

4. EUGOWRA

4.1. Location

Eugowra is located at the south-western edge of Cabonne Shire on The Escort Way between Cudal and Forbes. It is located ~35km from Forbes/Canowindra; ~42km from Parkes/Cudal; ~55km from Manildra; ~66km from Cowra; and ~80km from Orange. Therefore, Forbes/Parkes are the closest higher-level service centres.

The settlement was covered in more detail in the 2012 *Cabonne Settlement Strategy* (CSS2012) so this Strategy focusses on the growth & recommendations for key land uses only. See the *Local Profile & Issues Paper (LPIP)* for more background.

4.2. Summary

EUGOWRA (2020)	Total	Zone RU5 Village	Zone R5 LLR	Comment
Area	~242ha	~150.5ha	~91.8ha	Excludes Zone RE1/RE2/SP2
Lots	~522	~495	~27	Village + Large Lot Res. lots
Other Uses	Community lots~28; Business lots~32 (some vacant); Industrial Lots~11			
Dwellings	~250	~237	~13	2016 Census ~260
Pop. 2016	2016 Census (~510 people) includes Zone RU5 & Zone R5 LLR			
Est. Pop. 2019	~495 (projected population based on historical decline)			
Pop. Growth	2006-2016 (-25 people) = -0.47%/year			
Future Growth	Pop. Min -0.5 %/year; AVERAGE -0.1%/year; Max. +0.3%/year.			
Vacant Lots	~44	~32	~12	Less constrained vacant lots
+Subdivision	~76	~59	~17	Add subdivision potential vacant
50% likely	~39	~30	~9	50% likely to be developed
Past Dwelling Demand	~1.55/year	~1/year (65%)	~0.55/year (35%)	Dwelling construction/approvals 2010-2020 (aerial + inspection)
Fut. Dwelling Est. Demand	~1.4/yr (28 dw)	~1/year= 20 (71%)	~0.4/year= 8 (29%)	~28 dwellings 2021-2041 (20 years) may be required
Supply/Demand		~30/20 = 30 years	~9/8 = 21 years	Zone RU5 + R5 > 20 years but held by limited owners so risk
Recommend	Council to consider flood-free Strategy (Growth Investigation) Areas if land owners do not develop infill land to full potential in next 5-10 years			

4.3. Existing Urban Area

4.3.1. Existing Planning Controls (CLEP2012)

Under CLEP2012, the existing land use zones for the urban area are:

- Zone RU5 Village (~150.5ha incl. local roads) permits a wide range of possible land uses (subject to merit assessment);
- Zone R5 Large Lot Residential (~91.8ha) is primarily for dwellings on larger lots;
- Zones RE1 Public & RE2 Private Recreation (Sportsground & Showground);
- Zone SP2 Classified Road (The Escort Way & Nangar Rd);

Under CLEP2012, the Minimum Lot Size (MLS) for subdivision is:

- Zone RU5 – 2,000m² but reduced to 900m² if connected to reticulated sewer (which was connected around 2012);
- Zone R5 - 4,000m² (1 acre).

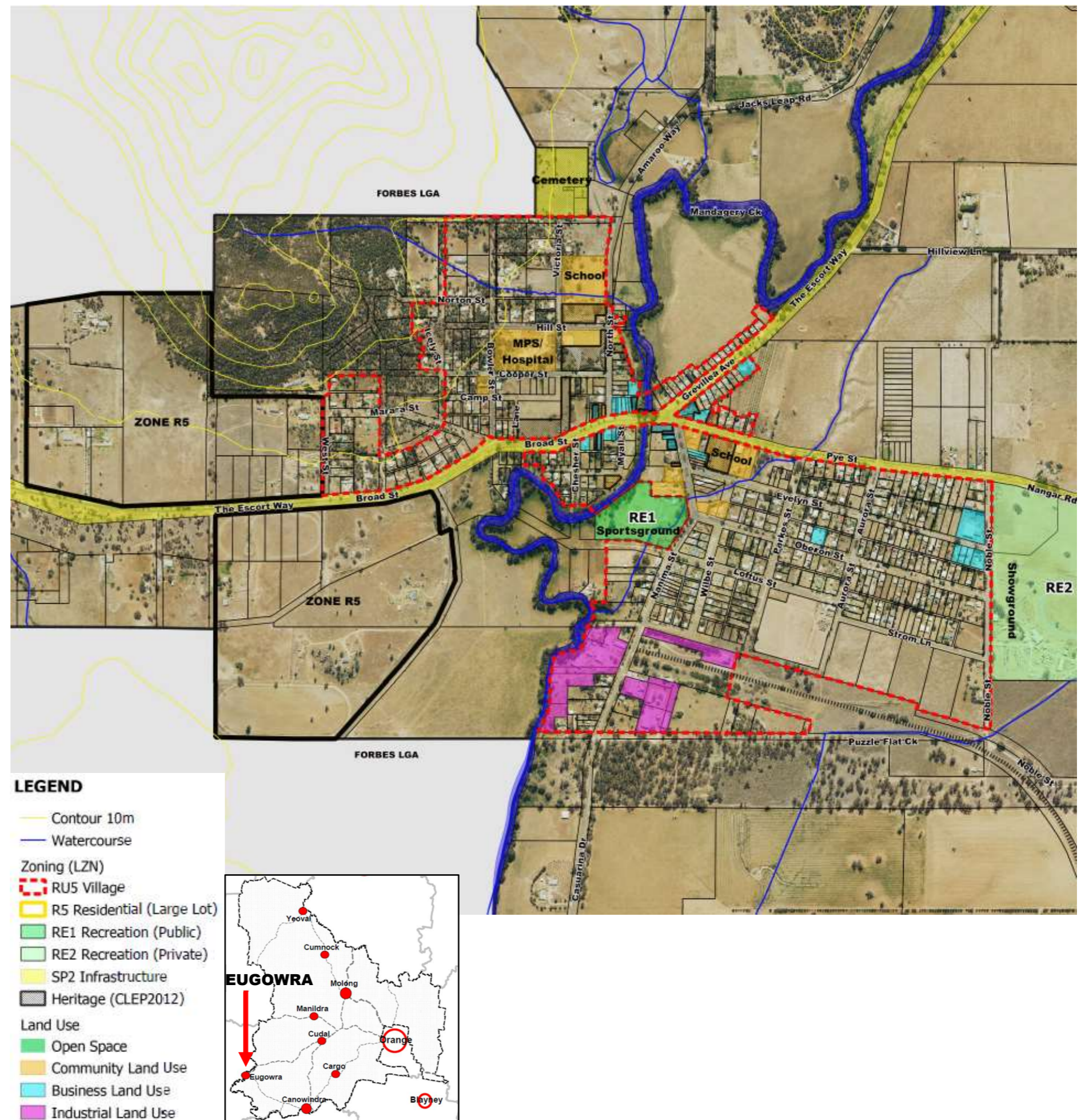
4.3.2. Settlement Pattern

Eugowra has a historic road, block & lot arrangement based on a modified grid pattern that adjusts around Mandagery Creek, the terrain, and the railway line. As a result, there are more standard blocks in the eastern Village Zone but they vary at around ~200m long and ~106-160m deep (a central lane 6m wide for many).

Therefore, standard lots are generally 40m wide and 50m deep (~2,000m²) but there are many lots ~20m wide by ~55m deep (~1,100m²). Lot sizes vary from ~100m² to several hectares as some flood/bushfire prone remains undeveloped.

Street widths vary between the standard ~30m allowing for wide parking areas on each side of the two traffic lanes, with some reduced to ~20m.

Figure 1: Settlement location, zoning, key land uses & heritage.



4.3.3. Open Space and Recreation

Eugowra has a reasonable level of open space/recreation including, but not limited to:

- a) Pioneer Park, corner The Escort Way/Broad St ~0.32ha (park with picnic/visitor stop-over facilities & toilets/BBQ);
- b) Eugowra Memorial Park, corner Cooper & North Streets ~1.15ha (War Memorial, playground, shelter, toilets & formal plantings);
- c) Eugowra War Memorial Swimming Pool ~0.38ha (incl. footpath lot);
- d) Eugowra Sportsground, Nanima St ~3.93ha (Tennis courts, toilets, sheds, trotting track, SES shed etc.);
- e) Showground, 21 Noble St ~40ha (track, horse arena, toilets, campground etc).

No significant change to the existing recreation areas or controls is needed to facilitate reasonable growth at this time.

4.3.4. Community/Business Uses and Employment

The main commercial street is The Escort Way / Grevillea Ave / Broad St with some businesses extending down Nanima St. Current businesses include, but are not limited to: Eugowra Newsagency & Supermarket, Post Office, Central Hotel, Pharmacy, gift store, rural supplies, cafes; mechanic, real estate etc.

Community uses also extend up Pye, Cooper, Victoria & North Streets including, but not limited to: Multi-Purpose Health Centre/aged care; Eugowra Public (Primary) School; St Joseph's Catholic Primary School; the Rural Transaction Centre; pre-school; historical museum; Police; Rural Fire Service (RFS); SES; and churches.

However, in recent years there has been a relatively-high turn-over of commercial buildings/businesses and/or conversion to dwellings that could impact on the level of local services, employment and streetscape presentation/activity.

Unlike some smaller Cabonne settlements, Eugowra has a number of industrial operations including Eugowra & Canowindra Produce; granite supplies; and a number of local businesses that contribute significantly to employment and growth.

It is important to note that Moxey Farms (dairy) & Gundamain Feedlot are located between Eugowra & Gooloogong and collectively employ ~260-300 staff with some growth potential – so these are key employers for the area.

The largest local employers are the health service, schools and some limited retail so there is some local employment opportunity (outside of agriculture).

4.3.5. Utilities/Infrastructure

Sewer

Eugowra's Sewage Treatment Plan (STP) on Gooloogong Rd (Casuarina Drive) & reticulated sewerage has been connected since ~1999 consisting of 3 pump stations, gravity & rising mains. The STP design loading is ~550 Equivalent Persons ('EP') (2009 Joint Integrated Water Cycle Management Plan).

The projected population for Eugowra would need to exceed the maximum 0.3%/year from 2021-2041 (see *Population & Growth* Section below) to exceed the capacity of the STP but this should be monitored by Council.

Water

Eugowra is connected to the Central Tablelands Water (CTW) network via a pipeline near Canowindra. It is assumed there is sufficient capacity within this network to allow for moderate population growth.

Electricity/Gas

Low voltage electricity is available in most formed streets and can be extended to allow for growth. There is no high voltage electricity lines or gas line present near Eugowra to facilitate energy-intensive uses such as industry.

Telecommunications

The NBN maps in 2020 suggest that all of Eugowra and surrounds has potential to connect to the fixed-wireless network for telecommunications/internet.

Waste

Eugowra has a local waste depot located off The Escort Way (in Forbes LGA) that provides landfill and recycling services.

4.4. Summary of Growth Potential

Some of the key demographic information is reviewed in the *Local Profile & Issues Paper* to this Strategy. Only key information is repeated here.

The key **POSITIVE** influences that may assist growth include:

- a) **Population:** A population in 2016 of ~510 is sufficiently high to sustain a range of local services & facilities if escape expenditure to larger centres is managed.
- b) **Growth/Puzzle Flat Creek Levee:** Council has recently upgraded the Puzzle Flat Creek Levee bank to address the Flood Planning Level along this Creek and this should reduce flood potential in the eastern section of Eugowra, hopefully reduce flood insurance premiums, and improve development affordability. In the last 10 years, nearly all the new buildings have occurred east of Aurora St.
- c) **Proximity to Forbes/Parkes:** Proximity to Forbes/Parkes/Newell Highway and its location on a key connection to Orange are likely to contribute to some economic growth & transport-related industries in the area.
- d) **Employment/Income:** In 2016, Eugowra had an unemployment level (6.9%) that was only slightly higher than NSW (6.3%) and lower than Cumnock, Yeoval, Cudal & Canowindra, though it still had high rates of part time employment (27.6%). Median personal weekly incomes were higher than Yeoval, Cumnock & Canowindra but still significantly lower than the Cabonne/ NSW average.
- e) **Agricultural Employers:** Local and agricultural employment is significant. Moxey Farms (dairy) & Gundamain Feedlot are both located between Eugowra & Gooloogong and have 260-300 employees. Anecdotal evidence is they are looking to grow and employees need additional dwellings in Eugowra.
- f) **Health/Aged Care:** Eugowra has a Multi-Purpose Health Service that includes a 24-hour health service and 14-bed aged care accommodation (including dementia suitable, respite & palliative care), community health services (physiotherapy/podiatry), GP services & day care that allows older citizens to remain in Eugowra & may attract families.
- g) **Education:** Eugowra has a choice of public or Catholic primary schools. Higher education is located in nearby towns such as Forbes, Parkes & Canowindra so it may be attractive for young families.
- h) **Retail:** Compared to many villages, Eugowra has maintained a reasonable level of main street retail, services and activity that meet local & visitor needs (though there is still a degree of turn-over of businesses).
- i) **Household Composition/Dwelling Types:** In 2016, of the eight (8) larger settlements, Eugowra has one of the lowest rates of single (lone) person households and more family dwellings and also has a greater range of dwelling sizes with the highest number of smaller & 2-bedroom houses (24.2%).
- j) **Housing Tenure/Stress:** In 2016, Eugowra had one of the highest rates of home ownership (without mortgage) and lowest levels of rental (2.1%) & mortgage (2.4%) stress of the eight (8) larger settlements with the highest rate of unoccupied dwellings providing some flexibility in the market.
- k) **Affordability:** Compared to other nearby regional cities and larger Cabonne settlements, Eugowra offers affordable land and housing.
- l) **Tourism & Character:** Potential for increased tourism due to its history, location near the Newell Highway/Forbes/Parkes, proximity to National Parks & nature reserves, the museum, the village's character and heritage, and the camping/accommodation options (including Byrnes Park & the Showground).
- m) **Sewer:** Centralised sewerage allows subdivision to smaller lot sizes.
- n) **Water:** Central Tablelands Water (CTW) provides a relatively secure water supply to support limited growth (compared to some other Cabonne settlements).
- o) **Telecommunications:** There is a reasonably good level of internet and mobile connectivity in and around Eugowra that would enable people to run businesses and work remotely.
- p) **Recreation:** Access to a good range of recreation and sporting facilities.
- q) **Community Spirit:** Good community associations foster community spirit and local solutions to community needs with a range of community and visitor events throughout the year.

The potential **NEGATIVE** influences on growth include:

- a) **Flooding:** Eugowra is one of the larger settlements with significant amounts of its urban land that are flood prone and below the Flood Planning Level. Whilst this is improving with the Puzzle Creek flood levee improvements, it is both difficult & expensive to get flood insurance across much of the urban area and this restricts development. The buy-back of some houses in the floodway is reducing available housing stock and may be affecting population.
- b) **Bushfire:** Eugowra also has significant amounts of urban land (mostly to the west) that are bushfire prone. This can affect insurance, cost of building and development.
- c) **Limited Land Supply:** As a result of flood & bushfire prone lands & insurance prices, there is a very limited supply of land suitable for affordable development (noting recent improvements with the Puzzle Flat Creek Levee).
- d) **Historic Population:** Eugowra continues to have fairly significant rises and falls in population (with the long-term averages generally negative) making it more difficult to invest and cater for growth. Drought and other agricultural issues appear to have significant flow-on effects for Eugowra and it is heavily reliant on agriculture which is cyclical, reducing long-term resilience.
- e) **Proximity to Regional Centres:** Eugowra is outside the 'commuter zone' (15-25 minutes' drive) of larger centres like Orange & Parkes where most significant growth, demand & employment is occurring. However, proximity to Forbes/Parkes is likely resulting in 'escape expenditure' where people buy most of their goods outside Eugowra, reducing growth of local retail.
- f) **Ageing:** In 2016, the median age in Eugowra was 52 years (up from 49 in 2011) and the highest of all Cabonne's settlements with 29.8% of the population over the age of 65 years. With an ageing population there is a real risk of population decline unless local health services and aged care housing (both limited) allows citizens to remain in Eugowra. An ageing population may also affect families to support the local schools. In addition, there is a limited supply of aged care units & support services in the community & investment is needed to expand. The community run units in Nanima & Evelyn St may also need upgrades.
- g) **Housing Tenure:** Eugowra, like most Cabonne settlements has relatively low levels of rental availability and this may affect temporary employees and lower socio-economic groups seeking to live in Eugowra.
- h) **Employment:** Local employment is likely to be concentrated in the local industries, agriculture and limited retail. This may cause issues if there is agricultural variability that flows through all these employers.
- i) **Public Transport:** Limited public transport restricts access to services / facilities / employment in regional centres for those without access to private vehicles.
- j) **Electricity:** Eugowra is not located near high voltage power lines so it is less attractive for renewable (solar) energy generation & energy dependent industries.
- k) **Tourism:** Limited items of tourist interest to act as major destination & generate longer stays compared to some other larger settlements in Cabonne.
- l) **Finance:** Historically it has been more difficult to get bank finance in lower growth areas of Cabonne (to be confirmed).

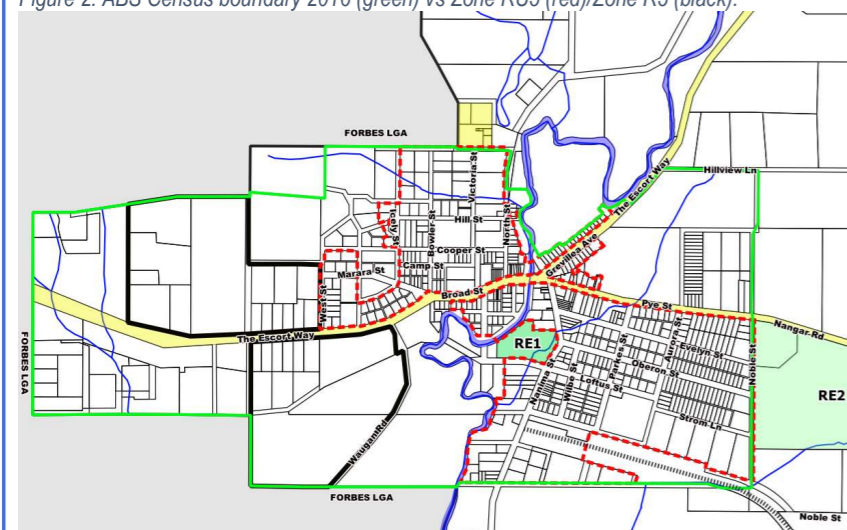
4.5. Population & Dwelling Demand

4.5.1. Census Boundaries

The Figure below shows the 2016 ABS Census Urban Centre boundary (green) for Eugowra compared to the existing urban zones (Village & LLR Zone-red/LLR Zone-black). It shows that the Census boundary includes all of the Village & LLR Zones for Eugowra (plus limited adjacent land) and, therefore, the Census population represents the settlement. The 2011 Urban Centre boundary is also very similar to the 2016 boundary except for a small pocket outside the urban area.

We note that Eugowra is likely to have a rural catchment that utilises the services of this settlement but it is not possible to accurately estimate the influence of this wider population even though they are important to its growth.

Figure 2: ABS Census boundary 2016 (green) vs Zone RU5 (red)/Zone R5 (black).



4.5.2. Historical Population

The table below shows that the Census population for Eugowra (Village + LLR Zone) has varied from a high of 651 people in 1976 to a low of 510 people in 2016.

Over the long term (1976-2016) the average annual population growth rate was approximately -0.54%, and this is similar to the average over the last 10 years of approximately -0.47%/year.

There is some anecdotal evidence that the removal of dwellings under the flood buy-back scheme may be affecting the population and flood/bushfire insurance is making it difficult to replace or build new dwellings.

Figure 3: Table of Eugowra's historic population change 1976-2016 (ABS Census).

Year	Population	Change	% Change from Previous Period	Average Annual % Change
1976	651	N/A	N/A	N/A
1981	577	-74	-11.40%	-2.27%
1986	579	+2	+0.35%	+0.07%
1991	572	-7	-1.21%	-0.24%
1996	612	+40	+6.99%	+1.40%
2001	589	-23	-3.76%	-0.75%
2006	535	-54	-9.17%	-1.83%
2011	530	-5	-0.94%	-0.19%
2016	510	-20	-3.77%	-0.76%
1976 - 2016		-141	-21.66%	-0.54%
1986 - 2016		-69	-11.92%	-0.39%
1996 - 2016		-102	-16.67%	-0.83%
2006 - 2016		-25	-4.67%	-0.47%

4.5.3. Population Projection

This Strategy makes an estimate of future population projection in order to be able to respond to growth or decline through appropriate land supply and planning controls. However, it is an estimate only and based upon a balancing of positive and negative growth factors at the time this Strategy is prepared. There may be future changes that affect growth that cannot be predicted at this time.

For example, the economic and health impacts of COVID-19 are still yet to be fully understood in late 2020 and the range of impacts could be large (though we have assumed that rural communities will continue to be less affected at this time).

For that reason, a range from minimum to average to maximum is provided.

Based on the analysis in this Strategy, the projected population growth average for Eugowra 2021-2041 (20 years) is expected to range from:

- **Minimum: -0.5%/year;**
- **AVERAGE: -0.1%/year (low negative/static population growth);**
- **Maximum: +0.3%/year.**

It is interesting to note that in CSS2012, the population projection expected range 2016-2036 was MINIMUM -0.5%/year; AVERAGE -0.1%/year; MAXIMUM +0.3%/year and in reality, the MINIMUM was nearly correct between 2006-2016.

The positive maximum population growth projection is based in-part on the Puzzle Flat Creek Levee aiming to reduce flood insurance premiums in east Eugowra and free up land for more affordable development and people choosing to live in Eugowra to be near major agricultural employers (e.g., Moxey Farms/Gundamain Feedlot).

The Table below projects the population based on this range and higher/lower figures to allow it to be tested at each census. It suggests that population will not vary greatly over 2021-2041 unless it has very high or low growth.

At such low historic growth rates, it would only take some minor changes in growth potential to increase or decrease this rate so it is important to ensure that a reasonable amount of vacant land is available to cater for potential growth opportunities (i.e., at the maximum growth rate).

4.5.4. Estimated Dwelling Demand

Existing Dwellings

A review of dwellings from the late 2019 aerial photo found ~250 dwellings in the Village & LLR Zones (with an additional 10 dwellings in the census/outside the urban area). In the 2016 Census, 44 dwellings were unoccupied (assume 35 in urban zone) leaving ~225 occupied dwellings. With an occupancy rate in 2016 of ~2.2 people/dwelling this is ~495 people (similar to the census).

Dwelling Approvals 2010-2019

A review of Development Approvals from 2011-2019 (9 years) suggests there have been ~12 new dwellings approved in this time including: ~8 in Zone RU5 Village and ~4 in the Zone R5 Large Lot Residential area, an average of ~1.3 dwellings/year.

Dwelling Construction 2010-2019

The Vacant Land Analysis Figure(s) on the following page(s) shows that from 2010-2020 (10 years) ~17 new buildings were constructed/under construction by late 2020, an average dwelling growth of ~1.55 dwellings/year including:

- a) ~11 dwellings in the Village Zone; 1/year (~65%);
- b) ~6 dwellings in the Large Lot Residential Zone; 0.55/year (~35%).

Figure 4: This Strategy's population projection range for Eugowra 2021-2041.

Range of Potential Average Annual Pop. Growth Rates	Av. Ann. Growth Rate	Projected Population – 5Yr Census Dates						
		2016	2021	2026	2031	2036	2041	Δ pop. 2016-2041
VERY NEGATIVE GROWTH	-1.50%	510	472	436	404	373	345	-165
NEGATIVE GROWTH	-1.00%	510	485	460	437	415	395	-115
MINOR NEG. GROWTH (MINIMUM)	-0.50%	510	497	485	473	461	449	-61
LOW NEGATIVE GROWTH (AVERAGE)	-0.10%	510	507	505	502	500	497	-13
LOW POSITIVE GROWTH (MAXIMUM)	0.30%	510	518	525	533	541	549	39
MEDIUM GROWTH	0.50%	510	523	536	549	563	577	67
HIGH GROWTH	0.70%	510	528	546	565	585	606	96

Projected Future Dwelling Demand

If this historical rate is an estimate of future dwelling growth, there may be need for ~31 dwellings from 2021-2041 (20 years).

However, with an ageing population and more lone person households, dwelling occupancy is expected to decrease and this will naturally increase demand for dwellings (assuming they are affordable) even with a low growth population.

Based on the maximum projected population growth in the next 20 years to 549 people (an extra 39 people) and assuming a household occupancy rate of 2.1 people/dwelling (2016 was 2.2) then the required amount of housing is:

- a) Max. total population (549)/occupancy of 2.1 = 262 dwellings – 225 existing occupied dwellings = ~37 new dwellings; OR
- b) Additional 39 people/occupancy of 2.1 = ~19 new dwellings.

Therefore, this Strategy projects an **AVERAGE future growth** of ~28 new dwellings from 2021-2041 (20 years) or ~1.4 dwellings/year. This is comparable to the historic dwelling growth (~1.55 dwellings/year) in the last 10 years and is supported by the *Summary of Growth Potential* Section above.

Estimated allocation to each residential zone is:

- a) ~20 new dwellings in the Village Zone (~71%); and
- b) ~8 new dwellings in the Large Lot Residential Zone (~29%).

It is expected dwelling development in the Village Zone will dominate demand due to lack of large areas of vacant Zone R5 land.

4.6. Land Supply

4.6.1. Impact of Flood/Bushfire Risk & Puzzle Flat Creek Levee

Please see *Section 4.6 – Opportunities & Constraints* for a more detailed analysis of the impacts of constraints on land supply. In particular, it highlights the flood risk over much of Eugowra's urban area.

Council has been looking to at least partially ameliorate this risk by upgrading the Puzzle Flat Creek levee bank along the creek that runs along the southern edge of the settlement (see ARUP (2015) *Puzzle Flat Creek Levee Upgrade- Concept Design Report* for details).

As the current levee is ineffective, the Puzzle Flat Creek overland flow area extends across most of the Village Zone land east of Aurora St, joining the Mandagery Creek flood fringe to impact on most Village Zoned land.

Bushfire risk in western Eugowra effectively sterilises the remainder of the Village Zone, with insurance premiums reducing the affordability of development & constraining the village growth.

By upgrading the levee to a suitable barrier for the Flood Planning Level it has the potential to remove or significantly reduce flood risk east of Aurora St (mostly overland flow from Puzzle Flat Creek). Ideally, this will be confirmed by an update/addendum to the original Flood Studies. It is assumed the land east of Aurora St will be above the Flood Planning Level (FPL) in this Strategy.

As a result, this Strategy suggests that all vacant land that is either bushfire or flood affected (by Mandagery Creek floodway/flood fringe) is effectively constrained from affordable future development/growth. However, if the levee is successful, land east of Aurora St may be capable of further infill development.

4.6.2. Vacant Land Supply

Based on a review of developed sites in late 2019 (see the Figures opposite and the following page – sites coloured red), Eugowra had ~167 lots without dwellings:

- a) ~153 lots in Zone RU5 Village; and
- b) ~14 lots in Zone R5 Large Lot Residential (LLR).

The sites (or part sites) marked with black hatching are generally constrained from further development as they are within the flood prone lands (excluding the Puzzle Flat Creek that is removed), bushfire prone land, or affected by drainage issues, trees, or significant out-buildings. Those marked with purple hatching are usually owned by the immediately adjacent dwelling and are unlikely to be developed in the short term. Removing these reduces the number of 'vacant' developable lots to a total of ~44 lots:

- a) ~32 lots in Zone RU5 Village; and
- b) ~12 lots in the LLR Zone.

We note that there are larger parcels capable of further subdivision that could provide additional development potential (assuming viable) for ~90 lots:

- a) ~27 lots in the Village Zone – Total ~59 lots;
- b) ~5 lots in the LLR Zone - Total ~17 lots.

It is important to note that many people who seek to live in a rural settlement do so with the expectation of having a larger holding/backyard and will often own the adjacent lot(s) just for a shed, storing equipment, or extended garden. It would be incompatible with the character of these settlements to assume that each and every vacant lot will be developed or subdivided to its minimum lot size.

Even assuming that 50% of the unconstrained vacant land were to be developed (assuming market demand and suitable land price), this may produce:

- a) ~30 lots in the Village Zone; and
- b) ~9 lots in the LLR Zone.

4.6.3. Residential Supply & Demand

Comparing the vacant land supply to projected demand for the next 20 years:

- a) Village Zone: ~30 lot supply; ~1 dwellings/year demand = >20 years supply;
- b) LLR Zone: ~9 lot supply; ~0.4 dwellings/year demand = >20 years supply.

Therefore, there is sufficient supply at projected growth rates in both zones.

However, it is important to note that:

- a) 23/27 lots (85%) in the Village Zone are owned by two (2) owners; AND
- b) 11/17 lots (65%) in the LLR Zone are owned by two (2) owners,

so, if these do not proceed to subdivision within the next few years then there are very few development options outside the flood or bushfire prone lands.

On this basis, Council should investigate additional Strategy (Growth) Areas in the next few years to provide additional supply if the major landholders do not proceed to subdivision in this time. See the Section on *Strategy (Growth Investigation) Areas* below for more details.

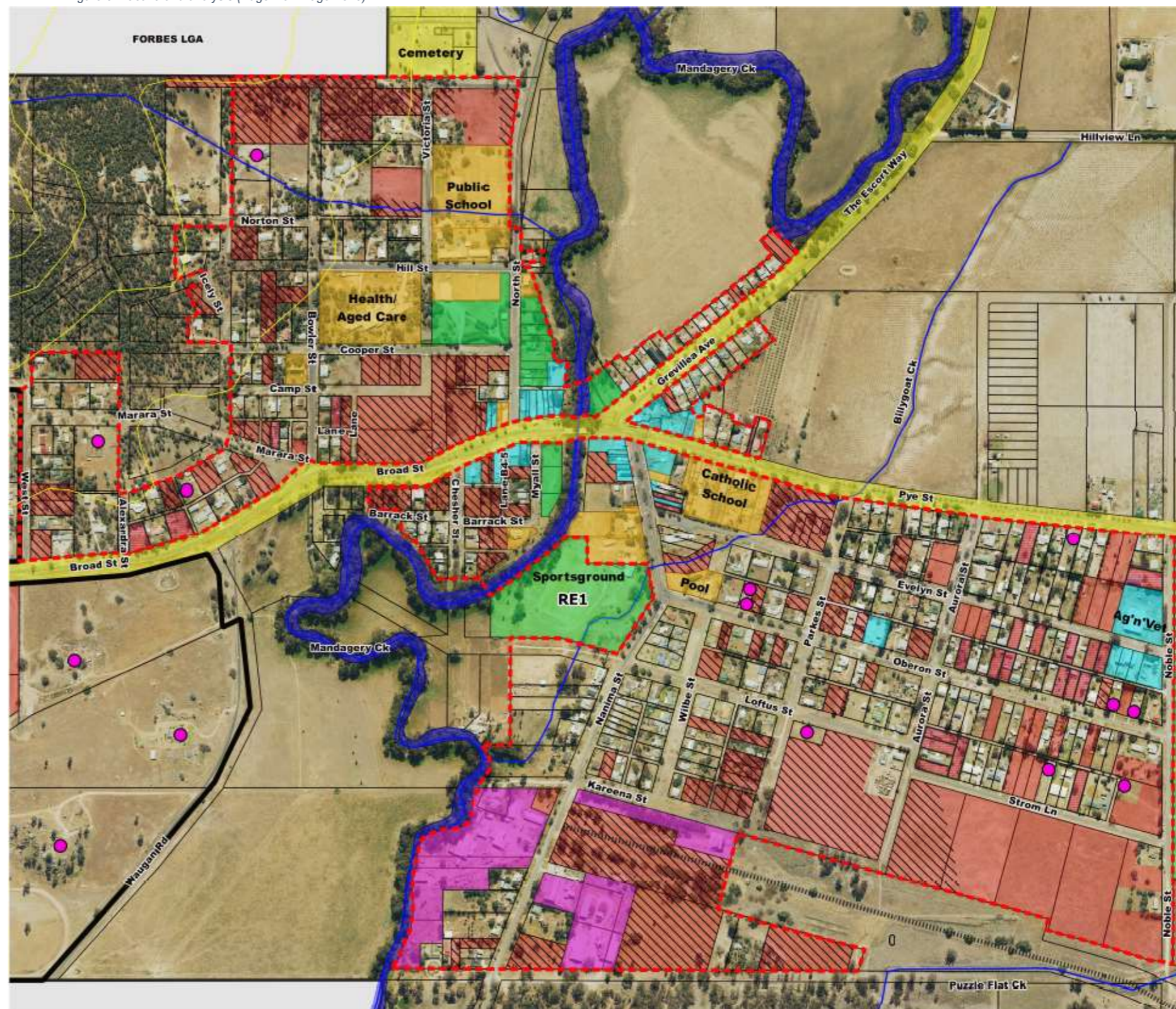
4.6.4. Non-Residential Uses

As the urban area of Eugowra is currently within Zone RU5 Village under CLEP2012, a wide variety of commercial, industrial, and community land uses are permissible with consent across the settlement, subject to merit assessment of impacts.

There is also a reasonable rate of vacancy of existing commercial properties to enable some expansion of community or business uses, assuming that demand increases. Since CSS2012 there have been limited applications for new community or business uses (several existing have been adapted/alterred). For these reasons, there is sufficient supply of land for commercial/business for the foreseeable future.

However, it is noted that the community may like to see some key community / emergency infrastructure relocated to site(s) away from the flood prone lands, possibly at the Showground. This includes the Rural Fire Service (Sportsground) and a possible community multi-purpose centre for evacuation management and community events/child-care. See the Section on *Strategy (Growth Investigation) Areas* for more details.

Figure 5: Vacant land analysis (Eugowra Village Zone).



LEGEND	
	Contour 10m
	Watercourse
	Zoning (LZN) RU5 Village
	R5 Residential (Large Lot)
	RE1 Recreation (Public)
	RE2 Recreation (Private)
	SP2 Infrastructure
	Open Space
	Community Land Use
	Business Land Use
	Industrial Land Use
	Vacant (No Dwelling Sept 2019)
	Constrained Vacant Land
	Vacant Adjacent Owner
	New Building (since 2012)

4.7. Opportunities and Constraints

4.7.1. Natural Environment & Hazards

Urban infill & expansion is heavily constrained by topography, flood prone lands, significant vegetation & biodiversity, bushfire risk and surrounding agricultural land. See *Constraints Mapping* Figure on the following page.

Topography & Drainage

The urban area of Eugowra lies between approximately 250 metres and 360 metres above sea level. There are higher hills located to the north-west of the Village Zone falling down to Mandagery Creek. There is also a small fall from east to west across Puzzle Creek Flat in the east of the village. However, in general the land is relatively flat to the east of Mandagery Creek which results in a larger floodplain & some drainage issues. The hills to the north-west provide an important landscape backdrop to the development in Eugowra and are an important part of the settlement's character. However, the steeper slopes increase the need for cut/fill/retaining & are likely to increase development costs in the western area.

Watercourses

Mandagery Creek is a sensitive (riparian) watercourse that flows from north to south and splits the settlement. It has a large catchment that extends up to Molong and includes Boree, Manildra & Waterhole Creeks. In addition, Puzzle Flat Creek runs from the east to the west along the southern edge of the settlement. Mandagery Creek flows into the Lachlan River to the south of Eugowra. There are a number of intermittent unnamed drainage lines that also cut through the urban area.

Flooding

The floodplain experiences significant flood events with the Flood Planning Area (1% Annual Recurrence Interval + 500mm freeboard) currently mapped as covering all of the Village Zone east of Mandagery Creek and a significant proportion to the west in the *Eugowra Floodplain Management Study (1999) & Review (2010)*.

The floodway (high hazard) area for Mandagery Creek affects a significant portion of the Village Zone resulting in Council's policy to repurchase/remove some dwellings.

Flooding imposes a number of restrictions to new development including additional site & buildings costs & increased flood premiums that make Eugowra less affordable & suppress development. Please see *Section 4.5.1* above for more details on the impacts of upgrades to the Puzzle Flat Creek Levee.

Vegetation & Biodiversity

Sensitive biodiversity usually aligns with significant vegetation, mostly along Mandagery Creek and in the Crown lands/travelling stock reserves/recreation areas. It also sits on ridgelines around the settlement. However, the constraints are limited in the Village Zone areas and only some of the LLR Zone, though, any development may still affect biodiversity, particularly on larger uncleared sites.

Bushfire

The large area of vegetation on the hill to the north-west and north of Eugowra is mapped as bushfire prone land (RFS 2003) and poses a significant risk to the settlement (& insurance premiums) that constrains growth to the west of Mandagery Creek and in some of the large lot residential area. There are also pockets of bushfire prone land to the south and east and the heavily vegetated travelling stock reserve & grasslands pose a risk.

Geology

Other than some steeper lands, geology does not appear to be a significant constraint for Eugowra with no significant karst (limestone) though there are also rocky outcrops along ridges throughout some of the lands that might affect lot size and servicing. Naturally occurring asbestos is not mapped in the area.

Groundwater

The CLEP2012 *Groundwater Vulnerability Map(s)* for Eugowra show that the Village Zone is generally covered by moderately-high to high groundwater sensitivity but the Large Lot Residential Zone is less affected. This is not a major constraint to land serviced with reticulated sewer & water (where bores are generally limited) and large lot residential land is unlikely to have a significant impact if bore consumption does not exceed supply.

Figure 6: Vacant land analysis (Eugowra West Large Lot Residential Zone).

Note: Aerial photograph does not align exactly with the lot boundaries in this area.

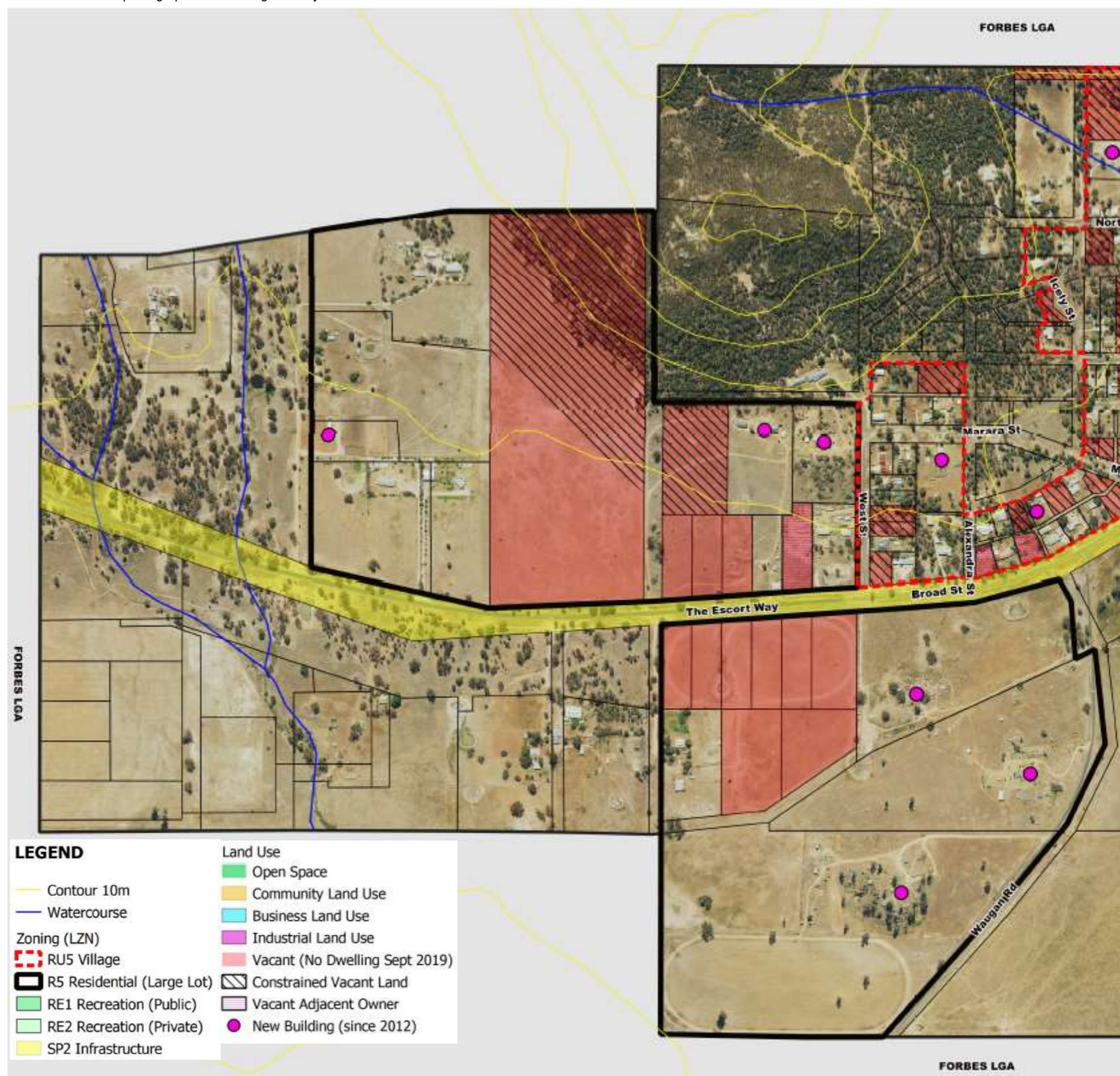
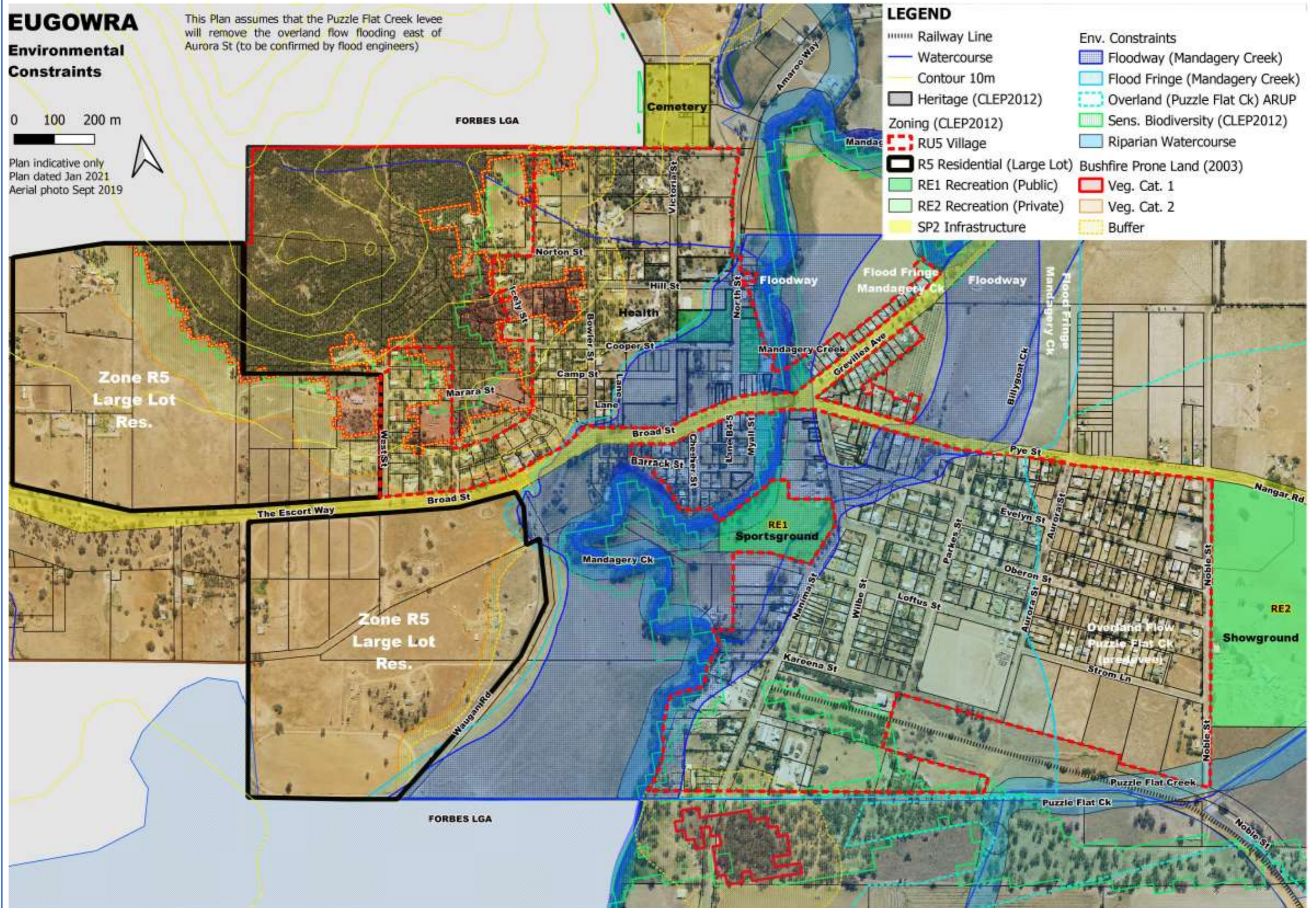


Figure 7: Key environmental constraints.



4.7.2. 2008 Subregional Strategy

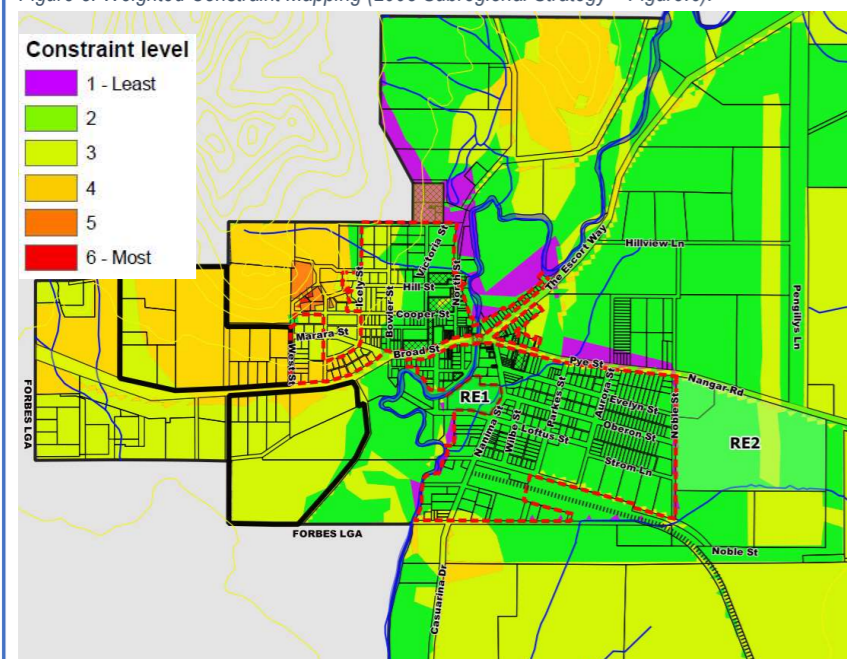
Whilst the 2008 Subregional Strategy did not make recommendations for individual settlements, it did provide constraint analysis for the entire Shire that is unlikely to have changed significantly in 2020.

The Soft Constraints Analysis provided a weighting to various constraints and represented them as levels from 1 (least) to 6 (most) constrained. However, we suggest that this mapping did not factor in all of the constraints and requires site specific testing.

The Constraints Mapping around Eugowra (see Figure below) shows that most of the existing Village Zone is in Level 2 Constraint area. This Constraint Level extends out to the north-east and south-east of the Village Zone (with some small pockets of Level 1 (least) Constraints. However, for west Eugowra and the Large Lot Residential areas the bushfire risk increases this to Level 3-4 (moderate constraints and less development potential).

At this stage, additional infill development within the existing Village Zone and Large Lot Residential areas and some future investigation of lands to the east and north-east is consistent with the 2008 Subregional Strategy.

Figure 8: Weighted Constraint Mapping (2008 Subregional Strategy – Figure.6).



4.7.3. Agriculture

Agricultural land (outside urban areas) has historically been classified according to land capability Class 1 (high quality) though to Class 6 (low quality) though this system is limited in its application and isn't verified at the property level.

The NSW Government agricultural policy is to try to protect higher quality land from unnecessary urban encroachment or land use conflict (e.g., 'Right to Farm' policy). The mapping below suggests that land immediately surrounding Eugowra's Village Zone, particularly to the north, east and south is in Class 2 (higher quality land). The land including the Large Lot Residential area to the west is mostly in Class 3 (moderate quality).

Eugowra is identified as having Biophysical Strategic Agricultural Land (BSAL) (see Figure below) running along the Mandagery Creek/Puzzle Flat Creek valleys to the north, east and south of the Village Zone (though this mapping is for the purpose of preventing land use conflict with extractive industries, not urban growth).

Unfortunately, due to flood and bushfire risk, there is only the potential to develop to the east & north-east out of the flood zone.

The Central West Pilot (2012) Agricultural Study mapping for Cabonne suggests that land immediately around Eugowra urban area is NOT important cropping and grazing, horticulture and viticulture, or wool producing land (though wool producing lands are to the south and east further away from the settlement). This contrasts with the BSAL map.

Figure 9: Indicative map of Agricultural Land Capability Classes around Eugowra.

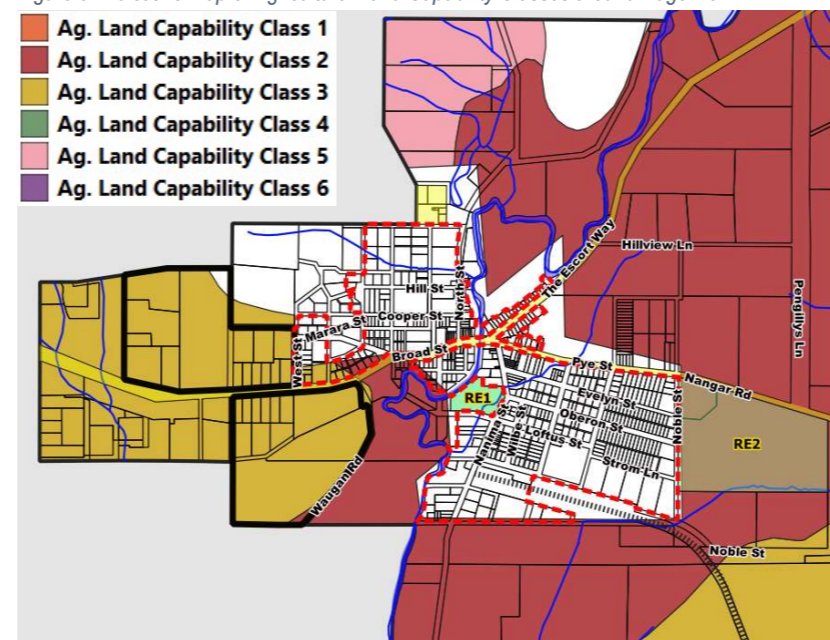
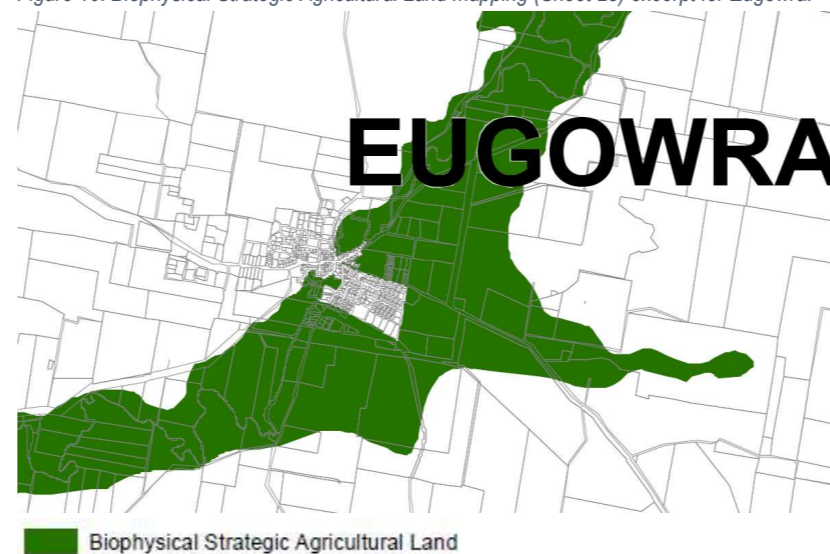


Figure 10: Biophysical Strategic Agricultural Land mapping (Sheet 23) excerpt for Eugowra.



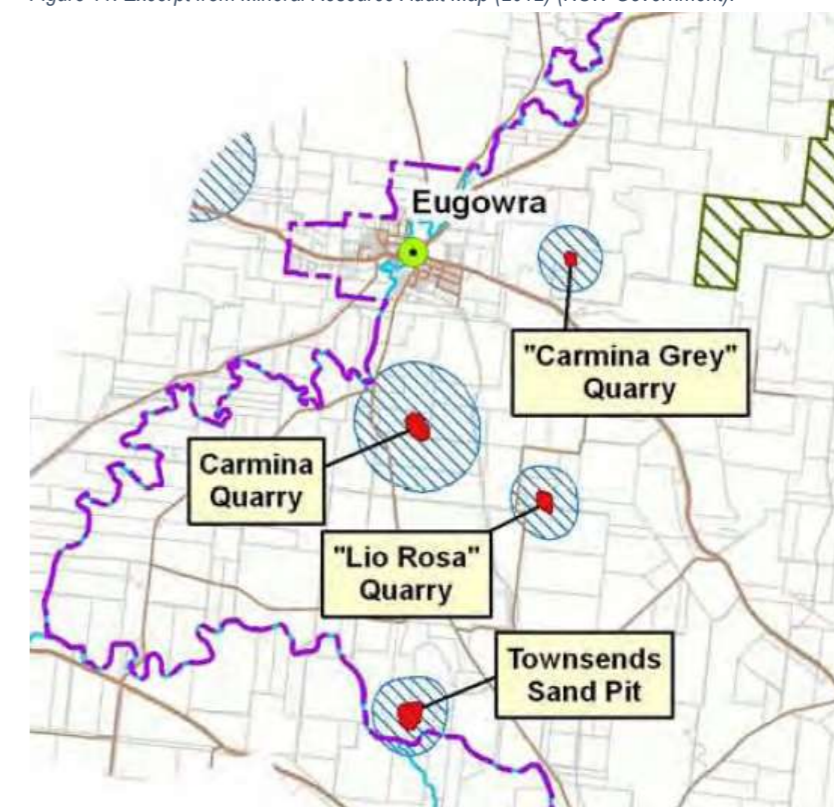
4.7.4. Mineral Resources

Generally, growth of urban and residential uses should seek to avoid or minimise impacts on known existing extractive industries or areas with potential mineral resources.

The Figure below is an excerpt from the 2012 Mineral Resource Audit mapping for Cabonne. It shows that there are no existing quarries or potential resource areas whose buffers extend over the Eugowra urban area or constrain its growth.

However, there are a number of quarries to the east and south that should be protected/ considered. Therefore, any urban growth around the fringes of Eugowra, particularly to the north-east is unlikely to significantly increase land use conflict.

Figure 11: Excerpt from Mineral Resource Audit Map (2012) (NSW Government).



RESOURCE CLASSIFICATION

- Identified Resource - areas containing existing quarries, mines, and/or identified resources**
Industry & Investment NSW would generally object to any proposed zoning changes or developments that may prohibit mining or quarrying in these areas. Any proposed zoning changes or developments that may prohibit mining or quarrying in these areas should be referred to Industry & Investment NSW for comment.
- Potential Resource - areas containing potential mineral and/or extractive resources**
Development within these areas could adversely affect or be affected by future mining and/or extractive resource operations. Any proposed zoning changes or developments that may prohibit mining or quarrying in these areas should be referred to Industry & Investment NSW for comment.
- Buffer Zone**
Development within these areas could adversely affect or be affected by adjacent mining and/or extractive resource operations. Any proposed zoning changes or developments that may conflict with mining or quarrying on adjacent lands should be referred to Industry & Investment NSW for comment.

4.8. Strategy (Growth Investigation) Areas

The aim of this Strategy is to identify up to 20-years' supply of urban and large lot residential land supply for each settlement where growth is sustainable and ensure planning decisions do not constrain future growth or increase land use conflict.

This Section sets out the identified Strategy Areas in rough order of priority (subject to market feasibility & detailed site studies). See the following Figure(s): *Growth Areas*.

If at least 10-20 lots from the existing infill areas of the Village Zone (east of Aurora St) and LLR Zone are not made available in the next 5 years (by 2026) then Eugowra is unlikely to have sufficient supply of land in the medium term (5-10 years).

Therefore, Council should discuss with the relevant land owners of the following Strategy (Growth) Areas whether they would be willing to rezone their land to provide potential for up to 20 year' supply or 50 dwelling lots.

4.8.1. Infill Development within Existing Urban Zones

This Strategy encourages infill development within existing zones in preference to expansion of the urban area into agricultural lands to meet dwelling demand.

The Vacant Land analysis above suggests that there are some vacant/under-developed existing lots outside the flood planning area, particularly to the east of Aurora St, as well as some additional subdivision potential in both Zone RU5 Village and Zone R5 Large Lot Residential (LLR).

Therefore, before the following Strategy (Growth) Areas are investigated and NEW land is rezoned, there should have been reasonable attempts made to purchase and develop infill land.

However, it is common in Cabonne's villages for people to desire a larger holding for privacy/amenity and release of land for development is limited. As land values increase it is expected that this position may change slightly. This is covered in more detail in this Strategy in the **Local Profile Section 2.3 – Tools/ Incentives to Achieve Desired Outcomes**. Should infill areas not be put on the market within a reasonable timeframe then additional areas may need to be rezoned.

Warning: If significant areas of existing vacant/under-developed urban/LLR zoned land is not developed in the next 10 years (by 2031) then Council may rezone part or all of these areas to rural use to allow the identification of alternative areas.

In Eugowra, in particular, the following land should be encouraged for additional (infill) development:

a) East of Aurora St (Village Zone) – particularly Area 'Infill 1'

This assumes the Puzzle Flat Creek levee will remove this creek's floodplain east of Aurora St and, as a result, the area is no longer flood prone land.

Infill 1 consists of 4 lots / 2 owners with ~7.3ha of land. If this is connected to reticulated sewer/ water it could subdivide down to 900m²/lot but in reality, is more likely to achieve lots of 1,200-2,000m². To maximise lot yield it will need new internal roads from either Strom Lane or Noble St. A preliminary estimate of yield is ~20-25 lots. It may have issues with sewer servicing as it falls towards Puzzle Flat Creek to the south (away from sewer to the north) but utilities are in the adjacent streets. It is believed this owner is already investigating subdivision potential.

b) Showground Site (Zone RE2) – 'Infill-Comm' (Community Facilities)

The community is interested in better utilisation of the Showground Site east of Noble St. One of the priorities is to seek funding to relocate the Rural Fire Service (RFS) and possibly the pre-school from the flood prone lands in/near the sportsground out to the Showground. Another priority is to have a multi-purpose community facility for events, meetings & emergency co-ordination & evacuation centre.

If the Puzzle Flat Creek levee addresses overland flow issues east of Aurora St, then the western section of the Showground may be a suitable emergency evacuation centre away from the bushfire prone and flood prone lands. The SES/Ambulance is already located on the site.

Zone RE2 already permits with consent 'community facilities' and 'emergency services facilities'. 'Child care' or 'educational facilities' are currently prohibited but could be ancillary to this or there would need to be amendment to CLEP2012.

c) West Eugowra along The Escort Way – particularly 'Infill LLR' areas

The existing Large Lot Residential (LLR) zoned areas to the west of Eugowra along The Escort Way & Waugan Rd are currently under-developed. They are mostly above the Flood Planning Level (though cut off from East Eugowra in a flood) and whilst bushfire prone, the main risk is for land closer to the vegetated hill to the north. There is a historical subdivision pattern on some of the lots fronting The Escort Way but few of these lots have dwellings. Large areas of land appear to be used for horse training. If the owners of some of this land could be convinced to release land for development then it would provide significant potential for growth.

4.8.2. EUG1 – Rear of Museum (Minor)

Strategy Area EUG1 is a small area of land (~1,800m²) between Grevillea Ave and Pye St (behind the museum) where the lots in the Village Zone are split-zoned and part of the 2 lots are in the surrounding Rural Zone. This may have been an error in CLEP2012 when the Village Zone was rationalised or the cadastre has changed since that time.

There is some discussion around future expansion of the museum or relocation of the Men's Shed here. It is unlikely to be used for significant residential development.

As a house-keeping amendment, if the owners requested, Council could consider putting this land back in the Village Zone, noting that it is in the flood fringe of Mandagery Creek – so it has limited development potential.

4.8.3. EUG2 – Noble St / Adjacent Puzzle Flat Creek Levee

The newly constructed Puzzle Flat Creek levee will sever a triangle of land (~1.9ha) from the remainder of the rural land that will be in the flood zone and, as a result, it would have limited agricultural potential.

Assuming Strategy Area EUG2 is above the Flood Planning Level, once the levee is constructed this triangle could be included in the Village Zone to permit a few dwellings fronting Noble Street. Whilst it doesn't have significant yield potential, it may further facilitate the upgrade of Noble St along with Infill 1 Area development.

4.8.4. EUG3 – West Eugowra (The Escort Way/Waughan Rd)

Strategy Area EUG3 is existing Zone R5 Large Lot Residential land to the west of Eugowra and opposite Zone RU5 Village Zone across The Escort Way. It currently only appears to have one (1) existing dwelling and is ~6.6ha. There is reticulated sewer & water running along Broad St/The Escort Way in front of the property. On this basis it is suggested this is a natural extension of the Village Zone into less constrained land.

Whilst this land is outside the Flood Planning Level it may become isolated from east Eugowra during flooding and is still within Bushfire Vegetation Class 2, though its separation from the vegetated hill is likely to reduce its risk. There are also some rocky outcrops that may affect yield and servicing.

However, there are utilities in Broad St/The Escort Way and the land is already fragmented. Levels need to be checked to see if sewer can drain towards the existing sewer mains or a pump station may be required.

4.8.5. EUG4/5 – West Eugowra (The Escort Way/West St)

As stated above, Strategy Areas EUG4/5 include a historic subdivision pattern with a number of smaller lots down to ~0.7ha. There are only two (2) existing dwellings and what appears to be a horse training track.

This area has two possibilities:

- To remain in the existing Zone R5 Large Lot Residential area and utilise the existing historic lot pattern to produce up to ~15 lots using some right-of-way/ easements for access to rear lots; or
- To rezone the land to Zone RU5 Village to permit urban residential lots down to ~2,000m² with additional subdivision potential subject to internal road provision.

There are reduced upfront costs to re-utilise the historic lot pattern in existing LLR zone so this is more likely.

4.8.6. EUG6 – NE Eugowra Pye St (Aurora/Noble St Extensions)

Strategy Area EUG6 (~13.73ha) is an area to the north-east of Eugowra, north of Pye St between the natural extensions of Aurora St and Noble St (becoming Hillview Lane to the north) with 3 owners.

Assuming that the Puzzle Flat Creek levee removes this area from the flood fringe and it is outside the Flood Planning Level for Mandagery Creek then it may be suitable for an extension of the Village Zone for urban residential use. An urban residential zone would be preferable to a large lot residential (LLR) zone as it is likely to produce more lots and offset the cost of forming up the roads for access.

It already has a historic subdivision pattern and surrounding Crown road resulting in 23-26 small lots and 4-5 larger lots. However, ideally all 3 land owners would work together to create a more logical and efficient road/lot pattern. The land should naturally drain to Pye St (though it is quite flat and there are some drainage issues) and existing sewer lines/ utilities run along Pye St.

Whilst this land is mapped as being Class 2 Agricultural Land Capability & Bio-physical Strategic Agricultural Land – due to flooding and bushfire Eugowra has few other choices for expansion of the Village Zone so the conflict is justified.

It has an interface with agriculture on 3 sides but the land holdings are relatively small and fragmented and intensive agriculture is not visible so land use conflicts can be managed. There are lands to the east and north (Hillview Lane) that could act as future growth or alternative areas, though these are further from the village centre and significant parts are likely to be flood affected. Drainage of this land would need to be investigated.

4.8.7. Cabonne Settlement Strategy 2012 (CSS2012)

The Strategy (Growth Investigation) Areas remain relatively unchanged from what was recommended in CSS2012 though since then the Puzzle Flat Creek Levee is likely to reduce flood impacts east of Aurora St to enable some infill development and minor urban rezoning in this area. There is also increased potential to expand urban development to the west into the existing LLR area. The industrial recommendations in CSS2012 have since being removed from CLEP2012.

4.9. Minimum Lot Size for Subdivision (CLEP2012)

It is not recommended to change the Minimum Lot Size (MLS) for subdivision in existing Zone RU5 Village or Zone R5 Large Lot Residential lands.

There is no clear evidence that on-site effluent management is failing at the existing minimum lot (subdivision) sizes.

Generally, landowners and the community appear to want larger lot sizes for dwellings so there is little pressure to subdivide to the minimum.

4.10. Planning Control Recommendations

Rezoning recommendations are in accordance with the Strategy Area recommendations above. Minimum Lot Size (MLS) is reviewed in *Section 4.8* above.

There is currently no comprehensive DCP for Eugowra though there are DCPs for general LLR areas (DCP6); relocatable homes (DCP15); and flood prone lands (DCP16) – mostly out-of-date (though the flood controls are still relevant).

A new comprehensive DCP covering all major forms of urban and large lot residential should be prepared. In addition, for any Strategy (Growth) Areas, there should ideally be DCP site-specific controls, potentially including a structure plan guiding access & connections & responses to site constraints to deliver the best outcomes.

4.11. Additional Studies

It is important to note that this Strategy is NOT a comprehensive investigation of the suitability of any Strategy (Growth) Areas for future development. The land owners or Applicants will need to prepare a Planning (Rezoning) Proposal, potentially supported by a number of environmental & other studies to justify any rezoning and/or development.

Figure 12: Strategy (Growth Investigation) Areas – EUGOWRA.

