellbeing is maintained through the management of

potential risk

Attachments: 1. Work Health and Safety Policy

2. Work Health and Safety Statement

EXECUTIVE SUMMARY

The attached documents have been developed to assist Council define and summarise the system and principles supporting its Work Health and Safety (WHS) undertakings, to effectively maintain the safety of its people and engender a safety culture.

The objectives of the Health and Safety Policy are to:

- Ensure compliance with WHS legislation
- Ensure CEO and Management are committed to health and safety
- Provide information, instruction, training and supervision to workers including contractors, volunteers and visitor to ensure their health and safety
- Provide and implement appropriate consultation mechanisms between person conducting business or undertaking (PCBU) and workers
- Develop and implement safe systems of work to ensure workers conduct their work in a safe manner
- Develop and implement incident management systems
- Establish effective return to work programs to ensure injured workers return to work within a timely manner
- Provide programs of health and safety activities and procedures for work practices which are continually updated and effectively carried out
- Establish processes to identify hazards, assess the risk and implement control measures in accordance with the Hierarchy of Controls
- Continually monitor and improve WHS
- Provide adequate facilities, equipment and resources to enable workers to perform their duties safely

The following officer's recommendation is submitted for Council's consideration.

OFFICER'S RECOMMENDATION

That Council:

- A. Receive and note the report and its attachments
- B. Authorise the commencement of adopting the WHS Policy through the appropriate processes.

BACKGROUND

The previous policy was adopted by Council resolution 134/16 on 31 August 2016.

The attached Work Health and Safety Policy is the result of a revision and consultation process to bring it in line with current legislative requirements including the Work Health and Safety Act 2011 and Work Health and Safety Regulation 2017.

A draft document was circulated to all staff (including the WHS Committee) via email on 1 February 2021, allowing two weeks for comments to be provided to Workforce Management for consideration. Minor grammatical comments were received and a draft policy approved by ELT on 16 September 2020. The acting Chief Workforce Officer subsequently required an additional review.

The reviewed document is attached – reviewers include Council's WHS & RTW Officer and WHS Officer and Councils Workers Compensation Insurer – StateCover Mutual.

The various reviews have not resulted in material changes to the document and therefore further consultation is not recommended.

The policy should be adopted by Council. The attached policy statement should be reviewed and approved by the CEO and posted in various locations at Council work sites to support promotion and awareness of the policy.

Once adopted by Council the revised Policy will be disseminated to all staff via the WHS Committee, All staff email, placement on the Intranet and provided at staff induction training.

QUADRUPLE BOTTOM LINE REPORTING

1. Social

The proposed Work Health and Safety Framework will positively benefit Council's workforce (including contractors, volunteers and visitors) by providing a suite of documents that are easily accessible, via the intranet, and will help to support the effective management of its people.

2. Environmental

It is not anticipated that this report will have perceived environmental impacts.

3. Economic

All costs associated with the provision of work health and safety resources are considered when determining annual budgets.

9.1.4 WORK HEALTH AND SAFETY POLICY AND STATEMENT

4. Civic Leadership

Adopting a Work Health and Safety Framework demonstrates leadership to the community by providing a mechanism for strong and effective leadership and a commitment to safety of the Council's employees, contractors, volunteers and visitors which assists our organisation to be compliant with Work Health and Safety legislation, as well as Australian Standards and Codes of Practice.

Policy



Title of Policy	Work Health and Safety				
Responsible Department	Workforce Management	Document Register ID	250.2016.61.2		
Policy Owner	Chief Workforce Officer	Review Date	21/11/2022		
Date of Council Meeting		Resolution Number	134/16		
Legislation, Australian Standards, Code of Practice	Work Health and Safety Act 2011 Work Health and Safety Regulation 2017 All Australian Standards and Codes of Practice relevant to Work Health and Safety				

1. Policy Statement

Snowy Monaro Regional Council (SMRC) is committed to providing a safe and healthy working environment, so far as is reasonably practicable.

Council recognises that it has a legal obligation to ensure the health and safety of workers and other persons affected by SMRC activities. In meeting this obligation, SMRC shall comply with the requirements set out in the Work Health and Safety Act 2011 and Work Health and Safety Regulation 2017.

SMRC Work Health & Safety Policy Statement is an Appendix to this policy which is presented in a one page format.

2. Scope

This policy applies to all Snowy Monaro Regional Council workers including contractors, visitors, volunteers and other persons at all Snowy Monaro Regional Council workplaces including SMRC owned facilities.

3. Policy Objectives

Health and safety is everyone's responsibility. All SMRC workers have a responsibility to ensure the health and safety of themselves as well as others.

- a) Ensure compliance with Work Health and Safety (WHS) Legislation Framework
- b) Ensure as far as reasonably practicable a safe and health work environment

- Provide a safe system of work, information, instruction, training and supervision to all workers including contractors, volunteers and visitors to ensure their health and safety
- d) Maintain an effective process for reporting, investigating and resolving health and safety issues
- e) Ensure and encourage early reporting of injuries, illnesses, incidents, hazards, any near miss incidents or concerns without fear of reprisal
- f) Taking a planned and systematic approach to identifying hazards, assessing the risk and eliminating or minimising the risk by applying and monitoring appropriate control measures in accordance with the hierarchy of control
- g) Enable access for all workers to relevant work health safety training and education
- h) Encourage reporting of behaviours which breach this Policy as well as associated procedures
- i) Provide and maintain appropriate consultation mechanisms between person conducting the business or undertaking (PCBU) and workers
- j) Provide and maintain an effective return to work program to ensure workers recover and return to work within a timely manner
- k) Continually monitor and improve SMRC Work Health Safety Management System
- Establish measurable and achievable objectives and targets aimed at reducing work related injury and illness and take action to overcome identified issues by taking positive steps to drive continuous improvement
- m) Provide adequate facilities, equipment and resources to enable workers to perform their duties in a safe manner

4. Responsibility

4.1 Chief Executive Officer

The Chief Executive Officer (CEO) has ultimate responsibility for the implementation and review of Council's Work Health and Safety Policy and associated procedures. Further, the CEO will:

- Ensure the policy framework promotes a workplace committed to continuously improving WHS performance
- Ensure management supports, manages and applies this policy and associated procedures within their area.
- Ensure measurable objectives and targets are set to assess the Council's performance

4.2 Management

 Understand this policy and associated procedures, and implement Council's WHS Management System within their area

- Ensure all workers meet their work health and safety responsibilities
- Make available education, information and support regarding this policy and associated procedures
- Provide adequate instruction, consultation, training and supervision that is reasonably necessary to ensure a harm-free workplace
- Respond in an appropriate, timely and effective manner to address any concerns, hazards or risks raised by any worker or stakeholder of the Council

4.3 Workers and Other People

Each worker has a responsibility to meet the Council's work health and safety objectives and Part 2: section 28 of the Work Health and Safety Act 2011.

While at work, a worker must:

- Take reasonable care of his or her own health and safety; and
- Take reasonable care that his or her acts or omissions do not adversely affect the health and safety of other persons; and
- Comply, so far as is reasonably able, with any reasonable instruction that is given by the PCBU to allow the person to comply with the Act; and
- Co-operate with any reasonable policy or procedure of the PCBU relating to health or safety at the workplace that has been notified to workers

Appendix A – WHS Policy Statement



Work Health and Safety Policy Statement

"SAFETY - It's My Responsibility"

As Chief Executive Officer of Snowy Monaro Regional Council, I express my personal commitment to providing and maintaining a safe and healthy work environment as well as upholding our vision and values of Solutionary, Caring, Innovative, Together and Accountable to ensure all of our employees arrive home safely every day. We appreciate that safety enables efficiency and productivity resulting in improved business outcomes and an effective safety culture actively contributes to our overall success.

For our commitment to a safe and healthy work environment to succeed, all workers need to work together and take responsibility and accountability for the health and safety of ourselves and those around us. Together with your support we can ensure Council continues to be a safe and healthy workplace.

Snowy Monaro Regional Council will make our workplaces safer by:

Management Commitment to Safety

Ensure compliance with WHS legislation as well as emphasising that management at all levels demonstrate accountability and commitment to the Health and Safety or our workers. A commitment to provide adequate resources for our workers to perform work safely.

Safety Management System

Continually monitor and improve SMRC Work Health Safety Management System.

Continuous Improvement

Establish measurable and achievable objectives and targets aimed at reducing work related injury and illness and take action to address WHS issues by taking positive steps to drive continuous improvement.

Consultation with workers and other stakeholders

Provide and maintain appropriate consultation mechanisms between PCBU and workers.

Risk Management

Taking a planned and systematic approach to identifying hazards, assessing the risk and eliminating or minimising the risk by applying and monitoring appropriate control measures in accordance with the hierarchy of control.

Disseminate health and safety information

Provide safe systems of work, information, instruction, training and supervision to all workers including contractors, volunteers and visitors to ensure their health and safety.

Provide education, training and awareness

Enable access for all workers to relevant work health safety training and education.

Policy Implementation

This policy statement shall be displayed in the workplace and made available to all stakeholders. This policy and supporting documents shall be made available to all workers by way of education implemented by all levels of management and regularly reviewed for continual improvement. We shall strive to engage our workers at every level and foster a leader-led safety culture to demonstrate and reinforce our commitment to the health and safety of workers.

<<signature>>
Peter Bascomb

Chief Executive Officer
Approved: MMYYYY

9.2.1 SECTION 355 SMRC TOURISM ADVISORY COMMITTEE DECEMBER 2020 MINUTES

Record No:

Responsible Officer: Coordinator Economic Development

Author: Coordinator Tourism and Events

Key Theme: 2. Economy Outcomes

CSP Community Strategy: 6.1 The Snowy Monaro region is a destination that offers a variety

of quintessential year – round experiences, attractions and events

Delivery Program Objectives: 6.1.1 Promote tourism and enhance the Snowy Monaro Region as

a year round destination of choice through a collaborative approach between all stakeholders and interest groups

Attachments: 1. SMRC Tourism Advisory Committee December 2020 meeting

minutes

EXECUTIVE SUMMARY

Minutes of the SMRC Tourism Advisory Committee meeting held on 16 December 2020 attached.

OFFICER'S RECOMMENDATION

That Council receive the minutes of The Tourism Advisory Committee meeting held 16 December 2020.

BACKGROUND

Meetings of the Tourism Advisory Committee are held approximately every eight weeks. The Committee operates under the Council Adopted Section 355 Tourism Committee Charter.

QUADRUPLE BOTTOM LINE REPORTING

1. Social

This meeting provides a platform for industry and community input into the promotion and growth of Tourism & Events in the region.

2. Environmental

No environmental impacts

3. Economic

No financial impacts

4. Civic Leadership

Councillor and staff representation at these meetings demonstrates good civic leadership.

•

SMRC Tourism SNOWY MONARO Advisory Committee Minutes

Address: Cooma Committee room or via Zoom

Date: Wednesday 16 December 2020 Time: 2 – 4pm

Agenda Items

1 Opening of the Meeting

12.12pm

Attendees: Peter Beer, Donna Smith, Rogan Corbett, Peter Cottrell, Mark Adams, Tim Corkill, via ZOOM: Susie Diver, Gina Woodward, Luke Kneller, Gail Eastaway (at 12.30pm)

Special presentation: Ken Lister and Dave - MRT inc - Rail Trail

Steering team with professional expertise - equal number of consultants

Objective: To use disused Queanbeayn to Bombala 230km rail corridor as a rail trail

3 stages 1 Sth Jerrabomberra - Michelago, 10km nth Cooma, Bombala 92km - some sealed, some unsealed \$16-\$17M - seeking funding via Bushfire Recovery

Land Tenure - meeting with NSW Governmentt officials in to discuss how to get use. Presentation to Council about setting up 355 committee to manage jointly with Queanbeyan-Palerang.

Tumbarumba 21km - Rosewood completed end of last year and has been incredible success

Estimated 1600 people per month using it and growing

Expected injection 24-25M per annum. Ongoing employment opportunities.

DISCUSSION: Considered amazing opportunity for the region, plenty of community support - TSM and committee members in general agreeance.

Issues with land ownership? Transport for NSW land - native title risk, responsibilities for asbestos etc. Whole process for Crown land can take years - aiming for lease or licence to start construction - eg. letter of intent. Legal and Crown expertise included in their committee

Queanbeyan-Palerang officers were excellent - going to their Council tonight. Mixed feelings with Captains Flat Rail Trail issues

Shared corridor - detailed discussions with Cooma Monaro Railway. Vision to Rock Flat - happy with concept. Consider other rail opportunities from a tourism perspective - train carts etc highly successful. Not JUST a bike rail trail. A heritage rail experience.

Cooma Rail station is most intact in NSW - only two signalling systems in Australia, one here in Cooma. One of a kind opportunity in Australia.

Consideration to farmers/landholders adjoining rail trail - submission to LEP.

450,000 people living at the head of the rail trail - better than Queenstown.

\$16M includes planning work, trail design, economic analysis, environmental, business plus Stage 1 construction.

- Budgeting for Jincumbilly Siding Shed, charging points for ebikes/mobility scooters. Sponsorship along the way. Shearing sheds or pop up coffee stalls. Private entreprenuer or landholder opportunity - advertise farm tours etc.

Moved: Peter Cottrell

Seek further briefing and provide support on the rail trail project plans.

Seconded: Tim Corkill All in favour

Gina: A fantastic project, plenty of costs eg future maintenance but paving the way for investors to come on board over time. The work the committee have done is fantastic and well researched.

2 Apologies - Barry Renford

3 Adoption of previous minutes No comments regarding meeting of October

Mayor Beer: Enquired about the status of action to put up to Council to adopt the amendment to the actions in DMP. Still to go back to Council - live document. Gina to put back up to the next Council meeting in 2021.

Motion: To adopt the previous minutes as true and factual documents

Moved: Rogan Corbett Second: Peter Cottrell All in favour

4 Conflicts of Interest

Committee members to raise during the meeting as items are presented

5 Committee Business

- 5.1 Updates from previous minutes
- 5.2 SMRC Tourism/Events Update Donna S

Acknowledged meeting time change on this occasion

 Very active, good promo National/State level. Destination NSW good products - Peter Cottrell was a part of with trout farm. Professional video \$1.2M followers on FB and instagram.

3 different videos - 500k views. Shared several hundred times from that site. High end state level promotion.

Luke Kneller and TSM for their contacts with Destination NSW - Luke meets and guides them.

Tourism Australia working in this area "holiday here" Today show presented from the region last week. Relationships between Luke and those contacts. Great promo for the region.

Events are starting to ramp up. - Mt Gladstone, new facility. Fantastic reputation as excellent facility. Canberra MTB group ran an, slightly onerous process for the organiser. Great feedback, outside event organiser, external sponsorship and support, 90% competitors outside of the region, happy with the facility. Key summer activity. A few processes need to be polished but the right direction for tourism.

Running of new event at Cooma Railway - Local Produce Markets. Quite well promoted. 400 people in first hour. By 11am they sold out. Some teething issues, not too many stall holders. Potential to grow, it's a recurring monthly event.

"Monaro Produce Co-op" developed for the event included various home growers/small farmgate style operators

Bombala market wrap up - figure stats, dachshund derby growing

Jan/Feb/March - brief overview of events -

Lakelight Sculpture - Easter, Australia Day events - Cooma, Bombala, Jindabyne, Michelago, Nimmitabel, Adaminaby, Dalgety - COVID safe grant funding obtained to invest locally where possible.

Shows - Cooma, Bombala, Dalgety, Delegate proceeding - Gail advised Cooma show not running as normal though. Future Gen and Snowy expo - tunnel boring etc on Saturday. Horse events on another day. Meeting on Friday

Welcome to the Snowies - planning, outdoor music concert.

Rodeos - Jindabyne, Easter, Billy Kart Derby March, Adaminaby Easter Fair, Cooma Rodeo Feb. Snowies MTB Festival, Trail Runs, AAA Trail run

Other projects: Monaro Rail Trail, recovery funding Mark & Donna working on a tourism data project, collecting data to use and share with, better market and coordinate future activities. Hoping to roll out early to mid 2021. Valuable date to move along

Tim: Snowy Scheme is open back to normal - plenty of enquiries, bus groups. Including Boxing Day. Museums and galleries guidelines are being followed for when to open.

Donna: Next 6 days - what's open and closed for the Xmas/New Year - need to ensure we can present the product of what will be open - operators, hospitality, restaurants etc. Guide used by VCs, accommodation, local businesses. Trying to encourage operators to be open but aware of penalty rates and business viability.

General committee discussion that it's looking positive for tourism/visitors over Christmas.

Gail update: Cooma Races - 500 people, slight glitch with ticket bookings. Easy to clean up, no issues. Everyone enjoyed themselves, no marquees.

ACTION: Gina requested information at tourism hot spots - Vendors with availability. Attractions, experiences or accommodation - to be shared with Communication for advertising opportunities. Donna to action.

5.3 TSM Update - Luke K

- DNSW exciting things
- Tourism Australia photographer etc
- Filming the wider region, admainaby, cooma, degate, nimmitabel. Foundational footage, wider region promotion and dispersal
- Better Homes & Gardens new year.
- Red Bull project, cancelled on the day, still be a little bit of promotion. Brands and campaigns Toyota Hilux a few months ago'
- Travelling with Kids, Food & Drink and Heritage itineraries.
- DNSW one of the winners had a hamper local produce
- Music Festival big 2 day tribute festival. Jindabyne, satellite events across the region on the back of a truck. Plan to start Easter weekend to co-exist with Lakelight Sculpture initially and capture the audience.
- TSM AGM website, brand launch this evening, looking like a promising summer.

Luke finished with TSM at the end of this year, helping transition.

5.4 DMP Update - Gina W

The amendments were gathered from all parties within the actions area.

Briefed into the Council, live document - updates in status and changes in timing such as due to SAP. Even though it's a live document, will take to Council for endorsement - will be in the New Year.

Peter Cottrell asked about SMEG museum? Not on the action list as it was early in the plan development stage at the time the DMP was being done. Recognised that it's an attraction to be supported. The intention regarding the future of that museum wasn't developed at the time. Tim updated 'Hydro 1' has been reached out by the Adaminaby museum to establish dialogue and work together with complimentary projects rather than feed off each other.

5.5 SAP update - Mark A

- Progress continuing but slowed, original timeframe for public exhibition draft Feb/March looking like April/May.
- SAP team in the region last week, community advisory meeting. Coming back towards end of January for community pop-up stalls, Jindabyne and possibly Thredbo.
- Media release from deputy premier re: Education precinct. New school at Sport and Rec site. Direct result of background strategic thinking of SAP.
- Project remains ambitious to move Jindabyne from winter to all round destination economy. New visitation targets and residential growth targets being developed. Working through realistic, achieveable.

- Council has just put on a consultant for regional trails masterplan - LGA as a whole, to coordinate development of trails. Walking, MTB, horse riding, road cycling, hiking primarily. Highlight future opportunities. Treadwell consultants, plan to be in the region mid-March for community consultation.

Mayor Beer; increasing contact - the longer the SAP goes, how it will tie in with local strategy. Whether we should be waiting for SAP. Any thought from SAP with how to link these? Mark advised draft land use strategies have been sent to SAP planning committee.

Resolution: Accept the reports given

Moved: Rogan Corbett Second: Peter Cottrell All in favour

6 General Business

Tim: Trout Challenge briefing - 2 months. \$4500 Snowy Hydro prizes gone - Canberra and Albury. Still about half prizes -200 trout to be caught. Being caught across the region.

Decent size fish being caught, reinforces message via 3 chambers to reinvent trout fishing.

Discussion about fisheries restocking plans - releasing larger fish.

Susie: Trout Challenge - promo needed on the fish remaining - \$15,000 remains?

Business/Tourism - supply expo in Jindabyne planned for March. Connecting local business with local opeartors/food supply. Musicians, food

Opening "Business and Recovery" Hub - 57 Vale street premises, for one year from January to support business and recovery.

Recovery concert - March 6 'Welcome to the Snowies' concert.

7 Action Sheet

Reference	Date	Action	Assignee	Completed	Notes
1/2020	1/7/20	The Charter will be adopted with following amendments:		Complete	
		Mark and Donna are to be recognised as non-voting members.		Complete	
2/2020	1/7/20	All committee members to be responsible for passing on accurate information relating to COVID restrictions		Ongoing	
3/2020	1/7/20	Add a clearer timeframe to the cover of DMP – indicating 5 years			
4/2020	1/7/20	VC Name change		Complete	Voted down at Council mtg - no further action at this stage

5/2020	1/7/20	Snowy Region info centre name consideration	Gina Woodward	Complete	No further action at this stage as per VC Name Change
6/2020	21/10	Donna to distribute DMP updates to advisory committee members Members to respond to Gina	Donna	Complete	
7/2020	21/10	Circulate Cooma Chamber strategy to members from TRC	Donna	Complete	
8/2020	16/12	Tourism hot spots - Availability for attractions, experiences or accommodation - to be provided for Communication promotional opportunities	Donna		
9/2020	16/12	Seek further briefing and provide support on the rail trail project plans.	Committee	Open & Ongoing	
10/2020	16/12	DMP amendments to be submitted to Council for endorsement	Gina		

8 Date of next meeting

Wednesday 17 February 2021

9 Close of Meeting

1.45pm

9.3.1 DRAFT SNOWY MONARO REGIONAL COUNCIL WASTE MANAGEMENT STRATEGY FOR PUBLIC EXHIBITION

Record No:

Responsible Officer: Chief Strategy Officer

Author: Project Specialist

Key Theme: 3. Environment Outcomes

CSP Community Strategy: 7.1 Protect, value and enhance the existing natural environment

Delivery Program Objectives: 7.1.2 The significance and protection of the region's natural assets

along with the efficient and equitable planning of public services, infrastructure and amenities is provided for in Council's Local

Environmental and associated plans

Attachments: 1. Snowy Monaro Regional Council Waste Management Strategy

Summary (Under Separate Cover)

2. Snowy Monaro Regional Council Waste Management Strategy

(Under Separate Cover)

3. Addendum to the Landfill Options Analysis Report (Under

Separate Cover)

4. Landfill Options Analysis (Under Separate Cover)

5. Rationalisation of Transfer Stations (Under Separate Cover)

6. Jindabyne Regional Waste Management Facility Feasibility

Analysis New Landfill Cell (Under Separate Cover)

7. Appendices - JRWMF Feasibility Analysis (Under Separate

Cover)

8. Waste Management Strategy Risk Assessment (Under Separate

Cover)

EXECUTIVE SUMMARY

The Snowy Monaro Regional Council Waste Strategy (The Strategy) was identified under Action 7.1.2.1 of the 2020 Operational and Delivery Plan.

The Draft Strategy has now been prepared after consultation with Councillors, Council staff and virtual community consultation due to COVID-19 restrictions the document is now ready to be placed on public exhibition for a period of 28 calendar days.

Following receipt of community feedback the final document will amended where appropriate and presented to council for adoption. The strategy will assist in development of future delivery and operational plans.

The following officer's recommendation is submitted for Council's consideration.

OFFICER'S RECOMMENDATION

That Council endorse the Draft Snowy Monaro Regional Council Waste Management Strategy and Draft Snowy Monaro Regional Council Waste Management Strategy Summary to be placed on public exhibition for a period of 28 calendar days.

BACKGROUND

The Snowy Monaro Regional Council Waste Strategy (The Strategy) was identified under Action 7.1.2.1 of the 2020 Operational Plan. The delivery of the Strategy has been delayed due to the 2019-2020 summer bushfire disaster and the impacts of COVID-19 on the community and staff.

The Strategy provides an overview of waste management practices relevant to our local government area. A summary version of the strategy has been prepared and will be place on public exhibition alongside the full strategy document.

The Strategy evaluates the performance of current waste management services and provides an options analysis and actions assessment that will be used to form the basis of future Operational and Delivery Plans in relation to waste management services.

The strategy will be placed on public exhibition for a period of 28 calendar days.

QUADRUPLE BOTTOM LINE REPORTING

1. Social

The strategy has been developed with consideration of community, staff and councillor input.

The main feedback from consultation included:

- Concerns around cost of waste services;
- The charges of green waste;
- Support for the expansion of a third green food and organic waste bin; and,
- The community would like a bulky waste service.

The draft strategy proposes to address these main concerns by implementing the following:

- Increasing the availability of collection and bank of bin services;
- Consideration of a green waste voucher in the development of future fees and charges;
- Expansion of the compost facility and third bin service; and,
- Undertake further investigation to potentially provide a bulky waste service to pensioners and people with a disability.

2. Environmental

The strategy has been prepared to be consistent with current State and Federal Government targets and best practice waste management practices.

3. Economic

Attachment 1 and 2 provide an overview of operational and capital cost for the various options analysed including the current facility operational expenses.

4. Civic Leadership

The Strategy has been developed in accordance with Action 7.1.2.1 of the 2020 Operation and Delivery Plan. The Strategy provides a framework for Council to provide efficient and contemporary waste management services. The action plan in the strategy will assist in development of future delivery and operational plans.

9.3.2 MICHELAGO MASTER PLAN GROWTH SCENARIOS

Record No:

Responsible Officer: Chief Strategy Officer

Author: Team Leader Strategic Planning

Key Theme: 3. Environment Outcomes

CSP Community Strategy: 8.1 Plan for rural, urban and industrial development that is

sensitive to the region's natural environment and heritage

Delivery Program Objectives: 8.1.1 New development and land use is facilitated in appropriate

locations with areas of environmental value protected

Attachments: 1. Draft Michelago Master Plan Scenarios

2. Michelago Water and Wastewater Scoping Study

3. Michelago Master Plan - Preliminary Consultation Summary

Cost Centre WO 441

Project Michelago Masterplan

EXECUTIVE SUMMARY

Michelago is a village located approximately 50km south of Canberra and 60km north of Cooma. Canberra heavily influences Michelago, with many residents choosing to live in Michelago for a rural lifestyle close to the services and employment in Canberra. High underlying land values and strong demand for a rural residential product has resulted in significant development pressures. Councils Local Strategic Planning Statement action 8.6 recommended Council undertake a specific plan for Michelago to guide growth and development in this area. Council has engaged WSP to undertake a Master Plan.

WSP has now developed four (4) draft growth scenarios based on the Community feedback and the Councillor workshop. These scenarios consider the economics of service delivery and are modelled at differing densities. The scenarios utilised best practice land-use planning principles to inform a future village structure.

The following officer's recommendation is submitted for Council's consideration.

OFFICER'S RECOMMENDATION

That Council:

- A. Receive and note the report by the Team Leader of Strategic Planning on Michelago Master Plan Growth Scenarios
- B. Place Michelago Master Plan Growth Scenario's on public exhibition for a minimum of 28 days.

BACKGROUND

For over a decade, Michelago has been speculated as a centre for growth. The village's rural lifestyle, coupled with its proximity to Canberra, has resulted in a view that growth in Michelago is inevitable. The concept of growth in Michelago was explored in Cooma-Monaro Settlements Strategy Discussion Paper published in 2016. This was then further explored in Snowy Monaro Planning and Land Use Discussion Paper in 2019.

Due to this potential demand for growth, Michelago was identified as one of the five main areas of future growth and development in the Snowy Monaro Region in Council's Local Strategic Planning Statement (LSPS). Two key actions were identified in Council's LSPS were:

- 8.7 Council will develop a Master Plan for Michelago to provide forward planning and strategic direction for its growth.
- 12.2 Council will undertake a water and wastewater options study for Michelago.

Council engaged GHD to undertake the Michelago Water and Wastewater Options Study (Appendix A) to complete action 12.2 of the LSPS. Four (4) options were considered to provide reticulated water services to Michelago. These are outlined below under the heading of 'servicing options'.

To deliver on action 8.7 of the LSPS Council have engaged WSP to undertake a Master Plan for Michelago. As part of the preliminary consultation on this project, a Councillor Workshop was held on 3 December 2020. Further community consultation was undertaken with a survey, ideas board, interactive map, and a community workshop held on 15 December 2020. A summary of the consultation is provided in attachment 3. Based on feedback from the consultation and the overarching land-use planning principals, four (4) development scenarios have been developed.

DEVELOPMENT SCENARIOS

Four (4) development scenarios have been prepared A to D. These scenarios have been designed to facilitate development of differing densities. It has been considered that minimum lot sizes below 600sqm are not compatible with the desired future character of the Village. Lot sizes considered in these scenarios include 1,800sqm in scenario's without reticulated services and 1200sqm, 1000sqm, 800sqm, 700sqm and 650sqm in serviced scenarios. The increase in village population for these scenario varies from 130 additional people to 2,300 additional people.

Table 1 - Michelago Master Plan Draft Scenarios

Scenario	Estimated Area	Potential lot yield / size	Equivalent persons (x 2.88) unserviced/serviced
Scenario A – Status Quo RU5 Village Zone	13.8ha of vacant land (assume 9.66ha available)	 80 existing dwellings estimated 47 lot potential at 1,800 m² 	 ~200 people 135 people (unserviced) potential
		 96 lot potential at 1,000 m² per lot 120 lot potential at 800 m² per lot 	276 people (serviced)345 people (serviced)
Scenario B – Low growth	20ha*	 (Unserviced) 110 lots @ 1,800 m² 	_ 316 people
Lot 13 DP 11175 Lot 15 DP11175 28ha		Serviced options: 166 lots @ 1,200 m ² 200 lots @1,000 m ² 250 lots @800 m ²	480 people 576 people 720 people
Scenario C – Medium Growth^ Lots 13 and 14 DP 11175 Lots 13 & 14 DP 11175 28ha	42.5ha*	Serviced options only: 420 lots at 1,000 m ² 525 lots at 800 m ² 607 lots at 700 m ² 643 lots at 650 m ²	1,200 people 1,500 people 1,750 people 1,880 people

SERVICING OPTIONS

The following servicing options were considered in detail in the water and wastewater scoping study conducted by GHD. Groundwater options were assessed based on best available data and were considered not viable.

1. Murrumbidgee River

Water allocation options

Raw water from Murrumbidgee River can either be via a water licence and allocation specifically for Michelago or sharing Cooma's water allocation under its licence. Note that Cooma's water allocation may need to be increased to meet the additional demand. However, this may be easier to achieve, administratively, than seeking to obtain a new licence for Michelago.

Murrumbidgee River is approximately 3 km from the Michelago Township and flows in a south to north direction. The reliability of flow and associated river levels in periods of both drought and flood is yet to be defined and outside the scope of the current project.

Infrastructure required

This option would involve a run-of-river water intake structure, a nearby pump station, off-stream water storage, and a water treatment plant (WTP) with all electrical components situated above the 1:100 year flood level. The power supply would need to be extended from the Monaro Highway to the pump station site, a distance of around 2 km.

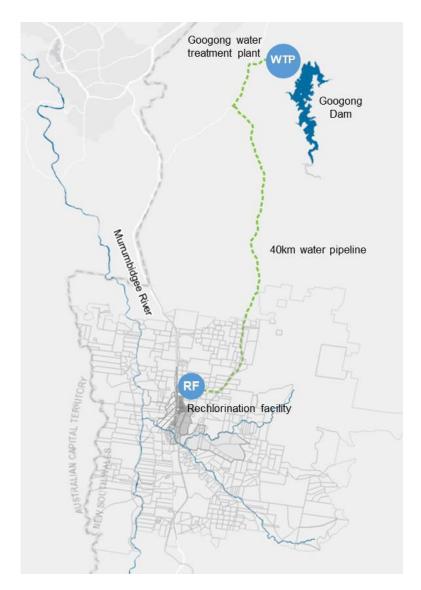
2. Googong Dam (Icon Water)

Michelago could potentially receive potable supply from Icon Water's Googong WTP, approximately 40 km from Michelago. Supply of potable water to Michelago would roughly cost \$1.7 per kL, though this will need to be confirmed with Icon Water if this option is more seriously considered.

This option would involve constructing a pump station near the Googong WTP and a 300 mm ID potable water transfer pipeline approximately 40 km long along Googong Road, Old Cooma Road, and Burra Road to Michelago. Clear water storage at Michelago and additional chlorine dosing will also be required (see Figure 1).

Two other options were considered, one from Theodore Reservoir and the other directly from Googong Dam. Though marginally closer to Michelago (~2km), Theodore Reservoir capacity and connection are untested. Further investigation would be required on Icon Water's part to assess the feasibility of accessing water from this point. The pipeline from this reservoir would also traverse through both ACT and NSW land and will attract a more complicated approvals process. Drawing raw water from Googong Dam seems unfeasible due to the need for a similar length of a pipeline for the Googong WTP option but requiring a full WTP at Michelago. The costs immediately surpass the Googong WTP option. Furthermore, there is a Commonwealth agreement around the ownership and use of Googong Dam, which may not be straightforward to navigate through. Therefore, obtaining water from the Googong Dam has not been considered further.

Figure 1 Water sources



While the ACT Government have not ruled out providing water via the options outlined below, recent correspondence received on the topic of a growing Michelago has outlined several concerns. While conversations with ICON water could be further explored, it is considered unlikely these would result in a determined outcome for many years. Given the high infrastructure costs of building a 40km water pipeline and the limited ongoing benefit, this option is not preferred.

3. Wastewater

The development of Michelago will result in the creation of a new urban area that will generate Wastewater. This presents an opportunity for treatment and fit-for-purpose reuse to complement the more conventional sources of surface water and rainwater.

While efficient, there is generally a stigma around the reuse of wastewater for potable purposes. This would not be a sufficient water source in itself and would need to be supplemented by other water sources.

4. Rainwater

Rainwater harvesting for household use provides an opportunity to offset surface water use and provide added benefits to reducing stormwater runoff from urban areas. Rainwater is typically used for non-potable purposes but can be used for potable use with suitable treatment.

A limitation of rainwater is that options cannot fully rely on this source as it is inherently unreliable in dry periods. There are practical limits on how big domestic tanks can be to mitigate this risk.

Provision of reticulated infrastructure

WSP has considered the GHD and recalculated the numbers to provide infrastructure based on the draft population scenarios provided. The costs outlined in table two are those associated with the provision of reticulated infrastructure. If the preferred scenario is to provide reticulated services, this will be incorporated into a charge per ET as per section 64 of the Local Government Act 1993 to cover these expected costs.

Estimates for the costs of servicing the land identified in the growth Scenarios are provided below, based on the 12,000 EP servicing regime established by the GHD study. For simplicity, the range of EPs is estimated in groups of Equivalent Persons (1,000 - 1,500, 1,500 - 2,400,and 2,400 - 3,600), reflecting the required trunk infrastructure works per scenario as follows.

Table 2 – Costs associated with provision of reticulated infrastructure

Ranges of Equivalent People	Water Capex \$	water OPEX \$/YR	sewerage CAPEX \$	Sewerage OPEX \$/yr	Comments
1,000 - 1,500 Lots 13 and 14	15,351,163	233,512	12,788,372	276,694	Does not include Michelago RU5 zone
1,500 – 2,400 Lots 13 and 14	21,941,860	379,419	19,188,372	392,534	Includes both Lots 13 and 14 and dual occupancy options
2,400 – 3,600 – Mix based on 800- 1000m² lots and 600-800m² lots Lots 13 and 14	21,941,860	379,419	23,688,372	437,534	Includes options for 30% dual occupancy and higher density development on lots 13 and 14
Michelago Village RU5 zone (extension costs only)	9,662,791	136,628	6,659,128	121,731	RU5 zone Michelago only

Table 3 provides an estimate of costs for the Michelago RU5 zone and Lots 13 and 14 as per the Medium growth Scenario D range of 1,875 to 2,300 people:

Table 3 – Servicing Costs associated with Scenario D

scenario D	water Capex \$	water opex \$/YR	sewerage CAPEX \$	Sewerage OPEX \$/yr	Comments
1,500 – 2,400 EP	21,941,860	379,419	19,188,372	392,534	Includes both Lots 13 and 14 and dual occupancy options
Michelago Village RU5 zone	9,662,791	136,628	6,659,128	121,731	RU5 zone Michelago only
Scenario D: Combined	31,604,651	516,047	25,847,500	514,265	Combined costs

QUADRUPLE BOTTOM LINE REPORTING

1. Social

Michelago has been identified as a strategic growth centre for the region. While this growth is predominantly related to Canberra, there is the ability to create a self-sufficient northern township for the region. Regardless of growth, the local community have expressed a desire for greater services and growth, and it is prudent for Council to explore that.

The ongoing master planning of Michelago is designed to facilitate good social outcomes. These draft development scenarios should be placed on public exhibition to ensure community input throughout the master planning process and facilitate good long term social outcomes for the community.

2. Environmental

Michelago's proximity to the Murrumbidgee River and regionally significant biodiversity corridors such as the Tinderry Ranges mean that it holds significant environmental value to the region. The Master Plan process has full regard to the environmental significance of the Michelago area. Early input into this process has been sought from the biodiversity conservation division to deliver good long-term environmental outcomes.

The draft scenarios have been prepared following sustainable planning principles to deliver high-quality natural and built environmental outcomes.

3. Economic

There will be a cost associated with providing reticulated water to Michelago if a serviced option is preferred. The regions development servicing plan under section 64 of the Local Government Act 1993 will need to be revised to incorporate Michelago. These revisions may ensure that much of this cost is recouped. However, it is unlikely that the provision of this infrastructure and ongoing maintenance would be cost-neutral.

9.3.2 MICHELAGO MASTER PLAN GROWTH SCENARIOS

4. Civic Leadership

Council has demonstrated leadership in creating a Local Strategic Planning Statement (LSPS) which identifies the core planning priorities for the region. The Michelago Master Plan delivers on action 8.6 of the LSPS. The scenarios developed at this stage of the master plan process allows Council to provide the community with an early opportunity to provide informed input into the process.

MICHELAGO MASTER PLAN

DEVELOPMENT PRINCIPLES AND GROWTH SCENARIOS BRIEFING PAPER



Prepared for Snowy Monaro Regional Council to inform the selection of a Master Plan growth scenario for Michelago. This paper will be included in the draft Master Plan for Public Exhibition.

WSP Level 1, 121 Marcus Clarke Street Canberra ACT 2601 PO Box 1551 Canberra ACT 2600

Tel: +61 2 6201 9600 Fax: +61 2 6201 9666

wsp.com

REV	DATE	DETAILS
4	01 Mar 2021	Issued

	NAME	DATE	SIGNATURE
Prepared by:	Claire Adams and Nita	16 Feb 2021	CA
	Scott	10 Feb 2021	NS
Reviewed by:	Jenny Rudolph	18 Feb 2021	JR
Reviewed by:	Alex Adkins	28 Feb 2021	AA
Approved by:	Nita Scott	01 March 2021	NS

This document may contain confidential and legally privileged information, neither of which are intended to be waived, and must be used only for its intended purpose. Any unauthorised copying, dissemination or use in any form or by any means other than by the addressee, is strictly prohibited. If you have received this document in error or by any means other than as authorised addressee, please notify us immediately and we will arrange for its return to us.

Cover image: Michelago Railway Station, Nita Scott 2020



TABLE OF CONTENTS

1	PURPOSE OF THIS BRIEFING PAPER
2	SUSTAINABLE SETTLEMENT PRINCIPLES
3	THE FORM OF NEW GROWTH FOR MICHELAGO15
4	THREE GROWTH SCENARIOS - SUMMARY17
4.1.2	Population growth
4.2	Servicing cost estimates
5	MICALAGO ROAD AND SMITHS ROAD
6	SUMMARY OF THE MICHELAGO MASTER PLAN SCENARIOS28
APPEN	NDIX A - DETAILED CONSIDERATIONS FOR EACH SCENARIO31
Scenario	o A: 'Status quo'
Scenario	o B: 'Low growth'
Scenario	o C: Medium growth
Scenario	o D – combination of Scenarios A and C
	ix B - Potential Dwelling yields
	ix C – infrastructure Cost estimates
	39
	40
	41
	s of servicing Michelago is D3 less D4
Append	ix D – REFERENCES
LIST O	F TABLES
Table 3.1	Summary of potential lot yield for Scenarios A – C
Table 3.3	
Table 3.3	Equivalent persons cost estimates based on GHD study
LIST O	F FIGURES
Figure 1.	1 Michelago and surrounds land use zones (Cooma-Monaro LEP 2013) 6
Figure 1.	2 Draft issues consideration for Michelago

igure 2.1	Models of Rural Growth, Source: Shire of Augusta-Margaret River, 2009 16
igure 3.3.1	The Michelago ABS catchment, 2016 Census
igure 3.2	Potential development options illustrating areas east of railway line20
igure 4.4.1	Micalago Road R5 Large Lot Residential Zone (NSW Planning Portal)
igure 4.4.2	Clear Range Bushfire risk (NSW Planning Portal 2021)

1 PURPOSE OF THIS BRIEFING PAPER

This briefing paper provides Snowy Monaro Regional Council with a range of residential growth scenarios for Michelago as part of the draft Master Planning process being carried out by WSP Australia. Three options have been prepared to illustrate the potential spatial extent, density and estimated costs of new housing in Michelago.

It is acknowledged that there has been considerable work done by Council to investigate whether Michelago should or could increase in scale as a function of proximity to Canberra. Michelago is constrained by flooding and nearby bushfire risk, it has a linear layout between the Monaro Highway and railway, and there are limited water supply options. There are other considerations of equal priority should Michelago expand such as the need to respect and preserve village character, avoid impact of natural hazards, heritage and biodiversity protection and avoiding non-strategic 'development for development's sake'.

The scenarios presented in this paper have been developed through application of sustainable settlement principles and best planning practice. The scenarios suggest a relatively compact spatial form, with modest population growth ranging from several hundred to a possible maximum of around two thousand people. In the serviced options it is acknowledged that housing diversity will have a more prominent role to play in the future, allowing for increased densities on the same footprint. There is also scope for employment-generating development within the serviced options.

The development scenarios are one part of the Michelago draft Master Plan. There are other objectives for the protection of village character, heritage and environmental values, and the formalising of a village 'heart' through improvements to open space, traffic circulation and compatible economic opportunities. Facilitating some new residential development and ensuring the form of new housing is compatible with Michelago is just part of the strategic planning process.

It is important that whichever residential scenario is selected by Council, the views of the local community, government agencies and stakeholders are considered and incorporated into the recommendations of the draft master plan.



2 SUSTAINABLE SETTLEMENT PRINCIPLES

THE CURRENT SITUATION

Michelago is a small village of around 230 people located 50km south of Canberra and 60km north of Cooma on the Monaro Highway, east of the Murrumbidgee River. The Department of Planning, Industry and Environment (DPIE) population projections (2019) indicate that the Snowy Monaro LGA will not experience large amounts of new growth to 2040. However, Michelago is within the Canberra Corridor and it is reasonable and likely that there will be some growth as a function of proximity to Canberra. Michelago is in a traditionally agricultural region, with once-large beef and fine wool properties dominating the landscape pattern. North of Michelago there is a mixture of agricultural land, nature reserves and dispersed lifestyle development, where traditional grazing properties have been fragmented into 'hobby farms'.

Michelago, like other small villages, is under pressure from developers seeking to create 'satellite suburbs' in NSW to service demand for an alternative housing choice in proximity to Canberra. Royalla in neighbouring Queanbeyan Palerang LGA, and Murrumbateman in Yass Valley LGA are examples.

As development pressures from Canberra have moved into NSW, the rural landscape has been gradually fragmented. Notwithstanding, agriculture remains of the biggest contributors to the Snowy Monaro economy, and for this and other reasons associated with best practice planning it is necessary to protect rural production values and the benefits brought by broadacre agriculture to the landscape.

Michelago village is a compact village (around 40ha zoned area), zoned RU5 Village Zone under the *Cooma-Monaro Local Environmental Plan 2013* (Fig 1.1) with limited *ad hoc* 'sprawl' primarily as the adjacent land is zoned RU1 Primary Production with an 80ha minimum lot size. There is approximately 820ha of land to the east of Michelago on Micalago Road that is zoned R5 Large Lot Residential and supports 32 unserviced lifestyle dwellings on properties of varying size.

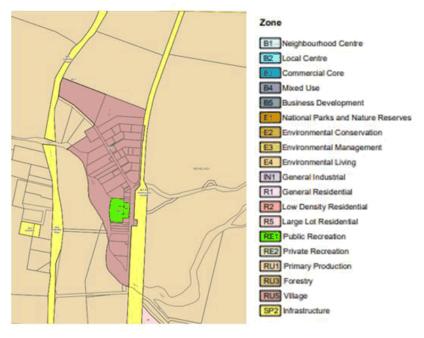


Figure 2.1 Michelago and surrounds land use zones (Cooma-Monaro LEP 2013)

The pace of new development in Michelago to date is modest, with recent demand for housing constrained by the zoned, available land supply. The linear structure of Michelago is a function of the Monaro highway, railway reserve and Michelago Creek which has resulted in mainly long narrow lots being developed into 1,800m² size lots off Ryrie Street or along narrow carriageways or 'rights of way'.

The form and style of new housing varies but all are single detached dwellings. There have been 23 dwellings and two dual occupancies approved since 2016 with eight Complying Development Certificates issued. These numbers exclude alterations and additions to existing dwellings.

THE BRIEF

Snowy Monaro Regional Council commissioned a Master Plan for Michelago in response to a range of community and stakeholder views as to how Michelago can, or should, develop into the future. The growth of Michelago is widely accepted as inevitable, however, there are varying opinions as to the appropriate scale of development. One view that the village, because of its location, is a logical candidate for densification and conventional style development into a small satellite suburb of several thousand people. Council and developers have investigated the options of servicing Michelago with reticulated water and sewer, which are both possible, however, securing a cost-effective water supply has proved to be challenging.

There are other views that Michelago is a unique, well defined rural village that could benefit from some residential growth to expand opportunities in tourism-related industry and employment, while preserving important natural features, heritage and agricultural production values.

Council however acknowledges that any future growth of Michelago needs to be managed in accordance with sustainable settlement principles and policy settings that advise against development 'for the sake of development' for localities like Michelago close to a metropolitan area.

The draft Michelago Master Plan is a process that has used desktop studies, review of Council reports and government policy, and early consultation with the community and Council to:

- Develop sustainable settlement principles and criteria to inform the desired future for Michelago; observing and enhancing local character and context, protecting environmental and heritage assets, developing a plan for the village 'heart' for new enterprises and community activity, and enhancements to open space and recreation.
- Identify opportunities for increased commercial activity, particularly against the backdrop of Covid-19 and recent impetus for low density regional lifestyles.
- Identify areas for future staged residential development with recommendations to guide future growth to 2040 based on analysis of future population growth, demographic trends and servicing.
- Make recommendations for a range of site specific and local policy amendments (LEP, DCP, Contributions plans).

SUSTAINABLE SETTLEMENT PRINCIPLES

The Michelago Master Plan and future growth scenarios are guided by a range of relevant documents and policies, including Snowy Monaro Regional Council's (SMRC) *Draft Settlement Strategy*, *Local Strategic Planning Statement* and associated evidence base, as well as 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 draft 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.

7 | P a g e

- 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 on land near 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 Micalago 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 in West Michelago 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

CONSULTATION

Consultation activities to date, along with the key messages, initiatives and aspirations from the community and Council are set out in this section.

Community engagement is a crucial part of developing the draft Master Plan for Michelago, to ensure that residents perceived future needs are considered and the quintessential part of Michelago are preserved.

Preliminary consultation activities were completed during November and December 2020 with the primary goal being to understand what residents and interested stakeholders would want to see protected and/or improved upon in Michelago. More specifically, consultation aimed to:

- Ensure the community feels they have a say in Michelago's future
- Understand what people want to see protected, improved upon or added in the town
- Establish clear expectations with the community of what type of change is possible with this Master Plan; communicate planning constraints
- Communicate that Council is seeking a considered, researched Master Plan that aims to retain Michelago's village character rather than propose changes resulting in overdevelopment.

The engagement tools used were a project website, online survey and visioning workshops, as outlined below.

Webpage

A dedicated Michelago Master Plan page was established on Council's website. This page is the single source of truth for the project; providing all critical information concerning the projects goals and timeline, key contacts and scheduled consultation activities.

The page is live and is being updated regularly throughout the phases of the Master Plan development so that progress and next steps are communicated clearly.

Survey

A simple, high-level survey was published on Council's webpage, which was designed to capture people's initial thoughts on what they may want to see included in the Master Plan, and what they would suggest Council consider in the plan's development.

Questions were primarily open-ended and allowed for a lot of free thought and suggestions; encouraging people to input as much or as little information as they thought necessary.

Councillor workshop

A visioning workshop was held via Zoom on 3 December with SMRC Councillors to gain their ideas on how Michelago could and should develop.

The workshop consisted of a short 'PowerPoint' presentation followed by four discussion activities using the program Mural. Activities were simple, and questions ultimately asked what they like about Michelago as it is now, what they want to see changed, and how they could see this change implemented.

Community workshop

A second visioning workshop was held in-person at Michelago Hall on 15 December for community members and interested stakeholders. The workshop was designed to mirror the activities of the Councillor Workshop, and again, discuss people's ideas, visions, wants and concerns in developing a Master Plan for Michelago's future development.

The workshop setup in included table groups equipped with town maps and worksheets. The session was attended by 18 community members, two members of the WSP consultant team, and two Council staff representatives.

A few comments were made suggesting Council 'should consider the needs and wants of the community as a whole, rather than of only a few', and indicated that not all residents agree with the position of the Michelago Region Community Association on all issues. This feedback reinforces the need to continue to reach out to 'quieter voices' in the community during the next stages of the project.

WHAT WE HEARD

Key sentiments towards Michelago now and into the future were consistently expressed across the consultation activities and are summarised below.

Things that are strongly valued in Michelago:

The rural character and pace of life, 'rural charm'

The views to the natural landscape and rural land

The feeling of 'community'

Preferences of survey respondents for changes:

Facility upgrade in the Michelago park and other social spaces, eg seating and cooking facilities at the park

Reuse of the Heritage railway station for community and economic uses, also the Hibernian Inn

Creation of a town centre

Improvement to the entrance to the town from the Monaro Highway

Facilitate growth but retain the character of Michelago

Equity in development and design (concerns that prescriptive development controls could price locals and first home buyers out of Michelago)

COMMUNITY PRIORITIES

Character and connection to area

The rural character, feeling of community and pace of life - "rural village ambience"

Keep the General Store, Railway Station, School, Churches and oval as they are now. Repurpose and enhance existing areas and facilities rather than removal or complete redesign.

Preserve the views to the natural landscape

Appropriate density and scale of new development - "not like Googong"

Improve the entranceway to the town from the highway; attract people in transit

Create a road loop with the highway between Ryrie Street and Micalago Road

The potential for some new economic growth opportunities within Michelago

Inclusive services and amenities to improve liveability

Health services and aged care facilities

Events spaces, hospitality venues, museum or gallery space, working hub space, and location for new small businesses (e.g. arts and crafts) as potential uses for heritage buildings

Improvements to the recreational facilities in the village (e.g. upgrade toilets) along with new spaces for recreational use. Bicycle riding, seating for picnics, and walking/running were the most popular among survey respondents.

Master Plan priorities - online survey

Economic growth and efficiency (ranked in top two by 44% of survey respondents)

Preservation of local character (ranked in top two by 44% of survey respondents)

Heritage protection (ranked in top two by 36% of survey respondents)

DESKTOP REPORTS: ECONOMIC AND DEMOGRAPHIC ASSESSMENT

An economic and demographic assessment of Michelago was prepared by Sustainable East as part of the suite of desktop studies informing the draft Master Plan. The report provides an insight into the potential economic growth opportunities for Michelago based on the likely make up of the future population.

In summary, this report found the following considerations to note in assessing growth scenarios:

- Michelago's 2016 population is heavily weighted to older aged residents with those in the 50-59 age groups making up almost 19% of the population compared to 12.8% in NSW. This age group will fall into the seniors living and/or aged care market by 2036 and beyond.
- > This trend is projected to continue by DPIE, with likelihood there will be significant growth in residents aged over 65-70 by 2041. This will have impacts on accommodating housing demand that is suitable for older residents, including smaller typologies as well as seniors housing (independent living units) and possible aged care places.
- ➤ It is estimated that by 2041 will be demand for between 345 and 431 seniors housing spaces in SMRC, noting that there are currently 4 seniors housing providers in Cooma with none in the Canberra Corridor despite an existing and growing ageing population.
- The Master plan needs to cater for a likely demand for smaller accommodation options, including typologies suitable to a rapid increase in lone person households.
- Michelago is forecast to experience some growth over the next 20 years, which will create local induced demand for commercial, industrial and general employment needs. The SMRC Employment Lands and Rural Lands Analysis projected a quantum of 13.3ha of employment lands required by 2041. This would accommodate commercial/retail, light industrial and potential service uses.
- The location of proposed employment lands is critical. There is expected to be a small service induced demand for retail and commercial uses. The current RU5 Village zoning permits a variety of commercial and light industrial uses, and new businesses may be attracted as the population grows. It is not desirable to attract existing businesses from Cooma or Canberra using lower land values.
- Base industries that cold be accommodated in the existing RU5 zone are light industries, cellar door premises and tourist and visitor accommodation among other predominantly agricultural and service uses.
- Nature based tourism is likely to provide significant employment generating opportunities for Michelago but is likely to require a catalysing investment such as a destination attraction to increase visitation. Artisan food and drinks industries are closely linked with tourism patronage and tourism attractions and could be realised in Michelago.
- The Rail Trail is acknowledged as a catalysing investment if it were to be realised.

Michelago's strategic location in the Canberra Corridor positions the village between a number of current and future economic anchors. It would be a loss in opportunity for Michelago to become a dormitory suburb to Canberra and to a lesser extent, Cooma. The impacts to the local economy and community as a result of Michelago's growth are dependent on the scale, timing and type of growth that occurs.

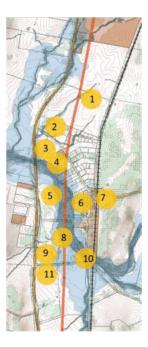
OBJECTIVES FOR THE DRAFT MICHELAGO MASTER PLAN

The sustainable settlement principles, desktop studies and public consultation outcomes have formed the following objectives framework for the draft Michelago Master Plan:

- Ensure that Michelago develops into the future (2040) as an environmentally sustainable, and economically and socially resilient village
- Identify initiatives and opportunities to enhance the natural, cultural and built environment of Michelago, based on the needs
 of the Michelago community and Council
- Support economic diversification and strengthen opportunities to capitalise on nature-based adventure and cultural tourism in appropriate locations, and encouraging local industries across a range of sectors to provide employment for local people
- Ensure that housing choice is provided for current and future residents, consistent with the community's needs, with release
 areas designed to be compatible with the locality, be connected and accessible, walkable, safe and attractive.
- Ensuring that natural constraints of groundwater vulnerability, bushfire and flooding are avoided and managed. Protecting built heritage and areas that are predictive for cultural heritage.
- Protect the surrounding rural landscape and conserving natural lands and biodiversity by keeping agricultural land in commercial holding sizes, avoiding fragmentation for non-agricultural development, and maintaining views to the Tinderry Range
- Provide actions for implementation through Council's strategic and statutory policy and plans
- Ensure that the costs of new growth are equitably distributed

The NSW Planning system generally requires that any expansion of new development to be justified by a land use strategy. The final Master Plan will provide the justification for the expansion of Michelago in accordance with the planning policy framework and strong principles to guide future development.

Preliminary approaches to the Michelago Master Plan are illustrated in following Figure 1.2 and table as a guide.



SUSTAINABLE SETTLEMENT PRINCIPLES AND MAP REF.	POTENTIAL OPPORTUNITY * SUBJECT TO DETAILED SITE – SPECIFIC INVESTIGATIONS	TARGET OUTCOMES
1	• Lots 13 and 14 DP11175	Village style residential growth accessed via Ryrie Street (through 1 Ryrie Street)
Managing Future Change and Growth	RU1 zone, grass cover.	Riparian restoration and stormwater management
Environment and sustainability	Approx. 60 ha (40ha development potential)	Open space, active travel and active recreation links
		Road and pedestrian connection between village and historic Catholic Church and Hibernian Inn
2	• 1 Ryrie Street	Gateway to Michelago – improve entrance and Ryrie Street with landscaping
Managing Future Change and Growth	RU5 Zone, Service Station, Motel, Pub.	Mix of development (service/ tourist) and residential
Community and Village life	Approx. 6.5 ha (3.5ha new development potential)	Requires road and pedestrian/ bicycle link to #1
Landscape and the public realm		
Access and movement		
3	• 2 Ryrie Street (Lots 27,28,29)	Gateway to Michelago – improve with streetscaping
Managing Future Change and Growth	• RU1 zone, grass cover.	Mix of development (service/tourist) and residential
Community and Village life	Approx. 6.9 ha (5ha new development potential) identified as Future Residential Growth Area under Mining	Potential for School expansion into area immediately adjacent
Landscape and the public realm	SEPP but previously unsupported by DPIE for rezoning.	Investigate pedestrian and bicycle link between Ryrie Street and Creek Path loop
Access and movement		Further investigations required
4	• 2 Ryrie Street (Lots 25,26)	Potential for School expansion into immediately adjacent area that is not impacted by Electricity Easement
Managing Future Change and Growth	RU5 zone, grass cover.	or flooding
Community and Village life	Approx. 3.2ha (1.8ha new development potential)	Infill development of RU5 subject to site specific investigations
Access and movement		Potential to create walking track on Crown land for creek walking loop access to Ryrie Street
5	Lot 1 DP 1150315 (RU1 zone) and part of Crown Land parcel (RU5 zone)	Recreation facilities and enhanced events capability
Community and Village life	Grass cover, line of trees along drainage contour	Active open space including potentially relocated Pony Club (buildings and infrastructure above flood
Access and movement	Approx. Sha investigation site across both titles	planning level)
Environment and sustainability		Vehicle access via Micalago Road, pedestrian/equestrian/bicycle access

	1	,
6	 Lot 5405 DP 1244970 (SP2 zone), Lots 5-15 DP 11158 (RE1 zone), part Crown Land parcel (RU5 zone), 	Village heart create tourist attractors and places for locals, plus housing in higher densities
 Community and Village life 	RFS Shed (RU5 and SP2 zones) and Community Hall (RU5 zone).	Formalise parking and access at intersection of Ryrie Street and Burra Road
 Access and movement 	Existing facilities not well connected, particularly for pedestrian/cycle access.	Access to Creek Path loop and open space
	Opportunities to strengthen 'sense of place', pride and belonging in Michelago for school students and new	Restore and enhance riparian habitat - Land Care Group, 'chain of ponds'
	residents	New facilities along Creek Path loop e.g. outdoor fitness, seating, interpretive signage (geology, ACH and
		local stories, biodiversity)
		Pedestrian/bicycle/equestrian crossing of Creek to directly link #5, #8, #9.
7	• Part Lot 17 DP 1002934	Part of Village Heart
 Access and movement 	Zoned RU1, grass cover.	Tourist/service business opportunities/possibilities around railway precinct - adaptive reuse of heritage
 Community and Village life 	Triangular 1.7ha parcel bounded by Railway reserve, Burra Road and road reserve Not intended for light	buildings
	industrial	Provide wi fi hub and agile workspace to reduce commute to Canberra
		Overflow parking for events/ parking for historic and nature walks
8	Part Crown Land parcel (RU5 zone) and Lot 1 DP 575718 (RU1 zone), grass/crop cover, 1 dwelling with	Investigate for camping with infrastructure located above flood planning level.
 Community and Village life 	trees and garden area.	Access via Micalago Road, linked to Ryrie Street via vehicle, pedestrian and cycle access
 Landscape and the public realm 	Site is flood affected and biophysical strategic agricultural land (BSAL) under Mining SEPP.	Somewhere to stay and do adventure day trips to Tinderry Range etc.
 Access and movement 		
 Environment and sustainability 		
9 and 11	Portion of Lot 1 DP 1150315 either side of Micalago Rd, and not mapped BSAL or flood affected (approx.	Scenic entry to Michelago via Micalago Road – avenue of Poplars, views to Tinderry Range
 Community and Village life 	Sha total).	Development screened from Monaro Highway and views to Tinderry Range preserved
 Access and movement 	• RU1 zone, grass cover.	Upgraded highway access and sealed road, access #5, #8, #9, #11 via Micalago Road
 Environment and sustainability 	Not intended for light industrial	Tourist/service businesses, opportunities for local employment generating development
10	Crown Land/Ryrie Street road reserve	Road access over Creek creating a loop road for tourists and locals. Opportunity to provide a creek crossing
 Community and Village life 	Separate Council project to connect Ryrie Street and Micalago Road.	with separated pedestrian/cycle crossing space.
 Access and movement 		New picnic and passive recreation area with formalised parking linked to Creek Path loop.
Landscape and the public realm		Creek Path loop approx. 3km long including Ryrie Street section, with multiple entry/exit points to enhance
 Environment and sustainability 		usage and accessibility.

Figure 2.2 Draft issues consideration for Michelago (in preparation)

3 THE FORM OF NEW GROWTH FOR MICHELAGO

DISCUSSION

The competitive advantages of Michelago are the low-density scale, pace of life, scenic and heritage values, rural landscape context and proximity to Canberra and snowfields. These factors, along with perceived disadvantages of potential natural hazard risk, constrained servicing and public transport access combine to provide an opportunity to create a unique situation for the village. It follows that in planning for Michelago, the potential impacts of development on the environment, existing community and future community must be given the highest consideration. New growth can also supply the critical mass of people and enterprise to support commercial activity at a scale that will benefit Michelago such as nature-based tourism and agricultural value adding.

Recent research suggests the traditional Australian 'business as usual' model of landscape fragmentation and rural sprawl needs to be replaced with a model that encourages settlement that is more sustainable: compact in form, serviced, climate-sensitive and less car dependent¹. These concepts suggest that new residential development in Michelago might be a low scale, sustainable alternative to urban sprawl or rural lifestyle peri-urban growth near Canberra. This is particularly pertinent following the 2019-2020 bushfire season which directly impacted the Michelago and Smiths Road area.

Decisions around the scale of future growth also requires consideration of government policy settings and the management of expectations of the community and development industry. It is noted that investigations into bringing reticulated services to Michelago (current population of around 250 people) were based on potential growth scenarios of 4,000, 8,000 and 12,000 potential new people (GHD, 2020). Advice from the community and Council during consultation is that Michelago should not become another 'Googong', with small (450m²) suburban lots juxtaposed in a rural locality. This is an understandable sentiment about an undesirable outcome in a rural context. However, if Michelago is to grow sustainably to any scale over infill of the existing zoned area, reticulated services need to be provided. It is then that rational economic arguments and to an extent government plan making policy (Section 9.1 Ministerial Direction 3.1) requires infrastructure efficiency that can inadvertently result in a default contemporary 'cookie cutter' residential subdivision layout.

RESILIENCE

The notion of resilience as it applies to a village refers to an interconnected place that has robustness and capacity to deal with shock and change while maintaining essential functions, structures, identity and feedbacks (Walker and Salt, 2006). A resilient village in the Australian context has the critical mass of people and networks to make a community with social capital, protection from external shocks and natural hazards, uses resources sustainably and limits its effect on surrounding areas. The physical form of a resilient village is ideally compact, clustered settlement within a productive, restored rural environment.

Other factors that will help increase resilience are clear governance systems, cost effective servicing, equity in opportunity, healthy urban design incorporating recreation and open space, housing choice and a range of neighbourhood facilities.

Other areas of Australia have managed the dual objectives of preserving character while facilitating new growth in a rural location by changing the conventional methods of creating large rural residential or 'bush' blocks, and instead developing a small proportion of land to ensure the majority remains for productive land uses and natural assets. By integrating residential development with the surrounding environment and not dominating it with 'sprawl', a small, low-impact community can be created which has the effect of increasing opportunities for population growth and reinforcing the rural character and values of a village like Michelago.

This notion is illustrated in diagram 2.1 with an example from Western Australia.

.

Norman, Newman and Steffen, 2021

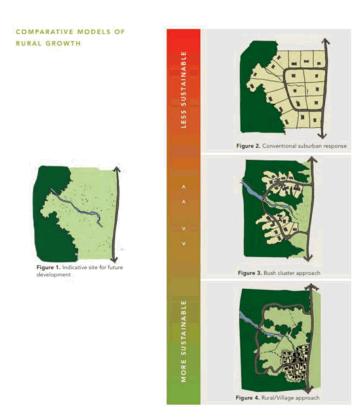


Figure 3.1 Models of Rural Growth, Source: Shire of Augusta-Margaret River, 2009

The discussion around the form of new growth for Michelago has considered sustainable development principles and best practice planning advice to encourage a compact urban form that provides social and environmental resilience in a changing climate. The extension of services to Michelago requires a detailed assessment of the environmental impacts of the various water supply and sewerage treatment options and costs to the Council and community. It is not a 'given' that services will be feasible, meaning that new growth in Michelago may remain constrained to the existing zoned area in the foreseeable future. If services are available at reasonable cost, it is imperative that new growth is of a scale and extent that is appropriately 'fit for purpose', meeting sustainable development principles and respecting local requirements.

4 THREE GROWTH SCENARIOS - SUMMARY

The brief for the Michelago Master plan requires the preparation of three growth scenarios for Council's consideration before finalisation of the Draft Michelago Master Plan. It should be noted that the land in the growth scenarios has already been identified by Council for future development potential due to serviceability, accessibility and relative lack of constraints. The GHD 2020 Water and Wastewater Scoping Study was used as the basis for determining likely servicing costs. Considering sustainable development principles, good planning practice and previous land analysis has provided three scenarios, namely:

- Scenario A the 'status quo' option of allowing unserviced infill development in the zoned area of Michelago village at 1,800m² per lot with a potential 152 more people in 53 new dwellings. There are no servicing costs.
- Scenario B 'Low growth' being the extension of reticulated services to contiguous land being Lot 13 DP11175 with access off Ryrie Street allowing dwelling density and population potential of between 480 to 720 people on lots ranging from 800m² to 1,200m². This scenario has the same servicing costs as Scenario C, but with higher per lot costs due to low yield. The option of not servicing Lot 13 but allowing new development at 1,800 m² lot sizes will yield around 319 people in 111 new dwellings but will require further investigation into groundwater impacts.
- Scenario C 'Moderate growth' being the extension of services to contiguous Lots 13 and 14 DP11175 with main access off Ryrie Street, with a population range between 1,200 to 1,675 people with options for dual occupancies, on lots ranging in size from 800m² to 1,200m². This scenario has the lowest per lot cost due to relatively higher yield.

A further scenario has been devised, **Scenario D** – which is a **combination of Scenarios A and C**. This Scenario investigated servicing of Michelago Village with reticulated water and sewerage, allowing higher density subdivision and some dual occupancy development with a potential population of up to 2,300 (2,285 as estimated in Appendix B) across the serviced area. It is noted that the modelled servicing capacity of around 3,500 EP also allows for some tourist and visitor accommodation and other employment generating activities in Michelago. The cost of retrospectively servicing Michelago village as well as the lots in Scenario C result in the highest servicing model.

The following sections set out the premise for the residential growth scenarios, potential yields and servicing costs.

4.1.1 POPULATION GROWTH

- The population of Snowy Monaro Regional Council 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's population projections suggest that the Canberra Corridor of which Michelago is part could experience some population growth of 113 dwellings to 2036 (Profile.id), which at the ABS census rate of 2.88 people/dwelling is 325 persons. It is assumed that this new growth is not supported by servicing.
- The current population of Michelago is estimated at between 230 people. The ABS Census data for Michelago states that the broader locality supported 562 people in 2016. The extent of the ABS statistical division for Michelago is shown in the following excerpt:

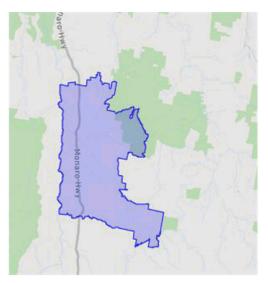


Figure 3.4.1 The Michelago ABS catchment, 2016 Census

- ABS statistics (2016) indicate for this area that single dwellings dominate (171 dwellings, 98.3%); family households make up 78.5% (n=139) with single or lone households being 19.8% (n=35) of the population. There were 86.6% occupied dwellings and 13.4% unoccupied (ABS, 2016).
- The ratio of people per dwelling is 2.88 (ABS, 2016), and this is used as an assumption throughout this report. It is also assumed that there are approximately 80 dwellings in Michelago and a population of 230 people.

4.1.2 DWELLING CAPACITY, DEVELOPABLE AREA AND SERVICING

For the purposes of providing Council with growth scenarios, this section sets out the considerations behind each scenario. In the first instance, the option of retaining the current population in the Michelago Village RU5 zone is suggested to guide the discussion if servicing is not possible. This is translated to Scenario (A) which estimates some infill development at the same density allowing potentially 53 new lots and around 152 more people (Fig. 3.3).

The higher growth scenarios are based on longer term prospects if servicing is provided and there is Council and community support. If services are provided to adjoining land north of Michelago village, there will be opportunity to provide services to the RU5 zoned land as trunk mains will be in proximity. It is acknowledged that it is not always possible or practical to allow infill development due to natural hazards, topography, form of existing development, and personal circumstances. There will need to be decisions made about servicing Michelago in the context of individual household cost estimates.

The draft Master Plan scenarios are therefore focused on the following areas:

- The existing zoned RU5 Village, a compact area of 42ha with some infill potential as shown in Figure 3.3. A broad analysis
 was undertaken as to which of those lands may support some infill development with servicing.
- Two lots comprising 60ha in total known as Lots 13 and 14 DP11175, which are directly north of Michelago and contiguous with the existing zoned area, shown in (Fig. 3.4 3.5), being capable and suitable to accommodate some growth at different densities. The option to provide services only to Lot 13 makes up the 'low growth' scenario, while combined lots 13 and 14 make up the 'medium growth' scenario.

The R5 Large Lot Residential zone at Micalago Road and E3 Environmental Management zone at Smiths Road are discussed
with Micalago Road considered for <u>unserviced</u> infill potential only due to existing zoned supply. Smiths Road is deemed not
appropriate for densification in this report.



Figure 3.3 RU5 zoned area – Scenario A 'status quo'



Figure 3.4 Lot 13 DP 11175 – Scenario B Low Growth

Figure 3.5 Lots 13 & 14 – Scenario C Medium Growth

DWELLING POTENTIAL PER SCENARIO

Table 3.1 provides estimates of potential dwelling yield in each Scenario. Scenario A is the 'status quo' which presumes no services to Michelago and some infill at existing densities. A fourth Scenario 'D' is provided to account for extension of services to the RU5 zone and various options for intensification via dual occupancies (Table 3.2). It should be noted that:

- In Scenario B, both 'unserviced' and serviced options are provided for lot 13 DP11175. Unserviced development adopts the current 1,800m² minimum lot size for onsite effluent disposal. However, it is suggested that at this scale development may have adverse cumulative environmental impacts and detailed investigations into the feasibility of allowing development of 111 potential new dwellings are recommended.
- The assumed ET/EP ratio of 2.88 persons is based on demographic data for the Canberra Corridor (Profile.id.com.au/snowy-monaro/). It is probable that the ET/EP ratio will reduce over time as the population ages.
- The minimum lot size for dwellings in the serviced scenarios range from 1,200m² to 800m², with dual occupancies indicated at 1,500/1,000m² and 1,200/800m². Council may decide upon a lower MLS in the serviced scenarios after consideration of this report.
- Dual occupancy development is regarded as a compatible form of increased density in a low density setting, allowing for housing choice to be incorporated with good design to meet the needs of a future population. Dual occupancy development is defined as 'detached' or 'attached', with options for separate title in each case. In a village context a dual occupancy would represent low density development compared to a metropolitan example. Dual occupancy, where well designed can provide financial benefits for land owners as well as increase the housing choice for a range of people who do not want a large area of land to manage. Other forms of appropriate higher density development such as multi dwelling housing and tourist development such as serviced apartments could also be realised in the 'heart' of Michelago to invigorate the precinct. It is emphasised that exceptional design requirements are necessary to keep development at a 'Michelago' scale. Appropriate minimum lot sizes will assist in maintaining village density and character.
- The potential for further unserviced infill development of the Micalago Road R5 Large Lot Residential zone is provided to demonstrate an indicative population for the wider locality. It is not recommended or intended to extend services or rezone this area for residential development in the draft Master Plan. Long term there may be opportunity to service land adjacent to infrastructure just over the eastern side of the railway line to provide small scale commercial and/or residential development as shown in the following Figure 3.2, noting this is draft only.

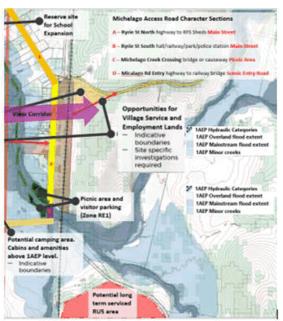


Figure 4.2 Potential development options illustrating areas east of railway line

 The Smiths Road E3 Environmental Management zone is not part of growth scenarios due to bushfire risk and requirement for further investigation into this area.

In terms of the costs of servicing, more detailed information on each scenario as a function of the potential population is provided in section 3.2. Appendix A has detailed background information on each scenario, with refinement of potential yields in Appendix B and detailed costings per Scenario in Appendix C extrapolated from the GHD study.

SUMMARY OF ESTIMATED LOT YIELD FOR MICHELAGO SCENARIOS A, B, C

SCENARIO	ESTIMATED AREA	POTENTIAL LOT YIELD / SIZE	EQUIVALENT PERSONS (X 2.88) UNSERVICED/SERVICED
Scenario A – Status Quo RU5 Village Zone	13.8ha of vacant land (assume 9.66ha available)	 80 existing dwellings estimated 53 lot potential at 1,800 m² 96 lot potential at 1,000 m² per lot 120 lot potential at 800 m² per lot 	
Scenario B – Low growth Lot 13 DP 11175	20ha*	— (Unserviced) 111 lots @ 1,800 m ² Serviced single dwellings: 166 lots @ 1,200 m ² 200 lots @1,000 m ² 250 lots @800 m ²	319 people480 people576 people720 people
Scenario C – Medium Growth^ Lots 13 and 14 DP 11175	42.5ha*	Serviced single dwellings only: 420 lots at 1,000 m ² 525 lots at 800 m ² 607 lots at 700 m ²	1,200 people 1,500 people 1,750 people

Table 4.1 Summary of potential lot yield for Scenarios A – C

SCENARIO 'D'

If services are available and efficiencies in increased dwelling yield are compatible with sustainable settlement principles, there is a further logical option of another Scenario, **Scenario 'D'** that assumes urban servicing for the areas in Scenarios A and C being the Michelago RU5 zone and Lots 13 and 14 DP11175. Scenario B, the serviced option for Lot 13 DP11175, is part of Scenario C

^{*}remaining land after assumed 30% for infrastructure, open space, easement etc

[^] yields do not provide for dual occupancy subdivision

in this context. The possible dwelling yields are shown in the following Table 3.2, with opportunities for dual occupancies factored in at minimum lot sizes of 800 m^2 for single dwellings and $1,200 \text{ m}^2$ for dual occupancies.

Options for combined scenarios (Scenario D), (more detail in Appendix B)

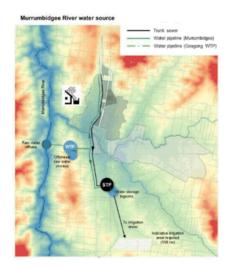
SCENARIO D	AREA	SERVICED LOT SIZE DUAL OCC/SINGLE DWELLING	INDICATIVE YIELD/EP
Scenarios A and C combined at 800 m²/lot	RU5 Village zone Lots 13 +14	120 lots @800 m ² 525 lots @800 m ² @ 645 lots	345 people 1,530 people @1,875 people
Scenarios A and C combined at 70% @ 800 m²/lot and 30% land area @1,200 m²/dual occupancy	RU5 Village zone Lots 13 +14	Mix of lot sizes allowing housing options indicate ~712 new dwellings	@2,053 people
Michelago existing population		80 dwellings	230 people
		POTENTIAL FOR SCENARIO D	@1,875 to 2,280+ people

Table 3.4.2 Summary of indicative lot yield for Scenario 'D'

The potential yields in Scenario D assume land is available in Michelago and it is acceptable to allow closer density subdivision. It has been noted that retrospectively subdividing and developing an established settlement is not as straightforward as a 'greenfield' site. Therefore, the assessed lot yields for Michelago RU5 zoned extent are likely on the higher side of estimated potential growth.

4.1.3 THE GHD MICHELAGO WATER AND WASTEWATER SCOPING STUDY 2020

The GHD 2020 study was reviewed by WSP as part of the background research for this project. In summary the preferred (least cost) option to supply raw water to Michelago is from the Murrumbidgee River. This could be potentially undertaken as an extension to the existing Cooma water allocation licence or purchase of other entitlements. This would also require the construction of a Water Treatment Plant (WTP) near the Murrumbidgee River, pumping infrastructure and 2-3km of pipeline to the Village, as shown in the following diagram. 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.



Rainwater harvesting, as per the existing system in Michelago may be suitable for low growth scenarios but unsuitable for medium to larger growth within the village, particularly with further development of commercial hubs or tourist and visitor accommodation. The option of connecting to water services from Icon Water in the ACT may provide a solution for higher growth scenarios, involving less ongoing maintenance as the system will not require a local Water Treatment Plant. However, supply charges will likely offset this saving. The initial costs to construct the required 40km water pipeline are likely economically prohibitive for the expected growth in Michelago as well. The GHD study suggests a 'hybrid' solution of wastewater re-use and rainwater harvesting, but extensive community consultation should be undertaken in the first instance.

Figure 3.6 Excerpt from 2019 GHD study

4.2 SERVICING COST ESTIMATES

Estimates for the costs of servicing the land identified in the growth Scenarios are provided below, based on the 12,000 EP servicing regime established by the GHD study. For simplicity, the range of EPs are estimated in groups of Equivalent Persons (1,000-1,500,1,500-2,400, and 2,400-3,600) reflecting the required trunk infrastructure works per Scenario as follows, with detailed estimates of these assumptions provided in Appendix C.

RANGES OF EQUIVALENT PEOPLE	WATER CAPEX \$	WATER OPEX \$/YR	SEWERAGE CAPEX \$	SEWERAGE OPEX \$/YR	COMMENTS
1,000 – 1,500 Lots 13 and 14	15,351,163	233,512	12,788,372	276,694	Does not include Michelago RU5 zone
1,500 – 2,400 Lots 13 and 14	21,941,860	379,419	19,188,372	392,534	Includes both Lots 13 and 14 with single dwelling and dual occupancy options
2,400 – 3,600 – Mix based on 800-1000m² lots and 600-800m² lots Lots 13 and 14	21,941,860	379,419	23,688,372	437,534	Includes options for 30% dual occupancy and higher density development on lots 13 and 14
Michelago Village RU5 zone (extension costs only)	9,662,791	136,628	6,659,128	121,731	RU5 zone Michelago only

Table 4.3 Equivalent persons cost estimates based on GHD study

The following table provides an estimate of costs for the Michelago RU5 zone and Lots 13 and 14 as per the Medium growth Scenario D range of 1,875 to 2,300 people:

SCENARIO D	WATER CAPEX \$	WATER OPEX \$/YR	SEWERAGE CAPEX \$	SEWERAGE OPEX \$/YR	COMMENTS
1,500 – 2,400 EP	21,941,860	379,419	19,188,372	392,534	Includes both Lots 13 and 14 and dual occupancy options
Michelago Village RU5 zone	9,662,791	136,628	6,659,128	121,731	RU5 zone Michelago only
Scenario D: Combined	31,604,651	516,047	25,847,500	514,265	Combined costs

In Scenario D the capex for water and sewerage is \$57.4m and opex around \$1m. If Michelago village is not serviced, the capex for servicing Lots 13 and 14 only up to 2,400 persons with water and sewerage is \$41.1m and opex \$771,000 respectively.

The following assumptions are also made regarding the development of Capex and Opex costs, with more information in Appendix C:

- GHD rates pro-rated to suit the estimated equivalent population of the development scenario considering GHD rates were prepared for a 12,000 EP
- For water and wastewater treatment plant, it has been assumed that 20% of GHD lump sum costs for each item will be required and then a percentage is applied over this to pro-rate for the estimated population
- For trunk sewers and water supply mains, 50% of GHD costs applied considering smaller mains could be built if full development to 12,000 EP is unlikely
- Some of the infrastructure such as treatment plants and pump stations were lumped into one sum and we applied a percentage split between these items. These splits will need to be verified by Council
- Batching of estimates into 1,000 -1500 EPs, 1501-2,400EPs, 2,400-3,600 EPs. Development scenarios within the same range will result in similar Capex and Opex costs
- Gravity sewer reticulation has been assumed
- The Michelago RU5 servicing estimates include reticulation of services around the existing 40ha of zoned area which
 includes developed and undeveloped land, and treatment costs.
- Different trunk sewer and water distribution main lengths were applied to the scenarios based on full infrastructure lengths in GHD report in comparison with location of the proposed development relative to the infrastructure, Figure 3.7

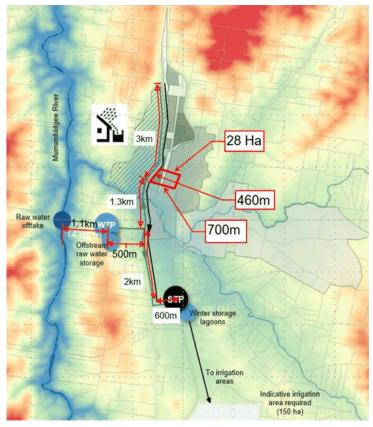


Figure 4.7 Revised estimate for infrastructure based on growth scenarios

5 MICALAGO ROAD AND SMITHS ROAD

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 area is not serviced. The Cooma Monaro LEP 2013 minimum lot size for the R5 zone is 8ha, ostensibly permitting (conservatively) 46 new unserviced lots and at 2.88 persons per lot, this would be around 130 more people. At this stage there is no strategic justification to provide more land for R5 style development, due to the infill potential in the existing zoned area. It is recommended that services not be extended to this area and that further investigations into future management of the zone be undertaken. As illustrated in Figure 3.2 there is potential to include more diverse, serviced housing opportunities in the area directly to the east of the railway line, subject to detailed consideration of constraints, access, demand/supply and costs.

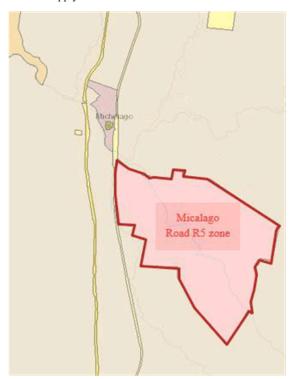


Figure 4.5.1 Micalago Road R5 Large Lot Residential Zone (NSW Planning Portal)

SMITHS ROAD E3 ZONE

Smiths Road is an unserviced, low density subdivision zoned E3 Environmental Management. The land is exposed to high bushfire risk with restricted access and evacuation routes. The 2019 RFS Planning for Bushfire Protection guidelines suggest that no further expansion or densification of this type of area and this is recommended as part of the draft Michelago Master Planning process.

Other factors the basis for this recommendation are:

— The severe bushfire risk of the Clear Range locality as shown in Figure 4.4, being a function of the combined factors of isolated subdivision with a lack of access and water supply for firefighting, lack of evacuation routes, perimeter roads and inherent risks to the public and emergency services.

26 | Page

- The lack of strategic justification for more development in this locality provides compelling reasons to not expand this type of lifestyle offering. 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 bushfire hazard context. Further, 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.
- The projected risk of more frequent and larger bushfires, driven by enhanced fire weather conditions as the result of climate change. Recent bushfires in NSW have been of unprecedented scale with adverse and far reaching impacts on biodiversity, human health and infrastructure. It is argued that permitting densification in peri-urban areas and resettlement of fire affected areas is contrary to sustainable development principles. Scattered low density lifestyle offerings have poor ecological outcomes, are unsustainable for resource use and infrastructure but also heighten risk for emergency services². The post fire impacts on individuals and communities are felt for decades psychologically and economically, with trauma leading to retreat from areas with bushfire risk.

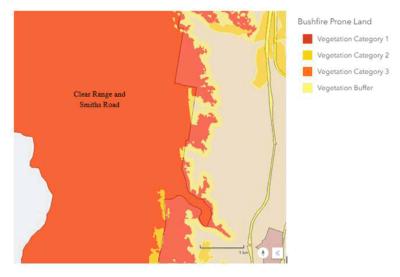


Figure 4.5.2 Clear Range Bushfire risk (NSW Planning Portal 2021)

² Norman et.al.

6 SUMMARY OF THE MICHELAGO MASTER PLAN SCENARIOS

The broad investigations into the desired form and scale of Michelago have settled on potential growth scenarios that range from a few hundred more people via infill in the existing village without servicing to around 2,300 equivalent people with servicing. The options assume growth will occur through both infill development and a compact new growth front in a location that allows logical extension of the village while avoiding constraints and limiting impacts on surrounding rural land.

Three scenarios have been prepared, with a fourth an amalgamation of two scenarios that provides an insight into possible maximum settlement density. Estimates of the costs of servicing have been extrapolated from the GHD 2020 study, which assessed servicing a maximum potential of 12,000 people. The costs of servicing are based on population ranges and the expenditure to extend and operate services, with the lowest costs for a potential population increase of 1,000 to 1,500; higher for a population of 1,500 to 2,400 people but only slightly higher for 2,400 to 3,600 people. Proportionately the costs of servicing existing development and infill in Michelago village is the most expensive per capita. This is summarised in the following table:

RANGE OF EQUIVALENT PEOPLE	WATER CAPEX \$	WATER OPEX \$/YR	SEWERAGE CAPEX \$	SEWERAGE OPEX \$/YR
1,000 – 1,500	15,351,163	233,512	12,788,372	276,694
1,500 – 2,400	21,941,860	379,419	19,188,372	392,534
2,400 – 3,600	21,941,860	379,419	23,688,372	437,534
Michelago Village RU5 zone ~550	9,662,791	136,628	6,659,128	121,731
Scenario C and Michelago (Scenario D)	68,897,674	1,128,978	62,324,244	1,228,493

In terms of growth scenarios, Scenarios C and D provide for new growth that results in economic use of infrastructure while retaining lot sizes at a 'village' scale. Scenario C allows for the extension of services to Lots 13 and 14 DP11175 with combined water and sewerage capex of \$41.1m and opex of \$771,000.

Scenario D includes Michelago village with Lots 13 and 14 DP11175 and results in capex for water and sewerage of \$57.4m and opex of around \$1m. It is estimated that reticulating services around Michelago village will cost over \$16 million.

A range of potential dwelling yields are provided as a guide, with there yet to be a final decision on optimum lot sizes. There is some tension within the objectives of retaining village character with large lot sizes and providing walkable, less car dependent neighbourhoods; avoiding impacts on natural resources with 'sprawl' and making best use of infrastructure without resulting in a high-density standalone 'Canberra-style' subdivision that is out of place in a rural setting.

Best planning practice which incorporates sustainable settlement principles point to a more clustered, compact development model as opposed to unserviced 'sprawl'. This is translated in Michelago as some infill in the existing RU5zoned area and new serviced growth on Lots 13 and 14 DP11175 being 60ha of adjacent rural land zoned RU1 Primary Production.

Estimates of potential lot yield need to be verified but provide a guide as to the possible scale of new development on Lots 13 and 14 DP11175 with the extension of services. The option of intensifying Lot 13 without services is considered as an option however investigations would need to be carried out to determine potential cumulative impacts to groundwater.

A compromise that provides staged, serviced development is a plausible option, given the efficiencies in extending services to a compact settlement model. This could provide a range of lot sizes, enabling increased housing choice for current and future residents which will likely include a large proportion of older people. The issue of servicing Michelago village given assessed high per capita costs and equity considerations requires careful consideration.

28 | Page

The following table provides an assessment of each growth scenario against sustainability principles, policy settings and an understanding of community views so far, as a way of summarising the findings. The Capex and Opex totals for each scenario are included as a guide, with the costs of reticulating and operating services across Lots 13 and 14 and around the RU5 zoned village included as an indication of the likely expenditure required. Verification of all costs and lot yields will be necessary.

Where practical, a rating is provided to show where the option or scenario meets sustainability principles. These ratings are as follows:

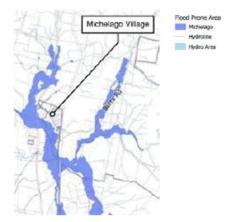
	Does not meet sustainability principles
	Able to meet sustainability principles
	Can meet sustainability principles with design improvements

SUSTAINABILITY PRINCIPLES	SCENARIO A MICHELAGO RU5	SCENARIO B LOT 13 UNSERVICED	SCENARIO C LOT 13 AND 14 SERVICED	SCENARIO D A- C SERVICED
Managing Future Change and Growth	Presumes the status quo with some infill. Low cost option.	Provides scope to expand	Logical extension of Michelago with services	Logical extension and servicing of the village
Community and Village life	Will retain village scale and character	Continuation of village scale and form	Lot sizes will determine compatible density, can preserve through design	Will likely alter village through increased density
Landscape and the public realm	As above with local rates to apply to upgrades	Higher rate base, no servicing costs	Higher rate base to apply to upgrades	Higher rate base to apply to upgrades
Access and movement	Difficulties in servicing linear lots	Layout presumed to be best practice	Layout presumed to be best practice	Layout presumed to be best practice
Environment and sustainability	Potential cumulative impacts of onsite effluent disposal	Potential cumulative impacts of onsite effluent disposal	Yes	Yes
Cost effective servicing	None – presumed landholders bear costs of onsite effluent disposal and rainwater harvest	None – presumed landholders bear costs of onsite effluent disposal and rainwater harvest	W&S 1,000-1,500 EP \$28m Capex, \$0.5m Opex/yr	W&S 1,500-2,400 EP \$57.4m Capex, \$1.0m Opex/yr
	Servicing with W&S @550 EP		W&S 1,500-2,400 EP	W&S 2,400-3,600 EP (indicative)
	\$16m Capex, Opex \$258,359		\$44m Capex, \$0.8m Opex/yr	\$62m Capex, \$1.5m Opex/yr
Policy objectives	Retention of village character and scale	To be investigated. Unserviced growth generally not supported	Yes – sustainable serviced growth supported	Yes - sustainable serviced growth supported
Potential yield	53 lots/~152 people	111 unserviced lots	420-580 serviced lots	713 serviced lots
estimate		319 people	1,200 – 1,675 people approx	1,800 - 2,284 people including Michelago Village (infill and existing)

APPENDIX A - DETAILED CONSIDERATIONS FOR EACH SCENARIO

SCENARIO A: 'STATUS QUO'

This scenario presumes there is no extension of services to Michelago and the extent of the RU5 zone is developed where possible. The approximate area of the zoned village is approximately 40 ha, noting that the RU5 zone does extend to and across the Michelago creek in the south, incorporating one dwelling. However much of the land adjoining the Michelago Creek is mapped as riparian land and therefore likely undevelopable due to flood risk. It is also noted that all the land on which the village is located is affected by groundwater vulnerability. It is set out in the Master Plan sustainable settlement principles that it is important to keep the urban form compact, keeping within the scope provided by the Monaro Highway and railway reserve, with 'hard' edges to adjoining rural land maintained. It is also imperative that new growth does not compromise the contextual features of the locality such as the views to the Tinderry Range, the natural processes of the Michelago Creek, important vegetation and the rural character of the built form of the village.



Excerpt from Council's Settlement Strategy (draft Michelago Flood Prone Land Map)

The issues to consider are the constraints imposed by natural hazards, lack of reticulated services and the optimal scale and form of new housing. The flood risk is to be formalised by additional Council investigations. Assuming new development replicates that possible under the Cooma Monaro LEP, with onsite effluent and stormwater disposal and roads without kerb and guttering, new development would result in lots sizes at a minimum area of 1,800m². This area may need to be revised upwards if groundwater vulnerability requirements are reviewed.

It should be noted that the 'older' lots in Michelago range in size from as low as 1,400m² along Ryrie Street (near Michelago Park) to long linear lots between the police station and Hall of over 2,700m². Other lots are in the order of 1.5ha near the Church to 6,225m² to 1.4ha between the Michelago Public School and General Store.

More recent subdivision activity on the eastern and northern side of Ryrie Street has lots designed to make best use of the linear lot layout while also providing 'right of way' style access. For example, a former portion that is 1.8ha in area now supports five new dwellings on lots averaging 2,000m².



In estimating potential infill development in the RU5 zone, using the 1,800m² minimum lot size and assuming land beyond the hotel and service station curtilage is available for residential subdivision, the potential yield is conservatively 53 new lots and dwellings. Using Council's ID profile, the average household size in the Michelago locality is 2.88 persons per dwelling. Therefore 53 new dwellings could result in a population of 152 extra people without the need to rezone land.

Michelago's population at the 2016 Census was 562 people, noting that the census catchment area extends beyond the village to adjoining rural areas. It is estimated conservatively that there are 230 people in Michelago village.

There has been some new residential development since 2016, and with this in mind, the potential infill scenario could see Michelago village become a settlement of around 450 people.

As the majority of Michelago has groundwater vulnerability, there will need to be ongoing dialogue and agreement from government agencies as to the method of effluent disposal and acceptable densities into the future.

Risks and considerations

- Groundwater vulnerability may preclude further development that relies on onsite effluent disposal
- Riparian land restrictions may further limit lot yield 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 RU5 zone, and if realised likely to reduce the residential yield
- Intensification of residential land use and efficient use of services is a plan making direction of the government and a method of creating more diverse and affordable housing. However, the current lack of servicing in Michelago also potentially restricts housing diversity such as seniors housing, semi-detached dwellings (not permissible in RU5 zone) and multi dwelling housing, as well as tourist and visitor accommodation such as backpackers' accommodation, eco tourist facilities and caravan parks.

SCENARIO B: 'LOW GROWTH'

The 'Low Growth' 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 28ha in area). It is important that in order to protect groundwater resources and maintain village character that lots are of a size to accommodate dual occupancies at an appropriate density with reticulated water and sewer. Assuming 30% of the land area is used for infrastructure, a buffer from the Monaro highway, waterways and the electricity easement (open space), this leaves approximately 20 ha of developable land.

Based on this area, assuming services are available, the lot yield is conservatively 166 new lots at a minimum of 1,200m² (at 8.3 dwellings per ha on 20 ha). At 2.88 persons per dwelling this indicates growth of 480 people. At 1,000m², there could be 200 lots and 576 people. If lots were 800m², this would result in a yield of 250 lots and 720 people. If the infill opportunities were realised in Michelago as illustrated in the 'Status Quo' Scenario 1 (53 dwellings and 152 people plus approximately 230 residents), combined this could see Michelago grow to a village of between 1,100 and 1,200 people with serviced and unserviced options.



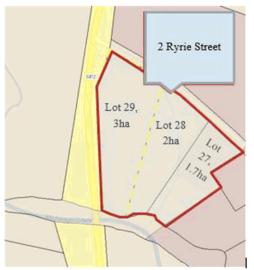
By comparison, if services were **not available** and it was proven to be achievable and sustainable to develop at the current RU5 Village 1,800m² minimum lot size (5.5dw/ha), 111 new dwellings could be developed on Lot 13 DP11175. At 2.88 persons per dwelling, this equates to 319 more people in this release area. Combined with the existing zoned infill potential of Michelago village (9.6ha at 1,800 m² resulting in 53 new lots and 152 EP, plus existing population making up 230 people as per Scenario 1), this would result in a village of around 770 people. Issues for consideration are the same as the Scenario 1: constraints from groundwater vulnerability, flooding, access routes, electricity easement and continued preservation of views, scale and density. In keeping with the current style of development, it would be appropriate to extend the RU5 zone Lot 13 DP11175. Updated provisions for density controls, landscaping and access would be made to the DCP.

This scenario provides serviced and unserviced options for Lot 13 DP11175. It will be critical that lot sizes, if water and sewer are not available, are of a size that maintains village character, particularly if subdivision into dual occupancy development or higher density dwellings is permitted. For example, it is prudent to include an LEP clause requiring a sustainable minimum lot size for dual occupancy development where reticulated sewerage and sustainable water supply are not provided, e.g. 3,200 m².

In both serviced and unserviced situations, 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 potentially an opportunity to use the land for open space and pedestrian/cycle access.

If a standalone servicing option is available, the economic thresholds for development will need to be weighed against the overarching objectives to maintain and enhance village character. All stakeholders have expressed a clear desire to avoid developing a Canberra-style suburb in an isolated area. However, it is prudent if unserviced development occurs, that subdivision layouts adopt an element of 'future proofing' of design and layout to facilitate new growth in the future.

2 RYRIE STREET



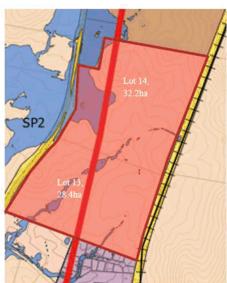
No 2 Ryrie Street, or the 6.7ha portion zoned RU1 Primary Production being lots 27, 28 DP11158 and Lot 29 DP1002933 as shown in the figure has been excluded from the growth scenarios at this time. This is due to the need for further investigations into the site due to location and environmental features. It is noted that the site has riparian land, groundwater vulnerability, terrestrial biodiversity values, and scenic protection considerations. The three portions are part of a larger holding that wraps around the Michelago Public school that are zoned RU5 Village.

The prominent location of the property will require particular management if it is deemed appropriate to be up-zoned and used for future growth.

SCENARIO C: MEDIUM GROWTH

Being mindful of the need to respect Michelago's village character and guided by planning best practice, if Michelago was to grow into a larger community than expressed in Scenario B, the most logical and workable extension to Michelago is the combination of Lot 13 DP 11175 (28.4ha) from Scenario B and Lot 14 DP 11175 (32.2ha) to the immediate north of Lot 13, a total raw area of 60.6ha. Lot 14 is affected by flooding, the electricity easement and to some extent has frontage to the Monaro Highway, as shown in the images below.





Settling on a lot size that makes best use of services while retaining walkability and character is of key concern. Other matters for consideration are the funding of new services, the connection of existing development in Michelago to reticulated water and sewer and cost distribution. Assumptions around the availability of servicing indicate that 800-1,000m² minimum lot size for single dwellings and 1,200m² for dual occupancies may result in a compatible village style layout. Variations on these lot sizes account for densification to make better use of the urban footprint while still maintaining village 'feel' and character. As noted, the clear advice from Council and residents is that a 'Googong' style subdivision of 450m² lots is not desirable for Michelago.

Assuming water supply and sewer is provided, and that 30% land used for infrastructure, open space and avoidance of constraints, potential dwelling yields are shown in Appendix B. The assumptions are focused on Lots 13 and 14 DP11175, where Lot 13 is 28.4ha in area with @20ha available land from Scenario B) and Lot 14 (32.2ha in area, with @ 22.54ha available), an area of 42.5ha. Both Lots 13 and 14 have been investigated by Council in the Draft Settlement Strategy 2016 as the logical future growth front for Michelago. Lot sizes are provided to guide the potential yield, ranging from 1,000m² to 800m² for single dwellings, in a bid to make good use of reticulated services while retaining a sense of relatively low-density living. Options for 30% dual occupancy³/70% single dwellings are also provided as a proportion of the lot yield in Appendix B, which suggest yields from 1,345 people in 467 dwellings, or 1,675 people in 581 dwellings. Recommendations for minimum lot sizes are made for single dwellings and dual occupancies to 'build in' character retention appropriate for Michelago.

SCENARIO D – COMBINATION OF SCENARIOS A AND C

A logical extension of Scenarios A (Michelago Village) and C – lots 13 and 14 DP11175 is Scenario 'D'. This scenario makes best use of reticulated services by extending throughout Michelago Village which will allow for infill development to occur at similar densities and housing typologies. The costs of extending services will need to be allocated carefully and equitably. The Scenario maintains appropriate lot sizes and provides opportunity for housing diversity to cater for future needs. Using Scenario C and the RU5 zone, a further 132 dwellings and 380 people will add to the estimated 1,675 people in 581 dwellings, or around 2,054 people. Including the existing population increases the total serviced to ~713 dwellings and ~2,284 people.

35 | Page

Or acceptable medium density development option

APPENDIX B - POTENTIAL DWELLING YIELDS

DWELLING YIELD ON LOTS 13 AND 14 DP 11175, TOTAL DEVELOPABLE AREA ASSUMED: 42.5HA

LOT SIZE	YIELD/ET	EP (@2.88 EP/ET)	TOTAL LOTS/EP	
1,000m ²	Lot 13 200 lots Lot 14 220 lots	576 633	420 lots/houses	1,209 EP
800m ²	Lot 13 250 lots Lot 14 275 lots	720 792	525 lots/houses	1,512 EP
700m ²	Lot 13 285 lots Lot 14 321 lots	820 924	606 lots/houses	1,745 EP

DUAL OCCUPANCY AND SINGLE DWELLING OPTIONS - ON COMBINED LOTS 13 AND 14 (42.5HA):

PRESUMED MIX OF DUAL OCCUPANCY (30%) AND SINGLE LOTS (70%) 1,500/1,000 M ²					
Lot size Yield/Et EP (@2.88 EP/ET) Total Dwellings/ Equivalent People					
1,500m² dual occupancy (on 30% of land, 12.6ha)	85 lots	85 lots divided into 170 dwellings	170	489 EP	
70% (29.75ha) @1,000 m ²	297 single lots	297 x 2.88 = 856 people	297	856 EP	
			467	1,345 EP	

PRESUMED MIX OF DUAL OCCUPANCY (30%) AND SINGLE LOTS (70%) 1,200/800 M²

Lot size	Yield/Et	EP (@2.88 EP/ET)	Total Dwellings/ Equivalent People	
1,200m² dual occupancy on 30%, 12.6ha	106 lots	106 lots divided into 254 dwellings x 2.88	210	604 people
70% (29.75ha) at 800m ²	371 lots	371 x 2.88	371	1,071 people
			581	~1,675 EP*

^{*581} x 2.88 = 1,673 - total has been rounded up

MICHELAGO RU5 ZONE SCENARIO A: UNSERVICED

Scenario 1 – Michelago zoned area (vacant 9.6ha)

36 | Page

Lot size	Yield/ET	EP (@2.88 EP/ET)	Total Dwellings/Equivalent People	
1,800m ²	53	53 (x 2.88)	53	152 EP

COMBINED SCENARIO A AND C, 1,800 M² UNSERVICED

Michelago zoned area (9.6ha) and Lot 13 DP11175 (20ha) INDICATIVE					
Area/Lot size Yield/ET EP (@2.88 EP/ET) Total Dwellings/Equivalent People					
RU5 zone 9.6ha, 1,800m ²	53	53 (x 2.88)	53	152 EP	
Lot 13, 20 ha 1,800m ² 111 111 (x2.88) 111 319 EP				319 EP	
		Total	164 ET	471 EP	

COMPINED COENTADIO	AND C 1 000 M2 SERVICED	CINIOLE DIVIELLINIOS
COMBINED SCENARIO A	CAND C. 1 DOD ME SERVICED	SINGLE DVVELLINGS

Combined serviced Scenario 1 and 3 (Lots 13 and 14): 1000m2 lot size/no dual occupancy					
Michelago infill available zoned area at 1,000m ² 9.6ha 96 lots 276 EP					
Lots 13 and 14 1,000m ²	42.5ha		420 lots	1,209 EP	
		Total	516	1,486 EP	

COMBINED SCENARIOS A AND C 800 M2 SERVICED SINGLE DWELLINGS

Michelago zoned 800m² infill	9.6ha		120 lots	346 EP
Lots 13 and 14 800m ²	42.5ha		531 lots	1,529 EP
		Total	@700	@1,875 EP

COMBINED SERVICED SCENARIOS 1 AND 3 WITH 30% DUAL OCCUPANCY

Combined serviced Scenario A and C: 30% dual occupancy on RU5 and Lots 13 and 14 @ 1,200 m²/800 m²					
(Lots 13 and 14) Yield/Et EP (@2.88 EP/ET) Total Dwellings/ Equivalent People					
1,200m² dual occupancy on 30%, 12.6ha	105 lots	105 lots divided into 210 dwellings x 2.88	210	604 people	
70% (29.75ha) at 800m ²	371 lots	371 x 2.88	371	1,071 people	

			581	@1,675 people		
Michelago RU5 9.6ha	Yield/Et EP (@2.88 EP/ET)		Total Dwellings/ Equivalent People			
(30% = 28,800m ²) @1,200m ²	24 lots	24 lots divided into 48 dwellings x 2.88	48 lots	139		
$(70\% = 67,200 \text{m}^2)$ @ 800m^2	84 lots	84 x 2.88	84 lots	240 @380 people		
		Total lots 13 and 14 and RU5	132 + 581 = 713 lots/dwellings	@2,054 people total		

Michelago existing village	Yield/ET	EP (@2.88 EP/ET)	Total Dwellings/ Equivalent People
	80 dwellings	230	2,054 plus 230 people =2,284

APPENDIX C – INFRASTRUCTURE COST ESTIMATES

Scenario					CA	PEX								OPEX	
Scenario	Iten	Description	Qty	Unit	Rate	e	Α	mount	Basis	% of CAPEX	Other	0&M	An	nount (\$/yr)	Basis
	S1	Reticulation Sewer	3750	m	\$	930	\$	3,488,372	GHD rate	1%	\$	3,750	\$	38,633.72	% of CAPEX + CCTV (\$10/m/10yr)
	S2	Trunk Sewer (development to STP)	4000	m	\$	1,000	\$	4,000,000	Estimate	1%	\$	4,000	\$	44,000.00	% of CAPEX + CCTV (\$10/m/10yr)
	S3	Manholes	60	ea	\$	15,000	\$	900,000	Estimate	1%	\$	60	\$	9,060.00	% of CAPEX + CCTV (\$10/m/10yr)
	\$4	Small Sewer SPS - 100%	1	lot	\$	500,000	\$	500,000	Estimate	1%	\$	-	\$	5,000.00	% of CAPEX
	S5	Sewer Treatment Plant - 50%	1	lot	\$	3,900,000	\$	3,900,000	GHD Rate	5%	\$	-	\$	180,000.00	% of CAPEX
		TOTAL SEWERAGE COSTS					\$	12,788,372					\$	276,694	
		Notes/Assumptions:													
		- Retic mains are for development area.													
		- Trunk sewer from development area to	STP.												
		- Facilities are assumed to be % portion of	f full devel	opment (12	2000	EP), with sta	age	d upgrades fo	r future de	velopments. 1	100-14	20 EP			
		- Allowance for small SPS required for small	all norther	n developm	nent,	likely requir	ring	upgrade in tl	he future. (GHD report re	quires l	arge 65	L/s	SPS for full 1	2000 EP development.
		- Infrastructure requirements based on G	HD report												
Scenario 2: Low Gro		Water Reticulation	4200	m	Ś	651	ć	2,734,884	GHD rate	1%	ć		ć	27 248 84	% of CAPEX
	***	Water Trunk Main (intake PS to WTP to	4200		~	031	~	2,734,004	OTID Tate	170	Ÿ		~	27,540.04	NOT CAPEX
	W2	development to STP)	5500	m	Ś	930	Ġ	5,116,279	GHD Rate	1%	Ġ	_	Ś	51 162 70	% of CAPEX
	W3	Clear Water storage - 50%		lot	-	2,500,000	Ś	2,500,000					Ś		% of CAPEX
	W4	Raw Water storage - 50%	_	lot	-			2,500,000					Ś		% of CAPEX
	W5	Intake raw water PS - 100%		lot	Ś	500,000	-		GHD Rate				Ś		% of CAPEX
		Water Treatment Plant - 50%		lot		2,000,000	٠.						\$		% of CAPEX
		TOTAL WATER COSTS			Ť		-	15,351,163			_		\$	233,512	
		Notes/Assumptions:					i								
		- Retic mains are for development area.													
		- Water trunk main between river intake	PS, WTP,	developme	nt ar	ea and STP.									
		- Facilities are assumed to be % portion of						d upgrades fo	r future de	velopments.					
		- Infrastructure requirements and rates b				,,	0-	10							

	S1	Reticulation Sewer	8050	m	\$	930	Ś	7,488,372	GHD rate	1%	Ś	8,050	\$	82.933.72	% of CAPEX + CCTV (\$10/m/10yr)
	S2	Trunk Sewer (development to STP)	4500		Ś	1,000		4,500,000		196		4,500	-		% of CAPEX + CCTV (\$10/m/10yr)
	S3	Manholes	100	ea	\$	15,000	\$	1,500,000		1%	-	100	\$		% of CAPEX + CCTV (\$10/m/10yr)
	S4	Small Sewer SPS - 100%	1	lot	\$	500,000	\$	500,000	Estimate	1%	\$	-	\$	5,000.00	% of CAPEX
	S 5	Sewer Treatment Plant - 75%	1	lot	\$	5,200,000	\$	5,200,000	GHD Rate	5%	\$	-	\$	240,000.00	% of CAPEX
		TOTAL SEWERAGE COSTS					\$	19,188,372					\$	392,534	
		Notes/Assumptions:													
		- Retic mains are for development area.													
		- Trunk sewer from development area to S	TP.												
		- Facilities are assumed to be % portion of	full develo	pment (120	00	EP), with sta	ageo	d upgrades fo	or future de	velopments 17	50 E	Р			
		- Allowance for small SPS required for sma	ll northern	developme	ent	, likely requir	ing	upgrade in t	he future. G	HD report red	uire	s large 65	L/s	SPS for full 1	2000 EP development.
		- Infrastructure requirements based on GI	ID report.												
Scenario 3 Med Growth	W1	Water Reticulation	9000	m	\$	651	\$	5,860,465	GHD rate	1%	\$	-	\$	58,604.65	% of CAPEX
		Water Trunk Main (intake PS to WTP to													
	W2	development to STP)	6000	m	\$	930	\$	5,581,395	GHD Rate	196	\$	-	\$	55,813.95	% of CAPEX
	W3	Clear Water storage - 75%	1	lot	\$	3,000,000	\$	3,000,000	GHD Rate	196	\$	-	\$	30,000.00	% of CAPEX
	W4	Raw Water storage - 75%	1	lot	\$	3,000,000	\$	3,000,000	GHD Rate	1%	\$	-	\$	30,000.00	% of CAPEX
	W5	Intake raw water PS - 100%	1	lot	\$	500,000	\$	500,000	GHD Rate	196	\$	-	\$	5,000.00	% of CAPEX
	W56	Water Treatment Plant - 75%	1	lot	\$	4,000,000	\$	4,000,000	GHD Rate	5%	\$	-	\$	200,000.00	% of CAPEX
		TOTAL WATER COSTS					\$	21,941,860					\$	379,419	
		Notes/Assumptions:													
		- Retic mains are for development area.													
		- Water trunk main between river intake F	S, WTP, de	evelopment	ar	ea and STP.									
		- Facilities are assumed to be % portion of	full develo	pment (120	00	EP), with sta	ageo	d upgrades fo	or future de	velopments.					
		- Infrastructure requirements and rates ba	ased on GH	ID report.											

		Notes/Assumptions:												
		- Retic mains are for development area.												
		- Water trunk main between river intake i	PS, WTP, devel	lopment area ar	nd ST	TP.								
		- Facilities are assumed to be % portion o	ffull developn	nent (12000 EP),	, with	h staged up	ogrades for futu	e developm	ents.					
		- Infrastructure requirements and rates b	ased on GHD	report.										
	S1	Reticulation Sewer	16050	m	\$	950	\$ 15,247,500	GHD rate	1%	5	16,050	\$ 16	68,525.00	% of CAPEX + CCTV (\$10/m/10
	\$2	Trunk Sewer (development to STP)	4500	m	\$	1,000	\$ 4,500,000	Estimate	1%	\$	4,500	\$ 4	49,500.00	% of CAPEX + CCTV (\$10/m/10
	\$3	Manholes	240	ea	\$	15,000	\$ 3,600,000	Estimate	196	\$	240	\$ 3	36,240.00	% of CAPEX + CCTV (\$10/m/10
	\$4	Small Sewer SPS - 100%	1	lot	\$	500,000	\$ 500,000	Estimate	196	\$	-	\$	5,000.00	% of CAPEX
	S5	Sewer Treatment Plant - 75%	1	lot	\$ 6	5,500,000	\$ 6,500,000	GHD Rate	5%	\$	-	\$ 30	00,000.00	% of CAPEX
D4 Mix	33	TOTAL SEWERAGE COSTS					\$ 30,347,500					\$	559,265	
		TOTAL SEWERAGE COSTS d on 800-1000m2 lots					\$ 30,347,500					\$	559,265	
ncluding	Base		20000		\$	651	\$ 30,347,500 \$ 13,023,256		1%	\$				% of CAPEX
	Base	d on 800-1000m2 lots	20000		\$	651			1%	\$	-			
ncluding	Base W1	d on 800-1000m2 lots Water Reticulation	20000	m	\$	651 930		GHD rate		\$		\$ 13	30,232.56	
ncluding	Base W1	d on 800-1000m2 lots Water Reticulation Water Trunk Main (intake PS to WTP to	6000	m m	\$		\$ 13,023,256	GHD rate	1%			\$ 13	30,232.56 55,813.95	% of CAPEX
ncluding	Base W1	d on 800-1000m2 lots Water Reticulation Water Trunk Main (intake PS to WTP to development to STP)	6000	m m lot	\$ \$ 3	930	\$ 13,023,256 \$ 5,581,395	GHD rate GHD Rate GHD Rate	196 196	\$		\$ 13 \$ 5 \$ 3	30,232.56 55,813.95 37,500.00	% of CAPEX % of CAPEX
ncluding	Base W1 W2 W3	d on 800-1000m2 lots Water Reticulation Water Trunk Main (intake PS to WTP to development to STP) Clear Water storage - 75%	6000 1 1	m m lot	\$ \$ 3	930 3,750,000	\$ 13,023,256 \$ 5,581,395 \$ 3,750,000 \$ 3,750,000	GHD rate GHD Rate GHD Rate	196 196 196	s s		\$ 13 \$ 5 \$ 3 \$ 3	30,232.56 55,813.95 37,500.00 37,500.00	% of CAPEX % of CAPEX % of CAPEX
ncluding	Base W1 W2 W3 W4	d on 800-1000m2 lots Water Reticulation Water Trunk Main (intake PS to WTP to development to STP) Clear Water storage - 75% Raw Water storage - 75%	6000 1 1 1	m Iot Iot	\$ \$ 3 \$ 3	930 3,750,000 3,750,000	\$ 13,023,256 \$ 5,581,395 \$ 3,750,000 \$ 3,750,000 \$ 500,000	GHD rate GHD Rate GHD Rate GHD Rate GHD Rate	196 196 196	\$ \$ \$	-	\$ 13 \$ 5 \$ 3 \$ 3	30,232.56 55,813.95 37,500.00 37,500.00 5,000.00	% of CAPEX % of CAPEX % of CAPEX % of CAPEX

D5 Mix 600-800 m2, refer D3

THE COSTS OF SERVICING MICHELAGO IS D3 LESS D4

Michelago water CAPEX is \$9,662,791 Michelago water OPEX is \$136,628 Michelago sewer CAPEX is \$6,659,128 Michelago sewer OPEX is \$121,731

Total CAPEX \$16,321,919 Total OPEX/YR \$258,359

APPENDIX D - REFERENCES

- Australian Bureau of Statistics 2016 Census data for Michelago, www.quickstats.censusdata.abs.gov.au/census_services/getproduct/Census/2016/quickstats/SSC12598
- ➤ DPIE Population Projections 2019, www.planning.nsw.gov.au/Research-and-Demography/Population-projections/Projections
- ▶ DPIE, South East and Tablelands Regional Plan 2017, https://www.planning.nsw.gov.au/Plans-for-your-area/Regional-Plans/South-East-and-Tablelands
- GHD, 2020, Michelago Water and Wastewater Infrastructure Scoping Study Report, SMRC
- Norman, B, Newman, P and Steffen, W, 2021, 'Apocalypse now: Australian bushfires and the future of urban settlements', NPJ Urban Sustainability, www.nature.com/npjUrbanSustain
- NSW Government, 2020, Final Report of the NSW Bushfire Inquiry, (Owens, D. and O'Kane, M), www.nsw.gov.au/nsw-government/projects-and-initiatives/nsw-bushfire-inquiry
- > Section 9.1(2) Ministerial Directions, Environmental Planning and Assessment Act, DPIE
- Rural Fire Service, Planning for Bushfire Protection 2019, www.rfs.nsw.gov.au/ data/assets/pdf file/0005/174272/Planning-for-Bushfire-Protection-2019.pdf
- Walker, B and Salt, D, 2006, Resilience Thinking, Sustaining Ecosystems and People in a changing world, Island Press





Snowy Monaro Regional Council

Michelago Water & Wastewater Infrastructure Scoping Study Report

November 2020

WATER | ENERGY & RESOURCES | ENVIRONMENT | PROPERTY & BUILDINGS | TRANSPORTATION

Executive summary

The township of Michelago, being midway between Canberra and Cooma, has the potential to grow from a current population of approximately 150 into a town of several thousand people. To support this growth, the township requires appropriate water and wastewater infrastructure that is innovative, flexible, sustainable, resilient and sympathetic to the environment and the needs of existing and proposed residents. An integrated water cycle management approach is used, though in a dry climate, water will be the limiting factor to the town's growth potential.

Two potential sources of bulk water have been identified for Michelago and these are Icon Water's water supply network and the Murrumbidgee River.

The integrated water and wastewater servicing options considered for Michelago are as follows.

- Option 1 town water connection with 10 kL rainwater tank on each house to supply non
 potable demand.
- Option 2 town water connection with 10 kL rainwater tank on each house to supply potable and non-potable demand
- Option 3 town water connection and separate recycled water connection to each house to supply non-potable demand
- Option 4 town water connection (includes recycled water) to each house to supply potable and non-potable demand
- Option 5 town water connection and separate recycled water connection and 10 kL rainwater tank on each house to supply non-potable demand
- Option 6 town water connection (includes recycled water) and 10 kL rainwater tank on each house to supply potable and non-potable demand.

The water source and integrated water options identified in this report have been assessed, at a high level, against the following criteria:

- Financial: CAPEX and OPEX
- Non-financial: Operations, Sustainability, Constructability, Resilience / Redundancy and Regulatory approval

Based on the options assessment undertaken, the preferred options are as follows:

Preferred water source option: Murrumbidgee River

Although obtaining water from Icon Water from Googong WTP provides simpler treatment requirements, overall, the preferred water source is still the Murrumbidgee River due to:

- Lower capital and operating cost
- · Lower costs lead to lower fees for the community
- · Conventional approach and straightforward to implement
- All assets are within New South Wales, thereby eliminating cross border arrangements and discussions with the ACT Government or Icon Water which may be challenging and could cause project delays.

It is therefore important to understand how much water could be allocated to Council and what regulatory mechanism should be applied to gain access to water from the Murrumbidgee River.

Preferred IWM option: Rainwater tanks for potable and non-potable use (Options 1 & 2)

Based on the options assessment, rainwater tanks for non-potable use only (option 1) and for all uses (option 2) appear to be the most favorable options if the cost of the rainwater tanks and inhouse treatment can be passed on to the homeowners. Furthermore, these options have the advantages of being:

- · Lowest in operating cost and therefore increases community affordability
- Able to be staged with all other options depending on the community's appetite for recycled water and especially if the recycled water plumbing is already installed in the houses
- A conventional approach and therefore straightforward to implement
- Straightforward when requiring regulatory approval.

Although this is not the *innovative* outcome that Council may have hoped for, there are a number of unknowns and uncertainties that need to be addressed to further progress the Michelago water and sewer services strategy. An important one is to test community sentiment around the use of recycled water for non-potable *and* potable use.

A quantitative mulitcriteria analysis was conducted to understand further differentiate between the options. The first-pass assessment confirmed that Options 1 and 2 are the preferred option, mainly due to operational advantages of a simpler plant, lower energy consumption and higher community acceptance. However, when importance was placed on community acceptance and the desire for Council to gain a progressive reputation, the recycled water options became more feasible.

With a future that is uncertain and a climate that is becoming increasingly variable, it would be prudent to implement an adaptive planning strategy for Michelago that provides a roadmap identifying scenarios that trigger the need for Council to either to pivot or stay on course to achieve the best outcome for the community.

Table of contents

1.	Intro	duction	1
	1.1	Background	1
	1.2	Summary of opportunities and constraints report	1
	1.3	Purpose of this report	2
	1.4	Scope and limitations	2
	1.5	Assumptions	3
2.	Wate	er balance	4
	2.1	Key assumptions	4
	2.2	Demand estimates	6
	2.3	Land application of treated water	7
3.	Integ	grated water options	8
	3.1	Water sources	8
	3.2	Overview of Integrated Water Management Servicing Options	10
	3.3	Surface water treatment	12
	3.4	Rainwater treatment	14
	3.5	Water supply system	15
	3.6	Sewerage system	16
	3.7	Wastewater treatment	17
	3.8	Recycled water scheme	22
4.	High	level cost estimate of options	24
	4.1	Cost estimate methodology and assumptions	24
	4.2	Capital cost estimates	26
	4.3	Annual cost estimates	26
5.	Non-	financial assessment	29
	5.1	Water source assessment	29
	5.2	IWM assessment	31
	5.1	Risk and opportunities	33
6.	Sum	mary of IWM options	36
7.	Stag	ing approach	43
	7.1	Staging for growth	43
	7.2	Strategy staging	44
8.	Multi	icriteria analysis	45
	8.1	Approach	
	8.2	Results	
Q	Reco	ommendation	10

Table index

Table 2-1	Michelago end use assumptions	6
Table 2-2	Average daily demand per growth scenario	6
Table 3-1	Water balance breakdown based on 12,000 EP	11
Table 3-2	Key elements of the Michelago water supply system based on 12,000 population	15
Table 3-3	Key elements of the Michelago sewerage system based on 12,000 population	17
Table 3-4	ADWF flow estimates	18
Table 3-5	Key elements of the Michelago recycled water system based on 12,000 population	22
Table 5-1	Non-financial assessment of water sources	30
Table 5-2	Non-financial assessment of IWM options	32
Table 5-3	Risk and opportunities for each option	34
Table 8-1	Raw scores	46
Table 8-2	Weighted scores	46
Table 8-3	Amended raw scores	47
Table 8-4	Amended weighted scores	47
Figure i		
Figure 2-1	Annual rainfall at Michelago from 01/01/1980 to 27/05/2020 showing general decreasing trend	4
Figure 2-2	Breakdown of water use in residential areas at Michelago showing potable and non-potable end uses	5
Figure 3-1	Water sources	9
Figure 3-2	Schematic of indicative water treatment process	13
Figure 3-3	Schematic of indicative treatment process for crop irrigation	19
Figure 3-4	Schematic of indicative treatment process for in-house non-potable recycling	20
Figure 3-5	Schematic of indicative treatment process for potable recycling	22
Figure 4-1	CAPEX breakdown	27

Appendices

Appendix A – Opportunities and Constraints Report, GHD, August 2020

 Appendix B – Design Basis Memo for Michelago Water and Sewer Scoping Study, June 2020

Table of Acronyms

Acronym	Definition
ADWG	Australian Drinking Water Guidelines
AGWR	Australian Guidelines for Water Recycling
AWTP	Advanced Water Treatment Plant
BAC	Biological Activated Carbon
BASIX	Building Sustainability Index
BOD	Biological Oxygen Demand
CAPEX	Capital Expenditure
DAFF	Dissolved air floatation and filtration
DPR	Direct Potable Reuse
EP	Equivalent Population
HACCP	Hazard Analysis Critical Control Point
НВТ	Health Based Treatment Targets
ID	Internal Diameter
IDEA	Intermittently Decant Extended Aeration
IWM	Integrated Water Management
kL	kilo Litre
MBR	Membrane Bioreactor
ML	Mega Litre
OPEX	Operational Expenditure
PAC	Powdered Activated Carbon
PDD	Peak Day Demand
PDFW	Peak Dry Weather Flow
POE	Point of Entry
POU	Point of Use
RO	Reverse Osmosis
STP	Sewage Treatment Plant
PWWF	Peak Wet Weather Flow

Acronym	Definition
UV	Ultraviolet
WELS	Water Efficiency Labelling Scheme
WTP	Water Treatment Plant

1. Introduction

1.1 Background

The township of Michelago is situated approximately midway between Canberra and Cooma. As such, it has the potential to grow from a current population of approximately 150 into a town of several thousand people due to its proximity to Canberra and the Snowy Mountains. In order to support this growth, the township requires appropriate water and wastewater infrastructure. An important objective of this scoping study is to evaluate the feasibility of a range of solutions and provide options that are innovative, flexible, sustainable, resilient and sympathetic to the environment and the needs of existing and future residents. An integrated water cycle management approach will be used, though in a dry climate, water will be the limiting factor to the town's growth potential. Therefore, the scoping study will also shed light on what a sustainable population for Michelago will look like.

1.2 Summary of opportunities and constraints report

An earlier report (attached in Appendix A) was produced to identify the opportunities and constraints around the possible options available to Michelago in terms of:

- Water supply
- · Wastewater treatment
- Water reticulation and sewerage
- Water reuse.

For this scoping study, populations of 4,000, 8,000 and 12,000 people were used to determine potential raw water requirements. For these growth scenarios, around 1,000, 2,000 and 3,000 ML per annum is required.

It was made clear very early that raw water supply was the limiting factor. Based on the desktop assessment, the Murrumbidgee River seems to be the most obvious and straightforward supply option due to its proximity and volume. However, this is not without its issues. The water in the Murrumbidgee River is fully allocated and therefore, any additional water entitlements will need to be purchased. Therefore, development at Michelago may need to be staged in accordance with the volume of water purchased. The amount of water allocation that can be secured for Michelago will be the main limit on the sustainable size of this town.

Michelago could also potentially receive potable supply from Icon Water's Googong WTP, which is approximately 40 km from Michelago. Supply of potable water to Michelago would roughly cost \$1.7 per kL. This option would involve constructing a pump station and a potable water transfer pipeline along road reserves from the Googong WTP to Michelago, a clear water balancing storage at Michelago and additional chlorine dosing.

A number of alternative water sources have also been reviewed. The most reliable of these sources are recycled greywater and wastewater. The others, rainwater and stormwater, are dependent on rainfall. Although stormwater is feasible, fundamentally, sourcing the best quality supply (i.e. rainwater compared to stormwater), is always preferable to minimise treatment costs. Nevertheless, stormwater recycling is a viable option in certain situations and has proven to be effective when appropriately implemented.

By supplementing water from the Murrumbidgee with these sources, more people could have their water demand met and therefore development at Michelago could be maximised. This approach could also be staged to match population growth.

Water and wastewater treatment can be designed to suit raw water source (in terms of water supply) and end use (in terms of wastewater management). Water and wastewater conveyance can be designed to suit the terrain. In general, the treatment plants for Michelago can generally follow these processes:

- Water treatment: intake → storage → flocculation/coagulation → filtration or DAFF → disinfection
- Wastewater treatment: inlet works → biological treatment →chemical dosing as required →
 sludge dewatering and disposal → disinfection as required → winter storage.

Water source and wastewater reuse or disposal was determined be the driving factors in the developing the water supply and sewerage system for Michelago.

1.3 Purpose of this report

The purpose of this report is to provide a summary of the water and wastewater servicing options for Michelago. These options have been developed to a point where high level costing (CAPEX and OPEX) could be done. Whilst there are projected low, medium and high population growth scenarios for Michelago, the high-level design and costing of each servicing option presented in this report has been based on the highest growth scenario, i.e. 12,000, as the trunk infrastructure would need to be designed for the ultimate population.

A high-level risk assessment was undertaken to provide a recommendation on the most feasible option using the following criteria:

- Financial: CAPEX and OPEX
- Non-financial: Operations, Sustainability, Constructability, Resilience / Redundancy and Regulatory approval

1.4 Scope and limitations

This report has been prepared by GHD for Snowy Monaro Regional Council and may only be used and relied on by Snowy Monaro Regional Council for the purpose agreed between GHD and the Snowy Monaro Regional Council as set out in section 1.3 of this report.

GHD otherwise disclaims responsibility to any person other than Snowy Monaro Regional Council arising in connection with this report. GHD also excludes implied warranties and conditions, to the extent legally permissible.

The services undertaken by GHD in connection with preparing this report were limited to those specifically detailed in the report and are subject to the scope limitations set out in the report.

The opinions, conclusions and any recommendations in this report are based on conditions encountered and information reviewed at the date of preparation of the report. GHD has no responsibility or obligation to update this report to account for events or changes occurring subsequent to the date that the report was prepared.

GHD has prepared this report on the basis of information provided by Snowy Monaro Regional Council and others who provided information to GHD (including Government authorities)], which GHD has not independently verified or checked beyond the agreed scope of work. GHD does not accept liability in connection with such unverified information, including errors and omissions in the report which were caused by errors or omissions in that information.

GHD has prepared the high level cost estimate set out in section 4 of this report ("Cost Estimate") using information reasonably available to the GHD employee(s) who prepared this report; and based on assumptions and judgments made by GHD.

The Cost Estimate has been prepared for the purpose of comparing options and must not be used for any other purpose.

The Cost Estimate is a preliminary estimate only. Actual prices, costs and other variables may be different to those used to prepare the Cost Estimate and may change. Unless as otherwise specified in this report, no detailed quotation has been obtained for actions identified in this report. GHD does not represent, warrant or guarantee that the infrastructure works can or will be undertaken at a cost which is the same or less than the Cost Estimate.

Where estimates of potential costs are provided with an indicated level of confidence, notwithstanding the conservatism of the level of confidence selected as the planning level, there remains a chance that the cost will be greater than the planning estimate, and any funding would not be adequate. The confidence level considered to be most appropriate for planning purposes will vary depending on the conservatism of the user and the nature of the project. The user should therefore select appropriate confidence levels to suit their particular risk profile.

1.5 Assumptions

The opinions, conclusions and any recommendations in this report are based on assumptions made by GHD described in this section. GHD disclaims liability arising from any of the assumptions being incorrect.

The assumptions made in this report include:

- Data and information compiled in the Design Basis Memo (see Appendix B)
- Assumptions in section 1.4 of the Opportunities and Constraints Report (see Appendix A)
- Sections 2.1, 4.1.1 and 4.1.2 of this report.

2. Water balance

2.1 Key assumptions

2.1.1 General

- The analysis undertaken herein is a water balance only e.g. no water quality analysis has been undertaken.
- GHD's Integrated Water Management daily water balance toolkit was chosen for this analysis.
- While an attempt to incorporate forecasted values into the analysis, the toolkit has not been calibrated. Accordingly, the analysis is comparative rather than predictive.
- Most common Water Efficiency Labelling Scheme (WELS) values have been assumed for end uses.
- Climate data used for the analysis was provided by SILO, an initiative of the Queensland Government and Bureau of Meteorology for Michelago (Soglio) Station 70064 and covers rainfall and evaporation from 01/01/1980 through to 27/05/2020 ~ 40 yrs (Queensland Government, 2020). A summary of rainfall for Michelago is shown in Figure 2-1.
- Analysis has looked at implications on the water systems and has not considered implications at a household level in terms of footprint cost, capital and operational costs of running rainwater tanks.

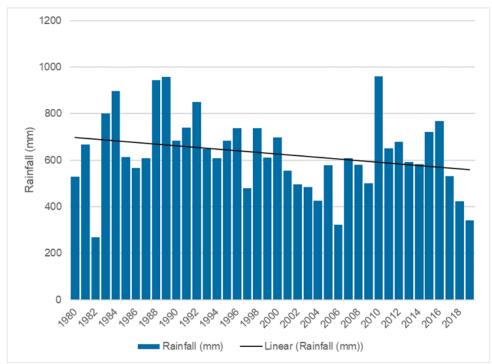


Figure 2-1 Annual rainfall at Michelago from 01/01/1980 to 27/05/2020 showing general decreasing trend

2.1.2 Variables

- Sewer usage discharge factor 0.78 (Sydney Water, 2020).
- Non-potable demand 0.65 factor (Water Services Association of Australia, 2011).
- Non-residential demand rates 21 kL/Ha/day (Sydney Water, 2014).
- · Commercial roof area factor 0.2 (estimate).
- Peak day factor 2 (Water Services Association of Australia, 2011).

Water use for each house is summarised in Table 2-1. The breakdown of potable and non-potable use within residential areas at Michelago is shown in Figure 2-2.

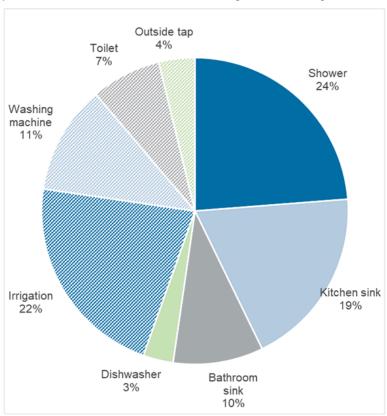


Figure 2-2 Breakdown of water use in residential areas at Michelago showing potable and non-potable end uses

Table 2-1 Michelago end use assumptions

End Use	Unit	WELS data	Usage (no/day/person)	Usage (L/person/day)	Occupancy (persons)	Total Daily (L/day)	Potable or Non-potable
Shower	L/min	9	5	45	3	135	Potable
Kitchen sink	L/min	12	3	36	3	108	Potable
Bathroom sink	L/min	12	1.5	18	3	54	Potable
Dishwasher	L/wash	12	0.5	6	3	18	Potable
Irrigation	L/house			41	3	124.11	Non-Potable
Washing machine	L/wash	75	0.29	22	3	65.25	Non-Potable
Toilet	L/flush	3.5	4	14	3	42	Non-Potable
Outside tap	L/min	12	0.6	7.2	3	21.6	Non-Potable
TOTALS				189		568	

2.2 Demand estimates

The average daily demands for different growth scenarios is shown in Table 2-2

Table 2-2 Average daily demand per growth scenario

Population	Average Daily Demand	d (kL/day)	
	Potable	Non-Potable	Total
4,000	438	384	822
8,000	877	768	1,645
12,000	1,315	1,152	2,468

2.3 Land application of treated water

A high level water balance model was developed based on the requirements of the Department of Environment and Conservation (NSW) Environmental Guidelines – Use of Effluent by Irrigation (NSW Primary Industries Office of Water, 2012).

Irrigation tends to increase runoff due to the reduction in the amount of rain needed to saturate soil to a point where runoff occurs. The Guideline requires runoff as a result of irrigation to be minimised, to ensure that runoff is not used as a means to dispose of the effluent to the environment and ensure that runoff does not increase significantly above the natural baseline.

Effluent storage is also a key component of the water balance and can be used to optimise the land area required to satisfy water demand requirements. For full reuse (no wet weather discharges) the strength of the effluent is used as a tool to determine the allowable frequency of uncontrolled discharges which inevitably occur as a result of prolonged rainfall events. As a general guide, for low strength effluents, uncontrolled releases may be permitted in 50% of years. For medium and high strength effluent, discharges may be limited to 25 and 10% of years respectively. In some situations, either the strength of the effluent and/or the sensitivity of the receiving environment may be such that there should be no overflows (or less frequent overflows than those provided in the Guideline) from the storage to the environment.

Based on the criteria of the Guidelines, the effluent from the sewage treatment plant would be generally classified as low strength.

The model was used to determine area and storage requirements for various volume disposal options, based on the following:

- Daily time step model
- Modelling from 1/1/1980 27/05/2020 (~40 years)
- · No accounting for nutrients
- Soil type Sandy Loam with Readily Available water (RAW) of 70 mm/m
- Root depth 1,000 mm
- Effective RAW 70 mm
- Irrigation Point 40 mm
- Wilting point (-) 20 mm
- Crop Factor of irrigated crop 1.0
- Leaching factor 0.085
- Irrigation area was balanced to minimise the calculated runoff (irrigation) (mm) to runoff (no
 irrigation) (mm). For the purposes of this assessment irrigation area was balanced with a
 runoff increase factor of +/- 10%.

Note that this is a preliminary assessment. MEDLI modelling or similar may be required when more information is known.

3. Integrated water options

With climate variability and population growth, conventional water supply sources are being stretched and their reliability uncertain. Furthermore, in order to protect downstream beneficial users and maintain or improve waterway health, discharge to rivers is discouraged and alternative disposal methods are preferred. Therefore, Council's aspiration for Michelago is to aim for 100% treated effluent reuse.

3.1 Water sources

3.1.1 Murrumbidgee River

Water allocation options

Raw water from Murrumbidgee River can either be via a water licence and allocation specifically for Michelago or sharing Cooma's water allocation under its licence. Note that Cooma's water allocation may need to be increased to meet the additional demand, though this may be easier to achieve, administratively, than seeking to obtain a new licence for Michelago.

Murrumbidgee River is approximately 3 km from the Michelago township, and flows in a south to north direction. The reliability of flow and associated river levels in periods of both drought and flood are yet to be defined and outside the scope of the current project.

Infrastructure required

This option would involve a run-of-river water intake structure, a nearby pump station, an off-stream water storage, and a water treatment plant (WTP) with all electrical components situated above the 1:100 year flood level. Power supply would need to be extended from the Monaro Highway to the pump station site, a distance of around 2 km.

3.1.2 Icon Water

Michelago could potentially receive potable supply from Icon Water's Googong WTP, which is approximately 40 km from Michelago. Supply of potable water to Michelago would roughly cost \$1.7 per kL, though this will need to be confirmed with Icon Water if this option is more seriously considered.

This option would involve constructing a pump station near the Googong WTP and a 300 mm ID potable water transfer pipeline approximately 40 km long along Googong Road, Old Cooma Road, and Burra Road to Michelago. A clear water storage at Michelago and additional chlorine dosing will also be required (see Figure 3-1).

Two other options were considered, one from Theodore Reservoir and the other directly from Googong Dam. Though marginally closer to Michelago (~2km), Theodore Reservoir capacity and connection is untested and further investigation would be required on Icon Water's part to assess the feasibility of accessing water from this point. The pipeline from this reservoir would also traverse through both ACT and NSW land and therefore will attract a more complicated approvals process. Drawing raw water from Googong Dam seems unfeasible due to the need for a similar length of pipeline as that for the Googong WTP option but requiring a full WTP at Michelago. The costs immediately surpass the Googong WTP option. Furthermore, there is a Commonwealth agreement around the ownership and use of Googong Dam which may not be straightforward to navigate through. Therefore, obtaining water from the Googong Dam has not been considered further.



Figure 3-1 Water sources

3.1.3 Wastewater

Development of Michelago will result in the creation of a new urban area that will generate wastewater. This presents an opportunity for treatment and fit-for purpose reuse to complement the more conventional sources of surface water and rainwater.

3.1.4 Rainwater

Rainwater harvesting for household use provides an opportunity to offset surface water use and provide added benefits related to reducing stormwater runoff from urban areas.

Rainwater is typically used for non-potable purposes but with suitable treatment can be used for potable use also.

A limitation of rainwater is that options cannot fully rely on this source as it is inherently unreliable in dry periods, and there are practical limits on how big domestic tanks can be to mitigate this risk.

3.2 Overview of Integrated Water Management Servicing Options

3.2.1 Servicing options

The integrated water and wastewater servicing options considered for Michelago are presented below. Each option also has a water source from either the Murrumbidgee River (raw water) or Icon Water (bulk/treated water).

- Option 1 town water connection with 10 kL rainwater tank on each house to supply non
 potable demand
- Option 2 town water connection with 10 kL rainwater tank on each house to supply potable and non-potable demand
- Option 3 town water connection and separate recycled water connection to each house to supply non-potable demand
- Option 4 town water connection (includes recycled water) to each house to supply potable and non-potable demand
- Option 5 town water connection and separate recycled water connection and 10 kL rainwater tank on each house to supply non-potable demand
- Option 6 town water connection (includes recycled water) and 10 kL rainwater tank on each house to supply potable and non-potable demand.

3.2.2 Water balance breakdown for each option

Table 3-1 provides the water balance breakdown based on a population of 12,000. The demands shown were used as the basis of the high-level design of the infrastructure which was then used in the development of the high-level cost estimates.

Table 3-1 Water balance breakdown based on 12,000 EP

Option	Demand (kL/day)			Water sour	ce (kL/day)		STP volumes	s (kL/day)	Irrigation Area (ha)	Winter Storage (ML)
	Potable	Non- potable	Total	Potable Water	Rainwater Tank	Recycled Wastewater	Production	Overflow		
1	1,315	1,152	2,468	1,654	814	-	1,520	1,520	150	150
2	1,315	1,152	2,468	1,447	1,020	-	1,520	1,520	150	150
3	1,315	1,152	2,467	1,315	-	1,151	1,520	369	55	25
4	1,315	1,152	2,468	947	-	1,520	1,520	-0	-	-
5	1,315	1,152	2,468	593	355	1,520	1,520	-0	-	-
6	1,315	1,152	2,468	265	682	1,520	1,520	-0	-	-

3.3 Surface water treatment

3.3.1 Water treatment plant sizing

Water treatment infrastructure is typically sized to enable production of water sufficient to meet peak daily demand in less than 24 hours, with time allowed for filter backwashing and contingency maintenance. For the projected population, the treatment plant capacity is designed to be:

- 1.7 ML/d for 4000 EP
- 3.3 ML/d for 8000 EP
- 5.0 ML/d for 12000 EP

Need for Potable Backup

An assumption that has been included in the development of options is that full potable backup is required for the alternative options.

This is due to:

- Options that rely on rainwater tanks to meet overall water demand will have reduced reliability during dry periods when tanks of practical size will be emptied by normal use.
- Options that rely on recycled water supply to meet overall water demand are vulnerable to
 reductions in wastewater volume (e.g. due to early stages of development with limited
 connections) and potential supply disruptions due to upsets at the treatment plants (being
 in-part reliant on a biological process that can be disrupted by external factors such as
 illegal sewer dumping).

Hence all options have been sized with the water treatment infrastructure outlined above.

3.3.2 Water treatment plant location

Ideally, water treatment plants (WTP) are located at the highest part of the serviced area to enable water supply to the town by gravity. For Michelago, the WTP is proposed to be located on a hill and is bounded by the Murrumbidgee River on the west, Monaro Highway on the east and the Michelago creek on the north. The summary figures in Section 6 show the proposed location of the WTP.

3.3.3 Process selection

The required treatment process is determined by the raw water characteristics and the risk profile of the upstream catchment.

Surface Water from the Murrumbidgee River

Using water pumped from the Murrumbidgee River will require a new WTP for supply to Michelago. The upstream catchment is not protected, and includes uses including agriculture including grazing of livestock, urban communities and settlements, wastewater treatment plants, septic tanks and access to the river for direct recreation. As a result, this source would be considered a Category 4 source under the Health Based Treatment Targets (HBT) framework that is in the process of being incorporated into the Australian Drinking Water Guidelines (ADWG) – this is the highest risk of permissible source water.

The following has been adopted for the purpose of this study, noting that no water quality data was available:

· Dissolved air floatation and filtration (DAFF) process.

- Murrumbidgee water (via Googong Reservoir) is successfully treated by DAFF at Googong WTP for supply to Canberra.
- DAFF is well suited to coloured and moderately turbid water. The process is also a robust solution if algae is a concern.
- DAFF is suitable for use with pre-oxidiation for metals removal or powdered activated carbon (PAC) should algal taste and odour or toxins be a risk from this water source.
 Further DAFF is suitable for use upstream of ozone and biological activated carbon (BAC) filtration which provides a more robust solution for organics removal than PAC.

UV disinfection

 UV is an effective barrier against harmful protozoa such as Cryptosporidium. A second barrier is required in addition to DAFF for protozoa removal for a Category 4 source water.

Chlorination

- The use of chlorine, either chlorine gas or sodium hypochlorite is a very effective means of reducing harmful bacteria and viruses in water.
- A chlorine residual in the treated water also protects the quality of this water to the customer tap against bacterial growth in the reticulation and any potential recontamination.
- Depending on detention times within the system and underlying levels of organic carbon in the treated water, chloramination may be required, where chlorine is reacted with ammonia to form chloramine. This is a longer lasting but less potent disinfectant, that is less liable to produce unwanted disinfection byproducts in the presence of organics.

An indicative water treatment process schematic is shown in Figure 3-2.

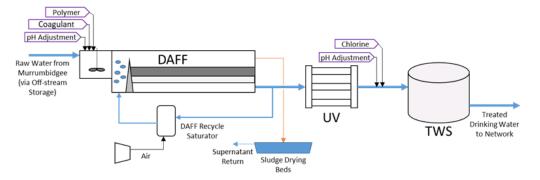


Figure 3-2 Schematic of indicative water treatment process

Alternative processes can be used to achieve the required outcome. For example, a conventional (sedimentation-filtration) process, which is well suited to variable turbid waters. At this preliminary concept level, these processes are equivalent in their cost and footprint.

Selection of a suitable process should consider the range of water quality that will be treated, hazards in the upstream catchment, and the need for additional process units to address specific risks. Sampling, jar testing and even pilot testing are recommended to fully inform process selection and provide key data used for process sizing and design.

Treated Water from Googong WTP

Water from Googong WTP is treated by Icon Water and meets the requirements of the ADWG.

The only treatment required at Michelago for a treated water supply is secondary chlorination (also referred to as "booster chlorination") where chlorine is dosed to maintain the chlorine residual in the treated water prior to entering the Michelago supply.

This chlorine dose is not required as a disinfection step, rather as a protective residual.

If the system is to be chloraminated, booster chloramination can be undertaken.

3.3.4 Treated water storage

For the requirement for full potable backup, treatment is sized to meet the full peak day demand of the system from all sources. The potable network would need to be cross connected to automatically maintain levels in the recycled water storage and hence overall system security.

Based on the need for full potable backup, each option has included a treated water storage e.g. 4.94 ML.

3.3.5 Off-stream storage

Allowance has been made in the options for provision of an off-stream storage, for the Murrumbidgee River water source option. This is required for water resources that are seasonally available or vary widely in quality.

The size of an off-stream storage required will depend largely on the need for seasonal balancing but also the ability to build a large storage of multiple months' supply. This second point will depend on the ability to find a suitable site (e.g. a flat site to build a suitable balanced cut/fill structure, ideally with local clay for lining) or a gully or other feature in which a dam can be constructed.

Key considerations here include avoiding/minimising native vegetation removal and identifying and avoiding areas of cultural significance.

To include the need for an off-stream storage, allowance has been made for 1 year of average potable demand. i.e. options that make greater use of alternative water sources require a smaller storage.

3.3.6 Waste management

The DAFF process will produce a sludge "float" and washwater from filter backwashing. These are typically combined and allowed to settle in a sludge drying bed or thickener. Water recovered from this gravity dewatering can be slowly returned to the process for treatment (at a rate of up to 10%) or discharged back to the raw water storage.

For a relatively small WTP as proposed for Michelago, sludge drying beds are the most costeffective solution. If site footprint is very constrained or local climatic conditions are not favourable for sludge drying beds, geobags can be used which allow for more compact dewatering of sludge waste.

Mechanical dewatering such as with a centrifuge is not recommended for a plant of this size.

Sludge is periodically removed from the sludge drying beds (or geobags) and carted to landfill.

3.4 Rainwater treatment

For non-potable household use, rainwater does not require any treatment. This includes for uses such as toilet flushing, use in washing machines and outdoor irrigation. Options 2 and 5 include this use of rainwater.

Rainwater can also be used for potable use in the home. Although frequently done where no town supply is available, drinking of rainwater is not recommended by most health departments

due to contamination by animal faecal material which can lead to illness (e.g. bird, possum and rodent excrement). For safe potable use, treatment is required. This would normally be in the form of a small point of use (POU) or point of entry (POE) system, depending on the final use and amount of water available. POU systms are typically undersink in a kitchen and provide a dedicated drinking water tap. POE are household scale, treating all water that is supplied for uses in the home where drinking water is required.

POU/POE systems typically involve a small cartridge or sand filter, and advanced systems include UV disinfection.

A key drawback to reliance on rainwater for potable use is the regulatory grey area that exists. It is unclear where the responsibility for maintaining safe drinking water rests, and where it is Council's responsibility the need to be able to inspect and maintain treatment assets on private property may be problematic. Further, the running costs of such a system would typically be borne by the household, leaving them with incentive to bypass/switch off a system to save running costs.

A clear determination of the regulatory requirement and demarcation of responsibilities if required to make potable use of rainwater in this context successful, supported by community education to provide understanding of the importance of maintaining operation.

3.5 Water supply system

Following discussions in Section 3.3.1, the water supply network has been sized based on the assumption that a full potable backup is required. Other assumptions used in the sizing are as follows:

- Peak Day Demand (PDD): Average Daily Demand (ADD): = 2 (refer Table 2-2 for average daily demand data)
- Velocity through pipe = 1.5 m/s

Applying the above assumptions, the minimum pipe size to service a population of 12,000 is 300 mm internal diameter.

From either the WTP or the re-chlorination facility, the water trunk main is approx. 5 km long running along Monaro Highway.

Table 3-2 summarises the water supply system for Michelago based on a population of 12,000.

Refer Section 3.4 for details on rainwater tanks and Section 3.8 for effluent re-use.

Table 3-2 Key elements of the Michelago water supply system based on 12,000 population

Component	Description	
Bulk/Treated Water from Googong WTP		
Water Pump station	Pump station configured to deliver potable water from Googong WTP to the Treated Water Storage Tank in Michelago (same area as the Re-chlorination Facility)	
Transfer Main	40 km long 300 mm ID pipeline from Googong WTP to the re-chlorination facility via Googong Road, Old Cooma Road and Burra Road.	

Component	Description		
Re-chlorination Facility	Small hypo dosing plant in a dedicated building with chemical unloading bund, monitoring, etc.		
Treated Water Storage Tank	At least two tanks (duty/standby) sized for 1-day storage of peak day demand in total (~5 ML)		
Potable Supply Main	6.5 km long 300 mm ID pipeline from the storage tank to the reticulation supply		
Raw Water from Murrumbidgee River			
River intake pump station	Run-of-river intake structure and a nearby pump station with screened suction pipe. Pump to be centrifugal type.		
Rising main from intake pump station to off-stream storage	1.1 km long 300 mm ID pipeline from the river intake pump station to the off-stream storage		
Off-stream storage	Sized for 1 year of average potable demand (ranging from 100 to 600 ML depending on the option, plus additional allowance for evaporation losses) though this can be reduced if there is confidence that the river flow is consistent.		
Potable Supply Main	5 km long 300 mm ID pipeline from the clear/treated storage tank to the reticulation supply		

3.6 Sewerage system

Sewage generated within the development will be collected and conveyed to the sewage treatment plant for treatment, irrigation and recycling.

The topography of Michelago generally slopes from north to south. The number of pump stations required is minimised by locating the wastewater treatment facility at the lowest elevation possible to facilitate the operation of the sewerage reticulation by gravity.

A pump station would be required to transfer sewage from the lowest point near the creek to the treatment plant which is located at an elevation approximately 30 m higher. The catchment south of the Michelago creek would also need a DN150 gravity sewer to discharge to the STP.

All electrical components shall be situated above the 1:100 year flood level.

The sewerage network has been sized based on the following assumptions:

- Peak Wet Weather Flow (PWWF): Average Dry Weather Flow (ADWF) = 4
- Velocity through pipe = 1.5 m/

Pipelines are typically difficult to stage and in most cases, it is more economical to design and install pipes based on the ultimate population. However, if this results in velocity through the pipe that is below the recommended minimum (0.8 m/s as per WSA03), duplicate mains may be considered.

The construction of the of the sewerage network would depend on the development timeline and therefore could be staged to minimise upfront costs.

Table 3-3 summarises the sewerage system for Michelago based on a population of 12,000.

Table 3-3 Key elements of the Michelago sewerage system based on 12,000 population

Component	Description
Trunk gravity sewer	4 km long of 150-300 mm ID buried pipeline servicing areas north of Michelago creek
	 1 km long of 150 mm ID buried pipeline servicing areas south of Michelago creek
Sewage pump station/s (SPS)	 Underground, concrete wet well structure with submersible sewage pumps in duty/duty/standby configuration at ultimate development
	 During initial stage, a duty/standby pump with a much smaller capacity will be installed. The second duty pump will be installed at a later stage when the flow into the SPS increases.
	Emergency storage provided for pump/power failure
	 Staging of pumps and emergency storage to be compatible with STP capacity and catchment size
	 One large SPS with maximum pump capacity of approx. 65 L/s for the northern catchment and potentially a smaller SPS with maximum pump capacity of approx. 5 L/s for the southern catchment.
Rising main	1.8 km long 200 mm ID buried pipeline from the sewage pump station to STP, including a trenchless crossing of the Michelago creek

3.7 Wastewater treatment

The required level of wastewater treatment is directly related to the end use or disposal route of the wastewater. Further, the size of the scheme and ability to be augmented need to be considered when establishing how to best manage wastewater from the town as it grows. The required approach to treatment, reuse and sizing is discussed

- Irrigation of fodder crop (Options 1 and 2)
- Domestic reuse for non-potable (Options 3 and 5)
- Domestic reuse including potable (Options 4 and 6)

The release of treated sewage into downstream waterways is not an acceptable approach, due to the environmental sustainability objectives for the development at Michelago and also because town water supplies for Canberra and Queanbeyan are extracted from the Murrumbidgee River in locations downstream. This therefore requires the effluent from the wastewater treatment plant to be beneficially reused in some form and not simply discharged to the downstream environment.

3.7.1 Wastewater generation

Table 3-4 below summarises the lower and upper bounds for Average Dry Weather Flow (ADWF) for each growth scenario.

Table 3-4 ADWF flow estimates

Growth scenario	Low	Medium	High
Population	4,000	8,000	12,000
ADWF - lower bound (ML/day) ¹	0.6	1.2	1.8
ADWF - upper bound (ML/day) ²	0.8	1.6	2.4

Notes:

- 1. 150 L/EP/day
- 2. 200 L/EP/day

Peak Wet Weather Flows (PWWF)

During wet weather, flows can increase significantly due to inflow from illegal connections and infiltration from manholes and leaking/broken sewer pipes. The peaking factor on dry weather flow can vary significantly depending on the age, configuration and ongoing level of effort attributed to identifying sources of inflow and infiltration. Typically, gravity sewerage system will have peak wet weather flows in the order 4-6 times ADWF with potential for rates to increase as the system ages. For this high level concept design, a peaking factor of 4 has been used for the estimation the peak wet weather flows. This assumes new sewerage infrastructure constructed with modern materials to appropriate quality standards.

3.7.2 Sewage treatment plant location

Ideally, sewage treatment plants (STP) are located at the lowest part of the catchment and away from the town to avoid odour issues/complaints. For Michelago, the STP is proposed to be located in an open area bounded by the Monaro Highway on the west and the Michelago creek on the north.

The west of Monaro Highway was also considered however this is not favoured on account of site constraints and the difficulties of crossing multiple watercourses and flood prone land.

The summary figures in Section 6 show the proposed location of the STP.

3.7.3 Treatment for crop irrigation (Options 1, 2 and 3)

The most simple and conventional approach for relatively small sewer systems is to collect and treat wastewater to achieve a reduction in Biological Oxygen Demand (BOD), suspended solids and pathogens (e.g. *E. coli*) so that the water can be safely applied to land to grow fodder crops (e.g. hay, lucerne etc) or timber.

Adopted Treatment Process

Costing has included a simple mechanical treatment secondary process to limit footprint. Example processes would include oxidation ditch, IDEA, or conventional wastewater treatment.

Costing is based on IDEA due to its ability to reliably achieve good quality secondary effluent and manage PWWF through the use of a modified operational cycle.

An indicative treatment process schematic for crop irrigation is shown in Figure 3-3.

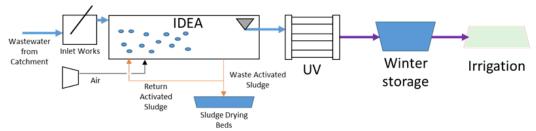


Figure 3-3 Schematic of indicative treatment process for crop irrigation

Alternate Treatment Process

If space allows and suitable sites are available, a lagoon-based treatment plant is likely to be a more cost effective approach, with treatment achieved via the natural processes that occur within facultative lagoons followed by maturation lagoons. The key benefit of a lagoon-based plant is their low cost (where a suitable site exists) and operational simplicity.

The drawback is primarily siting and having suitable clays for construction. Further, the buffers to housing for odour are likely to be greater than for the equivalent mechanical plant.

Winter Storage

The water balance has determined the size of winter storage required for each option that involves irrigation to land (includes Option 3, which has an excess of wastewater in the water balance).

The winter storage is required to provide seasonal balancing of secondary wastewater, providing holding capacity for wastewater generated during winter, that is then irrigated during summer when ground and climatic conditions allow.

The size of the winter storage will be influenced by the local climatic conditions and nature of the soils being irrigated and crops grown.

Irrigation

Irrigation is typically achieved by the use of an overhead travelling irrigator (e.g. centre-pivot or travelling type) or by fixed sprays. The preferred approach is determined by local conditions in particular the sustainable application rates of the local soils and the crops being grown.

The allowable irrigation rate will determine the areas that is required for sustainable irrigation. The application rate (and crop selection) needs to consider the sustainable hydraulic application of the soil (to prevent water logging) as well as the allowable rate of application of salt and nutrients. Crops will assist in taking up nutrients, so crop selection is intrinsically linked to the required infrastructure and sizing.

A land capability assessment (LCA) that includes water balance modelling and soil chemistry analysis is required to determine the optimum application rates, crop selection, and irrigation sizing.

The irrigation area assumed for Options 1 and 2 is 150 ha and 55 ha for Option 3.

3.7.4 Treatment for fit for purpose non-potable reuse (Options 3 and 5)

Treatment for non-potable reuse in the household needs to achieve a very high level of pathogen reduction to minimise health risk associated with accidental/inadvertent ingestion and potential erroneous cross connection.

Adopted Treatment Process

For non-potable domestic reuse the following treatment train has been adopted:

- Wastewater treatment with a membrane bioreactor (MBR)
 - This achieves a high quality treated wastewater, with the biological treatment and membrane filtration to produce a tertiary (filtered) wastewater.
 - The process achieves good pathogen reduction via membrane filtration.
 - A coagulant can be added to provide phosphorus removal also if required.
- Disinfection with UV and chlorine.
 - Multiple disinfection barriers are provided to achieve the required pathogen log reduction for all pathogen types.

An indicative treatment process schematic for in-house non-potable recycling is shown in Figure 3-4.

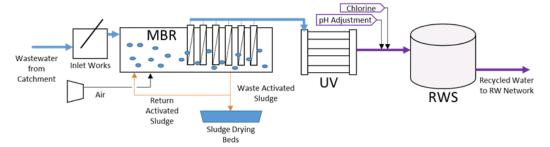


Figure 3-4 Schematic of indicative treatment process for in-house nonpotable recycling

Distribution

A dedicated distribution network is required for supplying the recycled water to houses. This is demarked by the use of purple pipes in the reticulation and in houses to alert users to recycled water, and as a warning not to drink.

3.7.5 Treatment for direct potable reuse (Options 4 and 6)

Treatment for potable use has few precedents in Australia, and in many jurisdictions is explicitly against policy. Presently, potable reuse is not covered by the ADWG or Australian Guideline for Water Recycling (AGWR).

Potable reuse does present an excellent opportunity to develop a truly climate independent water source that can supplement conventional surface water supplies. However due to the risk profile of the source and the few installations operating around the world, costing is difficult and may be unreliable. Further development of these options should involve engagement with the appropriate regulator so that the treatment train and other controls can be suitably developed.

The concept is to collect treat wastewater from the Michelago urban area and supply back to the potable system.

- For supply from the Murrumbidgee River this is via the proposed off-stream storage for subsequent treatment at the WTP.
- For supply from Googong WTP this is to the treated water balancing tank.

Both of these options would likely be considered Direct Potable Reuse (DPR) as they do not involve releasing the treated wastewater back into the natural environment (e.g. discharge to a waterway for downstream abstraction or injection into a drinking water aquifer).

Adopted Treatment Process

To manage risks associated with pathogens in the wastewater, up to 12 log reduction of pathogens is required to reach a level equivalent to drinking water. Further, other contaminants in the wastewater such as chemicals and pharmaceuticals need to be removed. The proposed wastewater catchment is domestic, meaning there are no industrial inputs expected. Council will need to limit industrial uses through the development approval and trade waste licensing systems.

Wastewater Treatment

An MBR wastewater treatment process as used for fit-for-purpose non potable recycling is adopted to provide the initial wastewater treatment and filtration.

Further treatment via an advanced water treatment plant (AWTP) would be required.

Advanced Water Treatment

Further treatment is required to provide additional pathogen log reduction as well as to remove chemical contaminants from the wastewater. Typical process trains for potable reuse involve:

- Membrane filtration (included in MBR treatment, above)
- Oxidation
 - Oxidation is required to break down organic molecules (including chemicals) and can also achieve a pathogen reduction.
 - Typical processes involve advanced oxidation or ozonation
 - Advanced oxidation includes high energy UV coupled with either chlorine or peroxide to form free radicals for destruction of organic molecules.
 - Ozonation doses ozone into the water which acts as a strong oxidant to break down organic molecules.
 - Filtration using activated carbon may be required to remove the broken down organics post oxidation.
- Reverse Osmosis (RO)
 - RO achieves high removal of dissolved constituents including chemials and salt.
- · Disinfection with UV and chlorine

For surface water supply from the Murrumbidgee, water is supplied back to the off-stream storage, blended with surface water and treated in the WTP.

For treated water supply from Googong WTP, additional treatment may be needed prior to reintroduction to supply as there is no WTP process or residence time in the off-stream storage.

An indicative treatment process schematic for potable recycling is shown in Figure 3-5.

Figure 3-5 Schematic of indicative treatment process for potable recycling

Need for monitoring and verification

A high level of process monitoring and verification is required for a potable reuse scheme. This includes implementation of HACCP principles and process interlocks to prevent supply of water that has not been adequately treated.

As a result of the complex nature of the process and the high level of compliance required, the overall treatment process will be less reliable than a typical wastewater or water treatment process.

3.8 Recycled water scheme

Table 3-5 summarises the recycled water system for Michelago based on a population of 12,000.

De-chlorination would be required for emergency discharge to waterways.

Table 3-5 Key elements of the Michelago recycled water system based on 12,000 population

End use	Description
Crop irrigation (Options 1 and 2)	Winter storage – 150 ML
Domestic reuse for non-	Winter storage – 25 ML (Option 3 only)
potable (Options 3 and 5)	 5 km long of 200 mm ID recycled water (or purple) pipeline from sewage treatment plant to the houses
	 Recycled water storage tank sized for 1-day storage of PWWF
	Recycled water pump station sized based on PWWF
Domestic reuse including potable (Options 4 and 6)	 Recycled water storage tank sized for 1-day storage of PWWF
	Recycled water pump station sized based on PWWF
	For supply from the Murrumbidgee River,
	 1 km long of 200 mm ID pipeline from wastewater treatment plant to the proposed off-stream storage for subsequent treatment at the WTP.

End use	Description
	For supply from Googong WTP,
	 5 km long of 200 mm ID pipeline from wastewater treatment plant to the treated water balancing tank.

4. High level cost estimate of options

4.1 Cost estimate methodology and assumptions

Cost estimates have been developed for each of the integrated water options.

Rainwater tanks had been costed and included to reflect the whole of community cost of servicing approach. The costing has not included apportioning costs at this point, e.g. cost of rainwater tanks borne by households, reticulation by developers etc.

The cost estimates presented in this section are based on a population of 12,000.

4.1.1 Capital cost assumptions

Reticulation

- Reticulation costs (i.e. potable water, sewerage, dual pipe, etc) have been developed from the number of houses within the precinct and applying a per house cost for the reticulation type.
- The reticulation rates have been developed from a GIS based analysis that examined the reticulation in a similar towns and estimated the cost based on typical engineering rates, breaking the final cost down to a per house basis.

2. Pipelines

- Preliminary sizing of connecting pipelines has been based on the required flow rate and velocity to obtain a pipe diameter
 - Velocity 1.5 m/s
 - Potable water network peak day demand
 - Sewerage network peak wet weather flow (gravity and rising main)
 - Recycled water network peak day demand
- Pipe lengths are based on a GIS analysis of likely connection points both within and outside the precinct, following likely corridors along existing easements and roadways.
- Costs have been calculated based on per metre pipe rates for the given pipe size over the identified length.
- A full potable backup has been allowed in the cost estimate. Although the water balance allows the potable system to be made smaller, in reality there is a need for potable backup due to the following:
 - Rainwater tanks will run dry at times and those demands will need to be met from the potable network.
 - · Reliability of recycled water supply
 - Staging in early days when wastewater flows might be insufficient to operate recycling process properly

Treatment Plants

- Cost curves for treatment plants have been applied using the design flows (e.g. peak
 day for water treatment plants, average dry weather flow for wastewater treatment
 plant) from the water balance to estimate the required overall plant cost.
- Treatment plants used are as follows:
 - Water treatment plant (WTP, DAFF + UV as per other Murrumbidgee towns)
 (Murrumbidgee River option only)
 - Re-chlorination facility (Googong WTP option only)

- Conventional WastewaterTreatment Plant (for Options 1, 2 and 3, irrigation to land)
- Membrane Bioreactor plant (MBR, for Options 3 and 5 i.e. non-potable reuse)
- Advanced WTP (AWTP, for Options 4 and 6 i.e. potable reuse)

Pump stations

- Pump station requirements have been estimated using typical pipe friction loss values (5 m/km) over the relevant pipeline lengths and an adopted static lift for the particular application and location.
- Once the pump station size (as measured in flow capacity and kW) is understood, cost curves are applied to determine capital costs.
- Pump stations used are as follows:
 - River Intake Pump Station (Murrumbidgee River option only)
 - Googong WTP to re-chlorination facility (Googong WTP option only)
 - Sewage Pump Station
 - Recycled Water to storage tank

5. Tanks and Storages

- Tanks and storages are sized based on meeting the design requirements (e.g. one peak day of storage) and the application of cost curves.
- Tanks and storages used are as follows:
 - Potable Network Storage Tank
 - Recycled Network Storage Tank
 - Rainwater Tanks

4.1.2 Annual cost assumptions

1. Pumping costs

- Pump sizes estimated for the purpose of capital costs are also used to estimate energy costs associated with operation of the pumps.
 - Pump operation 22 hours per day
 - Electricity cost 0.20 / kWh

2. Water usage rates

- A unit cost is applied to water consumption based on the water balance to determine the annual cost of supply from the potable water network. This price includes allowance for all elements of the water price, including wider network infrastructure upgrades and refurbishments.
 - Murrumbidgee River: \$8.8 /ML
 - Googong WTP option: \$1,700/ML
- 3. Irrigation and treatment plant maintenance cost
 - Where water or wastewater is treated locally, a unit cost is developed based on an overhead cost for plant operation (covering maintenance, staffing etc.) and a unit cost for water treated (covering power, chemicals etc.).

4. Rainwater tank costs

 Annual costs have been developed on a per house basis to cover typical annual expenses related to pump operation and maintenance with a rainwater tank system.

4.2 Capital cost estimates

The capital cost estimate including breakdown of the cost for each option is shown in Figure 4-1 for both the Murrumbidgee River and Googong WTP options.

Murrumbidgee River water source option

Options 5 and 6 has the highest CAPEX at \$108 M. About 27% of the CAPEX in Option 5 is in the reticulation, which included an additional recycled water reticulation for non-potable use, as per Option 3. As for Option 6, about 31% of the CAPEX is in water/wastewater treatment which included an advanced water treatment plant of the recycled water for potable use, and another 31% on collection and storage.

Options 3 and 4 has the lowest CAPEX as these options do not have rainwater tanks which is approximately \$20 M for non-potable use and approximately \$26 M for potable use.

Googong WTP water source option

Options 5 and 6 still has the highest CAPEX at \$136 M and \$143 M, respectively. About 40-45% of the CAPEX in Options 3 to 6 is in the pipelines to and from the treatment plants, which also includes the recycled water pipeline from the treatment plant to the chlorination tank, approx. 6.5 km long (estimated at approx. \$4.5 M). Options 1 and 2 do not have the recycled water pipeline hence its pipeline cost is lower by \$4.5 M (pipeline cost at about \$50 M).

Options 3 and 4 has the lowest CAPEX as these options do not have rainwater tanks which is approximately \$20 M for non-potable use and approximately \$26 M for potable use.

4.3 Annual cost estimates

The annual cost estimate including breakdown of the cost for each option is shown in Figure 4-2 for both the Murrumbidgee River and Googong WTP options.

Murrumbidgee River water source option

Options 4 and 6 has the highest annual OPEX at about \$2.4 M due to the advanced water treatment of the recycled water for potable use. The rest of the options have similar annual OPEX at about \$1.5 M.

Googong WTP water source option

Option 4 has the highest annual OPEX at about $2.8 \, \text{M}$ due to potable water supply charge from Icon Water. The rest of the options have annual OPEX ranging from about $1.7 \, \text{M}$ to $2.4 \, \text{M}$.

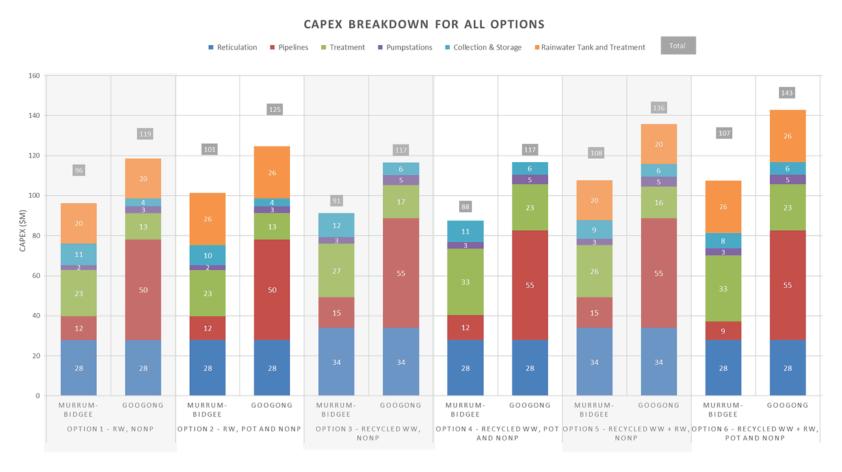


Figure 4-1 CAPEX breakdown

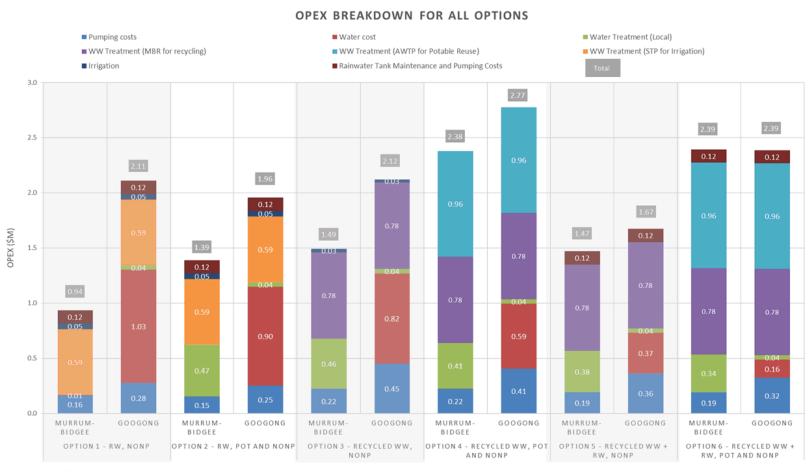


Figure 4-2 OPEX breakdown

5. Non-financial assessment

The water source and integrated water options identified in this report have been assessed, at a high level, against the following non-financial criteria:

Operations

This covers the operability of the water and wastewater facilities and network including ease of maintenance. It is inherently associated with OPEX but focuses on the non-cost aspects of operating the facilities and network.

Sustainability

Climate resilience through the reuse of wastewater is one of the main drivers for the wastewater reticulation. Other sustainability considerations may include energy use, bushfire resilience and community acceptance.

Constructability

This covers the constructability of options and is focused on the complexity of construction. It is inherently associated with CAPEX but focuses on the non-cost aspects of undertaking construction works such as how complex the infrastructure is to manufacture and construct.

Resilience / Redundancy

Consideration of resilience and redundancy for each option will enable the facilities and reticulation network to account for the potential secondary benefit of a more robust and resilient system.

Regulatory approval

Section 60 approval from the NSW Department of Planning, Industry and Environment will be required for the design and construction of any major water and wastewater infrastructure. Reuse of treated wastewater will attract further scrutiny due to the potential health risks and therefore require more effort and resources to obtain approval.

5.1 Water source assessment

As all options can source its water from either the Murrumbidgee River or be supplied by the Googong WTP, the assessment of these two options has been conducted independent of the water and wastewater infrastructure options. The two water sources have been assessed against the non-financial criteria and are presented in Table 5-1.

Table 5-1 Non-financial assessment of water sources

Non-financial criteria	Murrumbidgee	Googong	Comments
Low operational complexity	~	**	Googong will be less complex as treatment required is only rechlorination
Low energy consumption	~	X	Pumping from Googong is energy intensive
Low raw material usage	X	X	Similar as Googong requires 40km pipeline while Murrumbidgee requires offtake and water treatment plant infrastructure
High climate change resilience (e.g. drought, bushfire)	X	√ ?	Googong may be a more resilient source due to Icon Water's raw water network and large capacity
Low pollution/environmental impact	X	X ?	Murrumbidgee require an offtake infrastructure on banks of the river and the Googong pipeline may traverse some sensitive areas
High community acceptance	~	~	Both accepted practices. Queanbeyan-Palerang Regional Council currently buys treated water from Icon Water
Community affordability	~	X ?	Operating cost for Googong will be passed onto the customer and Icon Water may increase their water prices in the future
Low construction complexity	~	~	Conventional infrastructure
Accommodate future increase in capacity	√ ?	~	Googong water, in terms of volume, is more secure than the Murrumbidgee
Flexibility to accommodate uncertain future	X	X	Neither source is very resilient. Water allocation from the Murrumbidgee is uncertain and Icon Water may cap the amount of water supplied to Council
Low level of regulatory approval requirements	X	X	May be difficult to obtain water allocation for the Murrumbidgee River. Cross border negotiations will be required for the Googong option
Low level of Council resources to manage system	~	**	Less treatment required for Googong

Legend
Operations
Sustainability
Constructability
Resilience / Redundancy
Regulatory approval

Y Y	Strongly Positive
~	Positive
√ ?	Uncertain (Positive)
ХХ	Strongly Negative
X	Negative
X?	Uncertain (Negative)

Based on the above high-level assessment, there does not appear to be a clear front runner, though Googong is slightly more positive with low operational complexity and therefore lower level of Council resources required.

The main uncertainties around the sources are:

- Though nominally secure, water availability from Googong for regions outside of Canberra may not be Icon Water's priority
- Though the long pipeline from Googong is expected to be constructed within existing easements, it is likely that it will traverse some environmentally sensitive areas that will need to be managed
- Operating costs for water sourced from Googong WTP is generally higher and Council will need to decide how that cost is recovered in a manner that meets customer expectations
- The reliability of the river flow needs to be investigated further and the ability to obtain water allocation for the Murrumbidgee River may be problematic as the river is currently fully allocated
- Potentially complex and lengthy negotiations to access water from Icon Water.

5.2 IWM assessment

The six IWM options have also been assessed against the non-financial criteria. Again, these options were:

- Option 1 town water connection with 10 kL rainwater tank on each house to supply non
 potable demand
- Option 2 town water connection with 10 kL rainwater tank on each house to supply potable and non-potable demand
- Option 3 town water connection and separate treated wastewater connection to each house to supply non-potable demand
- Option 4 town water connection (includes recycled water) to each house to supply potable and non-potable demand
- Option 5 town water connection and separate treated wastewater connection and 10 kL rainwater tank on each house to supply non-potable demand
- Option 6 town water connection (includes recycled water) and 10 kL rainwater tank on each house to supply potable and non-potable demand.

Assessment comments for each option can be found in Section 6, but a summary of all options is presented below in Table 5-2.

Non-financial criteria **IWM Option** 4 5 6 Low operational complexity Х X Low energy consumption X Low raw material usage High climate change resilience (e.g. drought, bushfire) Low pollution High community acceptance Community affordability Х XX Low construction complexity X ΧХ XX Accommodate future increase in capacity Flexibility to accommodate uncertain future х Low level of regulatory approval ХX ХX requirements Low level of Council resources XX XX to manage system

Table 5-2 Non-financial assessment of IWM options

Legend
Operations
Sustainability
Constructability
Resilience / Redundancy
Regulatory approval

~ ~ ~	Strongly Positive
~	Positive
√ ?	Uncertain (Positive)
XX	Strongly Negative
X	Negative
X ?	Uncertain (Negative)

Based on the above high-level assessment, options 1 and 2 appear to be the most favourable ones, with options 3 and 5 (recycled water for non-potable use only) slightly ahead of the other recycled water options. The main reasons for the negative assessment of the recycled water options are:

- Complexity of the treatment and network, and therefore expense to Council with flow-on effects to the customer
- High energy consumption
- Complexity of the recycled water management and regulatory requirements
- · Current negative perception of the use of recycled water for potable use.

The breakdown of each type of water use for each option is shown in Figure 5-1 as a percentage of total water used per day. Predictably, the use of water from town water connection reduces as more alternative water sources are offered. Note that, this assumes there is a preference to use the alterative water first, prior to using town water for the uses stipulated in each option. In reality, if there is an option to use town water, it is possible that residents may choose to use this rather than the alternative sources, thereby negating the benefits.

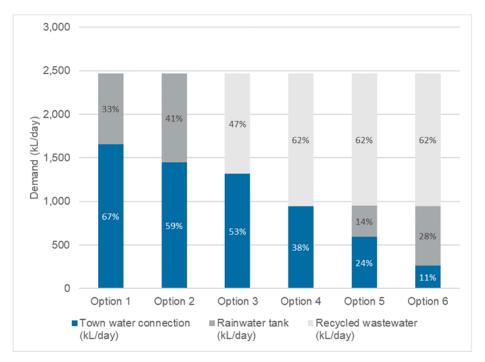


Figure 5-1 Breakdown of volume of water use for each option

5.1 Risk and opportunities

Although the criteria stated in the previous section assists Council in deciding on a direction, it is also useful to consider and be aware of the risks and opportunities of each option. The following table (Table 5-3) captures a number of the risks and opportunities for the water sources, as well as for each IWM option. These will allow Council to weigh up the impact of choosing an option, and manage and mitigate the risks according to Council's risk appetite.

This page has been left intentionally blank

Table 5-3 Risk and opportunities for each option

Option	Risks	Opportunities		
Water Source				
Googong	 Council is dependent on Icon Water for supply and water quality. May not be able to negotiate an agreement to supply water with Icon Water. 	Water treatment complexity is reduced.		
Murrumbidgee	 Council may not be able to purchase sufficient water from the Murrumbidgee system to support the growth. Council is dependent on availability of water from the Murrumbidgee regardless of allocation. 	Water source is close by and minimises pumping requirements.		
IWM Option				
1 - town water connection with 10 kL rainwater tank on each house to supply non potable demand	 Rainwater tanks unable to meet non-potable demand in dry periods and therefore there is a need for potable backup. Risks related to ongoing operation, maintenance and assurance for household treatment systems. Residents may choose to use reticulated potable water rather than rainwater, thereby negating the benefits of the rainwater tank for potable use. Council may not be able to find suitable land for effluent irrigation 	 Rainwater for non-potable use is consistent with fit for purpose approach. Reduces overall take from environment. Reduces urban runoff and changes to overall hydrology of development. Provides valuable resource (irrigation water) for agricultural use. 		
2 - town water connection with 10 kL rainwater tank on each house to supply potable and non-potable demand	 Rainwater tanks unable to meet non-potable demand in dry periods and therefore there is a need for potable backup. Risks related to ongoing operation, maintenance and assurance for household treatment systems. Rainwater use for potable likely to require further treatment to meet health requirements (household treatment costed). Residents may choose to use reticulated potable water rather than rainwater, thereby negating the benefits of the rainwater tank for potable use. Council may not be able to find suitable land for effluent irrigation. 	 Rainwater for non-potable use is consistent with fit for purpose approach. Reduces overall take from environment. Reduces urban runoff and changes to overall hydrology of development. Provides valuable resource (irrigation water) for agricultural use. 		
3 - town water connection and separate treated wastewater connection to each house to supply non-potable demand	 Recycled water used for non-potable at lot scale requires high degree of assurance related to preventing cross connections and maintaining treatment standards. Need for ongoing regulator reporting/oversight. Residents may choose to use reticulated potable water rather than rainwater, thereby negating the benefits of the rainwater tank for potable use. Council may not be able to find suitable land for effluent irrigation. 	 Reduces overall take from environment. Recycled for non-potable use is consistent with fit for purpose approach. Recycled water is rainfall independent supply of alternative water. Prevents/minimises any discharge to environment. Co-locate recycled water tank with WTP for potable backup. Opportunity for future augmentation of potable supply with recycled water. Provides valuable resource (irrigation water) for agricultural use. 		
4 - town water connection (includes recycled water) to each house to supply potable and non-potable demand	 Direct potable reuse untested with regulator and without Australian precedent. Need for multiple treatment barriers to achieve high level of pathogen reduction (typically 12 log). Complex treatment process and controls. Treatment will produce additional waste streams including saline brine. 	 If deployed, opportunity for council/community to be at leading edge of discussion in Australia (comes with own risks). Opportunity to Stage with Option 1 or 2 (i.e. without recycled water reticulation as sunk cost). Opportunity to Stage with Option 3 or 5 (i.e. recycled water reticulation becomes sunk cost/stranded asset). 		

Option	Risks	Opportunities
	 Emerging contaminants may present as yet unknown treatment challenges. Community acceptance of direct potable reuse not expected to be favourable without (potentially lengthy) engagement and education campaign. Residents may choose to use reticulated potable water rather than rainwater, thereby negating the benefits of the rainwater tank for potable use. 	
5 - town water connection and separate treated wastewater connection and 10 kL rainwater tank on each house to supply non-potable demand	 Rainwater tanks unable to meet non-potable demand in dry periods and therefore there is a need for potable backup. Risks related to ongoing operation, maintenance and assurance for household treatment systems. Recycled water used for non-potable at lot scale requires high degree of assurance related to preventing cross connections and maintaining treatment standards. Need for ongoing regulator reporting/oversight. Residents may choose to use reticulated potable water rather than rainwater, thereby negating the benefits of the rainwater tank for potable use. 	 Rainwater for non-potable use is consistent with fit for purpose approach. Reduces overall take from environment. Reduces urban runoff and changes to overall hydrology of development. Reduces overall take from environment. Recycled for non-potable use is consistent with fit for purpose approach. Recycled water is rainfall independent supply of alternative water. Prevents/minimises any discharge to environment. Co-locate recycled water tank with WTP for potable backup. Opportunity for future augmentation of potable supply with recycled water.
6 - town water connection (includes recycled water) and 10 kL rainwater tank on each house to supply potable and non-potable demand	 Rainwater tanks unable to meet non-potable demand in dry periods and therefore there is a need for potable backup. Risks related to ongoing operation, maintenance and assurance for household treatment systems. Rainwater use for potable likely to require further treatment to meet health requirements (household treatment costed). Direct potable reuse untested with regulator and without Australian precedent. Need for multiple treatment barriers to achieve high level of pathogen reduction (typically 12 log). Treatment will produce additional waste streams including saline brine. Emerging contaminants may present as yet unknown treatment challenges. Community acceptance of direct potable reuse not expected to be favourable without (potentially lengthy) engagement and education campaign. Residents may choose to use reticulated potable water rather than rainwater, thereby negating the benefits of the rainwater tank for potable use. 	 Rainwater for non-potable use is consistent with fit for purpose approach. Reduces overall take from environment. Reduces urban runoff and changes to overall hydrology of development. If deployed, opportunity for council/community to be at leading edge of discussion in Australia (comes with own risks). Opportunity to Stage with Option 1 or 2 (i.e. without recycled water reticulation as sunk cost). Opportunity to Stage with Option 3 or 5 (i.e. recycled water reticulation becomes sunk cost/stranded asset).

6. Summary of IWM options

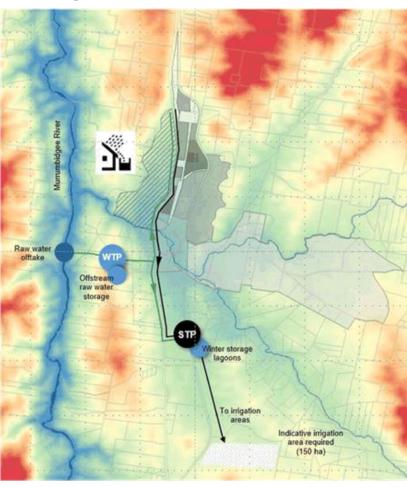
The figures in the following pages present the summary of the six IWM options considered, which includes the following:

- Option description
- · Infrastructure proposed for each option including indicative sizes
- Schematic showing the location of key infrastructure
- Assessment of the option based on agreed criteria
- CAPEX and OPEX estimates

This page has been left intentionally blank

Indicative irrigation area require (150 ha)

Murrumbidgee River water source





Sewage treatment plant











 Trunk sewer		
 Water pipeline	(Murrumbic	lgee)
 Water pipeline		

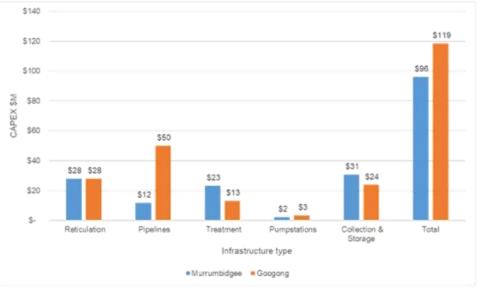
Non-financial criteria	Tick/Cross	Comment
Low operational complexity	~ ~	Least complex of all options
Low energy consumption	12	Less WW treatment energy costs, but potentially higher raw water pumping costs
Low raw material usage	~ ~ ~	Options 1 & 2 are the least material resource intensive of all options
High climate change resilience (e.g. drought, bushfire)	×	Mainly relies on a single water source, with no recycling
Low pollution	X?	Though water is used for irrigation, some effluent may still be discharged to creeks
High community acceptance	~ ~	Conventional approach
Community affordability		Conventional approach though existing residents may not want to pay for new services
Low construction complexity	V V	Conventional approach
Accommodate future increase in capacity	~	Treatment can be designed to be staged and trunk mains have been assumed to accommodate 12k EP
Flexibility to accommodate uncertain future	X	Retrofitting a third pipe if required will be expensive
Low level of regulatory approval requirements	~ ~	Conventional approach
Low level of Council resources to manage system	44	Conventional approach

Legend	V V	Strongly Positive
Operations	~	Positive
Sustainability	√ ?	Uncertain (Positive)
Constructability	XX	Strongly Negative
Resilience / Redundancy	X	Negative
Regulatory approval	X.3	Uncertain (Negative)

Option 1

Town water connection with 10 kL rainwater tank on each house to supply non potable demand

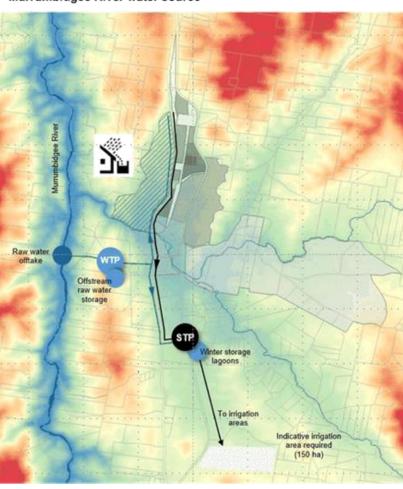
- . 10kL rainwater tank at each household to meet BASIX requirements for all new residential dwellings in NSW for non-potable use only.
- For the Murrumbidgee River option, there will be an offtake where the raw water is pumped to an off-stream storage lagoon or dam, which will then be treated in a WTP. This WTP is sized to provide full potable backup.
- · For treated water from Googong, a rechlorination facility is required to add sufficient chlorine to achieve a chlorine residual in the network.
- Potable water reticulation sized for full potable backup.
- Gravity sewer to a STP where it is treated to a quality sufficient for broadacre irrigation.
- Winter storage lagoon.
- · Emergency discharge will be via a local creek if required and permitted.





Indicative irrigation area required (150 ha)

Murrumbidgee River water source





Sewage treatment plant



Rechlorination facility



Trunk sewer Water pipeline (Murrumbidgee) - - - Water pipeline (Googong WTP)

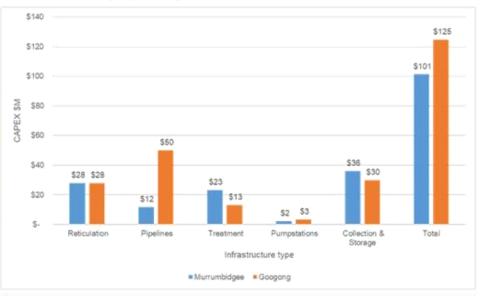
Non-financial criteria	Tick/Cross	Comment
Low operational complexity	44	All technology is tried and tested and will be accepted by approving authorities
Low energy consumption	¥7	Less WW treatment energy costs, but potentially higher raw water pumping costs
Low raw material usage	~ ~	Options 1 & 2 are the least material resource intensive of all options
High climate change resilience (e.g. drought, bushfire)	Х	Mainly relies on a single water source, with no recycling
Low pollution	X?	Though water is used for irrigation, some effluent may still be discharged to creeks
High community acceptance ✓ ✓		Conventional approach - though potable use of rainwater may not be as desirable for the community
Community affordability		Some in home treatment required and existing residents may not want to pay for new services
Low construction complexity	~ ~ ~	Conventional approach
Accommodate future increase in capacity	~	Treatment can be designed to be staged and trunk mains have been assumed to accommodate 12k EP
Flexibility to accommodate uncertain future	X	Retrofitting a third pipe if required will be expensive
Low level of regulatory approval requirements	44	Conventional approach, though rainwater for potable is not a standard approach for regulators
Low level of Council resources to manage system	44	Conventional approach, though some resources may be required to manage rainwater potable use

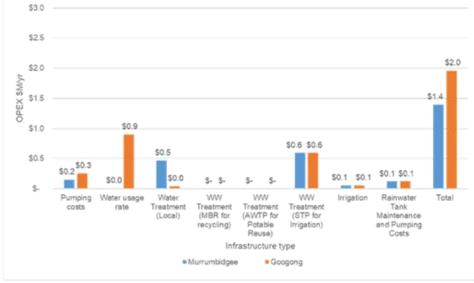
Legend	V V	Strongly Positive
Operations	~	Positive
Sustainability	47	Uncertain (Positive)
Constructability	XX	Strongly Negative
Resilience / Redundancy	×	Negative
Regulatory approval	X?	Uncertain (Negative)

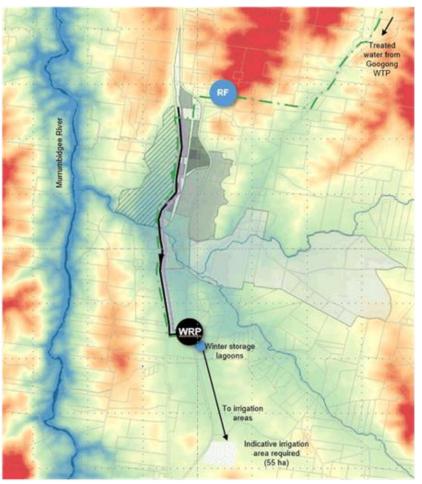
Option 2

Town water connection with 10 kL rainwater tank on each house to supply potable and non-potable demand

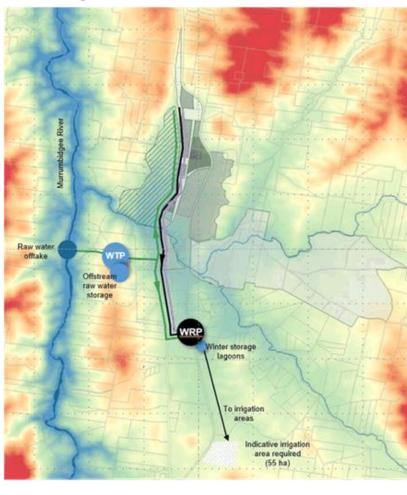
- 10kL rainwater tank at each household to meet BASIX requirements for all new residential dwellings in NSW for both potable and non-potable use.
- · For the Murrumbidgee River option, there will be an offtake where the raw water is pumped to an off-stream storage lagoon or dam, which will then be treated in a WTP. This WTP is sized to provide full potable backup.
- · For treated water from Googong, a rechlorination facility is required to add sufficient chlorine to achieve a chlorine residual in the network.
- Potable water reticulation sized for full potable backup.
- Gravity sewer to a STP where it is treated to a quality sufficient for broadacre irrigation.
- · Winter storage lagoon.
- · Emergency discharge will be via a local creek if required and permitted.







Murrumbidgee River water source



WTP	Water treatment plant	RF	Rechlorination facility	Storage	_	Trunk sewer Water pipeline (Murrumbidgee)
WRP	Water recycling plant			Offtake		Water pipeline (Googong WTP) Treated effluent for non-potable use

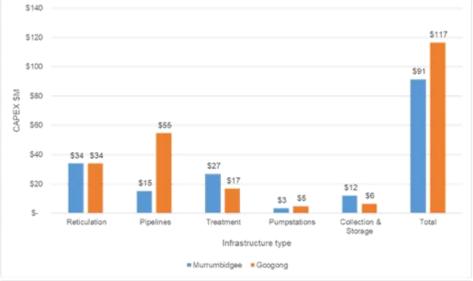
Non-financial criteria	Tick/Cross	Comment
Low operational complexity	~	All technology is tried and tested and will be accepted by approving authorities
Low energy consumption	X	Increased energy due to UV and MBR WW treatment
Low raw material usage	4	Additional recycled water network required
High climate change resilience (e.g. drought, bushfire)	~	Raw water supply is reduced due to WW recycling
Low pollution	~	Increased use for recycled water, less potential for emergency discharged to environment
High community acceptance	~	Recycled water schemes are slowly becoming more commonplace
Community affordability	Х	The additional treatment will likely be more expensive than the conventional servicing approach
Low construction complexity	Х	WW treatment is more complex than Options 1 or 2
Accommodate future increase in capacity	4	Treatment can be designed to be staged and trunk mains have been assumed to accommodate 12k EP
Flexibility to accommodate uncertain future	*	Pipeline installed to provide recycled water, so retrofitting not required in the future
Low level of regulatory approval requirements	X	Recycled water schemes require more stringent regulatory requirements
Low level of Council resources to manage system	X	Recycled water schemes require more Council resources to meet regulatory requirements

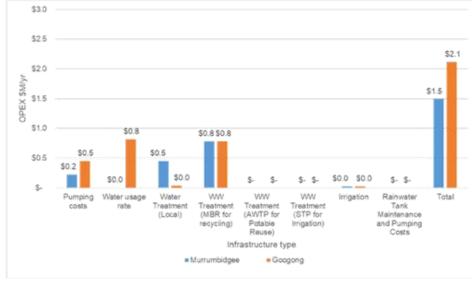
Legend	~ ~	Strongly Positive	
Operations	~	Positive	
Sustainability	¥7	Uncertain (Positive)	
Constructability	XX	Strongly Negative	
Resilience / Redundancy	Х	Negative	
Regulatory approval	X?	Uncertain (Negative)	

Option 3

Town water connection and separate treated wastewater connection to each house to supply non-potable demand

- For the Murrumbidgee River option, there will be an offtake where the raw water is pumped to an off-stream storage lagoon or dam, which will then be treated in a WTP. This WTP is sized to provide full potable backup.
- For treated water from Googong, a rechlorination facility is required to add sufficient chlorine to achieve a chlorine residual in the network.
- Potable water reticulation sized for full potable backup.
- Gravity sewer to a WRP where it is treated to a quality sufficient for nonpotable use.
- Recycled water pipeline from the WRP to supply the township.
- Winter storage lagoon (smaller than Options 1 or 2).
- . Emergency discharge will be via a local creek if required and permitted.



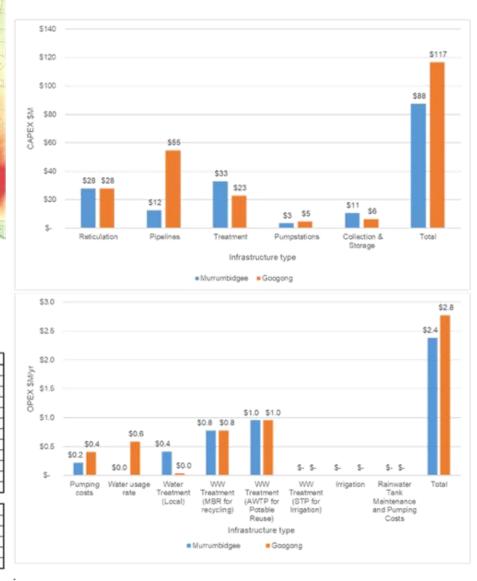


Option 4 Murrumbidgee River water source

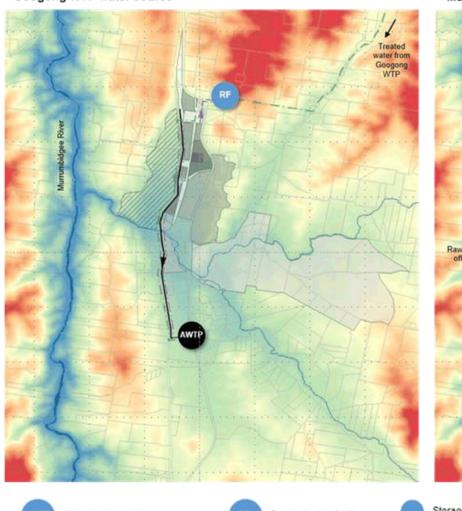
Town water connection (includes recycled water) to each house to supply potable and non-potable demand

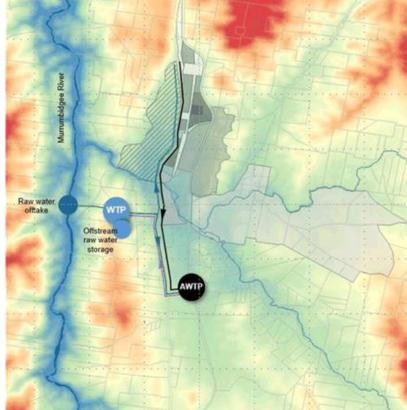
This option includes:

- For the Murrumbidgee River option, there will be an offtake where the raw water is pumped to an off-stream storage lagoon or dam, which will then be treated in a WTP. This WTP is sized to provide full potable backup.
- For treated water from Googong, a rechlorination facility is required to add sufficient chlorine to achieve a chlorine residual in the network.
- Potable water reticulation sized for full potable backup.
- Gravity sewer to an AWTP where it is treated to a quality sufficient for direct
- · Recycled water pipeline returning to either the WTP or the rechlorination facility.
- · Emergency discharge will be via a local creek if required and permitted.



Googong WTP water source





Water treatment plant

Advanced water treatment plant

Rechlorination facility

Storage

Trunk sewer Water pipeline (Murrumbidgee) Water pipeline (Googong WTP)

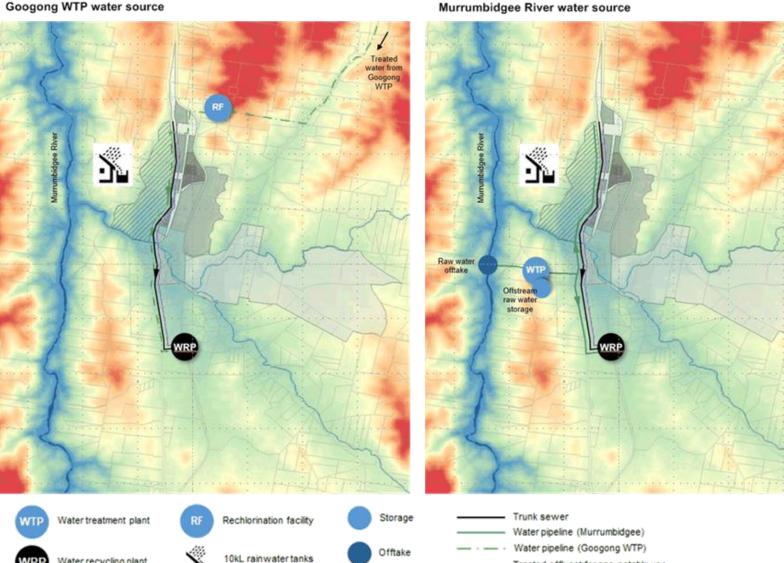
Treated effluent returning to WTP (Murrumbidgee)

Treated effluent returning to RF (Googong WTP)

Non-financial criteria	Tick/Cross	Comment
Low operational complexity	X	Significant risks with authority approval for recycled water for potable use
Low energy consumption	X	Increased energy due to UV / MBR / reverse osmosis WW treatment
Low raw material usage	~	Assume there is no need for a recycled water network (ie single pipe for mixed potable/recycled water), though more complex treatment require more resources
High climate change resilience (e.g. drought, bushfire)	44	Raw water supply is reduced due to potable reuse
Low pollution	· /	Increased use for recycled water, less potential for emergency discharged to environment
High community acceptance	X2	Negative public perception of potable reuse
Community affordability	X	More complex WW treatment likely to cost more to operate, increasing cost to community and no option to use alternative water (ie rainwater)
Low construction complexity	XX	WW treatment is more complex than Options 1, 2, 3 or 5
Accommodate future increase in capacity	~	Treatment can be designed to be staged and trunk mains have been assumed to accommodate 12k EP
Flexibility to accommodate uncertain future	X	Retrofitting a third pipe if required will be expensive
Low level of regulatory approval requirements	XX	Direct potable untested with Australian regulators
Low level of Council resources to manage system	XX	Recycled water schemes likely to require more Council resources to meet any new regulatory requirements

Legend	44	Strongly Positive
Operations	~	Positive
Operations Sustainability	47	Uncertain (Positive)
Constructability	XX	Strongly Negative
Resilience / Redundancy	X	Negative
Regulatory approval	X7	Uncertain (Negative)

Water recycling plant



Non-financial criteria	Tick/Cross	Commont
Non-linancial criteria		
Low operational complexity	~	All technology is tried and tested and will be accepted by approving authorities
Low energy consumption	X	Increased energy due to UV and MBR WW treatment
Low raw material usage	~	Additional recycled water network required
High climate change resilience (e.g. drought, bushfire)	~	Raw water supply is reduced due to WW recycling
Low pollution	~	Increased use for recycled water, less potential for emergency discharged to environment
High community acceptance	~	Recycled water schemes are slowly becoming more commonplace
Community affordability	X	The additional treatment will likely be more expensive than the conventional servicing approach
Low construction complexity	X	WW treatment is more complex than Options 1 or 2
Accommodate future increase in capacity	~	Treatment can be designed to be staged and trunk mains have been assumed to accommodate 12k EP
Flexibility to accommodate uncertain future	*	Pipeline installed to provide recycled water, so retrofitting not required in the future
Low level of regulatory approval requirements	X	Recycled water schemes require more stringent regulatory requirements
Low level of Council resources to manage system		Recycled water schemes require more Council resources to meet regulatory requirements

(non-potable)

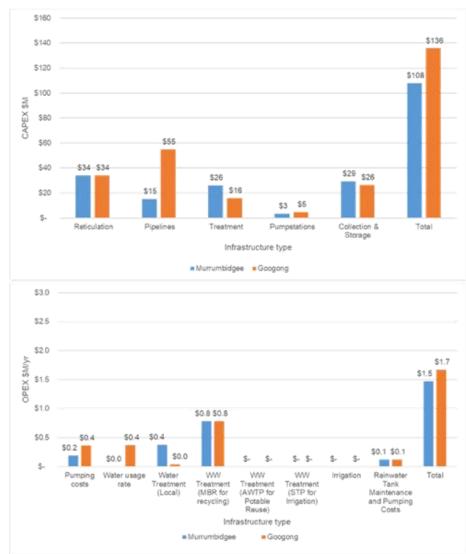
Treated effluent for non-potable use

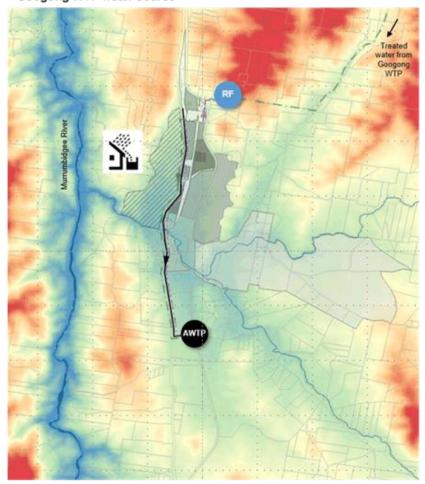
Legend	~ ~	Strongly Positive
Operations	~	Positive
Sustainability	¥2	Uncertain (Positive)
Constructability	XX	Strongly Negative
Resilience / Redundancy	X	Negative
Regulatory approval	X?	Uncertain (Negative)

Option 5

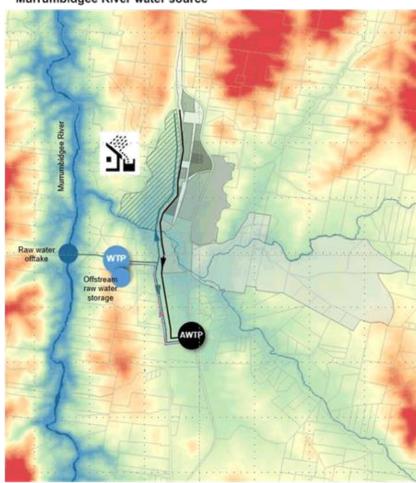
Town water connection and separate treated wastewater connection and 10 kL rainwater tank on each house to supply non-potable demand

- 10kL rainwater tank at each household to meet BASIX requirements for all new residential dwellings in NSW for non-potable use.
- · For the Murrumbidgee River option, there will be an offtake where the raw water is pumped to an off-stream storage lagoon or dam, which will then be treated in a WTP. This WTP is sized to provide full potable backup.
- · For treated water from Googong, a rechlorination facility is required to add sufficient chlorine to achieve a chlorine residual in the network.
- Potable water reticulation sized for full potable backup.
- Gravity sewer to a WRP where it is treated to a quality sufficient for broadacre
- Recycled water pipeline from the WRP to supply the township.
- Emergency discharge will be via a local creek if required and permitted.





Murrumbidgee River water source





Advanced water treatment plant





10kL rainwater tanks (non-potable & potable)







Water pipeline (Googong WTP) Treated effluent returning to WTP (Murrumbidgee) Treated effluent returning to RF (Googong WTP)

Water pipeline (Murrumbidgee)

Trunk sewer

Non-financial criteria	Tick/Cross	Comment		
Low operational complexity	X	Significant risks with authority approval for recycled water for potable use		
Low energy consumption	X	Increased energy due to UV / MBR / reverse osmosis WW treatment		
Low raw material usage	~	Assume there is no need for a recycled water network (ie single pipe for mixed potable/recycled water)		
High climate change resilience (e.g. drought, bushfire)	44	Raw water supply is reduced due to potable reuse and rainwater tanks		
Low pollution	~	Increased use for recycled water, less potential for emergency discharged to environment		
High community acceptance	X2	Negative public perception of potable reuse		
Community affordability	XX	More complex WW treatment likely to cost more to operate, increasing cost to community and additional treatment for rainwate		
Low construction complexity	XX	WW treatment is more complex than Options 1, 2, 3 or 5		
Accommodate future increase in capacity	~	Treatment can be designed to be staged and trunk mains have been assumed to accommodate 12k EP		
Flexibility to accommodate uncertain future	X	Retrofitting a third pipe if required will be expensive		
Low level of regulatory approval requirements	XX	Direct potable untested with Australian regulators		
Low level of Council resources to manage system	XX	Recycled water schemes likely to require more Council resources to meet any new regulatory requirements		

Legend	44	Strongly Positive
Operations	✓	Positive
Sustainability	43	Uncertain (Positive)
Constructability	ХX	Strongly Negative
Resilience / Redundancy	X	Negative
Regulatory approval	X?	Uncertain (Negative)

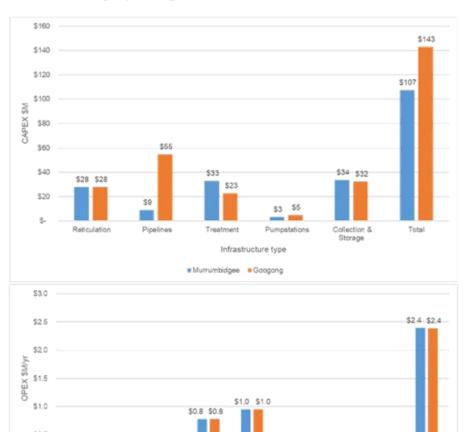
Option 6

\$0.1 \$0.1 Rainwater Tank

Town water connection (includes recycled water) and 10 kL rainwater tank on each house to supply potable and non-potable demand

This option includes:

- . 10kL rainwater tank at each household to meet BASIX requirements for all new residential dwellings in NSW for both potable and non-potable use.
- · For the Murrumbidgee River option, there will be an offtake where the raw water is pumped to an off-stream storage lagoon or dam, which will then be treated in a WTP. This WTP is sized to provide full potable backup.
- · For treated water from Googong, a rechlorination facility is required to add sufficient chlorine to achieve a chlorine residual in the network.
- Potable water reticulation sized for full potable backup.
- Gravity sewer to an AWTP where it is treated to a quality sufficient for broadacre irrigation.
- Recycled water pipeline returning to either the WTP or the rechlorination
- Emergency discharge will be via a local creek if required and permitted.



Treatment (AWTP for

Infrastructure type

■ Googong



Murrumbidgee



7. Staging approach

Michelago is proposed to be developed over a 20-year period. The infrastructure will be constructed in a staged approach to ensure that the infrastructure is correctly sized to meet the incremental level of demand. Each stage should provide capacity ahead of the demand, with the succeeding stage triggered as a certain stage reaches its capacity in response to population growth. Staging can be either growth/development-driven or strategy-driven.

7.1 Staging for growth

Unless growth forecasts are highly certain, there is likely to be a need to stage implementation of the trunk infrastructure. The aim for infrastructure staging is to achieve an efficient investment by deferring unnecessary capital expenditure whilst providing the required level of service to the community. Oversizing the infrastructure brings financial risk (especially if growth is uncertain) and can result in sub-optimal operational outcomes in the near-term.

Some staging options for the different infrastructure are as follows:

Treatment Plants

Modular components can be used, e.g. 2.5 ML/d capacity built initially with provision for a "simple" upgrade to 5 ML/d ultimately

Also, it is worth noting that where recycling is a key component, there might be a lag time until the scheme can function, as wastewater flows will be initially low, and possibly not sufficient to run a more complex system (e.g. MBR).

Storage Tanks

Adopt sites that allow for say 2 Nos. of smaller tanks to achieve the overall capacity, deferring the second tank until population/demand warrants it.

This may be beneficial in the long run by providing additional operational flexibility, e.g. allow use of a single tank in low demand periods, take one offline for cleaning/maintenance etc.

Pump stations

The wet well structure is usually sized for the ultimate capacity but smaller or reduced number of pumps are installed e.g. allow for (say) duty/standby for low population, with provision for additional pumps to provide (say) 2 no. duty/1 no. standby ultimately.

Alternatively, pumps may be upgraded by replacing motors or impellers in future, to provide for efficient operation throughout their life.

Trunk mains

Trunk mains are typically more difficult to stage and usually, the ultimate size of the trunk mains is installed upfront with some measures implemented to ensure operation of the trunk mains e.g. regular flushing of pipes due to low flow /less population.

Staging of trunk mains will also depend on the expected release of land and timeline for growth.

If using utilities easements through new areas, allow space for the duplication of mains as demand allows.

7.2 Strategy staging

This type of staging offers an opportunity to provide some guidance on, for example, how a strategy for potable reuse might be achieved from something more conventional.

In the IWM options considered, strategy staging would mean evolving/transitioning:

- Option 1 (rainwater for non-potable use) to Option 5 (rainwater and recycled wastewater for non-potable use), or
- Option 2 (rainwater for potable and non-potable use) to Option 6 (rainwater and recycled wastewater for potable and non-potable use).

Strategy staging also fits in with building community acceptance for use of recycled water, which can be implemented as follows:

- Use of conventional water supply and sewage collection networks i.e. use of potable water and discharge of treated effluent to environment
- Slowly transition to wastewater recycling. This would involve upgrading of the sewage
 treatment plant to a tertiary level of treatment (MBR) plus disinfection to say allow reuse of
 wastewater in public open space, conversion of irrigation area to recreation area etc.
- The community gets a handle on recycled water, learns what it is, "experiences it". Council builds trust.
- This then becomes an opportunity build case towards shift to potable reuse.

Key things to consider when staging for Strategy:

- · Community acceptance and affordability
- Install assets that are complimentary with some future outcome
- Plans for potential stranded/wasted assets (e.g. third pipe reticulation will be made redundant if transitioning to potable reuse).

8. Multicriteria analysis

8.1 Approach

A high level quantitative multicriterial analysis was conducted on the 13th November, 2020 with the project managers from Council and GHD. The purpose of this assessment was to quantify the positives and negatives attributes of the six options identified in the previous sections. Note that water sourced from Googong was, at this point in time, not assessed due to its CAPEX and OPEX compared to sourcing raw water from the Murrumbidgee.

The following criteria were used to assess each option:

- CAPEX this is based on the costs in Figure 4-1 and incorporates raw material use
- OPEX this is based on the costs in Figure 4-2
- Amount of surface water required this is based on the values in Figure 5-1
- Operational complexity this is related to the complexity of the treatment process relative to each option, with complexity increasing with higher level of treatment
- Construction complexity this is also related to the complexity of the treatment process, with complexity increasing with higher level of treatment
- Energy consumption this is associated with the energy use mainly at the treatment plants as there is no difference in the pumping arrangements between the options
- Climate resilience this refers to the ability of the option to supply water to Michelago in the face of climate variability
- Environmental impact this is based on the amount of waste (liquid and solid) discharged to the environment
- Community acceptance this relates to the community's level of acceptance of the different options
- Affordability this is associated with the cost of the options on the community and is related to the CAPEX and OPEX
- Flexibility this is based associated with the ability of each option to change to alternative water source if required
- Regulatory approval this is related to the extent of approval process required by the Regulator, with recycled water having more approval requirements due to its potential health risks
- Council resources required this is based on the amount of time and resources required for Council to manage the scheme

Each criterion was weighted in accordance with its importance to Council, from 1 low importance to 3 great importance. Each option was ranked from 1 to 6, with 6 being the best option and conversely, with 1 being the worst. If there were options that were considered similarly ranked, the same score was given to both. The rest of the options would then be allocated a score relative to the other options.

8.2 Results

The scores (raw and weighted) for each option against the criteria listed above can be seen in Table 8-1 and Table 8-2.

Table 8-1 Raw scores

	Weight- ing	Option 1	Option 2	Option 3	Option 4	Option 5	Option 6
CAPEX	1	4	3	5	6	1	2
OPEX	3	5	6	3	2	4	1
Amount of surface water required	1	1	2	3	4	5	6
Operational complexity	2	6	6	3	1	3	1
Construction complexity	1	6	6	3	1	3	1
Energy consumption	2	6	6	3	1	3	1
Climate resilience	2	1	1	3	6	3	6
Environment impact	3	1	1	3	6	3	6
Community acceptance	3	6	5	3	1	2	1
Affordability	3	3	3	2	1	2	1
Flexibility	1	4	3	3	2	5	1
Regulatory approval	2	3	3	2	1	2	1
Council resources	2	3	3	2	1	2	1
Total		49	48	38	33	38	29

Table 8-2 Weighted scores

	Weight- ing	Option 1	Option 2	Option 3	Option 4	Option 5	Option 6
CAPEX	1	4	3	5	6	1	2
OPEX	3	15	18	9	6	12	3
Amount of surface water required	1	1	2	3	4	5	6
Operational complexity	2	12	12	6	2	6	2
Construction complexity	1	6	6	3	1	3	1
Energy consumption	2	12	12	6	2	6	2
Climate resilience	2	2	2	6	12	6	12
Environment impact	3	3	3	9	18	9	18
Community acceptance	3	18	15	9	3	6	3
Affordability	3	9	9	6	3	6	3
Flexibility	1	4	3	3	2	5	1
Regulatory approval	2	6	6	4	2	4	2
Council resources	2	6	6	4	2	4	2
Total		98	97	73	63	73	57

It is clear that Options 1 and 2 score the highest out of all options. Looking at the scores, this is largely due to operational advantages of a simpler plant, lower energy consumption and higher community acceptance.

In order to understand what would increase the scores for the recycled water option, after some discussion, an additional criterion was included:

 Progressive reputation – this is related to Council's desire to gain a reputation as a progressive and innovative organisation.

GHD | Report for Snowy Monaro Regional Council - Michelago Water & Wastewater Infrastructure, 12527499 | 46

The scoring for *community acceptance* was also changed to reflect a community that wants to move away from the status quo and towards a more adaptive and sustainable water supply. The results of these changes are in Table 8-3 and Table 8-4 and highlighted within the blue boxes.

Table 8-3 Amended raw scores

	Weight- ing	Option 1	Option 2	Option 3	Option 4	Option 5	Option 6
CAPEX	1	4	3	5	6	1	2
OPEX	3	5	6	3	2	4	1
Amount of surface water required	1	1	2	3	4	5	6
Operational complexity	2	6	6	3	1	3	1
Construction complexity	1	6	6	3	1	3	1
Energy consumption	2	6	6	3	1	3	1
Climate resilience	2	1	1	3	6	3	6
Environment impact	3	1	1	3	6	3	6
Community acceptance	3	3	3	6	5	6	5
Affordability	3	3	3	2	1	2	1
Flexibility	1	4	3	3	2	5	1
Regulatory approval	2	3	3	2	1	2	1
Council resources	2	3	3	2	1	2	1
Progressive reputation	3	1	1	3	6	3	6
Total		47	47	44	43	45	39

Table 8-4 Amended weighted scores

	Weight- ing	Option 1	Option 2	Option 3	Option 4	Option 5	Option 6
CAPEX	1	4	3	5	6	1	2
OPEX	3	15	18	9	6	12	3
Amount of surface water required	1	1	2	3	4	5	6
Operational complexity	2	12	12	6	2	6	2
Construction complexity	1	6	6	3	1	3	1
Energy consumption	2	12	12	6	2	6	2
Climate resilience	2	2	2	6	12	6	12
Environment impact	3	3	3	9	18	9	18
Community acceptance	3	9	9	18	15	18	15
Affordability	3	9	9	6	3	6	3
Flexibility	1	4	3	3	2	5	1
Regulatory approval	2	6	6	4	2	4	2
Council resources	2	6	6	4	2	4	2
Progressive reputation	3	3	3	9	18	9	18
Total		92	94	91	93	94	87

By increasing the importance of the two criteria, the options that incorporates recycled water, especially Option 5, then become comparable to the options without recycled water (i.e. Options 1 and 2). This shows that as the community becomes more comfortable and even demands the provision of alternative water, the option to utilise all sources becomes more feasible.

9. Recommendation

Feasibility designs were developed for the two water sources (Murrumbidgee River and Googong WTP) and the six IWM options for the ultimate population of 12,000. Based on the options assessment undertaken, the preferred options are as follows:

Preferred water source option: Murrumbidgee River

Although obtaining water from Icon Water from Googong WTP provides simpler treatment requirements, overall, the preferred water source is still the Murrumbidgee River due to:

- Lower capital and operating cost
- · Lower costs lead to lower fees for the community
- Conventional approach and straightforward to implement
- All assets are within New South Wales, thereby eliminating cross border arrangements and discussions with the ACT Government or Icon Water which may be challenging and could cause project delays.

It is therefore important to understand how much water could be allocated to Council and what regulatory mechanism should be applied to gain access to water from the Murrumbidgee River.

Preferred IWM option: Rainwater tanks for potable and non-potable use (Options 1 & 2)

Based on the options assessment, rainwater tanks for non-potable use only (option 1) and for all uses (option 2) appear to be the most favorable options if the cost of the rainwater tanks and inhouse treatment can be passed on to the homeowners. Furthermore, these options have the advantages of being:

- Lowest in operating cost and therefore increases community affordability
- Able to be staged with all other options depending on the community's appetite for recycled water and especially if the recycled water plumbing is already installed in the houses
- A conventional approach and therefore straightforward to implement
- · Straightforward when requiring regulatory approval.

Although this is not the *innovative* outcome that Council may have hoped for, there are a number of unknowns and uncertainties that need to be addressed to further progress the Michelago water and sewer services strategy. An important one is to test community sentiment around the use of recycled water for non-potable *and* potable use. This is evident in the multicriteria analysis in Section 8 where the increase in community acceptance and Council's desire to be progressive and sustainable can influence the feasibility of an option.

With a future that is uncertain and a climate that is becoming increasingly variable, it would be prudent to implement an adaptive planning strategy for Michelago that provides a roadmap identifying scenarios that trigger the need for Council to either to pivot or stay on course to achieve the best outcome for the community.

Appendices

Appendix A – Opportunities and Constraints Report, GHD, August 2020



Memorandum

23 June 2020

То	Jessica Dunstan		
Copy to	John Wearne, Greg Searle, Mark Rixon, Alexanda Adkins		
From	Patty Chier	Tel	0439 305 331
Subject	Design Basis Memo for Michelago Water and Sewer Scoping Study	Job no.	12527499

1 Introduction

1.1 Project understanding

The township of Michelago has the potential to grow into a town of several thousand people due to its proximity to Canberra and the Snowy Mountains. In order to support this growth, the township requires appropriate water and wastewater infrastructure. An important objective of this scoping study is to evaluate the feasibility of a range of solutions and provide options that are innovative, flexible, sustainable, resilient and sympathetic to the environment and the needs of existing residents. An integrated water cycle management approach will be used, though in a dry climate, water will be the limiting factor to the town's growth potential. Therefore, the scoping study will also shed light on what a sustainable population for Michelago will look like.

1.2 Purpose of this document

The purpose of this memorandum is to define key criteria and assumptions made that will provide the basis for conducting the water and sewer scoping study for Michelago township.

2 Design basis

2.1 Population

The likely population growth scenarios for this project as advised by Council are:

- Low growth 4,000 people
- Medium growth 8,000 people
- High growth 12,000 people.

The timeframe for the town to reach these population projections is uncertain and will be based on numerous factors such as the economy, lifestyle trends and natural disasters.

2.2 Design horizon

The timeframe for this scoping study has been set at 30 years, with a reference point of 20 years to be in line with Council's Strategic Plan.

2.3 Geographical boundary for development

It has been assumed that the areas of growth are likely to occur in line with Council's Michelago Staging Plan (Figure 1).

2.4 Water demand

Based on the projected population for Michelago, the following preliminary estimates of water volume are required. The range between lower and upper bound values are summarised in .

Table 1 Preliminary estimates of raw water volume required to supply population

Growth scenario	Low	Medium	High
Population	4,000	8,000	12,000
Raw water demand - lower bound (ML/yr)¹	288	576	864
Raw water demand - upper bound (ML/yr) ²	1,040	2,080	3,120

Notes:

- 1. Based on 2.5 ppc, 150 kL/conn/yr and 20% non-revenue water
- 2. Based on 1.5 ppc, 300 kL/conn/yr and 30% non-revenue water

Taking the conservative approach of 1.5 people per connection (ppc), residential water consumption of 300 kL/connection/yr and 30% non-revenue water and treatment plant losses, the assumed raw water supply volumes requirements are around 1000, 2000 and 3000 ML per annum for each of the growth scenarios.

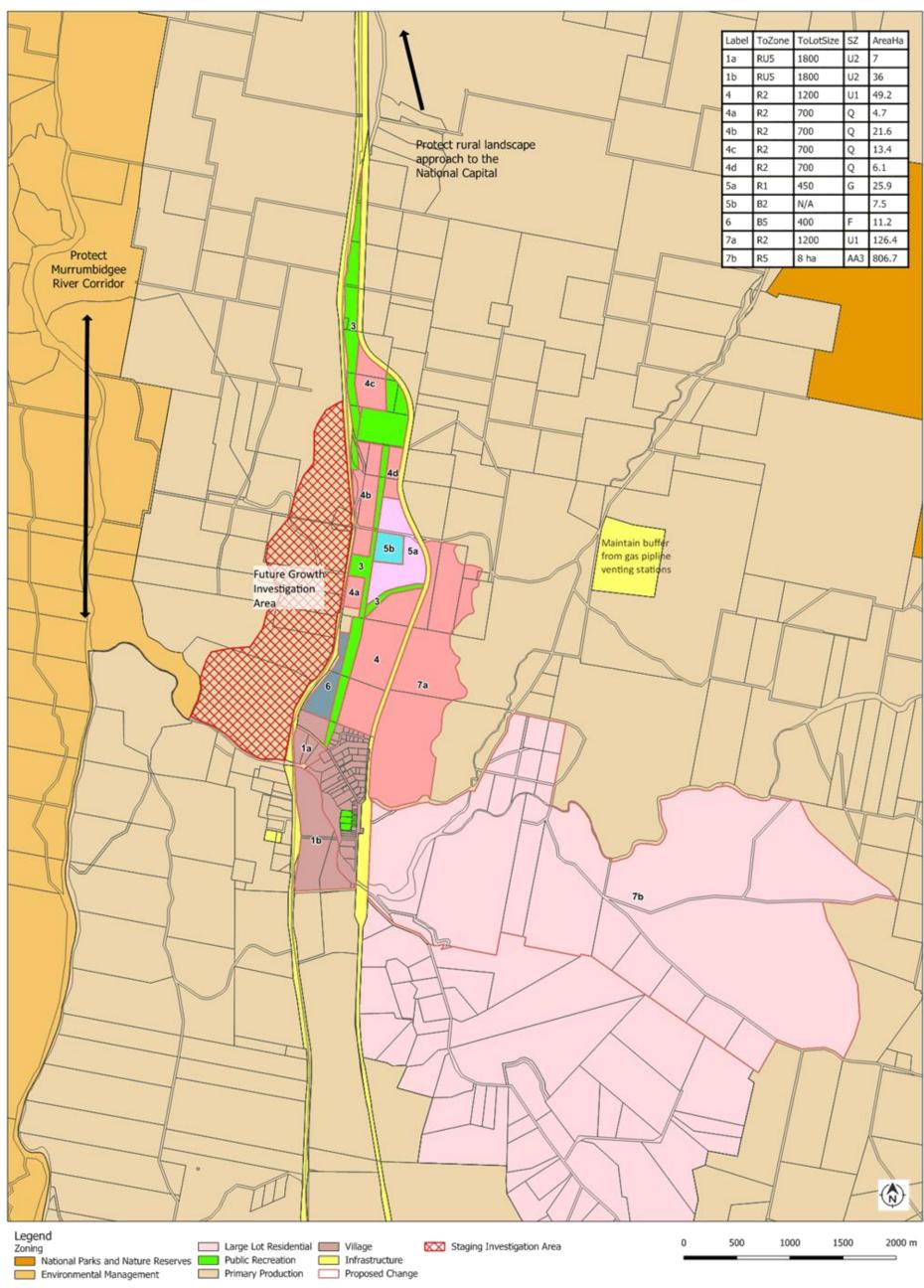
2.5 Potential water sources

Though there may be other potential water sources, however, obvious sources that will be included in this study are:

- Murrumbidgee River or its tributaries
- Groundwater
- Rainwater
- Icon Water
- · Direct/indirect potable reuse
- Stormwater
- · Or a combination of the above.

This page has been left intentionally blank

Figure 1 Michelago Staging Plan



Disclaimer

While due care has been taken by the Publisher in compiling this map, no responsibility will be accepted by Snowy Monaro Regional Council for errors or omissions. The Publisher, to the full extent permitted by law, excludes all warranties, and disclaims any responsibility to any person for loss or damage suffered from any use of this map.

2.6 Water treatment

The requirements for water treatment will depend on the likely water source. Regardless of source, any drinking water supply needs to meet the requirements of the Australian Drinking Water Guidelines (ADWG), including the incoming Health Based Treatment Targets (HBT) framework.

Determination of the most suitable process will require sampling, monitoring and analysis beyond the scope of this study, however, likely suitable process trains (and hence cost estimates) can be determined based on regional context and guidance from the Water Services Association of Australia's HBT manual and other references.

For consideration of surface water supplied from the Murrumbidgee River, treatment plants at Cooma and Canberra provide suitable references of likely process requirements, and hence infrastructure needs and cost.

For consideration of groundwater supplies, understanding of the aquifer depth, recharge zones and interaction with surface water will provide guidance related to expected health risk and pathogen removal capability. Assumptions, backed by any regional data (local data has been assumed unavailable), are required to define treatment requirements for other parameters (e.g. metals).

Where there is ambiguity around the treatment requirements, the required infrastructure and expected costs can be presented as ranges encompassing the likely risks and opportunities that may be realised. Recommendations for information and data to test the assumptions and allow further concept development will be provided as later parts of the scoping study.

2.7 Wastewater treatment

Similarly for wastewater treatment, the requirements will depend on the volume of wastewater generated and the composition. Typical domestic wastewater is generally able to be well characterised based on the number of people and the sewer characteristics. Assuming that there are no significant industrial discharges into the sewer network the wastewater flows and loads to be treated will be able to be well characterised.

The treatment process can be carried out by a range of technology and process options. Typically the processes would include primary treatment for gross solids removal, biological secondary treatment to remove the bulk of the remaining solids and organics and tertiary treatment which could include further treatment for a high degree of suspended solids and nutrient removal as well as disinfection for pathogen removal. The degree of treatment would be determined based on the treated effluent quality requirements based on the proposed discharge route and/or the proposed reuse applications. Determination of the most suitable treatment process to achieve the required degree of treatment would be impacted by footprint availability, site location, power costs, chemical costs and other application specific considerations.

If there is any ambiguity around treatment requirements, the required infrastructure and expected costs can be presented as ranges encompassing the likely risks and opportunities that may be realised. Recommendations for information and data to test the assumptions and allow further concept development will be provided as later parts of the scoping study.

2.8 Reticulation

It has been assumed that water supply and sewerage will only be provided to urban development (including areas zoned or to be zoned RU5 Village) and not rural areas. Key inputs into the reticulation (both water and sewer) include:

- · Lot sizes this will inform an average reticulation pipe length per property
- Road/street widths if there are extra wide streets proposed, the length of reticulation pipe will
 increase, otherwise standard street widths will be assumed to factor into a per property pipe length
- · There are assumed to be no water intensive industries proposed.

2.8.1 Water specific inputs for reticulation

For the purposes of sizing reticulation pipework the following assumptions have been made:

Average Daily Demand (ADD) 350L/connection/day
Peak Day Demand (PDD) 1000L/connection/day

Peak hour demand (PHD) 2.5 x PDD 15L/customer/hour

Peak velocity 2m/s at PHD

Pressure at PHD 20m at connection point/ meter

Fire flow requirements Yes

2.8.2 Sewer specific inputs

The following assumptions will apply to the sewerage reticulation:

Sewage generation rate 350L/connection/day

Peak dry weather flow PDWF:ADWF = 2.5:1

Peak wet weather flow PWWF:ADWF = 5:1 for conventional gravity system

PWWF=PDWF for pressure sewer system

2.9 Wastewater reuse

Supply availability

The availability of wastewater for treatment and supply at Michelago will be a function of the number of people in the development, the efficiency of water fixtures in buildings, and water consumption patterns. As there are no industrial areas planned for the collection network and treatment system will be new, the wastewater is predicted to be a suitable quality for treatment. Canberra receives an average of 636 mm rainfall per year with an even distribution (Bureau of Meteorology, 2020).

Licencing

For Michelago, a water recycling scheme, developed by Council, would require Section 60 Approval under the Local Government Act, 1993 (NSW) (LG Act) from the Department of Planning, Industry and Environment (Water) (DPIE).

However, if the scheme is developed by a private company (i.e. a developer), Section 68 Approval, under the LG Act must be sought from Snowy Monaro Regional Council. Once approved, a licence under the Water Industry Competition Act, 2006 (NSW) and this licence will be administered by the Independent Pricing and Regulatory Tribunal (IPART). To obtain and hold a WICA licence, the proponent must demonstrate that they have appropriate technical and financial capacity to build and maintain a system capable of providing appropriate quantity (supply) and quality of water.

2.10 Stormwater harvesting

Supply availability

Stormwater harvesting is dependent on rainfall and catchment characteristics and as the catchment characteristics for Michalago are not yet known, supply estimates are difficult. However, stormwater harvesting schemes have been successfully implemented at developments at this scale in Australia.

Licencing

Stormwater harvesting systems that collect water from ground runoff are licenced in a similar way to wastewater treatment systems; Section 60 Approval from the DPIE if the scheme is developed by Council; Section 68 Approval from Council and a licence granted under the Water Industry Competition Act, 2006 (NSW), administered by the IPART if the scheme is private.

2.11 Rainwater harvesting

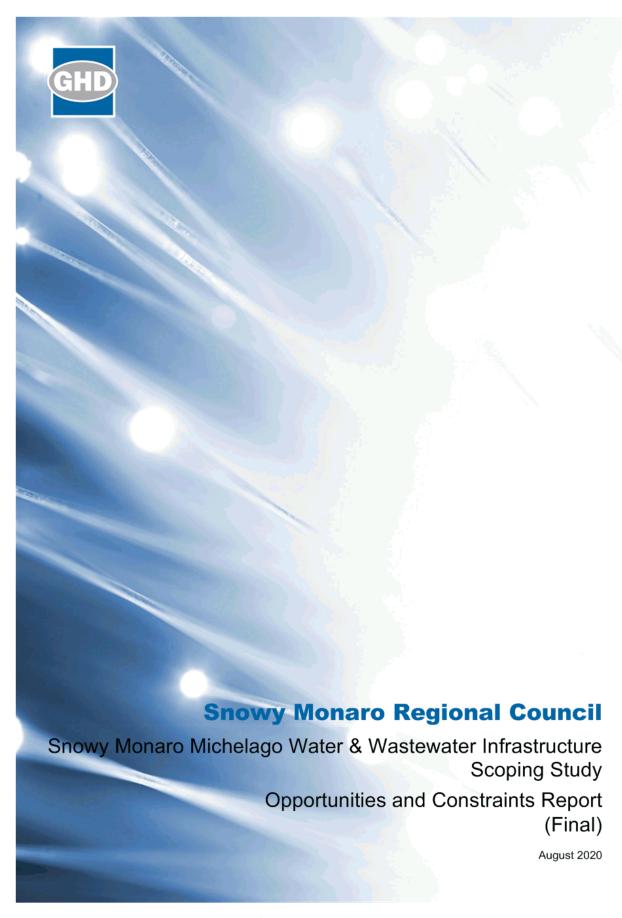
Supply availability

Rainwater tanks are widely and successfully used in Australia. Estimates for the volume of water that could be harvested vary according to roof size, tank size and uses. However, there is significant potential. An estimate for Canberra, located 50 km from Michelago, show that for a 150 m² roof and a house of three occupants, a 10 kL rainwater tank can save 82 kL per year (The Department of Health, 2020).

Licencing

Rainwater harvesting does not require a licence if they are for private residential use. However, they must be installed according to the relevant codes.

Appendix B – Design Basis Memo for Michelago Water and Sewer Scoping Study, June 2020



WATER | ENERGY & RESOURCES | ENVIRONMENT | PROPERTY & BUILDINGS | TRANSPORTATION

Executive Summary

Michelago has the potential to grow into a town of several thousand people due to its proximity to Canberra and the Snowy Mountains. In order to support this growth, the township requires appropriate water and wastewater infrastructure. This scoping study aims to evaluate the feasibility of a range of water supply and treatment solutions.

For this scoping study, populations of 4,000 8,000 and 12,000 people were used to determine potential raw water requirements. For these growth scenarios, around 1,000, 2,000 and 3,000 ML per annum is required.

To meet this raw water demand, a number of water sources have been identified, as shown below:

- Murrumbidgee River
- Icon Water supply
- Groundwater
- Rainwater harvesting
- Recycled greywater
- Recycled wastewater
- Stormwater

To determine the suitability of these sources to meet demand, a screening process was undertaken according to the criteria below:

- Availability based on the volume and reliability of supply
- Cost (CAPEX and OPEX), to consider where an option presents a long term solution or a short term solution that would require additional management action or upgrades in the future
- Practicality, which is particularly relevant where there is considerable uncertainty and or long time frames for a future impact
- Treatment, operational complexity, long or short term solution, ability to accommodate increase in population or adaptation to newer technology
- Centralised or lot scale system, to identify where the option may have trade-offs upon the surrounding environment
- Regulatory pathway, complexity and effort required, likelihood of approval
- Sustainability, in terms of effluent reuse, energy use, bushfire resilience, climate resilience, community acceptance (in-line with a "village" feel for example)
- Suitable end use, whether the water can be used at Michelago according to the following classifications:
 - Potable Residential
 - Non potable Residential
 - Irrigation Residential
 - Potable Commercial

This screening process demonstrated that the most economic and reliable source for water is from the Murrumbidgee River, with some off-stream raw water storage to carry through lengthy

GHD | Report for Snowy Monaro Regional Council - Snowy Monaro Michelago Water & Wastewater Infrastructure

Scoping Study, 12527499 | i

dry (low river flow) periods. However, all water from this river system has been fully allocated and Council will most likely need to buy water to service Michelago. At this stage, the amount of water that can be sourced is not known as there has been little trade within the Murrumbidgee unregulated zone, and will be subject to approval processes.

The treatment of wastewater at Michelago is relatively straightforward and sewerage reticulation can be provided as either conventional gravity or pressure reticulation. With correct selection, the treatment system will be a viable source of non-potable water, with potential to significantly reduce the required volumes of raw water to be supplied to the town.

There are a number of other water sources that have been identified that could be used to offset water from the Murrumbidgee River.

Due to these alternate water sources, an integrated water cycle management approach is proposed for the site. This approach has significant potential to help Michelago achieve its goal of being innovative, flexible, sustainable, resilient and sympathetic to the environment and the needs of existing residents.

Table of contents

⊢xec	utive S	summary	
1.	Introd	duction	6
	1.1	Background	6
	1.2	Purpose of this report	6
	1.3	Limitations	6
	1.4	Assumptions	7
2.	Wate	r supply	8
	2.1	Sustainable water	8
	2.2	Water demand	8
	2.3	Surface water	8
	2.4	Groundwater	19
	2.5	Rainwater harvesting	27
	2.6	Recycled wastewater	28
	2.7	Recycled greywater	29
	2.8	Stormwater	30
	2.9	Other	31
3.	Retic	ulation	32
	3.1	Water	32
	3.2	Wastewater	32
4.	Treat	ment	35
	4.1	Potable water	35
	4.2	Wastewater	39
	4.3	Treatment plant siting	45
5.	End	use modelling	48
	5.1	End use modelling classification	48
	5.2	Water balance model	48
6.	Multi	-criteria analysis	50
	6.1	Surface water	52
	6.2	Groundwater	53
	6.3	Rainwater harvesting	54
	6.4	Recycled greywater	55
	6.5	Recycled wastewater	57
	6.6	Stormwater	58
	6.7	Summary	59
7.	Discu	ussion	61
8.	Refe	rences	62

Table index

Table 2-1	Preliminary estimates of raw water volume required to supply population	8
Table 2-2	Summary of surface water entitlement volumes (Murrumbidgee Unregulated Plan)	12
Table 2-3	ACT water resource policy framework	17
Table 2-4	Surface water source options	17
Table 2-5	Geological and hydrogeological setting of Michelago	21
Table 2-6	WaterNSW groundwater bore database search results	23
Table 2-7	Groundwater supply requirements for different population projections	26
Table 2-8	Groundwater water source options	27
Table 2-9	Rainwater harvesting and reuse opportunities and constraints	28
Table 2-10	Recycled wastewater opportunities and constraints	29
Table 2-11	Recycled water opportunities and constraints	30
Table 2-12	Stormwater reuse opportunities and constraints	31
Table 3-1	Water reticulation opportunities and constraints	32
Table 3-2	Wastewater reticulation opportunities and constraints	33
Table 4-1	Example water treatment processes	36
Table 4-2	Existing treatment plants and processes	37
Table 4-3	ADWF flow estimates	41
Table 4-4	End use log reduction targets (DPI, 2015)	42
Table 4-5	Treatment barriers indicative log reduction values (DPI, 2015)	43
Table 4-6	Non treatment barriers indicative log reduction values (DPI, 2015)	43
Table 4-7	Treatment plant configurations	44
Table 4-8	Existing WWTPs and processes	45
Table 6-1	Multi-criteria assessment filter	51
Table 6-2	Preliminary description and assessment of river water (Murrumbidgee River)	52
Table 6-3	Preliminary description and assessment of supply from Canberra (Icon Water)	52
Table 6-4	Preliminary description and assessment of groundwater	53
Table 6-5	Preliminary description and assessment of rainwater harvesting	54
Table 6-6	Preliminary description and assessment of recycled greywater	55
Table 6-7	Preliminary description and assessment of recycled wastewater	57
Table 6-8	Preliminary description and assessment of stormwater	58
Table 6-9	Summary of MCA ratings for water sources at Michelago	60

Figure index

Figure 2-1	Murrumbidgee Surface Water Resource Plan Area (NSW Dept of Industry, 2019)9
Figure 2-2	Water Sharing Plan Area: Murrumbidgee Unregulated River Water Sources 2012
Figure 2-3	Water source zones in <i>Unregulated Murrumbidgee Above Burrinjuck Dam</i> Extraction Management Unit11
Figure 2-4	Volume of water required for Michelago per capita against Cooma's entitlement and use
Figure 2-5	Murrumbidgee II water access licences and allocations (each bar represents a single water licence)
Figure 2-6	Canberra water supply system schematic (Icon Water website)15
Figure 2-7	NSW Murray Darling Basin WRP areas (NSW Dept of Industry, 2019)20
Figure 2-8	Michelago bore location and geology map22
Figure 2-9	Cross section of the Murrumbidgee River to Michelago24
Figure 2-10	Potential groundwater salinity (NSW Pollution Mapping)25
Figure 3-1	General topography of the development area33
Figure 4-1	Wastewater management components (NSW Department of Urban Affairs and Planning, 1996)40
Figure 5-1	Michelago daily water demand by month49
Figure 6-1	Preliminary assessment of rainwater harvested compared to suitable demands55
Figure 6-2	Preliminary assessment of greywater recycling compared to suitable demands56
Figure 6-3	Preliminary assessment of wastewater recycling compared to suitable demands58
Figure 6-4	Preliminary demand estimates and supply at Michelago

Appendices

Appendix A - Design Basis Memo

Appendix B - Surface water entitlement details

1. Introduction

1.1 Background

The township of Michelago has the potential to grow from a current population of 150 into a town of several thousand people due to its proximity to Canberra and the Snowy Mountains. In order to support this growth, the township requires appropriate water and wastewater infrastructure. An important objective of this scoping study is to evaluate the feasibility of a range of solutions and provide options that are innovative, flexible, sustainable, resilient and sympathetic to the environment and the needs of existing residents. An integrated water cycle management approach will be used, though in a dry climate, water will be the limiting factor to the town's growth potential. Therefore, the scoping study will also shed light on what a sustainable population for Michelago will look like.

1.2 Purpose of this report

The purpose of this report is to provide a desktop review and high level assessment of the possible options available to Michelago in terms of:

- Water supply
- Wastewater treatment
- Water reticulation and sewerage
- Water reuse.

The opportunities and constraints of each option was also explored.

1.3 Limitations

This report has been prepared by GHD for Snowy Monaro Regional Council (Council) and may only be used and relied on by Council for the purpose agreed between GHD and the Council as set out in Section 1.2 of this report.

GHD otherwise disclaims responsibility to any person other than Council arising in connection with this report. GHD also excludes implied warranties and conditions, to the extent legally permissible.

The services undertaken by GHD in connection with preparing this report were limited to those specifically detailed in the report and are subject to the scope limitations set out in the report.

The opinions, conclusions and any recommendations in this report are based on conditions encountered and information reviewed at the date of preparation of the report. GHD has no responsibility or obligation to update this report to account for events or changes occurring subsequent to the date that the report was prepared.

Furthermore, the opinions, conclusions and any recommendations in this report are based on assumptions made by GHD described in Section 1.4. GHD disclaims liability arising from any of the supplied data and information being incorrect.

GHD has prepared this report on the basis of information provided by Council and others who provided information to GHD (including Government authorities). Although GHD has not independently verified or checked the information used beyond the agreed scope of work, GHD has obtained information from reputable sources. References are provided for all externally sourced information and can be found in Section 8. GHD does not accept liability in connection

with such unverified information, including errors and omissions in the report which were caused by errors or omissions in that information.

1.4 Assumptions

The opinion, conclusions and any recommendations in this report are based on assumptions made by GHD described in this section. GHD disclaims liability arising from any of these assumptions being incorrect.

The assumptions made in this report include:

- Data and information compiled in the Design Basis Memo (see Appendix A)
- Water use at the concrete batching plant for Snowy 2.0 is not significant over the planning horizon for the development proposed at Michelago
- Sewerage flows have assumed that Average Dry Weather Flow (ADWF) is 150L/EP/day for the lower bound and 200L/EP/day for the upper bound.

2. Water supply

2.1 Sustainable water

In a period of climate variability and uncertainty, Council and the Michelago community has a strong desire to create a town that is sustainable. As such, not only have the traditional water sources been investigated, alterative water sources have also been considered.

2.2 Water demand

Based on the projected population scenarios for Michelago, the following preliminary estimates of water volume are required. The range between lower and upper bound values are summarised in Table 2-1.

Table 2-1 Preliminary estimates of raw water volume required to supply population

Growth scenario	Low	Medium	High
Population	4,000	8,000	12,000
Raw water demand - lower bound (ML/yr) ¹	288	576	864
Raw water demand - upper bound (ML/yr) ²	1,040	2,080	3,120

Notes:

- 1. Based on 2.5 ppc, 150 kL/conn/yr and 20% non-revenue water
- 2. Based on 1.5 ppc, 300 kL/conn/yr and 30% non-revenue water

Taking the conservative approach of 1.5 people per connection (ppc), residential water consumption of 300 kL/connection/yr and 30% non-revenue water and treatment plant losses, the assumed raw water supply volumes requirements are around 1000, 2000 and 3000 ML per annum for each of the growth scenarios.

2.3 Surface water

2.3.1 Legislative framework

Michelago is situated within NSW, but is less than 10 km from the border of the Australian Capital Territory (ACT). Given this, the primary focus of the legislative framework for surface water supply relates to NSW, but consideration may need to be given to ACT water policy were Michelago to be supplied from the Canberra water supply system.

Murray Darling Basin Plan Murrumbidgee Surface Water Resource Plan (NSW)

To implement the *Basin Plan 2012* (Cwlth), Water Resource Plans are put in place across the Murray-Darling Basin (MDB), which must comply with the requirements of Chapter 10 of the Basin Plan for accreditation under Division 2 of Part 2 of the *Commonwealth Water Act 2007*. Note that existing Water Resource Plans are currently in the process of being replaced or amended to meet the accreditation requirements of Chapter 10 of the Basin Plan. This is relevant since Michelago occurs within the Murray-Darling Basin.

Therefore, under the Basin Plan, a draft Surface Water Resource Plan (SWRP) has been prepared for the Murrumbidgee basin (DoI, 2019), which includes the township of Michelago. The primary objectives of the Murrumbidgee SWRP are:

 To set out how NSW will incorporate and apply the long term annual diversion limit for the Sustainable Diversion Limit (SDL) resource unit in the Murrumbidgee SWRP Area (shown in Figure 2-1).

GHD | Report for Snowy Monaro Regional Council - Snowy Monaro Michelago Water & Wastewater Infrastructure

Scoping Study, 12527499 | 8

- Manage interception activities with a significant impact on water resources
- Plan for environmental watering
- Define water quality objectives
- Measure and monitor water take and water resources
- · Define aboriginal values and uses.

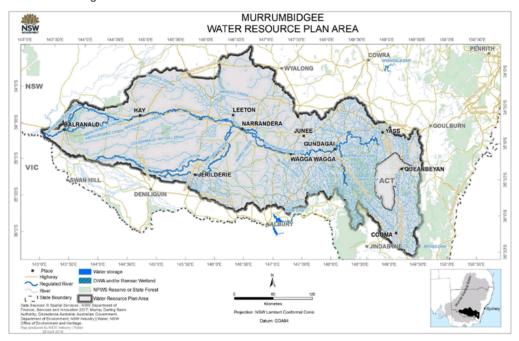


Figure 2-1 Murrumbidgee Surface Water Resource Plan Area (NSW Dept of Industry, 2019)

A key component of the Murrumbidgee SWRP was an assessment of risks to water resources, including:

- a. insufficient water being available for the environment
- b. water being of a quality unsuitable for use, and
- c. poor health of water-dependent ecosystems.

A number of strategies were defined to address the risks, the first being to limit consumptive water extractions in the WRP area to the predefined share of available water.

Another key component of the Murrumbidgee SWRP was an assessment of take for consumptive use, which identified water access rights and other take in the Murrumbidgee SWRP. In the Murrumbidgee unregulated river water sources, local water utility access licences and stock and domestic access licences have a higher priority than unregulated river access licences.

Water Sharing Plan (NSW)

Under the Murrumbidgee SWRP sits two Water Sharing Plans:

- Water Sharing Plan for the Murrumbidgee Regulated River Water Sources 2016
- Water Sharing Plan for the Murrumbidgee Unregulated River Water Sources 2012.

GHD | Report for Snowy Monaro Regional Council - Snowy Monaro Michelago Water & Wastewater Infrastructure

Scoping Study, 12527499 | 9

Michelago is located in an upstream part of the Murrumbidgee basin that is not regulated by major storages. As such, water sharing in the region is managed under the Water Sharing Plan for the Murrumbidgee Unregulated River Water Sources 2012 (NSW Office of Water, 2012) (refer Figure 2-2 below).

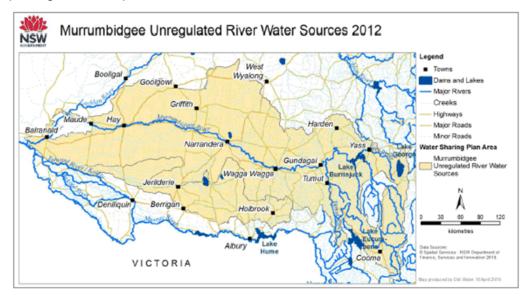


Figure 2-2 Water Sharing Plan Area: Murrumbidgee Unregulated River Water Sources 2012

Water entitlements

Importantly, there are no unallocated water resources in the Murrumbidgee basin, so any water supply for Michelago would need to be traded from an existing licence. There are four surface water extraction management units in the Murrumbidgee Unregulated Plan which are divided into 39 surface water sources, as well as 6 groundwater sources (none of which pertain to the area or aquifers around Michelago).

Michelago is located in the MURRUMBIDGEE II water source zone in the Unregulated Murrumbidgee Above Burrinjuck Dam Extraction Management Unit (refer to Figure 2-3 below).

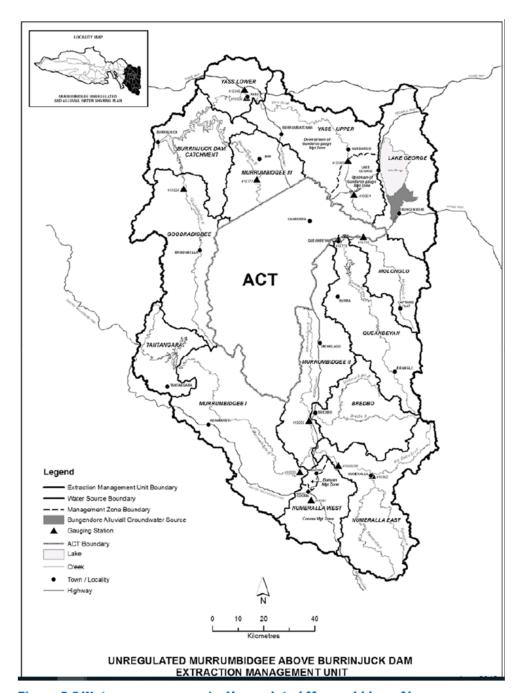


Figure 2-3 Water source zones in *Unregulated Murrumbidgee Above Burrinjuck Dam Extraction Management Unit*

The entitlement volumes and number of licences for six of the water source zones in the vicinity of Michelago, that could potentially supply the town, are presented in Table 2-2 below. Excluding basic landholder rights, the total surface water entitlement in the *MURRUMBIDGEE II* water source zone is 6614.5 ML/yr, spread between 78 licences. Though Bredbo is located within the Bredbo water source zone, it can extract water from the *MURRUMBIDGEE II* water source zone. It has an entitlement of 5 ML/yr (or <1% of the total entitlement).

Table 2-2 Summary of surface water entitlement volumes (Murrumbidgee Unregulated Plan)

Water source zone	Entitlement (ML/yr)	No. of licences
BREDBO	236.5	8
MURRUMBIDGEE I	4,048	21
MURRUMBIDGEE II	6,614.5	78
NUMERALLA EAST	4,308.25	60
NUMERALLA WEST	350	16
QUEANBEYAN	435	42

It is noted that the town of Cooma is located in the *NUMERALLA WEST* water source zone, but has an entitlement of 2,134 ML/yr (or 53% of the total entitlement) from the *MURRUMBIDGEE I* water source zone. To enable finer resolution of rules, the Cooma supply has been subdivided into the Cooma and Bunyan management zones (refer Figure 2-3).

A detailed analysis of the above surface water entitlements is included in Appendix A, based on data extracted from the NSW Water Register (2020). Analysis of usage for each of the licence types is also included in Appendix A.

Environmental value

Three of the water source zones in the vicinity of Michelago have been identified as having high instream values: *MURRUMBIDGEE I, MURRUMBIDGEE II* and *QUEANBEYAN*. If water is supplied from these water source zones, there may be restrictions on trading (refer trading section below).

Town supply (NSW)

Towns in the upper catchment above Burrinjuck Dam are mostly supplied from storages and direct river extractions. In the upper reaches of the Murrumbidgee, Cooma is supplied from the Murrumbidgee River by Council (Bredbo is supplied by alluvial bores). Under the Water Resource Plan, for unregulated river water sources, towns have a higher priority than other users, in that, water utilities can access low flows while other users cannot. Towns also have a higher priority for access to water than commercial licences. Water Sharing Plans recognise this priority by ensuring that a full share of water is allocated for annual town water supplies except where exceptional drought conditions prevent this. The annual share for every town water supply will be specified on the town's licence. Towns may be able to sell part of their annual account water to other towns but, unlike commercial users, cannot sell the licence permanently.

Any development of new water storages in the Plan area must be undertaken within the bounds of the Plan. The Plan is not prescriptive in endorsing any particular option since economic considerations vary over time. Instead, the Plan sets a framework within which development of future water supplies can occur in a sustainable manner.

In unregulated surface water sources, such as Cooma, towns will not need to change their existing water access arrangements unless their infrastructure is upgraded. In this case, when a major augmentation of the works occurs, town water utilities will need to meet conditions specified in the Plan to ensure that there is enough water flowing to protect the environment and consider any potential impacts on other consumptive users.

Cooma is the closest town with an existing entitlement owned by Council. Based on current water allocation and 2019 water use for Cooma, Figure 2-4 presents the amount of water per capita in Michelago if some of Cooma's allocation was used. Note that this assumes that the water use at the concrete batching plant for Snowy 2.0 will be negligible as they will be recycling

GHD | Report for Snowy Monaro Regional Council - Snowy Monaro Michelago Water & Wastewater Infrastructure

Scoping Study, 12527499 | 12

much of their water, and assuming change in volume of water used in Cooma will also be negligible. Upper bound and lower bound volumes have been calculated based on the factors noted in Table 2-1.

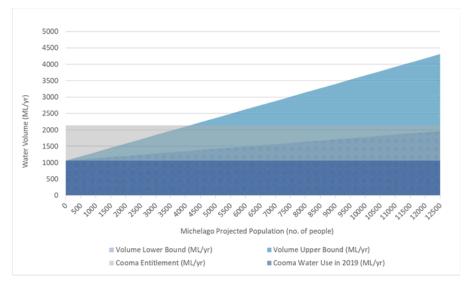


Figure 2-4 Volume of water required for Michelago per capita against Cooma's entitlement and use

It is clear that, if the water use for Michelago is closer to the upper bound, Cooma's remaining entitlement would not be sufficient to supply much more than 4000 people in Michelago.

Trading (NSW)

Trading rules for the NSW Murrumbidgee are guided by the following principles:

- Where instream values are considered high, trades are either not permitted or only allowed into high flows.
- Where a water source is under high hydrologic stress no trades are permitted into the water source.
- Trades into downstream water sources are permitted regardless of stress or instream value, as long as the water sources have a direct hydrologic connection.
- Trades through a regulated river are not permitted, for example a licence cannot be traded from an unregulated water source upstream of the regulated reach to a water source downstream of the regulated reach.
- Trading within water sources is generally permitted, however in some areas trading may be
 restricted to protect high value areas or to limit demand in areas where competition for
 water is already high.

As a result of these principles, trades are not permitted into many unregulated water sources across the plan area. High instream value water sources are protected by the Plan by prohibiting trades or limiting trades into only higher volume flows. Trades are allowed into some water sources with lower value in order to encourage the movement of extraction from high to lower environmental value areas.

Trades between water sources have been permitted in some circumstances where there is a connection but only within individual extraction management units.

Preliminary discussions with water brokers¹ in the region have revealed that there have not been many trades in the Murrumbidgee unregulated zone. Therefore, there was no specific information on licence holders and their willingness to sell their water allocations. However, one licence holder in Murrumbidgee II holds around 4,550 ML (they own both licences, see Figure 2-5).

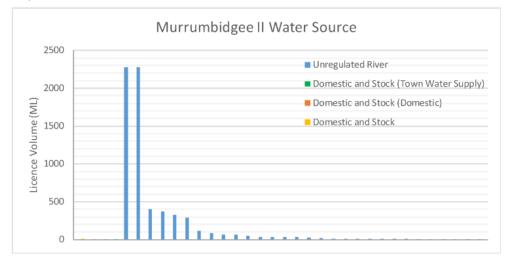


Figure 2-5 Murrumbidgee II water access licences and allocations (each bar represents a single water licence)

The water brokers both suggested a similar approach:

- Initially focus on larger volume entitlement holders in a targeted EOI process
- If the volumes are insufficient or there is little interest from the larger volume entitlement holders, advertise a general EOI for a specific volume of water.

New water access licence

There are a number of ways that Council can obtain a new water access licence:

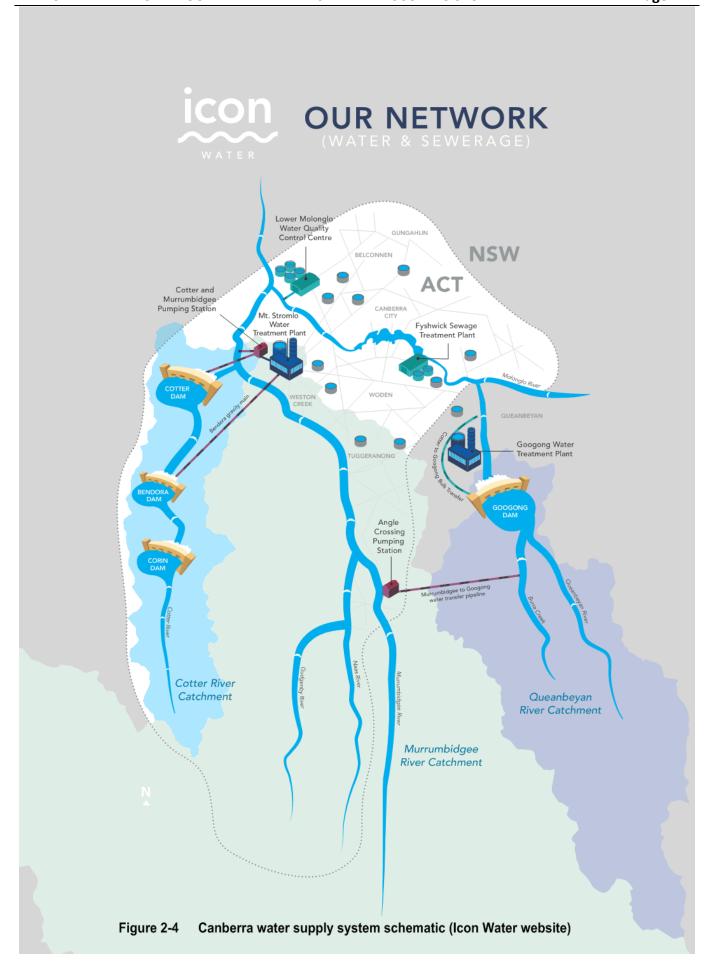
- Apply for a new access licence for priority access to water allocations
- Purchase a water access licence from another licence holder on the water market, though category of licence cannot be changed by this transfer
- Lease a water access licence from another licence holder on the water market and again, the category of licence cannot be changed
- Obtain the right to apply for a new water access licence through a controlled allocation only when the process is opened by the NSW Government.

However, one water broker (Andrew Martin) suggested that it may be administratively easier to increase Cooma's entitlement volume and then transfer it downstream to Michelago.

Supply from Canberra (Icon Water)

As Michelago is located close to the border of the ACT, one of the water supply options is to extend the Canberra water supply to the town. A schematic of the Canberra water supply system is shown in Figure 2-6 taken from Icon Water's website.

¹ Tom Wilks and Andrew Martin, personal communication, 4 August 2020.



The Canberra water supply system sources its supply primarily from the Cotter River catchment, a tributary of the Murrumbidgee River located within the ACT, with water supplied from Bendora dam and Corin dam. Supplementary water is also supplied from the Cotter dam, in the lower Cotter catchment, which was recently enlarged from 4 GL to 76 GL. The upper Cotter catchment is the preferred supply source due to the reliable runoff, good water quality and low supply cost (Icon Water, 2018).

A secondary supply source is the Queanbeyan River catchment, a tributary of the Molonglo River located in NSW, with water supplied from Googong dam (Icon Water, 2018).

With the completion of a pump station and pipeline from the Murrumbidgee River to Googong Dam in 2013, Murrumbidgee water can now also be supplied to Canberra, although this is a lower priority source of supply. Murrumbidgee water can also be pumped directly to Canberra's Stromlo Water Treatment Plant (WTP). Water from the Murrumbidgee is the least preferred source and will only be used during drought conditions (Icon Water, 2018).

Although water is potentially available from the Canberra system, there are uncertainties as to whether Icon Water would be willing to commit to making it available for Michelago.

Water entitlements

Net abstraction limits have been set out by the ACT Government aligning with the Murray-Darling Basin Plan, but are yet to be implemented. The proposed entitlement is an annual 35,000 ML urban water use licence (Icon Water, 2018).

Icon Water (2018) indicates that the Canberra water supply system has sufficient capacity to meet the required level of service until 2061, a demand growth of 50%. Further, Icon Water has sufficient water entitlements to meet demand growth of 100%, which may not occur this century.

Policy framework

Water resource planning in the ACT is managed under the policy framework summarised in Table 2-3 below (from Icon Water, 2018). Of note, the ACT and Region Catchment Management Coordination Group was established under the Water Resources Act to provide a regional approach to water resource management, across jurisdictions (supported by the Commonwealth-NSW-ACT Cross Border Resources Memorandum of Understanding (MOU) 2006) (Icon Water, 2018). The 2006 MOU Clause 2.3 states that, "...no additional supplies of Googong Dam water could be provided to any new development in NSW without an agreed strategy for integrated water supply." Furthermore, under Clause 6.1 of the MOU (2006) any additional supply of ACT water to NSW can be facilitated if:

- 6.1.1 such supply is to service population growth over the next 30 years in the ACT-NSW cross border region as expressed from time to time in the Canberra Spatial Plan, the Territory Plan and the ACT/NSW Cross Border Region Settlement MoU; and
- 6.1.2 such additional areas are consistent with developing the National Capital as a compact and sustainable city;
- 6.1.3 the provision of such supply would be in accordance with the settlement principles contained in the ACT/NSW Cross Border Region Settlement MoU, as amended from time to time.

This is likely to hinder the process to obtain water from Canberra.

Commonwealth **ACT** Icon Water Water Act (2007) Water Resources Act (2007) Source Water Strategy (2018-2030) ACT Water Strategy 2014-2044 Source Water Operating Guidelines MDB Plan (2012) Cth/NSW/ACT Cross Border Water Licence WU67 Resources MOU (2006) Water Access Entitlements ACT and region catchment management co-ordination group ACT Water Resource Plan (2019) ACT Water Trading Rules (TBC)

Table 2-3 ACT water resource policy framework

2.3.2 Source water options

Based on the information on surface water entitlements described above, there would appear to be some prospect of meeting some or all of the future water supply requirements of Michelago from surface water sources. This includes trading surface water within or from upstream water source zones, or alternatively from the Canberra water supply entitlement.

The estimated demand volumes for Michelago are all within the volumetric entitlements of the water source zones in the vicinity of Michelago, particularly *MURRUMBIDGEE I (4,048 ML)*, *MURRUMBIDGEE II* (6,614.5 ML), and *NUMERALLA EAST* (4,308.25 ML). The Canberra water supply has a nominal entitlement of 35,000 ML.

Surface water options available are summarised in Table 2-4 below, together with constraints for each option.

Table 2-4 Surface water source options

Source	Opportunities	Constraints
River water (Murrumbidgee)	Transferring available (unused) supply from the Cooma entitlement in the MURRUMBIDGEE I water source zone to the Michelago supply Offtake can be nearby the township	Council has advised that this is not an option, as it would threaten the security of the Cooma supply
River water (Murrumbidgee)	Trading permanent entitlement from other licence holders within the MURRUMBIDGEE II water source zone Offtake can be nearby the township	Requires a willing seller May be trading restrictions Opposition from irrigators Requires river diversion and off- stream storage
River water (Murrumbidgee)	Trading permanent entitlement from other licence holders in the upstream MURRUMBIDGEE I and NUMERALLA EAST water source zones. Offtake can be nearby the township	Requires a willing seller May be trading restrictions Opposition from irrigators Requires river diversion and off- stream storage

GHD | Report for Snowy Monaro Regional Council - Snowy Monaro Michelago Water & Wastewater Infrastructure

Scoping Study, 12527499 | 17

Source	Opportunities	Constraints
Canberra supply (Icon Water)	Extension of Canberra water supply to Michelago via transfer main, supplying either raw or potable water Supply of potable water means limited re-treatment required	Requires agreement with Icon Water Potential cross-border supply issues Lengthy pipelines, pump stations and rechlorination required and likely to be expensive Tapping into the Murrumbidgee to Googong network is also likely to be extremely expensive as significant upgrades and modifications are required to the existing pump station. Therefore, Icon Water unlikely to see this as a feasible venture. ²
Canberra supply (Icon Water)	Trading permanent entitlement from Canberra system (Icon Water)	Requires agreement with Icon Water May be trading restrictions

River water (Murrumbidgee)

The most cost-effective supply infrastructure is likely to be direct pumping from the Murrumbidgee River at a location near Michelago to an off-stream raw water storage and Water Treatment Plant (WTP). At its closest point, Michelago is located around 2 km from the Murrumbidgee. Note that the high in-stream values identified for the MURRUMBIDGEE II water source zone may result in some restrictions on trading or diversions from the waterway during low flow periods.

Ideally, the river pumping station could be designed without a weir, noting that the construction of a weir would significantly increase the cost due to the need to provide fish passage. Arrangements for the pump station are yet to be determined, but may comprise electrically-powered axial flow pumps or submersible pumps in a wet well. Power supply would need to be extended from the Monaro Highway to the pump station site, a distance of around 2 km.

A large off-stream raw water storage (say, 500 to 3,000 ML) would enable lower flows in the river to be passed and higher flows to be diverted. Finding a suitable location for an off-stream storage and WTP will require careful assessment, but there appears to be suitable clear land in the vicinity of the township.

Connection to Canberra supply

Michelago could potentially receive potable supply from Canberra's Googong WTP. This option would involve constructing a pump station and potable water transfer pipeline along road reserves from the Googong WTP to Michelago, a distance of around 40 km. For a nominal pipeline capacity of 20 ML/d, a DN450 to DN500 pipeline would be required. This option would potentially require a clear water balancing storage at Michelago and additional chlorine dosing.

² Based on conversation with Nicole Vonarx (Team Leader – Asset Growth & Innovation) at Icon Water (30 June 2020).

Alternatively, a raw water supply could be provided from Googong Dam. This would involve constructing a pump station and raw water transfer pipeline along road reserves from Googong Dam to Michelago, a distance of around 40 km. A similar approach would be to utilise Icon Water's infrastructure to provide water from the Murrumbidgee at Angle Crossing pump station, a distance of around 15 km. For a nominal pipeline capacity of 20 ML/d, a DN450 to DN500 pipeline would be required. This option would require a raw water storage and WTP at Michelago. However, in order to do this, significant work will need to be done at the pump station to accommodate this additional supply. This is unlikely to be economically feasible for Icon Water and therefore not a viable option.

2.4 Groundwater

In NSW, groundwater access licences and associated approvals for applications made by government agencies, including other NSW government agencies and local councils, are to be lodged and processed by the Natural Resource Access Regulator (NRAR). Through our discussions with NRAR, it is understood that an application by Council to NRAR for a 'new specific purpose access license for town water supply' would be required.

The provision of the required allocations or entitlements would be dependent on the individual application lodged, which would be assessed on an individual case basis in terms of the legislative and technical aspects of the application. These aspects are elaborated in the following sections.

2.4.1 Legislative framework

Groundwater licensing and entitlement allocation in NSW is complex, and the following summary is provided as background information that may be useful in future discussions with NRAR or other agencies.

MDB Fractured Rock Water Resource Plan 2019

Similar to surface water, a draft Water Resource Plan (WRP), NSW MDB Fractured Rock WRP 2019 has been prepared that covers all the groundwater resources of the Adelaide Fold Belt, Kanmantoo Fold Belt, Lachlan Fold Belt, New England Fold Belt, Inverell Basalt, Liverpool Ranges Basalt, Orange Basalt, Warrumbungle Basalt and Young Granite. As shown in Figure 2-7, the Lachlan Fold Belt includes the Michelago area.

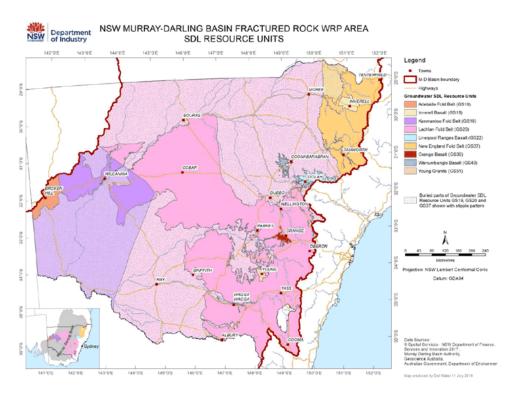


Figure 2-7 NSW Murray Darling Basin WRP areas (NSW Dept of Industry, 2019)

Water access rights in the NSW MDB Fractured Rock WRP are enabled under the *Water Management Act 2000*, and include access licences (known as 'take from groundwater' under the Basin Plan 2012) and basic landholder rights (known as 'take under basic rights' under the Basin Plan 2012).

Under the NSW MDB Fractured Rock WRP, water access rights require local councils, county councils and water supply authorities providing town water supplies to apply to NRAR for a Local Water Utility Access Licence (subcategory 'domestic and commercial') to 'take from groundwater'³.

Water Sharing Plan (NSW)

Under the NSW Fractured Rock WRP, the Water Sharing Plans are the legal instrument for managing water resources in NSW including groundwater. The Water Sharing Plan for the NSW Murray-Darling Basin Fractured Rock Groundwater Sources 2020 applies to the Michelago area.

In general, the plan area includes all fractured rock groundwater sources that are not included in other water sharing plans, such as fractured rock groundwater sources in the *Water Sharing Plan for the Unregulated, Alluvial and Fractured Rock Water Sources 2010*. The plan also includes miscellaneous, unmapped alluvial sediments that overlie outcropping fractured rock groundwater sources (as may occur near the ground surface around Michelago along Booroomba Creek and Michelago Creek) as well as porous rock and sediments that occur within groundwater sources that are predominantly fractured rock (as may occur at depth around Michelago).

³ Further details are provided in the NRAR information sheet here: https://www.industry.nsw.gov.au/ data/assets/pdf file/0018/160317/New-water-access-licence-specific-purpose-supporting-guide.pdf

Water entitlements

The Michelago area is managed through the Water Sharing Plan for the NSW MDB Fractured Rock Groundwater Sources 2020. This WSP establishes a long-term average annual extraction limit (LTAAEL) for each groundwater source (Sustainable Diversion Limit, SDL resource unit as defined in the Water Resource Plans) and manages extraction within these. LTAAELs, and provisions for management of extraction within these, have been developed to ensure the long-term availability of water for productive use generally, and to protect high-priority uses such as for critical human water needs.

A proportion of the total entitlement within the Lachlan Fold Belt MDB Groundwater Source has been allocated to extraction for town water supplies and local water utility access licences. It is understood from our discussions with NRAR, that such uses would be deemed high-priority (as defined above) when assessing applications for extraction.

GHD has opened up a case with NRAR (reference number V18/1021-24#36), which can be referenced in future discussions with NRAR. Available allocations or entitlements are not advertised publically but from initial discussions with NRAR, licence applications for town water supply are assessed on an individual basis. As such, there is potential feasibility for groundwater allocations or entitlements to be made available for the purpose of urban water supply for Michelago.

Trading

Groundwater trading is allowed within the Lachlan Fold Belt MDB Groundwater Source, but not into or out of the Lachlan Fold Belt MDB Groundwater Source.

2.4.2 Technical assessment

Aside from the legislative aspect of groundwater supply (i.e. availability of entitlements), groundwater supply availability is otherwise a factor of the local geology and hydrogeology.

Hydrostratigraphy

An indicative hydrogeological setting for the site is shown in Table 2-5, while outcrop geology is shown in Figure 2-8.

Table 2-5 Geological and hydrogeological setting of Michelago

Period	Period	Geological Formation	Hydrostratigraphic Unit	Lithology	Indicative Depth (m)
Cainozoic	Tertiary		Shallow, local water table aquifer	Gravel, sand, silt and talus breccia	0 – 5 m (inferred)
Palaeozoic	Silurian	Colinton Volcanics / Williamsdale Volcanics	Basement rocks Aquifer (fractured rock)	Rhyodacite tuff (massive, crystal and lithic tuff), minor sandstone, siltstone and limestone. Dacite porphyry	0 -> 2,000
Palaeozoic	Ordovician	Foxlow Beds	Basement rocks Aquifer (fractured rock)	Black chert and slate	0 -> 2,000

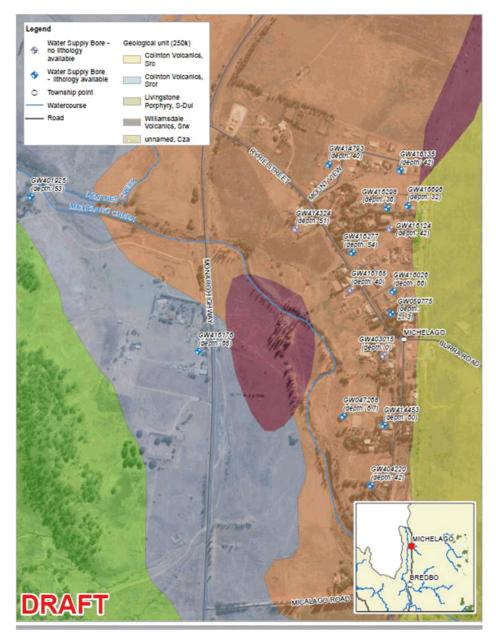


Figure 2-8 Michelago bore location and geology map

Relevant aquifer/s

If they exist, surficial Quaternary sediments are likely to be thin with varied thickness and laterally discontinuous. These sediments may represent local perched water table aquifers.

The regional Basement rocks Aquifer is a fractured rock aquifer system, where groundwater recharge and flow occurs through bedding planes, faults, joints and fractures.

Depth to water table

No data available to infer depth to water table for the township of Michelago.

Groundwater users

Groundwater within the Lachlan Fold Belt commonly provides stock and domestic groundwater supplies; these bores are typically less than 60 metres deep and supply at low yields (<3 Litres/second). Bores constructed in regional faults, fractures and shatter zones can yield higher volumes and are used for town water supplies and small scale irrigation.

Review of the WaterNSW groundwater bore database was undertaken to identify existing bores drilled in the Michelago area. The review focussed on recorded bore information and data, specifically in terms of lithology encountered, depth to water table, yield and water quality.

A total of 16 groundwater bores were identified within an approximate 5 km radius of Michelago township (bore locations shown in Figure 2-8 and summary of available bore data provided in Table 2-6). A review of available bore data indicates:

- Most bores record a use of 'water supply' or 'stock and domestic'
- Bore depths range from 16 m to 66 m, averaging at 40 m
- Most bores indicate a lithological profile comprising:

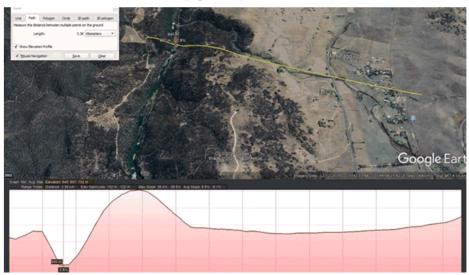
0 m to 2 m: topsoil / clay2 m to 15 m: granite / shale15 m to 66 m: granite / shale

- Groundwater bearing zone between 15 and 32 m
- Bores closer to Michelago Creek exhibit a greater thickness of weathered granite, which is potentially water bearing
- · Bores further to the east contain more shale than granite
- No groundwater level data recorded at any location
- No groundwater yield data recorded at any location
- · Only one location with a salinity record.

Table 2-6 WaterNSW groundwater bore database search results

Bore_ID	HydroID (BOM)	Easting	Northing	Date completed	Total depth	Construction details	Lithology	Salinity
GW047268	10044953	695707	6045862	1/10/1978	6.70	Yes	Yes	Yes
GW059775	10040591	695865	6046197	1/10/1983	21.30	Yes	Yes	No
GW401925	10121205	694688	6046579	11/04/2002	53.00	Yes	Yes	No
GW403015	10071588	695839	6046061	18/12/2004	0.00	No	No	No
GW404220	10068934	695797	6045637	2/05/2004	42.00	Yes	Yes	No
GW414324	10103414	695552	6046474	1/01/1998	51.00	Yes	No	No
GW414453	10114972	695840	6045832	26/08/2010	60.00	Yes	Yes	No
GW414793	10104733	695660	6046685	22/05/2011	40.00	Yes	Yes	No
GW416026	10102507	695870	6046271	4/10/2006	66.00	Yes	Yes	No
GW416124	10115074	695860	6046475	1/07/1997	42.00	Yes	No	No
GW416135	10110041	695892	6046666	29/11/2012	42.00	Yes	Yes	No
GW416165	10111243	695733	6046276	30/04/2013	40.00	Yes	No	No
GW416176	10133463	695234	6046074	27/05/2013	65.00	Yes	Yes	No
GW416277	10106383	695737	6046397	14/07/2009	54.00	Yes	Yes	No
GW416298	10107673	695851	6046543	14/07/2009	36.00	Yes	Yes	No
GW416696	10159606	695917	6046551	19/05/2011	32.00	Yes	Yes	No

Targeting an area within the Murrumbidgee River flood plain or within the mapped Tertiary sediments is recommended for any potential future test bores for Michelago, as yields in shallow alluvial sediments are likely to be higher than the regional Basement rocks Aquifer. However, geological mapping of the Michelago area does not indicate the presence of alluvial sediments in the immediate Murrumbidgee flood plain (which is narrow and incised in the Michelago area; as shown through the cross section in Figure 2-9). However, Tertiary sediments (Table 2-5) have been mapped in the Michelago township area; these sediments coincide with most identified stock and domestic bores (Figure 2-8).



Source: Google Earth Pro (2020)

Figure 2-9 Cross section of the Murrumbidgee River to Michelago

It is important to note that existing on-site treatment systems are likely to be disposing their effluent via dispersal fields. Depending on the site specific geology, nature of, and depth to the aquifer, effluent can contaminate groundwater. Further investigation, such as groundwater sampling and testing, audit of on-site systems and dispersal fields, and an assessment of the nature of the aquifer, would confirm whether there is any contamination of the groundwater.

Review of Bredbo township supply bores

Bredbo township is located some 25 km south of Michelago and has similar geology to Michelago. Bredbo was historically supplied by two bores, about 9 metres deep, located on the Murrumbidgee River flood plain and developing alluvial sediments. It is understood that these bores were installed some two metres apart and produced a total of 4.0 Litres/second. In 2005, two replacement bores were drilled some 20 metres apart, to depths of up to 12 metres, developing an alluvial aquifer. These replacement bores produce yields of up to 10 Litres/second each.

There is the possibility that alluvial sediments exist along Michelago Creek, however the thickness of this geological unit, as well as yields, may be limited. The only way to confirm the lithological profile and bore yields is through test bores.

Groundwater quality

Council provided GHD with data obtained from the Bredbo groundwater supply bores, located some 25 km south of Michelago. This data indicates fresh groundwater quality (<500 mg/L Total Dissolved Solids, TDS). This correlates with NSW regional salinity mapping, which indicates salinity in the area is <1,000 mg/L TDS (Figure 2-10).



Figure 2-10 Potential groundwater salinity (NSW Pollution Mapping)

Environmental value

The Australian Bureau of Meteorology (BoM) maintains a database of potential terrestrial and aquatic groundwater dependent ecosystems (GDEs) across Australia. A search of the BoM GDE Atlas within 3 km of Michelago identified:

- Five high potential aquatic GDEs, including Murrumbidgee River, Michelago Creek, Booroomba Creek, Ryries Creek, Lenanes Creek and Margaret Creek
- One low potential terrestrial GDE in the herb/shrub/grass forest southwest of Michelago

Fractured rock aquifers of the Lachlan Fold Belt MDB have been considered by NSW Office of Water (2012)⁴ to generally show a low to moderate level of connection between surface and groundwater, with an estimated travel time between groundwater surface water of years to decades.

High priority GDEs identified in the NSW MDB Fractured Rock WRPA for the Lachlan Fold Belt include ecological assets such as springs and karsts and patches of very high ecological value such as groundwater dependent woodland forests and wetlands including black box, lignum, river red gum, yellow box and coolabah, along with non woody Wetlands (NSW DPIE, 2019).⁵

2.4.3 Source water options

To gain an appreciation of the potential contribution that a groundwater source could make to the future township supply, some further analysis has been undertaken using limited known data and by applying some reasonable inferences, including:

· Raw water demands under each population scenario have been applied

⁴ NSW Office of Water (2012) Water Sharing Plan for the NSW Murray-Darling Basin Fractured Rock Groundwater Sources

NSW DPIE (2019) NSW Murray—Darling Basin Fractured Rock Water Resource Plan: GW 11 NSW Murray—Darling Basin Fractured Rock

 Actual bore yield data from the Bredbo supply bores have been applied as indicative upper limit yields that could possibly be achieved at Michelago

Table 2-7 shows that groundwater potentially presents a feasible option to supplement other water supply options, however it is unlikely to be able to meet volumetric water demands as the primary water source option for any Growth Scenario.

The analysis in Table 2-7 shows that assuming a conservative bore yield of <3 L/sec, groundwater could potentially meet up to 10% of the Low Growth Scenario water demand (as shown in green highlights in Table 2-7), but only up to 2% of the High Growth Scenario water demands (see green highlights in Table 2-7). Again, the only way to assess actual bore yield potential in Michelago is through test bores.

Table 2-7 Groundwater supply requirements for different population projections

Growth scenario	Low Growth Scenario	Medium Growth Scenario	High Growth Scenario
Population	4,000	8,000	12,000
Raw water demand - lower bound (ML/yr)	288	576	864
Raw water demand - upper bound (ML/yr)	1,040	2,080	3,120
Raw water demand - upper bound (L/sec)			
100%	32	66	95
50%	16	33	48
40%	13	26	38
35%	11	23	33
30%	10	20	29
25%	8	17	24
20%	6	13	19
15%	5	10	14
10%	3	7	10
5%	2	3	5
2%	0.6	1	2
1%	0.3	1	1

Note:

Green highlighted cells represent bore yields of <3 L/sec Yellow highlighted cells represent bore yields of 4 L to 10 L/sec

Red highlighted cells represent bore yields of >10 L/sec

The presence of numerous stock and domestic bores in the Michelago township indicates that shallow groundwater is likely to be present. The absence of bore yield data for any of these bores renders it difficult to infer the potential yields that could be obtained from each bore and whether a borefield could feasibly supply the township.

If groundwater source is to be investigated further, a prudent course of action would be to:

 Assess the potential volumetric requirements required from groundwater under the various growth scenarios

- Identify potential locations of future water infrastructure that could be used as future test bore sites
- 3. Undertake drilling of a couple of test bores to a maximum depth of 100 m, during which bore yield could be estimated at various depths by airlifting, and water samples could be collected for onsite salinity measurement and potentially laboratory analyses. The first site for testing should be located in the vicinity of the current (or proposed future) water infrastructure.

A summary of the opportunities and constraints for incorporating groundwater as a potential water supply source is shown in Table 2-8.

Table 2-8 Groundwater water source options

Source	Opportunities	Constraints
Supply from Bredbo groundwater bores	Transferring available (unused) supply from the Bredbo entitlement	Several unknowns around the sustainable yield of these bores; they have been aquifer tested at ~10 L/sec but are currently being pumped at ~5 L/sec. Unlikely to be an attractive option for Council as this would reduce the security of Bredbo's supply. A long pipeline (i.e. >25 km) would be required and would likely be cost prohibitive to construct.
Supply from Michelago groundwater bores	Local supply and therefore reduces the need to construct lengthy pipelines	Surrounding bores do not contain yield data, therefore there is current uncertainty whether sufficient yield could be produced from one or several bores drilled in the Michelago area. Current septics effluent disposed via land. Contamination of the groundwater source could be an issue. Requirement to better understand local geology. Requirement to drill one or two test bores, ideally A) in town and B) adjacent Murrumbidgee River, Michelago Creek or within the area overlain by Tertiary sediments as shown in Figure 2-8.

2.5 Rainwater harvesting

2.5.1 Legislative framework

Rainwater harvesting does not require licencing for private residential use. However, rainwater systems must be installed according to relevant building codes.

2.5.2 Source water options

Rainwater harvesting involves storing roof run-off in rainwater tanks for use. With careful design, maintenance and operation, rainwater harvesting can provide a source of potable and non-potable water. However, in areas of larger population, rainwater tanks are generally only used for non-potable uses such as garden irrigation, toilet flushing and laundry. This is mainly because a reliable potable supply is provided by the local water utility.

Community rainwater storage and reuse was considered as part of this project, however due to the low density housing proposed, the capital and operating costs of pumps and pipelines are likely to make this option uneconomical (Gurung, Sharma, & Umapathi, 2012).

A summary of the opportunities and constraints for rainwater collection and reuse is shown in Table 2-9.

Table 2-9 Rainwater harvesting and reuse opportunities and constraints

Source	Opportunities	Constraints
Rainwater	Compared to wastewater and stormwater, rainwater requires less treatment Lower regulatory requirements when compared to stormwater and wastewater	Many systems operated by non-technical people increases chance of systems failing Pumping costs can be high Supply dependent on rainfall

2.6 Recycled wastewater

2.6.1 Legislative framework

For Michelago, a water recycling scheme, developed by Council, would require Section 60 Approval under the Local Government Act, 1993 (NSW) (LG Act) from the Department of Planning, Industry and Environment (Water) (DPIE).

However, if the scheme is developed by a private company (i.e. a developer), Section 68 Approval, under the LG Act must be sought from Snowy Monaro Regional Council. Once approved, a licence under the Water Industry Competition Act, 2006 (NSW) and this licence will be administered by the Independent Pricing and Regulatory Tribunal (IPART). To obtain and hold a WICA licence, the proponent must demonstrate that they have appropriate technical and financial capacity to build and maintain a system capable of providing appropriate quantity (supply) and quality of water.

Recycled wastewater for non-potable use has a clear regulatory process. The regulatory process to reuse water for potable end uses is significantly more difficult and may lead to project delays, if not abandonment altogether due to the 'yuck' factor, and increased costs.

2.6.2 Source water options

Two commonly used recycled water treatment options have been identified for Michelago, they are: centralised re-use (either third pipe re-use or direct/indirect potable re-use) and lot scale wastewater re-use. Sourcing effluent from other wastewater treatment plants (WWTP) have been excluded due mainly to the length of piping and pumping required (i.e. ~50km from Queanbeyan, ~65km from Cooma and ~76km from Canberra).

The NSW government defines wastewater as water sourced from a shower, bath, spa, hand basins, laundry tub, washing machine, dishwasher, kitchen sink, toilets and urinals.

Recycled wastewater - centralised

Wastewater recycling schemes involve the delivery of treated wastewater from a centralised scheme directly to users through a distribution and reticulation pipe network. Since most urban areas have a potable water distribution and a wastewater collection pipe network, a treated wastewater distribution network is often referred to as a third pipe or purple pipe scheme.

In Australia, current recycled wastewater schemes most commonly supply non-potable demand, typically irrigation, washing clothes and flushing toilets, via a third pipe system. Though there are two schemes in Australia, one that can direct recycled water to a reservoir (Queensland) and another recharges aquifers (Western Australia). In other countries, such as Singapore, highly treated effluent is returned directly back into the potable network instead of being blended with other water sources.

Recycled wastewater - lot scale

Most lot-scale wastewater treatment systems typically provide only primary and sometimes secondary treatment of the wastewater, occasionally with disinfection, and the treated wastewater is used primarily for garden irrigation. The use of treated wastewater for toilet flushing and other in-house non-potable uses requires a higher level of treatment than generally used in current schemes, with associated higher costs.

Table 2-10 Recycled wastewater opportunities and constraints

Source	Opportunities	Constraints
Recycled wastewater - centralised	Reliable source of water Environmental benefits from eliminating effluent discharge Reduction in use of raw water	Community acceptance Operating cost of treatment system Management of health risk can be resource intensive (i.e. ongoing auditing, sampling and testing and inspections)
Recycled wastewater – lot scale	Reliable source of water Environmental benefits from eliminating effluent discharge Reduction in use of raw water	Community acceptance Operating cost of treatment system Many systems operated by non- technical people increases chance of system failure Management of health risk can be resource intensive (i.e. ongoing auditing, sampling and testing and inspections)

2.7 Recycled greywater

2.7.1 Legislative framework

For Michelago, a water recycling scheme, developed by Council, would require Section 60 Approval under the Local Government Act, 1993 (NSW) (LG Act) from the Department of Planning, Industry and Environment (Water) (DPIE).

However, if the scheme is developed by a private company (i.e. a developer), Section 68 Approval, under the LG Act must be sought from Snowy Monaro Regional Council. Once approved, a licence under the Water Industry Competition Act, 2006 (NSW) and this licence will be administered by the Independent Pricing and Regulatory Tribunal (IPART). To obtain and hold a WICA licence, the proponent must demonstrate that they have appropriate technical and financial capacity to build and maintain a system capable of providing appropriate quantity (supply) and quality of water.

A domestic greywater diversion system can be installed without prior approval if:

- It is carried out in accordance with the Plumbing Code of Australia
- A sewage management facility is not installed on the premises concerned
- Relevant performance standards are met

Lot scale greywater treatment systems typically have undemanding regulatory requirements, compared to wastewater treatment.

2.7.2 Source water options

The NSW government defines greywater as water sourced from a shower, bath, spa, hand basins, laundry tub, washing machine, dishwasher and kitchen sink. It does not include water from toilets or urinals.

The lower organic loading and reduced pathogen concentrations in greywater require lower levels of treatment compared with the treatment required for the use of the complete household wastewater stream, greywater can be recycled with or without treatment. The simplest form of re-use is collection and diversion to a subsurface irrigation system. Diversion of greywater does not provide any level of treatment, therefore the water cannot be stored and can only be used for subsurface irrigation. Alternatively, greywater can be treated, stored and re-used for toilet flushing, irrigation and for clothes washing.

Greywater treatment systems still require a connection to a municipal sewerage system for the disposal of the remaining household wastewater stream, which reduces the avoided costs compared to lot-scale wastewater treatment systems.

A summary of the opportunities and constraints for third pipe re-use, lot scale wastewater re-use, and lot scale greywater re-use is shown in Table 2-10.

Table 2-11 Recycled water opportunities and constraints

Source	Opportunities	Constraints
Lot scale greywater re-use	Reliable source of water	Community acceptance
	Environmental benefits	Operating cost of treatment
	Comparatively lower cost	system

2.8 Stormwater

2.8.1 Legislative framework

Stormwater harvesting systems that collect water from ground runoff are licenced in a similar way to wastewater treatment systems; Section 60 Approval from the DPIE if the scheme is developed by Council; Section 68 Approval from Council and a licence granted under the Water Industry Competition Act, 2006 (NSW), administered by the IPART if the scheme is private.

Stormwater harvesting systems have an established regulatory pathway and approvals are usually not onerous.

2.8.2 Source water options

Stormwater harvesting and re-use is the collection, treatment, storage and use of stormwater runoff from urban areas. It differs from rainwater harvesting as the runoff is collected from drains or creeks, rather than roofs.

Stormwater storages include dams, weirs, lakes, or tanks. Appropriate levels of treatment achieve water quality consistent with how the water will be used, as well as address both public health and environmental guidelines and laws.

Opportunities for stormwater use include the irrigation of public parks, sporting grounds and gardens. Treated stormwater can be used for industrial applications including wash down, dust suppression and other operational process work, and as a potable water substitute for urban residential applications such as toilet flushing, laundry washing and irrigation for cluster/community scale development.

As Michelago is a low density residential area, the treatment required is likely to be relatively low compared to stormwater harvesting systems in areas of higher density or containing industrial and commercial land uses. However, fundamentally, where there is an opportunity to capture better quality water (i.e. rainwater), that is always the better option as treatment costs are minimised.

A summary of opportunities and constraints for stormwater harvesting at Michelago is shown in Table 2-12

Table 2-12 Stormwater reuse opportunities and constraints

Source	Opportunities	Constraints
Stormwater	Catchment with low risk from pollution	Lower runoff due to low density development
	Comparatively lower cost of treatment compared to wastewater recycling	Reliability of supply dependent on rainfall More treatment required than capturing rainwater

2.9 Other

The following water sources were considered, but not progressed as a part of this study.

2.9.1 Air to water production

Water is extracted from air through cooling the air below the dew point. This technology has not been proven at the scale of Michelago and costs to produce water are comparatively high.

3. Reticulation

3.1 Water

Water reticulation is highly dependent on the location of the treated water and the receiving population. To minimise energy use, the water is usually pumped to a high level tank and then gravity fed to the town. Alternative energy (i.e. solar) could be used, though the need for reliable operation means that mains backup is likely to be required to supplement.

Opportunities and constraints associated with potable reticulation are summarised in Table 3-1.

Table 3-1 Water reticulation opportunities and constraints

Source	Opportunities	Constraints
Potable	The majority of new development is to the north of the existing township, a high level tank could be placed on one of the nearby hills which should allow a gravity fed water supply downstream of the main tank.	Chlorine residual may need to be managed initially if the number of connections are low
Non-potable	As there are currently no reticulated water or sewer, any servicing could be undertaken installing all pipes from the beginning of the development, rather than have to work around existing infrastructure. Depending on where the balancing storages and the water treatment plant are located it could be possible to co-locate the recycled water tank/plant with water treatment plant allowing raw water top-up of non-potable supply. If there was high demand for non-potable water there could be a blend with raw water as a supplementary source.	As with all non-potable supplies, cross connections and contamination is always a risk to human health that needs to be managed through careful design, and regular maintenance, audits, inspections. This adds to the cost of such a system.

3.2 Wastewater

The main development area is to the north of the existing township and has the Monaro Highway on its western boundary. The slope of the land along the highway from north to south should be sufficient to allow a conventional gravity system to operate where a WWTP would be located either immediately north or south (outside of buffer zones) of the Michelago Creek, and west of the Monaro Highway. Refer to Figure 3-1 for a general surface profile of the land from north to south along the Monaro Highway.

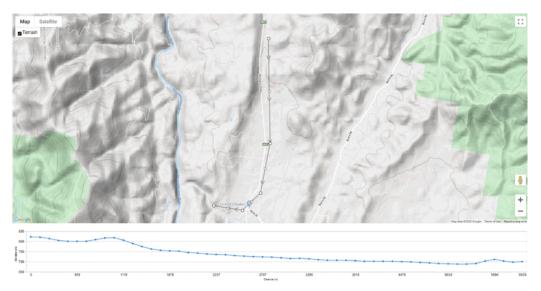


Figure 3-1 General topography of the development area

A pressure sewer system may need to be considered if a gravity system is not possible due to, for example, the terrain being too flat or there is high water table or bedrock in the area. In addition to this, there is more flexibility available in the pressure sewer system if the development is not neatly sequenced from the downstream end of the sewer catchment.

Existing properties could be connected to either a conventional gravity or pressure sewer network. As the existing properties are on septic tanks, the pipework would need to be directed from the septic to the gravity connection either at the front or rear of the property. If a pressure sewer network was installed, a pressure sewer unit would need to be installed, typically adjacent to or along the inlet to the septic tank. The pressure sewer pipework within the property would then connect to the boundary valve kit and into the pressure sewer network.

Opportunities and constraints associated with wastewater reticulation are summarised in Table 3-2.

Table 3-2 Wastewater reticulation opportunities and constraints

Source	Opportunities	Constraints
Conventional gravity sewer	Low energy use compared to pressure sewers, though this will be dependent on topography and the location of population relative to the treatment plant.	Pipe sizing will be larger than for a pressure sewer system and being gravity, is constrained by topography which could necessitate deep pipes which are costly to construct and maintain.
Pressure sewer	Pressure sewer servicing allows for a number of benefits over conventional gravity servicing including: • Minimising the transfer pipe sizing by: - including controls over when pumps operate	Power will be required to operate the pumps that is not required for the gravity system. The pressure sewer pumps need to be maintained (usually by Council) and spares held. Therefore OPEX is generally higher than a gravity system

Source	Opportunities	Constraints
	 not requiring an inflow and infiltration allowance for wet weather Allowing more system flexibility with the direction and timing of development Sewage passes through grinder pumps which can be an advantage at the treatment plant 	There is a higher likelihood of odour associated with a pressure sewer system than a conventional gravity one, however this is highly dependent on the design and configuration of the systems.
	 Suitable for smaller population 	
	 CAPEX generally lower as on-property components are not required until the house is constructed and costs are borne by the property owner. 	

4. Treatment

4.1 Potable water

The requirements for treatment to provide potable water are dependent on the source of water to be used.

4.1.1 Australian Drinking Water Guidelines

The Australian Drinking Water Guidelines (ADWG) are the primary set of national guidelines about the provision of safe drinking water and advocate a "catchment to tap" perspective on any given system to minimise risk. The ADWG describes itself thusly:

The ADWG are intended to provide a framework for good management of drinking water supplies that, if implemented, will assure safety at point of use. The ADWG have been developed after consideration of the best available scientific evidence. They are designed to provide an authoritative reference on what defines safe, good quality water, how it can be achieved and how it can be assured. They are concerned both with safety from a health point of view and with aesthetic quality.

Furthermore the ADWG states the following guiding principles (amongst others):

- The greatest risks to consumers of drinking water are pathogenic microorganisms.
 Protection of water sources and treatment are of paramount importance and must never be compromised.
- The drinking water system must have, and continuously maintain, robust multiple barriers appropriate to the level of potential contamination facing the raw water supply.
- Prevention of contamination provides greater surety than removal of contaminants by
 treatment, so the most effective barrier is protection of source waters to the maximum
 degree practicable. Knowing how many barriers are required to address the level of
 potential contamination in individual systems is important. This requires a thorough
 understanding of the nature of the challenges and the vulnerabilities of the barriers in place.
 In terms of reliability, there is no substitute for understanding a water supply system from
 catchment to consumer, how it works and its vulnerabilities to failure.

The Australian water industry is moving towards adoption of Health Based Targets (HBTs), with the inclusion of risk assessment metrics for pathogen infection rates and disability adjusted life years (DALYs) to increasingly quantify pathogen risks to drinking water.

The requirement of the HBT frameworks is that for a given source, sufficient treatment barriers are required to achieve the HBT of 1 μ DALY. Hence a poorer water source will require additional treatment to achieve the required risk reduction.

The HBT framework is currently in the process of being formally included in the ADWG, and is currently being applied by Water Authorities across Australia. The HBT framework provides a method for quantifying both catchment risk and risk reduction achieved via treatment barriers. Guidance of its application is primarily via the Water Services Association of Australia (WSAA) 2015 Manual for the Application of Health-Based Treatment Targets (Doc WSA202-2015-1.2). The HBT will be included in the next revision of the ADWG via a new Chapter 5 – no final draft of this new chapter is yet available for industry to work from.

4.1.2 Potable water treatment requirements

Sizing

Water treatment infrastructure is typically sized to enable production of water sufficient to meet peak daily demand in less than 24 hours, with time allowed for filter backwashing and contingency maintenance.

Where population growth, and hence future demand is uncertain, treatment facilities are often staged with respect to capacity. This also assist with spreading out the capital expenditure over a number of years. Therefore, flexibility in a process to be duplicated is an important consideration.

Process selection

The required process is determined based on the raw water source and its characteristics. Table 4-1 provides a high level summary of example treatment processes for different contaminants that might be present.

Process selection cannot be confirmed until the preferred water source is selected, and data can be obtained. Nevertheless, existing treatment processes utilised in treatment plants under Council's management need to be taken into consideration. This is because the learning curve for operators to manage a similar process technology is not as great as a plant with an entirely different treatment process.

Table 4-1 Example water treatment processes

Contaminant	Applicable Source Waters	Example Treatment
Pathogens	All	Filtration, disinfection
Turbidity/solids	All	Coagulation-clarification-filtration
Organics/colour	All, typically surface waters (river or reservoir)	Coagulation-filtration
Dissolved metals	All, typically groundwater and reservoir supplies, stormwater	Oxidation-clarification-filtration
Algal taste and odour or toxins	Surface waters (typically reservoirs)	Powdered activated carbon or ozone and activated carbon filtration
Chemicals	All, typically surface waters, stormwater, recycled water	Contaminant dependent
Salt	Groundwater	Reverse osmosis

In the context of Michelago, the following treatment processes are expected to apply for different source waters:

- Surface water from Murrumbidgee River:
 - Dissolved air floatation and filtration (DAFF) or conventional (sedimentation and filtration) treatment train.

- Chlorination for disinfection.
- UV disinfection likely to be required based on lack of protection of upstream catchment.
- · Surface water from Googong dam:
 - DAFF or conventional opportunity to use direct filtration as Googong WTP does for much of the year.
 - Chlorination for disinfection.
 - UV disinfection likely to be required based on lack of protection of upstream catchment.
- · Groundwater from unconfined shallow aquifer:
 - Conventional treatment
 - Chlorination for disinfection.
 - UV disinfection if aquifer shown to be heavily affected by surface water run off.
- · Groundwater from confined, deep aquifer:
 - Conventional treatment
 - Possible pre-oxidation for metals
 - Chlorination for disinfection
- · Stormwater from mixed urban/peri-urban catchment
 - Pre-oxidation for metals
 - Sedimentation and filtration (possibly membrane filtration)
 - Possible activated carbon
 - UV and chlorine for disinfection.
- Recycled water for potable reuse:
 - Sedimentation and filtration
 - Possibly activated carbon filtration and ozone or advanced oxidation
 - Reverse osmosis
 - UV and chlorine for disinfection

For comparison, Table 4-2 lists current water treatment processes.

Table 4-2 Existing treatment plants and processes

Town	Treatment process
Adaminaby	Chlorination with chlorine gas (primary disinfection) or sodium hypochlorite tablets (secondary disinfectants) and fluoridation with sodium fluoride
Bredbo	Chlorination with sodium hypochlorite liquid (scoping study currently underway to look at options for secondary filtration)
Bombala	Currently: chlorine gas (primary disinfection) or calcium hypochlorite (secondary disinfectant at reservoir if needed), pH adjustment with sodium carbonate, coagulation with alchlor gold, flocculation with magnafloc LT20, fluoridation with fluoride adjustment buffer powder or fluorodose or fluoride standard solution. Will be upgraded to preoxidation, DAF, membrane filtration, GAC, UV, chloramination, THM stripping
Cooma	Powdered activated Carbon for blue-green algae, sodium hydroxide for pH adjustment, aluminium sulphate or polyelectrolyte for coagulation, chlorine gas for disinfection, sodium fluoride granular for fluoridation and a water softener

Town	Treatment process
Dalgety	Sodium hypochlorite solution primary disinfectant dosed at reservoir, sodium hypochlorite tablets as secondary disinfectants, membrane filtration
Delegate	Chlorine gas for disinfection. Current non-potable supply. Planned for upgrade shortly.
East Jindabyne/Berridale	Chlorination with chlorine gas (primary disinfection) or sodium hypochlorite tablets (secondary disinfectants), fluoridation with sodium fluoride and pH adjustment with Liquid carbon dioxide or lime
Eucumbene Cove	Sodium hypochlorite solution primary disinfectant dosed at reservoir, sodium hypochlorite tablets as secondary disinfectants. (scoping study currently underway to look at options for secondary filtration)
Jindabyne – Barry Way	Chlorine gas (primary disinfectants) and sodium hypochlorite tablets (secondary disinfectants), fluoridation with sodium fluoride (scoping study will be done to look at options for secondary filtration)
Jindabyne – High/Low Zone	Chlorine gas (primary disinfectants) and sodium hypochlorite tablets (secondary disinfectants), fluoridation with sodium fluoride (scoping study will be done to look at options for secondary filtration)
Kalkite	Sodium hypochlorite solution primary disinfectant dosed at reservoir, sodium hypochlorite tablets as secondary disinfectants. (scoping study currently underway to look at options for secondary filtration)
Nimmitabel	Sodium Hypochlorite for disinfection (scoping study currently underway to look at options for secondary filtration)

Other treatment processes to those outlined above may also be suitable. Further design development including sampling and characterisation of preferred water sources and potentially pilot testing are recommended for final determination of process requirements.

Treated water storage

A treated water storage tank is required, and is typically located at the WTP. Sizing of the WTP is usually sufficient to provide a peak day of storage based on the following:

- 8 hours storage for diurnal balancing (WTP output vs instantaneous demand) and WTP requirements (chlorine contact time, filter backwash)
- 8 hours for system contingency (WTP failure, pipe break, power outage etc)
- 8 hours for firefighting.

If the treated water storage is to be located away from the WTP, a dedicated backwash and chlorine contact tank is required at the WTP site.

Raw water storage

Raw water storage may be required depending on the relative location of the source and its seasonal availability.

A small balancing tank is required where the raw water is pumped some distance, and there is a risk of pump or pipeline failure that would prevent the WTP from operating. In this instance a raw water balancing tank providing 24 to 48 hours would be sufficient.

For water resources that are seasonally available or vary widely in quality, a larger storage may be required, for example an off-stream storage that allows seasonal balancing. This also provides benefits through pre-settling of water prior to treatment and allows poor quality water to be avoided (e.g. where a WTP draws from a river, flood events which bring elevated turbidity can be avoided with the WTP drawing from the storage during this period).

Waste management

Waste will be generated by the water treatment process in the form of washwater from filter backwashing and where clarification is used, sludge.

Typically, this waste is managed onsite, through the use of sludge drying beds. Depending on the siting and climatic conditions, use of geobags or mechanical dewatering of sludge may be required. Dried or dewatered sludge is periodically removed and typically sent to landfill.

Supernatant from sludge drying beds can be returned to the treatment process to improve overall recovery, this can by up to 10% of the total volume treated. Depending on the pathogen load of the raw water and occurrence of taste and odour compounds supernatant return may require additional treatment. Alternatively supernatant can be discharged to sewer, but for small systems can become a significant input to the wastewater treatment and disposal approach.

Where membrane filtration is employed, sludge volumes are typically reduced due to less coagulant being used, but volumes of washwater will still need to be managed. Further, these processes add chemical wastes from periodic "clean-in-place" (CIP) of membranes. CIP chemicals, typically including citric acid, caustic soda, sodium metabisulfite and others, require neutralisation and would then be discharged to sewer. Where sewer connection was not available, trucking to a nearby WWTP is required.

4.1.3 Decentralised potable water supply

Approaches that involve a non-reticulated potable water supply are only relevant if each lot has an alternative source of water (e.g. rainwater or untreated water).

For such a scheme, each property would have an onsite water treatment system that provides treated water to the point of use (POU) or for the point of entry (POE) to the lot.

- POU systems are small and would provide potable water (usually) to a single drinking water tap in the house. These systems would only be suitable if health risks from untreated water for other uses can be managed and are acceptably low.
- POE systems treat all water supplied to the house for purposes that would normally require potable quality (e.g. showers, sinks, kitchen).

POU and POE approaches do not have widespread use outside of isolated rural properties, not serviced by council/utility infrastructure. Both approaches typically involve filtration and UV disinfection, suitable for only some potential source waters. For higher risk/more highly contaminated source waters, these systems can become large and onerous to operate and maintain. Further, depending on the process, there may be waste streams that require further treatment/management at lot scale.

Examination of POU or POE for small communities serviced by utilities present a number of regulatory and risk management hurdles, for example:

- Who is responsible for the maintenance and safe operation of the systems?
- If council or a utility has responsibility, how is monitoring and access for maintenance provided?

POU/POE approaches are not employed in urban settings.

4.2 Wastewater

4.2.1 Sustainable wastewater management

The required wastewater treatment is directly related to the end use or disposal route of the wastewater. Further, the size of the scheme and ability to be augmented need to be considered

when establishing how to best manage wastewater from the town as it grows. A general diagram of the typical wastewater management process can be seen in Figure 4-1.

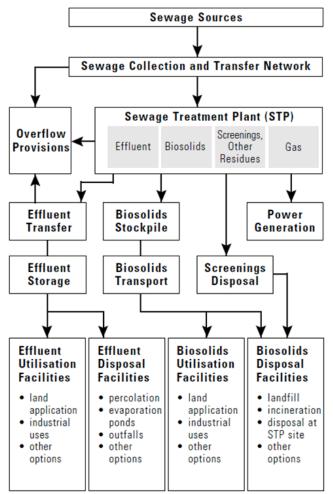


Figure 4-1 Wastewater management components (NSW Department of Urban Affairs and Planning, 1996)

With climate variability and population growth, conventional water supply sources are being stretched and their reliability uncertain. Furthermore, in order to protect downstream beneficial users and maintain or improve waterway health, discharge to rivers is discouraged and alternative disposal methods are preferred. Therefore, Council's aspiration for Michelago is to aim for 100% treated effluent reuse.

4.2.2 Note about lot scale treatment

On-site wastewater management, e.g. through the use of septic tanks or small lot scale package plants, is not appropriate at the lot scale proposed for the main area of Michelago, but may be suitable for rural living areas to the south east. This is because on-site systems require a section of the land to be used for effluent disposal. Suburban lots are usually too small to effectively accommodate this.

4.2.3 Treatment requirements

Sizing

Dry weather wastewater production rates can vary significantly across Australia depending on the age of housing stock within the catchment as we all as other factors. New developments typically produce in the order of 150 L/EP/day due to use of water efficient devices and fittings. For comparison the dry weather wastewater production rates are approximately 150 L/EP/day in Melbourne and 180 L/EP/day in Sydney. Table 4-3 below summarises the lower and upper bounds for Average Dry Weather Flow (ADWF) for each growth scenario.

Table 4-3 ADWF flow estimates

Growth scenario	Low	Medium	High
Population	4,000	8,000	12,000
ADWF - lower bound (ML/day) ¹	0.6	1.2	1.8
ADWF - upper bound (ML/day) ²	0.8	1.6	2.4

Notes:

- 1. 150 L/EP/day
- 2. 200 L/EP/day

During wet weather, flows can increase significantly due to inflow from illegal connections and infiltration from manholes and broken sewer pipes. The peaking factor on dry weather flow can vary significantly depending on the age, configuration and ongoing level of effort attributed to identifying sources of inflow and infiltration. Typically, gravity sewerage system will have peak wet weather flows in the order 4-6 times ADWF with potential for rates to increase as the system ages. Pressure sewer system typically have much lower peaking factors of approximately 2.5 times ADWF as there is minimal opportunity for infiltration and inflow can be quickly identified and rectified by analysing household pump station run times during wet weather.

Start up and commissioning

Wastewater treatment processes have limited turndown and careful consideration must given to start up and staging of capacity. Common strategies to manage start-up of new scheme include:

- Trucking wastewater to an existing treatment plant until flows reach the threshold capacity
 of the new treatment plant
- Hiring smaller package treatment plants and re-using effluent during construction (e.g. for dust suppression).

Process selection

The when selecting a wastewater treatment process train, the following will need to be taken into account:

- · Land availability for treatment and odour buffer zone
- End use or disposal route.

Land availability

The availability of land for both the treatment plant and an odour buffer zone will limit the treatment process options available. For scenarios where the treatment plant size is to be minimised and buffer zones are small, a mechanical treatment process with mechanical dewatering of biosolids and odour control will be required. Conversely, if the treatment can be located away from sensitive receptors and effluent can be disposed of to land application where

access can be restricted, a lagoon based treatment system may be acceptable. However, with a lagoon based system, desludging would be required and during this process, offensive odour emissions would occur.

End use requirements

Specific guidance will need to be sought from the NSW EPA regarding conditions for discharge to a waterway as these conditions are determined on a case by case basis. Generally, there is strong preference for zero discharge and there are several examples of these schemes in NSW. One example is Lendlease's Bingara Gorge Scheme on the outskirts of Sydney. This scheme achieves zero discharge through a combination of winter storages, irrigation of greenspace and 3rd pipe reuse. Another scheme is Sydney Water's Picton Farm Scheme where recycled water is reused on a farm adjacent to the treatment plant.

Guidance for the requirements of treatment and use of recycled water are described in the document "NSW Guidance for Recycled Water Management Systems" (DPI, 2015). The following tables are drawn from this report. The level of treatment required is determined by the end use, with fire fighting having the highest treatment requirements in terms of log reductions for protozoa, virus and bacteria.

The log reduction that can be achieved is dependent on the treatment process, plus other non-treatment barriers. These are summarised in Table 4-5 and Table 4-6. Note that where a range of log reduction values is displayed for a treatment process, the lowest value must be adopted unless additional validation is completed. For small schemes such as this, it would generally be cost prohibitive to undertake additional validation work and therefore, purchasing validated equipment is usually more cost effective.

Table 4-4 End use log reduction targets (DPI, 2015)

End Use	Log Reduction Targets		
	Protozoa	Virus	Bacteria
Fire fighting (fire & rescue)	5.1	6.5	5.3
Dual reticulation and municipal irrigation	5.0	6.4	5.1
Commercial food crops	4.8	6.1	5.0
Municipal use — open spaces, sports grounds, golf courses, trees, shrubs, public gardens, dust suppression or unrestricted access and application	3.7	5.2	4.0
Non-food crops — trees, turf, woodlots, flowers, pasture etc.	3.7	5.2	4.0

Table 4-5 Treatment barriers indicative log reduction values (DPI, 2015)

Treatment	Indicative Log Reduction Values		
	Protozoa	Virus	Bacteria
Primary treatment	0-0.5	0-0.1	0-0.5
Secondary treatment (well aerated secondary systems)	0.5–2.0	0.5–2.0	1.0-3.0
Dual media filtration with coagulation	1.4-4.0	1.2-4.0	1.0-3.4
Membrane filtration	4.0	2.5-4.0	3.5-4.0
Reverse osmosis	1-4.0	1-4.0	1-4.0
Lagoon storage	1.0-3.5	1.0-4.0	1.0-5.0
Chlorination	0-0.5	1.0-4.0	2.0-4.0
Ozonation	n/a	3.0-4.0	2.0-4.0
UV light	3.0-4.0	adenovirus 1.0-4.0 other 3.0-4.0	2.0-4.0
Wetlands – surface flow	0.5–1.0	n/a	1.0
Wetlands – subsurface flow	0.5–1.0	n/a	1.0-3.0

Table 4-6 Non treatment barriers indicative log reduction values (DPI, 2015)

Non-treatment barrier	LRV	Group protected
Cooking or processing of produce (e.g. cereal, wine grapes)	4 log	Produce consumers
Subsurface irrigation of above ground crops	4 log	Produce consumers
Drip irrigation of raised crops with no ground contact (e.g. apples, apricots, grapes)	4 log	Produce consumers
Drip irrigation of crops with limited to no ground contact (e.g. tomatoes, capsicums)	3 log	Produce consumers
Drip irrigation of crops	2 log	Produce consumers
Removal of skins from produce before consumption		Produce consumers
Withholding periods — produce (decay rate)	0.5 log/day1	Produce consumers
No public access during irrigation and limited contact after (non-grassed areas e.g. food crop irrigation)	3 log	Facility users
No public access during irrigation		Facility users
Withholding periods for irrigation of parks/sports grounds (1–4 hours)	1 log	Facility users
Drip irrigation of produce/plants/shrubs	4 log	Produce consumers, neighbors, passing public
Subsurface irrigation of plants/shrubs or grassed areas	4 log	Neighbors, passing public
Spray drift control (microsprinklers, anemometer systems, inward-throwing sprinklers, etc.)	1 log	Neighbors, passing public
Buffer zones (25–30 m)	1 log	Neighbors, passing public

The recycled water guidelines focus on pathogen reduction requirements for reuse only. Further to pathogens, the following constituents need to be considered when determining the appropriate treatment process (and reuse/disposal route):

- Organic content (as measured by Biological oxygen demand, BOD, and chemical oxygen demand, COD)
- Suspended solids
- Ammonia
- Nutrients (Ammonia plus other nitrogen species and phosphorus)

- Salt
- Other contaminants (e.g. chemicals, pharmaceuticals etc. occurrence depends on catchment).

Typically, 3rd pipe reuse systems will target very low levels of BOD and a reduction in nutrients (nitrogen and phosphorus) to manage biological growth within the reticulation and general aesthetic qualities of the water.

Table 4-7 below summarises possible infrastructure configurations for different end uses and common risks associated with each treatment train. Although there is a desire to reuse 100% of the treated wastewater for Michelago, this is often near impossible to do due to the need to balance cost, space required and capacity of a winter storage. Emergency discharge to waterways during extreme weather events is common and a discussion with NSW EPA will be required as to how this should be managed.

Anaerobic digestion, producing biogas for energy recovery, has not been included in the table below as it is generally not viable for a smaller populations. The equipment associated with the anaerobic digestion is expensive to install and therefore, a reasonable amount of biogas is required to provide a sufficient offset of site power demands. Even then, savings associated with sludge disposal costs generally need to be included to improve the payback period which are only material for sites with large quantities of biosolids to dispose of.

At the predicted population growth, it is unlikely that the plant will be able to justify a primary sedimentation process. Without primary sludge (i.e. operating on Waste Activated Sludge only), the amount of biogas produced is generally not sufficient for energy recovery.

Table 4-7 Treatment plant configurations

End Use/Disposal Route	Treatment Requirements	Potential Infrastructure	Common Risks
Irrigation for disposal (land application / non food crops)	Pathogen Reduction Access limitations after irrigation	Treatment Lagoons (aerobic, facultative, maturation) or mechanised secondary process (e.g. IDEA tanks) Sludge drying pans or mechanical biosolids dewatering Winter storage Irrigation infrastructure	Odour emissions during lagoon desludging and drying pan harvesting
Re-use within a residential development (Dual reticulation and municipal reuse)	Total Nitrogen <15 mg/L Total Phosphorus <0.1 mg/L	Flow balance tank Inlet works (screening) MLE MBR Chemical Dosing for Phosphorus removal Mechanical sludge dewatering and storage UV disinfection	Skilled operators required to manage process Careful selection of chemicals used in the treatment process to avoid contaminants that impact the aesthetic quality of the water (e.g. manganese in ferric chloride)

End Use/Disposal Route	Treatment Requirements	Potential Infrastructure	Common Risks
		Chlorine disinfection Recycled water storages	On-going management of community expectations of recycled water
		and pump station Winter storage Dechlorination for	·
		emergency discharge to waterways	

Similar to water treatment, existing treatment processes should be taken into consideration to assist operators in managing the new treatment plant. For comparison, Table 4-8 lists current wastewater treatment processes.

Table 4-8 Existing WWTPs and processes

Town	Treatment process	Disposal method
Adaminaby	Trickling filter plant though currently being redesigned. Likely to be an IDEA plant	Treated effluent discharged to Locker Creek
Berridale	IDEA based plant with UV disinfection	Golf course reuse and discharge to Myack Creek
Bredbo	Household on-site treatment systems	On-site disposal
Bombala	New treatment plant – IDEA, lagoon	Discharge to creek
Cooma	Activated sludge process, Settling tanks, sand filtration, UV	On-site reuse and discharge to creek
Dalgety	Household on-site treatment systems	On-site disposal
Delegate	IDEA based plant consisting of manual screen, tank with two aerators, two sludge ponds and two tertiary ponds	Golf course reuse
East Jindabyne	Pumped to Jindabyne	Not applicable
Eucumbene Cove	Household on-site treatment systems	On-site disposal
Jindabyne	IDEA, treatment lagoon, 15 pump stations	Discharged to Cobbon Creek
Kalkite	Pasveer channel, evaporation pond	No discharge
Nimmitabel	Pasveer channel	Discharged to Bobundara Creek

4.3 Treatment plant siting

4.3.1 Common siting considerations

A number of other considerations are required for siting a water treatment plant:

Proximity to residents

As treatment plants are considered industrial sites, it is common practice to construct
them away from residents. This is especially important for WWTPs as odour is often
an issue. Careful consideration is required to site plants as far away from residents as
possible and retain a buffer zone to prevent encroachment of development

· Environmentally sensitive areas

The Murrumbidgee River and Clear Range to the west, and Tinderry Nature Reserve
to the east of Michelago sets the limits to the treatment plant siting in these directions
as they are environmentally sensitive areas. Furthermore, the Cooma – Monaro Local
Environmental Plan (LEP) 2013 also provide maps areas where there are high
biodiversity value

Culturally sensitive areas

 Based on the LEP (Cooma-Monaro Local Environmental Plan, 2013), there are a small number of general heritage areas highlighted in the area. However, it is prudent to conduct a specific cultural heritage assessment once a site is selected

Aesthetics

 Based on the LEP (Cooma-Monaro Local Environmental Plan, 2013), there is a scenic protection buffer of 400 m along the Monaro Highway. This area is unlikely to be amenable to the siting of a treatment plant

Bushfire prone areas

 Based on NSW's Department of Planning, Industry and Environment's ePlanning Spatial Viewer, the Clear Range and Tinderry Nature Reserves are specified bushfire prone areas. Siting of the treatment plants should consider the risks and requirements to protection the plant from bushfires

Flood prone areas

 Flood studies have not been done for Michelago (Snowy Monaro Regional Council, n.d.). However, the treatment plant will likely need to be set back from waterways in case of flooding and to protect them from unintended discharges

Land slide prone and Karst areas

 According to the LEP (Cooma-Monaro Local Environmental Plan, 2013), there are numerous areas surrounding Michelago that are prone to land slides and sites where Karst areas are known

Land tenure

 Most of the land appear to be freehold land. Purchase of the land for the treatment plants will need to be negotiated

Power supply

 Power is required to operate the treatment equipment and pumping. For sites with a poor/unreliable power supply, standby generation is required (or additional treated water storage at a WTP)

Road access

Good road access for heavy vehicles is required for the construction and operation
phases of a treatment plant. Chemical deliveries may be via tanker truck, and access
via a suitably graded and sealed road including space for safe turning is desirable.

4.3.2 WTP siting considerations

Siting of water treatment infrastructure will depend on the location of the source water and the how the potable water network is to be configured.

Elevation

Ideally, treatment infrastructure is located at an elevation that enables supply into the treatment plant by gravity, and supply to a network by gravity. For Michelago, this is unlikely to be possible, as the water sources are expected to be at relatively low elevations (from the Murrumbidgee River or local groundwater).

The treatment plant can be located near the source water, and then supply to a service reservoir or treated water storage located at a suitable elevation to the network.

The treatment plant location will need to be determined based on the source water and whether there is a need for a raw water storage (e.g. an off-stream storage for seasonal balancing).

Proximity to water source

Locating a WTP near to a water source is beneficial by reducing the length of raw water transfer infrastructure needed, and potentially the need for a raw water storage. Where a WTP is drawing from a river, consideration of the variability of raw water quality needs to be considered, as it may be beneficial to enable the plant to operate from a storage during poor water quality events following rainfall or during floods. Sewer connection

Where available, a sewer connection to the WTP is useful and provides a means to dispose of waste from amenities, washwater supernatant (if not managed onsite) and CIP waste where relevant.

4.3.3 WWTP siting considerations

As mentioned earlier in Section 3.2, the siting of a WWTP is somewhat dependent on the sewerage conveyance method.

Elevation

A gravity transfer system is usually preferred as this minimises the installation and operating cost of pumping the sewage. Therefore, the optimum location for the WWTP would need to be at a low point within the catchment with plant infrastructure located above the 1:100 year flood levels. As discussed in Section 3.2, based on Council's proposed location of future development, a pressure sewer system is unlikely to be required. Though, as a pumped system, pressure sewers allow more flexibility with the location of the WWTP. For these systems, the following should be considered when selecting a site:

- Can a re-lift pump station be avoided (i.e. is there a site where the household pump stations will have sufficient head to pump to)?
- Is there an option that will allow recycled water to gravitate to the end user (for re-use schemes)?

Proximity to disposal sites

In order to minimise pumping costs, irrigation properties or any other reuse schemes (i.e. residential estates with recycled water supply) should be as close to the WWTP as possible.

5. End use modelling

5.1 End use modelling classification

To quantify the volumes and assess the potential for alternate water sources, end use demand across Michelago has been grouped and categorised according to quality and area of supply, as shown below:

- Potable residential
- Non-potable residential
- Irrigation residential
- Potable commercial

5.1.1 Potable - residential

The demand estimation for these end uses must be potable and include:

- Shower
- Dishwasher
- · Bathroom sink
- Kitchen sink

5.1.2 Non potable - residential

The demand estimation for these end uses that could be supplied by an alternative water source (i.e. greywater, recycled wastewater, stormwater and rainwater) include:

- Washing machine
- Toilet
- · Outside tap (not including residential irrigation)

5.1.3 Irrigation - residential

Residential irrigation is often the largest use of water at a lot level. Therefore, it is useful to separate this from the rest of residential water use, especially as alternative water sources (i.e. greywater, recycled wastewater, stormwater and rainwater) could be used. The demand estimation for residential irrigation of outdoor garden areas is based on the conservative assumption that each lot has a low water use garden of an average 150 m² area.

5.1.4 Potable - commercial

Due to the small size of the proposed commercial areas and because it is unknown what uses will be encountered, it was assumed that all commercial use was to a potable grade.

5.1.5 Irrigation – open space

Approximately 70 ha of Public Recreation space has been identified in the Michelago Staging Plan. After consultation with Council, no irrigation has been allocated for this area.

5.2 Water balance model

To better understand the quantity of water required, a preliminary water balance was undertaken. The water balance had the following parameters:

- Calculations were undertaken using GHD's Integrated Water Management daily water balance toolkit.
- Number of inhabitants and lots were estimated from the Michelago staging plan.
- No calibration of the water balance has been undertaken, due to this being a new development. Therefore, the results are comparative rather than predictive.
- Climate data used for the analysis was provided by the Queensland Government for Michelago and covers rainfall and evaporation from 01/01/2000 through to 1/04/2020 ~ 20 years (Jeffrey, Carter, Moodie, & Beswick, 2001).
- Roof area has been estimated from the Australian average of 230 m² (CommSec, 2019).
- · Open public space has been estimated at 7 ha.
- Most common Water Efficiency Labelling Scheme (WELS) values have been assumed for end uses.
- Commercial area use was determined using a development density factor and equivalent people per commercial area (Water Services Association of Australia, 2014).

5.2.1 Results

The results of the modelling are summarised in Figure 5-1. They show that non-potable water sources make up the majority of demands for Michelago. Therefore, there is a significant opportunity to use recycled and lower grade water to meet non-potable requirements and therefore reduce potable water demand.

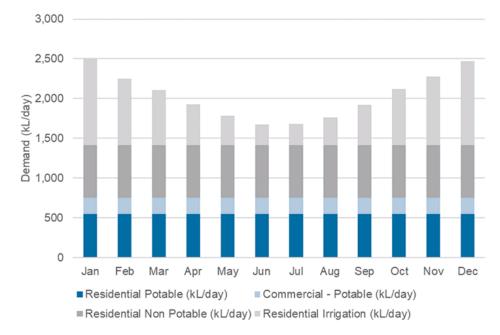


Figure 5-1 Michelago daily water demand by month

6. Multi-criteria analysis

This section identifies and reviews water sources that could be used at Michelago. These sources were selected based on discussions with Snowy Monaro Council and an assessment of the catchment and surrounding areas.

The sources identified were:

- · Water from the Murrumbidgee River
- Water from Icon Water
- Groundwater
- Rainwater harvesting
- Recycled greywater
- Recycled wastewater
- Stormwater

Water and wastewater treatment identified have not been assessed at this point in time as treatment can be designed to suit raw water source (in terms of water treatment) and end use (in terms of wastewater treatment). As neither has been selected, it is not possible to compare technologies in a meaningful way. Similarly, network selection can be made to suit the terrain and location of development.

Each option was screened for suitability by assessing the following criteria:

- Availability based on the volume and reliability of supply
- Cost (CAPEX and OPEX), to consider where an option presents a long term solution or a short term solution that would require additional management action or upgrades in the future
- Practicality, which is particularly relevant where there is considerable uncertainty and or long time frames for a future impact
- Treatment, operational complexity, long or short term solution, ability to accommodate increase in population or adaptation to newer technology
- Centralised or lot scale system, to identify where the option may have trade-offs upon the surrounding environment
- Regulatory pathway, complexity and effort required, likelihood of approval
- Sustainability, in terms of effluent reuse, energy use, bushfire resilience, climate resilience, community acceptance (in-line with a "village" feel for example)
- Suitable end use, whether the water can be used at Michelago according to the following classifications:
 - Potable Residential
 - Non potable Residential
 - Irrigation Residential
 - Potable Commercial

The screening was undertaken as a preliminary assessment to indicate whether the option rated for each criterion was considered to be:

• "HIGH" suitable with minimal trade-offs

- "MEDIUM" may be suitable, subject to a more detailed assessment
- "LOW" where an option is not suitable

A list of the criteria is shown in Table 6-1. The results of the assessment for options are provided in Section 6.1 to Section 6.6.

Table 6-1 Multi-criteria assessment filter

Criteria	Low	Medium	High
Availability	Water source has low supply volume compared to demand and / or large variability of supply.	Water source can supply a moderate amount of water or periodically has issues with reliability.	Water source is able to meet demand and has no issues with variability of supply.
Cost	Very expensive to construct and/or operate	Moderately expensive to construct and/or operate	Low cost to construct and/or operate
Practicality	Difficult to implement or has high risk of failure	System is likely to work, however is partly untried or risky	Easy to implement and likely to succeed
Treatment	Technology is untried or expensive	Technology is available, but moderately expensive and/or new	Treatment is commonly used and robust
Centralised system or lot scale system	Unsuitable at this scale	Moderately suitable at this scale	Very suitable at this scale.
Regulatory pathway	Unlikely to be approved	Approval possible, but may be difficult	Clear method for approval
Sustainability	Little to no positive sustainability factors	Moderate number of positive sustainability factors	Many positive sustainability factors
Potable – Residential Non-potable - Residential Irrigation – Residential Potable – Commercial	Rarely used or unsuitable	Occasionally used, possibility for use at Michelago	Commonly used. High Potential

6.1 Surface water

The preliminary assessment of surface water options are shown in Table 6-2 and Table 6-3.

Table 6-2 Preliminary description and assessment of river water (Murrumbidgee River)

Type of solution	Murrumbidgee River		
Description	Extract from the Murrumbidgee River west of the township		
Criteria	Suitability	Comment	
Availability	High	The Murrumbidgee River has sufficient flows to supply Michelago	
Costs	Medium	Extraction from rivers uses standard technology and pumps required unlikely to be large. However, the cost may come in the purchase price of water entitlements	
Practicality	High	Extraction from rivers uses standard technology	
Treatment	High	Treatment of river water is not complicated	
Centralised system	High	Extraction from rivers in this manner is suited to centralised systems	
Lot scale system	Low	Multiple extractions are unlikely to be practical or economical	
Regulatory pathway	Medium	Availability of water entitlements is unknown at the time of writing this report	
Sustainability	Medium	River water is highly dependent on rainfall and upstream users and is therefore not climate resilient	
Potable - Residential	High	Commonly used	
Non potable - Residential	High	Commonly used	
Irrigation - Residential	High	Commonly used	
Potable - Commercial	High	Commonly used	
Summary	Extraction from rivers is a conventional method of sourcing water and is probably the most economical water source. However, there is a potential that water entitlements may not be available for purchase.		

Table 6-3 Preliminary description and assessment of supply from Canberra (Icon Water)

Type of solution	Icon Water		
Description	Extension of Icon Water's network to Michelago		
Criteria	Suitability	Comment	
Availability	High	There is sufficient water available to supply Michelago	
Costs	Low	A pipeline, pump stations and rechlorination (for treated water) would make this option very expensive. Furthermore, the cost of bulk water will also need to be considered	
Practicality	Medium	Installation of water transfer infrastructure is likely to work but is risky due to other criteria listed in this table	
Treatment	High	If taking treated water, the only additional treatment required would be rechlorination. However, if taking raw water, a full water treatment plant would be required	
Centralised system	High	Supply from Icon Water is suited to centralised systems	
Lot scale system	Low	Not applicable	
Regulatory pathway	Low	Negotiation and cooperation with Icon Water will be required	
Sustainability	Low	High energy use to pump water from that distance.	
Potable - Residential	High	Commonly used	
Non potable - Residential	High	Commonly used	
Irrigation - Residential	High	Commonly used	

Criteria	Suitability	Comment
Potable -	High	Commonly used
Commercial		-
Summary	Obtaining bulk water, whether raw or treated, will require some consultation with Icon Water and is likely to be an expensive option.	

6.2 Groundwater

The preliminary assessment of groundwater is shown in Table 6-4.

Table 6-4 Preliminary description and assessment of groundwater

Type of solution	Groundwater	
Description	Groundwater sourced within the Michelago area	
Criteria	Suitability	Comment
Availability	Low	Supply volumes are unlikely to be sufficient based on desktop evaluation done so far
Costs	Medium	Investigative drilling is likely to be costly though constructing the groundwater bore is comparative to sourcing water from the Murrumbidgee River.
Practicality	Medium	Based on the bore information from other areas nearby, it is unlikely that groundwater would be sufficient to supply all of Michelago's population needs under the projected growth.
Treatment	High	Treating groundwater for potable use requires conventional technology unless unusual contaminants were found (i.e. heavy metals)
Centralised system	High	Groundwater supply is suited to centralised systems
Lot scale system	Medium	Groundwater supply is suited to lot scale systems though it is not suitable for larger population such as those proposed in this study
Regulatory pathway	Medium	There is some uncertainty around the ability to obtain groundwater entitlements
Sustainability	Medium	Excessive groundwater use can lower the groundwater table and potentially damage the GDEs.
Potable - Residential	High	Commonly used
Non potable - Residential	High	Commonly used
Private lot Irrigation	High	Commonly used
Potable - Commercial	High	Commonly used
Summary	Based on the groundwater information discovered so far, it is unlikely that there is sufficient volumes available to supply the full requirements of a future Michelago under the growth scenarios assumed in this project.	

6.3 Rainwater harvesting

The preliminary assessment of rainwater harvesting is shown in Table 6-5.

Table 6-5 Preliminary description and assessment of rainwater harvesting

Type of solution	Rainwater h	arvesting
Description	Rainwater collected from roofs, stored in a rainwater tank and reused.	
Criteria	Suitability	Comment
Availability	Medium	Rainwater is dependent on rainfall and therefore there are fluctuations in supply. Rainwater tank size can alleviate this problem, however, there are periods of shortfall through the year
Costs	Medium	Capital costs are moderate and are paid by the landholder. An advantage of rainwater tanks is they can be installed as development progresses
Practicality	Medium	Rainwater tanks are a mature, well understood technology. However, on a lot scale, supply and quality are dependent on the homeowner and on a community scale, CAPEX and OPEX could be high.
Treatment	High	Treatment of rainwater for non-potable use is typically through maintenance of the system and a simple filtration system
Centralised system	Low	Due to additional piping and complexity, centralised rainwater harvesting systems are rarely used
Lot scale system	High	Lot scale rainwater harvesting is commonly and successfully used. However, as they are operated by often untrained users, they can be prone to failure
Regulatory pathway	High	BASIX encourages the use of rainwater tanks
Sustainability	Medium	Though lot scale rainwater harvesting requires little pumping requirement, it is highly dependent on rainfall and therefore is not climate resilient
Potable - Residential	Low	Typically not used in new developments due to small health risk and possible unreliability of supply. They are commonly used in rural areas
Non potable - Residential	High	Typically used for non-potable purposes such as toilet flushing and washing clothes
Private lot Irrigation	High	Typically used
Potable - Commercial	Low	Rarely used
Summary	Rainwater tanks are a reliable and robust technology. They are widely used for non-potable residential demand.	

In addition to the assessment in Table 6-5, a monthly time step model of the potential rainwater harvesting for Michelago was prepared. The results of this modelling were compared to with the most suitable demands identified in Table 6-5, this comparison is shown in Figure 6-1.

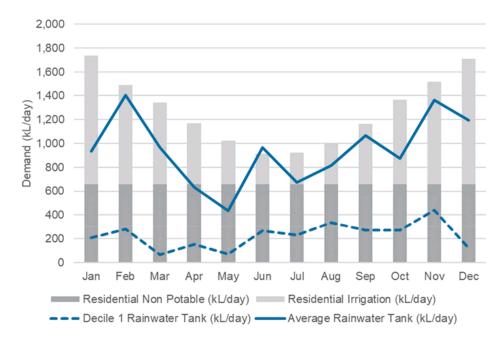


Figure 6-1 Preliminary assessment of rainwater harvested compared to suitable demands

Figure 6-1 demonstrates that rainwater tanks can, on average, supply a significant proportion of non-potable residential demand. However, during years of low rainfall, a significant shortfall is present.

6.4 Recycled greywater

The preliminary assessment of recycled greywater is shown in Table 6-6.

Table 6-6 Preliminary description and assessment of recycled greywater

Type of solution	Lot scale recycled greywater	
Description	Greywater from residential areas treated for reuse.	
Criteria	Suitability	Comment
Availability	High	Availability is consistent, volumes are lower than blackwater
Capital Costs	Medium	Capital costs are moderate and include treatment, collection and supply systems.
Practicality	High	From the perspective of the user, this is a low maintenance water source
Treatment	High	The treatment of greywater and use for non-potable sources is a mature and well understood technology.
Centralised system	Low	Centralised greywater treatment systems are rare. They require an additional collection and supply network, making them comparatively complex
Lot scale system	Medium	Lot scale greywater treatment systems are used moderately. They are more complex and expensive to run and install than rainwater tanks, but less complex and expensive than lot scale wastewater treatment
Regulatory pathway	High	There is an established regulatory process to install schemes
Sustainability	High	Greywater recycling can reduce potable water use
Potable - Residential	Low	Very rarely used. The technology is available, however community resistance is typically high and there are usually more suitable options

Criteria	Suitability	Comment						
Non potable - Residential	High	Typically used for non-potable purposes such as toilet flushing and washing clothes						
Private lot Irrigation	High	Typically used						
Potable - Commercial	Low	Very rarely used						
Summary		ycling when used for non-potable demands is a proven has good reliability and cost. Treatment systems are typically lot se on site.						

In addition to the assessment in Table 6-6, a monthly timestep model of the potential for greywater recycling at Michelago was prepared. The results of this modelling were compared to with the most suitable demands identified in Table 6-6, this comparison is shown in Figure 6-2.

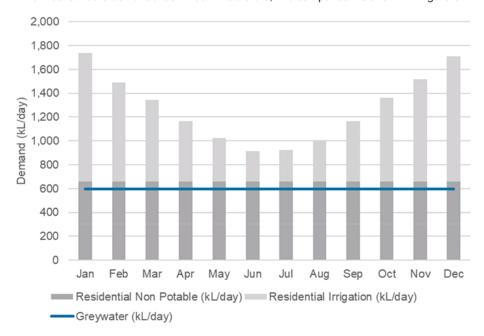


Figure 6-2 Preliminary assessment of greywater recycling compared to suitable demands

Figure 6-2 demonstrates that recycled greywater can supply a significant proportion of non-potable residential demand. It also shows that the reliability of supply is constant throughout the year and during periods of low rainfall.

6.5 Recycled wastewater

The preliminary assessment of recycled wastewater is shown in Table 6-7.

Table 6-7 Preliminary description and assessment of recycled wastewater

Type of solution		cycled wastewater						
Description	Wastewater from	m residential areas treated for reuse.						
Criteria	Suitability	Comment						
Availability	High	Availability of wastewater is consistent and volume is high.						
Capital Costs	Medium	Capital costs are moderate. They include extra processing a the wastewater treatment plant and the installation of a sup- network.						
Practicality	Medium	From the perspective of the user, this is a low maintenance system.						
Treatment	High	The treatment of wastewater and use for non-potable demands is a mature and well understood technology.						
Centralised system	High	Suitable.						
Lot scale system	Low	Lot scale systems are available, however they time from the owner and are comparatively expensive.						
Regulatory pathway	Medium	There is a clear regulatory process to establish schemes, though navigating through the process and its requirements may take some effort						
Sustainability	High	Recycled effluent use can reduce potable water consumption						
Potable - Residential	Low	Very rarely used. The technology is available, however community resistance is typically high.						
Non potable - Residential	High	Typically used for non-potable purposes such as toilet flushing and washing clothes.						
Private lot Irrigation	High	Typically used.						
Potable - Commercial	Low	Very rarely used.						
Summary		cling when used for non-potable demands is a proven s good reliability and cost. Direct potable reuse is rarely used by objections.						

In addition to the assessment in Table 6-7, a monthly timestep model of the potential for wastewater recycling at Michelago was prepared. The results of this modelling were compared to with the most suitable demands identified in Table 6-7, this comparison is shown in Figure 6-3.

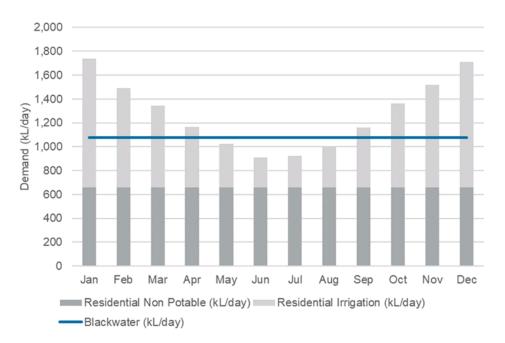


Figure 6-3 Preliminary assessment of wastewater recycling compared to suitable demands

Figure 6-3 demonstrates that recycled wastewater can supply a significant proportion of non-potable residential demand. It also has a greater supply potential than recycled greywater. The reliability of supply is constant throughout the year and during periods of low rainfall.

6.6 Stormwater

The preliminary assessment of recycled stormwater is shown in Table 6-7.

Table 6-8 Preliminary description and assessment of stormwater

Type of solution	Centralised re	ecycled wastewater						
Description	Stormwater ca	otured and treated for reuse.						
Criteria	Suitability	Comment						
Availability	Medium	Availability is variable and reliant on rainfall. Furthermore, lower density development areas have less impervious surfaces and therefore, less runoff.						
Capital Costs	Medium	Capital costs are moderate. They include a treatment system, the installation of a supply pipe and large storage systems						
Practicality	High	Stormwater systems are typically centralised. From the perspective of the user, this is a low maintenance supply of water						
Treatment	High	The treatment of stormwater is typically cost effective and not difficult						
Centralised system	High	Systems are typically centralised, to take advantage of runoff from the wider catchment.						
Lot scale system	Medium	Are more typical on larger lots which can collect stormwater in dams						
Regulatory pathway	High	There is a clear regulatory process to establish schemes, however this can be an involved process						
Sustainability	High	Recycled stormwater can reduce potable water use						
Potable - Residential	Low	Very rarely used. The technology is available, however community resistance is typically high						
Non potable - Residential	High	Typically used for non-potable purposes such as toilet flushing and washing clothes						

GHD | Report for Snowy Monaro Regional Council - Snowy Monaro Michelago Water & Wastewater Infrastructure

Scoping Study, 12527499 | 58

Private lot Irrigation	High	Typically used						
Criteria	Suitability	Comment						
Potable - Commercial	Low	Very rarely used						
Summary	technology. It I	cycling when used for non-potable demands is a proven has good reliability and cost. Direct potable reuse is rarely used nity objections, however it can be considered for Michelago.						

A monthly model of stormwater was not undertaken, due to uncertainty around catchments, impervious areas, soil types and potential storage areas.

6.7 Summary

The results of the multi-criteria analysis have been summarised in Table 6-9. The results show that there are a number of water sources that are suitable for the development at Michelago.

There are many combinations of water supply possible at Michelago, however for illustrative purposes, a comparison has been made of potable and non-potable demand with blackwater recycling and rainwater harvesting. The results are shown in Figure 6-4 and show that if they were to be combined, potable water demand could be reduced by over 60%.

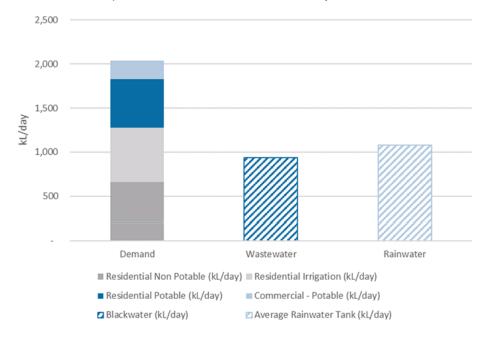


Figure 6-4 Preliminary demand estimates and supply at Michelago

Table 6-9 Summary of MCA ratings for water sources at Michelago

	Availability	Capital cost	Practicality	Treatment	Centralised system	Lot scale system	Regulatory pathway	Sustain- ability	Potable - residential	Non- potable - residential	Private lot irrigation	Potable - Commercial
Surface water (Murrumbidgee River)	High	Medium	High	High	High	Low	Medium	Medium	High	High	High	High
Surface Water (Icon Water)	High	Low	Medium	High	High	Low	Low	Low	High	High	High	High
Groundwater	Low	Medium	Medium	High	High	Medium	Medium	Medium	High	High	High	High
Rainwater	Medium	Medium	Medium	High	Low	High	High	Medium	Low	High	High	Low
Recycled greywater	High	Medium	High	High	Low	Medium	Medium	High	Low	High	High	Low
Recycled wastewater	High	Medium	High	High	High	Low	High	High	Low	High	High	Low
Stormwater	Medium	Medium	Medium	High	High	Medium	High	High	Low	High	High	Low

7. Discussion

For the township of Michelago, the limiting factor for its growth is the ability to provide a sustainable water supply. Based on the above desktop assessment, the Murrumbidgee River seems to be the most obvious and straightforward supply option due to its proximity and volume. However, this is not without its issues. The Murrumbidgee River is fully allocated and therefore, any additional water entitlements will need to be purchased. Therefore, development at Michelago may need to be staged in accordance with the volume of water purchased. The amount of water allocation that can be secured for Michelago will be the main limit on the sustainable size of this town.

A number of alternative water sources have been reviewed. The most reliable of these sources are recycled greywater and wastewater. The others, rainwater and stormwater, is dependent on rainfall. Although stormwater is feasible, fundamentally, sourcing the best quality supply (i.e. rainwater compared to stormwater), is always preferable to minimise treatment costs. Nevertheless, stormwater recycling is a viable option in certain situations and has proven to be effective when appropriately implemented.

By supplementing water from the Murrumbidgee with these sources, more people could have their water demand met and therefore development at Michelago could be maximised. This approach could also be staged to match population growth.

Although a strategy for the supply of water for the site has not been finalised, the identified water sources could be used to supply over 60% of Michelago's demand. By using this innovative approach, it would help the development be sustainable and sympathetic to the environment and the needs of existing residents. Having these alternate sources will also improve the resilience and flexibility of supply.

Water and wastewater treatment can be designed to suit raw water source (in terms of water supply) and end use (in terms of wastewater management). Water and wastewater conveyance can be designed to suit the terrain. In general, the treatment plants for Michelago can generally follow these processes:

- Water treatment: intake → storage → flocculation/coagulation → filtration or DAFF → disinfection
- Wastewater treatment: inlet works → biological treatment →chemical dosing as required →
 sludge dewatering and disposal → disinfection as required → winter storage.

Water source and wastewater reuse or disposal will be the driving factors in the developing the water supply and sewerage system for Michelago.

This desktop assessment is the start of this scoping study. The next steps in the development of a water supply and treatment plan for Michelago are:

- Incorporate feedback from Council into developing a number of feasible water and wastewater scenarios for Michelago.
- · Assess the scenarios in collaboration with Council.
- Determine the sustainable supply of water (taking into account all water sources available) that can be achieved and assess this according to proposed population numbers at Michelago.

8. References

- CommSec. (2019, 11 08). Australian houses shrink: Smallest in 17 years. Retrieved from Economic Insights:
 - https://www.commsec.com.au/content/dam/EN/ResearchNews/2019Reports/November/ECO_Insights_111119-Home-size-trends-report.pdf
- Connellan, G. (2002). Efficient irrigation: A reference manual for turf and landscape. Melbourne: University of Melbourne.
- Cooma-Monaro Local Environmental Plan. (2013).
- Gurung, T. R., Sharma, A., & Umapathi, S. (2012). Economics of Scale Analysis of Communal Rainwater Tanks. CSIRO. Urban Water Security Research Alliance Technical Report No. 67.
- Icon Water. (2018). Source Water Strategy 2018-2030. Canberra: Icon Water.
- Jeffrey, S. J., Carter, J. O., Moodie, K. B., & Beswick, A. R. (2001). Using spatial interpolation to construct a comprehensive archive of Australian climate data. *Environmental Modelling and Software*, 16(4), 309-330.
- NSW Department of Industry. (2019). Murrumbidgee Surface Water Resource Plan SW9
 Murrumbidgee Surface Water Resource Plan Area. NSW Department of Industry.
- NSW Department of Urban Affairs and Planning. (1996, October). NSW Planning, Industry and Environment. Retrieved July 29, 2020, from https://www.planning.nsw.gov.au/-/media/Files/DPE/Guidelines/sewerage-systems-eis-guideline-1996-10.pdf?la=en
- NSW Office of Water. (2012). Water Sharing Plan for the Murrumbidgee Unregulated and Alluvial Water Sources. NSW Department of Primary Industries.
- Snowy Monaro Regional Council. (n.d.). Snowy Monaro Regional Council. Retrieved July 28, 2020, from https://www.snowymonaro.nsw.gov.au/801/Floodplain-Management
- Water Services Association of Australia. (2014). Gravity Sewerage Code of Australia. Part 1: Planning and Design. Third Edition. Water Services Association of Australia.
- WaterNSW. (n.d.). NSW Water Register. NSW, Australia. Retrieved July 3, 2020, from https://waterregister.waternsw.com.au

Appendices

GHD | Report for Snowy Monaro Regional Council - Snowy Monaro Michelago Water & Wastewater Infrastructure Scoping Study, 12527499

Appendix A – Design Basis Memo



Memorandum

23 June 2020

То	Jessica Dunstan		
Copy to	John Wearne, Greg Searle, Mark Rixon, Alexanda Ad	kins	
From	Patty Chier	Tel	0439 305 331
Subject	Design Basis Memo for Michelago Water and Sewer Scoping Study	Job no.	12527499

1 Introduction

1.1 Project understanding

The township of Michelago has the potential to grow into a town of several thousand people due to its proximity to Canberra and the Snowy Mountains. In order to support this growth, the township requires appropriate water and wastewater infrastructure. An important objective of this scoping study is to evaluate the feasibility of a range of solutions and provide options that are innovative, flexible, sustainable, resilient and sympathetic to the environment and the needs of existing residents. An integrated water cycle management approach will be used, though in a dry climate, water will be the limiting factor to the town's growth potential. Therefore, the scoping study will also shed light on what a sustainable population for Michelago will look like.

1.2 Purpose of this document

The purpose of this memorandum is to define key criteria and assumptions made that will provide the basis for conducting the water and sewer scoping study for Michelago township.

2 Design basis

2.1 Population

The likely population growth scenarios for this project as advised by Council are:

- Low growth 4,000 people
- Medium growth 8,000 people
- High growth 12,000 people.

The timeframe for the town to reach these population projections is uncertain and will be based on numerous factors such as the economy, lifestyle trends and natural disasters.

2.2 Design horizon

The timeframe for this scoping study has been set at 30 years, with a reference point of 20 years to be in line with Council's Strategic Plan.

2.3 Geographical boundary for development

It has been assumed that the areas of growth are likely to occur in line with Council's Michelago Staging Plan (Figure 1).

2.4 Water demand

Based on the projected population for Michelago, the following preliminary estimates of water volume are required. The range between lower and upper bound values are summarised in .

Table 1 Preliminary estimates of raw water volume required to supply population

Growth scenario	Low	Medium	High
Population	4,000	8,000	12,000
Raw water demand - lower bound (ML/yr)¹	288	576	864
Raw water demand - upper bound (ML/yr) ²	1,040	2,080	3,120

Notes:

- 1. Based on 2.5 ppc, 150 kL/conn/yr and 20% non-revenue water
- 2. Based on 1.5 ppc, 300 kL/conn/yr and 30% non-revenue water

Taking the conservative approach of 1.5 people per connection (ppc), residential water consumption of 300 kL/connection/yr and 30% non-revenue water and treatment plant losses, the assumed raw water supply volumes requirements are around 1000, 2000 and 3000 ML per annum for each of the growth scenarios.

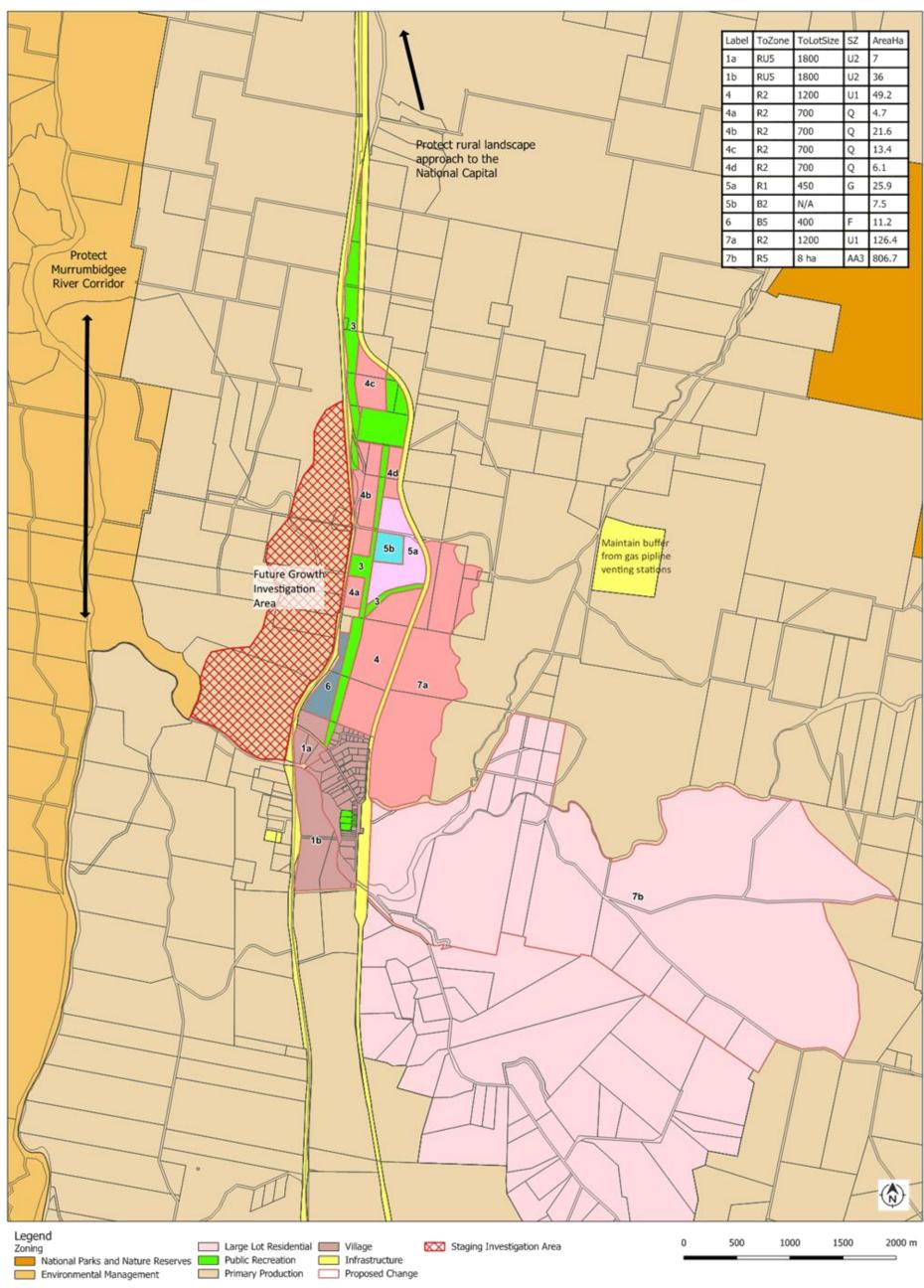
2.5 Potential water sources

Though there may be other potential water sources, however, obvious sources that will be included in this study are:

- Murrumbidgee River or its tributaries
- Groundwater
- Rainwater
- Icon Water
- · Direct/indirect potable reuse
- Stormwater
- · Or a combination of the above.

This page has been left intentionally blank

Figure 1 Michelago Staging Plan



Disclaimer

While due care has been taken by the Publisher in compiling this map, no responsibility will be accepted by Snowy Monaro Regional Council for errors or omissions. The Publisher, to the full extent permitted by law, excludes all warranties, and disclaims any responsibility to any person for loss or damage suffered from any use of this map.

This page has been left intentionally blank

2.6 Water treatment

The requirements for water treatment will depend on the likely water source. Regardless of source, any drinking water supply needs to meet the requirements of the Australian Drinking Water Guidelines (ADWG), including the incoming Health Based Treatment Targets (HBT) framework.

Determination of the most suitable process will require sampling, monitoring and analysis beyond the scope of this study, however, likely suitable process trains (and hence cost estimates) can be determined based on regional context and guidance from the Water Services Association of Australia's HBT manual and other references.

For consideration of surface water supplied from the Murrumbidgee River, treatment plants at Cooma and Canberra provide suitable references of likely process requirements, and hence infrastructure needs and cost.

For consideration of groundwater supplies, understanding of the aquifer depth, recharge zones and interaction with surface water will provide guidance related to expected health risk and pathogen removal capability. Assumptions, backed by any regional data (local data has been assumed unavailable), are required to define treatment requirements for other parameters (e.g. metals).

Where there is ambiguity around the treatment requirements, the required infrastructure and expected costs can be presented as ranges encompassing the likely risks and opportunities that may be realised. Recommendations for information and data to test the assumptions and allow further concept development will be provided as later parts of the scoping study.

2.7 Wastewater treatment

Similarly for wastewater treatment, the requirements will depend on the volume of wastewater generated and the composition. Typical domestic wastewater is generally able to be well characterised based on the number of people and the sewer characteristics. Assuming that there are no significant industrial discharges into the sewer network the wastewater flows and loads to be treated will be able to be well characterised.

The treatment process can be carried out by a range of technology and process options. Typically the processes would include primary treatment for gross solids removal, biological secondary treatment to remove the bulk of the remaining solids and organics and tertiary treatment which could include further treatment for a high degree of suspended solids and nutrient removal as well as disinfection for pathogen removal. The degree of treatment would be determined based on the treated effluent quality requirements based on the proposed discharge route and/or the proposed reuse applications.

Determination of the most suitable treatment process to achieve the required degree of treatment would be impacted by footprint availability, site location, power costs, chemical costs and other application specific considerations.

If there is any ambiguity around treatment requirements, the required infrastructure and expected costs can be presented as ranges encompassing the likely risks and opportunities that may be realised. Recommendations for information and data to test the assumptions and allow further concept development will be provided as later parts of the scoping study.

2.8 Reticulation

It has been assumed that water supply and sewerage will only be provided to urban development (including areas zoned or to be zoned RU5 Village) and not rural areas. Key inputs into the reticulation (both water and sewer) include:

- · Lot sizes this will inform an average reticulation pipe length per property
- Road/street widths if there are extra wide streets proposed, the length of reticulation pipe will
 increase, otherwise standard street widths will be assumed to factor into a per property pipe length
- · There are assumed to be no water intensive industries proposed.

2.8.1 Water specific inputs for reticulation

For the purposes of sizing reticulation pipework the following assumptions have been made:

Average Daily Demand (ADD) 350L/connection/day
Peak Day Demand (PDD) 1000L/connection/day

Peak hour demand (PHD) 2.5 x PDD 15L/customer/hour

Peak velocity 2m/s at PHD

Pressure at PHD 20m at connection point/ meter

Fire flow requirements Yes

2.8.2 Sewer specific inputs

The following assumptions will apply to the sewerage reticulation:

Sewage generation rate 350L/connection/day
Peak dry weather flow PDWF:ADWF = 2.5:1

Peak wet weather flow PWWF:ADWF = 5:1 for conventional gravity system

PWWF=PDWF for pressure sewer system

2.9 Wastewater reuse

Supply availability

The availability of wastewater for treatment and supply at Michelago will be a function of the number of people in the development, the efficiency of water fixtures in buildings, and water consumption patterns. As there are no industrial areas planned for the collection network and treatment system will be new, the wastewater is predicted to be a suitable quality for treatment. Canberra receives an average of 636 mm rainfall per year with an even distribution (Bureau of Meteorology, 2020).

Licencing

For Michelago, a water recycling scheme, developed by Council, would require Section 60 Approval under the Local Government Act, 1993 (NSW) (LG Act) from the Department of Planning, Industry and Environment (Water) (DPIE).

However, if the scheme is developed by a private company (i.e. a developer), Section 68 Approval, under the LG Act must be sought from Snowy Monaro Regional Council. Once approved, a licence under the Water Industry Competition Act, 2006 (NSW) and this licence will be administered by the Independent Pricing and Regulatory Tribunal (IPART). To obtain and hold a WICA licence, the proponent must demonstrate that they have appropriate technical and financial capacity to build and maintain a system capable of providing appropriate quantity (supply) and quality of water.

2.10 Stormwater harvesting

Supply availability

Stormwater harvesting is dependent on rainfall and catchment characteristics and as the catchment characteristics for Michalago are not yet known, supply estimates are difficult. However, stormwater harvesting schemes have been successfully implemented at developments at this scale in Australia.

Licencing

Stormwater harvesting systems that collect water from ground runoff are licenced in a similar way to wastewater treatment systems; Section 60 Approval from the DPIE if the scheme is developed by Council; Section 68 Approval from Council and a licence granted under the Water Industry Competition Act, 2006 (NSW), administered by the IPART if the scheme is private.

2.11 Rainwater harvesting

Supply availability

Rainwater tanks are widely and successfully used in Australia. Estimates for the volume of water that could be harvested vary according to roof size, tank size and uses. However, there is significant potential. An estimate for Canberra, located 50 km from Michelago, show that for a 150 m² roof and a house of three occupants, a 10 kL rainwater tank can save 82 kL per year (The Department of Health, 2020).

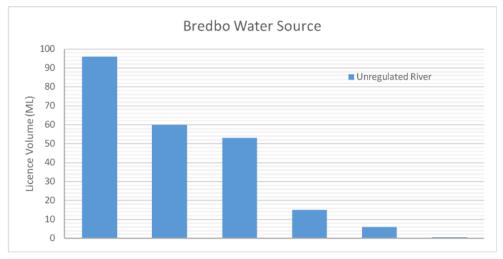
Licencing

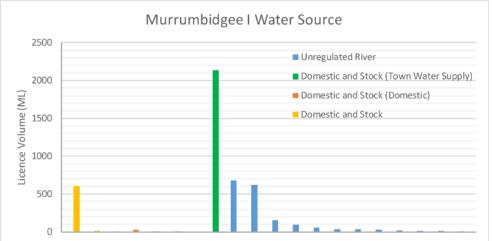
Rainwater harvesting does not require a licence if they are for private residential use. However, they must be installed according to the relevant codes.

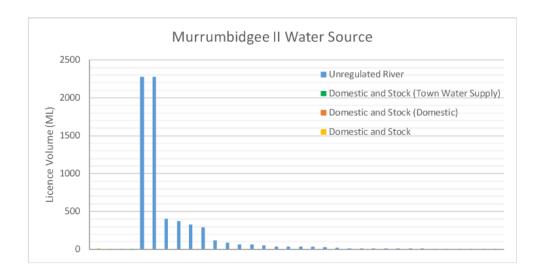
Appendix B - Surface water entitlement details

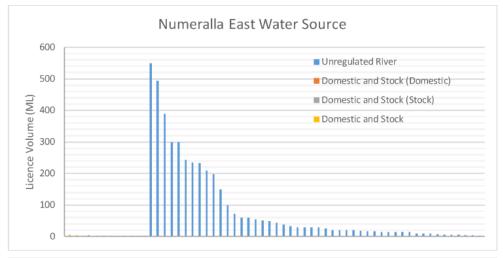
Licence Category Distribution (Source: NSW Water Register)

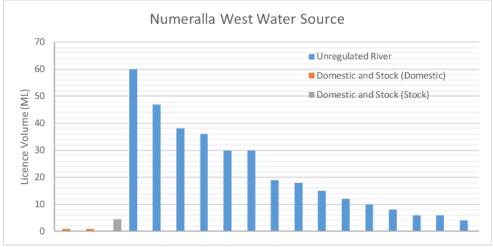
Note that each bar represents a single water access licence and the bar represents how much water is associated with that licence in that water source.





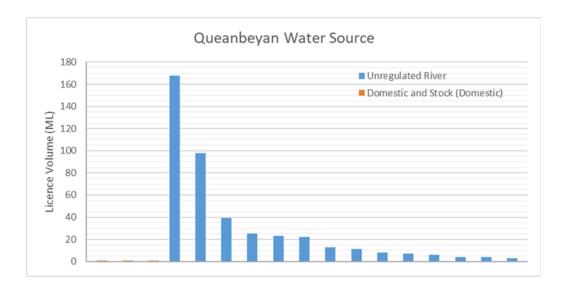






GHD | Report for Snowy Monaro Regional Council - Snowy Monaro Michelago Water & Wastewater Infrastructure

Scoping Study, 12527499 | 66



Licence Category - Water Use (Source: NSW Water Register)



GHD | Report for Snowy Monaro Regional Council - Snowy Monaro Michelago Water & Wastewater Infrastructure

Scoping Study, 12527499 | 68

GHD

LvI 7, 16 Marcus Clarke Street Canberra ACT 2601 T: 02 6113 3200 E: cbrmail@ghd.com

© GHD 2020

This document is and shall remain the property of GHD. The document may only be used for the purpose for which it was commissioned and in accordance with the Terms of Engagement for the commission. Unauthorised use of this document in any form whatsoever is prohibited.

12527499-91632-

 $31/https://projectsportal.ghd.com/sites/pp09_02/snowymonaromichelago/ProjectDocs/12527499-RPT-GHD Opportunities and Constraints.docx$

Document Status

Revision	Author	uthor Reviewer		Approved for Issue					
		Name	Signature	Name	Signature	Date			
A	T Cauchi G Savage P Carroll T Patterson S White J Orr	P Chier		J Weame		15/7/20			
0	T Cauchi G Savage P Carroll T Patterson S White J Orr	P Chier	Tosky (Di.	J Wearne	*J Wearne	14/8/20			

^{*}Approval on file

www.ghd.com



GHD

Level 7, 16 Marcus Clarke Street Canberra ACT 2601

T: 61 2 6113 3200 F: 61 2 9475 0725 E: cbrmail@ghd.com

© GHD 2020

This document is and shall remain the property of GHD. The document may only be used for the purpose for which it was commissioned and in accordance with the Terms of Engagement for the commission. Unauthorised use of this document in any form whatsoever is prohibited.

12527499-36910-

 $78/https://projectsportal.ghd.com/sites/pp09_02/snowymonaromichelago/ProjectDocs/12527499-RPT-Michelago Scoping Study.docx$

Document Status

Revision	Author	Reviewer		Approved for Issue					
		Name	Signature	Name	Signature	Date			
0	P Carroll A Remedios	P Chier		J Wearne		9/10/20			
1	P Carroll A Remedios	P Chier		J Wearne		19/11/20			

www.ghd.com



MICHELAGO MASTERPLAN - CONSULTATION OUTCOMES

Michelago Masterplan

Consultation Outcomes Snapshot – 2020

Snowy Monaro Regional Council (SMRC) has begun the process of developing a Masterplan for Michelago, to help inform how the town can best grow and develop into the future, whilst retaining the inherent character so beloved by current residents and visitors.

Elton Consulting and WSP were engaged to complete a number of engagement activities in 2020 to begin to ask stakeholders what they want to see protected, improved or added in Michelago; asking for their contributions in creating a shared vision for the future of Michelago.

Below is a snapshot summary of activities completed during this early visioning period. Further consultation will be offered in 2021, during the public exhibition of the Masterplan.

Website

A dedicated Masterplan page was established on Council's website. This page acted as the single source of truth for the Masterplan; providing all critical information concerning the project's goals and timeline, key contacts and scheduled engagement activities.

This page will be regularly utilised and updated throughout the future phases of the Masterplan development.

Survey

A simple, high-level survey was published on Council's webpage, which was designed to capture people's initial thoughts on what they may want to see included in the Masterplan, and what they would suggest Council consider in its development.

Questions were primarily open, and allowed for a lot of free thought and suggestions; encouraging people to input as much or as little information as they thought necessary.

As of Monday 14 December, 24 survey responses had been completed.

Some initial themes observed:

Repurposing and enhancement

There was a clear preference among respondents for areas or facilities to be upgraded or repurposed for modern use, rather than suggesting these places be removed entirely or completely redesigned.

Many suggestions included upgrades to infrastructure such as the toilets at the local park, whilst other comments put forward the idea of repurposing some of the older, more redundant buildings such as the Hibernian Inn; people were fond of the idea of this becoming a restaurant, or museum space.

Spaces for gatherings

Suggestions for improved or new social places and spaces were common among responses answering the questions "what places, buildings or service sin Michelago would you like to see upgraded?" and "is there anything missing from the village of Michelago?"

There was a clear call-out for improvements to existing social spaces, such as more seating and cooking facilities at the park, and the repurposing the railway station as a café/wine bar or events venue. People were also in favour of introducing new facilities such as a working hub and more places to eat and drink.

Connection to area

The free-text fields of the survey revealed a commonality in language when people described what they like about Michelago, primarily in answer to the question, "What places, buildings or service in Michelago would you like kept exactly the same as they are now?"

A connection to and fondness for Michelago was regularly communicated. Some words used included:

- » "rural village ambience"
- » "rural charm"

MICHELAGO MASTERPLAN - CONSULTATION OUTCOMES

» "village feel"

Councillor Workshop

A visioning workshop was held via Zoom on 3 December with SMRC Councillors to gain their ideas on how Michelago could and should develop.

The workshop consisted of a short PowerPoint presentation followed by four discussion activities using the program Mural. Activities were simple, and questions ultimately asked what they like about Michelago as it is now, what they want to see changed, and how they could see this change implemented.

A key observation from the discussion was no one was opposed to growth itself; all were in favour of growth and enhancement in a way that was considered and area appropriate.

Councillors were generally in agreement with most topics. Some of their suggestions included:

- » Infrastructure upgrades to support population growth
- » Creation of a town centre; introduce more food/beverage services, arts and craft stores, tourist attractions, a main street
- » Improve the entranceway to the town from the highway; attract people in transit
- » Facilitate growth but retain character to avoid mass development; councillors often used the example of Googong as what they did not want to see in Michelago.

Community Workshop

A visioning workshop was held in-person at Michelago Hall on 15 December for community members and interested stakeholders. The workshop was designed to mirror the activities of the Councillor Workshop, and again, discuss people's ideas, visions, wants and concerns in developing a Masterplan for Michelago's future development.

18 people attended the session.

An important thing to note from the discussion is that many comments and suggestions made reflected those captured in the survey as well as in discussion with councillors. There is clearly a common sentiment towards Michelago currently, as well as how people see Michelago in the future.

Some key discussion themes observed:

Character

Similar to previous engagement activities, people felt strongly about preserving the character and community feel of Michelago, with one person describing it as 'having a personality.' There was a strong imploration to work to retain current character in any new development through flexible strategies, rather than being too prescriptive.

Inclusive services and amenities

Growth or improvement was often framed in terms of what new services or facilities could be introduced which would improve the liveability of Michelago.

Many suggestions centred on leisure or social spaces and included but were not limited to a rail trail, food/beverage facilities including restaurants and pubs, and play areas for children and families. There were also several requests for more health services and aged care facilities.

Within this discussion, it was revealed equity in development and design was important to a fair few attendees. A few comments were made suggesting Council should consider the needs and wants of the community as a whole, rather than of only a few.

MICHELAGO MASTERPLAN - CONSULTATION OUTCOMES

Council Briefing

An informal briefing session was held with council staff on 15 December via Teams to present on and discuss the preliminary findings of studies completed into the potential opportunities and constraints in developing the Masterplan.

Findings were presented by a member of the Elton Consulting Planning Team, and WSP research report authors were on standby to answer technical questions of council staff.

It allowed Council a 'first look' into how these studies were progressing, and offered an opportunity for them to ask questions or submit requests for certain elements to be considered.

Key topics of discussion included:

- » Seeking information on community feedback heard so far
- » Asking how the Masterplan would fit into and/or affect other strategies and development underway in the area
- » Feasibility of a rail vs rail trail
- » Activation areas.

9.3.3 HIGHDALE CARPARK IMPROVEMENTS - DESIGN ENDORSEMENT AND APPROVAL TO IMPLEMENT

Record No:

Responsible Officer: Chief Operating Officer

Author: Manager Infrastructure

Key Theme: 3. Environment Outcomes

CSP Community Strategy: 9.1 Transportation corridors throughout the region are improved

and maintained

Delivery Program Objectives: 9.1.2 Our local road network is planned, built and repaired to

improve movement across the region

Attachments: 1. Highdale Carpark - Design Proposal

Cost Centre 1863 - Carparks

Project Highdale Carpark Improvement

EXECUTIVE SUMMARY

At the December 2020 meeting of Council, a report was considered in relation to proposed Highdale carpark improvements in Berridale. This report contained the design at 80% completion along with the results of Council's community consultation process.

The recommendation proposed in that report and Council resolution was:

COUNCIL RESOLUTION 1/20

That Council:

- A. Acknowledge the report on community consultation in relation to proposed Highdale Carpark Improvements;
- B. Receive and note the revised preliminary design; and
- C. Endorse proceeding with further, targeted consultation with specific members of the business and school communities to further improve the design to address outstanding concerns in relation to bus parking and vehicle access to businesses.

The purpose of this report is to:

- Provide Council with an update on the targeted consultation process; and
- Propose endorsement of the design, proceeding to 100% ready for construction and implementation of the design by December 2021.

As part of the targeted consultation process, staff undertook a selection of one-on-one meetings with:

- Local building and property owners;
- Parents;
- Local School Bus Companies; and
- Local School representatives.

It is acknowledged that not all residents of Berridale's local community support movement of the current bus zone from Park Street to Highdale carpark; however all stakeholders agree that Highdale carpark in its current configuration is dangerous and does not present Berridale's CBD in a manner that attracts increased visitation. More importantly, there is support for the design from key stakeholders i.e. parents, local schools and local school bus companies to suggest Council endorsement would be a positive step for the improvement of Berridale and the CBD.

The following officer's recommendation is submitted for Council's consideration.

OFFICER'S RECOMMENDATION

That Council:

- A. Acknowledge completion of the targeted consultation process in relation to proposed improvements to Highdale Carpark, Berridale;
- B. Endorse the current 80% design to progress to 100% design ready for construction; and
- C. Approve construction to commence with the aim of delivering proposed improvements by 30 December 2021.

BACKGROUND

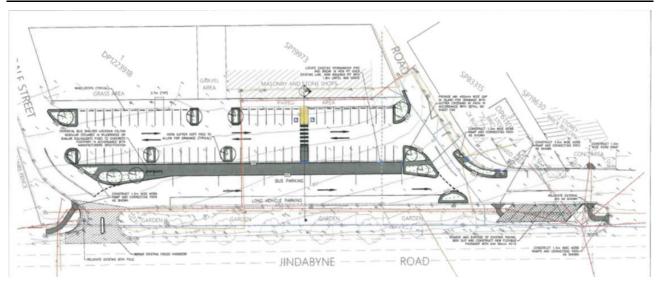
The targeted consultation process allowed consideration of concerns raised predominantly by business owners established within the area surrounding Highdale carpark. Although a thorough community consultation process was completed prior to Council consideration of the design; it was acknowledged that some elements of the community remained concerned and attempts were made by Council staff to resolve these through a targeted consultation process.

The main areas of concern, suggested design amendments and staff recommendations identified through the targeted consultation process were:

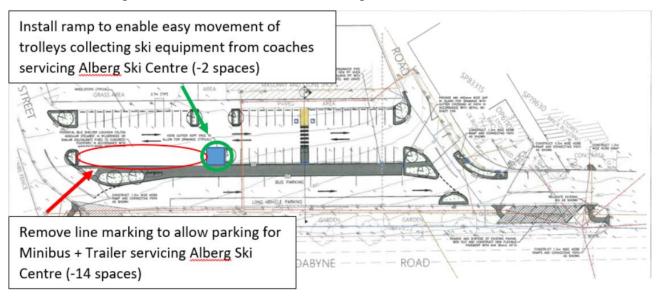
Proposal 1 – Minibus and Trailer Parking.

This proposal related to the design recognising a need to accommodate minibus and trailer parking for collection and return of ski equipment to Arlberg Ski Centre. In addition, the proposal suggested installation of a ramp to support trolley access from the business to the median strip when collecting returned ski equipment. The effect on Highdale carpark should the proposed be implemented would reduce formal parking capacity in Highdale carpark by 16 spaces.

The current design proposes outlines parking as follows:



An amended design would look similar to the following:



Recommendation

The installation of a ramp to provide easy access from Arlberg Ski Centre to the median strip for collection of ski equipment returning from the ski fields would introduce a permanent reduction of 2 parking spaces to accommodate a winter only business. However, this suggestion is supported given the length of time Arlberg Ski Centre has established itself in Berridale, the contribution this business makes to the CBD and to encourage business to operate 'as usual' during peak operating hours.

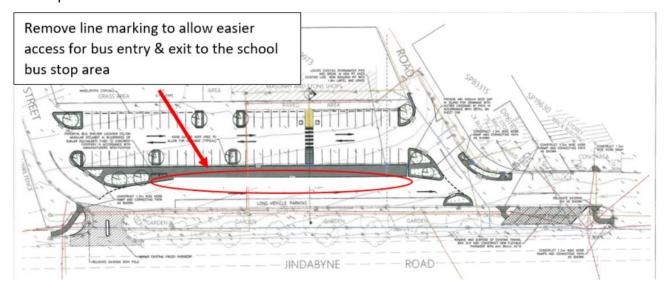
However, the removal of 14 parking bays to accommodate a single minibus + trailer parking is not supported for the following reasons:

- Experience of parking habits within the townships of Cooma, Nimmitabel and Bombala suggests that, if sufficient car parking bays are available, vehicles with trailers will park across a number of bays available to them;
- The permanent removal of 14 parking bays to accommodate a winter only requirement is not justified; and

• The development of four (4) new businesses directly opposite the lost parking bays would be impacted by their loss.

Proposal 2 – Removal of Line Marking within the Bus Parking Bay.

A meeting between Council staff, Cooma Coaches and Snowliner Coach owner/managers reviewed the designs and both companies supported the designs as provided. There was some discussion relating to removal of lines separating bus parking bays but it was agreed that retention of lines would provide a more safer and familiar environment for school children.



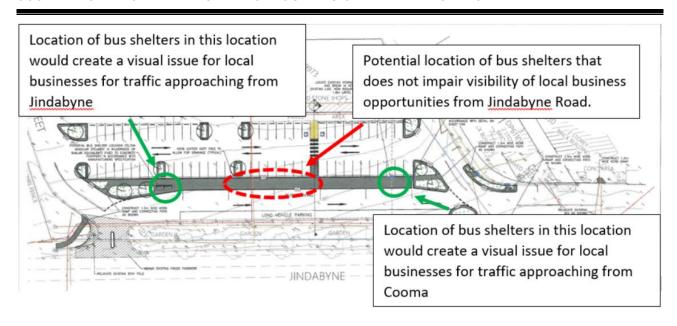
Recommendation

This proposal to remove lines separating bus parking bays is not supported. The owners of both Cooma Coaches and Snowliner Coaches have advised that schoolchildren become familiar with where their school bus parks, which determines where they stand while waiting for the bus to arrive. Removal of line marking within the proposed bus parking area would cause confusion and is considered unnecessary by both Cooma Coaches and Snowliner Coaches.

Proposal 3 – Bus Shelters.

The concerns of local businesses established in Highdale with the proposal to install bus shelters and the visual impact these may have on business

9.3.3 HIGHDALE CARPARK IMPROVEMENTS - DESIGN ENDORSEMENT AND APPROVAL TO IMPLEMENT



Recommendation

Any decision on the installation of bus shelters in Highdale Carpark <u>is deferred</u> until a suitable design has been identified, businesses informed and any visual impairment concerns overcome.

Proposal 4 – Intersection of Jindabyne Road to Highdale Carpark near Highdale Street.

The suggestion is that large vehicles would cross the centre line on Jindabyne Road to access or exit Highdale carpark safely and the introduction of a median strip at the intersection would impact the movement of vehicles through the intersection.

Recommendation

Concerns from local business owners regarding the movement of stock trucks, school & local business buss traffic and B-Double operators servicing the service station are noted. However the design already proposes an amendment to this intersection and, following swept path analysis undertaken by the design company, confirms this is sufficient to address those concerns.

Proposal 5 – Local Traffic Committee.

It had been suggested that designs for Highdale Carpark improvements had not been considered by the Local Traffic Committee (LTC) and, while it is acknowledged that LTC involvement is not generally provided until designs are 100% complete; the current designs were reviewed by LTC members at the January meeting. Both TfNSW and NSW Police did not express any concerns or objections to current design proposals.

Recommendation

Comment from LTC is sufficient to allow progress of the existing designs through to 100% ready for construction, at which time they will require submission to LTC for a recommendation to Council for progression to construction.

QUADRUPLE BOTTOM LINE REPORTING

1. Social

The Berridale Landscape Masterplan 2014 (Section 8.4) captured the potential challenges that exist when developing what the community perceive as "their space". Extracts from the masterplan acknowledge that:

- Not everyone is going to think the strategy proposed is the right one, particularly when some of the solutions and choices may be mutually exclusive.
- The main focus was to try and achieve an appropriate balance between all competing issues and community views along with an appropriate response to the myriad of circumstances and personal opinions regarding the street, trees and village centre landscape in Berridale.
- The document was intended to stimulate debate amongst the Council and wider community and that:
 - It is worth noting that street tree planting and broad and long-term strategies put forward can be a particularly emotive subject.
 - Most people want the benefits and outcomes espoused but are surprisingly intolerant of the minor inconveniences associated with works or the proposed changes to long-loved spaces.

There is one area of common ground amongst all residents of Berridale in relation to Highdale Carpark i.e. the current configuration is unacceptable:. This common ground is captured through the following comments

- "Generally everyone at the meeting was enthused about an upgrade and pleased to have now secured the funding to beautify our town" (letter 14 October).
- "Let me state very clearly I am not against the carpark redevelopment" (letter 1 October).
- "Thank you for the great consultation meeting last night...It is clear that much thought has gone into the plan to utilise this space to maximum potential" (Email 30 July).
- "We are never opposed to any upgrades which will make positive changes to the town of Berridale" (Email 2 October).
- "Thank you again for last night's meeting. I felt I was the only one in the room concerned about the children and our community members being given a safe passage through the car park area" (Email 28 October).

There are a wide variety of users of Highdale carpark and the aim of this design is to improve pedestrian safety, regulate traffic flow and parking and create a space that attracts increased visitation to Berridale. The Berridale Landscape Masterplan acknowledges that "not everyone is going to think the strategy proposed is the right one" but the implementation of this design aligns with the recommendations within the Masterplan and satisfies the majority of stakeholders who use and operate within this space.

2. Environmental

The improvement of Highdale Carpark in Berridale provides no real environmental benefits. However the introduction of green spaces and potential to accommodate future Electronic Vehicle Charging facilities through an initiative with NRMA provides an environmental offset to the development of the Berridale CBD.

3. Economic

Estimated Expenditure	Amount	Financial year	Led	ger	A	ссо	un	t st	rin	g					
100% Design	\$30,000	2020/2021													
Construction	\$700,000	2021/2022													
	\$														
Funding	Amount		Led	σer	Account string										
(Income/reserves)	Amount		LCG	gei						•					
(Income/reserves) Stronger Communities Fund	\$225,000	2020/2021	LCu	861											
Stronger		2020/2021		861											

4. Civic Leadership

Community consultation, Council Briefing sessions and reports to Council in relation to the Berridale Landscape Masterplan and proposal to invest grant funding into Highdale carpark

9.3.3 HIGHDALE CARPARK IMPROVEMENTS - DESIGN ENDORSEMENT AND APPROVAL TO IMPLEMENT

improvements have been numerous between March and December 2020. The upgrade to Highdale carpark was proposed through the masterplan that, in itself, resulted from substantial communication with the community.

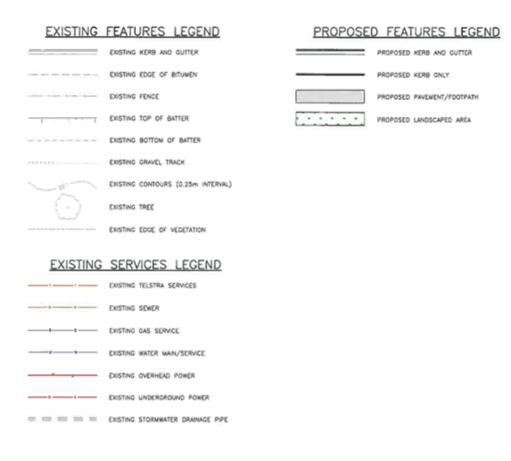
It is acknowledged that not all sections of the community will support the proposal and, where possible, the design has been reviewed and amended to accommodate the majority of community concerns. Unfortunately, discussions have not been able to resolve the issue of school bus parking in Park Street but key stakeholders have agreed and endorsed the design for improved bus parking at Highdale carpark.

The design as presented for endorsement by Council meets all Australian Standards for a Class 3A carpark.

PROPOSED CARPARK IMPROVEMENTS HIGHDALE STREET, BERRIDALE



SHEET INDEX		
DWG No.	DESCRIPTION	
1968-C01	TITLE SHEET	
1968-C02	NOTES	
1958-C03	SURVEY AND SERVICES PLAN	
1968-CO4	EROSION AND SEDIMENT CONTROL PLAN	
1968-C05	GENERAL ARRANGEMENT PLAN	
1968-C06	SECTIONS AND DETAILS	
1968-C07	SIGNAGE AND LINEMARKING PLAN	
1968-C08	SINGLE UNIT TRUCK/BUS SWEPT PATH ANALYSIS	



3	RE-ISSUED FOR BOX DETAILED DESIGN APPROVAL	02/12/20
2	ISSUED FOR 80% DETAILED DESIGN APPROVAL	27/11/20
1	ISSUED FOR CONCEPT DESIGN APPROVAL	11/07/20
ISSUE	DESCRIPTION	DATE

80% DETAILED DESIGN NOT FOR CONSTRUCTION

FOOTPRINT (NSW) PTV. LTD. AUTHORISE THE USE OF THI DRAWING ONLY FOR THE PURPOSE DEMONSTRATED BY TH STATUS STAMP SHOWN ABOVE.

Π	SCALES	ORIGINAL	SUR		
П			DAT		
II	N.T.S	A1	AZIV		
ŀ	es et et et		DRA		
Ш	CUENT:				
11	SNOWY MONARO				
11	10	CHE			

RVEYOR: JATKINSON

TUM: AHD

MUTH: MGA

KWN: AB

BIGNED: AB

BIGNED DATE: JUL '20

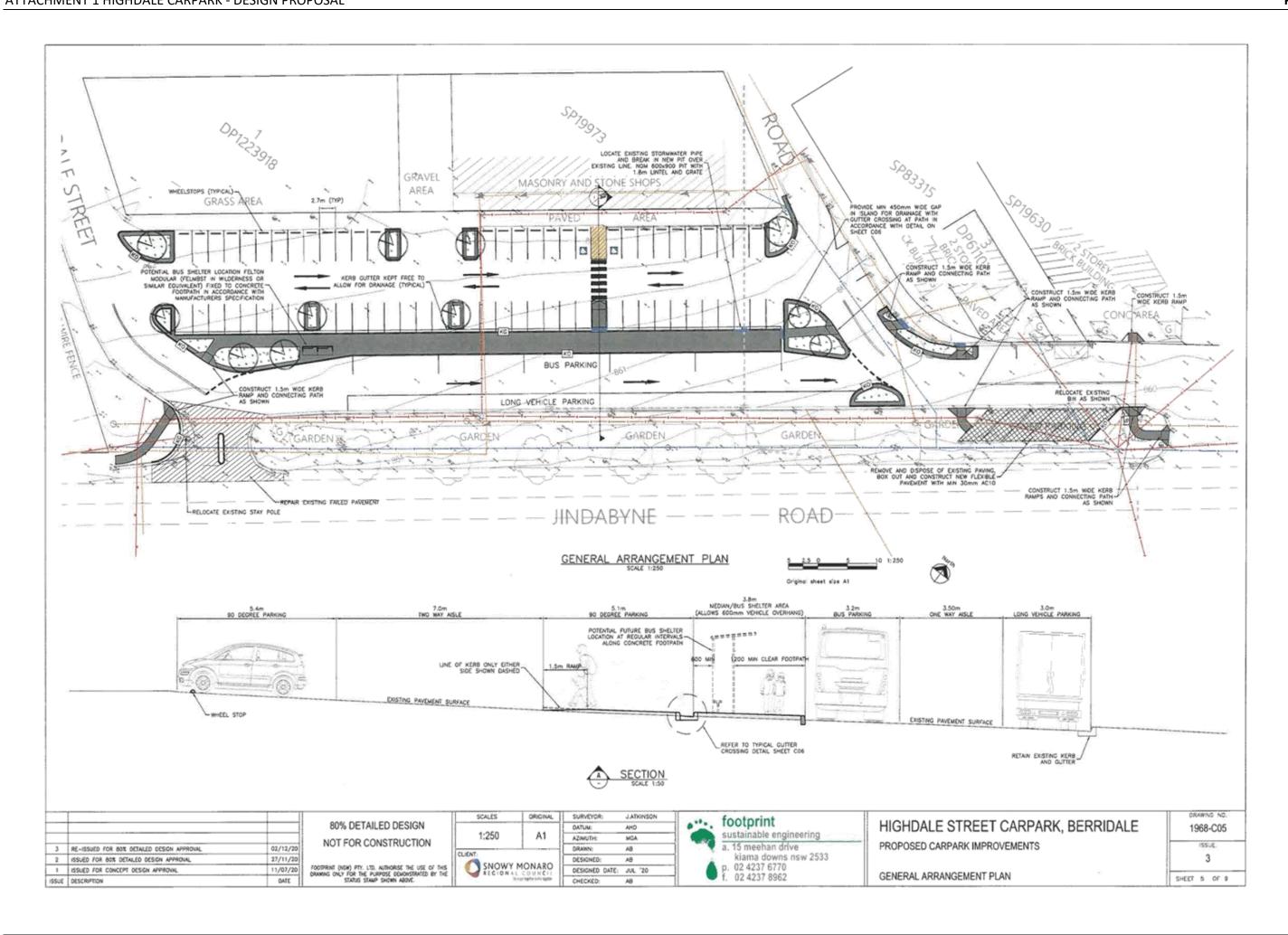
ECKED: AB

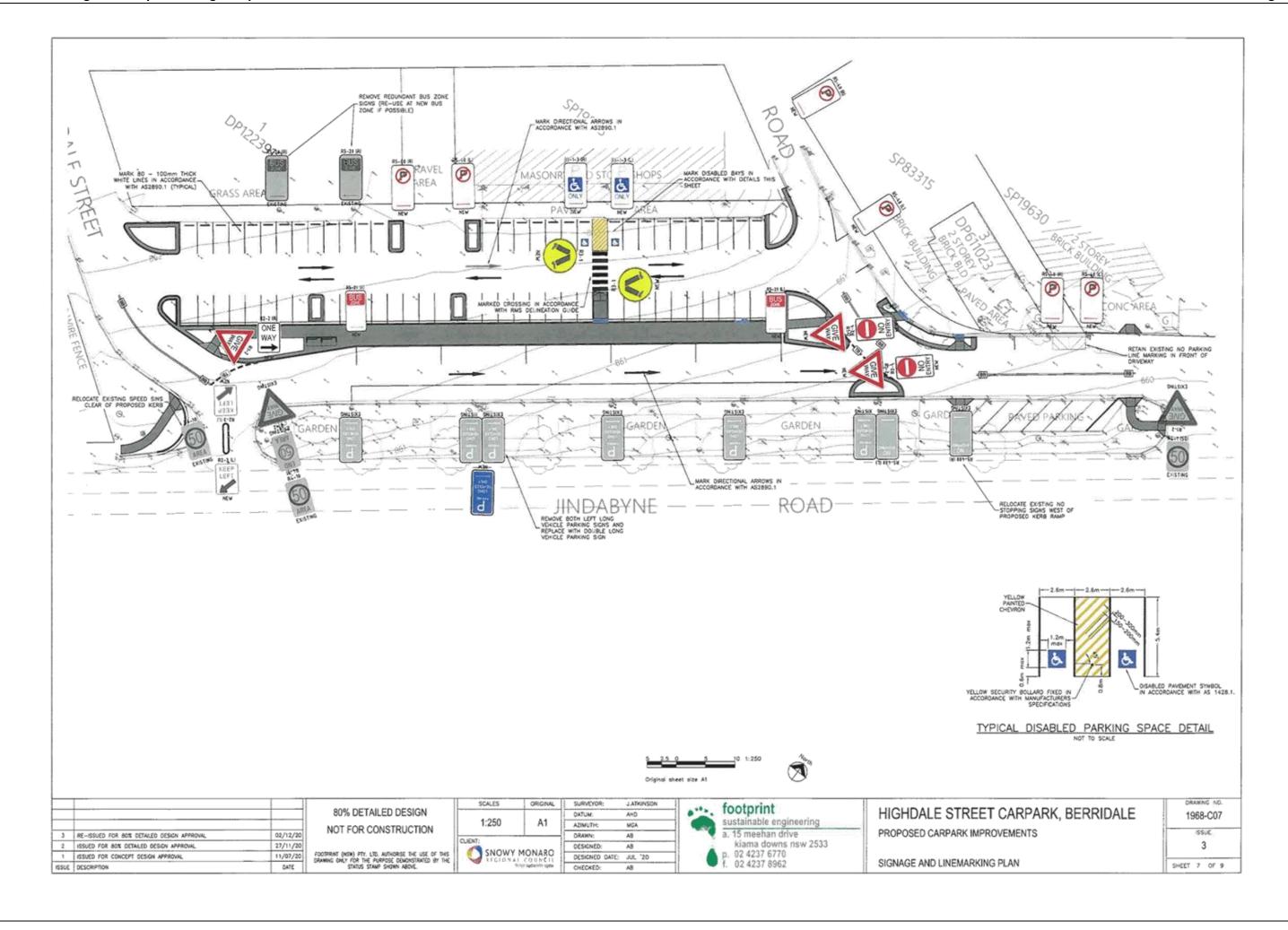


HIGHDALE STREET CARPARK, BERRIDALE PROPOSED CARPARK IMPROVEMENTS

TITLE SHEET

1968-C01 1958-C01 1958-3 SHEET 1 OF 9







9.3.4 POST EXHIBITION REPORT LAND USE STRATEGIES

Record No:

Responsible Officer: Chief Strategy Officer

Author: Team Leader Strategic Planning

Key Theme: 3. Environment Outcomes

CSP Community Strategy: 8.1 Plan for rural, urban and industrial development that is

sensitive to the region's natural environment and heritage

Delivery Program Objectives: 8.1.2 Land use is optimised to meet the social, environment and

economic needs of the region

Attachments: 1. Consultation Report - Draft Rural Land Use Strategy

Cost Centre WO 47

Project Rural Land Use and Settlements Strategies

EXECUTIVE SUMMARY

Between 19 October 2020 and 1 February 2021 Council received more than 300 pieces of written feedback. In person and online consultation sessions were undertaken with landholders, farmers, community groups, and Government Agencies. The Snowy Monaro YourSay Page on the Rural Land Use Strategy has been accessed more than 5000 times. The Settlements Strategy YourSay page has also been accessed over 2500 times.

Many submissions raised concerns about the application of zone E3 Environmental Management and changes to minimum lot size (MLS) though many other issues and concerns were raised. Council staff have prepared a consultation report (attachment 1) providing a summary of feedback received throughout this consultation. It is expected that considered changes to the Rural Land Use Strategy will take time, and community concerns should be comprehensively addressed.

The following officer's recommendation is submitted for Council's consideration.

OFFICER'S RECOMMENDATION

That Council:

- A. Receive and note the post exhibition report land use strategies;
- B. Send the consultation report to all who provided written feedback and place on YourSay page for community to view
- C. Publish all submissions on Councils YourSay page with personal details of individuals redacted
- D. Establish an internal working group consisting of all Councillors and relevant staff
- E. Amend proposed E3 Environmental Management zoning by;
 - Maintain existing E3 Environmental Management zoning as per current LEPs
 - Initially remove all newly proposed E3 Environmental Management zoning in the draft Rural Land Use Strategy
 - Review E3 Environmental Management methodology in conjunction with the working group.
 - Consult and work with individual land owners affected to seek agreement on the

revised approach.

- Report back to Council individually on proposed new E3 zones where agreement cannot be reached with the land owners.
- F. Review proposed minimum lot size to provide a tailored approach based on sub-regions identified in the Local Strategic Planning Statement.
- G. Consider all feedback and amend draft land use strategies as appropriate

BACKGROUND

In February 2019 Council began a review of its strategic planning framework with the Snowy Monaro Planning and Land Use discussion paper's release. The accompanying 10-week community consultation period saw significant feedback from the community on planning and land use issues across the Snowy Monaro region.

Feedback received during the public exhibition on the discussion paper established the direction of the new Snowy Monaro planning framework. It ultimately informed the 12 planning principles of the inaugural Snowy Monaro Local Strategic Planning Statement (LSPS), which Council adopted at its ordinary meeting on 21 May 2020.

Core deliverables of the LSPS are the Settlements and Rural Land Use Strategies, which have been developed with a clear line of sight to the LSPS and the South East and Tablelands Regional Plan (SETRP). The Settlements Strategy and the Rural Land Use Strategy are the final strategic document to inform the consolidated Snowy Monaro LEP.

Since the conclusion of the public exhibition on 1 February 2021, it is clear that a holistic review of E3 Environmental zones is required. This will result in a significant reduction of E3 Environmental Management zoned land. Following this review, any proposed E3 Environmental Management zoning should be subject to individual consultation with and landowners.

CONSULTATION

Council resolved on 15 October 2020 to place the draft Rural Land Use and Settlements Strategies on public exhibition for 40 days. On 17 December 2021, the public exhibition was extended to 1 February 2021 to allow the community additional time to read, process and respond to the draft documentation. Between 19 October 2020 and 1 February 2021, the following consultation activities were undertaken.

Location Key issues or concerns raised Strategic Planning Response	
	se
• Concerns were raised Session Thursday 29 October 2020 • Concerns were raised regarding rural living opportunities given the reduction in R5 Large Lot Residential particularly around Berridale and Adaminaby • Concerns over lack of ground-truthing in areas proposed to be zoned E3 Environmental • Concerns were raised Residential is reviewed. Land wo large lot sizes or land holding su used for agricultural enterprise does not meet the zone object for R5 Large Lot Residential shows be considered for the provision small rural lots to support som residential growth in well service.	t nd with ing sizes prises ojectives al should vision of some

	•	Management. Support for including extensive agriculture as permissible without consent in E3 Environmental Management Zone	Methodology for E3 Environmental Management should be amended and significantly scaled back, and further ground-truthing may be required as part of this process. Council staff will seek to engage with the NSW Government to ascertain the amount of further ground-truthing required.
	•	Some concerns were raised with the boundaries between zones and minimum lot size changes. Some confusion was noted between the role of Council and new LEP vs. role of Snowy SAP and AP SEPP.	Extensive agriculture is anticipated to stay as a land use permissible without consent in E3 Environmental Management zone as it is considered an important land management practice. Minimum lot size methodology should be reviewed on a sub landscape basis to address all concerns.
			A draft SAP Masterplan is expected for release later this year, and it is expected this will resolve the confusion.
Cooma Drop in session 4 November 2020	•	Concerns raised over lack of transport considerations, particularly of atrial roads. Request that bypass for Cooma is included in settlements strategy Ongoing concerns over split zones and subdivision in split zones Support for changes proposed changes for R5 Large Lot Residential around Bredbo	The purpose of these draft documents is to provide guidance for future planning proposals. Action 10.1 of Council's LSPS is to develop an integrated transport strategy that will provide strategic guidance for transport infrastructure needs and priorities. There is little evidence to support the need for a bypass around Cooma. Community views are significantly opposed to such a project. It is recommended a split zone subdivision clause be placed in a new Local Environmental Plan, and it is likely this will address these concerns.
			Support for these changes is noted; it is suggested further biodiversity

assessments will be required as

	part of the planning proposal process.
Bombala Drop in Session 10 November 2020	 Concerns were raised over E3 Environmental Management and the restrictive nature of this zoning. Concerns were raised over forestry and private native forestry (PNF) in E3 Environmental Management zone Methodology for E3 Environmental Management should be amended and scaled back, and further ground-truthing may be required as part of this process. Council staff will seek to engage with the NSW Government to ascertain the amount of further ground-truthing required.
	 Views on minimum lot size (MLS) where mixed somewhere of the view that an increase in MLS was positive as it may lead to better land management, protect agricultural land and limit dogs and other land use conflicts. Some were of the view that MLS should be more flexible and that smaller rural lots, particularly close to town, were not a bad thing. It is expected that a change in E3 Methodology will address these concerns. Council staff have sought advice from Biodiversity Conservation Division (BCD) on this matter, and it was noted they do not support forestry as permissible land use in the E3 Environmental Management zone. It should also be noted there is a bill before NSW government to amend the LLS Act, which may address this issue. A review of methodology on the MLS across the LGA will help provide a greater evidence base to support and changes.
Online Zoom sessions 11 November 2021	 Interested to know how the SAP may impact them and future development of Jindabyne Interested to know how the SAP process is significant for the region, and the draft land use strategies are designed to integrate with the SAP Masterplan once completed.
Berridale Drop in Session 12 November 2021	 Smaller lots (rural residential) for the edge of town in Berridale. Concerns over impacts of smaller lots (rural residential) on the edge of town especially, from dogs attacking sheep. Land use conflict Mixed reaction to E3 There is a provision in the draft settlements strategy for significant rural residential around Berridale, of which zoning can be changed when demand justifies it. This is noted, and the draft land use strategies seek to reduce land rural areas.
	environmental management zone, some attendees could see the reasoning behind it Methodology for E3 Environmental Management should be amended and scaled back, and further

	 and thought that the land should be protected, and the zone should apply more broadly, especially to areas of native grasslands. Some concerns raised over MLS were it is proposed to increase. Using MLS as a tool for weed management was raised, there were different opinions on how best to achieve this outcome. 	ground-truthing may be required as part of this process. Council staff will seek to engage with the NSW Government to ascertain the amount of further ground-truthing required. Minimum lot size methodology should be reviewed on a sub landscape basis to provide a greater evidence base to support and changes. There is significant evidence to indicate large minimum lot sizes result in better weed management on properties.
Michelago Workshop Sessions 17 November 2021	 Significant concerns were raised over the use of E3 Environmental Management zone. These concerns revolved around the restrictive nature of the E3 zone and permissible land uses. Some concerns were raised regarding MLS, including the request to reduce MLS around Michelago to allow for smaller rural lots. Road quality and maintenance was raised as a significant concern. Confusion was raised regarding the role of the strategies vs the role of the Michelago Master Plan, foreshadowed by the LSPS and Settlements Strategy. 	Methodology for E3 Environmental Management should be amended and scaled back, and further ground-truthing may be required as part of this process. Council staff will seek to engage with the NSW Government to ascertain the amount of further ground-truthing required. Minimum lot size methodology should be reviewed on a sub landscape basis to provide a greater evidence base to support and changes. It was noted by Council staff that the Michelago Masterplan process provides an opportunity for road upgrades to be included in the development contributions plan. The Michelago Masterplan process is well underway, and there will be multiple opportunities for community input into this process. Michelago Masterplan will provide direction for the growth and development of Michelago include reductions in MLS if deemed necessary.
Online Zoom	Short Term Rental	Mechanisms to regulate STRA state

wide are being considered by the Meetings Accommodation in Jindabyne should be encouraged. NSW Government and will be 18 November considered as part of the SAP. 2021 Dual occupancies in rural STRA in residential zones. neighbourhoods is of ongoing Not opposed to E3 concern to Council. **Environmental Management** It is proposed to maintain dual Zone Methodology occupancies in rural zones. The inclusion of a DCP control to restrict the location of dwellings on the lot will be considered at the DCP stage and may be included based on lot size. Methodology for E3 Environmental Management should be amended and scaled back, and further ground-truthing may be required as part of this process. Council staff will seek to engage with the NSW Government to ascertain the amount of further ground-truthing required. Methodology for E3 Environmental Kybeyan and Significant concerns were Tuross workshop Management should be amended raised over the E3 session and scaled back, and further **Environmental Management** zones and the impacts on ground-truthing may be required 19 November agriculture in these zones. as part of this process. Council staff 2020 will seek to engage with the NSW While this was not a unanimous view, these views Government to ascertain the amount of further ground-truthing did represent the vast required. majority of attendees. It is expected that a change in E3 Concerns were also raised Methodology will address these over the impact of E3 concerns. Council staff have sought **Environmental Management** advice from BCD on this matter, on private native forestry, and it was noted they do not both direct and indirect support forestry as permissible impacts. land use in the E3 Environmental There was broad support to Management zone. It should also increase MLS and concern that be noted there is a bill before the the existing MLS could lead to NSW government to amend the

increased fragmentation of

to what had been seen in

Cootamundra Shire. There

good agricultural land similar

LLS Act, which may address this

Minimum lot size methodology

issue.

9.3.4 POST EXHIBITION REPORT LAND USE STRATEGIES

	were some views that smaller rural lifestyle lots provided diversity in a rural area which a larger MLS may not achieve.	should be reviewed on a sub landscape basis to provide a greater evidence base to support and changes.
Bombala Drop in Session 20 November 2020	 Concerns raised over MLS increase, views that smaller or 40ha MLS allows flexibility which larger lot sizes do not. Particularly areas around town could have lower MLS to support more intensive or boutique production Support for concessional allotments and would like to see these return as part of the new LEP. 	Minimum lot size methodology should be reviewed on a sub landscape basis to provide a greater evidence base to support and changes. Rural lot averaging will be reconsidered for areas close to townships where services can be provided. Concessional allotments are not considered strategic, are expensive to service, and cause poor agricultural outcomes.
Meeting with Monaro Farming Systems 20 November 2020	 Strong support for Minimum Lot Size increase, there was a view that a larger MLS was vital for the future agricultural viability of the region. Larger MLS would result in landowners being farmers/dependent on the land for income, and as such better land management would result from necessity. Planning system needs to be more flexible for farm management both in times of drought and on an ongoing basis. The definition of extensive agricultural is not broad enough. Wider exemptions should be considered 	Minimum lot size methodology should be reviewed on a sub landscape basis to provide a greater evidence base to support and changes. It is noted that the NSW Agriculture Commissioner is currently looking at a wide range of reform of planning for agriculture, including changes of definitions, preventing rural subdivisions and flexible planning controls for agricultural production.
Meeting with RFS 24 November 2020	 Support increase in MLS in rural and bushfire prone locations. Support use of land use zones, including E3 Environmental Management which restricts inappropriate development in 	Minimum lot size methodology should be reviewed on a sub landscape basis to provide a greater evidence base to support and changes. Methodology for E3 Environmental Management is proposed to be

POST EXHIBITION REPORT LAND USE STRATEGIES bushfire prone locations. visitor accommodation as a permissible use in rural areas. bushfire study. Online session via Concerns about E3

Do not support tourist and

Significant concerns on any potential decrease in MLS at Smiths Road and recommend Council undertake a strategic

amended and scaled back, and further ground-truthing may be required as part of this process. Council staff will seek to engage with the NSW Government to ascertain the amount of further ground-truthing required.

Permissibility of tourist and visitor accommodation in rural areas will be reviewed based on other changes and advice from RFS.

Smiths Road area will require a strategic bushfire study as part of any planning proposal.

Zoom with NSW **Farmers**

24 November

- **Environmental Management** zoning and area's which have had environmental protection zones had a negative impact on agricultural production.
- Mixed views on MLS some thought that the market should dictate MLS. Others thought higher MLS would result in less rural subdivisions, which would be a good outcome. If left to the market, over capitalisation on smaller lots would lead to lower agricultural production.
- Succession planning was put forward as a potential reason for low MLS; however, this was not agreed upon across the board. One member noted that when younger, all members were against subdivision and now approaching retirement, some think it's not a bad idea.
- Would like mapping to be removed and E3 **Environmental Management** to be reduced significantly as soon as possible.

Methodology for E3 Environmental Management is proposed to be amended and scaled back, and further ground-truthing may be required as part of this process. Council staff will seek to engage with the NSW Government to ascertain the amount of further ground-truthing required.

Minimum lot size methodology should be reviewed on a sub landscape basis to provide a greater evidence base to support and changes.

Land use planning decisions should focus on protecting the viability of agriculture in the region and the production of food and fibre for future generations ahead of succession planning.

Methodology for E3 Environmental Management is proposed to be amended and scaled back, and further ground-truthing may be required as part of this process. Council staff will seek to engage with the NSW Government to ascertain the amount of further ground-truthing required.

Online meeting via Zoom 25 November 2020	 Ability to do dual occupancy in E3 Environmental Management zone. Concerns over restrictive nature of E3 Environmental Management. Ability to build dams and harvest water. 	The review of E3 Environment Management may change permissible use. However, dual occupancies were prohibited from E3 in favour of secondary dwellings (granny flats). It is considered that secondary dwellings will have a smaller footprint and, as such, a lower environmental impact.
	 Impact on property values due to the potential prohibition of Airstrip. 	Permissible land uses are being reviewed to address confusion concerning building dams in rural areas.
		Prohibition of an airstrip is not expected to impact property prices.
Smiths Road workshop sessions 8 December 2020	 Support for proposed changes to zone and minimum lot size. Some questions were raised regarding the boundaries of the E3 Environmental Management and E4 Environmental Living zoning. Concerns over road alignment and quality where raised. Questions regarding contributions planning was raised. ACT Government ongoing concern with the intensification of the Smiths Road area was also discussed. 	Minimum lot size methodology should be reviewed on a sub landscape basis to provide a greater evidence base to support and changes. As identified by RFS, a strategic bushfire study should be undertaken for the area, along with further biodiversity investigations. Road infrastructure and access should be considered as part of a strategic bushfire study.
Tinderry/Calabash Area Community Meeting 11 December 2020	 Significant concerns over E3 Environmental Management Zone was raised and the restrictive nature of the zone. Concerns over vegetation clearing and removal of invasive natives was raised. Concerns were raised over the cost of permits or costs associated with the native vegetation panel for 	Methodology for E3 Environmental Management is proposed to be amended and scaled back, and further ground-truthing may be required as part of this process. Council staff will seek to engage with the NSW Government to ascertain the amount of further ground-truthing required. Some clearing exemptions should be considered to be added to DCP

	 Concerns were raised regarding loss of dwelling entitlement and ability to rebuild after bushfire. It was noted by Council staff onsite that rebuild after a lawful dwelling is destroyed by bushfire is permissible with consent. Concerns were raised regarding MLS, and it was considered not flexible enough to respond to unique climate factors nor innovations in farming/boutique or artisan industry. Some concerns were raised regarding the provision of any additional rural residential land around Michelago and 	for E3 zones, including clearing for fence lines; clearing above the thresholds for native vegetation panel will require native vegetation panel approval. Standard clause in LEP will allow for the rebuild of a destroyed lawfully approved; this does not rely on existing use rights. It should be noted property information request can be lodged with Council to determine dwelling entitlement in rural areas below MLS. Minimum lot size methodology should be reviewed on a sub landscape basis to provide a greater evidence base to support and changes. Michelago Masterplan should address rural residential land requirements. Settlements Strategy should be amended for
Shannons Flat	the potential impact on the rural landscape and agricultural industry. • E3 Environmental	The application of the additional E3
meeting 14 December 2020	Management Zone and its application – areas used predominantly for agriculture. • Proposed RU2 zone – don't support further tourism uses or emphasis on tourism in this area. Strongly supports the keeping of the character and land uses agricultural for sheep and cattle grazing.	Environmental Management Zone will be reviewed in its entirety. Consider the application of the RU1 Primary Production Zone based on the information provided by the residents of Shannons Flat.
Michelago Community Visioning Workshop 15 December 2020	While this session was focused on the Michelago Master Plan concerns regarding the rural land use strategy, including permissible land uses, RU2 Rural Landscape zone, minimum lot size and E3 Environmental Management Zone.	Land use zones and methodology underpinning the application of these zones should be reviewed and reapplied based on community feedback. Minimum lot size should be reconsidered on smaller sub landscape scales with the intent of delivering on local and state government policies.

9.3.4 POST EXHIBITION REPORT LAND USE STRATEGIES			
Online Meeting via Zoom 16 December 2020	 Loss of Dwelling Entitlement was the dominant issue raised at this session. Innovation and niche and small scale agriculture was also raised as a matter for further consideration in the DRLUS in this session. 	Lots in this area are predominately 40ha in size and, based on the information from landholders, do not result from a Council approved subdivision. It is likely that these lots lost their dwelling entitlement at the commencement of the 2013 Cooma Monaro LEP. Despite this, it was recommended that landholders submit a Property Information Request to confirm whether or not the land enjoys a dwelling entitlement. Further information and clarification on this can be provided within the DRLUS. It should be noted that it is only dwelling houses that are required to comply with the minimum lot size. Therefore, where niche agricultural land uses are proposed, these would not be limited based on the minimum lot size.	
Jerangle Community Meeting 21 December 2020	 It was noted that Jerangle is nary mentioned in either land use strategy. Given Jerangle's rich history, it may warrant being included in Settlements Strategy as a village. Concerns were raised over use of E3 Environmental Management zone and its impact on agriculture and forestry. Some concerns raised about Councils communications regarding the land use strategies, particularly centre on the wording of media 	Jerangle should be considered for inclusion in settlement strategy as a potential rural hamlet. Methodology for E3 Environmental Management is proposed to be amended and scaled back, and further ground-truthing may be required as part of this process. Council staff will seek to engage with the NSW Government to ascertain the amount of further ground-truthing required.	

releases.

There was a broad objection to the proposed use of E3 **Environmental Management** zone in the first session. There

	was apprehension to E3 zone, but some attendees could understand the reasoning and approach Council was taking.	
Adaminaby Community Workshop Sessions 13 January 2021	 Concerns centred on Councils community consultation throughout the public exhibition period. There were concerns that many community members may not be aware of the draft land use strategies and that individual letters should be sent to all landowners regardless of potential impact. Significant concerns were raised regarding E3 Environmental Management zone and the potential impacts of this zone. There was a broad apprehension to the proposed RU2 Rural Landscape zone as well, views that a more traditional agricultural zone would suit the area better There was some confusion raised over the land use definitions, with a view that intensive livestock agriculture was the most common land use across the Monaro Think Adaminaby should be included as the sixth town in the LGA with many services within the existing village. There was a view that Adaminaby had outgrown the 	Public exhibition of the land use strategies was promoted via Council webpage, social media, newspaper, radio and letters. Over 5000 people accessed the Rural Land Use Strategy online. It should be noted this is a high level of access for this engagement tool for a local planning consultation period. Methodology for E3 Environmental Management is proposed to be amended and scaled back, and further ground-truthing may be required as part of this process. Council staff will seek to engage with the NSW Government to ascertain the amount of further ground-truthing required. Application of rural zones should be reviewed with areas of a high agricultural productive zone for primary production purposes. Livestock grazing meets the land use definition of extensive agriculture. Livestock grazing is the most common agricultural activity on the Monaro. Activities that meet the definition of extensive agriculture are precluded from being considered as intensive agriculture for planning purposes. Adaminaby may benefit from town zoning and further investigation in the settlements strategy. The
	village zoning and required a more structured zone to address land use conflicts • Crown land was a major	addition of Adaminaby as the sixth town should be included in the revised settlement strategy. Council should continue to liaise
	constraint to village growth. The community would like this	with Crown Lands to facilitate the orderly development of land zoned

	to be addressed immediately. f	for development in Adaminaby.
	should not be sprawled and survival residential development	Expansion areas for the village should be compact as to not encroach into productive agricultural land.
	 There was support for agritourism focus, particularly on rural land between Adaminaby and Old Adaminaby. 	
Numeralla Community Sessions 14 January 2021	Environmental Management zoning and minimum lot size; some could understand the zoning approach but sought further information about what the potential impacts would be. The minimum lot size for subdivision and dwelling entitlement was important to the local community. There was a strong view that 250ha did not reflect the local area, existing lots and settlement pattern. • While a potential extension to the Village north was not	Methodology for E3 Environmental Management is proposed to be amended and scaled back, and further ground-truthing may be required as part of this process. Council staff will seek to engage with the NSW Government to ascertain the amount of further ground-truthing required. Village expansion area should be subject to planning proposal addressing any bushfire, biodiversity, servicing and demand issues. Koala plan of management should be developed in accordance with state environmental planning policy as a Council priority.
Meeting with the NSW Government Department of Planning Industry and Environment (DPIE) Regional	Supportive of the approach Council was taking by preparing detailed land use strategies before creating a	Draft land use strategies were prepared in accordance with state and local planning policy, and they deliver on actions from LSPS and SETRP.

Planning Office Council should continue to work There was an 14 January 2021 with the Department of Planning acknowledgement that draft to achieve desirable outcomes. strategies were broadly consistent with SETRP. It is proposed that Council develop a plain English summary version of Acknowledgment of the high the Rural Land Use Strategy to be environmental values mapped easier for the community to digest. land was included for consideration as E3 **Environmental Management** zone in accordance with the SETRP direction. Support for Councils public exhibition and engagement approach allowing for community input early in the process. It was noted that documents are very detailed and technical in nature and that a summary/easy read version may help the community members better understand the draft strategies. Meeting with Methodology for E3 Environmental Broad support for proposed **NSW Government** Management is proposed to be approach, methodology and Biodiversity application E3 Environmental amended and scaled back, and Conservation further ground-truthing may be zone. Division. required as part of this process. Broad support for changes in Council staff will seek to engage 20 January 2021 MLS; however, there was a with the NSW Government to view that this could be more ascertain the amount of further succinctly presented for ease ground-truthing required. of understanding where Minimum lot size methodology increase development or should be reviewed on a sub subdivision may occur. landscape basis to provide a There were concerns greater evidence base to support regarding reducing R5 Large and changes. Lot Residential zoning and Zoning should reflect State and increasing Rural zones as this local policy and to reflect land uses may have unintended impacts where necessary. Land zoning on biodiversity through should not be placed on land for

activities that may be

Act 2013

undertaken without consent

through the Local Land Service

the sole purposes of allowing or

facilitated through other

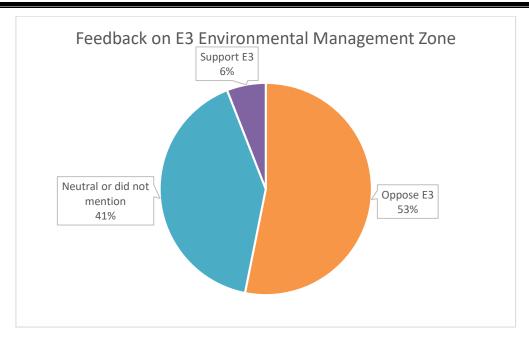
not allowing activities that may be

Meeting with Eden Local Aboriginal Land Council 21 January 2021 • Mould like to facilitate realisation and development of their assets. • See the Bundian Way as a significant project and lead to potential developments along the trail and supporting infrastructure. • Would like Council to consider flexible rural zoning along the corridor to facilitate things such as camping grounds. • Delegate should be identified as an important strategic location on the Bundian Way. • Potential to provide a cultural experience in Bombala adjacent to railway precinct, which will help provide riders
of the Monaro Rail Trail opportunities to learn about the Bundian Way

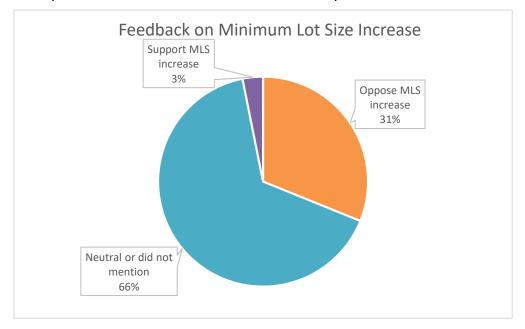
SUBMISSIONS

Rural Land Use Strategy

The draft rural land use strategy was publically exhibited from 19 October 2020 to 1 February 2021 and received 285 pieces of written feedback. The vast majority of this feedback focused on the proposed use of the E3 Environmental Management zone and, to a lesser extent, on the Minimum Lot size. However, the community raised many issues, including but not limited to permissible land uses, schedule 1 additional permitted uses, land zoning, minimum lot size, miscellaneous permissible uses, interaction with other government policies, exempt and complying SEPP, local land services policies, development control plan controls, protection of riparian areas and waterways, protection of agricultural land, existing use rights, large scale renewable energy and dwelling entitlements.



Due to the high volume of submissions on the Rural Land Use Strategy and the detailed nature of some of these submissions, it is expected that revisions to the rural land use strategy will take time and be far-reaching. It is expected that significant changes will be made to land zoning methodology to reflect community views and sentiments, particularly on zone E3 Environmental Management. It is also proposed that the methodology behind MLS is completely reviewed and looked at on a smaller sub landscape scale with the potential to be tailored to achieve positive outcomes. Other changes are anticipated to be required to respond to items raised by the community and government agencies. Due to the significant changes to the draft document, it is recommended by staff that a revised draft be re-exhibited by Council.



A consultation report has been prepared attached. It is recommended that this be sent to all people who have made a written submission and circulated to our wider mailing list, and placed on the YourSay page. It is also recommended that all pieces of written feedback received are placed on Councils YourSay page.

Further, it is recommended that Council staff send letters and offer to meet with all landowners proposed to be affected by an environmental protection zone that currently is not affected by such a zone in their respective Local Environmental Plan.

Steering/Advisory Committee

It is understood the Council would like to consider a steering and advisory committee for the Rural Land Use Strategy process to move towards a Local Environmental Plan. Council staff have sought advice on this issue from the Department of Planning, who have advised that if Council wants to proceed with a steering committee, this consists of all Councillors and relevant Council staff. It was strongly recommended that any committee or working group set up to advise Council on land use planning, is an internal working group to reduce risks related to probity.

'Forming a specific working group for all councillors and staff to work through the issues, being able to invite others in (Primary Industries, the Department, OEH, for example) at various stages could also be helpful. Having members of the public in a Comprehensive LEP making process is problematic given that changing zones, minimum lot size etc. has an impact on land values and is a recipe for conflicts of interest and probity issues. A community and farmers forum at the beginning and as part of the consultation process is very helpful and which you have already done with the Rural Lands Strategy and your LSPS'

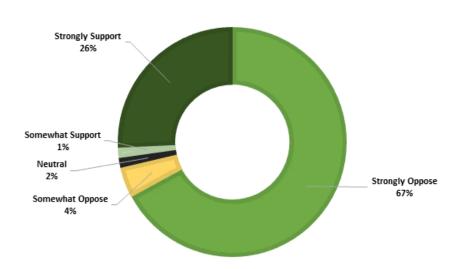
All Councillors should be included in this committee so all Councillors have access to the same information and can be well informed in decision making. It should be noted all Councillors are community representatives; however, further input from community members can be facilitated through an open forum at the start of this process.

Other models of advisory committees have been used by Councils historically; however, these committees have tended not to deliver desired outcomes. External committee members could provide interested parties with knowledge that may lead to corrupt conduct. Members of an internal committee can seek expert advice from external bodies as required, including industry groups and government agencies.

Settlements Strategy

The settlements strategy was publically exhibited from 19 October 2020 to 1 February 2021 and received 56 pieces of written feedback. 20 pieces of feedback directly relate to a bypass around Cooma, 19 of these opposed any such road. The heavy vehicle alternative route or 'bypass' is not included in the draft Settlements Strategy. Rather, a separate poll Council ran to gauge support (or lack there off) for a potential southern heavy vehicle/ring road. 71% of respondents to the quick poll on Councils your say page opposed a proposed alternative heavy vehicle route for Cooma, as shown in the doughnut chart below.

HEAVY VEHICLE ALTERNATIVE ROUTE



Other items raised about the settlements strategy raised specific items of concern or support generally around potential zonings or potential changes to MLS. The growth development of towns across the region had broad support, and there was a view that Adaminaby should be included as a town due to the development pressures it faces, in part due to Snowy 2.0. In a similar fashion to the Rural Land Use Strategy Project, it is recommended that all submissions are placed on the YourSay page to allow the community an opportunity to view.

It is generally considered that the feedback received can be addressed through minor amendments to the draft document and can be considered for adoption at a Council meeting in May. Re-exhibition of the draft settlements strategy is not considered necessary.

QUADRUPLE BOTTOM LINE REPORTING

1. Social

Significant community feedback has been received on the draft land use strategies, including over 300 pieces of written feedback. Face to face engagement has seen over 200 community members meet with staff through various forums in addition to several hundred phone calls.

Community input early in the planning process at the strategy stage is vital to a strong, stable and robust planning system. Community feedback has been wide ranging and has covered many items. Key themes included the use of zoneE3 Environmental Management and minimum lot size. Community feedback should be comprehensively reviewed and responded to with the intent of finding a palatable solution. It should be noted that land use planning decisions should be made for broad social, environmental and economic benefit not to benefit, individual landholders.

2. Environmental

Positive environmental impact is a core element of both land use strategies, and this has been reflected by the community to a certain extent. While there is a clear concern regarding the methodology underpinning E3 Environmental Management zoning, other ways to achieve positive environmental outcomes such as biodiversity overlays are preferred.

9.3.4 POST EXHIBITION REPORT LAND USE STRATEGIES

3. Economic

Strategies will be revised internally with input from Councillors, Government agencies and the community through an internal working group. The working group is anticipated to be facilitated within Councils existing budget.

4. Civic Leadership

Councillor involvement and leadership in developing Council planning policy is vital to its success. While Council staff seek to brief and inform Councillors where possible, it would be beneficial due to the technical nature of proposed changes or process dedicated workshops are set up. Proposed workshops could form a part of an internal working group with all Councillors and relevant staff.

What we have heard

CONSULTATION REPORT - DRAFT RURAL LAND USE STRATEGY

Snowy Monaro Regional Council

CONTENTS

ABOUT THIS REPORT	2
ENGAGEMENT	3
SUBMISSIONS ANALYSIS	4
KEY THEMES	4
E3 ENVIRONMENTAL MANAGEMENT ZONE	5
PROPOSED INCREASE TO MINIMUM LOT SIZE	6
PROPOSED PERMISSIBLE LAND USES, MISCELLANEOUS USES A	MD
OTHER ZONES	7
LENGTH AND COMPLEXITY	8
LACK OF DETAIL	8
THE WAY FORWARD	9

Acknowledgement of Country

We wish to acknowledge the Traditional Custodians of the land upon which the Snowy Monaro Region has grown; the Ngarigo people, and in places the connection of the Walgalu, Ngunnawal and Bidhawal people, and recognise their continuing connection to land, water, and community. Through thoughtful and collaborative planning, we aim to demonstrate our ongoing commitment to designing places where Aboriginal people are socially, culturally and economically included.

About this report

This report summarises feedback received by Snowy Monaro Regional Council on the Draft Rural Land Use Strategy from 20 October 2020 to 1 February 2021.

This report consists of:

- A brief outline of the consultation undertaken with local communities, NSW Government Agencies, surrounding jurisdictions, community organisations and industry.
- A summary of the key themes arising from the submissions during the public exhibition period.
- Next steps for the review and further development of the Draft Rural Land Use Strategy.



About the Draft Rural Land Use Strategy

The Draft Rural Land Use Strategy was developed to guide and inform a comprehensive Local Environmental Plan (LEP) for the Snowy Monaro region.

Council currently operates three LEPs; Bombala LEP 2012, Cooma-Monaro LEP 2013, Snowy River LEP 2013. The intent of this process is to set the direction for the next 20 years, harmonise the approach to permissible land uses but also reflect the characteristics of land which varies across landscapes through zoning and overlays.

Engagement

2019

Council released the **Land Use Discussion Paper** in early 2019 to prompt discussion about future land use planning in the Snowy Monaro region. Over ten weeks Council staff carried out drop in sessions and community meetings across the area, engaging with 300 community members face to face. The Land Use Discussion Paper was also circulated to community groups, government agencies, industry and other key stakeholders.

Feedback received from this engagement informed the 12 Planning Priorities that make up the Local Strategic Planning Statement (LSPS) and provided direction for the Draft Rural Land Use Strategy.

2020

Council prepared and released the **Local Strategic Planning Statement** (LSPS) in 2020. The LSPS was publicly exhibited from 26 February to 19 April 2020. Twelve face to face consultation sessions were undertaken (in person and online). Unfortunately, due to COVID-19 restrictions, in person sessions were limited. As required by the *Environmental Planning and Assessment Act 1979*, the LSPS was adopted in May 2020, before the 1 July 2020 deadline imposed by the legislation.

2020/2021

The public exhibition period for the **Rural Land Use Strategy** commenced on 19th October 2020 with advertising on Council's website, Facebook page, on radio, in newspapers and was shared directly on 17
Facebook community noticeboards. In addition, approximately 2200 letters were sent to potentially impacted landowners. The Draft Rural Land Use
Strategy was also circulated to community groups, government agencies, industry and other key stakeholders.

Five full-day in person drop in sessions were held throughout the public exhibition period across the region. Council took part in 36 in-person consultation sessions across the region, in conjunction with nine online Zoom sessions for greater public accessibility.

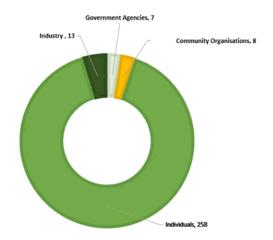
The Snowy Monaro Your Say (online) page on the Rural Land Use Strategy has been accessed more than 5000 times.

Council staff met with local farming, indigenous, and business groups. There were an additional 300 phone conversations with community members and 200 people have registered for updates through Council's mailing list.

Appendix A provides a visual representation of the overall process and the pathway to a consolidated Snowy Monaro Local Environmental Plan.

Submissions analysis

A total of 286 pieces of written feedback were received during the public exhibition of the Draft Rural Land Use Strategy between 20 October 2020 and 1 February 2021 across the following groups, organisations and individuals.



The majority of submissions from individuals came from rural landholders, with a small number coming from interested parties from towns and villages of the Snowy Monaro.

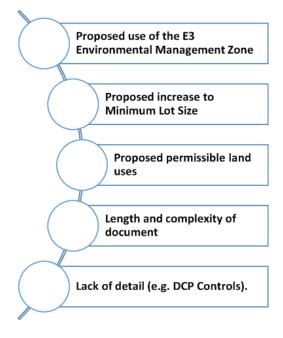
All submissions will be published on the Draft Rural Land Use Strategy Your Say Page.

Key Themes

Many submitters understand the need to rationalise and harmonise the existing LEPs.

The greatest concern was raised in relation to the proposed use of the E3 Environmental Management Zone and to a lesser extent the minimum lot size increase proposed in parts of the RU1 Primary Production and the E3 Environmental Management area.

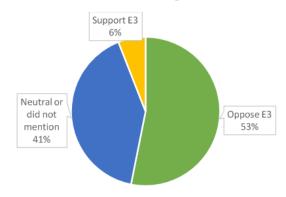
Concerns were raised in relation to community consultation as well as the complexity of the document.



E3 Environmental Management Zone

What you told us

Many written submissions as well as verbal feedback has indicated that the environment is important to those that live in the Snowy Monaro region. However, 53% of written submissions and as well as verbal feedback received during the public exhibition period does not support the use of the E3 Environmental Management zone.



Much of the feedback has related to areas mapped as potentially suitable for an E3 Environmental Management zoning being utilised for a predominantly agricultural purpose. This is acknowledged as being inconsistent with the LEP Practice Note on Environmental Protect Zones, PN 09–002.

The use of the E3 Environmental Management zone impacts on the ability of land holders to utilise provisions within the *Local Land Services Act 2013*, particularly Land Management Code, Allowable Activities and Private Native Forestry.

Other impacts include limitations on the use of the Exempt and Complying SEPP and clearing around rural infrastructure under the *Rural Fires Act 1997*.

Questions were raised in relation to the proposed minimum lot size of 250ha in relation to the E3 Environmental Zone.

We need to consider:

- Significant reduction in the proposed E3
 Environmental Management Zone. The methodology for the E3 Environmental Management zone is to be reviewed, and one on one consultation with individual landholders is undertaken where the E3
 Environmental Zone is considered for application.
- Alternative ways to achieve the protection of environmental values in an LEP. This could include using an RU2 Rural Landscape zone, which reflects the constraints of land (differing from RU1), in combination with overlays to highlight terrestrial biodiversity, wetlands and other constraints.

We need to clarify that:

- The E3 Environmental Management zone places no restrictions on the ability to manage weeds and feral animals. These matters are dealt with under the *Biosecurity* Act 2015.
- Bushfire hazard reduction works (emergency or managed) are not restricted by the E3 Environmental Management zone as per section 100C of the Rural Fires Act 1997.
- Land management practices defined as 'Environmental Protection Works' are proposed to be permitted without consent in the E3 zone. This includes works associated with the rehabilitation of land towards its natural state or any work to protect land from environmental degradation, and includes bush regeneration works, wetland protection works or erosion protection works.
- Use of land zones should reflect land constraints and capabilities as opposed to a one size fits all approach.
- The relationship between the proposed E3 zone and the proposed minimum lot refers to limiting dwelling density in significantly bushfire prone areas to protect life and property.

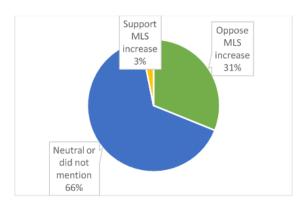
Proposed increase to minimum lot size

What you told us

Of the written submissions received, 31% were opposed to an increase in the minimum lot size. During discussions, many could understand the rationale for applying a minimum lot size and agree that the protection of agricultural land is important across the Snowy Monaro Region.

However, reasons for concern in relation to an increase to minimum lot size include:

- Loss of dwelling entitlement
- Limiting growth of the rural community
- Difficult for young farmers to enter the agricultural industry
- Lack of consideration for innovative and emerging agricultural uses.



Concern was raised, particularly in relation to Bombala, that a large minimum lot size so close to town would stifle the growth and progress of the town. Feedback suggested the need to provide for additional rural living opportunities, particularly close to towns and villages.

Suggestions were made that different areas of the LGA have differing capacities and minimum lot size should reflect this, rather than a "one size fits all approach".

The lot size vs holding size analysis was raised and that lot size should be the basis to establishing a minimum lot size.

We need to consider:

- A more nuanced approach to minimum lot size. Consideration is to be given to analysing holdings size on a landscape scale, which can be further broken down into localities.
- More opportunities for rural living on smaller lots, closer to towns and villages within the area.
- Opportunities for lot averaging in some rural zones.

We need to clarify that:

- Subdivision below the minimum lot size for agricultural purpose is permissible.
 However, the land does not receive a dwelling entitlement.
- Separate lots (titles) can be transferred to new ownership without issue.
- It is only dwelling houses that are linked to minimum lot size, all other land uses are able to be undertaken (with or without consent) irrespective of minimum lot size.
- Dual occupancies (two dwellings on one lot) are proposed to be permissible with consent in the RU1 Primary Production to allow for intergenerational farming, succession planning and support.
- There are other criteria for dwelling entitlement, not only minimum lot size.
 For example, subdivisions under previous LEPs are likely to enjoy a dwelling entitlement.
- Consolidation of lots does not require consent and is therefore not affected by the provisions of an LEP.

Proposed permissible land uses, miscellaneous uses and other zones

What you told us

Various issues in relation to land uses and zones were raised, including:

- Opposition to the proposed RU2 Rural Landscape zoning in the Eucumbene/Murrumbidgee area
- Opposition to emphasis on tourism uses in some locations, support in others
- Consider zoning to facilitate appropriate development along the Bundian Way
- Consider zoning to facilitate complimentary uses along the Monaro Rail Trail.

Based on comments received, further thought, engagement and reflection of indigenous aspirations should be incorporated into the Draft Rural Land Use Strategy.

Concern was also raised in relation to existing use rights and abandonment of use.

We need to consider:

- Consider all suggestions in relation to desired land uses.
- Adding land uses into land use tables, even where they are exempt under another Environmental Planning Instrument (such as a State Environmental Planning Policy).
- Re-consider the 'Miscellaneous permissible uses' under Clause 5.4 of the Standard Instrument.

We need to clarify that:

- Some land uses (e.g. home business, home industry, and signage) are exempt development under the Exempt and Complying SEPP or permissible without consent under the Infrastructure SEPP (e.g. water and sewer infrastructure) and therefore did not consider it necessary to include as 'permissible without consent' in the land use tables.
- Some land uses are prescribed by the Standard Instrument LEP and therefore must appear in a certain location in the land use tables.
- Some controls prescribed in 'miscellaneous permissible uses' in clause
 5.4 of the LEP are mandated by the
 Standard Instrument LEP
- 'Existing use' provisions only need to be relied upon where a land use is made prohibited. In the case of 'extensive agriculture', which includes grazing in the E3 Environmental Management zone, 'extensive agriculture' is proposed to be permitted without consent (not prohibited) and therefore existing use rights do not need to be relied upon.
- In terms of 'abandonment of use' after 12 months, this also only relates where uses have become prohibited in the relevant zone. An 'existing use' that has a development consent cannot be abandoned.
- Pursuant to Part 5 of the Environmental Planning and Assessment Regulation 2000 an existing use may be enlarged, expanded, intensified or rebuilt (with development consent).

Length and complexity

What you told us

Many submissions referenced the length, complexity and difficulty of navigating the document

We heard that the Draft Rural Land Use Strategy contains too much jargon and is very technical in nature. The language used throughout the draft document makes it difficult to read and interpret.

Another criticism is that the draft document does not provide links to other relevant information.

We need to consider:

- Consider ways to reduce the size of the document e.g. removal of the Section 9.1 Directions to an Appendix.
- Reconsider the language used to ensure it can be understood and interpreted by a large cross section of the community.
- Prepare comparison tables between zones.
- Provide links to other relevant documents and references.
- Including graphs, images and examples.
- Preparing a 'plain English' summary document.

Lack of detail

Submissions have flagged that the Draft Rural Land Use Strategy does not contain enough information and detail, particularly in relation to development siting, design and operation of development.

The DRLUS strategy is not an implementation document or a statutory requirement, but rather is a bridging document from State and Local Strategy. The level of detail sought is likely to be contained in a Development Control Plan.

Further community consultation will be undertaken in the preparation of a Draft Local Environmental Plan, Development Control Plan and Developer Contributions Plan to ensure community views are captured.

We need to consider:

- Clarifying the role of the Draft Rural Land Use Strategy, within the context of the broader planning framework.
- Clarifying the role the Development Control Plan will provide in delivery of objectives in the draft document.

The way forward

The Strategic Planning team will consider in further detail all issues raised in the submissions. The revised draft will seek to address both community and agency feedback on the Draft Rural Land Use Strategy.

We note that submission content is nuanced and varied and the changes required to the Draft Rural Land Use Strategy will need to be substantial and wide ranging to ensure that the DRLUS better reflects the aspirations of the community.

In response to comments that the Draft Rural Land Use Strategy is too lengthy and difficult to understand, the revised Draft Rural Land Use Strategy will be supported by a 'plain English' summary document.

It is anticipated that the Draft Rural Land Use Strategy will be re-exhibited once a full review and re-draft has been completed. Further opportunities for community consultation will also be provided at the Draft LEP stage as shown on the right.

Submissions will be placed on the Draft Rural Land Use Strategy Your Say page.

Appendix A provides the pathway forward to a comprehensive Snowy Monaro LEP.



Appendix A

Discussion Paper and Preliminary Consultation

 Discussion Paper consultation design to inform Local Strategic Planning Statement

2019

Local Strategic Planning

•Local Strategic Planning Statement is the overarching Planning Strategy for the region and identifies 12 core planning priorities

Statement

Settlements

Strategy

 Detailed land use strategy to provide strategic direction for the growth and development of all towns and villages across the Snowy Monaro

•Implements actions from the Local Strategic Planning Statement

• Provides framework for future planing proposals

Rural Land Use

Strategy

- Detailed land use strategy for all rural land in the region with a focus on implementing local planning priorities such as the protection of agricultural land
- •Implements actions from the Local Strategic Planning Statment
- Provides framework for future planning proposals

Snowy Monaro Local Environmental Plan

- Local Environmental Planning Instrument designed to implement recomendations from above documents
- •Contains important planning controls such as zoning and minimum lot size

Snowy Monaro Development Control Plan

- Council local policy document to implement recomendations from above document via local planning controls
- Contains important forms based controls such as setbacks and openspace requirements
- Development Control Plan is more easily varied than Local Environmental Plan

9.3.5 BUNDARRA ROAD - COMPLETION OF COUNCIL ACTIONS 258/19 AND 386/19

Record No:

Responsible Officer: Chief Executive Officer

Author: Chief Operating Officer

Key Theme: 3. Environment Outcomes

CSP Community Strategy: 9.1 Transportation corridors throughout the region are improved

and maintained

Delivery Program Objectives: 9.1.2 Our local road network is planned, built and repaired to

improve movement across the region

Attachments: 1. CEO Letter to Owners Lot 20 - Confidential

2. Letter to CEO from Solicitor for Owners Lot 20 - Confidential

Cost Centre 1802 – Road Operations

Project Bundarra Road

EXECUTIVE SUMMARY

The purpose of this report is to advise Council that:

- Part A of Council Resolution 258/19, relating to Bundarra Road, that required staff to
 "Negotiate with the owner of Lot 15 to realign the road over the track through his property"
 has been enacted and the owner of lot 15 is unwilling to negotiate access.
- All actions relating to Resolution 368/19 (Bundarra Road) have been completed.

Staff consider resolutions 258/19 and 368/19 as complete or at a point where they cannot be progressed any further given the unwillingness of the owner of Lot 15 to negotiate to realign the road over the track through his property; therefore no further action in relation to either resolution is required.

Furthermore, advice has been obtained in relation to the impact Council's acquisition of the Crown road located within Lot 20 in Deposited Plan 655382 (Lot 20) including the impact the acquisition had or may have on the rights of the registered proprietors of Lot 20 to restrict the use of the road by members of the public.

Bundarra Road - Through Lot 15



The following officer's recommendation is submitted for Council's consideration.

OFFICER'S RECOMMENDATION

That Council:

- A. Acknowledge actions relating to resolutions 258/19 and 368/19 are complete with no further action by Council required.
- B. Acknowledge that the provisions of Section 4(2) of the *Inclosed Lands Protection Act* (1901) apply to the road located within Lot 20 in Deposited Plan 655382 regardless of which agency is responsible for the road.
- C. Advise the parties to this matter that while Council has provided an interpretation of Section 4(2) of the *Inclosed Lands Protection Act (1901)* and its application to this matter, it is not to be considered legal advice and that the parties should seek their own independent legal advice.

BACKGROUND

Resolutions of Council relating to Bundarra Road

Council has considered the matter of access by the Southern Tablelands 4WD Club through Lot 20 DP 655382 twice before. At its 18 July 2019 meeting Council resolved as follows:

COUNCIL RESOLUTION

258/19

That Council

- A. Negotiate with the owner of lot 15 to realign the road over the track through his property.
- B. Engage the services of a surveyor to survey the off-line section of Bundarra Road through lot 15.
- C. Close the section of Bundarra Road which is off line.
- D. Dedicate the section of Bundarra Road to be closed to the landowner in compensation.
- E. Take ownership of the bridge which has been constructed over the creek.
- F. Acquire the land within the proposed road reserve 20 wide in accordance with a survey plan.
- G. Apply to the Crown to have the Crown reserve road which passes through lot 20 transferred to Council as a Council public road.
- H. Acquire approximately 3ha of lot 20 around the Crown reserve road in order to create a more viable access to the bridge.
- I. Gazette the length of Bundarra Road as a Council public road from the intersection of Jerangle Road to the creek.
- J. Authorise the expenditure amount of \$60,000 in the 2020 Financial Year Budget with funding to be provided from Other Internal Reserves account 35116.

Moved Councillor Castellari

Seconded Councillor Haslingden

CARRIED

Following representation to the General Manager by the owners of Lot 20, staff submitted a further report for Council's consideration to the meeting of 17 October 2019, at which Council resolved as follows:

COUNCIL RESOLUTION 368/19

That Council:

- A. Note that Part G of Resolution 258/19 has been implemented and the Crown Road that passed through Lot 20 DP 655382 has been transferred to Council;
- B. Not proceed with the implementation of parts E, H and I from Resolution 258/19;
- C. Refer the matter back to the relevant parties indicating that it is a civil matter that should be resolved by the parties without Council's engagement;
- D. Formally apologise to the owners of Lot 20 DP 655382 for Council's action in seeking the transfer of the Crown Road that previously formed part of their Enclosure Permit; and
- E. Ask the General Manager to assist the parties in finding independent mediation services to assist with the issue.

Moved Councillor Ewart Seconded Councillor Corbett Carried

Part A of Council Resolution 258/19 required negotiation with the owner of Lot 15. This has been completed and the owner is unwilling to negotiate to realign the road over the track through his property. Therefore Council are unable to proceed with parts B, C and D of resolution 258/19.

Rights of Proprietors of Lot 20

To assist in finalising this matter, and subsequent to a letter from the solicitor acting for the owners of Lot 20, Council sought further advice in relation to Council's acquisition of the Crown road located within Lot 20 in Deposited Plan 655382 (Lot 20) including whether the acquisition had any impact on the rights of the registered proprietors of Lot 20.

Section 4(2) of the *Inclosed Lands Protection Act 1901* (the ILPA) addresses situations where a road is enclosed within private land and a reasonably defined track-in-use crosses the same land, but the location of the track-in-use does not correspond entirely with the location of the gazetted road. In this situation, Section 4(2) of the ILPA deems that the centre of the track-in-use is the centre of the gazetted road.

4 Unlawful entry on inclosed lands

- (1) Any person who, without lawful excuse (proof of which lies on the person), enters into inclosed lands without the consent of the owner, occupier or person apparently in charge of those lands, or who remains on those lands after being requested by the owner, occupier or person apparently in charge of those lands to leave those lands, is liable to a penalty not exceeding—
 - (a) 10 penalty units in the case of prescribed premises, or
 - (b) 5 penalty units in any other case.
- (1A) A drover or person in charge of stock being driven on a road lawfully inclosed within the lands of any person has a lawful excuse for entering those lands for the purpose of preventing the stock from straying, or regaining control of stock that have strayed, from that road.
- (2) Where a road is lawfully inclosed with the lands of any person, and such road is not clearly defined but there is a reasonably defined track commonly used by persons passing through such lands, the centre of such track shall, for the purposes of this Act, be deemed to be the centre of the road.
- (3) Where a road is lawfully inclosed with the lands of any person and such road is not clearly defined and there is no reasonably defined track through such lands a person passing through such inclosed lands shall not be guilty of an offence unless it is shown that the route taken by such person in so passing was, having regard to the circumstances, unreasonable.
- (4) In this section, stock includes horses, cattle, sheep, goats, pigs and camels.

The Crown road that was located within Lot 20 was transferred to Council pursuant to Section 152I of the *Roads Act 1993* (the RA). This section sets out the transfer of a Crown road to another roads authority, in this instance Council. While this section provides that the road ceases to be a Crown road (Sub-section (2)), it does not cease to be a road and it remains a road as defined at Section 3 of the ILPA. The provisions of Section 4(2) of the ILPA therefore continue to apply to the road within Lot 20 following the transfer of the road from the Crown to Council.

In other words, the rights of the registered proprietors of Lot 20 were unaffected by the transfer of the road from the Crown to Council.

Options to manage access through Lot 20 to Wangrah Creek

It is acknowledged that part F of resolution 258/19 has resulted in the Crown Reserve Road though Lot 20 being acquired by Council and recent correspondence from the owners of Lot 20 have requested Council provide certainty that no traffic will be allowed to use the section of road from their property boundary to Wangrah Creek.

The CEO, in a letter dated 12 February 2021 (attached), provided the following assurance "However, Council can assure you that no plans exist to construct a road, along the road reserve, through Lot 20 from the boundary of Lot 15 to Wangrah Creek".

The owners of Lot 20 and, separately, their solicitor (attached) have subsequently requested that Council provide greater certainty that traffic on the road through Lot 20 be restricted.

Given the above review of the applicability of Section 4(2) of the ILPA there has been no change in the ability of members of the public to travel through Lot 20.

There are options to restrict access through Lot 20 by members of the public which could provide more satisfaction to the owners of Lot 20 but may be less acceptable to other property owners. These options include:

- Close the road through Lot 20 between the boundary of Lot 15 and Wangrah Creek acknowledging the land would remain Council land.
- Close the road through Lot 20 between the boundary of Lot 15 and Wangrah Creek with the aim of selling this land to the owners of Lot 20.

Both of these options will result in restricting access where no restrictions have previously been in place and are therefore not recommended.

Council was advised of a compromise reached between the owners of the ST4WD and the owners of lot 20 but that was considered unworkable given the advice from the owners of lot 15. Given the new understanding of Section 4(2) of the ILPA, this compromise may now be feasible.

QUADRUPLE BOTTOM LINE REPORTING

1. Social

COUNCIL RESOLUTION 114/20

That Council

- A. Posts on the Home Page of SMRC Website in a prominent position, and on all Rates notices, the following advice: "SMRC Council alerts purchasers of land or property in SMRC region, be it for residential purposes or otherwise, that Legal and Practical Access to the purchased land is the responsibility of the purchaser" and
- B. That Council action this Motion within 21 days of today's date.

2. Environmental

N/A

3. Economic

N/A

4. Civic Leadership

Bundarra Road from its connection with Jerangle Road through to the property boundary between Lot 15 and Lot 20 is registered in Council's asset system as a Council public road although the track-in-use does not align with the Crown road passing through Lot 15. This does not preclude access due to provisions of Section 4(2) of the ILPA.

At the time of writing, it is proposed that Council staff will contact the owners of Lot 20 and their solicitor as well as the owners of Lot 15 prior to the publication of this report.

9.3.6 ADAMINABY SEWAGE TREATMENT PLANT AUGMENTATION - FUNDING REQUEST

Record No:

Responsible Officer: Chief Operating Officer

Author: Manager Water Wastewater Operations

Key Theme: 3. Environment Outcomes

CSP Community Strategy: 8.2 Improve and maintain our public owned infrastructure and

assets and facilities to a high standard

Delivery Program Objectives: 8.2.1 Council maximises its Asset utilisation to deliver services

today and into the future

Attachments: Nil

Cost Centre WO333-4560-410

Project Adaminaby Sewage Treatment Plant - Augmentation

Further Operational Plan Actions: N/A

EXECUTIVE SUMMARY

This report seeks Council approval for the allocation of increased funding for the Adaminaby Sewage Treatment Plant (STP) Augmentation.

The following officer's recommendation is submitted for Council's consideration.

OFFICER'S RECOMMENDATION

That Council approve use of additional sewer reserve funds of \$3,881,144 over 3 years.

BACKGROUND

Detailed design of the new Adaminaby sewage treatment plan and preparation for tendering is an action within Council's current operational plan. This project has progressed to the point of tendering for construction. Implementing the Adaminaby STP augmentation is required to meet EPA issued Pollution Reduction Program (PRP) conditions in the current licence for Adaminaby STP.

The plant is in very poor condition. In particular:

- The concrete walls of the trickling filters are in poor condition and there is a risk of collapse.
- The mechanical and electrical equipment are in very poor condition.
- Wombats have caused damage to the maturation ponds, threatening collapse. One pond is currently bypassed to prevent this.
- The effluent quality is generally poor, particularly with regard to coliforms.

Funding for this project needs to be increased. The previous allocation was \$7,202,156. The amount required is \$11,083,300. The design process identified additional costs that had not previously been identified.

The most significant contributors to the increase in cost include (but are not limited to):

- The upgrade of power either by new transformer or 5 kms of mains to be delivered,
- DPIE water would only grant section 60 approval if Adaminaby STP had a concrete inlet works.
- Accommodation very scarce in area due to Snowy 2.0 leading to increased construction related costs,
- Initial cost estimation was undertaken 3 years ago and prior to design and DPIE approval and is therefore inaccurate,
- Additions to designs to ensure operations optimised (project whole of life) as follows but not limited to:
 - Programmable Logic Controller backups,
 - On site generator as the Adaminaby power supply is unreliable and is located hours away from mobile generators,
 - Lessons learnt from gaps in design at the Bombala STP,
- Demolition of old STP,
- General complex nature of construction while the current STP remains operational,
- Tender prices received from the market, noting that the lowest cost tender is preferred.

The funding will be broken into three specific areas

- Sewer reserve funds of \$7,232,222 over 3 years
- Operational funds of \$500,000 FY20/21
- NSW Restart grant funding of \$3,351,078 over 3 years

This gives total funding of \$11,083,300 over 3 years.

QUADRUPLE BOTTOM LINE REPORTING

1. Social

The construction of the new STP will be beneficial to the community. The current STP poses significant risks to the Adaminaby community as well as to the workforce currently operating the existing STP. It is essential this project goes ahead.

2. Environmental

A review of environmental factors has been prepared and concludes no siginificant negative environmental impacts.

3. Economic

Funding for the STP is available through state funding as well as through Council funding. The project budget consists of \$3,351,078 from Restart NSW Funding Contribution (50%) and \$3,351,078 from SMRC Funding (50%) (existing budget allocation). Additional SMRC Funding will cover the shortfall due to the underestimation of the project costs. Council team members will also seek additional NSW Restart funding which if successful, would mean the full allocation from the sewer reserve fund would not be required.

9.3.6 ADAMINABY SEWAGE TREATMENT PLANT AUGMENTATION - FUNDING REQUEST

Funding (Income/reserves)	Amount		Work Order	,	Acc	ou	nt s	trin	g			
Sewer reserve fund	\$1,500,000	2020/21	333									
Sewer reserve fund	\$3,800,000	2021/22	333									
Sewer reserve fund	\$1,932,222	2022/23	333									
Operational funds	\$500,000	2020/21	WO279.560									
NSW Restart funding	\$500,000	2020/21	333									
NSW Restart funding	\$2,000,000	2021/22	333									
NSW Restart funding	\$851,078	2022/23	333									

The additional funding required (included in the above table) is as follows:

Funding (Income/reserves)	Amount	
Sewer reserve fund	\$0	2020/21
Sewer reserve fund	\$2,707,503	2021/22
Sewer reserve fund	\$1,173,641	2022/23
TOTAL	\$3,881,144	

4. Civic Leadership

Council is driving this initiative to deliver an efficient and sustainable STP for the Adaminaby community.

9.3.7 NOMINATION OF COUNCILLOR TO NSW ASBESTOS COORDINATION COMMITTEE

Record No:

Responsible Officer: Chief Executive Officer

Author: Chief Operating Officer

Key Theme: 3. Environment Outcomes

CSP Community Strategy: 8.2 Improve and maintain our public owned infrastructure and

assets and facilities to a high standard

Delivery Program Objectives: 8.2.6 Council's infrastructure is maintained to meet compliance

standards and to deliver high level services

Attachments: 1. NACC Terms of Reference

Cost Centre N/A

Project Membership of NSW Asbestos Coordination Committee

Further Operational Plan Actions:

EXECUTIVE SUMMARY

LGNSW is seeking applications from mayors and councillors to represent local government on the NSW Government's Asbestos Coordination Committee (NACC).

The following officer's recommendation is submitted for Council's consideration.

OFFICER'S RECOMMENDATION

That Council nominates a Councillor to the NSW Government's Asbestos Coordination Committee.

BACKGROUND

LGNSW is seeking applications from mayors and councillors to represent local government on the NSW Government's Asbestos Coordination Committee (NACC). The NACC meets quarterly and members will be expected to contribute effectively to the development and implementation of the whole-of-government strategy on asbestos management in NSW. The LGNSW asbestos policy project manager supports the LGNSW NACC representative in preparing for and representing councils on these committee meetings.

It is critical that the LGNSW representative has a strong understanding of conference-endorsed LGNSW policy relating to asbestos, and an appreciation of the asbestos issues facing the whole sector, including both metropolitan and rural and regional councils.

Asbestos related topic areas that the committee member will need expertise in or the ability to gain expertise on are as follows:

- work health and safety
- contaminated land management

9.3.7 NOMINATION OF COUNCILLOR TO NSW ASBESTOS COORDINATION COMMITTEE

- council land, building and asset management
- emergency response
- land use planning (including development approvals and demolition)
- management of naturally occurring asbestos
- regulation of activities at residential premises
- waste management and regulation.

Appointments are for a period of two years, and there is remuneration as per the public service commission guidelines. Members are appointed by the EPA in accordance with Schedule 2 of the Protection of the Environment Administration Act 1991.

QUADRUPLE BOTTOM LINE REPORTING

1. Social

Nomination of a Councillor to participate in the NACC will ensure SMRC is able to provide input into the development implementation of the whole-of-government strategy on asbestos management in NSW.

2. Environmental

Contribution to the development and implementation of the whole-of-government strategy on asbestos management in NSW will result in positive environmental impacts.

3. Economic

Nil

4. Civic Leadership

SMRC participation in the development and implementation of the whole-of-government strategy on asbestos management in NSW will demonstrate civic leadership.



NSW ASBESTOS COORDINATION COMMITTEE

Terms of Reference

Version 1

October 2020

Document control sheet

Contact for enquiries and proposed changes

If you have any questions regarding this document or if you have a suggestion for improvements, please contact:

Contact Officer Lou-Anne Lind

Title Director, Education and Programs Branch, EPA

Phone 02 9995 6718



Contents

1.	Introduction	
2.	Authority	4
3.	Purpose	5
4.	Appointment of members and tenure	5
5.	Responsibilities of members	5
6.	Coordination of NSW Asbestos Coordination Committee	6
7.	Meeting schedule, engagement and frequency	7
8.	Attendance	
9.	Meeting preparation, agenda, distribution of materials and communication	7
10.	Role of independent chair	
11.	Resources and responsibilities	8
12.	Confidentially	
13.	Scope and boundaries – advice and reporting	
14.	Review	
App	pendix 1	10
	nhership of NSW Ashestos Coordination Committee	10

1. Introduction

The NSW Asbestos Coordination Committee (NACC) works to minimise the impacts of asbestos on the people and environment of NSW by ensuring that New South Wales Government agencies and emergency managers (including councils and Aboriginal Land councils) effectively coordinate to achieve the safe management of asbestos at all stages of the asbestos lifecycle. This applies across the policy areas of workplace health and safety, planning and development, public health, emergency response and environment protection.

It is responsible for coordinating activities contributing to this goal, primarily through working with key State authorities and representatives of emergency managers and regulators.

Coordination relates to all aspects of asbestos information/awareness, assistance, major incident response, compliance and enforcement.

The NACC replaces the Heads of Asbestos Coordination Authorities (HACA), which operated from 2011 until 2018. The arrangements were changed following recommendations made by the NSW Ombudsman's Office in late 2017 and aim to ensure a strong continuing focus on asbestos management in NSW.

2. Authority

The NACC is established under s29 of the Protection of the Environment Administration Act 1991, to provide advice to Environment Protection Authority (EPA). In practice, the NACC will be responsible to the Minister for Energy and Environment and will provide advice to Government (either the Minister or other members of Cabinet) as necessary. The activities of the NACC will be routinely reported to the Minister, and the independent Chair will publish a communique following each meeting.

The Committee will be supported by a secretariat provided through the EPA. The Committee will be supported by a technical working group that is comprised of (but not limited to) officers from each of the agencies or organisations represented on the NACC. The role of the working group will be to advance issues in practice and provide advice and technical support to the NACC.

3. Purpose

The purpose of the NACC is to drive a strategic and coordinated approach to asbestos management in NSW to protect human health and the environment. This includes:

- (a) Developing a whole-of-government strategy on asbestos management in NSW.
- (b) Monitoring the implementation of the strategy and trouble-shooting any risks, delay or blockages to progress.
- (c) Engaging with the best evidence of the day to drive continuous improvement to asbestos management.
- (d) Championing the importance of asbestos safety in NSW.

4. Appointment of members and tenure

Members will be appointed by the EPA for a period of two years through direct invitation. Membership at the Deputy Secretary level or equivalent representation is expected. Please see **Appendix 1** for the current Membership List.

Membership will be reviewed annually to ensure there is equity of representation across government.

Additional attendees will be invited as required to contribute to the deliberations of the NACC.

Members are appointed in accordance with Schedule 2 of the *Protection of the Environment Administration Act* 1991.

5. Responsibilities of members

It is the responsibility of all members to:

- Provide feedback, guidance and contribute advice on behalf of their agency or organisation.
- Act as a conduit into their agency and representative of their agency's collective views and needs.

- Identify and raise significant current or emerging issues relating to asbestos that require discussion at a senior level.
- Attend with the spirit of cooperation between all attendees to work through issues and proposals raised.
- Respect the contribution of all attendees, be open to new ideas and innovative approaches.
- Respect the confidentiality of advice and information shared members.
- Declare and actively manage any conflict of interest.

6. Disclosure of pecuniary interest

The disclosure of pecuniary interests for this advisory committee is an EPA requirement.

If a member of the NACC has a direct or indirect pecuniary interest in a matter being considered or about to be considered at a meeting of the NACC, and this interest appears to raise a conflict with the proper performance of the member's duties in relation to the consideration of the matter, the member must, as soon as possible after the relevant facts have come to the member's knowledge, disclose the nature of the interest at a meeting of the NACC.

A disclosure by a member at a meeting of the NACC that the member:

- 1. is a member, or is in the employment, of a specified company or other body, or
- 2. is a partner, or is in the employment, of a specified person, or
- 3. has some other specified interest relating to a specified company or other body or to a specified person, is a sufficient disclosure of the nature of the interest in any matter relating to that company or other body or to that person which may arise after the date of the disclosure and is required to be disclosed under subclause (1)

Particulars of any disclosure made under this clause must be recorded by the NACC in the minutes of the meeting concerned.

A member of the NACC is not disqualified from taking part in any deliberation of the matter, or in a decision with respect to the matter, because of the member's pecuniary interest.

A contravention of this clause does not invalidate any advice of the NACC.

7. Coordination of NSW Asbestos Coordination Committee

Secretariat support and coordination of the NACC will be undertaken by officers from the EPA.

8. Meeting schedule, engagement and frequency

Meetings will take place quarterly. Meetings can be held more frequently as required.

Where a member cannot attend in person, participation by telephone or video conferencing will be arranged, noting that is it is not necessary to attend the meeting in person.

9. Attendance

It is expected that all members will attend every meeting, noting that it is not necessary to attend the meeting in person.

Members who are unable to attend a meeting are expected to relay their apologies as soon as possible before the meeting to properly record absence in the minutes. Members who are unable to attend a meeting may send a deputy in their place with prior notice to the secretariat.

10. Meeting preparation, agenda, distribution of materials and communication

The NACC's secretariat will be responsible for circulating the agenda and meeting papers electronically at least five working days prior to each meeting. Members of the NACC are expected to prepare for each meeting accordingly.

Minutes will be distributed to all members by the secretariat within 10 working days of the last meeting. The minutes are confidential. A communique will be prepared by the Secretariat for the Chair for external publication.

Members are asked to communicate through the NACC secretariat. Regular communication

is encouraged.

Committee members are to proactively exchange asbestos operational and policy information, subject to any statutory prohibitions, and will make other parties aware of matters of public interest, including new guidance and technical standards, significant enforcement actions and media releases.

11. Role of independent chair

The Chair will be responsible for leading the work of the NACC and will:

- Foster an environment of collaboration and creativity to find solutions to asbestos management
- Broker solutions and commitments between committee members where necessary
- · Ensure that the roles, responsibilities and timelines for priorities and action are clear
- Hold agencies (and others) to account for carrying out the agreed commitments

The Chair has the authority to publish independently and advise Government Ministers.

The Chair may also advocate for funding with Government or for increased support for asbestos programs, where it is appropriate and supported by the members of the NACC.

The chairperson vacates office as Chair if the person:

- 1. is removed from office by the EPA, or
- 2. ceases to be a member.

The EPA may at any time remove the chairperson from office as Chair.

The Chair will be entitled to be remunerated (including travelling and subsistence allowances).

12. Resources and responsibilities

Each State Government agency will bear the administrative costs associated with attendance of their representative at NACC and associated working group meetings.

The Chair and all non-government members are eligible to receive remuneration (including travelling and subsistence allowances) in accordance with decisions made by Government under the Classification and Remuneration Framework for NSW Government Boards and Committees.

Costs associated with the implementation of NACC initiatives will be funded by individual agencies, except for those initiatives for which additional funding has been identified and provided.

Funds allocated to the NACC and expenditure of those funds will be reported on annually.

13. Confidentially

From time to time NACC members may be given access to confidential material.

Non-government committee members will be required to sign a confidentiality agreement.

Confidential materials are shared in good faith and committee members will ensure that confidentiality is strictly maintained, are not be discussed with third parties unless otherwise advised. Documents that are confidential will be marked accordingly.

All documents must be kept in a secure location by members.

14. Scope and boundaries - advice and reporting

The NACC has an advisory role; the group cannot make binding recommendations to Government. The Government will consider any advice arising from the NACC.

15. Review

The Terms of Reference will be reviewed every 12 months.

Appendix 1.

Membership of NSW Asbestos Coordination Committee

1. Independent Chair

One senior official (deputy secretary or representative) from the following state Government agencies or their successor organisations:

- 2. Environment Protection Authority (DPIE)
- 3. SafeWork NSW (Customer Service)
- 4. Ministry of Health
- 5. iCare (former Dust Diseases Authority)
- 6. Planning and Assessment (DPIE)
- 7. Public Works Advisory (DPIE)
- 8. Resilience NSW
- 9. Fire and Rescue NSW
- 10. Department of Premier and Cabinet
- 11. Local Government, Planning and Policy (DPIE)

One senior official (Chair or President) from the following organisations:

- 12. Local Government NSW (LGNSW)
- 13. NSW Aboriginal Land Council (NSWALC)

One observer from the following organisations:

- a. NSW Ombudsman's office
- b. Asbestos Safety and Eradication Agency (Commonwealth)

Record No:

Responsible Officer: Chief Strategy Officer

Author: Grants Officer

Key Theme: 4. Leadership Outcomes

CSP Community Strategy: 11.2 Council utilises sound fiscal management practices, pursues

and attracts other sources of income

Delivery Program Objectives: 11.2.3 Alternative sources of revenue to rating income are

identified and maximised

Attachments: Nil

EXECUTIVE SUMMARY

This calendar year Council has been successful in 3 grants totalling \$ 421,105.

OFFICER'S RECOMMENDATION

That Council receive and note the information related to grants activity up to 31 January 2021.

BACKGROUND

This report provides an update on Grants activity as at 28 February 2021.

Grant Applications July 2020 – February 2021:

Grant Applications - Successful

Grant Applications – Success	ojui		
Funding Program &	Project Details	Grant	Grant
Origin		Request	Awarded
BCRRF – Stream 1	Business Recovery Officer	\$100,000	\$250,000.00
		\$70,000	
	 Mandatory Community Grants 	\$15,000	
		\$10,000	
	 Peak View Plane Crash Memorial 		
		\$10,000	
	 Building Resilient Women to 		
	support the family unit.	\$20,000	
	Preparedness & resilience	\$15,000	
	Programs for aged and vulnerable	\$10,000	
	Art of Hosting for Community Organisations		
	Tourism Industry development		
	Youth Career Readiness Program		
Festival of Place -	Seaside Scavenge – Lakeside cleanup,	\$10,000	\$10,000
Summer Fund Round 2 –	April 2021 Includes: Litter collection;		
200034 – Jindabyne	pop-up market; live music; informative		
Lakeside Scavenge	talks and stalls. Community		
	engagement & education are key to		
	event success.		
Crown Reserves	Installation of Solar System &		\$23,205.00
Improvement Fund (CRIF)	replacement of outlets on Snowy River Holiday Park.		
20/01/2021	·		\$6,602.00
	Bush regeneration for North Ridge		
	Reserve – Cooma - Civic		
	Maintenance Department		\$131,298.00
	Control of priority weeds – for		Total:
	various locations – Biosecurity		\$161,105.00
	Department.		
Sports Election	Capital - Cooma Sports Hub -	\$15,000,000	\$15,000,000
Commitments Program – STATE	Registration C006-04		
Australia Day 2021 –	Delivery of Australia Day 2021 events	\$20,000	\$20,000
COVID Safe Grants	in a COVID safe environment, while		
Program	supporting local communities and		
-	industries.		

Funding Program & Origin	Project Details	Grant Request	Grant Awarded
Safe and Secure Water Program - Stream 2 IWCM Strategy STATE	Operational - IWCM Strategy (capped at 50% of eligible costs). Ref: SSWP245	\$220,000 Capped and variable co- funding	\$220,000
Regional Growth Fund - Stronger Country Communities Fund Round 3 (SCCF3) - STATE	 SCCF3-0155 HUBGrade (Cooma), Youth; \$168,940 SCCF3-0375 RYDER Program - Regional Youth Development Entertainment & Recreation (3 year delivery plan; includes vehicle & trailer purchase), Youth; \$265,000 SCCF3-0376 Bringing Jindabyne Community Memorial Hall into 21st Century - Heating & Cooling, Community; \$130,113 	\$5,135,360	\$564,053
National Landcare Program - Smart Farms Small Grants Round 3 - COMMONWEALTH	Operational - Sustainable land management education project.	\$50,000	\$50,000
Australia Day Branding Program	Promotional material to display the Reflect, Respect, Celebrate theme – Cnr Centennial Park, Cooma	\$1,000	\$1,000
Drought Communities Program – COMMONWEALTH	Cooma Truck Wash, Bombala Ginger Leigh Stage 2, Bombala Caravan Park Sewer and Dump Point	\$1,000,000	\$1,000,000
Regional Tourism Bushfire Recovery - Stream 1 Exceptional Circumstances - COMMONWEALTH	Lake Light Sculpture Jindabyne - 2021 Event Expansion (Timing Update); Ref: Stream1X005 March 2020: 2020 event cancelled due to COVID-19 impacts.	\$22,000	\$22,000
	Welcome to the Snowys Festival Note: Event postponed to Nov 2021.	\$20,000	\$20,000
	Numeralla Folk Festival	\$10,000	\$10,000
Law Week NSW - STATE	Operational – 'Planning Ahead: Wills, Estates, Power of Attorney and more'; Library sites.	\$900	\$900

Funding Program & Origin		Project Details	Grant Request	Grant Awarded
Showground Stimulus	•	Cooma showground Electrical upgrade	\$851,884	\$350,000 \$194,867.20 \$96,865
	•	Nimmitabel showground pavilion		\$172,700 \$36,362.56
	•	Bombala showground electrical		Ψ30,30 <u>2</u> .30
	•	Bombala Caretakers Cottage		
	•	Delegate showground supper room		

Grant Applications – Unsuccessful

Funding Program & Origin	Grant Request	Project Details
2021 NSW Women's Week Grants WWG-095	\$3,150.00	Operational – Targeting Women; Economic opportunities & advancement; Health & Wellbeing; Participation & Empowerment.
Combatting Social Isolation for Seniors During COVID- 19 – STATE	\$10,000	Operational - 'Community Connection Within Snowy Monaro – Seniors'; Wellbeing related.
Regional Growth Fund - Stronger Country	\$4,571,307	SCCF3-0300 Jindabyne Skate Park Upgrade, Community; \$950,000
Communities Fund Round 3 (SCCF3) - STATE		SCCF3-0301 Lions Park - Murrumbidgee River Shared Use Path (Cooma) – Stage 1, Community; \$996,000
		SCCF3-0302 Cooma CBD Streetscape Beautification, Community; \$1,000,000
		SCCF3- 0303 Bombala Playground and Parking Upgrade, Community; \$838,200
		SCCF3- 0304 Delegate School of Arts Upgrade, Community; \$435,018
		SCCF3- 0305 Werri-Nina Centre Kitchen Upgrade, Community; \$352,089
Recreational Fishing Trust - STATE	\$32,480	Operational (includes signage install) - Improved information and access for Snowy Monaro recreational fishing.
National Science Week Grants - COMMONWALTH	\$5,550	Operational - National Science Week (August 2020) activities & exhibition.

Funding Program & Origin	Grant Request	Project Details
FRRR Mosaic Time Walk 2.0	\$20,000	FRRR Tackling Tough Times Together Program

Grant Applications – Lodgements Pending Outcome

Funding Program & Origin	Grant Request	Project Details
Community Heritage – Local Government	\$10,000 \$10,000	21-23HA049 – Snowy Monaro Heritage Advisor Service
Advisors	¥ = 3,3 c c	2021-23HG057 – Snowy Monaro Local Heritage Small Heritage Grants
		Submitted 4 th Feb 2021
Fixing Local Roads	\$3,712,792.02	Priority 5 – Mila Road (sealing 100%) – Package 5
Round 2	\$4,322,264.50	Priority 4 – Avonside Road (sealing 75%) & Maffra Road (rehab/sealing 50%)
	\$3,394,371	Priority 3 – Dry Plains Rd & Shannons Flat Rd (sealing 25% each) Package 2
BLER – Bushfire Local	\$906,400	Adaminaby Revitalisation Project – BLERF-0592
Economic Recovery Fund – STATE & COMMONWEALTH	\$715,122	Delegate School of Arts Hall Upgrade – BLERF- 0593
COMMONWEALTH	\$810,605	Bombala Sporting Facilities Upgrade – BLERF- 0679
	\$1,000,000	Adaminaby Revitalisation – Long Vehicle & Truck Parking – BLERF-0976
	\$896,645	Bombala Arts & Innovation Centre (Heritage Property Conversion) BLERF-0927
Local Government Transport Infrastructure Projects (Shovel ready) - COMMONWEALTH	\$27,500	Capital - Installation of speed reduction devices (Dalgety, Michelago & Cooma) and virtual fence 2 nd trial site.
Active Transport Program 2020-21 - STATE	\$670,000	Capital – Shared user path Mittagong Road, Cooma North.

QUADRUPLE BOTTOM LINE REPORTING

1. Social

Council receives recurrent funding for some operations including the Financial Assistance grant, RFS subsidies, Library Funding, Community Services and Aged Care, and Roads (Regional and Roads to Recovery).

2. Environmental

A number of grants provide environmental benefits. Example: Council's Biosecurity Management endeavours and Green Team aims have benefited from additional grant funding.

3. Economic

All Community Strategic Plan (CSP) key themes benefit from collaboration, advocacy and the seeking of additional funding streams. A concerted approach to advocating and identifying appropriate grant funding opportunities for Council initiatives improves the financial sustainability of Council.

4. Civic Leadership

A proactive grant sourcing approach aligns strongly with the role and responsibilities of Council.

9.4.2 NOMINATION OF COUNCILLORS FOR COOMA SALEYARDS COMMITTEE

Record No:

Responsible Officer: Chief Strategy Officer

Author: Governance Officer

Key Theme: 4. Leadership Outcomes

CSP Community Strategy: 10.2 Sound governance practices direct Council business and

decision making

Delivery Program Objectives: 10.2.2 Councillors are supported to make informed decisions in

the best interest of the community and to advocate on behalf of

the community

Attachments: Nil

EXECUTIVE SUMMARY

Council, at its meeting on 17 September 2020, appointed only Councillor Lynley Miners to the Cooma Saleyards Committee and resolved the following.

COUNCIL RESOLUTION 183/20

That Council

A. Extend the term of the representatives on external committees to the end of the Council term and notify the external committees of the extension of appointments; and

B. Extend the term of the remaining internal advisory and management committees until December 2021 and notify the members of the extension of appointments.

Moved Deputy Mayor Miners

Seconded Councillor Corbett

CARRIED

The following officer's recommendation is submitted for Council's consideration.

OFFICER'S RECOMMENDATION

That Council

- A. Appoint two more Councillors and one alternate Councillor to the Sale Yard Committee;
- B. Appoint Chief Operations Officer, Manager Community Services as staff members and Coordinator Community Facilities as alternate.

BACKGROUND

Councillor Miners had requested to arrange a meeting with Cooma Saleyard Committee.

On reviewing the membership of the Cooma Saleyards committee, we noted on 14 September 2015, Council resolved (Resolution number 229/15) the following;

9.4.2 NOMINATION OF COUNCILLORS FOR COOMA SALEYARDS COMMITTEE

SALEYAR	RDS	(Engineering Services – Recreation & Property Manager
MEMBERSHIP	:	OBJECTIVES:
Councillors	Winston Phillips, Craig Mitchell, Dean Lynch, Tony Kaltoum (alt)	► To provide strategic advice on the development and promotion of the Cooma Regional Livestock Selling Centre.
Staff	Director Engineering Services, Recreation and Property Manager	FREQUENCY OF MEETINGS: - Bi annually - Two meetings with Stakeholders

On further review we noted, post 16 November 2016 (EDRMS number – CM.16/50588), no meetings have been held and the committee has been inactive since. In the November 2016 meeting, the representatives from Local Representative Committee and the administrator were present along with the staff and Councillor Miners was present as an observer.

Following this appointments of Councillor and Staff a meeting will be arranged for this committee.

9.4.3 DEVELOPMENT OF RATES STRUCTURE (HARMONISATION)

Record No:

Responsible Officer: Chief Executive Officer

Author: Chief Strategy Officer

Key Theme: 4. Leadership Outcomes

CSP Community Strategy: 11.1 Public services and processes are delivered reliably and

efficiently in response to community needs

Delivery Program Objectives: 11.1.3 Rates, Fees and Charges are rationalised to support

community needs and services

Attachments: 1. Additional charts and information

Cost Centre

Project

Further Operational Plan Actions:

EXECUTIVE SUMMARY

Council is required to introduce a new rating structure to comply with legislation. This will lead to changes to individual's rates, but no change to the overall level of rates raised.

Three farmland and residential rate categories need to be combined into one to meet the legislative requirements. Currently there are very different approaches taken across the three former areas in the rates structures.

It is considered that the community would want a rate structure that is easy to understand and equitable. Landowners should be able to see the principles used to determine why they are paying a certain contribution and how that determines their contribution.

There will be concerns in the community over any increases that impacts on individual landowners. It is expected, based on discussion held so far, that the community will prefer models that do not deliver large increases. It will not be possible to do this entirely, due to the legislative constraints, but minimising impacts in an important principle in this process for the community.

The rating structure should be based on the following principles:

- Minimise Impacts: Where there is opportunity to minimise increases through the change these should be strongly considered.
- Equitable & fair: It should ensure that it provides and equitable and fair outcomes. This can be interpreted different ways, but the council will need to find a suitable balance between
 - Those who benefit pay: The concept that the beneficiaries of a service should contribute for what they have access to, and
 - Capacity to Pay: The ability of the landowner to pay the taxes levied.
- Reflect the services available: the contribution of landowners should reflect the services available to them. This is not seen as requiring a full user pays type system, but the end result should generally reflect the relative accessibility of services.

• Simple: It should be as simple as possible and easy for people to understand how it works and the principles being applied.

19 models have been built, based around three main approaches:

- Reflect the services provided: Net service costs have been mapped against localities and rates are then set to recover the revenue required.
- Common good: Most services benefit all ratepayers, either directly or via improving social outcomes we all benefit from. Under this approach everyone contributes to the cost of the services provided.
- Minimum change: Only do the minimum changes required to reduce the impact on landowners.

Of the models developed the following have been recommended to progress for consultation with the community. It does not mean that any particular model will be adopted, but this starts the conversation around the principles and how they end up being reflecting in the rate structure and eventual distribution of rates.

Model 1A: Service Linked

This model shows the result should the Council use the net costs of services to derive its rate distribution. Under this model centres of population are treated separately as far as is possible with the current data. For each sub category the base rates is calculated on the essential services and the corporate services. This creates a higher base rate, which within the modelling increases the number of landowners who get and increases, but reduced the amount of those increases, compared to a low base model.

It is expected that many in the community will call for a system that reflects the level of service they received. The expectations as to what that means in terms of rates is often going to vary from the outcomes based on the costs of services provision. Despite this the community needs to be able to see this as an option.

It is recommended that while this model is placed on exhibition the Council indicate that it does not favour this model as the impact on smaller communities is not seen as fair or equitable or reflect the capacity of people in those areas to pay.

Model 1C: Service Linked (Larger Urban Centres)

This model is the same as Model 1A, with the exception that smaller urban centres are combined with the general residential. This leads to a sharing of costs across the general residential and farmland. This is a viable model for consideration. It reflects the principle of rates aligning with the services available in the locality where the land is.

The model still results in variations in the average rates for Bombala that are unlikely to be supported by landowners in that area. Despite this, the model provides what would have to be the outcomes if a model of reflecting the cost of services is utilised. Stepping back from this model effectively leads to the use of a common good approach.

Model 2A: Community sharing - Maximum Minimums

Of the models in this series this version is seen as best meeting the principle of seeking to minimise impacts. The higher base rates leads to the lowest number of landowners seeing increases above 10% and it minimises the overall transfer of rates towards farmland.

As this model uses minimums it will lead to more of the changes being seen in the former Cooma area as those landowners will be changing from a base system to a minimum system.

Model 2D: Community sharing - Base rate model

This model also applies the approach of using the land values to distribute the rates. It utilises a higher base value instead of minimums. Providing this model will allow the community to see the difference between using the two main approaches allowed under the rating structures.

Model 3E: Minimum change

Feedback provided through the working group strongly indicated support for reducing the negative impacts on landowners of the change. Of the models developed this one has the lowest number of landowners that would have an increase of over 10% in rates.

This is achieved by using minimum rates and collecting the same yield as has historically been collected. The downside of this model is that there is no reason that can be given for why the yield is split between the different rate categories.

Note: The Office of Local Government are indicating that legislation will be enacted to allow councils to be able to bring in changes over a four year period. It is not known what those changes will entail or when the legislation will come into effect.

The following officer's recommendation is submitted for Council's consideration.

OFFICER'S RECOMMENDATION

That Council undertake consultation on the following rate structure models:

- A. The full cost recovery model with localities (Model 1A).
- B. The full cost recovery model without localities (Model 1C).
- C. The community sharing model using minimum rates (Model 2A)
- D. The community sharing model using minimum rates (Model 2D)
- E. The minimum change model (Model 3E)
- F. The maximum minimum model (Model 3E)

BACKGROUND

As part of the creation of Snowy Monaro Regional Council the NSW Government determined that the former rate paths of the Council must be maintained for a period of three years. Legislation

was put in place to allow this to occur. That period was extended by twelve months and Council took up the option to defer the implementation.

From 1 July 2021 the Council has to have in place a rate structure that meets the legislative requirements. This means that Council cannot keep the existing structure.

The main changes required are that all farmland, residential category (not the subcategories) and rural residential must have the same rate (whereas there are currently three farmland and residential categories).

The current rating structure consists of a mixture of rates, including the use of minimum and base rate models. It is unknown what the basis of the current rate structure is. In adopting a new rates structure the Council needs to ensure that it has a structure that is understandable by the community. It should be easy for a landowner to understand the mechanism used by Council to determine how their taxes are determined.

The <u>Council Rating and Revenue Raising Manual January 2007</u> issued by the Office of Local Government provides guidance (Non mandatory) on how Council's should determine their rate structure. This document sets out two key criteria be considered:

- The extent to which those who receive the benefits of council's services also pay for those services - the so called "benefit principle".
- The extent to which those who pay for council's services have the ability to pay for those services the so called "ability to pay principle".

These two criteria can be in conflict and are open to interpretation. Discussions with a focus group has indicated that the community will be wanting to see that the imposition of the rates is equitable. There will be a desire to see that those who benefit from services are contributing towards those services, but also a strong awareness that many of the social benefits accrue across many different landholder categories, not only the main beneficiaries of the service. For example, having good social infrastructure in place is seen to provide a benefit to business, as it allows them to attract a higher quality employee. These discussions also indicate that there is a desire to limit increases in rates to any ratepayer through this process.

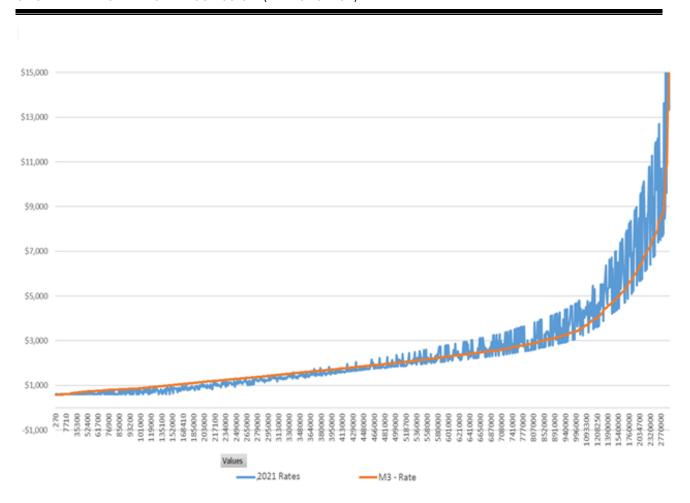
Change cannot be avoided

Moving from the previous structures into one structure will lead to significant changes in how the rates are distributed.

This can be shown clearly by looking at the farmland properties. Even if the Council retained the overall same yield from farmland properties as it currently raises, there will be significant change for individual properties. In the following chart the orange line shows the rates that would be raised for the single farmland category we are required to have. The blue area shows the range of current rates for the farmland properties on any particular land value.

Chart 1: Indication of impacts from moving to one farmland category

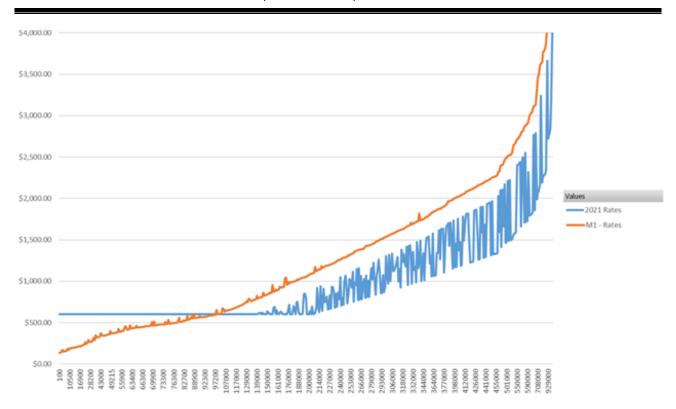
9.4.3 DEVELOPMENT OF RATES STRUCTURE (HARMONISATION)



A similar effect can be seen on the various land categories that would need to become the general residential category.

Chart 2: Indication of impacts from moving to one residential category

9.4.3 DEVELOPMENT OF RATES STRUCTURE (HARMONISATION)



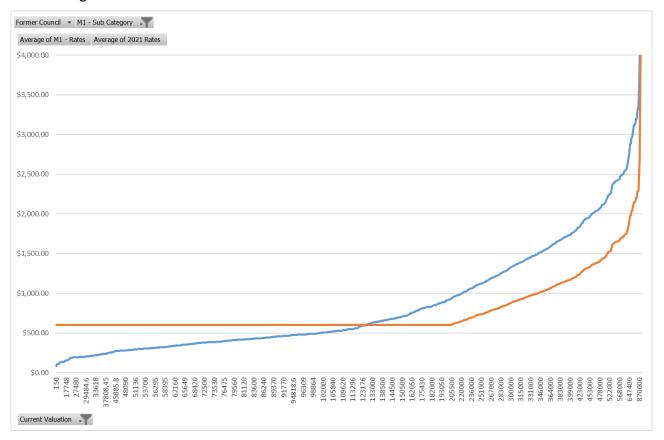
As can be seen, blue area indicates that there a very different approaches to how similar properties are currently rated. While the Council can change the height and slope of the orange line, this will move the impacts onto other categories. Any desire to reduce the impact in one area needs to be offset with increase in other areas as no additional revenue is raised through this process. Models based on trying to recreate the current structure still create a large number of increases and decreases because of the need to combine some current rate categories.

Base Rates V Minimums

Using minimum or base rates will create two different outcomes for two properties with the same value. A lot depends on how they are applied. A low minimum against a low base will show a similar outcome, with the minimum rate model leading to slightly higher rates below the category average and slightly lower rates on the higher valued land.

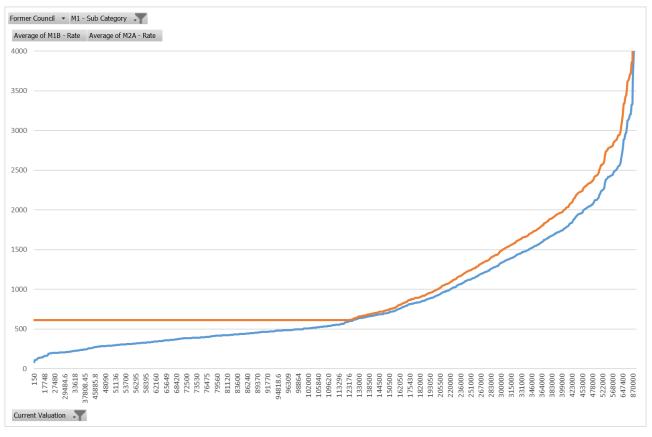
A low base against a high minimum will see the base rate provide a much lower rate for the low valued land and higher for the high value land. In the charts below, the orange line shows the minimum rates calculations and the blue line the base rate calculations.

Chart 3: High minimum versus base rate models



A high minimum against a high base will result in a similar graph, but with a less pronounced gap between the two lines. A high minimum against a low base will also see the lower end of the scale with a greater gap, while the higher value properties move closer together.

Chart 4: High Minimum versus low base rates



62% of rural councils in NSW have residential base rates and 56% have business base rates (IPART).

IPART, in conducting its review of the rating system, did advocate for minimum rates to be removed from the Local Government Act. While it appears unlikely that this will be enacted by the NSW government, IPART's view on minimum and base rates was as follows:

"Our finding is that base amounts are more efficient and equitable than minimum amounts in recovering the fixed costs of servicing dwellings, such as providing billing services. This is consistent with previous research on current NSW rating practices.

This is because:

- Under a minimum amount, all ratepayers below a set threshold of land value pay the same amount. A one-bedroom apartment will pay the same minimum amount as a three-bedroom apartment.
- Under a base amount (with an ad valorem amount), all ratepayers face the same fixed charge to which an ad valorem amount is added. A one-bedroom apartment would pay lower rates than a three-bedroom apartment.

This means that a base amount plus an ad valorem amount will more closely reflect the benefits received from council services, and differences in ratepayers' ability to pay."

"However, base amounts should not be set above the level required to recover fixed costs, because they do not reflect ratepayers' benefits received or ability to pay as closely as an ad valorem amount."

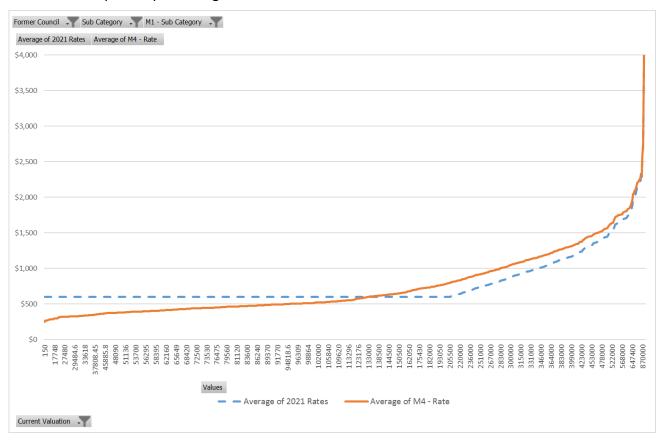
It should be noted that under both models (Base or minimum) the properties would pay the same rate if the unimproved land value was the same. However a high minimum does create a situation where the tax becomes more regressive, pushing more burden onto owners of low value land.

If the Council wanted to have most people paying the same contribution, regardless of their land values it would have to use a minimum rate system.

Base Rates Implications

Utilising base rates imposes more controls over what the Council can do than minimum rates. Only 50% of the overall rate yield can come from the base rate. This means you cannot replicate the outcomes that currently exists in areas such as Delegate or Jindabyne, where many residential landowners pay the minimum rates. The chart below shows residential rates within Jindabyne in the former Snowy area, with the current rates (Blue dotted line) compared to those calculated using a base rate (Orange).

Chart 5: Attempt to replicate high minimum rate



In determining the base amount the council must have regard to (But is not limited to) the following:

- its general administration and overhead costs
- the extent to which projected ad valorem rates on individual properties do not reflect the cost of providing necessary services and facilities
- the level of grant or similar income available to provide necessary services and facilities
- the degree of congruity and homogeneity between the values of properties subject to the rate and their spread throughout the area

- whether a rate that is wholly an ad valorem rate would result in an uneven distribution of the rate burden because a comparatively high proportion of assessments would bear a comparatively low share of the total rate burden
- in the case of a special rate the cost of providing the works, services, facilities or activities to the parcels of land subject to the rate (ignoring the rateable value of those parcels).

Models have been developed which include the general administration and overhead costs as well as those that are necessary services and both. Current sub categories with base rates range from \$233.90 (properties located outside Cooma) to \$579.70 (Business in Cooma). A base rate set to the essential services (Only those service required under legislation be provided) would average out at \$119.20. The base rate set by also including all the corporate and support services equates to \$432.03.

Development of Models

Development of models started with the following principles:

- Rates should be distributed against those who gain the benefits, based on proximity to where services are.
- Essential services should have their costs put in the base rate payable.
- That the various population centres be treated individually and rates reflect the services provided to those villages.
- Seek to avoid large increases in rates.
- Use base rates.

Model Series 1:

This model series was developed by identifying which Council services were provided to localities and which were essential or corporate services that are provided across the area. This model is based on the view that while most services are available to everyone, the distance people are from a service impacts on whether those people really gain much benefit. Such a model attributes the cost to the primary users and does mean that there are some users who are not contributing to the service costs. It is distributes costs to business landowners for social services equally to residential landowners. This is based on the view that the business gains a higher productive workforce when a well serviced and attractive community is in place.

Where services were based on localities their net costs were broken down as far as needed to align with subcategories. Most services has operating costing in the new accounting system charged directly to locations. Some costs had been put against general costing numbers and these were allocated based in the same proportion as the locality bases costs. Depreciation was allocated based on the location of the asset being used. This gave the long term cost of providing the service to the various localities.

The initial costings were then scaled back to match the proportion of net costs that need to come from rates, which is 44% of the net costs. The balance of the net costs comes from other general income, such as Financial Assistance Grants and interest.

Base costs were calculated on the services that the Council is required to provide by legislation and allocated to ratepayers based on which category was receiving the main benefit. The primary variation in base costs is driven by the emergency fire services. The cost per property that the Council incurs for the Rural Fire Service is well above the cost of the NSW Fire Brigade.

Ad valorem rates reflecting the costs of service are highly impacted by the cost of the road network. Most of the value of this is in the rural area and per kilometre there are less landowners to cover the costs. The villages also end up with higher ad valorem rates, not because they are provided with a higher level of service, but rather that the cost of providing the service to a smaller population centre is relatively higher. Historical differences in the level of assets and services provided lead to quite significant differences in the rates calculated for each location.

Model Series 2:

This model was developed on the basis that all residents should contribute equally to the social services offered.

Model Series 3:

Minimum change to the existing system are put into place. Where an existing category or sub category can be retained it is retained with the same rate structure as exists and the same overall yield. Where this is not possible sub categories are based on the rates structure within the former Cooma area for the base rates. The ad valorem is calculated to achieve the same yield as formerly raised.

Model Series 4:

This series is based on modifying the subcategories so that there are separate categories only for the major population centres. Models looked at retention of the existing yield and use of a common base rate approach on a more simplified range of categories.

Model Summary Table

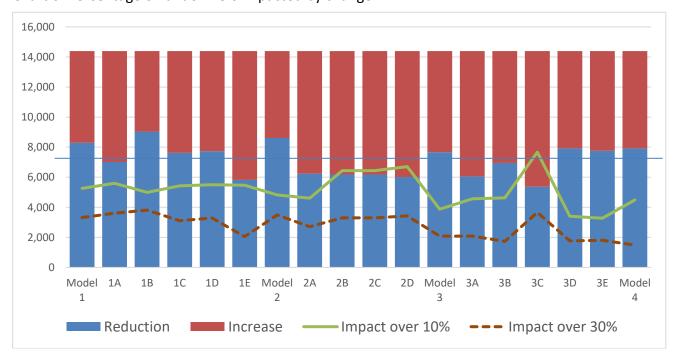
Woder Julilliary Table							
Model	Pros	Cons					
Series 1 – Locality based costs with base rates.	Aligns costs to the main users of the services.	Outcomes will not align with the communities beliefs.					
	Allows increased service requests to be linked to the specific group in the community when considering funding. Removes cross subsides among the rate categories.	Creates high costs for services to smaller or spread out groups. Create large changes from the current structure.					
	Easy to explain to the community.						
Series 2 – Based solely on land values and capacity to pay.	Simple to explain. Simple to calculate. Appears to align with the capacity to pay. Shares higher per landowner costs.	No connection between what it costs to provide services to a rate category and the rates raised. Create large changes from the current structure.					

Model	Pros	Cons
Series 3 – Minimum changes	Reduces the number of landowners seeing changes.	No good reason for how rates are distributed.
	Reduces the value of negative impacts across the community.	Reduces the number of landowners gaining a reduction and the size of the reduction.
		Future Council will probably have to address problems again, causing double issues.
Series 4 – Same previous yield, with changed sub	Places all properties on the same rating structure.	Similar outcomes to other models.
categories	Reduces the value of negative impacts across the community.	Uses arbitrary approach to the yield, so unclear to the community the basis of the calculation.

Number of landowners negatively impacted

It is expected that the Council will be contacted and hear about the people who are negatively impacted. This is normally the case and the primary factor that will influence this will be whether they perceive their rates will go up. Therefore the number of people that will be negatively impacted for the models is a consideration.

Chart 6: Percentage of landowners impacted by change



The overall impact is seen as the most likely driver of the number of people who are likely to react negatively. When this subject is raised it is expected that most people will:

- Assume that their rate will go up
- Assume that the amount of rates the council receives will go up.

As a result it is expected that the actual numbers of increases will not significantly alter the community reaction. However, it is considered that the community will be wanting the Council to reduce the negative impact on as many landowners as possible. It can be seen in the above that the model with the minimum change to categories results in more than half of the landowners seeing an increase.

The top 5 models that achieve this are:

- 1B − 5,358
- 2 5785
- 1 6,096
- 3D 6,471
- 4 6,472

Number of large impacts (Over 30%)

Large impacts are another factor that the community is probably wanting to have avoided. As with the models that best achieve this are:

- 4-1,482
- 3B 1,734
- 3D 1,761
- 3E 1,811
- 1E − 2,047

It can be seen that these are primarily from the models where the minimum change is made and is considered to be driven by maintaining the current yield.

Equity/fairness

These are subjective measures. Many people will see equity differently. It is anticipated that the broadest view in the community will be that equity is that those who benefits from a service should pay for it. It is important to recognise that this view is normally based on an assumption that they are the people who are subsidising others. Many in the community will have difficulty in reconciling what the cost per landowner for different rate categories is compared to their beliefs.

It is also considered that there will be a large cohort among the community who will see that there is an obligation on the part of those more fortunate to support similar levels of services for those who are not as fortunate.

Model 1 portrays the best match to the uses located where a service is located funding those services through rates. Models within this series that break costs down to smaller villages show a high cost of providing services to these areas. This, while equitable will in most cases be seen within the community as unfair.

Model 2 provides models that portray a common good approach. Land values do appear to coincide with average household earnings. This indicates, that on the basis of equity being that

those with the greatest capacity to pay contribute more, irrespective of the services they have available, model 2 best matches this version of fairness.

The minimum change model (Model 3) does not provide equity or fairness in itself. It simple seeks to minimise the impacts of change and the only principle it meets is to reduce the impact of change. It is possible to minimise change, to some extent, but only by implementing a rate structure that is solely designed to achieve this.

Capacity to pay

The ability of landowners to pay the rates is an important principle. As a wealth tax, it uses the unimproved land value to reflect this. To confirm whether this is the case .idcommunity data was reviewed to see whether higher land values appear to coincide with higher household income.

The household incomes indicates that the landowner categories with the greatest capacity to pay will be in the rural residential properties. This can be seen by the significantly higher incomes in areas adjacent to urban areas and in the northern parts of the area.

Outside the urban areas it can be seen that the rural areas with the higher density is also the areas with the higher average household income. Higher density indicates smaller properties, indicating that the higher income is not the result of households earning a higher farm income as a result of a greater farming area per household. The areas with the higher incomes also tend to have the higher mortgages, indicating that those households have more valuable assets. Generally the closer to a larger population centre) the properties are locate but still remaining rural), the greater the income.

Overall rural incomes are significantly higher than urban household incomes. This indicates that the rural residential landowners and possibly farmland owners have a greater capacity to pay than urban based landowners. The percentage of households in housing stress supports this assessment.

Residential rates can be varied by locality. This means there is capacity for Council to consider the capacity to pay. Models 1, 1A, 1D and 1E lead to significantly higher average rates from the villages. This is contrary to the relative capacity to pay and these models are considered unfavourable to continue with for this purpose.

Reviewing the household income by locality indicates that based on residents alone (as non-resident owners are not captured in the household income data) model 1C (Higher base rate type) is the most equitable. Land values are considerably higher in the former Snowy urban area, which is not reflective of the household incomes within the township. There is the potential that the higher level of 'commercial' residential in Jindabyne means that those properties are creating a high return, but it is not reflected in household incomes as it leaves the area. Basing the rate structure on resident incomes alone would mean a lower contribution from potentially higher wealth non-resident landowners. If it is considered that there are high wealth individuals owning this land model 2C (Purely land value driven) would be the most equitable. It is not possible to rate residential differently based on the ownership type, so a decision will need to be taken on which approach is considered the most equitable.

The models developed are as follows:

Model 1: This model series looks to raise rates from people who are located in the proximity of where the services are provided using base and ad valorem rates.

This model is based on:

- Base rate calculated using cost of essential services.
- Rates are collected based on the services available within proximity of the subcategory
 of rates.
- Business equally benefits from the social support benefits gained by residents as this leads to more productive workers.
- Towns and villages have their own subcategories and are treated individually to reflect the services provided.
- Where service costs can be assigned to a locality this is done.
- Where service costs cannot be assigned to a locality they are attributed to the rate subcategories that are in the locality or the primary beneficiary of the service.

This model has the strongest alignment to the benefits pays principle. It creates a relatively large cost burden for smaller communities. This is particularly the case for Delegate, where there are low average household incomes and relatively low land values. Other villages also pay higher rates than Cooma, despite having significantly lower land and income values that the main town. The model also shows high costs for Bombala, again not reflective of the indications of wealth, driven by a high level of infrastructure to service.

While this model is recommended, the community's ideal principles would lead to this outcome. If it is not included it is expected that it will be called for. It is also expected that the community will not believe the outcomes of this model, as it will conflict with their beliefs.

In terms of the overall distribution this model shifts the distribution away from the business category and residential category and towards farmland.

Model 1A: The model is the same as Model 1 with the base rate being based on the costs of corporate and support costs.

This model suffers the same problems as Model 1, in that it leads to higher costs in the smaller centres. The higher base rate used results in the changes being even more pronounced. The model changes the distribution in model 1, so that instead of the distribution moving from business to farmland, the distribution instead goes to residential landowners. This increases the average rates in the smaller communities. For example, the average rates in Delegate rise to \$1,990 compared to the Cooma average of \$829.05.

While this model would achieve the outcome of farmland not contributing more, the flow on effect of that is considered so negative that this model is not considered viable to continue with.

Model 1B: This is the same as Model 1 with the smaller centres being included in the general residential grouping. This means that the costs of the villages are effectively shared between rural residential properties, farmland and villages. This is not seen as unreasonable as the interaction between the surrounding rural areas and the small villages is still high.

This model provides improvements in the village areas. It highlights the impact on the main urban centres, with the average rates still diminishing as the population builds. While it is not possible to

build a nexus between household incomes and business incomes, it would be probably considered that business in the regional centre would have a greater capacity to earn higher income. This may be offset by there being a larger number of businesses seeking a share of higher value market, effectively offsetting any benefit.

Model 1C: This model takes the benefit pays principles and looks at whether using minimum rates would provide a better outcome. This approach still leads to increasingly high rates as the urban population centre lowers. In most cases the minimum system leads to worse outcomes that Model 1 across the residential properties. While it creates an overall larger number of people facing an increase, it does reduce the number who are in the over 30% group. It would also reduce the people getting a large reduction in their rates.

This model is one of the lower ones in the series for the value of increases that would be seen by ratepayers, making it one of the more attractive models in this series.

Model 2: As models on the principle aligned with the users who gain the benefit all have high impacts a model was developed that is based around the capacity to pay. The simplest system is to use the unimproved land value as the indicator of the wealth of the landowner.

\$1,000,000.00
\$1,000,000.00
\$800,000.00
\$400,000.00
\$200,000.00
\$0.00

\$0.00

Business

Farmland

Residential

Average

Chart 7: Land Values by locality

Adaminaby land values is inflated by the land holdings of Snowy Hydro, which is a large area of land, leading to a very high valuation.

Farmland will already be using this system (or a system based on minimum rates) and if Council proceeds with a rural land subcategory that subcategory and the residential category (not subcategories) will also be distributed on this basis.

This model is simpler, but it does not provide a strong link between the benefits of services and the distribution of rates.

The overall number of landowners who would see and increase are relatively low. Within that it creates one of the highest number of landowners in the 30% plus increase bracket. It also creates the largest reductions across landowners.

The average rates generated by this model matches the average earnings across the region reasonably well. The Jindabyne township itself shows considerable variation in average earnings across the township, it is unknown if this is reflected within the land values. Overall, however, the average earnings between Jindabyne and Cooma align closely to the average rates that are generated. This relationship does not hold true for Bombala, where the average earnings are higher than in Cooma, but the land values much lower.

While the average rates in Jindabyne businesses look high, this group of landowners will generally see reductions in their rates, with a small group of properties having high rates. Michelago residential also looks high, but is in one of the highest average household income areas and the maximum increases are still only around 6%, indicating there are already higher average rates in the residential sector at this locality. There will also be some substantive drops for the lower valued properties in that area.

Model 2A: This model is the same as model 2, but based on use of the maximum level of minimum rates that may be approved. Council does not yet have permission to apply this maximum level.

The model reduces the variance between centres, bring average rates closer together over the region. This means that it does not align to the benefits pays principle or the capacity to pay principle. It does work towards addressing the low rates in Bombala compared to average earnings, but has the opposite effect in other areas.

The advantage of this model is that it reduces the number of landowners who see increases over 30%. Offsetting this is the fact that the total number of landowners seeing an increase is high.

Model 2B: This model is the same as model 2, but with a higher base rate and has less sub categories.

The higher common case rates moves the distribution away from the properties with the higher land values and towards the lower valued properties. This benefits the farmland properties to the detriment of residential properties. There is also a slight movement away from business and towards residential. This is most reflected in residential increases in Bombala and Cooma. Rural residential land benefits from this model.

Model 2C: This model is the same a model 2, with the base being calculated to include both essential services and corporate services. This provides a high base model. In reality, this base level is not dissimilar to some of the existing base figures.

This model creates a similar outcome to model 2B, in that it brings together the average rates, leading to a higher portion coming from the lower land value parcels.

Model2D: This model is the same as model 2C, but with no sub categories for the smaller village areas. Of the models in this series, this one shifts the distribution less from farmland properties than the current structures. It has the lowest overall dollar impact in terms of the variations that will be seen. Against this, this model has one of the higher overall number of landowners seeing an increase and the greatest number seeing a negative change over 10%.

Model 3: This series of models is designed to see the extent that the minimum changes would have. This gives a baseline against which the other options can be considered. To determine this

model the same rate structure and yield is used where possible. The overall yield from business, farmland and residential categories remain the same.

Most of the current villages do not have separate rate categories within the current structure, so these are combined within the general residential category. This means similar areas will not be treated the same. For example, Delegate will have its own rate subcategory, yet Berridale, etc would fall under general residential.

As there is no information on the reasons for why the current structure are in place the only principle underlying this model is to minimise the impact of change.

Model 3A: This model takes the pre-existing categories where possible and the same yield as previously raised. It modifies the structure by applying base rates to all sub categories, with the closest alternative base from the Cooma structure applied.

Model 3B: This model takes the pre-existing categories where possible and the same yield as previously raised. It modifies the structure by applying base rates, with the base rate using essential service costs applied.

Model 3C: This model takes the pre-existing categories where possible and the same yield as previously raised. It modifies the structure by applying base rates, with the base rate including corporate and support service costs.

Model 3D: This model takes the pre-existing categories where possible and the same yield as previously raised. It modifies the structure by applying minimum rates, with the base rate including essential services costs.

Model 3E: This model takes the pre-existing categories where possible and the same yield as previously raised. It modifies the structure by applying minimum rates, with the base rate including corporate and support costs.

Model 4: This model looks at using a condensed number of subcategories and applying the base rate with essential services included. It is similar to previous models, but streamlines the calculations.

QUADRUPLE BOTTOM LINE REPORTING

1. Social

The distribution of rates should achieve social equity where possible. This means that the relative advantages and disadvantages of people should be considered in developing the new rate structure. The constraints of the legislation will practically limit the capacity of the Council to achieve this, as social equity will vary significantly within the rate categories.

Overall there are strong relationships between land values, household earnings, household stress and the SEIFA indexes of advantage and disadvantage. This indicates that the land values are likely reasonable indicators of the social capital.

2. Environmental

N/a

3. Economic

The change results in no net change to the revenue raised by the Council.

4. Civic Leadership

The following principles from the Local Government Act apply to this decision:

- a) Councils should recognise diverse local community needs and interests.
- b) Councils should consider social justice principles.
- c) Councils should consider the long term and cumulative effects of actions on future generations.

The models under consideration should be ones that result in a rate structure being in place that will distribute the rates in a way that is fair and equitable and not simply delay difficult choices for a future council to deal with.

Rate Structures - Supporting Information

Contents

1 Overall Yield Comparisons

1.1.1 SMRC Heading 3

1.2 SMRC Heading 2

APPENDIX 1 Appendix Title

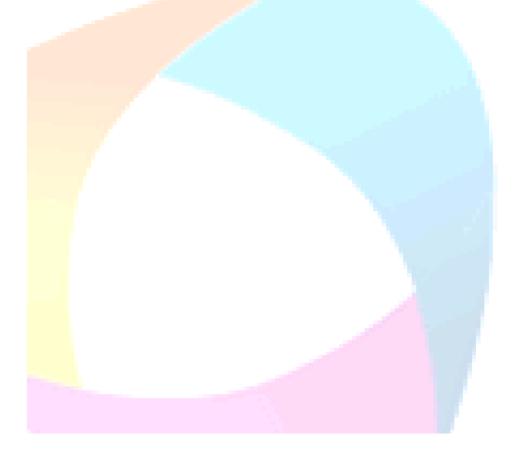
APPENDIX 2 Appendix Title

2 Error! Bookmark not defined.

Error! Bookmark not defined.

Error! Bookmark not defined.

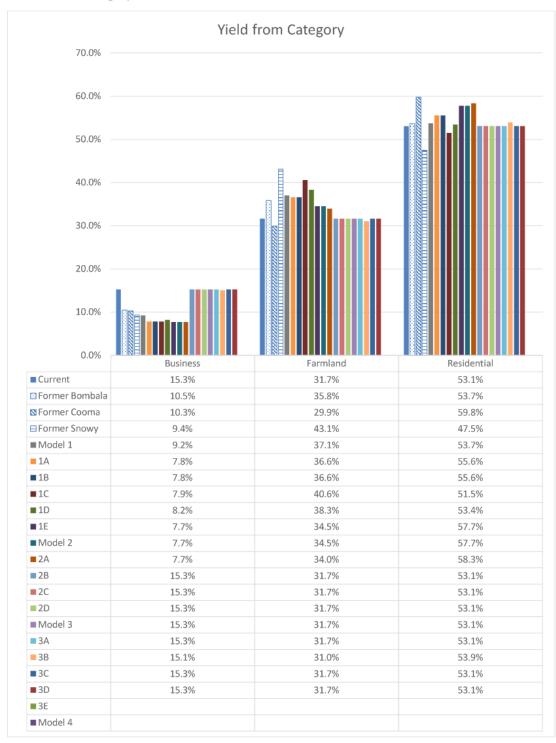




Document Name

1 Overall Yield Comparisons

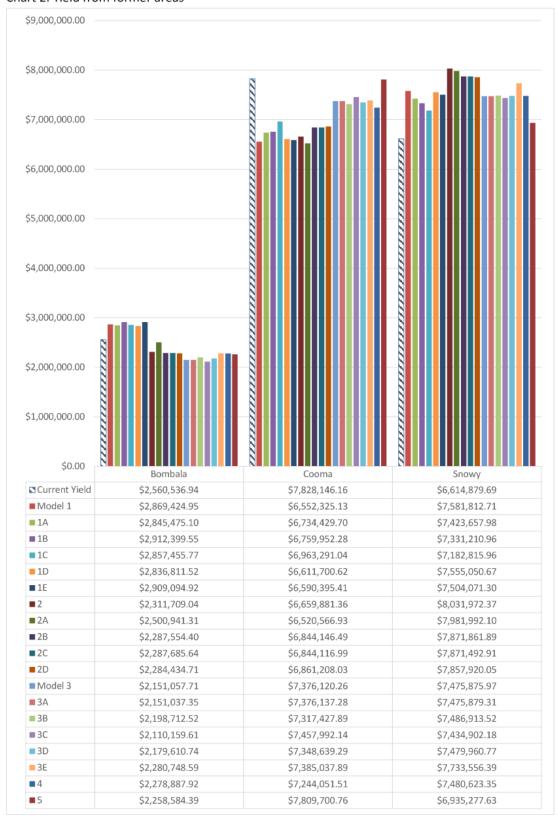
Chart 1: Rate Category Yield



250.2016.#.1	Issue Date: (date)	Revision Date:	Page 2 of 15

Document Name

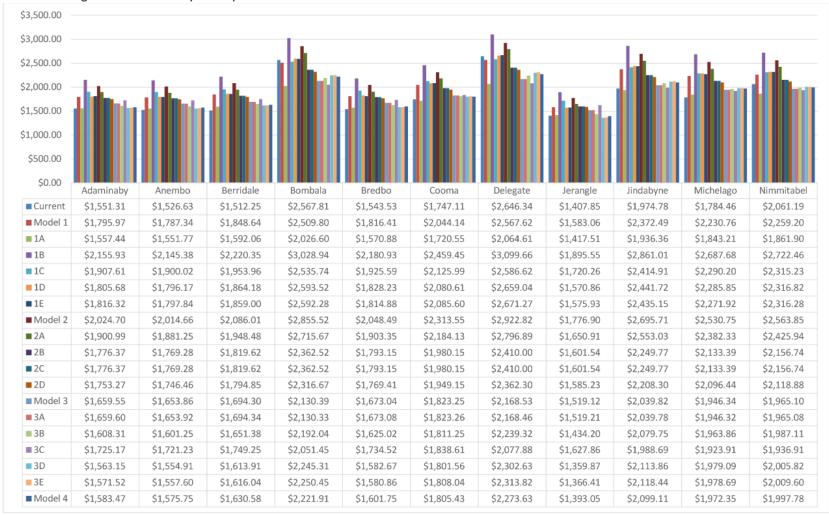
Chart 2: Yield from former areas



250.2016.#.1	Issue Date: (date)	Revision Date:	Page 3 of 15
--------------	--------------------	----------------	--------------







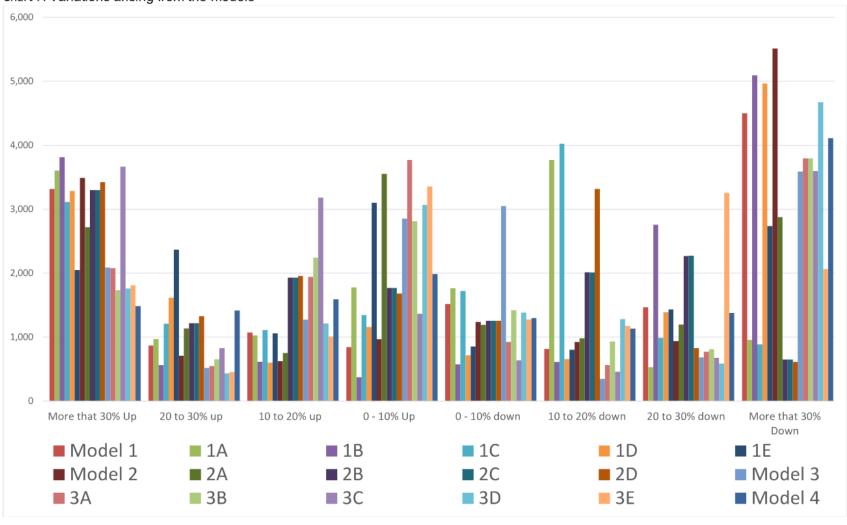
250.2016.#.1	Issue Date: (date)	Revision Date:	Page 5 of 15
--------------	--------------------	----------------	--------------





250.2016.#.1	Issue Date: (date)	Revision Date:	Page 6 of 15
--------------	--------------------	----------------	--------------





250.2016.#.1	Issue Date: (date)	Revision Date:	Page 7 of 15
--------------	--------------------	----------------	--------------

→3E

─Model 4

\$725.79

\$677.53

\$1,061.31

\$1,056.96

Document Name

\$1,690.19

\$1,653.04

\$1,771.86

\$1,735.99

\$609.28

\$531.54



\$3,255.25

\$3,248.54

\$563.82

\$461.51

	250.2016.#.1	Issue Date: (date)	Revision Date:	Page 8 of 15
--	--------------	--------------------	----------------	--------------

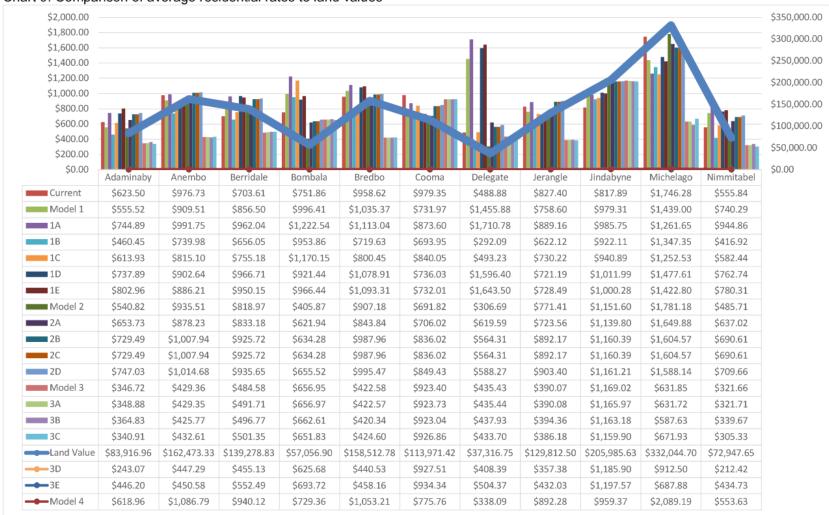
\$1,140.77

\$1,147.87

\$989.28

\$868.57





	250.2016.#.1	Issue Date: (date)	Revision Date:	Page 9 of 15
--	--------------	--------------------	----------------	--------------

Document Name

Table 1: Number of landowners within percentage change ranges – Model series 1 & 2

Table 1. Halliber of 1				.99	Wiodol oolik						
	Model1	1A	1B	1C	1D	1E	Model2	2A	2 B	2C	2 D
More than 30% Up	3,314	3,605	3,814	3,111	3,285	2,047	3,491	2,717	3,297	3,297	3,423
20% to3 0% up	867	970	561	1,208	1,616	2,366	707	1,136	1,218	1,218	1,326
10% to 20% up	1,073	1,025	613	1,108	603	1,061	623	749	1,928	1,928	1,956
0-10% Up	842	1,774	370	1,343	1,158	3,100	964	3,553	1,767	1,766	1,679
0-10%down	1,517	1,765	573	1,723	717	852	1,236	1,190	1,253	1,254	1,256
10to20%down	814	3,768	611	4,024	658	800	925	980	2,013	2,011	3,317
20to30%down	1,466	528	2,758	988	1,390	1,432	934	1,193	2,270	2,271	824
More than 30% Down	4,499	957	5,092	887	4,965	2,734	5,512	2,874	646	647	611
Number increasing	6,096	7,374	5,358	6,770	6,662	8,574	5,785	8,155	8,210	8,209	8,384
Inc Above 10%	5,254	5,600	4,988	5,427	5,504	5,474	4,821	4,602	6,443	6,443	6,705
Reduction	8,296	7,018	9,034	7,622	7,730	5,818	8,607	6,237	6,182	6,183	6,008
Business											
More than 30% Up	16	31	12	27	18	32	1	50	37	37	38
20% to3 0% up	-	11	4	12	3	1	1	5	12	12	18
10% to 20% up	8	31	25	34	-	3	3	5	62	62	66
0-10% Up	37	16	20	22	-	110	14	269	89	88	103
0-10%down	1	48	-	52	1	29	18	76	97	98	82
10to20%down	2	76	2	74	4	23	83	44	82	80	127
20to30%down	7	112	7	124	20	186	173	27	150	151	104
More than 30% Down	994	740	995	720	1,019	681	772	589	536	537	527
Number Increasing	61	89	61	95	21	146	19	329	200	199	225
Farmland											

250.2016.#.1	Issue Date: (date)	Revision Date:	Page 10 of 15
--------------	--------------------	----------------	---------------

	Model1	1A	1B	1C	1D	1E	Model2	2A	2B	2C	2 D
More than 30% Up	464	287	1,597	947	288	265	1,347	359	530	530	485
20% to3 0% up	624	152	379	638	973	980	298	970	482	482	423
10% to 20% up	481	217	411	586	163	161	517	174	671	671	720
0-10% Up	416	854	164	409	706	776	252	761	634	634	685
0-10%down	469	899	138	199	164	239	168	216	337	337	320
10to20%down	190	228	76	88	168	160	122	146	181	181	186
20to30%down	125	166	44	6	153	224	80	214	38	38	54
More than 30% Down	104	70	64	-	258	68	89	33	-	-	-
Number Increasing	1,985	1,510	2,551	2,580	2,130	2,182	2,414	2,264	2,317	2,317	2,313
Residential											
More than 30% Up	2,834	3,287	2,205	2,137	2,979	1,750	2,143	2,308	2,730	2,730	2,900
20% to3 0% up	243	807	178	558	640	1,385	408	161	724	724	885
10% to 20% up	584	777	177	488	440	897	103	570	1,195	1,195	1,170
0-10% Up	389	904	186	912	452	2,214	698	2,523	1,044	1,044	891
0-10%down	1,046	817	434	1,471	551	583	1,049	897	818	818	853
10to20%down	622	3,464	533	3,862	486	617	720	790	1,750	1,750	3,004
20to30%down	1,334	250	2,707	858	1,217	1,022	681	952	2,082	2,082	666
More than 30% Down	3,401	147	4,033	167	3,688	1,985	4,651	2,252	110	110	84
Number Increasing	4,050	5,775	2,746	4,095	4,511	6,246	3,352	5,562	5,693	5,693	5,846

Table 2: Number of landowners within percentage change ranges – Model series 3 & 4

All	Model3	3A	3B	3C	3D	3E	Model4	4A
More than 30% Up	2,084	2,079	1,734	3,662	1,761	1,806	1,482	1,032

250.2016.#.1	Issue Date: (date)	Revision Date:	Page 11 of 15
--------------	--------------------	----------------	---------------

All	Model3	3A	3B	3C	3D	3E	Model4	4A
20% to3 0% up	518	546	650	824	431	457	1,417	1,307
10% to 20% up	1,273	1,942	2,241	3,182	1,212	1,004	1,591	1,133
0-10% Up	2,852	3,772	2,812	1,364	3,067	2,943	1,982	2,842
0-10%down	3,049	925	1,420	635	1,382	1,263	1,297	2,853
10to20%down	346	563	933	458	1,280	1,164	1,133	2,290
20to30%down	681	770	807	671	585	3,658	1,379	889
More than 30% Down	3,589	3,795	3,795	3,596	4,674	2,097	4,111	2,046
Number Increasing	6,727	8,339	7,437	9,032	6,471	6,210	6,472	6,314
Inc Above 10%	3,875	4,567	4,625	7,668	3,404	3,267	4,490	3,472
Number Reducting	7,665	6,053	6,955	5,360	7,921	8,182	7,920	8,078
Business								
More than 30% Up								65
20% to3 0% up	72	78	87	134	2	11	33	54
10% to 20% up	76	87	72	162	242	9	140	107
0-10% Up	472	495	272	175	204	430	277	259
0-10%down	180	110	330	149	154	174	231	220
10to20%down	33	46	53	71	101	86	117	103
20to30%down	29	34	38	50	72	271	39	31
More than 30% Down	142	142	132	21	256	38	200	226

250.2016.#.1	Issue Date: (date)	Revision Date:	Page 12 of 15
--------------	--------------------	----------------	---------------

All	Model3	3A	3B	3C	3D	3E	Model4	4A
Number Increasing	681	733	512	774	482	496	478	485
Farmland								
More than 30% Up	460	460	122	1,016	108	104	74	74
20% to3 0% up	165	165	268	387	85	89	120	120
10% to 20% up	364	363	515	436	138	128	549	549
0-10% Up	1,358	1,359	687	359	998	1,002	685	685
0-10%down	178	178	522	230	203	206	445	445
10to20%down	177	177	511	144	723	716	538	538
20to30%down	125	125	185	120	194	298	212	212
More than 30% Down	46	46	63	181	424	330	250	250
Number Increasing	2,347	2,347	1,592	2,198	1,329	1,323	1,428	1,428
Residential								
More than 30% Up	1,563	1,546	1,531	2,343	1,619	1,656	1,380	893
20% to3 0% up	281	303	295	303	344	357	1,264	1,133
10% to 20% up	833	1,492	1,654	2,584	832	867	902	477
0-10% Up	1,022	1,918	1,853	830	1,865	1,511	1,020	1,898
0-10%down	2,690	636	567	255	1,024	882	620	2,187
10to20%down	136	340	369	243	456	362	478	1,649

250.2016.#.1	Issue Date: (date)	Revision Date:	Page 13 of 15
--------------	--------------------	----------------	---------------

All	Model3	3A	3B	3C	3D	3E	Model4	4A
20to30%down	527	611	584	501	319	3,089	1,128	646
More than 30% Down	3,401	3,607	3,600	3,394	3,994	1,729	3,661	1,570
Number Increasing	3,699	5,259	5,333	6,060	4,660	4,391	4,566	4,401

250.2016.#.1	Issue Date: (date)	Revision Date:	Page 14 of 15
--------------	--------------------	----------------	---------------

Document Name

APPENDIX 2 Appendix Title

Item	Development type	Service length (metres)	Main cock & meter size (mm)	Service pipe size (mm)	Comments
1	Residential – Single Dwelling	<30	20	20	
2	Residential – Multi – No Units: 2	<30	25	32	Highest serviced floor level may be 9 metres above the main
3	Residential – Multi – No Units: 3 to 5	<30	32	32	Highest serviced floor level may be 9 metres above the main
4	Residential – Multi – No Units: 6 to 10	<30	32	40	Highest serviced floor level may be 9 metres above the main
5	Residential – Multi – No Units: 11 to 16	<30	40	50	Highest serviced floor level may be 9 metres above the main
6	Residential – Multi – No Units: 17 to 50	<30	50	65	Highest serviced floor level may be 9 metres above the main
7	Laundromat – No of Washing Machines: 1 to 5	<30	32	32	
8	Laundromat – No of Washing Machines: 6 to 9	<30	40	40	
9	Laundromat – No of Washing Machines: 10 to 13	<30	50	50	

	250.2016.#.1	Issue Date: (date)	Revision Date:	Page 15 of 15
--	--------------	--------------------	----------------	---------------

9.4.4 ANSWERS TO QUESTIONS WITH NOTICE

Record No:

Responsible Officer: Chief Strategy Officer

Author: CIS Project Administration Support Officer

Key Theme: 4. Leadership Outcomes

CSP Community Strategy: 10.2 Sound governance practices direct Council business and

decision making

Delivery Program Objectives: 10.2.2 Councillors are supported to make informed decisions in

the best interest of the community and to advocate on behalf of

the community

Attachments: 1. In Progress Questions up to the end of February 2021

EXECUTIVE SUMMARY

As per clause 3.13 of Code of Meeting Practice a councillor may, by way of a notice submitted under clause 3.9, ask a question for response by the Chief Executive Officer about the performance or operations of the Council.

In order to provide Councillors with updates on questions asked by Councillors, a report has been generated with a summary of questions that are current and have recently been completed, for the period ending February 2021.

OFFICER'S RECOMMENDATION

That Council receive the answers to questions with notice for the period ending February 2021.

No.	Date rec'd	Item No.	Question/Request	Responsible Officer	Response	Compl Y/N
186	15 October 2020	12.6	Footpaths in the Region Councillor Rogan Corbett Question: Can Council put together a plan for the Federal Government program for Community Infrastructure that will employ people and be a benefit for the whole community, in particular footpaths throughout the region are in need of attention?	Manager Corporate Projects	25/01/2021 – GH: This would require the development of a footpath strategy. A footpath strategy is required to ensure a regional and well planned approach to priorities for funding upgrades and new footpaths throughout the Region. There is currently no resources allocated to undertake this work, which would require other strategies or projects to be deferred if this was to become a higher priority. Council is currently delivering the Cooma Streetscape Beautification grant funded project that is focused on footpaths. In addition an application under BLERF has been prepared to address footpath issues around Denison Street, Adaminaby 27/11/2020 – GH: No further progress. 02/11/2020 – GH: Initial discussions have held to develop a planned approach to this request.	N
190	19 Nov 2020	12.2	Southern Tablelands 4 Wheel Drive Club Councillor John Castellari Question: The Southern Tablelands 4 Wheel Drive Club Inc. have asked me to inquire concerning what action Council has taken to progress Parts A B C D F & J of Resolution 258/19 (18 July 2019)? They have had a legal opinion to the effect that Council resolved not to support parts E, F, I of that resolution but still need to follow through on the outstanding parts of the resolution.	Chief Operations Officer	03/03/2021 – JM: Report prepared for 18 March 2021 Council meeting. 29/01/2021 – JM: A relevant party approached Council in January with a potential solution to the matter. In discussing with neighbour, it was concluded by the parties that the suggested approach was not acceptable. Therefore to enact part A of resolution 258/19 (Negotiate with the owner of lot 15 to realign the road over the track through his property.) Contact will be made with the	N

No.	Date rec'd	Item No.	Question/Request	Responsible Officer	Response	Compl Y/N
	rec a	NO.		Officer	owner of lot 15 and a letter sent. 30/11/2020 – JM: Resolution 368/19 in part C resolved to "Refer the matter back to the relevant parties indicating that it is a civil matter that should be resolved by the parties without Council's engagement." The resolution may have impacted on the location of the track leading to the segment of the road involved in the dispute. Council did not want to commence discussions that may subsequently need to be changed. As it is apparent that no agreement has been reached, part A of resolution 258/19 (Negotiate with the owner of lot 15 to realign the road over the track through his property.) will now commence.	
193	19 Nov 2020	12.5	Signage for Dog Waste Councillor Brian Old Question: Can Council put some signs up down at the lake walk, for owners to pick up their dog waste.	Manager Infrastructure	29/01/2021 – JM: Request still being reviewed. 30/11/2020 – GS: This request is being reviewed by staff. It is noted that some signage already exists and will be reviewed. Pet clean up bag dispensers are also installed in two locations. Once an acceptable design/message has been agreed and optimal number of signs determined, signs will be ordered and installed.	N
196	17 Dec 2020	12.3	Flying Boats Councillor John Last Question: Flying Boats are presently arranging to fly to Lake Burley Griffin. Has the General Manager been in touch with the Flying Boat	CEO / Executive Assistant to Chief Executive Officer, Mayor and Councillors	09/03/2021 – GW: Hydro advised they had contact with this company 12 months ago. Snowy has no plans to use sea planes for any projects. Any future tourism operators would need to contact Maritime Services and Council (per Hydro).	N

9.4.4 ANSWERS TO QUESTIONS WITH NOTICE

No.	Date rec'd	Item No.	Question/Request	Responsible Officer	Response	Compl Y/N
			company to see if they would be prepared to fly to Lake Jindabyne?		29/1/2021 – GW: Air transport utilising sea planes is under consideration through the SAP project. Snowy Hydro are aware of this. This service was in place many years ago with sea plane services from Rose Bay to Jindabyne. The CCO will ensure that Hydro is also aware of Flying Boats so they can consider this option. Email sent to Snowy Hydro 29/1/21 by CCO on behalf of CEO.	
200	17 Dec 2020	12.7	Fleet Management Report Councillor Sue Haslingden Question: Can Council please receive a comprehensive fleet management report – early 2021 – in respect of the Fleet Management Policy – to understand what the fleet is worth, costs, fuel etc.	Manager Fleet and Plant	12/01/2021 – SS: A report will be presented to Council in March 2021.	N
202	18 February 2021	12.1	Bombala Bicentennial Gardens Councillor Anne Maslin Question: Can Council fast-track inclusion of the Bombala Bicentennial Garden as a heritage precinct?	Manager Infrastructure	03/03/2021 – JM: As advised against part C of resolution 240/20, heritage assessment has been completed and currently being reviewed by Council's Strategic Planning team.	N
203	18 February 2021	12.2	Cooma Main Street Councillor Lynley Miners Question: Has Council had a conversation with TfNSW and or Snowy / Future Gen on the road pavement through Short Street (it is very rough) – it needs the hot mix cover. When the segment trucks start, the noise complaints will be horrific due to the roughness of the surface.	Manager Infrastructure	02/03/2021 – TP: Response to this question to be tabled next month.	N

No.	Date rec'd	Item No.	Question/Request	Responsible Officer	Response	Comp Y/N
204	18 February 2021	12.3	Norris Park Councillor John Last Question: Ivy is taking over Norris Park. Ruining the flowers / shrubs in the park. Urgent actions is needed. It is a disgrace.		O4/O3/2021 – BJ: During spring and summer months, sports grounds and parks within Cooma CBD are scheduled for mowing every week. Civic maintenance staff within Cooma CBD follow a daily schedule of opening public toilets, cleaning toilets, litter pick up of all open areas, cleaning of picnic areas and bbq's. Then a less formal schedule is created depending on need; this encompasses tasks such as weeding, watering and fertilising of garden beds (all having now been planted with summer annuals). Tree care, mowing, weeding of lawn areas and footpaths are scheduled in-line with significant public events such as ANZAC Day but generally resources are allocated where the needs exists most and this is determined by weather and vegetation growth, which varies across the Region. Correctional Services C2 team often helps with these tasks but have been unavailable for the last 12 months.	N
205	18 February 2021	12.4	Council Land Councillor John Last Question: Who purchased the land from the Council at Polo Flat?	Team Leader Cooma Civic Service	04/03/2021: TP: Karatoga Pty Ltd via public auction process.	N
206	18 February 2021	12.5	Weeds in Streets Councillor John Last Question: Can the weeds in the streets be poisoned? Once again, another disgrace.	Team Leader Cooma Civic Service	04/03/2021 – JMH: Have been poisoned and then whipper-snipped.	N
207	18 February 2021	12.6	Town Gardens Councillor John Last Question: When will the person in charge of town gardens commence maintaining the gardens to bring them to a decent standard?	Team Leader Cooma Civic Service	04/03/2021 – BJ: During spring and summer months, sports grounds and parks within Cooma CBD are scheduled for mowing every week. Civic maintenance staff within Cooma CBD follow a daily schedule of opening public toilets,	N

No.	Date rec'd	Item No.	Question/Request	Responsible Officer	Response	Compl Y/N
			At present they are a disgrace save for the gardens near the library.		cleaning toilets, litter pick up of all open areas, cleaning of picnic areas and bbq's. Then a less formal schedule is created depending on need; this encompasses tasks such as weeding, watering and fertilising of garden beds (all having now been planted with summer annuals). Tree care, mowing, weeding of lawn areas and footpaths are scheduled in-line with significant public events such as ANZAC Day but generally resources are allocated where the needs exists most and this is determined by weather and vegetation growth, which varies across the Region. Correctional Services C2 team often helps with these tasks but have been unavailable for the last 12 months.	
208	18 February 2021	12.7	Exit Interviews Councillor John Last Question: That any person resigning from the Council be offered an exit interview if he/she desires. And can a reports to the Council on all persons resigning be provided.	Chief Workforce Officer	03/03/2021 – AM: Exit interviews are offered to all employees upon leaving the organisation. Whether they choose to complete this interview or not is optional. 83 employees from March 2020 to current have left SMRC, 49 of whom completed the exit interview offered. Naturally all of the discussions were in confidence therefore further information is not available for distribution.	N
209	18 February 2021	12.8	Michelago Causeway Councillor John Rooney Question: When will construction of the Michelago Causeway commence and when will it be completed?	Manager Corporate Projects	02/03/2021 – GH: - Design priorities are C/L of Ryrie Street and Micalago Road/Booroomba Creek Detail; - Bridge/Causeway draft designs to be revised based on detailed Survey & Geotech data. Issues: - Funding allocated from LRCIP Program does not cover design only. Need to commence planned work on Telstra and Booroomba Creek ASAP. - LRCIP funding of \$872,161.00 to be spent by June	N

9.4.4 ANSWERS TO QUESTIONS WITH NOTICE

Page 3	354
--------	-----

Date	Item	Question/Request	Responsible	Response	Compl
rec'd	No.		Officer		Y/N
				2021. - Available timeframe in LRCIP funding is inadequate to permit completed construction; - Initial concept based on LIDAR survey levels; - Detailed Survey of the creek bed indicates an additional 2m depth in creek C/L; - Additional crossing length and low flow capacity required to meet Fisheries minimum requirements; - Est for crossing will need to cover BC (\$400K Dual Lane) + bridge (\$960K Dual Lane) + Telstra relocation (TBA) + Road approaches (TBA) + Micalago Road inc	
			· · ·		rec'd No. Officer 2021 Available timeframe in LRCIP funding is inadequate to permit completed construction; - Initial concept based on LIDAR survey levels; - Detailed Survey of the creek bed indicates an additional 2m depth in creek C/L; - Additional crossing length and low flow capacity required to meet Fisheries minimum requirements; - Est for crossing will need to cover BC (\$400K Dual Lane) + bridge (\$960K Dual Lane) + Telstra relocation

9.4.5 RESOLUTION ACTION SHEET UPDATE

Record No:

Responsible Officer: Chief Strategy Officer

Author: CIS Project Administration Support Officer

Key Direction: 7. Providing Effective Civic Leadership and Citizen Participation

Delivery Plan Strategy: DP7.1.1.2 Council's leadership is based on ethics and integrity to

enable informed and appropriate decisions in the community's

best interest.

Operational Plan Action: OP7.7 Provide timely, accurate and relevant information to

Council to enable informed decision making.

Attachments: 1. In Progress Actions up to end of February 2021

Cost Centre 3120

EXECUTIVE SUMMARY

In order to provide Councillors with updates on resolutions of Council, a report has been generated with a summary of actions that are current and have recently been completed, for the period ending February 2021.

The In Progress Resolution Action Sheet for period ending December 2020 is attached to this report.

OFFICER'S RECOMMENDATION

That Council receive the In Progress Resolution Action Sheet Update for the period ending February 2021.

SMRC Resolution Action Sheet – In Progress

			SMRC Resolution Ac	·			
No.	Meeting Date	Res. No	Action	R/Officer	Progress	Estimated Comp Date	Comp Y/N
16	05 April 2018	118/18	Proposed Road Closure & Sale of old Lions Park at Bombala That Council; A. Approve the partial road closure on the corner of High Street and Stephen Street Bombala so that the fence line becomes the boundary of lot 9 DP 995614; B. Engage the services of a land surveyor to provide a plan for the boundary adjustment; C. Authorise the General Manager to execute any documents necessary to complete the boundary adjustment and sale of the property; D. Readvertise the property on the open market for auction with an appropriate reserve; and E. Make the Report public once the matter is settled.	Property Officer	 24/02/2021 - JH: Target date now 30 June 2021, Waiting for return of lodged documents from LRS. 12/01/2021 - JH: No further update. 27/11/2020 - JH: C. Solicitor is preparing documents to have a certificate of title (CT) created over the portion of the road to be closed so consolidation can take place. Recent verbal feedback from NSW Land Registry Services to the surveyor indicates that a further survey of the original lot may need to occur to complete the registration due to the age of the original plan's survey. This will be reviewed once the CT has been assigned. 20/10/2020 - JH: A. Finalised. B. Finalised. C. Solicitor is preparing documents to have a CT created so consolidation can take place. D. Once notified of completed registration the property can be placed on the open market. E. To take place at completion of D. 23/09/2020 - JH: C Consolidation Plans lodged, surveyor has advised that a CT was not created and the solicitor is now preparing this so that 	20/04/2021	N

ATTACHMENT 1 IN PROGRESS ACTIONS UP TO END OF FEBRUARY 2021		Page 357
	registration can take place.	
	 26/08/2020 JH: C. Finalised. D. Finalised. C. Consolidation Plans lodged, Surveyor is following up on progress of same. D. Once notified of completed registration the property can be placed on the open market. E. To take place at completion of D 	
	 22/07/2020 – JH: C. Consolidation Plans received from Surveyor and signed by CEO, returned to Surveyor for lodging for registration of same. D. Once notified of completed registration the property can be placed on the open market. E. To take place at completion of D. 	
	24/06/2020 – JH: E. Finalised. F. Finalised. C D and E: Still waiting finalised consolidation plans from surveyor for this item to be completed. Have sent numerous email requests to Surveyor.	
	28/05/2020 – JH: Surveyor again requested to provide the final plan, no response and will continue to follow up. This plan is in draft form with the Surveyor and would not be cost effective to engage another surveyor to finalise the plan.	
	27/04/2020 - JH: Email sent to Surveyor requesting a definite date for plan to be registered. Surveyor advised he will	

					review the current draft of this consolidation plan this week and submit for Registration.		
					26/03/2020 - JH: Followed up with Surveyor and was advised this item is going to be delayed due to the large scale workload he has in place.		
					27/02/2020 - JH: Followed up with Surveyor and was advised this item is going to be delayed due to the large scale workload he has in place. 15/01/2020 - JH: The Surveyor has advised that he is hoping to have the consolidation plan ready for the end of January 2020.		
20	07 May 2018	162/18	Proposal to Realign the Barry Way Jindabyne and to Address Issues with the Intersections of	Land & Property Officer	01/03/2021 – TP: A&C Further follow up email (3/2/021 LB) has	31/08/2022	N
	2020		Barry Way with Eagle View Lane and	0111001	been sent to landowner on Eagle View Lane		
			Bungarra Lane		requesting contact be made with Council to		
			That Council		discuss the way forward., B. Application is being		
			A. Approve the proposal to realign The Barry		prepared to apply for sections of Crown Road to		
			Way over the constructed road from the		be transferred to Council. 4/2/21 Query tabled to		
			intersection with MR286 to the boundary of		Coordinator Development relaying landowner		
			the national park. B. Approve the proposal to apply to the Crown		query.		
			to transfer those sections of The Barry Way		22/01/2021 – LB:		
			which are Crown reserve road to Council.		A&C Follow up email has been sent to landowner		
			C. Authorise staff to negotiate with landowners		on Eagle View Lane requesting that he		
			for acquisition of the constructed Barry Way		contact the Land and Property Officer to		
			and, where possible, to offer to close		discuss the way forward.		
1			corresponding sections of paper road and to	1	B. Application is being prepared to apply for		1
			dedicate the land to the landowner in		sections of Crown Road to be transferred to		

compensation.
To engage the services of
identify those sections of

compensation

- D. a surveyor to identify those sections of the Barry Way which are not on line with the constructed road.
- E. To acquire any Crown land upon which the Barry Way has been constructed through the process of the Land Acquisition (Just Terms Compensation) Act 1991 through the authority of the Roads Act 1993.
- F. Authorise the General Manager to execute any documents necessary to complete the project.
- G. Authorise the expenditure and allocate an amount of \$135,000 in the 2018/19 year Budget with funding to be provided from Stronger Communities Project PP-219 (Undertake project to align the road with road reserves).

Council.

4/12/2020 - LB:

A&B. Waiting on response from landowner who does not live locally.

Letters are currently being prepared to commence negotiation with landowners adjoining Barry Way on Cobbon Hill. A quote has been sought from Public Works Advisory to carry out the compulsory acquisition of Crown land on Cobbon Hill.

03/11/2020 - LB:

A&B Surveyor has provided necessary information which has now been provided to the land owner. Provision of this information will now allow action C to be completed.

24/09/2020 - LB:

- A&B. Surveyor has addressed questions relating to the plan at the intersection of Eagle View Lane. The landowner was notified and again posed a number of questions. Most of these have been answered and the answer to the last question will be provided this week.
- C. Negotiation will commence next week with landowners adjacent to Cobbon Hill. This section of realignment of the Barry Way will involve compulsory acquisition from the Crown.
- D. This project has been divided into sections so that the surveyor completes the survey work as Council is ready to address each section.
- The section of the Barry Way which passes through Crown land without a road reserve is

<u> </u>
at the southern end and will be addressed as that stage is reached.
26/08/2020 – LB: A&B Surveyor has notified Council that due to workload this plan may take a little longer. C Landowner has been notified that there is a delay involved in obtaining the information that they have requested. E-G Ongoing. 29/07/2020 – LB:
A & B Surveyor has been requested to provide the plan for the second section which will involve Eagle View Lane. C. Landowners have been notified that Council is waiting on plan. E-G. Ongoing.
26/06/2020 – LB: The draft plan may be expected. The landowner is waiting on this information before proceeding. A. Survey is being done in sections B. Request for sections of Crown road to be transferred to Council will be carried out at the end of the project. C. Negotiations with landowners are ongoing. D. See A. above. E. Acquisition will be carried out as necessary
when the plan for individual sections is finalised. F-G Ongoing. 28/05/2020 – LB: The surveyor has promised to have the draft plan

	has requested information. He wants to know how much land Council will require for the road and how much land he will receive in compensation. Will there be sufficient space for him to construct an eco-hut. The surveyor has been requested to calculate the area of both areas so that an accurate answer can be provided. 26/03/2020 – LB: In view of the fact that the landowner has not contacted the Land and Property Officer to date a letter has been sent asking him to contact the Land and Property Officer to discuss his consent to the creation of the road reserve over the road in its current location through his property. 02/03/2020 – LB: The Land and Property Officer met with the landowner and he said he will respond after consultation with his wife. 20/01/2020 – LB: Waiting on response from landowner on Eagle View Road. He resides in Tasmania.	
29 21 June 253/18 Council Property - Town View, Waterworks Manager Water and and	28/2/21 - TP: 30/03/2021 No further update.	N

71117(6)1117(2)1111	NO GRESS METHORS OF TO ERRO OF TEDROMINI 2021			1 agc 302
	That Council A. Approve the proposal to demolish the residence located on lot 1 DP 1216130 B. Serve notice on the tenant to vacate the premises in accordance with the Residential Tenancy Act. C. Engage the services of a suitably qualified contractor to demolish the residence, clear the site and dispose of any asbestos in accordance with the EPA Act; and D. Authorise the expenditure and allocate an amount in the 2018 Financial Year Budget with funding to be provided from the Former Bombala LGA Reserve.	Wastewater Operations	29/01/2021 - JM: No further update. 25/11/2020 – JM: A-D. The demolition of the building will take place with the facility upgrade. 03/11/2020 – JM: DPIE Water comments received on 3/11/2020 for Bombala. Currently being reviewed prior to community consultation commencing. 24/09/2020 – JD: Both Bombala and Delegate option reports complete and with DPIE for comment. Both now endorsed by Council. Community consultation with both communities will be held once comment from DPIE received. 27/08/2020 – BC: A-D. Option Study Report for Bombala sent to DPI Water for comment. Email sent to DPI on 11 August 2020 attaching Delegate Option Study Report and also sought comments from DPI on Bombala Options Study Report. 28/07/2020 – MR: A. Under the provision of the State Environmental Planning Policy (Infrastructure) 2007, development for the purpose of water treatment facilities may be carried out by or on behalf of a public authority without consent on land in a prescribed zone. No DA would be required to rebuild the water	
			treatment works in Bombala, however it will	

		need an REF.	
		The demolition of the existing building will be	
		included as part of the REF for the rebuild.	
		B. The tenant has vacated the dwelling and all	
		utility services have been disconnected.	
		C. Demolition will be a component of the WTP	
		•	
		rebuild in accordance with the Options Study	
		and REF.	
		D. Expenditure is expected to be incorporated in	
		the \$10M options funding grant.	
		25/06/2020 – GS:	
		Options study is complete covering Security of	
		supply, alternate water sources and quality issues	
		driving a new water treatment plant with	
		presentation by designer to Councillors scheduled	
		for 2 July 2020.	
		,	
		01/06/2020 – MR:	
		No further update until adoption of final options	
		study.	
		, i	
		22/04/2020 – GS:	
		Demolition of BWTP Cottage on hold pending	
		Bombala/Delegate Water Supply Options Study	
		recommendations.	
		23/03/2020 – MR:	
		Demolition of BWTP Cottage to coincide with	
		Bombala WTP refurb or rebuild in accordance	
		with Bombala/Delegate Water Supply Options	
		Study recommendations.	
		02/03/2020 – MR:	
		Demolishment of the residence will depend on the	

	TACITIVILIT	I 111 1100	THE STACTIONS OF TO LIND OF TEDROART 2021			rage	30 -
					outcome of the Options Study and recommendations. Options Study will be provided to Council when received. 14/01/2020 – AS: Still waiting on the Bombala/Delegate Water Options Study Report – expected finalisation April 2020.		
57	Septem ber 2018	314/18	Proposed Acquisition of Land in Cooma That Council A. Acquire Lots 400 and 434 DP 750535 and lot 461 DP 41999 by compulsory process under the Land Acquisition (Just Terms Compensation) Act 1991 by authority contained in the Local Government Act 1993 for the purpose of saleyards. B. That the land be dedicated as Operational land in accordance with the Local Government Act 1993 C. That minerals be included in this acquisition D. That this acquisition is not for the purpose of resale E. That the necessary applications be made to the Minister for Local Government and the Governor. F. That the Common Seal be affixed to all documentation required to be sealed to give effect to this resolution. G. That following the acquisition of the three Crown allotments, the eleven lots comprising the Cooma saleyards be consolidated into a single allotment. H. That this project be funded from the former	Property Officer	 28/2/21 TP: A-F Completed; G Consolidation process in progress; H All costs will be funded from the former Cooma Monaro Shire Council reserve fund. 12/01/2021 – JH: The acquisition process is finalised, Gazette notice featured in Government Gazette of 11 December 2020. The solicitor is preparing First Title on each lot. 27/11/2020 – JH: A to F: Awaiting the acquisition notice number to be issued from the Office of Local Government, which is required prior to publishing the gazette notice. 20/10/2020 - JH: A to F: After PAN notification date of 13 November OLG will send the relevant paperwork to both the Minister and Governor for approval. Once documents are approved OLG will send notice and then gazettal will occur 120 days after this notice. G: This will take place once the acquisition has 	28/02/2021	N

711171CHIVILIVI I HVI HOC	TRESS ACTIONS OF TO LIND OF TEDROART 2021		rage 303
ATTACHWENT THE NEC	Cooma Monaro Shire Council reserve fund.	been approved and finalised by OLG and Crown. H: All costs will be funded from the former Cooma Monaro Shire Council reserve fund. 23/09/2020 JH: A to F: Proposed acquisition notice (PAN) lodged now waiting for Acquisition Number to	1 456 303
		prepare Gazette Notice. Compensation monies deposited to Crown as per PAN.	
		26/08/2020 - JH: A to F: Notice from OLG to lodge PAN (proposed acquisition notice) and PAN lodgement was completed and lodged with Crown, NTSCORP and NSWALC. There is a 90 day period that OLG has now to complete the notice and gazette the acquisition, subject to no submissions are received from NTSCORP and NSWALC. Submissions from NTSCORP and NSWALC are not expected as this was reviewed prior to the PAN being sent during the original application, but is a requirement of the PAN. G: This will take place once the acquisition has been approved and finalised by OLG and Crown. H: All costs will be funded from the former Cooma Monaro Shire Council reserve fund.	
		22/07/2020 – JH: A to f: Updated Valuation report submitted to Crown to enable a faster completion of this acquisition once approval received from OLG. Latest email received from OLG is that	

		they are following up on our application and
		have not forgotten about it. No further response from Crown as to permission to
		begin project whilst waiting for OLG to send
		documentation of approval. None of these
		items can be finalised until a response from
		OLG is received.
		G: This will take place once the acquisition has
		been approved and finalised by OLG and
		Crown.
		H: All costs will be funded from the former
		Cooma Monaro Shire Council reserve fund.
		24/06/2020 – JH:
		A to H: Latest email received from OLG is that they
		are following up on our application and have
		not forgotten about it. No response from
		Crown as to permission to begin project
		whilst waiting for OLG to send
		documentation of approval. None of these
		items can be finalised until a response from
		OLG is received.
		28/05/2020 – JH:
		Email received from OLG on 20/5/2020 advising
		they can confirm that it has been processed,
		unfortunately they are unable to advise as to
		when/if it will be approved. Following up with
		Crown as to the option to gain approval for works
		to begin prior to acquisition taking place.
		Unfortunately with most staff working remotely responses are slower than usual.
		responses are slower triair usual.
		27/04/2020 - JH:
		Numerous requests have been sent to Office of

	TTT/TETHVIETT	± 1111 1101	SKESS / KETTORIS OF TO END OF TEDRO/ IKT 2021			i agc	
					Local Government asking for this matter to be finalised. Council does not have the option to gain approval for acquisitions from anyone other than OLG.		
					26/03/2020 - JH: Waiting on response from OLG.		
					27/02/2020 - JH: All information is with OLG and waiting for approval to come through.		
					15/01/2020 - JH: Waiting on response from Crown to advise that the Special Lease will be extinguished after acquisition has been completed to finalise documents required by OLG.		
74	4 October 2018	353/18	Clr Castellari Notice of Motion - Rooftop Solar That Council A. Support the Albury City Council motion regarding legislative changes to enable the implementation of a program similar to that implemented by Darebin City Council in Victoria; B. Advocate for the legislative changes to local members and relevant Ministers; C. Carry out due diligence with a business case which includes funding options, power under current legislation that would provide solar subsidy schemes for residence and	Executive Assistant to Chief Executive Officer, Mayor and Councillors	03/03/202 - PB: Nil update received. 28/01/2021 – JB: The CEO requested an update from LGNSW regarding to their advocacy of behalf of the local government sector (as per resolution 100 Solar Buy Back - from the 2018 LGNSW Conference). Following is their update: LGNSW advocated for changes to legislation, including the Local Government Act, to provide	Ongoing	N
			businesses within the SMRC council area; and D. Provide for public consultation process once the above has been carried out.		 incentives and mechanisms for households to adopt renewable energy systems through: Writing to the (then) Minister for the Environment and Minister for Local 		

		Government, Gabrielle Upton	
		Follow up letter with Minister for the	
		Environment, Matt Kean and Minister for Local	
		Government, Shelley Hancock (see attached)	
		Submission to Treasury Laws Amendment	
		(Improving the Energy Efficiency of Rental	
		Properties) Bill 2018 (Federal)	
		Input to the Department of Planning, Industry	
		& Environment project to identify how NSW	
		councils could be further supported to reduce	
		emissions (report not public).	
		While a response was not received from the	
		Minister for the Environment and Minister for	
		Local Government, Gabrielle Upton from the	
		2018 conference letter, a response was	
		received from Minister Upton the previous year	
		on the same policy matter. The response noted	
		the State Government's actions to improve	
		energy efficiency, however did not address the	
		request to amend the Local Government Act.	
		LGNSW continued to advocate to the NSW	
		Government but has not yet received a response	
		from Minister Kean or Hancock.	
		Unfortunately the Federal Treasury Laws	
		Amendment (Improving the Energy Efficiency of	
		Rental Properties) Bill 2018 has since lapsed.	
		However the second reading speech notes	
		elements of LGNSW's submission regarding split	
		incentives, indicating that there is support for this	
		kind of measure at the federal sphere of	
		government.	

	The LGNSW Policy Platform has also been updated to support new and fairer financing opportunities for local government including for fees and charges, a range of funding mechanisms to allow councils to build climate resilience in their communities, and enabling the update of zero and low carbon technologies through appropriate investment, concessions and legislation (see Finance Position Statement and Climate Change Position Statement). LGNSW will continue to advocate on this matter and others matters of importance to our members and especially those arising from annual conference resolutions. 26/11/2020 – JT: Investigation underway for further information. 23/10/2020 – JT: No further update. 28/09/2020 – JT: No further update. 29/06/2020 – JT: No further update 29/06/2020 – SC: A. Motion supported at LGNSW Annual Conference. B. Raised in conversation with Local Member and LGNSW.	
	C & D. No action.	

			20/05/2020 CC.	
			29/05/2020 – SC:	
			No further update.	
			29/04/2020 – SC:	
			No further update.	
			04/03/2020 – SC:	
			No further update.	
			06/02/2020 – SC:	
			No further update.	
			03/12/2019 – SC:	
			B. The CEO requested an update from LGNSW in	
			regarding to their advocacy of behalf of the	
			local government sector (as per resolution 100	
			Solar Buy Back - from the 2018 LGNSW	
			· ·	
			Conference).	
			LGNSW has made representations to the previous	
			Minister for the Environment and Minister for	
			Local Government prior to the latest cabinet	
			reshuffle.	
			The matter was also raised in LGNSW's submission	
			to the Senate Standing Committee on	
			Environment and Communications Inquiry into	
			Treasury Laws Amendment (Improving the	
			, , , , ,	
			Energy Efficiency of Rental Properties) Bill	
			2108.	
			Further to this, LGNSW also raised this matter at	
			their liaison meeting with the Office of	
			Environment and Heritage and will continue to	
			advocate on the issue as opportunities arise.	
<u> </u>	<u>I</u>			

88	Novem ber 2018	394/18	 Planning Proposal 461 Barry Way, Moonbah to Amend Snowy River Local Environmental Plan 2013 That: A. The report from the Senior Strategic Land Use Planner on the Planning Proposal 461 Barry Way (Lot 101 DP 817374) be received. B. The Planning Proposal be submitted to the Minister of NSW Planning & Environment for a Gateway Determination in accordance with Section 3.34 of the Environmental Planning and Assessment Act 1979. C. The Department of Planning and Environment be advised that Council wishes to be issued with an authorisation to use delegation for the Planning Proposal. D. In the event NSW Department of Planning & Environment issues a Gateway Determination to proceed with the Planning Proposal, consultation be undertaken with the community and government agencies in accordance with Schedule 1, Division 1, Clause 4 of the Environmental Planning and Assessment Act 1979 and any directions of the Gateway Determination. 	Senior Strategic Land Use Planner	26/02/2021 – AA: No further update, further update will be provided at conclusion of SAP Masterplan 14/01/2021 – AA: No further update. 26/11/2020 – AA: No further update. 30/10/2020 – AA: No further update. 25/09/2020 – AA: No further update. 28/08/2020 – AA: No further update. Proposal is waiting for proponent to respond to agency concerns and is on hold to the conclusion of the SAP Masterplan. The following sections of the Council resolution have been completed. A. No action required. B. Completed. C. Completed. D. Referred to relevant Government Agencies. An objection was received from OEH. Further information was requested from proponent. Awaiting response. 30/07/2020 – AA: No further update. 22/06/2020 – AA:	Ongoing	N
----	----------------	--------	---	---	--	---------	---

		•
	No further update.	
	03/06/2020 – MA:	
	No further update and not expected to be any	
	significant progress until the SAP masterplan is	
	more fully developed.	
	more rany developed.	
	05/05/2020 – AA:	
	An altered Gateway determination was issued by	
	the Department of Planning Industry and	
	Environment extending the timeframe for	
	completion by 24 months to 7 June 2022. This	
	allows the proposal adequate time to be	
	considered and finalised after the Snowy	
	Mountains Special Activation Precinct Masterplan	
	is completed.	
	19/03/2020 – MA:	
	No response received from DPIE regarding request	
	for extension of time due to SAP Masterplan. In	
	process of following up with DPIE.	
	31/03/2020 – AS:	
	No further update.	
	No further apaate.	
	02/03/2020 – BD:	
	No further update.	
	20/01/2020 – AA:	
	A letter has been forwarded to State Government	
	requesting the Gateway Determination date be	
	extended to coincide with the conclusion of the Go	
	Jindabyne masterplan.	
	06/12/2018 – MA:	

					 B. Planning proposal has been submitted to the Minister of NSW Planning and Environment for a Gateway Determination. C. Council has advised Department of Planning and Environment that Council wishes to be issued with an authorisation to use Delegation for the Planning Proposal Cannot be actioned until a determination is given. 		
165	Februar y 2019	68/19	Parking in the laneway at the rear of the Jindabyne Town Centre That Council A. Approve the proposal to enter into public consultation with the shopkeepers and owners in Jindabyne Town Centre regarding changes to the laneway at the rear of the shops. B. Receive a further report regarding the results of the public consultation and the proposed way forward together with detailed costings.	Manager Corporate Projects	irther advice as to SAP intentions pending. Once more integrated planning has occurred the project will be in a position to progress, in consult with Corporate Projects team. i/01/2021 – GH: waiting indication of SAP intentions for the Jindabyne Town Centre precinct. 4/12/2020 – LB: A. This project needs to be incorporated within a range of projects currently underway in the Jindabyne town centre to ensure that a good outcome is achieved. Once more integrated planning has occurred the project will be scheduled. i/10/2020 – LB: A. This project has temporarily been place on hold. B. Further report will be presented to Council at the appropriate time. 24/09/2020 – LB:	31/08/2021	N

		 _
	A. Amended plan still to be received by Council.	
	26/08/2020 – LB:	
	A. Council has requested a minor adjustment to	
	the concept plan. When the concept plan is	
	amended it is proposed to form a Steering	
	Committee to guide the project to completion.	
	B. Further report will be submitted for Council's	
	consideration when the public consultation has	
	taken place.	
	29/07/2020 – LB:	
	A. Council is in receipt of the draft survey plan and	
	is currently waiting on the design plan. When	
	both plans are to hand Council will undertake	
	public consultation.	
	B. Following public consultation a further report	
	will be prepared for Council with detailed	
	costings.	
	26/06/2020 – LB:	
	The Road Safety Officer advised that the	
	surveyor has been selected and the project is	
	progressing.	
	A. Public consultation will take place when the	
	survey and design is completed.	
	28/05/2020 – LB:	
	RFQ sent out to four surveyors for quotation for	
	survey and design. This is to be funded by	
	RMS.	
	28/05/2020 – LB:	
	RFQ sent out to four surveyors for quotation for	
<u> </u>		ı

					survey and design. This is to be funded by RMS.		
					24/04/2020 – LB: Specification for the tender is currently underway. Collaboration between the Special Projects Officer and the Road Safety Officer is being undertaken in view of the issues encountered with the proposed construction of the public toilets in Jindabyne.		
					26/03/2020 – LB: Tenders will need to be called for the survey and design work. When survey & design is completed, staff will arrange for public consultation.		
					02/03/2020 – LB: Waiting on survey and design so that public consultation can be arranged.		
					03/02/2020 – LB: Shopkeepers and shop owners in the Jindabyne Town Centre have been notified by letter that Council has been successful in securing grant funding for survey and design of the back lane.		
211	21 March 2019	127/19	Delegate Disadvantaged Housing That Council continue with the current arrangement of Facilities staff managing the tenants and maintenance on the properties pending community consultation, and bring a report back to Council.	Coordinator Land & Property	28/2/21 TP: Forward advice and notice the community to occur in March 2021. Profile flagging the general topic & basic elements of consideration. 27/01/2021 – TP: No further update.	30/06/2021	N
					27/11/2020 – TP: No further update.		

Design of consultation mechanics pending, with input from former Facilities staff to be included. 25/09/2020 – TP: It is anticipated that community consultation will be initiated in first quarter of 2021 calendar year. 27/08/2020 – TP: Council continuing to manage properties. Review of the background and full context relating to this item required by Land & Property unit. 24/07/2020 – KH: This area is now under the Land & Property Portfolio. An initial handover has been conducted with a more detailed one to follow explaining what steps have been taken so far and why, and to work together moving forward on this. 26/06/2020 – KH: There is no further update as there has been too much occurring with bushfires and COVID. 01/06/2020 – KH: No further update. 28/04/2020 – KH: No further update.		26/10/2020 – TP:	
input from former Facilities staff to be included. 25/09/2020 – TP: It is anticipated that community consultation will be initiated in first quarter of 2021 calendar year. 27/08/2020 – TP: Council continuing to manage properties. Review of the background and full context relating to this Item required by Land & Property unit. 24/07/2020 – KH: This area is now under the Land & Property Portfolio. An initial handover has been conducted with a more detailed one to follow explaining what steps have been taken so far and why, and to work together moving forward on this. 26/06/2020 – KH: There is no further update as there has been too much occurring with bushfires and COVID. 01/06/2020 – KH: No further update. 28/04/2020 – KH: No further update.		Design of consultation mechanics pending, with	
It is anticipated that community consultation will be initiated in first quarter of 2021 calendar year. 27/08/2020 – TP: Council continuing to manage properties. Review of the background and full context relating to this item required by Land & Property unit. 24/07/2020 – KH: This area is now under the Land & Property Portfolio. An initial handover has been conducted with a more detailed one to follow explaining what steps have been taken so far and why, and to work together moving forward on this. 26/06/2020 – KH: There is no further update as there has been too much occurring with bushfires and COVID. 01/06/2020 – KH: No further update. 28/04/2020 – KH: No further update.		input from former Facilities staff to be included.	
It is anticipated that community consultation will be initiated in first quarter of 2021 calendar year. 27/08/2020 – TP: Council continuing to manage properties. Review of the background and full context relating to this item required by Land & Property unit. 24/07/2020 – KH: This area is now under the Land & Property Portfolio. An initial handover has been conducted with a more detailed one to follow explaining what steps have been taken so far and why, and to work together moving forward on this. 26/06/2020 – KH: There is no further update as there has been too much occurring with bushfires and COVID. 01/06/2020 – KH: No further update. 28/04/2020 – KH: No further update.			
be initiated in first quarter of 2021 calendar year. 27/08/2020 – TP: Council continuing to manage properties. Review of the background and full context relating to this item required by Land & Property unit. 24/07/2020 – KH: This area is now under the Land & Property Portfolio. An initial handover has been conducted with a more detailed one to follow explaining what steps have been taken so far and why, and to work together moving forward on this. 26/06/2020 – KH: There is no further update as there has been too much occurring with bushfires and COVID. 01/06/2020 – KH: No further update. 28/04/2020 – KH: No further update. 28/04/2020 – KH: No further update.			
year. 27/08/2020 – TP: Council continuing to manage properties. Review of the background and full context relating to this item required by Land & Property unit. 24/07/2020 – KH: This area is now under the Land & Property Portfolio. An initial handover has been conducted with a more detailed one to follow explaining what steps have been taken so far and why, and to work together moving forward on this. 26/06/2020 – KH: There is no further update as there has been too much occurring with bushfires and COVID. 01/06/2020 – KH: No further update. 28/04/2020 – KH: No further update. 28/04/2020 – KH: No further update.		It is anticipated that community consultation will	
27/08/2020 – TP: Council continuing to manage properties. Review of the background and full context relating to this item required by Land & Property unit. 24/07/2020 – KH: This area is now under the Land & Property Portfolio. An initial handover has been conducted with a more detailed one to follow explaining what steps have been taken so far and why, and to work together moving forward on this. 26/06/2020 – KH: There is no further update as there has been too much occurring with bushfires and COVID. 01/06/2020 – KH: No further update. 28/04/2020 – KH: No further update. 28/04/2020 – KH: No further update.		be initiated in first quarter of 2021 calendar	
Council continuing to manage properties. Review of the background and full context relating to this item required by Land & Property unit. 24/07/2020 – KH: This area is now under the Land & Property Portfolio. An initial handover has been conducted with a more detailed one to follow explaining what steps have been taken so far and why, and to work together moving forward on this. 26/06/2020 – KH: There is no further update as there has been too much occurring with bushfires and COVID. 01/06/2020 – KH: No further update. 28/04/2020 – KH: No further update. 27/03/2020 – KH:		year.	
Council continuing to manage properties. Review of the background and full context relating to this item required by Land & Property unit. 24/07/2020 – KH: This area is now under the Land & Property Portfolio. An initial handover has been conducted with a more detailed one to follow explaining what steps have been taken so far and why, and to work together moving forward on this. 26/06/2020 – KH: There is no further update as there has been too much occurring with bushfires and COVID. 01/06/2020 – KH: No further update. 28/04/2020 – KH: No further update. 28/04/2020 – KH: No further update.			
of the background and full context relating to this item required by Land & Property unit. 24/07/2020 – KH: This area is now under the Land & Property Portfolio. An initial handover has been conducted with a more detailed one to follow explaining what steps have been taken so far and why, and to work together moving forward on this. 26/06/2020 – KH: There is no further update as there has been too much occurring with bushfires and COVID. 01/06/2020 – KH: No further update. 28/04/2020 – KH: No further update. 27/03/2020 – KH:			
this item required by Land & Property unit. 24/07/2020 – KH: This area is now under the Land & Property Portfolio. An initial handover has been conducted with a more detailed one to follow explaining what steps have been taken so far and why, and to work together moving forward on this. 26/06/2020 – KH: There is no further update as there has been too much occurring with bushfires and COVID. 01/06/2020 – KH: No further update. 28/04/2020 – KH: No further update. 28/04/2020 – KH: No further update.			
24/07/2020 – KH: This area is now under the Land & Property Portfolio. An initial handover has been conducted with a more detailed one to follow explaining what steps have been taken so far and why, and to work together moving forward on this. 26/06/2020 – KH: There is no further update as there has been too much occurring with bushfires and COVID. 01/06/2020 – KH: No further update. 28/04/2020 – KH: No further update. 28/04/2020 – KH: No further update.			
This area is now under the Land & Property Portfolio. An initial handover has been conducted with a more detailed one to follow explaining what steps have been taken so far and why, and to work together moving forward on this. 26/06/2020 – KH: There is no further update as there has been too much occurring with bushfires and COVID. 01/06/2020 – KH: No further update. 28/04/2020 – KH: No further update. 28/04/2020 – KH: No further update.		this item required by Land & Property unit.	
This area is now under the Land & Property Portfolio. An initial handover has been conducted with a more detailed one to follow explaining what steps have been taken so far and why, and to work together moving forward on this. 26/06/2020 – KH: There is no further update as there has been too much occurring with bushfires and COVID. 01/06/2020 – KH: No further update. 28/04/2020 – KH: No further update. 28/04/2020 – KH: No further update.		24/07/2020 – KH·	
Portfolio. An initial handover has been conducted with a more detailed one to follow explaining what steps have been taken so far and why, and to work together moving forward on this. 26/06/2020 – KH: There is no further update as there has been too much occurring with bushfires and COVID. 01/06/2020 – KH: No further update. 28/04/2020 – KH: No further update. 28/04/2020 – KH: No further update.			
with a more detailed one to follow explaining what steps have been taken so far and why, and to work together moving forward on this. 26/06/2020 – KH: There is no further update as there has been too much occurring with bushfires and COVID. 01/06/2020 – KH: No further update. 28/04/2020 – KH: No further update. 28/04/2020 – KH: No further update.		· · ·	
steps have been taken so far and why, and to work together moving forward on this. 26/06/2020 – KH: There is no further update as there has been too much occurring with bushfires and COVID. 01/06/2020 – KH: No further update. 28/04/2020 – KH: No further update. 27/03/2020 – KH:			
together moving forward on this. 26/06/2020 – KH: There is no further update as there has been too much occurring with bushfires and COVID. 01/06/2020 – KH: No further update. 28/04/2020 – KH: No further update. 27/03/2020 – KH:		, , , , , , , , , , , , , , , , , , ,	
26/06/2020 – KH: There is no further update as there has been too much occurring with bushfires and COVID. 01/06/2020 – KH: No further update. 28/04/2020 – KH: No further update. 28/04/2020 – KH: No further update.			
There is no further update as there has been too much occurring with bushfires and COVID. 01/06/2020 – KH: No further update. 28/04/2020 – KH: No further update. 27/03/2020 – KH:		together moving for ward on this.	
much occurring with bushfires and COVID. 01/06/2020 – KH: No further update. 28/04/2020 – KH: No further update. 27/03/2020 – KH:		26/06/2020 – KH:	
much occurring with bushfires and COVID. 01/06/2020 – KH: No further update. 28/04/2020 – KH: No further update. 27/03/2020 – KH:		There is no further update as there has been too	
No further update. 28/04/2020 – KH: No further update. 27/03/2020 – KH:		much occurring with bushfires and COVID.	
No further update. 28/04/2020 – KH: No further update. 27/03/2020 – KH:			
28/04/2020 – KH: No further update. 27/03/2020 – KH:			
No further update. 27/03/2020 – KH:		No further update.	
No further update. 27/03/2020 – KH:		28/04/2020 – KH·	
27/03/2020 – KH:			
		No futities apaate.	
		27/03/2020 – KH:	
		No further update.	
02/03/2020 – KH:		02/03/2020 – KH:	

					Mail out to the community at Delegate seeking their feedback to be arranged asap to gauge thoughts.		
227	17 April 2019	151/19	Consolidation of Reserve no. 530002 Centennial Park and Lot 6 DP 758280 Cooma Visitors Centre as one Crown Reserve for General Community Use That Council A. Request that the Crown add lot 6 DP 758280 to Reserve 530002 comprising Centennial Park and add an additional purpose of "General Community Use" to the Reserve. B. Relinquish Licence LI 453017 for the use of the Cooma Visitors Centre when Lot 6 DP 758280 is added to Reserve 530002.	Land & Property Officer	28/2/21 – TP: No further update at this point in time. 28/2/21 – TP: Application for possessory title lodged with NSW LRS. Further legal paperwork being formatted including the Statutory Declarations of two "disinterested witness" to support Council's possessory claim. 22/01/2021 – LB: A. Follow up phone calls to Crown Lands has confirmed that Crown Lands is still awaiting the native title assessment to be completed. 4/12/2020 – LB: A. Crown Lands are waiting on a native title assessment to be completed internally prior to approval and gazettal. 26/10/2020 – LB: A. A further email has been sent to Crown Lands requesting an update. B. The licence will be relinquished when Crown Lands has completed their processes. 24/09/2020 – LB:	28/02/2021	N
					A. An email has been sent to Crown Lands asking		

for an update on the progress of this matter.
26/08/2020 – LB: A. Crown Lands has assured the Land and Property Officer that the documentation recommending the amendment to both reserves has gone before the Minister. B. The licence will be relinquished when Crown Lands has completed their processes.
29/07/2020 – LB: This matter needs to be signed off by the Minister and then must be advertised in the Government Gazette as a part of the process. It is anticipated that it may take some months to finalise.
26/06/2020 – LB: Communication with NSW ALC confirmed that the claim over the Visitors Centre has been rescinded. This information will be relayed to Crown Lands with a request to expedite the matter. A. Crown Lands is presently preparing the
documentation for transfer to Council as Crown Land Manager B. The licence will be relinquished in conjunction with transfer to Council Management.
28/05/2020 – LB: Reminder was sent to Crown Lands last week. This matter will take some time to resolve at the Crown Lands level.
24/04/2020 – LB: Crown Lands has advised that due to the COVID-19

	i i i të i ii ti Ei i i					i agc	
					Pandemic this process may suffer some delays.		
					26/03/2020 – LB: Crown was sent a second reminder today. It is an involved process, and will take a while to review, given the current COVID-19 pandemic and the recent bushfires.		
					02/03/2020 – LB: Negotiations with the Crown are ongoing. It is likely that the Crown would prefer lot 6 to be placed under Council management & that the lease be rescinded. We are currently waiting on a reply.		
					20/01/2020 – LB: This matter has been escalated at Crown Lands to achieve a decision on the way forward.		
260	16 May 2019	194/19	Classification and Categorisation of Crown Land in Council's Care and Control That Council approve the proposed categorisation of Crown land as per attachment 1 to report Classification and Categorisation of Crown Land in Council's Care and Control	Property Officer	28/2/2021 - TP: Initial Draft Plans of Management received. Internal proofing review on Draft documentation for accuracy to be conducted prior to next consultation phase. 12/01/2020 – JH: The consultant has advised the draft plans of	30/06/2021	N
					management are expected for early March for Council's staff to review before being submitted to Council.		
					25/11/2020 – JH: Community consultation completed for the initial stage of the Plans of Management (PoM). The 'have your say' submissions will be collated,		

		reviewed and passed onto the consultants. This	
		feedback will used to help draft the PoM, which	
		will go out for community consultation, planned	
		for early March 2021.	
		10.00.7	
		03/11/2020 - JM:	
		Community consultation has commenced via the	
		Yoursay website from mid-October and face-to-	
		face drop in sessions in Bombala, Cooma and	
		Jindabyne for mid-November. Community	
		engagement framework continually being	
		reviewed throughout the consultation to ensure	
		we are reaching all those in the community who	
		may have an interest.	
		23/09/2020 - JH:	
		Council has received the notice from Crown on the	
		categories applied to the Reserves. These have	
		been passed on to the Contractor and the plan is	
		for the Draft PoM to go to public consultation mid-	
		October via council's website and then face to face	
		consultation to take place.	
		26/08/2020 - JH:	
		Crown have not returned the approval of the	
		application after updates were provided to Crown	
		as per their request. This has been brought up by	
		many other councils as most have not received any	
		notifications. This has been raised with Crown and	
		the Consultants preparing the Plan of	
		Management are also following up with Crown on Council's behalf.	
		Council's bendii.	
		22/07/2020 – JH:	
		Still waiting for approval of Council application	
1	<u> </u>	Jenn Watering for approval of Council application	

ATTACHMENT TIM FROGRESS ACTIONS OF TO END OF TEBROART 2021		rage 301
	from Crown. Draft Plans of Management in preparation stage.	
	preparation stage.	
	24/06/2020 - JH:	
	Updated changes completed and lodged with	
	Crown, awaiting their approval of the application.	
	28/05/2020 – JH:	
	Crown advised they would like some changes made	
	to the application for some of the categories.	
	Changes made as per request and submitted	
	Friday 29 May following review by consultant.	
	Community consultation process is being put in	
	place by Consultant and hope to have a final plan	
	for process.	
	27/04/2020 - JH:	
	This application is with DPIE Crown Lands. There is	
	a large backlog of applications and the implications	
	of COVID-19 have added more time constraints on	
	these applications. The contractors are also in	
	contact with Crown to try and get this process	
	expedited.	
	26/03/2020 – LB:	
	The consultants engaged by Council to do the Plan	
	of Management for Crown Land have checked with	
	Crown Lands about approval of the categorisation	
	for Crown Land in SMRC and have advised that the	
	Crown is still working through the many	
	submissions it has received.	
	02/03/2020 – LB:	
	Council is waiting on confirmation of approval of	
	categorisations. The Plans of Management are	
	1 221302	

					currently underway.		
					20/1/2020 – LB: Requests for classification and categorisation have been submitted for approval by CL. A copy of the submission has been sent to Council's Contractors to enable them to commence work on the Plan of Management for Crown Land to be managed as community land under the Local Government Act.		
290	20 June 2019	227/19	Application to Crown Land to be appointed as Land Manager to Various Waste Management Sites That Council requests to be appointed as Land Manager of the following Reserves: A. Dalgety Landfill Lot 2 DP 837128, Reserve 88070 for Rubbish Depot under Crown control; B. Bombala Landfill Lot 123 DP 756819, Reserve 15472 for Night Soil Depot under Crown control; C. Bombala Landfill Lot 300 DP 756819, Reserve 49491 for Night Soil Depot under Crown control; D. Berridale Transfer Station Lot 178 DP 756837, Reserve 73609 for Sanitary Purpose under Crown control; E. Berridale Landfill Lot 153 DP 756694, Reserve 47391 for Rubbish Depot under Crown control; and Request the purpose of land be changed to Urban Services for Reserves 15472 & 49491	Manager Resource and Waste	02/03/2021 – MD: E. No further update from Crown. 12/01/2021 – MT: E. No further update from Crown. 25/11/2020 – JH: E. No further update from Crown. 20/10/2020 - JH: A, B, C & D. Complete. E. No further update. 23/09/2020 - JH: A, B, C & D. Complete. E. NSW ALC are following up on this item they referred to the Local Aboriginal Land Council (LALC) with the recommendation that the CEO of the LALC refer it to the LALC Board for consideration of claim withdrawal. NSWALC will advise of the outcome when received, they have advised that the LALC are not meeting regularly during this COVID pandemic.	Ongoing	N
					26/08/2020 -JH:		

		A, B, C & D. Complete. F. NSW ALC are following up on this item they referred to the Local Aboriginal Land Council (LALC) with the recommendation that the CEO of the LALC refer it to the LALC Board for consideration of claim withdrawal. NSWALC will advise of the outcome when received, they have advised that the LALC are not meeting regularly during this COVID pandemic.	
		 24/06/2020 – JH: A, B, C & D. Complete. E. This item has been referred by NSWLALC to the Local Aboriginal Land Council (LALC) with the recommendation that the CEO of the LALC refer it to the LALC Board for consideration of claim withdrawal. NSWALC will advise of the outcome when received. 	
		28/05/2020 – JH: E: Email received from NSWALC requesting further information on this Reserve. Gazette notices were researched and supplied to NSWALC. They still require any information that Council may have on the lawful use and occupation of this land and/or need for this land for an essential public purpose, as at 8 June 2010. Following up on this request with Waste Team. Spoke again to NSWALC 27/5/2020 advice they are also now discussing with LALC with regard to their interest in the land due to it not being used for many years, as such they may wish to keep the land claim active.	
		30/03/2020 – JH:	

				No further update. 22/01/2020 – JH: E. Property officer has written to the NSW Aboriginal Land Council to see if they wish to revoke their interest as ALC 25795 is current on this reserve.		
				E. Property officer has written to the NSW Aboriginal Land Council to see if they wish to revoke their interest as ALC 25795 is current on		
				 09/01/2020 – MD: A. Confirmation has been received Council is the Land Manager of Dalgety Landfill Lot 2 DP 837128, Reserve 88070 for Rubbish Depot; B. Confirmation has been received Council is the Land Manager of Bombala Landfill Lot 123 DP 756819, Reserve 15472 for Night Soil Depot; C. Confirmation has been received Council is the Land Manager of Bombala Landfill Lot 300 DP 756819, Reserve 49491 for Night Soil Depot; D. Confirmation has been received Council is the Land Manager of Lot 178 DP 756837, Reserve 73609 for Sanitary Purpose under Crown control; E. Awaiting confirmation. 		
.8 July .019	277/19	Australian Tourist Park Management - NRMA - Caravan Park Jindabyne That Council consider the approval for the Lessee to execute the 2 x 5 terms on the Lease Agreement when the first option to renew is due in October 2019 which will take the Lease Agreement through until October 2029.	Commercial Land Officer	02/03/2021 – KH: Correspondence dated 10 February 2021 received from Blaxland, Mawson and Rose confirming the lease has been forwarded to Crown Lands with a request for provision of the necessary forms to record Council as the Crown Land Manager on the register and to update the Crown restriction currently noted on the register. 12/01/2021 – KH:	28/02/2021	N

	Correspondence received from BMR that lease has	
	been lodged for registering. Council was	
	requested to execute the lease as a crown land	
	manager and pay a further \$345.40 payable to	
	Land Registry Services to formalise this.	
	Land Registry Services to formalise this.	
	27/11/2020 – KH:	
	Awaiting confirmation from BMR on registration of	
	the lease.	
	the lease.	
	26/10/2020 – KH:	
	BMR is finalising the registration.	
	24/09/2020 – KH:	
	BMR is actioning the registration of the lease	
	25/08/2020- KH:	
	Documents with BMR for action.	
	24/07/2020 – KH:	
	CEO has signed, awaiting a cheque to be drawn to	
	go with signed lease back to BMR for action	
	26/06/2020 – KH:	
	Signed lease has been received and forwarded	
	onto the CEO Office for signing.	
	28/05/2020 – JH:	
	Solicitors have advised the signed lease agreement	
	should be returned to Council next week.	
	27/04/2020 - JH:	
	Correspondence has been received by Council's	
	Solicitor advising the Lease Agreement has had a	
	few minor amendments and is with NRMA for	
-		<u> </u>

					exaction of same.		
					26/03/2020 - JH: Council is liaising with NRMA in regard to this item. 27/02/2020 - JH: Council Solicitor and NRMA Solicitor are reviewing Agreement and making some minor amendments. 15/01/2020 - JH: Solicitor has sent through an updated Agreement with some changes that were required to be made for further review. This is now back with the Solicitor.		
315	18 July 2019	258/19	 Establishment of Access to Lot 10 DP 7505534 and lot 73 DP 750565 - Southern Tablelands 4 Wheel Drive Club That Council A. Negotiate with the owner of lot 15 to realign the road over the track through his property. B. Engage the services of a surveyor to survey the off-line section of Bundarra Road through lot 15. C. Close the section of Bundarra Road which is off line. D. Dedicate the section of Bundarra Road to be closed to the landowner in compensation. E. Take ownership of the bridge which has been constructed over the creek. F. Acquire the land within the proposed road reserve 20 wide in accordance with a survey plan. G. Apply to the Crown to have the Crown reserve road which passes through lot 20 	Chief Operating Officer	28/2/2021 TP: No further update at this point in time. 08/02/2021 – JM: A. Letter sent to owner of lot 15 enquiring if owner is willing to negotiate to realign road over track through his property. B – D; F – Subject to outcome of part A. G – Completed. E, H, I – not to be completed due to resolution 368/19.	30/06/2021	N

<u>·</u>	, (61.111.2111		TRESS ACTIONS OF TO LIVE OF TEDROART 2021		_	i ugc	
			transferred to Council as a Council public road. H. Acquire approximately 3ha of lot 20 around the Crown reserve road in order to create a more viable access to the bridge. I. Gazette the length of Bundarra Road as a Council public road from the intersection of Jerangle Road to the creek. J. Authorise the expenditure amount of \$60,000 in the 2020 Financial Year Budget with funding to be provided from Other Internal Reserves account 35116.				
347	15 August 2019	296/19	Road Closure and Creation of Road Reserve - Badja Road That Council A. Approve to formally close the Council public road that traverses lot 1 DP 124507, Lot 2 DP 1195991 and Lots 15,16 &81 of DP 752146; B. Engage the services of a Surveyor to prepare a plan of subdivision for the creation of a road reserve over Badja Road; C. Agree to exchange the former closed road through the affected properties in compensation of the area required of the privately owned properties for the road reserve to be created over Badja Road; and D. Authorise the General Manager to execute the documents to give effect to the above	Land and Property Officer	28/2/2021 TP: Review of intended timeline to be conducted due to staff resource changes. 01/03/2021 – TP: Review of intended timeline to be conducted due to staff resource changes. 22/01/2021 – LB: A&B Landowner has been contacted by phone to advise that Council is going to commence the road closing process in early 2021. Letters and advertising will commence in late January. 4/12/2020 – LB: A&B. Letters to affected landowners and notifiable authorities being prepared. The road closing will effectively commence when the 28 day advertising period has ended. C. Letters to appropriate landowners include proposal to dedicate closed road in	30/03/2021	N

		compensation for the area to be acquired.	
		23/10/2020 – LB:	
		A. Subject of resolution 296/19	
		B. Survey plan has been received	
		C. Exchange will occur at the appropriate time	
		D. Documents will be executed at the appropriate	
		time.	
		24/09/2020 – LB:	
		B. The plan has been received and letters	
		regarding road closure in accordance with	
		legislative requirements are being prepared.	
		27/07/2020 – LB:	
		A &B. Council is in receipt of a draft plan which has	
		been checked and the surveyor has been	
		requested to provide the final plan with	
		Administration Sheet. When the final plan is	
		received an application will be submitted for	
		Subdivision Certificate.	
		26/06/2020 – LB:	
		A. Surveyor has given assurance that the plan will	
		be sent to Council in the next two weeks.	
		B. This will be done in consultation with	
		landowners after plan of subdivision is	
		received.	
		28/05/2020 – LB:	
		Contractor has been asked to forward plan and it is	
		anticipated that it will be available very shortly.	
		24/04/2020 – LB:	
		Discussion with the contractor revealed that due to	

						- 0 -	
					COVID-19 there would be some delay but the plan is now expected any day. 26/03/2020 – LB: Council is waiting on survey plan before proceeding. 02/03/2020 – LB: Survey work is currently being carried out. 20/01/2020 – LB: Landmark Surveys have been engaged to carry out the survey and produce a plan.		
352	15 August 2019	301/19	Proposed Closure and Sale of Public Pathway in Kalkite That Council A. Agree to close the pathway and sell the land 50% to each adjoining landowner for \$10,000 including GST each with each party to pay their own legal fees; B. Notify the owners of lots 38 and 39 that Council approves the payment for 50% of the pathway as a "repayment schedule" to be paid in conjunction with the land rates to be fully paid prior to 30 June 2020; C. Apply to the Crown to close the public pathway; D. Engage the services of a surveyor to create a plan of subdivision with the pathway to be divided along its length (front to back); E. Engage the services of a solicitor to draw up contracts for the sale of the land; and F. Authorise the General Manager to execute the documents for the sale of the property	Land & Property Officer	 28/02/2021 – TP: Awaiting plan of subdivision from surveyor., Note: Linkage exists with Resolution 57/20. 22/01/2021 – LB: A. Surveyor has been asked to lodge the plan of the pathway to close the road and to provide the plan of subdivision for the pathway. C. Response has been received from Crown Lands. D. Plan of subdivision will be available shortly. E. When the plan of subdivision is being processed Council's solicitor will be asked to arrange for the contracts for the sale of the land. F. Council's CEO will execute the contracts at the appropriate time. 4/12/2020 – LB: A. Closure process progressing. B. Owners notified. Payment plan now subject to Council resolution 57/20. 	30/06/2021	N

C. Currently waiting on response from Crown
Lands
D. Surveyor notified that plan of subdivision will
be needed shortly.
E. Solicitor asked to commence drawing up
contracts for the sale of the land.
23/10/2020 – LB:
A &B. Advertising period has ended and one
objection was received. The objection was a
general one, which objected to any pathway
in Kalkite being closed.
C. Process has changed and new application to
Crown Lands has been submitted
D. Surveyor has been asked for an anticipated
date for the plan of subdivision
E. Contracts will be drawn up based on the
'
plan of subdivision when the plan is
available.
F. Documents will be executed at the
appropriate time.
24/09/2020 – LB:
A&B. Advertising period has ended and one
objection was received. The objection was a
general one, which objected to any pathway
in Kalkite being closed.
C. Waiting on response from Department of
Industry - Crown Lands then the plan for
road closing will be lodged and gazetted.
D. The plan of subdivision will be available in
approximately two weeks.
E. The solicitor has been requested to get the
contracts for the sale of the land ready for
contracts for the sale of the fall feddy for

ATTACHIVILINI	I TIN PRODRESS ACTIONS OF TO LIND OF TEDROART 2021		Page 331
		when the plan of subdivision is received.	
		26/08/2020 – LB: A&B. Letters to landholders and notifiable authorities have been sent. At this time all responses have been positive. Waiting on response from Crown Lands for consent to proceed and for public pathway to vest in Council following closure. G. This is no longer a requirement under the Act. H. The plan of subdivision will be available in approx 6 weeks. In the meantime, the road closure is progressing. E&F. This will take place at the appropriate time. 27/07/2020 – LB: Follow-up with Council's surveyor determined that the plan to close the pathway will be received at Council by the end of July. Letters have been prepared to notify the local community of the proposal to close the pathway. The letters will be	
		posted. 26/06/2020 – LB: A. Landowners have been notified of Council resolution. Resolution /19 reviews the payment period until 30/6/2023. B. Application cannot be made until plan of subdivision is to hand. C. Plan of subdivision to divide the pathway lengthwise cannot be done until the pathway is closed. D. Contracts will be drawn up as soon as closure of the pathway is registered and the plan of	

						i age .	
					subdivision is ready.		
					subdivision is ready. 28/05/2020 – LB: Council's Finance Dept. are unable to set up a Special Rate in the rating system and they have suggested that Sundry Debtor accounts be set up with regular quarterly payments to be fully paid prior to March 2023. This will enable the sale of the land to proceed prior to 30/06/2020. 24/04/2020 – LB: Arrangements are currently underway to set up a payment plan and a surveyor has been engaged. 26/03/2020 – LB: All parties have been notified of the Council resolution and quotes for the survey of the pathway have been sought. This resolution is now superseded by resolution 57/20. 02/03/2020 – LB: Purchasers were not happy with the timeline for completion set by the Council resolution and a further report has been submitted to the March Council meeting. 20/01/2020 – LB: Landowners were notified of Council resolution via mail but are intending to write to Council		
					requesting more time to pay.		
270	40	222/42	Figure 1 Dec		25/02/2024	24/02/2024	
379	19 Sentem	333/19	Finalisation of Draft Bush Fire Prone Lands Map 2019	Senior Strategic	26/02/2021 - AA: RFS have sent final draft map for review. Final draft	31/03/2021	N
	Septem ber		That Council	Land Use	map has been reviewed by strategy and GIS		
	2019		A. Receive and note the report of the Senior	Planner	and comments have been provided to RFS		
	2019		A. Receive and note the report of the Senior		and comments have been provided to KFS		

$\overline{}$	HACHIVILINI	I IN PROC	INESS ACTION	JUF	IO LIND O	ILDNUANI	2021
			61	1	1 Dl		

- Strategic Land Use Planner on the finalisation of the draft Bushfire Prone Land Map;
- B. Submit the draft Bush Fire Prone Land Map and associated supporting documentation to the NSW Rural Fire Service for certification and provide a letter (attachment 3) to the NSW RFS Commissioner;
- C. Consent to a public notice (attachment 4) being attached to Section 10.7 (formerly Section 149) Planning Certificates advising of the bushfire prone lands changes until such time as the draft map is certified; and
- D. Advise the community and stakeholders via its website and the local newspaper once the Bush Fire Prone Land Map has come into effect.

finalisation is anticipated in coming months.

14/01/2021 – AA:

RFS have advised Snowy Monaro BFPL map is a priority and will be certified early 2021.

26/11/2020 - AA:

Council staff met with RFS and this matter was discussed. RFS is undergoing a restructure in which mapping certification will be prioritised.

04/11/2020 - AA:

No further update.

25/09/2020 - AA:

RFS have advised that draft map is with a commissioner to be signed.

30/07/20250 - AA:

Council staff have sought update from NSW RFS on this topic, awaiting response.

22/06/2020 – AA:

Letter sent to RFS in October 2019 requesting the Commissioner of the RFS to certify the draft map. Council Staff awaiting update from RFS on this certification process.

03/06/2020 – MA:

No further update. Waiting for RFS to finalise.

30/09/2019 – AA:

- A. Noted.
- B. Letter will be forwarded the Rural Fire Service on 1 October 2019.

						i agc	
					C. Information has been circulated to all relevant planning administration officers to be distributed with all 10.7 certificates Will be actioned once the Rural Fire Service have advised that the map will be certified by the commissioner.		
388	Septem ber 2019	343/19	Proposed Compulsory Acquisition of Part Lot 7002 DP 1028529 Crown Land Travelling Stock Reserve That Council A. Approves the acquisition of the constructed section of Dalgety Road 20m wide which traverses lot 7002 DP 1028529 for the purpose of public road through the process of Land Acquisition (Just Terms Compensation) Act 1991 for the purposes of s.178 of the Roads Act 1993; B. Seek approval from the Minister for Local Government and/or the Governor in accordance with section 187 of the Local Government Act 1993 to give all necessary Proposed Acquisition Notices in accordance with the Land Acquisition (Just Terms Compensation) Act 1991; C. Upon receipt of the Minister's/Governor's approval, Council serve each PAN and take each other action necessary to carry out the acquisition; D. Upon receipt of the Minister's/Governor's approval Council give effect to the acquisition by publication of an Acquisition Notice in the NSW Government Gazette and such other	Land & Property Officer	 04/03/2021 - TP: No further update at this point in time. 22/01/2021 - LB: A. Quotation for Public Works Advisory has been approved and PWA has been asked to proceed. 4/12/2020 - LB: A-G. Quote from Public Works Advisory to complete the acquisition of the travelling stock reserve is awaiting approval. NSW Aboriginal Land Council is considering the request to excise the road from their claim. 03/11/2020 - LB: A-G. Quotation has been received from Public Works Advisory to carry out the compulsory acquisition process. Currently finalising approval. Also waiting on reply from the NSW Aboriginal Land Council. 24/09/2020 - LB: A-G. Currently waiting on a reply from the NSW Aboriginal Land Council. 26/08/2020 - LB: A-G. This acquisition has been placed on hold while 	28/02/2021	N
			publication as may be required by law; E. Pay compensation to all interest holders		further investigations through Local Land		

ATTACHMENT 1 IN I	PROGRESS ACTIONS UP TO END OF FEBRUARY 2021		Page 395
ATTACHWENT THE	entitled to compensation by virtue of the compulsory acquisition on the terms set out in the Land Acquisition (Just Terms Compensation) Act 1991; F. That Council authorise the General Manager and the Administrator to complete and execute all documentation necessary to finalise and bring into force Council's acquisition of the land and if necessary to affix the Council seal to any documents related to the acquisition; and G. That upon acquisition the acquired Property is dedicated as road following gazettal of the acquisition;	Services and Aboriginal Land Council are carried out. 29/07/2020 – LB: A. Council is waiting on the survey to be completed. B. When the survey plan is received the application to the Minister and the Governor will be made. C. PANs will be served after the Minister and Governor's consent is received D. Gazettal will take place after consent of the Minister and the Governor is received E. Valuation has been requested from the Dept. of the Valuer General for land to be acquired without consent. F. Documents will be sent to the CEO for execution when appropriate. G. Upon acquisition the acquired property will be dedicated as road. 26/06/2020 – LB: Surveyor is presently carrying out the work. 28/05/2020 – LB: Surveyor advised that he will commence the survey in the next week. 24/04/2020 – LB: Surveyor has been engaged and expects to commence the survey in the immediate future. 26/03/2020 - LB: The NSW ALC has requested a survey plan be	rage 393
		provided prior to proceeding. Quotations are	

•						6	C 330
					currently being sought for the survey.		
					02/03/2020 – LB: The NSW Aboriginal Land Council has given consent in principal and is waiting on a survey plan.		
					20/01/2020 – LB: Currently waiting on survey plan.		
408	17 October 2019	369/19	Arts and Culture Advisory Committee Meeting held 11 September 2019 That Council A. Receive and note the minutes of the Arts and Culture Advisory Committee meeting held 11 September 2019; B. Support the Committee recommendations relating to Item 5.3 – Community Arts and Culture facility in Cooma; C. Support the Committee recommendation relating to Item 5.5 – Communication / Promotion of Committee; and D. Supports the Committee recommendation relating to Item 5.6 – Bombala Arts and Innovation Hub.	Coordinator Economic Development	 04/03/2021 – GT: No action required at this time. Awaiting grant funding decisions. 29/01/2021 – AM: B. No further update D. An application for additional works has been lodged within the BLER Fund. 30/11/2020 – AM: B. No further update D. After a meeting of the committee the need for further community consultation to refine options for future use was identified as being required. A further \$700K minimum is required for building upgrade works. Opportunities for further grant funding are being investigated. 30/10/2020 – KH: A. facilitated workshop has been held by the Community Arts and Culture group during October 2020 to develop a plan forward for the facility. 28/09/2020 – AM: 	Ongoing	N
					28/09/2020 – AM:		

	No further update.	
	No further apaate.	
	02/09/2020 – AM:	
	A. No action required.	
	B. No further update.	
	C. No further update.	
	D. The Bombala Arts and Innovation Hub	
	working group has been formed and had its	
	first meeting, attended by Clr Haslingden.	
	mist meeting, attended by Cir Hasiingden.	
	02/07/2020 – MA:	
	Nothing further to update over June.	
	·	
	03/06/2020 – MA:	
	Bombala Arts and Innovation Hub committee has	
	been advertising for members and is in progress of	
	beginning. Continuing to investigate opportunities	
	and options for the Arts and Culture Facility in	
	Cooma that are compatible with the funding	
	available in grant.	
	20/04/2020 NAA	
	29/04/2020 – MA: The Arts and Culture Committee minutes	
	25/03/2020 will recommend a request for	
	extension of time for the funding programme.	
	03/03/2020 – KH:	
	B. Relevant stakeholder meetings will soon	
	recommence.	
	C. No update.	
	D. Committee positions have been advertised and	
	recruitment will commence shortly.	
	04/02/2020 ///	
	04/02/2020 – KH:	

		ı	-		1 .	1	T -
					No further updates.		
					 02/12/2019 – KH: B. A small working group continues to meet to work towards the goal of establishing a community arts and culture facility in Cooma. C. A media release will be released early January 2020. Updates to the website have been drafted and are expected to go live in the next 2 weeks. D. To be actioned after December Arts and Culture 355 meeting. 4/11/2019 – KH: A. Noted. B. The GM is to negotiate with Land and Property NSW to transmit the property at 5 Dawson St Cooma to SMRC for the nominal fee of \$1, inclusive of related fees and charges such as stamp duty. C. The communications team are to prepare a media release and additional website to be included on the website. D. Community Development Planner & Support to form working group. 		
429	17 October 2019	389/1	Proposed Acquisition of Part Lot 6 DP 218752 for the Purpose of Road That Council, consistent with the guidelines contained within with the body of report: A. Authorise the General Manager to negotiate the purchase of 0.2542ha of lot 6 DP 218752; B. That Council be responsible for any additional costs including survey, legal fees, fencing; C. Authorise the General Manager to execute all	Land & Property Officer	28/2/2021 - TP: Discharge authority received from Landowner (due to Landowner having made error in initial document) and forwarded to bank to progress necessary mortgage discharge. 22/01/2021 – LB: A-C A phone conversation with the landowner on 13/1/21 revealed that he has been	28/02/2021	N

7(117(C)1101E101 I 11011(OGRESS ACTIONS OF TO END OF FEBRUARY 2021		Page 399
	necessary documents and affix Council's Seal if required; and D. Approach the plantation owners for a contribution towards the works prior to commencing the project.	communicating with the Rural Bank who are slow to respond. The landowner has been asked to send the phone contact number to Council so that we can contact the Rural Bank and try to fast-track the process. D. A letter was sent to the plantation owners who responded to say that they declined to contribute to the project. 4/12/2020 – LB: A-C. Email from the Bega Branch Manager of the Bendigo and Adelaide Bank this morning to confirm that they are waiting on a response from Rural Bank. Bega Branch Manager will notify Council when the discharge of mortgage has been registered.	
		 D. Letter has been sent to Plantation Owners. 23/10/2020 – LB: A-C. Application for discharge of mortgage completed by landowner and sent to the bank for processing. Signed application for subdivision certificate and the Administration Sheet received from landowner. As soon as the landowner receives his Certificate of Title from the bank the plan of subdivision will be registered and contracts will be exchanged. D. Letter is being prepared for the plantation owners requesting that they contribute to the works. 	
		24/09/2020 – LB: A-C. The Title to lot 6 has a mortgage noted in the	

second schedule. The landowner has verified that the loan has been paid out. A discharge of mortgage application was forwarded to the landowner to complete and return to Council so that the mortgage can be removed from the title. Council is also waiting on the application for a subdivision certificate to be signed by the owner of the property.
D. Nearby plantation owners to be approached in writing seeking contribution to the purchase.
26/08/2020 – LB: A-C. When Land and Property receives the subdivision certificate the landowner can sign off on the plan and arrange for his bank to sign off after which the plan can be submitted to the LRS for registration. Waiting on landowner to sign the application for the subdivision certificate or send an email giving consent for the application to be lodged. The subdivision certificate has been done but can't be released until consent is received from the landowner. C. Council has paid for survey and legal fees will be paid upon receipt of invoice D. Documents will be signed by the CEO when appropriate. E. Plantation owners are not affected and therefore will not be asked for a contribution.
27/07/2020 – LB: Council is currently waiting on the subdivision certificate so that the plan can be registered prior

 THOUNESS ACTIONS OF TO END OF TEDROAMT 2021	1 480 401
	to settlement.
	26/06/2020 – LB: Council's solicitor has been asked to produce the contracts. Application for subdivision certificate has been submitted. A. Purchase price has been negotiated and agreed by both parties. C. This acquisition does not affect the plantation owners.
	28/05/2020 – LB: An email has been sent to the surveyor each week asking for the plan of subdivision so that contracts for the purchase of the land can be exchanged. The plan has not been registered so the plan will need to be attached to the contract.
	24/04/2020 – LB: Council's solicitor is organising the contract and it is anticipated that exchange will take effect within the next month. 27/03/2020 – LB:
	MOU has been returned to Council and Council's solicitor has been asked to arrange a contract. 27/02/2020- JH: MOU with property owner, waiting return of same.
	15/01/2020 - JH: Staff have spoken to land owner and are waiting for a written response.

	TI I TO CEI II VI E I VI	± 11111110	JUNESS ACTIONS OF TO LIND OF TEDROART 2021			rage	102
439	21	408/1	Closure of Part of the Road Reserve in Barrack	Land & Property	28/2/2021 - TP:	30/03/2021	N
	Novem	9	Street Cooma	Officer	No further update.		
	ber		That Council	Officer			
	2019		A. Approve the proposal to close part of the		22/01/2021 – LB:		
			Barrack Street Cooma road reserve in		A&B Plan has been lodged with LRS for registration		
			accordance with the plan in this report;		when it will be classified as operational land.		
			B. Classify this new lot as operational land;		when it will be diassified as operational land.		
			C. Approve the consolidation of lot 4 DP 32321		4/12/2020 – LB:		
			with the new lot to be created by the road		A. An email was received from Crown Lands		
			,				
			closure; and		seeking clarification of the section of Barrack		
			D. Classify the new consolidated lot as		Street for investigation; clarified via email.		
			operational land.		22/40/2020 LB.		
					23/10/2020 – LB:		
					A. Awaiting information from Crown Lands. Email		
					sent to Crown Lands requesting that this		
					matter be expedited.		
					B-D. These actions will be carried out at the		
					appropriate time.		
					24/09/2020 – LB:		
					A-B. Crown Lands responded to Council's email to		
					say that the Old Title search is currently		
					underway and we should receive the results		
					shortly.		
					C. A plan of consolidation will be prepared as		
					soon as the road closing is registered.		
					D. The consolidated lot will be classified as		
					operational land upon registration of the plan.		
					26/08/2020 – LB:		
					Crown Lands have been reminded via email that		
					we are still waiting on the results of the search to		
					fulfil the requirements of the requisition. This		
					action cannot proceed until plan is Registered.		

		29/07/2020 – LB:	
		Application has been sent to Crown Lands for an	
		Old Title Search in accordance with the requisition	
		from the LRS.	
		26/06/2020 – LB:	
		When the plan of subdivision was lodged, Council	
		received requisitions on Title. A request has been	
		sent to Crown Lands for evidence of gazettal of	
		Barrack Street as a Council public road. Despite	
		extensive research by Council staff and Council's	
		solicitor definitive evidence was not found.	
		B. Plan of consolidation will be sought after the	
		road closing is complete through lodgement of	
		the plan.	
		the plant	
		28/05/2020 – LB:	
		Council's solicitor is currently carrying out	
		investigations to provide information to the LRS.	
		24/04/2020 – LB:	
		The plan was lodged at the LRS and the surveyor is	
		presently addressing a requisition from the LRS	
		regarding the date of gazettal of Barrack Street	
		Cooma as a Council public road.	
		and the second passion road.	
		26/03/2020 – LB:	
		The subdivision certificate has been released and	
		the documents executed by Council. The	
		documents have been delivered to the	
		surveyor for lodgement at the LRS.	
		sarreyor for loagement at the Ello.	
		02/03/2020 – LB:	
		The plan will be lodged as soon as the subdivision	
1		1 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	

					certificate is to hand.		
					20/01/2020 – LB:		
					Registration of the plan should be gazetted soon.		
449	21 Novem ber	418/1 9	Minutes of the Water and Sewer Committee held on 29 October 2019 and adoption of recommendations	Engineer Capital Projects	02/03/2021 – JD: No further update.	30/06/2021	N
	2019		That the recommendations of the meeting of the Water and Sewer Committee held on 29		15/01/2021 – JD: No further update.		
			October 2019 be adopted.		25/11/2020 – JD: No further update.		
					23/10/2020 – JD: No further update.		
					24/09/2020 – JD: Proposed charges presented to Councillors. There were concerns that Bombala and Delegate would		
					get an increase in charges while all other areas were decreasing. Considering options to include a		
					discount for the first year of 30% for Bombala and Delegate so all areas would see a decrease.		
					03/09/2020 – JD: Proposed charges presented to Councillors. There were concerns that Bombala and Delegate would get an increase in charges while all other areas were decreasing. I have proposed to DR that we		
					offer Bombala and Delegate a discount for the first year of 30% so then all areas would see a decrease. Awaiting feedback from DR on this		

7111716111111	IN THE ROCKESS ACTIONS OF TO END OF TEDROAL	2021	1 agc 1 03
		proposal.	
		24/06/2020 – JD:	
		Proposed charges presented at ELT meeting on 3	
		June 2020. DSP values accepted by ELT and will be	
		presented at the next council meeting on 2 July	
		2020 for acceptance by the Councillors.	
		28/05/2020 – JD:	
		Proposed charges agreed on with Chief Strategy	
		Officer. A report is being prepared to ELT	
		recommending these charges and the way	
		forward.	
		30/04/2020 – DR:	
		Matter deferred due to impacts of COVID-19.	
		24/03/2020 – JD:	
		Awaiting further Advice on charges from Acting	
		Director Corporate and Community Services	
		following meetings and discussions. A meeting will	
		then be scheduled with Councillors.	
		02/03/2020 – JD:	
		A. Discussions were held with DPIE Water and	
		they indicated that all towns/villages must	
		have charges.	
		B. DPIE Water indicated we can look at only	
		future assets when determining the charges	
		which could bring the charge amount down.	
		They also indicated we can set the charges	
		ourselves for the smaller villages and present	
		these to Council for approval.	
		C. Charges have been proposed and a meeting	
		will be set up with the councillors to discuss	

					these proposed charges.		
					 24/01/2020 – GA: A. S64 Workshop was held with ELT and the Consultant on 16 January 2020. As the charges were very high for the villages, advice is being sought from DPIE Water if the villages can be exempt from charges and any other changes that will meet the guidelines. B. Awaiting advice from DPIE Water prior to Councillor workshop and date for workshop to be determined after receipt of advice. 27/11/2019 – GA: Noted and the following actions will be taken: A. The draft minutes will be adopted at the next water and sewer committee meeting. B. Adopted Terms of Reference will be sent to document control for finalising. C. Amendments to sewer pricing and billing was reported to Council on 21 Nov 2019. S64 DSP Councillor workshop has been proposed to be held on 19 Dec 2019. 		
553	Novem ber 2019	422/1 9	Managing Heavy Vehicles in Bombala Town Centre - Community Consultation That the matter be deferred for further consultation with the public including correspondence from the Bombala Chamber of Commerce.	Manager Corporate Projects	03/03/2021 - GMc, No further action at this stage. 25/01/2021 – GH: An informal meeting was held between Bombala based councillors and relevant staff. The outcome of the meeting is to proceed with further community consultation. 27/11/2020 – GH: A meeting has been arranged with Bombala based	Ongoing	N

			1 486 107
		councillors to discuss options for further	
		community consultation. Meeting proposed to be	
		held on 4 December 2020 and is open to any other	
		interested councillor to attend.	
		05/11/2020 – JM:	
		No further update.	
		25/09/2020 – GH:	
		No further update.	
		03/09/2020 – GH:	
		No further update.	
		01/07/2020 – AS:	
		No further update. Consultation occurred from	
		September 2019 to October 2019.	
		01/06/2020 – GH:	
		Communication distribution proposed re Bombala	
		Town Centre Community Consultation:	
		 Noticeboards – IGA and Newsagency 	
		Bombala Times and Monaro Post	
		Facebook – Bombala Noticeboard	
		Facebook – SMRC page	
		Facebook – SMRC Business Forum Group	
		Radio – capital network and 2MNO	
		Notice at SMRC office	
		Info sent to SMRC customer service for any	
		enquiries	
		SMRC website	
		Sivine website	
		27/04/2020 – LN:	
		Working with Chief Communications Officer to	
		establish a strategy for community consultation	
<u> </u>	1	201 2 22 21 48880	L

						i agc	
					during the COVID-19 restrictions.		
					24/03/2020 – LN:		
					No further update.		
					28/02/2020 – LN:		
					Ongoing.		
					03/02/2020 – LN:		
					Ongoing.		
573	Novem ber 2019	443/1	 Werralong Road - Proposed Acquisition With and Without Consent That Council A. Approves the acquisition without consent of proposed lots 4, 5, 7, 8 and 10 in the plan of acquisition for the purpose of public road under the provisions of the Land Acquisition (Just Terms Compensation) Act 1991 in accordance with Division 1 Section 177 of the Roads Act 1993 and the making of the necessary application to the Minister and/or Governor. B. Approves the acquisition of proposed lots 1, 2, 3, 6 and 9 with consent for the purpose of public road under the provisions of the Land Acquisition (just Terms Compensation) Act 1991 in accordance with Division 1 Section 177 of the Roads Act 1993 and the making of the necessary application to the Minister and/or Governor. C. To authorise the General Manager to execute 	Land & Property Officer	 28/2/2021 - TP: Amended proposed acquisition notice tabled to the registered proprietor (external party) to ensure Lot 5 & Lot 7 DP 1245630 (formerly Crown Reserve Roads) are encompassed, being as they are actually now part of Lot 1 DP 1172849 (Downs). 22/01/2021 – LB: A. The OLG has confirmed that the application has been approved and is awaiting execution by the Minister. B. The land which was to be gifted to Council which is subject of the acquisition with consent cannot be gazetted as road until Council receives consent from the OLG to the acquisition without consent. The land to be gifted to Council was gifted on the condition that Council is successful in acquiring the land without consent. 	28/05/2021	N
			all documents relevant to the acquisitions both without consent and with consent on		4/12/2020 – LB: A&B. The paperwork returned from Office of Local Government appears to have overlooked		

 _ _		
behalf of Council.	sections of closed Crown reserve road,	
D. Agrees to bear all costs for the acquisition of	which have been sold prior to the adjoining	
the proposed lots.	landowner. Council is clarifying whether this	
	was an oversight to ensure there are no	
	future delays in the process of acquisition.	
	23/10/2020 – LB:	
	A. An email was received from one of the	
	landowners on Werralong Road attaching an	
	email from John Barilaro's office dated 23	
	October. The email from John Barilaro referred	
	to a reply from the Minister for Local	
	· ·	
	Government responding to correspondence	
	from the landowner. The email inferred that	
	the OLG has made a recommendation to the	
	Minister to be considered in the near future.	
	24/09/2020 – LB:	
	No further update.	
	26/08/2020 – LB:	
	A&B. OLG has not released consent for acquisition.	
	Currently Council is unable to proceed until	
	consent for acquisition without consent is	
	received from OLG	
	C&D. Documents will be executed at the	
	appropriate time. Costs are paid on invoice.	
	appropriate time. Costs are paid on invoice.	
	27/07/2020 – LB:	
	A. Application was sent to OLG for consent to the	
	acquisition. Email reply from OLG received	
	27/7/2020 consenting to the acquisition with	
	consent.	
	B. Application for acquisition of lots 4, 8 and 10	
	without consent is currently being assessed	
	without consent is currently being assessed	

	separately.	
	C. The necessary documents will be sent to the	
	CEO when necessary for execution.	
	D. All costs are being paid by Council.	
	21 7 III cools and some spane sty countries	
	26/06/2020 – LB:	
	Council received a letter from the OLG to say that	
	the process for requesting a shorter timeframe	
	would result in the process taking longer due to	
	their process. Therefore Council has withdrawn its	
	application to reduce the notification time.	
	The legislated timeframe for notification is 90 days	
	and Council should not anticipate a decision from	
	the OLG for at least 3 months. Recent experience	
	has demonstrated that the OLG is not providing	
	decisions on applications for 6 months or more.	
	28/05/2020 – LB:	
	There has been no response from the OLG with	
	respect to the application to reduce the	
	notification time. The application is with the OLG.	
	24/04/2020 – LB:	
	The application for acquisition of Werralong Road	
	has been lodged with the OLG. At the same	
	time an application to reduce the notification	
	time to 30 days has been lodged with the OLG.	
	26/03/2020 – LB:	
	The OLG returned the application. A new	
	application is currently being prepared by	
	Council's solicitors for submission to the OLG.	
	02/03/2020 – LB:	
	When consent is received from the OLG Werralong	
		I

					Road will be gazetted to Council.		
					28/01/2020 – LB: Council's solicitor is presently preparing Section 30 Agreements for execution by landowners who are gifting their land to Council. The solicitors are also preparing the application to the OLG for consent to acquire a portion of the land for road through the process of acquisition without consent. 02/12/2019 – LB: Resolution of Council has been sent to Council's solicitor to lodge with OLG for consent of the Minister and the Governor.		
607	Decem ber 2019	490/1	Chief Executive Officer's Annual Review That Council: A. Approve the variation of the Chief Executive Officer's contract by: a) Extending the term from three years to five years; b) Increasing the total remuneration package from \$300,000 pa to \$320,000; c) Permitting the CEO to participate in Council's leaseback vehicle arrangements in a manner consistent with other senior staff. B. Authorise the Mayor to develop an appropriate Deed of Variation to give effect to the above;	Executive Assistant to Chief Executive Officer, Mayor and Councillors	03/03/2021 – JT: Following a Council Resolution in the December Council Meeting, a further update will be provided at the March Council Meeting. 27/01/2021 – JB: Performance review was completed on 18/12/2020. 26/11/2020 – JT: Preparations are underway for a review in December 2020. 23/10/2020 – JT: No further update. 24/09/2020 – JT: No further update.	Ongoing	N
			C. Authorise the Performance Review Panel to		28/08/2020 – JT:		

ATTACHMENT TIN FROUNCE	33 ACTIONS OF TO LIND OF TEDROART 2021		Page 412
	determine a new performance agreement	A. Complete.	
	with the Chief Executive Officer's.	B. Complete.	
		C. Drafted performance agreement still in	
		progress.	
		03/08/2020 – JT:	
		C. Updated performance agreement is being	
		drafted by the panel.	
		24/06/2020 – SC:	
		A. Complete.	
		B. Complete.	
		C. Panel scheduled to meet 7 July 2020	
		5. Tumor some some some som y = 5=5	
		29/05/2020 – SC:	
		A. Complete.	
		B. Complete.	
		C. Not yet finalised.	
		·	
		29/4/2020 – SC:	
		A. Complete.	
		B. Deed under review.	
		C. Not yet finalised.	
		30/03/2020 – SC:	
		No further update.	
		No fulfiller apadite.	
		04/03/2020 – SC:	
		A. In progress	
		B. Deed under review.	
		C. Completed.	
		D. Not yet Finalised	
		,	
		04/02/2020 – SC:	
		A. In progress.	

			TO END OF TEDROAM 2021	1		ı uğc	
					B. Not yet finalised.		
615	20	12/20	Request to Acquire and Repair/Replace Bairds	Manager	01/03/2021 – GS:	28/02/2020	N
	Februar y 2020		Crossing Bridge over Snowy River That Council:	Infrastructure	No further Update.		
	, ====		A. Receive and note the report on the request to acquire, repair/replace Bairds Crossing Bridge		18/01/2021 – GS: As advised to residents and Council in December		
			over the Snowy River;		2020; without any information to progress part C		
			B. Reject the proposal for Bairds Crossing Bridge		of Council Resolution 12/20; Part B remains extant		
			to become a Council Asset and be subject to Council's asset maintenance/replacement program; and		i.e. Council reject the proposal for Bairds Crossing Bridge to become a Council Asset.		
			C. After the Proponent receives the advice from		27/11/2020 – GS:		
			the minister with that advice, he consults with		Residents have been advised that this matter		
			the council staff with a view of preparing		cannot progress until the proponent has met with		
			a report to the council.		the relevant minister and have provided the advice received to Council.		
					The Manager, Monaro District NSW Rural Fire		
					Service, has advised that the RFS will not be		
					writing to Council to recommend the crossing be reinstated.		
					23/10/2020 – GS:		
					The Minutes of the LEMC meeting held on 23		
					September 2020 contained actions relating to		
					Bairds Crossing Bridge. These were:LEMC to approach Council to explore options		
					for Bairds Crossing and repairs.		
					Assess choke points and fire load – Bairds		
					Crossing road.		
					Contact Manager Infrastructure re: over		
					hanging trees and road edges – Bairds Crossing		

		1	
		road.	
		A copy of the meeting minutes were provided to	
		the Manager Infrastructure on 13 October. At	
		the time of this update, no further information	
		has been received from the LEMC.	
		nas seem received from the LEMen	
		24/09/2020 – GS:	
		LEMC meeting was held after this update was	
		provided. Therefore any recommendations from	
		1 .	
		the LEMC that might influence Council deliberation	
		on this issue are not yet known.	
		26/08/2020 – GS:	
		No change from previous update other than	
		conversations with Mr Makhoul and other	
		residents of Bairds Crossing Road and Punt Hill	
		Road have been informed of the intention to	
		have this matter discussed at the LEMC in	
		September 2020.	
		24/07/2020 – GS:	
		C. As per previous update, the issue of Bairds	
		Crossing Bridge is to be discussed at the next	
		LEMC meeting in September 2020.	
		LEWIS MEETING IN SEPTEMBER 2020.	
		26/06/2020 – GS	
		There is no action for A and B.	
		A. The latest update from Mr Makhoul dated 15	
		June was as follows:	
		"We have received a recommendation letter	
		from our local fire brigade for the need of an	
		access bridge at Bairds Crossing, this has been	
		sent to the RFS and meet with open arms.	
		Please see attached for your perusal, the	
		bridge will be a topic at the next Local	
		Shage will be a topic at the next Local	

ATTACHMENT TIM FROGRESS ACTIONS OF TO END OF TEBROART 2021	rage 413
	Emergency Management Committee meeting for recommendation to be replaced with an adequate structure" Councils response to that update was as follows:
	Thank you for your email and update on discussions relating to Bairds Crossing Bridge. I think a discussion at the Local Emergency Management Committee is excellent progress. Without being a pain, could I please ask for an update on the part of Council's resolution that
	stated: C. After the Proponent receives the advice from the minister with that advice, he consults with the council staff with a view of preparing a report to the council Has anything from the Ministers Office been received? This would allow a further report to be prepared for Council consideration.
	29/05/2020 – GS: The latest update was an email from Mr Makhoul to John Barilaro MP on 30 April 2020 that stated:
	 In reply to your below email, we would like to advise that We are expecting documentation in support of our request for retention and upgrade of the Bairds Crossing Bridge from local Fire Brigade at Numbla Vale and in turn the RFS NSW.
	 We are expecting that funding can come from the recently advised increase in Safety/Fire expenditure budget Our understanding is that ownership of the land upon which the bridge stands is passed

anto Council After ownership of the land is finalised, the State funding is allocated to Council, for the bridge works. As soon as these documents are to hand we will forward them to you. Note: * No documentation has yet been received from any agency supporting the proposal for a retention and upgrade of Bairds Crossing Bridge. 29/04/2020 – GS: On 6 April 2020 A letter was drafted for CEO approal in response to questions raised by John Barilaro MP on behalf of Mr Joseph Makhoul and in relation to Council's decision on Bairds Crossing Bridge. On 23 April 2020, Council staff wrote to Mr Makhoul and other residents seeking any information "the proponent" may have received from the relevant minister in relation to safety concerns should Bairds Crossing Bridge not be repaired or replaced. This correspondence relevanted the decision of Council from the February 2020 meeting, suggesting this information would assist in preparing a further report on Bairds Crossing Bridge for Council consideration, Unfortunately no reply has been forthcoming.	711171ETTIVIETT	THE INCOMESS ACTIONS OF TO END OF TEDROANT 2021		1 agc +10
bridge works. As soon as these documents are to hand we will forward them to you. Note: - No documentation has yet been received from any agency supporting the proposal for a retention and upgrade of Bairds Crossing Bridge. 29/04/2020 – GS: On 6 April 2020 A letter was drafted for CEO approval in response to questions raised by John Barilaro MP on behalf of Mr Joseph Makhoul and in relation to Council's decision on Bairds Crossing Bridge. On 23 April 2020, Council staff wrote to Mr Makhoul and other residents seeking any information "the proponent" may have received from the relevant minister in relation to safety concerns should Bairds Crossing Bridge not be repaired or replaced. This correspondence reiterated the decision of Council from the February 2020 meeting, suggesting this information would assist in preparing a further report on Bairds Crossing Bridge for Council consideration. Unfortunately no reply has been forthcoming. 27/03/2020 – GS: There has been no confirmation of any advice from the Minister to the proponent and therefore this			After ownership of the land is finalised, the	
As soon as these documents are to hand we will forward them to you. Note: No documentation has yet been received from any agency supporting the proposal for a retention and upgrade of Bairds Crossing Bridge. 29/04/2020 – GS: On 6 April 2020 A letter was drafted for CEO approval in response to questions raised by John Barilaro MP on behalf of Mr Joseph Makhoul and in relation to Council's decision on Bairds Crossing Bridge. On 23 April 2020, Council staff wrote to Mr Makhoul and other residents seeking any information "the proponent" may have received from the relevant minister in relation to safety concerns should Bairds Crossing Bridge not be repaired or replaced. This correspondence reiterated the decision of Council from the February 2020 meeting, suggesting this information would assist in preparing a further report on Bairds Crossing Bridge not located to the proponent of the proponent of the proposition. Unfortunately no reply has been forthcoming. 27/03/2020 – GS: There has been no confirmation of any advice from the Minister to the proponent and therefore this				
Note: - No documentation has yet been received from any agency supporting the proposal for a retention and upgrade of Bairds Crossing Bridge. 29/04/2020 – GS: On 6 April 2020 A letter was drafted for CEO approval in response to questions raised by John Barilaro MP on behalf of Mr Joseph Makhoul and in relation to Council's decision on Bairds Crossing Bridge. On 23 April 2020, Council staff wrote to Mr Makhoul and other residents seeking any information "the proponent" may have received from the relevant minister in relation to safety concerns should Bairds Crossing Bridge not be repaired or replaced. This correspondence reiterated the decision of Council from the February 2020 meeting, suggesting this information would assist in prepaning a further report on Bairds Crossing Bridge for Council consideration. Unfortunately no reply has been forthcoming. 27/03/2020 – GS: There has been no confirmation of any advice from the Minister to the proponent and therefore this			_	
from any agency supporting the proposal for a retention and upgrade of Bairds Crossing Bridge. 29/04/2020 – GS: On 6 April 2020 A letter was drafted for CEO approval in response to questions raised by John Barilaro MP on behalf of Mr Joseph Makhoul and in relation to Council's decision on Bairds Crossing Bridge. On 23 April 2020, Council staff wrote to Mr Makhoul and other residents seeking any information "the proponent" may have received from the relevant minister in relation to safety concerns should Bairds Crossing Bridge not be repaired or replaced. This correspondence reiterated the decision of Council from the February 2020 meeting, suggesting this information would assist in preparing a further report on Bairds Crossing Bridge for Council consideration. Unfortunately no reply has been forthcoming. 27/03/2020 – GS: There has been no confirmation of any advice from the Minister to the proponent and therefore this			· · · · · · · · · · · · · · · · · · ·	
for a retention and upgrade of Bairds Crossing Bridge. 29/04/2020 – GS: On 6 April 2020 A letter was drafted for CEO approval in response to questions raised by John Barilaro MP on behalf of Mr Joseph Makhoul and in relation to Council's decision on Bairds Crossing Bridge. On 23 April 2020, Council staff wrote to Mr Makhoul and other residents seeking any information "the proponent" may have received from the relevant minister in relation to safety concerns should Bairds Crossing Bridge not be repaired or replaced. This correspondence reiterated the decision of Council from the February 2020 meeting, suggesting this information would assist in preparing a further report on Bairds Crossing Bridge for Council consideration. Unfortunately no reply has been forthcoming. 27/03/2020 – GS: There has been no confirmation of any advice from the Minister to the proponent and therefore this				
Crossing Bridge. 29/04/2020 – GS: On 6 April 2020 A letter was drafted for CEO approval in response to questions raised by John Barilaro MP on behalf of Mr Joseph Makhoul and in relation to Council's decision on Bairds Crossing Bridge. On 23 April 2020, Council staff wrote to Mr Makhoul and other residents seeking any information "the proponent" may have received from the relevant minister in relation to safety concerns should Bairds Crossing Bridge not be repaired or replaced. This correspondence reiterated the decision of Council from the February 2020 meeting, suggesting this information would assist in preparing a further report on Bairds Crossing Bridge for Council consideration. Unfortunately no reply has been forthcoming. 27/03/2020 – GS: There has been no confirmation of any advice from the Minister to the proponent and therefore this				
29/04/2020 – GS: On 6 April 2020 A letter was drafted for CEO approval in response to questions raised by John Barilaro MP on behalf of Mr Joseph Makhoul and in relation to Council's decision on Bairds Crossing Bridge. On 23 April 2020, Council staff wrote to Mr Makhoul and other residents seeking any information "the proponent" may have received from the relevant minister in relation to safety concerns should Bairds Crossing Bridge not be repaired or replaced. This correspondence reiterated the decision of Council from the February 2020 meeting, suggesting this information would assist in preparing a further report on Bairds Crossing Bridge for Council consideration. Unfortunately no reply has been forthcoming. 27/03/2020 – GS: There has been no confirmation of any advice from the Minister to the proponent and therefore this			, , , , , , , , , , , , , , , , , , , ,	
On 6 April 2020 A letter was drafted for CEO approval in response to questions raised by John Barilaro MP on behalf of Mr Joseph Makhoul and in relation to Council's decision on Bairds Crossing Bridge. On 23 April 2020, Council staff wrote to Mr Makhoul and other residents seeking any information "the proponent" may have received from the relevant minister in relation to safety concerns should Bairds Crossing Bridge not be repaired or replaced. This correspondence reiterated the decision of Council from the February 2020 meeting, suggesting this information would assist in preparing a further report on Bairds Crossing Bridge for Council consideration. Unfortunately no reply has been forthcoming. 27/03/2020 – GS: There has been no confirmation of any advice from the Minister to the proponent and therefore this			Crossing Bridge.	
On 6 April 2020 A letter was drafted for CEO approval in response to questions raised by John Barilaro MP on behalf of Mr Joseph Makhoul and in relation to Council's decision on Bairds Crossing Bridge. On 23 April 2020, Council staff wrote to Mr Makhoul and other residents seeking any information "the proponent" may have received from the relevant minister in relation to safety concerns should Bairds Crossing Bridge not be repaired or replaced. This correspondence reiterated the decision of Council from the February 2020 meeting, suggesting this information would assist in preparing a further report on Bairds Crossing Bridge for Council consideration. Unfortunately no reply has been forthcoming. 27/03/2020 – GS: There has been no confirmation of any advice from the Minister to the proponent and therefore this			29/04/2020 – GS:	
Barilaro MP on behalf of Mr Joseph Makhoul and in relation to Council's decision on Bairds Crossing Bridge. On 23 April 2020, Council staff wrote to Mr Makhoul and other residents seeking any information "the proponent" may have received from the relevant minister in relation to safety concerns should Bairds Crossing Bridge not be repaired or replaced. This correspondence reiterated the decision of Council from the February 2020 meeting, suggesting this information would assist in preparing a further report on Bairds Crossing Bridge for Council consideration. Unfortunately no reply has been forthcoming. 27/03/2020 – GS: There has been no confirmation of any advice from the Minister to the proponent and therefore this			On 6 April 2020 A letter was drafted for CEO	
in relation to Council's decision on Bairds Crossing Bridge. On 23 April 2020, Council staff wrote to Mr Makhoul and other residents seeking any information "the proponent" may have received from the relevant minister in relation to safety concerns should Bairds Crossing Bridge not be repaired or replaced. This correspondence reiterated the decision of Council from the February 2020 meeting, suggesting this information would assist in preparing a further report on Bairds Crossing Bridge for Council consideration. Unfortunately no reply has been forthcoming. 27/03/2020 – GS: There has been no confirmation of any advice from the Minister to the proponent and therefore this			approval in response to questions raised by John	
Bridge. On 23 April 2020, Council staff wrote to Mr Makhoul and other residents seeking any information "the proponent" may have received from the relevant minister in relation to safety concerns should Bairds Crossing Bridge not be repaired or replaced. This correspondence reiterated the decision of Council from the February 2020 meeting, suggesting this information would assist in preparing a further report on Bairds Crossing Bridge for Council consideration. Unfortunately no reply has been forthcoming. 27/03/2020 – GS: There has been no confirmation of any advice from the Minister to the proponent and therefore this			· ·	
On 23 April 2020, Council staff wrote to Mr Makhoul and other residents seeking any information "the proponent" may have received from the relevant minister in relation to safety concerns should Bairds Crossing Bridge not be repaired or replaced. This correspondence reiterated the decision of Council from the February 2020 meeting, suggesting this information would assist in preparing a further report on Bairds Crossing Bridge for Council consideration. Unfortunately no reply has been forthcoming. 27/03/2020 – GS: There has been no confirmation of any advice from the Minister to the proponent and therefore this				
Makhoul and other residents seeking any information "the proponent" may have received from the relevant minister in relation to safety concerns should Bairds Crossing Bridge not be repaired or replaced. This correspondence reiterated the decision of Council from the February 2020 meeting, suggesting this information would assist in preparing a further report on Bairds Crossing Bridge for Council consideration. Unfortunately no reply has been forthcoming. 27/03/2020 – GS: There has been no confirmation of any advice from the Minister to the proponent and therefore this				
information "the proponent" may have received from the relevant minister in relation to safety concerns should Bairds Crossing Bridge not be repaired or replaced. This correspondence reiterated the decision of Council from the February 2020 meeting, suggesting this information would assist in preparing a further report on Bairds Crossing Bridge for Council consideration. Unfortunately no reply has been forthcoming. 27/03/2020 – GS: There has been no confirmation of any advice from the Minister to the proponent and therefore this				
from the relevant minister in relation to safety concerns should Bairds Crossing Bridge not be repaired or replaced. This correspondence reiterated the decision of Council from the February 2020 meeting, suggesting this information would assist in preparing a further report on Bairds Crossing Bridge for Council consideration. Unfortunately no reply has been forthcoming. 27/03/2020 – GS: There has been no confirmation of any advice from the Minister to the proponent and therefore this			• •	
concerns should Bairds Crossing Bridge not be repaired or replaced. This correspondence reiterated the decision of Council from the February 2020 meeting, suggesting this information would assist in preparing a further report on Bairds Crossing Bridge for Council consideration. Unfortunately no reply has been forthcoming. 27/03/2020 – GS: There has been no confirmation of any advice from the Minister to the proponent and therefore this			· · · · · · · · · · · · · · · · · · ·	
repaired or replaced. This correspondence reiterated the decision of Council from the February 2020 meeting, suggesting this information would assist in preparing a further report on Bairds Crossing Bridge for Council consideration. Unfortunately no reply has been forthcoming. 27/03/2020 – GS: There has been no confirmation of any advice from the Minister to the proponent and therefore this			· · · · · · · · · · · · · · · · · · ·	
reiterated the decision of Council from the February 2020 meeting, suggesting this information would assist in preparing a further report on Bairds Crossing Bridge for Council consideration. Unfortunately no reply has been forthcoming. 27/03/2020 – GS: There has been no confirmation of any advice from the Minister to the proponent and therefore this				
information would assist in preparing a further report on Bairds Crossing Bridge for Council consideration. Unfortunately no reply has been forthcoming. 27/03/2020 – GS: There has been no confirmation of any advice from the Minister to the proponent and therefore this			· · · · · · · · · · · · · · · · · · ·	
information would assist in preparing a further report on Bairds Crossing Bridge for Council consideration. Unfortunately no reply has been forthcoming. 27/03/2020 – GS: There has been no confirmation of any advice from the Minister to the proponent and therefore this			February 2020 meeting, suggesting this	
consideration. Unfortunately no reply has been forthcoming. 27/03/2020 – GS: There has been no confirmation of any advice from the Minister to the proponent and therefore this				
forthcoming. 27/03/2020 – GS: There has been no confirmation of any advice from the Minister to the proponent and therefore this			report on Bairds Crossing Bridge for Council	
27/03/2020 – GS: There has been no confirmation of any advice from the Minister to the proponent and therefore this			consideration. Unfortunately no reply has been	
There has been no confirmation of any advice from the Minister to the proponent and therefore this			forthcoming.	
There has been no confirmation of any advice from the Minister to the proponent and therefore this			27/03/2020 – GS·	
the Minister to the proponent and therefore this				
			·	
			· · ·	

					 28/02/2020 – GS Residents near Bairds Crossing Bridge were informed of Councils decision and amendment to the report recommendations; especially the inclusion of recommendation. A. Staff now await the advice from the minister, through the proponent in order to provide a further report for Council consideration. 		
628	Pebruar y 2020	25/20	Bombala Library Sign That Council put up a sign at the street frontage entrance to the Bombala Library, indicating the opening hours for the Library and CTC before the end of May 2020.	Commercial Land Officer	02/03/2021 – KH: Item Complete. 12/01/2021 – KH: Stockl have advised the sign is to be installed in February 2021. 27/11/2020 – KH: Sign has been ordered. 26/10/2020 – KH: Supplier has been contacted to get a second proof with the correct font. Proof will be circulated to appropriate stakeholders once received. 25/09/2020 – KH: Proof being reviewed to confirm correct font. 25/08/2020 – KH: Proof has been received from a supplier. Reviewing before finalising. 24/07/2020 – KH: Quotes have been received this week. They will be assessed and forwarded onto the appropriate	28/02/2020	Y

					stakeholders for comment.		
					26/06/2020 – KH:		
					Providers have been contacted still trying to put		
					together quotes.		
					01/06/2020 – KH:		
					We are still waiting on quotes from sign providers.		
					28/04/2020 – KH:		
					Suggestions from Bombala based Councillors –		
					Manager Community Services to provide		
					feedback.		
					27/03/2020 – KH:		
					Still waiting on Bombala based Councillors for		
					design and placement.		
					design and placement.		
					02/03/2020 – GH:		
					Acting Land and Property Manager consulting with		
					Bombala based Councillors and library staff for		
					sign design and placement location.		
636	19 March	COV4/	No Stopping Zones along the Lake Jindabyne	Chief Operating	29/01/2021 – JM:	30/03/2021	N
	2020	20	foreshore - review of the 2019 winter traffic /	Officer	No further update.		
			camping management campaign.	Officer			
			That Council:		30/11/2020 – JM:		
			A. Note the successful outcomes of the 2019		D&F.Briefing for Council held in November 2020.		
			"No Stopping Zone" campaign;		Preparations underway for community		
			B. Note that the demand for budget camping /		engagement.		
			parking, both in summer and winter, is		22/40/2020 AAD		
			increasing as tourist and visitor numbers		23/10/2020 – MR:		
			coming to Jindabyne and the Snowy Monaro		F. Collating evidence and preparing a preliminary		
			Region continue to grow;		briefing for Council's November 2020 briefing.		
			C. Allocates an annual budget to maintain this				

٥.		.01101171011	311 311221 31 37 112					
A	ATTACHMENT 1 IN PROGRESS ACTIONS UP TO END OF FEBRUARY 2021							
		D.	campaign during the 2020 winter ski season and subsequent seasons; Notes a feasibility study will be undertaken during the 2020 winter ski season to investigate the strengths, weakness, opportunities and threats associated with the introduction of a paid parking permit for the Claypits carpark;					

- E. Approves the installation of "No Stopping Zone" signs in the following designated areas restricting parking from 6pm until midnight and from midnight until 7am between 01 June and 31 October annually:
 - i. Wollondibby Inlet (6 sites)
 - ii. Claypits (8 sites)
 - iii. Town Centre (2 sites)
 - iv. Townsend Street / Cobbon Crescent (5 sites)
 - v. Other areas identified throughout the course of the campaign; and
- F. Embark on a campaign for a permanent solution to control and regulate camping around Lake Jindabyne.

28/09/2020 - JG:

F. Evidence is being gathered looking at long term solutions.

28/08/2020 - MR:

- A. No further action required on this one. It is for Council to note.
- B. No further action required on this one. It is for Council to note the additional operational costs of enforcement.
- C. Budget was allocated for the program. No further action required.
- D. Evidence is presently being gather to prepare a feasibility study.
- E. No Stopping Signage zone signage installed. No further action required. Evidence is being gathered looking at long term solutions.

22/07/2020 – MR:

- F. No further action required on this one. It is for Council to note.
- G. No further action required on this one. It is for Council to note the additional operational costs of enforcement.
- H. Budget was allocated for the program. No further action required.
- I. Evidence is presently being gather to prepare a feasibility study.
- J. No Stopping Signage zone signage installed. No further action required Evidence is being gathered looking at long term solutions.

24/06/2020 - MR:

The winter Lake Jindabyne Foreshore Parking program has commenced. Council Rangers are

	 undertaking morning and evening patrols of the		
	area. The number of campers are presently low.		
	This is due to the Covid-19 restrictions and		
	associated ski field access limitations. The patrols		
	will continue throughout the ski season, with the		
	initial focus on education moving to enforcement		
	in early July 2020.		
	28/05/2020 – MR:		
	Everything is ready for the 2020 ski season winter		
	parking and camping campaign. This includes		
	the collection of intelligence to undertake a		
	feasibility study for the introduction of paid		
	parking.		
	05/05/2020 – MR:		
	The no stopping signage has been installed at the		
	areas noted. I have confirmed that Council's		
	Ranger working in collaboration with the Ranger		
	for the area are ready for the winter ski season.		
	Meeting held last week at the Clay Pits to discuss		
	future works on the foreshore. These works will		
	include the potential of charging a parking fee for		
	long term parkers at the Clay Pits. This concepts		
	discussed are going to be included in the		
	community consultation for the proposed works		
	and will form part of the feasibility study and long		
	term strategies mentioned in the resolution.		
	23/03/2020 – BJ:		
	"No stopping zone" signs have been ordered.		
	Feasibility study to be undertaken throughout		
	Winter 2020 season. Snowy Hydro, NSW Police		
	and other key stakeholders to be consulted in		
	identifying a permanent solution to camping		
 		· ·	I

P	MITACHIVIENT	TINENC	DOKESS ACTIONS OF TO END OF FEBRUARY 2021			Page	421
					arrangements around Lake Jindabyne.		
					 03/08/2020 – MR: A. No action required. B. No action required. C. Budget was allocated for the program. No further action required. D. Evidence is presently being gather to prepare a feasibility study. E. No Stopping Signage zone signage installed. No further action required F. Evidence is being gathered looking at long term solutions. 		
643	19 March 2020	44/20	Acquisition by Possessory Title - Lot 16 Section 1 DP 1242 - Berridale Memorial Park That Council A. Apply for possessory title over lot 16 Section 1 DP 1242 (Berridale Memorial Park) B. Classify lot 16 Section 1 DP 1242 as community land upon acquisition.	Land & Property Officer	28/2/2021 - TP: Application for possessory title lodged with NSW LRS. Further legal paperwork being formatted including the Statutory Declarations of two "disinterested witness" to support Council's possessory claim. 14/01/2021 – LB: A&B Application for possessory title has been lodged with the LRS after discussions with the RSL. RSL has been assured that the land will be classified as community land upon acquisition. 4/12/2020 – LB: A. A letter was received from Head Office of NSW RSL to say that Council should deal with the Snowy River Branch of the RSL with respect to future management of the park. An email was sent to the local RSL branch requesting consent for Council to proceed with the application for possessory title, with the assurance that the park would be classified as community land	28/02/2021	N

	upon acquisition. The relevant sections of the Local Government Act pertaining to management of community land were also sent in the email as a link to assist the RSL in determining their response. 23/10/2020 – LB: A. An email was sent to the local branch of the RSL asking for an update. B. To be completed upon acquisition of the land. 24/09/2020 – LB: A. The Snowy River branch of the RSL was notified of Council's intention to apply for possessory title and the branch has sent the notification to The RSL's head office for a response. 26/08/2020 – LB: Requisition on Title has requested an Old Title	
	The RSL's head office for a response. 26/08/2020 – LB:	
	29/07/2020 – LB: The CEO has executed the documents. 26/06/2020 – LB: Application is proceeding.	

	(TIACITIVILIVI	I 114 1 14C	JUNESS ACTIONS OF TO LIND OF TEDROART 2021			rage	723
					28/05/2020 – LB: Documentation is being prepared to lodge an application for Possessory Title. 24/04/2020 – LB: Council's solicitor is presently gathering all the evidence to lodge with the application for possessory title. A surveyor has been engaged to do a survey plan for identification purposes. 26/03/2020 – LB: Council's solicitor has been requested to prepare the documentation.		
660	19 March 2020	55/20	Proposed Acquisition of Easement for Access to Middlingbank Quarry That Council A. Enter into negotiations with the owner of lot 1 DP 1022898 for a right of way for access across his land. B. Engage the services of a surveyor to create a plan for registration of a right of way across lot 1 DP 1022898. C. Council to be responsible for all costs for creation and registration of the plan for the right of way. D. Authorise the Chief Executive Officer to negotiate the compensation for the easement. E. Authorise the Chief Executive Officer to sign all necessary documents to give effect to the above.	Land & Property Officer	 28/2/2021 - TP: A Negotiations continue with Manager Infrastructure spearheading discussions. B Draft plan for right of access pending results of A. C-E These actions will take place at the appropriate time. 22/01/2021 – LB: A. Letter has been sent to Council's solicitor requesting that he commence negotiations with the landowner for a right of way for access to the Quarry. B. Surveyor has submitted a draft plan for right of access and this will be finalized as soon as negotiations are completed. 4/12/2020 – LB: A. Completed. B. Discussions are ongoing to decide the best approach for a permanent access. 	30/03/2021	N

		23/20/2020 – LB:	
		A. The temporary agreement between SMRC and	
		Mr Thomas for access to Middlingbank Quarry	
		has been signed and is active from 2 November	
		2020 through to 30 April 2021. Notice has been	
		provided to Mr Thomas, in accordance with the	
		agreement that Council intend to access	
		Middlingbank Quarry to extract material in	
		November 2020. Work to ensure the access	
		road is suitable for heavy traffic will commence	
		on Monday 2 November.	
		B. The process to secure permanent access will	
		commence shortly	
		C. These actions will take place at the appropriate	
		time.	
		24/09/2020 – LB:	
		A. The agreement has been executed by both	
		parties and Council is planning dates for access	
		to the quarry to extract material.	
		26/08/2020 – LB:	
		A. Council is currently negotiating an agreement	
		with the landowner that will create a	
		temporary access agreement for a 6 month	
		period between November 2020 and April	
		2021.	
		B. The surveyor has completed the survey for the	
		easement for access subject to negotiation	
		with the landowner.	
		C. Council has engaged the surveyor and will be	
		responsible for all costs.	
		D. Further negotiations are required to	
		understand if a permanent agreement for	
1	1	·	

					access to Middlingbank Quarry, through Mr Thomas's property is possible. 28/07/2020 – LB: A. No update.		
					B. Quotations for the survey were received. Despite numerous emails being sent to the surveyors only one surveyor responded and he has been requested to proceed as soon as possible.		
					26/06/2020 – LB:A. Negotiations with landowners are ongoing.B. Requests for quotations for survey have been advertised.		
					28/05/2020 – LB: A meeting took place with the landowner, his father, Manager of Infrastructure, Land and Property Officer and Council's solicitor, Mark Herbert. Negotiations are ongoing.		
					24/4/2020 – LB: An email was sent to the landowner but there has been no response. A second email will be sent this week to be followed up with a phone call.		
					26/03/2020 – LB Negotiations have commenced with the landowner.		
662	19 March 2020	57/20	Proposed closure and sale of public pathway in Kalkite That Council	Land & Property Officer	28/2/2021 - TP: A Completed; B Caveat will be placed in the land when the road closing is registered. Note: Linkage exists with Resolution 301/19.	31/05/2020	N

ATTACHMENT 1	1 IN PROGRESS	ACTIONS UP TO	FND OF FFBR	UARY 2021

71117101111121111 2 111111	TOGRESS ACTIONS OF TO END OF TEDROART 2021		1 agc 420
	A. Extend the maximum term for repayment of		
	the purchase of the land, being the closed	22/01/2021 – LB:	
	public pathway, to 30 June 2023 for both	No further update.	
	purchasers.		
	B. Place a caveat on the subject land requiring	4/12/2020 – LB:	
	payment for the outstanding amount before	A. Completed.	
	sale.		
		23/10/2020 – LB:	
		A. Landowners have been notified of the	
		extension of the maximum time to repay the	
		purchase price	
		B. Caveat will be placed on the land after the road	
		closure is completed and before any	
		subdivision takes place.	
		24/09/2020 – LB:	
		A Landowners have been notified of the extension	
		of the maximum time to repay the purchase	
		price.	
		26/08/2020 – LB:	
		A. Letters to landholders and notifiable	
		authorities have been sent. At this time all	
		responses have been positive. Waiting on	
		response from Crown Lands for consent to	
		proceed and for public pathway to vest in	
		Council following closure.	
		B. Caveat will be placed on the land after the road	
		closure is completed and before any	
		subdivision takes place.	
		·	
		28/07/2020 – LB:	
		Request for quotations were sent to three	
		surveyors but only one responded. Surveyors	
		were sent a follow up email inviting quotations but	
			ı

					only the one response remained. The surveyor has been asked to proceed with the survey. 26/06/2020 – LB: Application forms for Sundry Debtor accounts have been sent to both landowners. Solicitor has been requested to arrange for caveat on title of both properties. 28/5/2020 – LB: Sundry Debtor accounts are being arranged with a repayment schedule to be agreed with the landowners. As the public pathway does not have a registered title it is not possible to place a caveat on the land until the pathway is closed. It is intended to address the issue that payment for the land must be finalised by both parties prior to June 2023. 24/04/2020 – LB: Arrangements are currently underway to set up a payment plan and a surveyor has been engaged. 26/03/2020 – LB: The landowners have been notified of Council's resolution and quotations are currently being		
					sought for the survey work.		
669	16 April 2020	69/20	 Bombala Commercial Precinct Painting That Council A. Note the previous resolution ADA96/16 adopted by the Administrator; B. Note the previous resolution 297/17 adopted by Council; C. Rescind Part C of resolution 297/17 and 	Coordinator Economic Development	25/02/2021 – SBly: No further update. 29/01/2021 – MA: No further update. 30/11/2020 – MA:	31/05/2021	N

			OUNCESS ACTIONS OF TO LIND OF TEDROART 2021			i age	
			replace it with: Authorise expenditure of \$10,000 directly to the Bombala and District Chamber of Commerce to assist with the current street upgrade project. The Chamber must agree to use the		Update received from Bombala Chamber of Commerce. They are still negotiating with main street businesses to cover the cost of labour for the painting, given the cost of the actual paint is covered by the project. Aiming for completion of		
			money on paint and provide supporting documentation to Council once the project		project by May 2021.		
			is completed.		04/11/2020 – MA: Still in progress by Bombala Chamber.		
					28/09/2020 – MA: No further update.		
					02/09/2020 – MA: Still in process of being implemented by Bombala Chamber.		
					02/07/2020 – MA: Project in progress and resting with Bombala Chamber – no further update from below.		
					03/06/2020 – MA: Arrangements for payment finalised. Awaiting reports from the chamber on execution of the project in due course.		
					05/05/2020 – SB: A purchase order will be issued to the Chamber of Commerce this week so that they can send us an invoice and be paid.		
696	21 May 2020	102/2	Design for truck Parking Area at Adaminaby That Council A. Agrees to proceed with further investigative works and to seek endorsement from	Manager Corporate Projects	02/03/2021 – GH: Planned Teams Meeting with TfNSW following submission of V3 and Traffic Study., - Traffic Count to be completed by 10/03/2021., - V3 Plans and	Ongoing	N

Transport for New South Wales for the proposed design; B. Allocates \$50,000 for investigation and assessment from internal reserves for the 2020/2021 financial year; C. That the project be included in the listing of projects for consideration for grant applications; and D. Approach Snowy hydro or Future Gen for funding towards the project of the	ATTACHIVILINI TIN FI	TOURLOS ACTIONS OF TO LIND OF TEBROART 2021		Page 423
the Adaminaby town centre without extensive roadworks.		Transport for New South Wales for the proposed design; B. Allocates \$50,000 for investigation and assessment from internal reserves for the 2020/2021 financial year; C. That the project be included in the listing of projects for consideration for grant applications; and D. Approach Snowy hydro or Future Gen for	comment., - Construction costing for approved concept to follow TfNSW agreement with the concept., - Report to Council on Proposed Design and Costing once TfNSW have responded., Issues:, - TfNSW concerned over the number of access points to the Hwy at the Denison St intersection., - HV parking separated from the Light Vehicle Parking at the Trout., - Both parking areas will have a significant impact on the current grassed/treed medians adjoining the Hwy. 25/01/2021 – GH: TfNSW have provided comment on concept revision, two of which incorporates both long vehicle/RV and truck parking concepts. Minor issues identified and expected to be addressed by design consultant and submitted back to TfNSW. Project being considered for BLERF application should it proceed to a suitable level of shovel readiness prior to applications closing. 27/11/2020 – GH: Revised concepts with 4 options have been received in draft form and are being reviewed by relevant staff before submitting to TfNSW. 02/11/2020 – GH: A review of the requirements for intersections and heavy vehicle movements indicates that it will not	1 age 425
25/09/2020 – GH:			A review of the requirements for intersections and heavy vehicle movements indicates that it will not be possible to locate a heavy vehicle stop close to the Adaminaby town centre without extensive	
			25/09/2020 – GH:	

						<u> </u>	
					TfNSW requirements will require a significant change to the proposal and it may not be possible to establish the location as a truck stop an meet the required specifications for the intersections.		
					28/08/2020 – GH: TfNSW have provided feedback on the concept design. Staff are reviewing this feedback to factor into the detailed design and funding solutions.		
					31/07/2020 – GH: Infrastructure Engineer seeking feedback from RMS on proposal assessment prior to proceeding to scoping and subsequent full design.		
					30/06/2020 – GH: Project preliminary investigations underway.		
					04/06/2020 – DR: The project has been included within the work schedule to be actioned.		
715	21 May 2020	119/2 0	Judgment of Court of Criminal Appeal on Tropic Asphalts case That Council A. Get report on the costing;	Coordinator Economic Development	06/02/2021 – MA: The CCA heard the appeal by Tropic in relation to the subpoena matter on 8 February. Council's legal team thought the proceedings went well and the judges were receptive to their arguments. The judgment is expected to be handed down on 3 March 2021. 29/01/2021 – MA: Preparations continue for CCA Appeal hearing in CCA on 8 February.	Ongoing	N
			B. Report from staff on the progress of the case;				
			C. Proceed with the case; and				
			D. Receive and note the information in the report on the Court of Criminal Appeal's				

judgment in the Tropic case.	
judgment in the Tropic case.	30/11/2020 – MA:
	Preparations underway for appeal hearing in CCA
	in early February 2021.
	04/11/2020 – MA:
	C. Tropic have appealed against the subpoena
	judgment which will result in a delay to the
	trial. Appeal listed for hearing in CCA in early
	February.
	28/09/2020 – MA:
	C. Trial preparation continues. Council successful
	in subpoena matter judgment.
	m coope and matter judgments
	02/09/2020 - MA:
	A. Complete – report provided to August Council
	meeting
	B. Complete – report provided to August Council
	meeting
	C. In progress – preparing for trial in November.
	D. Complete.
	02/07/2020 – MA:
	Expecting the outcome of a hearing into a
	subpoena issued by Council in the early days of the
	original investigation within the next fortnight or
	so. A further report will be provided to Council
	once the outcomes of the hearing are known.
	02/05/2020 144
	03/06/2020 – MA:
	Proceeding with the case and further report(s) with requested details will be provided to future
	Council meeting(s).
	Council meeting(s).
	i

718	18 June	80/20	Acquisition of Land - RFS Shed Michelago	Property Officer	28/02/2021 – JH:	28/02/2022	N
	2020		That Council	Property Officer	No further update.		
			A. Proceed with the compulsory acquisition of		·		
			the Land described as part Lot 5405 DP		12/01/2021 – JH:		
			1244970 Land fronting Ryrie Street,		No further update.		
			Michelago between 369.945 Km and				
			370.000 Km and having an area of		25/11/2020 – JH:		
			approximately 1,162.6m ² for the purpose of		A to C: This process will take approximately 18		
			Rural Fire Shed in accordance with the		months.		
			requirements of the Land Acquisition (Just		20/10/2020 - JH:		
			Terms Compensation) Act 1991;		A to C: Acquisition process underway.		
			B. Make an application to the Minister and the		D & E: Will be adhered to throughout this process.		
			Governor for approval to acquire part Lot				
			5405 DP 1244970 Land fronting Ryrie Street,		23/09/2020 - JH:		
			Michelago between 369.945 Km and		A to C: Survey Plan Quote to be received shortly.		
			370.000 Km and having an area of				
			approximately 1,162.6m² by compulsory		26/08/2020 - JH:		
			process under section 186(1) of the Local		A to C: Acquisition process underway. Research has		
			Government Act 1993;		to take place to find gazette notices, survey		
			C. Classify the land as operational land in		plans to be prepared etc.		
			accordance with the Local Government Act		D & E: Will be adhered to throughout this process.		
			1993;		22/07/2020 – JH:		
			D. Note that this acquisition is not for the		A to C: Acquisition process underway.		
			purpose of resale; and		D & E: Will be adhered to throughout this process.		
			E. Authorise CEO to sign any documentation		D & E. Will be adhered to throughout this process.		
			required for this Acquisition process.		24/06/2020 – JH:		
					A to C:The Acquisition process will begin, this is a		
					lengthy process as all items take place under		
					strict timelines.		
					D&E. Complete.		
					'		
723	18 June	85/20	Cooma Regional Sports Hub Funding Agreement	Doguartic:-	02/03/2021 – AA:	January 2023	N
	2020		That Council receive and note this update on the	Recreation	22 response to tender were received these have		
			Cooma Sports Hub project and agree to:	Planner,	been assessed against set criteria and short		

ATTACHMENT 1 IN PRO	OGRESS ACTIONS UP TO END OF FEBRUARY 2021			Page 433
ATTACHMENT 1 IN PRO	A. Proceed with signing the funding agreement of \$15M to design and construct a 3 court indoor sports facility and synthetic athletics track at the Snowy Oval and Monaro High School Precinct; B. Continue negotiations with Department of Education and Monaro High School for a Joint Use arrangement of the indoor sports facility while maintaining Council's right to withdraw if the long term business case places too much stress on Council's financial viability; and C. Undertake consultation with the community sporting clubs on the concept design phase.	Environmental Services	listed. Evaluation report has been drafted for Councils consideration at March meeting. 14/01/2021 - AD: A. The concept plan has been completed. Tender documents for detail design will be released before the end of January. Detail design is scheduled for completion by June 2021. B. Negotiation with the Project Working Group will be ongoing throughout the design and construction phase. Negotiation with NSW School's Infrastructure regarding the joint use planning arrangements are ongoing. 26/11/2020 – AD: B. Further progress on the joint use planning agreement (JUPA) with Schools Infrastructure has occurred. Council will be updated when a draft JUPA has been completed. C. Consultation with the Community Sporting Ground has been ongoing. The group has provided important input into the design and location of the facilities throughout the concept	Page 433
			C. Consultation with the Community Sporting Ground has been ongoing. The group has provided important input into the design and	
			30/10/2020 –AD: No further update.	

23/09/2020 - AD:

The draft concept design has progressed and

consultation with the project and community working groups has been ongoing throughout the design process. Council will be updated

	TI I7 (CI IIVILIVI	± 1111 110	TO END OF TEDROTURE 2021			r ugc -	
					following the completion of the draft concept plan. 23/06/2020 - AD: A. Completed. The Funding Agreement was signed by the CEO 22/06/2020. No Further action is required. B. Negotiation with the Project Working Group will be ongoing throughout the design and construction phase. Council will be updated on the Joint Use Planning arrangements at the September Council meeting. Consultation with the Community Sporting Groups has	. age	
					commenced and will be ongoing throughout the design process. Council will be updated on the Sports Hub design at the September		
					Council meeting.		
746	16 July 2020	107/2	Health One Facility, Jindabyne That Council A. Authorise the Chief Executive Officer to execute the Building Management Statement and take steps to finalise and sign the land	Facilities Officer Snowy River Health Centre	02/03/2021 – NW: Discussions ongoing between Dabyne Planning and Kleven Spain Surveyors. Subdivision application forms submitted to CEO for signature.	28/02/2021	N
			sale agreement; and		12/01/2021 – NW:		
			B. Approve the establishment of a Building Management Committee to oversee obligations of the Building Management		A. Surveyor provided plans although further information still required. Waiting on information to be forwarded.		
			Statement.		27/11/2020 – TP:		
					No further update		
					27/10/2020 – NW:		
					A. Awaiting surveyor to provide further		
					information to enable registration of		
]			subdivision. Other party (HealthOne) still to		

					sign the Land Sale Agreement. B. Building Management Committee to be formed with HealthOne once above items have been finalised. 24/09/2020 – NW: A. Status remains unchanged. Building Management Statement signed by Chief Executive officer. Information has been returned to surveyor for creation of subdivision. Waiting on lawyers for other party regarding the Land Sale Agreement. B. Building Management Committee to be formed with HealthOne. 26/08/2020 – NW: A. Building Management Statement signed by Chief Executive officer. Information has been returned to surveyor for creation of subdivision. Waiting on lawyers for other party regarding the Land Sale Agreement. B. Building Management Committee to be formed with HealthOne. 22/7/2020 – NW A. Building Management Statement sent to Chief Executive Office for signing. B. Will work on creation of Building Management Committee once BMS signed.		
748	16 July 2020	109/2 0	Lake Jindabyne Shared Trail Project Funding That Council agree to proceed with the Lake Jindabyne Shared Trail project.	Recreation Planner	26/02/2021 – AA: No further update. 14/01/2021 - AD: No further update.	July 2024	N

					26/11/2020 – AD: The funding deed was signed by NSW Treasury on the 7/10/2020. The project has now commenced. A media release and web page for the project has been drafted and is being reviewed by the communications team. Further consultation with stakeholders and neighbouring landholders is being undertaken.		
					30/10/2020 – AD: External communication and engagement is due to commence in updating our community in providing an overall scope of the project. Treasury has now signed the agreement.		
					03/09/2020 - AD: The funding deed has been finalised and signed by the CEO and sent to NSW Treasury. NSW Infrastructure are uncertain on the timeframe for approval by Treasury.		
					31/07/2020 - AD The funding deed is currently being finalised. The document is scheduled to be submitted to NSW Treasury for approval by 16 August.		
749	16 July 2020	110/2	Minutes of the Youth Council Meeting held on 22 June 2020 That Council A. Receive and note the minutes from the Youth Council meeting held 22 June 2020; and B. Endorse the motion as listed in the Youth Council Minutes under 9.2 to 'develop a shovel ready project plan for minor upgrades	Manager Corporate Projects	04/03/2021 – PB: No further update. 25/01/2021 – GH: Minor upgrades scheduled for Cooma skate park under SCCF 3. Jindabyne skate park BLERF application being prepared. Scoping for local skate competitions developed and submitted	Ongoing	N

			at the Bombala, Cooma, Jindabyne and Berridale Skate Parks'.		under BCRRF Round 2 in December 2020.		
			Derridale Skate Parks .		27/11/2020 – GH:		
					Project planning is continuing.		
					02/11/2020 – GH: Work has commenced to develop the projects to a		
					'shovel ready' state using the draft project management framework that is being developed.		
					25/09/2020 – GH:		
					Project will be added to prioritisation list of existing & backlogged projects need completion.		
					03/09/2020 – GH:		
					No further update.		
					04/08/2020 – BP:		
					Assigned to corporate projects to prepare shovel		
					ready project plan & pursue funding opportunities.		
756	16 July	115/2	Floodplain Risk Management Study and Plan	Coordinator	04/03/2021 – PV:	28/02/2021	N
	2020	0	That Council	Strategy	Still awaiting Cooma Back Creek Study Report -		
			A. Adopt the SMRC Flood and Floodplain Risk Management Studies – Flood Studies (April	Development	expected by mid-March.		
			2019);		31/12/2020 – GM:		
			B. Notify the property owners identified at		Awaiting Cooma Back Creek Study variation report,		
			significant flood risk, prior to the March 2020		due 31 January 2021.		
			Floodplain Risk Management Studies and Plans being placed on Public Exhibition;		26/11/2020 – GM:		
			C. Agrees to the public exhibition of SMRC Flood		No further update.		
			and Floodplain Risk Management Studies –				

ATTACHMENT 1 IN PROGRESS ACTIONS UP TO END OF FEBRUARY 2021	Pa	ige 438
Floodplain Risk Management Studies and Plans (DRAFT) report (March 2020); D. Liaise with the NSW SES and landowners at risk to develop an Evacuation Plan for a significant rain event; and E. Submit a Variation Request to the Department of Planning, Industry and Environment (DPIE) Floodplain grant program seeking funding and an amended scope of works to investigate mitigation options for Cooma Back Creek.	23/10/2020 - PV: A. Completed. B. Letters were sent out to identified landholders at risk advising of Public Exhibition of FRMP & S. Two residents called me as a result of letters. Concerns over the level of non-native vegetation in that stretch of Cooma Back Creek. Nil comments on the actual study. C. Public exhibition period closed. Total of 4 submissions received. Submissions forwarded to GRChydro to incorporate into final study document. D. No further discussion until Cooma Back Creek study variation report completed (delays due to modelling, now expected to be finalised early 2021). E. Variation approved, works have commenced on the study, as per previous comment report expected early 2021. 24/09/2020 - PV: A. Completed. B. Discussions with GRChydro (contractor) SES, DPIE and SMRC staff now decided to hold off contacting landholders until the Cooma Back Creek study finalised. SES aware of properties at risk. Letters have been sent out to residents in high risk areas (entire streets not just the identified 11 properties at significant risk) to advise of the FRMS & P being on public exhibition and how to access copies. C. Floodplain Risk Management Studies and Plans	

 5
(DRAFT) report on public display – Now
extended to 7 October.
D. Discussions have taken place with SES and SES
keen to support SMRC. Decided to hold off
actioning EP until end of consultation process –
see what comes back from the community. SES
happy to support liaison with relevant
landholders.
E. Variation request approved by relevant DPIE
staff.
25/08/2020-PV:
A. Request sent to Communications to upload
document.
B. Discussions with GRChydro (contractor) SES,
DPIE and SMRC staff now decided to hold off
contacting landholders until the Cooma Back
Creek study finalised. SES aware of properties
at risk.
C. Floodplain Risk Management Studies and Plans
(DRAFT) report on public display – closes 23 rd
September.
D. PV to liaise with SES – discussions have taken
place. SES keen to support SMRC. Decided to
hold off actioning EP until end of consultation
process – see what comes back from the
·
community. SES happy to support liaison with
relevant landholders.
E. Variation request approved by relevant DPIE
staff. Expect 'official' approval to come
through in the next few days.
31/07/2020-PV:
A. Adopted. Environmental Technical Officer

				='		80	
					organising to have documents uploaded onto the Council website. B. Discussions have taken place. Agreed managers will send a letter to high risk landowners and invite them in to inform them of their level or risk, plans to develop an Evacuation Plan and undertake further studies to try to mediate risks. C. Hard copies printed, need to be bound and Appendices with maps printed and bound ready for display once Action B addressed. D. Relevant managers aware and need to decide who will liaise with SES to commence this process. Variation documentation 75% complete, should be submitted to DPIE by the end of this week (31 July)		
771	20 August 2020	142/2	Harmonisation of Commercial Waste - Method of Charging That Council; A. Harmonise commercial waste charging methods from 1 January 2021, and B. Inform the commercial/business community regarding the proposed harmonisation of commercial waste charging methods.	nager Resource and Waste Services,	02/03/2021 – MT: Harmonisation of Commercial Waste method of charging will be implemented on or after 1 July 2021, in the meantime notification of change letters have been sent to commercial businesses and commercial building owners explaining the pending changes to the charging methods. A second notification letter reminding commercial businesses and building owners will be sent out during March as a reminder. 12/01/2021 – MT: First consultation letter has been delivered to commercial customers with only 2 inquiries, the second consultation letter will be send early February 2021.	01/07/2021	N

	I				I		
					25/11/2020 – MT: Due to the delay in distributing the first of the consultation letters, harmonisation of charging methods will commence from 1 July 2021. As a result the first consultation letter has now been mailed with the second consultation letter to be sent late February 2021.		
					23/10/2020 – MT: Final letter ready to be distributed to commercial customers as first form of consultation towards harmonising commercial charging methods.		
					24/09/2020 – MT:		
					Final draft letter out for comment.		
					25/8/2020 – MT: Commercial/business consultation will take place prior to the introduction to the changes in charging methods from 1 January 2021 First commercial/business consultation letter has been drafted and sent to finance for final input and comment. Once comments have been received the letter will be amended and then posted to the commercial property owners.		
775	20 August 2020	146/2 0	Endorsement of SMRC Section 355 Manual That Council send out a draft s355 manual to Committees for review and defer item until a Council workshop can be held.	Governance Officer	24/02/2021 – ED No further progress. 19/01/2021 – JM: No further progress. 26/11/2020 – JM: The consultation period for the committees closed	Ongoing	N

			- C. (2007 (C. (2010) C. (2010) C. (2010) C. (2011) C. (i age	<u> </u>
					on 12 November 2020 and Council has received 16 comments. Comments are currently being reviewed a report will be presented to the Councillors at the 4 February 2020 briefing session. 02/11/2020 – JM: A webinar was held on 29 October 2020 with all section 355 committees. A workshop will be conducted with councillors on 3 December 2020.		
					25/09/2020 – JM: Documentation has been subjected to a final review and proof read prior to being sent out.		
					31/08/2020 – JM: The Chief Communications Officer is currently reviewing the manual, after which it will be circulated to all committees to review for one month. A webinar will be conducted with all committees to explain the changes and answer questions. A Council workshop will be conducted on 5 November 2020.		
787	20 August 2020	158/2 0	Acquisition of Property That Council: A. Purchase Lot 2 DP 860886 Parish of Clyde as outlined in the report as a long-term investment for the Water and Wastewater Fund;	Coordinator Land & Property	28/2/2021 TP: A-C Completed. Lot 2 DP 860886 - Settlement occurred 3rd February 2021. 29/01/2021 – JM: No further update.	28/02/2021	Y
			B. Authorise the Chief Executive Officer to finalise the purchase according to the terms and conditions outlined in the report, including signing all relevant documentation.		27/11/2020 – TP: NSW Housing & Property confirmed the restriction on title has been registered and that their lawyers have been instructed to forward the		

			C. Authorise the use of the Council Seal if required to execute any relevant		contract to Council's solicitor. Solicitor's cost agreement contract signed by SMRC CEO.		
			documentation.		agreement contract signed by sinite cost		
					26/9/2020 – TP:		
					Issue of contract pending receipt by Council's		
					solicitor. Coordination ongoing.		
					25/09/2020 – TP:		
					NSW Housing & Property have confirmed the		
					following on 15/9/20: Property sale is conditional to a Restriction on Title for		
					community use purposes (for 15 years). The		
					restriction will be sent to LRS with the		
					Certificate of Title for registration after		
					Property New South Wales as the Proscribed		
					Authority has its authorised Delegate sign.		
					Once the restriction is registered upon the title a		
					contract will be issued to Council's solicitor for		
					acquisition of the property.		
					03/09/2020 – TP:		
					NSW Housing and Property advised of decision,		
					with Council's solicitor details also provided.		
					Land & Property team coordinating		
					arrangements to progress acquisition.		
789	17	167/2	Acquisition - Easement for Access Adaminaby	Manager Water &	02/03/2021 – JD:	30/04/2022	N
	Septem	0	Sewage Treatment Plant and Town Water	Wastewater	Acquisition currently underway.		
	ber		Supply	Waste Water			
	2020		That Council:		15/01/2021 – JH:		
			A. Proceed with the compulsory acquisition of the interest in the land described as part Lot		No further update.		
			287 DP 729870 Land fronting Snowy		25/11/2020 – JH:		
			Mountains Highway, Adaminaby and having		No further update		
			an area of approximately 22m for the				

ATTACHMENT	IN PROGRESS ACTIONS UP TO END	OF FEBRUARY 2021		Page 444	
	purpose of easement for services being the Sewag accordance with the result of the interest in the land as ease accordance with the land of th	ar access to essential ge Treatment Plant in equirements of the terms Compensation) ulsory acquisition of described as part Lot ving an area of and part Lot 292 DP ge Chalker Street, ing an area of or the purpose of or essential services by in accordance with the Land Acquisition on) Act 1991; the Minister and the acquire part Lot 287 and Snowy Mountains and having an area of de Part Lot 292 DP as of approximately approximately 344m for the per access to essential process under section terment Act 1993; seement for access in acad Government Act and any documentation	25/11/2020 – JH: A-D. Acquisition process underway and being managed by the Water/Wastewater Team. E.This will take place when required. 23/09/2020 - JH: A-D. Acquisition process underway. E. This will take place when required. 23/09/2020 - JH: A-D. Public Works Advisory (PWA) is being engaged to action this process so that Council secures permanent legal access swiftly. E. This will take place when required.		

<i>H</i>	TIACITIVILINI	TINFIC	DGRESS ACTIONS OF TO END OF FEBRUARY 2021			Page	443
791	Septem ber 2020	169/2	Shannons Flat Hall That Council: A. Rescind resolution 575/18; B. Approve the request for Council to lease the hall for \$200 per annum; and C. If B is agreed to that the following actions occur: i. The Shannons Flat Hall be added to Council's insurance schedule. ii. The lease conditions be approved by Council's CEO. iii. Authorise the CEO to execute the Lease on behalf of Council. D. Notify the landowner of Shannons Flat Hall of Council's decision.	Land & Property Officer	28/02/21 – TP: A-D Completed. Lease agreement in place with expiry 3rd February 2026, and documents provided to Council's insurance contact. 22/01/2021 – LB: B. Council has sent an electronic copy of the lease to the landowner as well as two paper copies. A number of emails have been sent in an attempt to arrange a time to visit the hall to complete the insurance schedule and get two original copies of the lease executed, to no avail. 4/12/2020 – LB: B. Lease has been prepared, with both digital and hardcopy versions provided to the landowner. C. Arrangements made to meet with landowner to complete insurance schedule and take photos of the hall to send to Council's insurers. CEO has approved lease conditions. Lease will be executed by Council after landowner signature, and upon confirmation that site electricity has been assigned back to landowner D. Completed. 23/10/2020 – LB: A. Completed B. Lease has been prepared C. When the lease is ready an inspection of the hall will be carried out in order to complete the insurance schedule. D. The landowner has been notified.	31/03/2021	Y

					i age	
				 24/09/2020 – LB: B. Lease currently being prepared for execution by the lessee. C. The insurance schedule will be completed and an inspection of the building, incl. photos to be sent to Council's insurers. Documents will be sent to the CEO for execution when they are ready. D. The landowner of Shannons Flat Hall has been notified of Council's decision. 		
794 17 Septem 2020	172/2 ber 0	Proposal to Close Part Mittagang Road - Yallambee Lodge That Council; A. Approve the road closing of part of Mittagang Road in accordance with the Roads Act 1993; B. Consolidate the new lot with lot 1 DP 841447 (Yallambee Lodge); and C. Authorise Council's CEO to execute all necessary documents to complete the road closing and lodgement of the plan of consolidation.	Land & Property Officer	28/2/2021 - TP: A-C - Corporate Projects consolidated land adjacent to the service station at Yallambee, and inadvertently used the incorrect resolution; thus road closure plan is required to be redone by surveyor to accurately reflect 'new' lot footprint & labels. 22/01/2021 – LB: No further update. 4/12/2020 – LB: A. Letters have been posted. There is a 28 day period for reply. 23/10/2020 – LB: A. Letters have been prepared and are ready to be posted. B. After the road is closed a plan of consolidation will be prepared by a surveyor and the plan will subsequently be lodged. 24/09/2020 – LB: A. Letters will be sent in the next two weeks to	28/02/2021	N

					the notifiable authorities and to properties surrounding Yallambee notifying them of the proposal to close the road. B. After the road is closed a plan of consolidation will be prepared by a surveyor and the plan will subsequently be lodged.		
795	Septem ber 2020	173/2	Delegate Water Supply Options Report – Update That Council endorse the Options Assessment Report–Delegate Water Supply for public exhibition.	Manager Water & Wastewater	02/03/2021 – JD: Comments received from DPIE Water on 8/2/2021. Public meeting with Delegate Community scheduled for 9/3/2021. 15/01/2021 – JD: Still awaiting endorsement from DPIE Water. 25/11/2020 – JD: No further update. 05/11/2020 – JD: Awaiting comments on the Options Report from DPIE. Community consultation to take place once comments received.	30/06/2021	N
798	Septem ber 2020	176/2	Request for Easement Over Council Land in Cooma That Council A. Approve the request to create an easement for water supply over Lot 2 DP 224408 subject to: i. All costs being borne by the owner of Lot 1 DP 224408. ii. Any disturbance to Lot 2 DP 224408 to be remediated by the applicant, as soon as possible, to the same condition as prior	Land & Property Officer	01/03/2021 – TP: No further update. 14/01/2021 – LB: A. The landowner has been requested to notify Council when the pipeline has been installed so that Council has an opportunity to inspect the area to ensure that Council property has been remediated. He has agreed to be responsible for all costs and will send a copy of the water licence to Council when he is in possession of the Licence.	30/03/2021	N

			to disturbance. iii. The owner of Lot 1 DP 224408 obtaining a licence to pump water from Cooma Creek prior to installing the pipeline for water supply; and B. Authorise Council's CEO to execute any documents necessary to register the easement.		 4/12/2020 – LB: A&B. Council will await notification from landowner that he has achieved a licence to pump water and that he has a plan ready to create the easement. 23/10/2020 – LB A. Landowner has been notified and is proceeding with the plan. B. Landowner is aware that he needs a licence to pump water from Cooma Creek prior to Council signing off on the plan for easement. 24/09/2020 – LB: A. The landowner will be notified of the Council resolution including the conditions of approval so that he can arrange for a surveyor to do a plan for the easement and an 88B for the terms of the easement. B. The owner of lot 1 will be notified that Council will not permit registration of the plan until he has obtained a licence to pump water from NSW Water. Documents will be sent to the CEO for execution when they are ready. 		
825	15 October 2020	207/2 0	Draft Rural Land Use Strategy That Council: A. Endorse the following for public exhibition; i. Appendix A – Draft Snowy Monaro Rural Land Use Strategy (provided separately) ii. Appendix B – Snowy Monaro Employment Lands and Rural Lands Analysis	Strategic Land Use Planner	 26/02/2021 – AA: Draft Rural Land Use Strategy has concluded public exhibition with 280 pieces of written feedback received. A post exhibition report has been drafted for the march meeting. 25/01/2021 – AA: Further face to face consultation has taken place including Adaminaby and Numeralla in January 	26/02/2021	Y

			iii. Appendix C – Snowy Monaro Biodiversity Study iv. Appendix D – Bombala Shire Area Heritage Study Inventory v. Appendix E – Bombala Shire Area Heritage Study Report; and B. Endorse a 40 day public exhibition period.		2021. 26/11/2020 - AA: The draft Rural Land Use Strategy exhibition period has been extended to 1 February 2021. A report is being prepared to the December Council meeting in response to submissions and comments received on the proposed use of zone E3, Environmental Management. 30/10/2020 - BD: Draft Rural Land use Strategy is currently on public exhibition.		
827	15 October 2020	209/2	Draft Settlements Strategy for Public Exhibition That Council: A. Endorse the public exhibition of the draft Settlements Strategy (provided separately) and all relevant supporting information; B. Endorse a 40 day public exhibition period of the Draft Settlements Strategy; and C. Include discussion on a Cooma Bypass for public consultation.	Senior Strategic Land Use Planner	 26/02/2021 – Public exhibition of draft Settlements Strategy concluded on 1 February 2021, approximately 50 pieces of written feedback were received a post exhibition report has been drafted for Council's March meeting. 25/01/2021 – AA: The draft Settlements Strategy exhibition period has been extended to 1 February 2021. Consultation was most recently undertaken in Numeralla and Adaminaby. 26/11/2020 – AA: The draft Settlements Strategy exhibition period has been extended to 1 February 2021. 30/10/2020 – AA: Draft Settlements Strategy is currently on public exhibition. A quick poll has been set up on Council's 'your say' page to open discussion on 	26/02/2021	Y

					a heavy vehicle by-pass for Cooma.		
836	15 October 2020	217/2	Zoom attendance at meetings That Council: A. Support the continuation of the option for Councillors to attend Council meetings via remote teleconference technology, e.g. Zoom or Team Viewer, to ensure equal opportunity for all; B. Support the Motion to the LGNSW	Coordinator Governance	04/03/2021 – GT: No further progress 19/01/2021 – JM: No further progress. 26/11/2020 – JM: Risk assessment has been completed and	Ongoing	N
			Conference 2020 put by Orange Council, to continue teleconference attendance at Council meetings; and C. Makes webinar facilities available for a 6 month trial at the Cooma Council Offices so that all members of the public, including those in wheelchairs and anyone unable to negotiate the stairs, can attend Council Meetings.		mitigating controls will be in place for the level of risks identified. The committee room will be available for the next Cooma meeting, which will be on 18 March 2020. 02/11/2020 – JM: A. No action required. B. Email send to LGNSW advising of intention of council to support motion. C. No action required. Note: A risk assessment will be shortly undertaken and the IT requirements will be determined after that for the trial to commence from the December Council meeting.		
840	Novem ber 2020	225/2	Peak View Hall That Council, in order to facilitate the Peak View community's access to Lions International funding to upgrade the Peak View Community hall: A. Support the proposal to relinquish care and control of Crown Reserve 56109 with care and control being transferred to an	Executive Assistant to Chief Executive Officer, Mayor and Councillors	26/02/2021 – JB: SMRC is waiting on advice from the Lions Club regarding their success in the grant before proceeding. 27/01/2021 – JB: A. Completed B. Discussions in progress	Ongoing	N

						<u> </u>	
			appropriate community based incorporated association such as the proposed Peak View Progress Association Inc.; B. Authorise the CEO to negotiate with relevant parties an outcome to satisfy the requirements of all parties including the Peak View Community, the Crown, the NSW Aboriginal Land Council, Lions International and the Rural Fire Service.		26/11/2020 – JT: Discussions are in progress.		
843	19 Novem ber 2020	228/2	Strategy Review - Vale Street Land That Council defer the report to a later date following a Councillor workshop.	Chief Strategy Officer	02/03/2021 – DR: Briefing completed in the Councillor Briefing Session on 04/02/21 with a Vale Street Property Workshop. 29/01/2021 – DR: Time has been scheduled in an upcoming councillor briefing session for councillors to discuss this issue. 27/11/2020 – DR: Time will be arranged for a fuller discussion on the options for the Council offices.	28/02/2021	Υ
844	Novem ber 2020	229/2 0	Proposed use of 57 Vale Street Cooma - Snowy Monaro Business and Recovery Hub That Council open 57 Vale Street Cooma as the Snowy Monaro Business and Recovery Hub for 12 months.	Economic Development Officer	01/02/2021 – SB: Anticipated for opening in March 2021. 29/01/2021 – MA: Work continuing on building compliance matters and draft agreement with Business Australia prepared. 30/11/2020 – MA: Staff are currently working to address building compliance matters.	Ongoing	N

	, (0111112111		2011200710110110 01 10 2110 01 12211071111 2021				
846	19 November 2020	231/2	Road Naming Proposals That Council approve the road names Mulleun Place and Murrumbidgee Drive for advertising and if no objections are received proceed to gazettal.	GIS Officer	04/03/2021 – GT: No further update. 27/01/2021 – JC: No further update. 27/11/2020 – JC: Advertising has commenced for Mulleun Place and Murrumbidgee Drive proposals.	Ongoing	N
850	Novem ber 2020	235/2	 Mature Tree Re-Location Policy That Council: A. Where the removal of mature trees is deemed necessary for Council works of any kind within any urban, village, park or reserve area, the targeted trees are first assessed by a qualified arborist or like expert, for suitability for relocation; B. Where trees are found suitable for relocation Council takes every necessary step to safely relocate the trees; C. As part of its BAU practices, Council identify and maintain a register of relocation sites for mature trees, such as public parks, playgrounds, sporting venues or other appropriate locations; D. Contractors are advised of the relocation policy and where practicable, the costs of relocation are negotiated when contracts are let; and E. Council affirms the value of mature trees for 	Chief Operating Officer	03/03/2021 – JM: No further update. 29/01/2021 – JM: No further update. 02/12/2020 – JM: A&B: Complete. All relevant Council managers and coordinators have been informed of these parts of the resolution. C: Register of relocation sites to be prepared. D. Complete. All relevant Council managers and coordinators have been informed of this part of the resolution. E. Completed.	30/03/2021	N

	1	1			_		
			their social and economic benefits to the community.				
851	19	236/2	Community Communication	Chief	/03/2021 – GW:	10/03/2021	Υ
	Novem	0	That Council resolve that:	Communication	licy rolled out to Senior Management team at		
	ber		A. It be recognised that Council has not met	s Officer	monthly meeting. Referenced in CEO update.		
	2020		the expectations of the community in		Uploaded to intranet. Will be used across		
			informing and engaging community around		organisation and included in induction. No further		
			council projects and activities.		action. COMPLETE.		
			B. Immediate change is needed to ensure that				
			community expectations are met on how		01/03/2021 – GW:		
			Council communicates with community and		Accepted at Council meeting. Includes community		
			recognises their contribution when working		communication through stakeholder		
			in collaboration with Council.		engagement framework.		
			C. That Council's Communications Policy				
			(SMRC 4) be updated to include the		29/01/20 – GW:		
			following:		A. Updated communications policy has been		
			I. Where council plans to change		developed and will be in February meeting		
			community infrastructure that will result		business papers for consideration.		
			in the removal or reduction of facilities				
			or community assets, including trees of		26/11/2020 – GW:		
			significance:		A. Noted. This is being addressed through active		
			i. a risk assessment of the project be		use of the new Community Engagement		
			undertaken (with a focus on		Framework across all areas of Council, including		
			reputational risk) and actions be		but not limited to, projects, events and		
			identified to minimise any		donations/sponsorships. The Community		
			unacceptable risks,		Engagement Framework was briefed to Council		
			ii. the communications plan identifies		and presented to the Senior Management		
			the stakeholders likely to be		Team.		
			impacted, the level of impacts		B. The CCO (together with COO) have attended		
			expected, and transparent		various community meetings across the region		
			communication to be undertaken,		to confirm community preferences for		
			and		communication with Council, including		
			iii. that the issue be communicated to		recognition of community member's		

			councillors prior to proceeding. II. Where community members have contributed to the development of council and community collaborative projects that: i. the community members be invited to any opening events, with at least one week notice. (Where possible by email, letter or suitably respectful means.) ii. Those Community members be recognised as part of the event. III. For all projects or initiatives a clear statement as to which staff member is responsible for community liaison be made available to the public. D. That the updated communications policy be brought back no later than the February 2021 Council meeting for adoption.		contribution. A spreadsheet had been developed noting communication channels for each community and key contacts within those communities. C. Review of Council's Communications Policy is underway and will address the inclusions noted from I through III. D. Council will be briefed on the new policy and the final policy presented at the February 2021 meeting for adoption by Council.		
853	Novem ber 2020	238/2	Transition to an electric and other low greenhouse gas (ghg) emissions vehicle fleet A. Engaging with other councils such as Newcastle, operating EVs/low emissions vehicles, and the NSW and ACT Governments, as a first step towards determining how Snowy Monaro can transition to an EV and other low GHG emissions fleet, and the practicable extent and timing of the transition. B. Provide a comprehensive report to Council no later than the March 2021 Councillor briefing, outlining an initial transition plan which provides the stages and extent of the	Manager - Fleet & Plant	 01/03/2021 – SS: Collating information to develop report via IPWEA,	31/03/2021	N
			transition, based on current and reasonably		mapping of the process required to transition		

			expected future developments in the EV industry.		to a low emission fleet.		133
854	19 November 2020	239/2	Monaro Rail Trail Draft Feasibility Report That the Council action Resolution Number 68/20 Monaro Rail Trail Draft Feasibility Report 16 April 2020 to: A. Receive and note that the reinstatement of the Queanbeyan to Bombala rail line and extension to Eden has been intensely investigated through the Canberra to Port of Eden Feasibility Study. The publically available Executive Summary states on page 10 that "None of the options are shown to be economically viable. All have BCRs that are much less than 1. The present value of benefits is far outweighed by the present value of costs in all options considered."; B. Receive and note all the reports presented as attachments, Senator Jim Molan's letter and support in principle the Monaro Rail Trail recommendations as presented to Council on 5 November 2020 as per the ten recommendations provided in their submission.	Coordinator Economic Development	 26/02/2021 – MA: Liaison with MRT Inc. has continued in February as they aim to submit an application to the Commonwealth Building Better Regions Fund. A difficultly has arisen in relation to TfNSW requiring as a condition of owners consent for the application that Council agree to accept a lease or transfer of the rail corridor including responsibility for all existing leases and agreements over the rail corridor, and responsibility for its other assets such as heritage buildings. MRT Inc. have been advised previously the Council was not prepared to accept the risks and liabilities this entails at this early stage of the project, however MRT Inc. have written to the Mayor requesting Council change this position to facilitate the BBRF application. 29/01/2021 – MA: Staff worked constructively with MRT Inc. throughout December-January to assist with development of a grant proposal which was lodged by MRT Inc. to the BLER Fund. 30/11/2020 – MA: A. No action required. B. Meeting held with MRT Inc. group to discuss resolution. Priority is sending letters to TfNSW, ACT Government and QPRC as well as organising a BLER funding application. Meeting 	Ongoing	N

	VI IACIIIVILIVI	I 114 1 110	ONLOS ACTIONS OF TO LIND OF TEDROANT 2021			rage	730
					with QPRC staff and MRT Inc. has also been arranged by MRT Inc.		
855	Novem ber 2020	240/2	Bicentennial Garden/ Parks – Bombala That Council: A. Ensures that gardens, trees and significant plantings in all parks throughout Snowy Monaro Regional Council area are to be protected by a Plans of Management that will manage parks and gardens, with a Tree Management Plan developed to ensure that trees are conserved into the future; B. Acknowledge that the Bombala Bicentennial Garden is significant to the community; and C. Assess the Bombala Bicentennial Garden by a heritage expert for inclusion on Council's Heritage Listing.	Chief Operations Officer	 03/03/2021 – JM: C. Assessment completed, currently being reviewed by Council's Strategic Planning team. 29/01/2021 – JM: C. Assessment completed, currently being reviewed by Council's Strategic Planning team 25/01/2021 – AA: C. Heritage consultant has undertaken an independent review of the Bicentennial Garden/Park against the NSW Heritage Councils criteria for local heritage listing. The heritage consultant concluded that Bicentennial Park meets the threshold for local heritage listing. The proposed listing will be incorporated into Councils new Snowy Monaro LEP and relevant planning proposal. 30/11/2020 – JM: A. To be incorporated into draft the Plans of Management which will go out for community consultation planned for early March 2021. B. Completed. C. A request has been sent to Council's Heritage consultant to consider this item for heritage listing. 	30/06/2021	N
062	47	252/2			25/2/2024	0	A 1
863	Decem ber 2020	253/2 0	Regional Cultural Fund - Proposed grant variation request for Jindabyne Library and Innovation Hub That Council:	Coordinator Economic Development	26/2/2021 – MA: Awaiting determination of the grant variation request (submitted in December) by Create NSW	Ongoing	N

			 A. Endorse the submission of a grant variation request to Create NSW seeking to install a modular library of approximately 500m² gross floor area on Lot 31 DP 227005 (adjacent the Jindabyne Memorial Hall) to remain on site as a library for at least five years; B. Authorise the CEO to sign the grant variation request; and C. Acknowledge that additional operational costs (estimated to be around \$100,000 annually in 2020 dollars) will result from the new library, with these costs needing to be included in the 2022-23 operational budget. 		 29/01/2021 – MA: A. A request to vary the funding agreement was lodged with Create NSW prior to Christmas and is currently under assessment by them. B. Completed. C. No further action required. 		
864	Decem ber 2020	254/2	Water and Wastewater Easement Acquisitions - Adaminaby and Bombala That Council: A. Application be made to the Minister for Local Government and the Governor to acquire easements for water supply purposes being 3 metres wide within (or over) Lot 287 DP 729870 and Lot 292 DP 729876 at Adaminaby by compulsory process in accordance with Council's power under Section 187(1) of the Local Government Act 1993 and in accordance with the provisions of the Land Acquisition (Just Terms Compensation) Act; B. Application be made to the Minister for Local Government and the Governor to acquire easements for purpose of sewer services being 3 metres wide within (or over) Lot 287 DP 729870 and Lot 292 DP 729876 at Adaminaby by compulsory	Manager Water & Wastewater	02/03/2021 – JD: Acquisition of easements has commenced. PWA procured to undertake this acquisition. 15/01/2021 – JD: Process has commenced. PWA engaged to assist SMRC with the applications.	30/06/2021	N

			process in accordance with Council's power under Section 187(1) of the Local Government Act 1993 and in accordance with the provisions of the Land Acquisition (Just Terms Compensation) Act; C. Application be made for a Licence from Department of Planning, Industry & Environment, Crown lands for purpose of town water supply infrastructure on Lot 291 DP 729876 at Adaminaby; D. Application be made to the Minister for Local Government and the Governor to acquire easements for purpose of sewer pump station on Lot 5 DP 758129 and sewer line being 3 metres wide within (or over) Lot 5 DP 758129 at Bombala by compulsory process in accordance with Council's power under Section 187(1) of the Local Government Act 1993 and in accordance with the provisions of the Land Acquisition (Just Terms Compensation) Act; and E. Authorise the CEO to sign any documentation required for the acquisition processes				
867	Decem ber 2020	257/2 0	Proposed Highdale Carpark Improvements - Berridale - Community Consultation Update That Council: A. Acknowledge the report on community consultation in relation to proposed Highdale Carpark Improvements; B. Receive and note the revised preliminary design; and C. Endorse proceeding with further, targeted	Manager Infrastructure	03/03/2021 – JM: Report being prepared for 18 March 2021 Council meeting. 18/01/2021 – GS: Targeted consultation with the community in relation to proposed Highdale Carpark Improvements commences on 21 January 2021.	28/02/2021	N

	117 (6111112141		7 G. 1230 7 G. 13 G. 13 G. 12 G. 12 G. 12 G. 11 G. 11 C. 12 G. 12			i ugc	
869	17 Decem ber	259/2 0	consultation with specific members of the business and school communities to further improve the design to address outstanding concerns in relation to bus parking and vehicle access to businesses. Bombala Sewerage Infrastructure Project - Relocation of Mahratta Street Pump Station and Bombala STP and Sewerage	Manager Water Wastewater	02/03/2021 – JD: Design of the pump station in the new location is underway by GHD. The heritage consultant has	30/06/2021	N
	2020		Infrastructure Budget Summary That Council: A. Approve installation of the Mahratta Street Pump Station at the option 2 site being north east of the skate park; B. Approve an additional budget of \$230,000 from the water and sewer reserve; and C. Receive and note the information on previous budget variations for the Bombala STP Augmentation and Sewerage Infrastructure Upgrade projects as listed in this report.	Operations	carried out an assessment and this assessment and application for exemption in terms of the Heritage Act to commence shortly. 15/01/2021 – JD: A. Council approved new location. Design work for new location has commenced. B. Complete. C. Complete.		
878	Decem ber 2020	268/2	Naming of Former Undoo Firetrail Phoenix Lane That Council approve the name Phoenix Lane for the section of the Undoo Firetrail that is now public road for community advertising and gazettal.	Land, Property & GIS Admin Officer	04/03/2021 – GT: No further update. 27/01/2021 – TP: The naming process will be actioned for the purpose of addressing in accordance with the NSW Addressing Policy and Road Naming Guidelines.	28/02/2021	N
881	Decem ber 2020	271/2 0	Rates Harmonisation Project Timeline and Community Consultation That Council: A. Endorse the formation of a Community Reference Group (CRG) by invitation from selected community groups (Attachment 2)	Manager Finance	02/03/2021 – DR: The rates harmonisation Group has met to discuss the principles that they felt should apply to the development of a new rate structure. Two main models have been developed (Principles of equity on services available, equal sharing	Ongoing	N

			B. Authorise the Mayor and Chief Executive Officer, acting jointly, to appoint additional members if it is considered that the membership does not adequately reflect the community.		based on land values) and 8 variations on those to see the impact of different approaches to applying the principles. A third model is being developed around minimum changes to the existing structure so it can be identified what the minimum change would look like. This may drive the development of other alternatives. 29/01/2021 – DR: The groups included for the committee have been requested to provide nominees. A number of nominations have been received and the process of providing background information to allow them to be informed before the discussion on the issues around rates harmonisation commences.		
883	18 Februar y 2021	4/21	Development application 10.2020.217.1 demolition of two (2) sheds and the erection of a storage shed	Town Planner	25/02/2021 – SB: DA released - action completed	25/02/2021	Y
			That pursuant to section 4.16(1)(a) of the Environmental Planning and Assessment Act 1979 (as amended) Council grants consent for DA 10.2020.217.1 for the removal/demolition of two existing sheds and the construction of a single storage shed at Bombala Exhibition Ground, Wellington Street Bombala, lot 14 DP 1097766, subject to the conditions attached.				
884	18 Februar y 2021	5/21	Planning proposal - reclassification of land community to operational That Council: A. Submit a Planning Proposal for proposed amendment to Snowy River 2013 and	Strategic Land Use Planner	09/03/2021 – DB: Planning Proposal submitted to Planning Portal on March 4th 2021.	22/03/2021	

			Cooma-Monaro LEP 2013 to reclassify Lot 10 DP 1130244 in Berridale and Part Lot 10 DP 1266613 in Cooma from community to operational land to the Minister of NSW Planning & Environment for a Gateway Determination in accordance with Section 3.34 of the Environmental Planning and Assessment Act 1979; and B. Subject to receipt of a gateway determination from the NSW Department of Planning and Environment, proceeds with the planning proposal and consultation is undertaken with the community and government agencies in accordance with Schedule 1, Division 1, Clause 4 of the Environmental Planning and Assessment Act 1979 and any directions of the Gateway Determination.				
885	18 Februar y 2021	6/21	Dalgety Showground section 355 management committee members resignation That Council accept the resignation of Sue Fabish from the Dalgety Showground S355 Management Committee.	Governance Officer	03/03/2021 – ED: Item complete. No action required.	03/03/2021	Y
886	18 Februar y 2021	7/21	Monthly funds management report - December 2020 That Council: A. Receive the report indicating Council's cash and investments position as at 31 December 2020; and B. Receive the Certificate of the Responsible	Finance Officer	04/03/2021 – MN: Item complete. No action required.	04/03/2021	Y

			DONESS ACTIONS OF TO END OF TEDROANT 2021			i agc	
			Accounting Officer.				
887	18 Februar y 2021	8/21	Monthly funds management report - January 2021 That Council: A. Receive the report indicating Council's cash and investments position as at 31 January 2021; and B. Receive the Certificate of the Responsible Accounting Officer.	Finance Officer	04/03/2021 – MN: Item complete. No action required.	04/03/2021	Y
888	18 Februar y 2021	9/21	Youth school holiday program report That Council receive the information in the report on School Holiday Program.	Youth Development Officer	03/03/2021 – JG: Completed, Resolution 9/21.	03/03/2021	Y
889	18 Februar y 2021	10/21	Classification and future use of land at 17 Bent Street Jindabyne That Council: A. Classify Lot 2 DP 860886, 17 Bent Street Jindabyne as Operational Land; and B. Commence an Expression of Interest process for community groups/community service providers to propose community uses for the land.	Property Officer	28/02/2021 - JH: A: Completed. Appropriate internal stakeholders advised of Operational category. B: EOI process to be undertaken.	28/02/2021	N
890	18 Februar y 2021	11/21	Nominations for membership on the North Ridge Reserve s355 committee That Council: A. Accept the resignation of Bruce Canavan, Hugh Darby, Darien Perry, Max Perry, Ann Duncan, Mike Mannile and Tim Scrace from	Governance Officer	03/03/2021 – ED: Successful members have been notified, via letter, of appointment to North Ridge Reserve Committee. Members have been contact regarding suitable dates and times for their first meeting.	22/03/2021	N

,		7 G. 1200 7 G. 100 G. 100 E. 12 E. 1			i age	
		the North Ridge Reserve S355 Committee; B. Note the continuing membership of Lori Lollback and Mary Zieskak; and C.Approve the five membership applications receiv				
18 Februar y 2021	12/21	Draft minutes - community services advisory committee - 30 November 2020 That Council receive the Draft Minutes of the Community Services Advisory Committee meeting held on 30 November 2020.	Executive Assistant (Strategy)	02/03/2021 – DR: Complete	02/03/2021	Y
18 Februar y 2021	13/21	2020 aged care approval round funding That Council proceed with an ACAR application for capital improvements to Yallambee Lodge and Snowy River Hostel.	Chief Operating Officer	03/03/2021 – JM: ACAR application submitted.	22/03/2021	N
18 Februar y 2021	14/21	Bombala region softwoods industry bushfire recovery study That Council receive the information and recommendations made to Council in the Bombala Region Softwoods Industry Bushfire Recovery Study and further consider implementation of relevant recommendations in the process of developing Council's next operational plan.	Economic Development Officer	25/02/2021 – SB: Economic Development Team will review the recommendations and consider those which could be implemented in Council's next operational plan.	22/03/2021	N
18 Februar y 2021	15/21	South east Australia transport strategy membership That Council resolve not to renew its membership of SEATS.	Manager Infrastructure	01/03/2021 – TP: Process of notifying SEATS of withdrawal underway.	22/03/2021	N
18 Februar y 2021	16/21	Adoption of committee recommendations from the local traffic committee meeting held on Thursday 21 January 2021	Road Safety Officer	01/03/2021 – GH Responses sent.	22/03/2021	N
	18 Februar y 2021 18 Februar y 2021 18 Februar y 2021 18 Februar y 2021	Februar y 2021 18 Februar y 2021	B. Note the continuing membership of Lori Lollback and Mary Zieskak; and C.Approve the five membership applications receiv 18 Februar y 2021 13/21 Februar y 2021 13/21 Februar y 2021 13/21 Februar y 2021 14/21 Februar y 2021 18 Feb	B. Note the continuing membership of Lori Lollback and Mary Zieskak; and C. Approve the five membership applications receiv 18 Februar y 2021 12/21 Draft minutes - community services advisory committee - 30 November 2020 That Council receive the Draft Minutes of the Community Services Advisory Committee meeting held on 30 November 2020. 18 Februar y 2021 19 South east Australia transport strategy membership of SEATS. 18 Februar y 2021 2020 Februar Y 2021	B. Note the continuing membership of Lori Lollback and Mary Zieskak; and C.Approve the five membership applications receiv	the North Ridge Reserve S355 Committee; B. Note the continuing membership of Lori Lollback and Mary Zleskak; and C.Approve the five membership applications receiv 18

 Dakess Actions of To END of Tebroakt 2021	i age -	
That the recommendations of the meeting of the Local Traffic Committee held on 21 January 2021 be adopted:		
A. LTC 1/21 - Bombala Agricultural Show – 2021		
That Council:		
A. Approve the request from Bombala Agricultural Show Inc. for the temporary closure of streets in Bombala associated with the conduct of the Bombala Show on Saturday 20 and Sunday 21 March 2021, from 7:00 am to 7:00 pm each day. The roads involved will be:		
i. Forbes Street – Between Wellington Street and Mercy Street, and		
ii. Cave		
B. With the condition of supplying evidence of Public Liability Insurance with a minimum value of \$20 million and naming Snowy Monaro Regional Council as an interested party;		
B. LTC2/21 - ANZAC Day - Jindabyne & Berridale 2021		
That Council:		
A. Approve the request from Snowy River Sub- Branch RSL for the temporary closure of Kosciuszko Road from 9:30 am till 9:45 am on 25 April 2021 for the annual Jindabyne ANZAC Day March and Commemoration, and		
B. Approve the request from Snowy River Sub- Branch RSL for the temporary closure of Jindabyne Road from 11:00 am till 1:00 pm on 25 April 2021 for the annual Berridale ANZAC Day		

March and Commemoration;	
C. LTC3/21 - ANZAC Day - Cooma &	
That Council:	
A. Approve the request from Cooma Monaro Sub-Branch RSL for the temporary road closures associated with 2021 ANZAC Day Commemorations in Cooma and Nimmitabel. The roads affected in Cooma would be:	
i. Sharp Street from Baron Street to Vale Street	
ii. Bombala Street – Sharp Street intersection	
iii.	
iv.Vale Street from Massie Street to Amos Street in	
B. The roads affected	
i. Snowy Mountains Highway, between Clarke Street and Miller Street, and	
ii. Boyd Street from Miller Street to Bentley Street;	
D. LTC4/21 - ANZAC Day - Bombala – 2021	
That Council:	
A.Approve the request from Bombala Sub-Branch P	
i. Forbes Street from Therry Street to Wellington Street	
ii. Maybe Street from Caveat Street to Burton Street.	
iii. Suitable traffic diversions will be in place from 5:45 am to 1:00 pm	
iv. With the condition of supplying evidence of	

			Public Liability Insurance with a minimum value of \$20 million and Snowy Monaro Regional Council as an interested party;				
			E. LTC5/21 - Signage & Linemarking - Segment Factory (Version 2)				
			That Council reject the request from Pitt & Sherry for a change to the signage and line marking for the segment factory access road.				
			F. LTC6/21 – Letter From Berridale Residents about Myack Road				
			That Council support the request for lowering the speed limit to 60km/h on section of Dalgety road, and forward data to Transport for NSW.				
896	18 Februar y 2021	17/21	Australian Local Government Association - notices of motions for National General Assembly 2021.	Executive Assistant to Chief	02/03/2021 – JB: Email distributed to Councillors 1 March 2021 seeking suggested motions.	22/03/2021	N
			That Council: A. Determine whether it wishes to submit Notices of Motion for National General Assembly 2021;	Executive Officer, Mayor			
			B. Authorise the Mayor and CEO to attend the NGA – 20 to 23 June 2021 in Canberra.				
897	18 Februar y 2021	18/21	Delivery program operational report s404 for the period July 2020 - December 2020 That Council receive the Progress Report on the	Acting Corporate Reporting Officer	02/03/2021 – MC: Report was received by Council and no further action was required.	22/03/2021	Υ
	2021		2020-2021 Operational Plan for the period July 2020 to December 2020.				

			JURESS ACTIONS OF TO END OF FEBRUARY 2021			Page 4	.07
898	18 Februar y 2021	21/21	21/21 Quarterly budget review statement (QBRS) to December 2020 That Council:	Acting Manager Finance	25/02/2021 - JS: Budget Uploaded on Monday 22/02/2021	22/03/2021	N
			A. Receive the quarterly budget review statement (QBRS) for the period ended 31 December 2020, and				
			B. Authorise the adjustments to the Council's budgeted Income & Expenditure, Capital Expenditure and Cash & Investments as shown in the QBRS.				
899	18 Februar y 2021	22/21	Harmonisation of customer service hours That Council endorse the recommendation to amend the Cooma Office customer service opening hours to 8.30am to 4.30pm to provide a uniform offering to the community across all Council offices.	Coordinator Engagement	09/03/21 – GW: Ongoing community communications utilising website, social media, radio, print advertising and new signage. COMPLETE. 01/03/2021 – CP: CP: 01/03/2012, ◆ This has been implemented from Monday 1 March 2021., ◆ A campaign to communicate this to the community was commenced in the preceding week, and will continue throughout March:, - Update to website., - Update to social/online references (e.g. Google Knowledge panels)., - Ads in The Monaro Post., - Media release., - Social posts., - Inclusion in Mayoral Column and Communique Page., - Planning inclusion of information in the next rates notices.	10/03/2021	Y
900	18 Februar y 2021	23/21	Update and revision of SMRC communications policy That Council adopt the revised communications policy.	Chief Communicati ons Officer	10/03/2021 – GW: Refer item 951. COMPLETE. 01/03/2021 – GW: Accepted at Council meeting. Introduced to Senior Management Team on 25/2/21.	10/03/2021	Υ

					Included in CEO update on 25/2/21. Will be communicated to business via email and noticeboards in w/c 1/3/21.		
901	18 Februar y 2021	24/21	Nominations for Michelago Hall s355 management committee and management of assets in Michelago That Council:	Governance Officer	04/03/2021 – ED: Successful members have been notified. Staff are communicating with the new members to arrange a suitable date and time for the first meeting.	22/03/2021	N
			A. Disband the current Michelago Hall Committee members and appoint all six applicants to form a new committee;				
			B. Develop a new constitution incorporating the tennis courts and club house within the areas managed by the committee; and				
			C. Only agree to taking over the lease agreement for the Michelago Railway Station Building and surrounding lands when an agreed plan has been developed that shows how this can be achieved without increased cost to Council and that the facility can be managed by the Michelago Hall S355 Management Committee.				
902	18 Februar y 2021	25/21	Application to set maximum level of minimum rates That Council seek approval to set the maximum amount of the minimum rate in all categories at \$625.95.	Chief Strategy Officer	02/03/2021 – DR: A request for an extension was granted after a discussion with The Office of Local Government.	22/03/2021	N
903	18 Februar Y 2021	26/21	CEO review panel That all Councillors have an option to be a part of the CEO review process.	Executive Assistant to Chief Executive Officer, Mayor	25/02/2021 – JB: All Councillors will be invited to participate in future CEO Performance Reviews.	22/03/2021	N

				and Council			
904	18 Februar y 2021	27/21	Funding for lake light festival That Council receive a post event launch from the Lake Light Sculpture Committee on the 6 May 2021 to discuss future collaboration and funding strategies.	Executive Assistant to Chief Executive Officer, Mayor and Council	10/3/2021 – GW: Funding overview for 2021 event - support from council is still quite extensive, just worded differently to previous years as not a single \$5K payment through Donations & Sponsorhip round For the 2021 event, \$22K (\$20K + GST) funding obtained through Austrade Grant Funding – Regional Tourism Bushfire Recovery (RTBR) for bushfire impacted LGAs (application made by Council on behalf of Lakelight). In 2016 Lakelight received \$20K from the Stronger Country Communities merger funding \$1500 sponsorship for Waste to Art project - Fees waived for artists utilising materials from SMRC landfills for past events (no uptake in 2021) - Waiving of waste removal and waste charges (inc. 24 bins for 2019 – delivery and collection) - \$1800 from Visitor Centre for advertising (noted as corporate sponsorship with SMRC as major sponsor) in the event booklet – done annually - Extensive In-kind support through provision of resource being SMRC Events Officer on organising committee for festival 25/02/2021 – JB: Future collaboration and funding strategies has been placed on the 6 May Councillor Briefing Session agenda. An invitation will be forwarded to the Lake Light Sculpture Committee.	22/03/2021	N

	TIACITIVILIVI	CHIVIENT I IN PROGRESS ACTIONS OF TO END OF FEBRUARY 2021					
905	18 Februar y 2021	28/21	MRT application for building better regions fund That Council provide support for the Monaro Rail Trail application for the Building Better Regions (BBT) fund.	Executive Assistant to Chief Executive Officer, Mayor and Council	 10/3/2021 – GW: Extraordinary Council meeting held on 4/03/2021. Media release distributed on 5/3/2021. Council resolved the following to: A. Not lodge an application under the current Building Better Regions Fund due to: (a) The project not being sufficiently developed to meet the grant criteria. (b) The Council not having in place the required consultations with the community on the willingness to fund the service. B. Establish a Section 355 Management Committee to oversight the development the Monaro Rail Trail and invite representatives from MRT Inc. and Queanbeyan-Palerang Regional Council to participate. C. Enter into negotiations with the NSW Government on the proposed lease of the rail corridor. D. Ensure the Monaro Rail Trail is included as part of the Regional Trails Masterplan and the recommendations of the Regional Trails Masterplan and the resommendations of the Regional Trails in the SMRC area, as recommended by the Regional Trails Masterplan, which will incorporate the Monaro Rail Trail. F. Continue to review grant funding opportunities to support the progression of the Monaro Rail Trail through the detailed design stage. 	22/03/2021	N
					25/02/2021 – JB: Letter of support sent to Ken Lister President of MRT Inc., on 25/2/21.		

906	18 Februar y 2021	30/21	Legal actions and potential claims against SMRC as at 22 January 2021 That Council receive the information in the Legal Actions and Potential Claims Against SMRC as at 22 January 2021 report.	Executive Assistant (Strategy)	02/03/2021 – DR: Complete	02/03/2021	Y
907	18 Februar y 2021	31/21	CEO's annual performance review That Council: A. That the CEO's Performance Review for 2020 be completed as matter of urgency, if possible prior to the March 2021 Council Meeting, in order to comply with OLG Guidelines, and B. That a new facilitator be considered for future CEO performance reviews.	Executive Assistant to Chief Executive Officer, Mayor and Council	25/02/2021 – JB: A follow up meeting with Christian Morris is scheduled for Monday 8 March 2021.	22/03/2021	N
908	18 Februar y 2021		Planning submissions to council That Council: A. In regard to the new Planning submissions, that the Council recruit people from organisations such as the farmers, commercial representatives, and the general public to form an advisory panel to advise the Council on the Rural Land Use Strategy and the Draft Settlement Strategy and B. That the date for the Rural Land Use Strategy and the Draft Settlement Strategy be extended to 1 June 2021 and further if necessary. Lost Motion	Chief Strategy Officer	02/03/2021 – DR: Action completed	02/03/2021	Υ

13. CONFIDENTIAL MATTERS

In accordance with Section 10A(2) of the Local Government Act 1993, Council can exclude members of the public from the meeting and go into Closed Session to consider confidential matters, if those matters involve:

- (a) personnel matters concerning particular individuals; or
- (b) the personal hardship of any resident or ratepayer; or
- (c) information that would, if disclosed, confer a commercial advantage on a person with whom the council is conducting (or proposes to conduct) business; or
- (d) commercial information of a confidential nature that would, if disclosed;
- (i) prejudice the commercial position of the person who supplied it, or
- (ii) confer a commercial advantage on a competitor of the council, or
- (iii) reveal a trade secret,
- (e) information that would, if disclosed, prejudice the maintenance of law; or
- (f) matters affecting the security of the council, councillors, council staff or council property; or
- (g) advice concerning litigation, or advice that would otherwise be privileged from production in legal proceedings on the ground of legal professional privilege or information concerning the nature and location of a place; or
- (h) an item of Aboriginal significance on community land.

and Council considers that the closure of that part of the meeting for the receipt or discussion of the nominated items or information relating thereto is necessary to preserve the relevant confidentiality, privilege or security of such information, and discussion of the material in open session would be contrary to the public interest.

In accordance with Section 10A(4) of the Local Government Act 1993 the Chairperson will invite members of the public to make verbal representations to the Council on whether the meeting should be closed to consider confidential matters.

RECOMMENDATION

1. THAT pursuant to Section 10A subsections 2 & 3 and Section 10B of the Local Government Act, 1993 (as amended) the following items on the agenda for the Ordinary Council meeting be dealt with in Closed Session for the reasons specified below:

13.1 Cooma Sports Hub Detailed Design Tender Approval

Item 13.1 is confidential in accordance with s10(A)(2)(c) of the Local Government Act because it contains information that would, if disclosed, confer a commercial advantage on a person with whom the Council is conducting (or proposes to conduct) business and discussion of the matter in an open meeting would be, on balance, contrary to the public interest.

13.2 CEO's annual performance review

Item 13.2 is confidential in accordance with s10(A)(2)(a) of the Local Government Act because it contains personnel matters concerning particular individuals (other than councillors) and discussion of the matter in an open meeting would be, on balance, contrary to the public interest.

- 2. The press and public be excluded from the proceedings of the Council in Closed Session on the basis that these items are considered to be of a confidential nature.
- 3. That the Minutes and Business Papers including any reports, correspondence, documentation or information relating to such matter be treated as confidential and be withheld from access by the press and public, until such time as the Council resolves that the reason for confidentiality has passed or become irrelevant.
- 4. That the resolutions made by the Council in Closed Session be recorded in the Minutes of the Council Meeting.

5. That upon this recommendation being moved and seconded, the Chairperson invite representations from the public as to whether this part of the meeting should be closed to consider the nominated item.