

Bega Structure Plan

June 2024

Proudly funded by the NSW Government in association with
Bega Valley Shire Council



Job Name: Bega and Wolumla Structure Plans

Client Contact: Sophie Thomson (Strategic Planning Coordinator)

Project Manager: Dan Barr - danbarr@bettercitiesgroup.com

Version	Date	Reviewed	Approved
V1 early draft (Stage 2A)	15/06/23	BH	DB
V2 early draft (Stage 2B)	01/08/23	BH	DB
Final Draft	15/12/23	BH	DB
Final 1	08/03/24	BH	DB
Final 2	28/03/24	BH	DB
Final 3	04/06/24	BH	DB

Disclaimer

The Better Cities Group does not warrant the accuracy of the information contained within and accepts no liability for any loss or damage that may be suffered as a result of reliance on this information, whether or not there has been any error, omission or negligence on the part of the Better Cities Group or their employees.

Any forecasts or projections used in the analysis can be affected by a number of unforeseen variables, and as such no warranty is given that a particular set of results will in fact be achieved.



Contents

GLOSSARY	5
FIGURES	6
TABLES	7
APPENDICES	7
EXECUTIVE SUMMARY	8
PART 1 CONTEXT	12
1.0 Introduction.....	12
1.1 Vision and Objectives.....	15
1.2 Council’s Role	15
1.3 Methodology.....	17
2.0 Context	18
2.1 Policy	18
2.2 Demographics	21
3.0 Stakeholder Engagement.....	24
3.1 How we engaged	24
3.2 Who we engaged	25
3.3 What we heard	26
4.0 Site Analysis.....	29
4.1 Additional Opportunities.....	29
4.2 Planning Assessment	31
4.3 Transport & Access	58
4.4 Services.....	61
4.5 Technical Studies	64
4.5.1 Biodiversity	64
4.5.2 Preliminary Contamination Investigation Report.....	70
4.5.3 Aboriginal Cultural Heritage Due Diligence Assessment.....	71
4.5.4 Recreational Needs Assessment	77
4.6 Opportunities and Constraints.....	80
4.7 Precinct Planning	82
PART 2 STRUCTURE PLAN	93
5.0 Precincts.....	94
5.1 Western Precinct	94

5.2	Central Precinct.....	96
5.3	Eastern Precinct.....	98
6.0	Master Structure Plan	100
7.0	Developable Area.....	103
8.0	Economic Impact Assessment	106
	Appendix A - Have Your Say Engagement Collateral.....	110
	Appendix B - Economic Impact Assessment (provided separately).....	113
	Appendix C - Recreation Needs Assessment (provided separately).....	113
	Appendix D - Biodiversity HEV Mapping Validation (provided separately)	113
	Appendix E - Preliminary Aboriginal Heritage Desktop Assessment (provided separately)	113
	Appendix F - Preliminary Contaminated Land Assessment (provided separately).....	113
	Appendix G - Additional Aboriginal Engagement	114

GLOSSARY

AHIP	Aboriginal Heritage Impact Permit
BAM	Biodiversity Assessment Methodology
BC Act	Biodiversity Conservation Act 2016
BDAR	Biodiversity Development Assessment Report
BVSC	Bega Valley Shire Council
BLALC	Bega Local Aboriginal Land Council
BOS	Biodiversity Offsets Scheme
CBD	Central Business District
DCP	Development Control Plan
DPHI	Department of Planning, Housing and Infrastructure
EP&A Act	Environmental Planning and Assessment Act 1979
IAP2	International Association for Public Participation
LEP	Local Environmental Plan
LSPS	Local Strategic Planning Statement 2040
NSW RFS	New South Wales Rural Fire Service
PAD	Potential Archaeological Deposits
PBP	Planning for Bush Fire Protection 2019
RLS	Residential Land Strategy 2040
TfNSW	Transport for New South Wales

FIGURES

Figure 1. Regional plan	12
Figure 2. Bega study and opportunity areas.....	13
Figure 3. Typical landscape within the Bega study area.....	14
Figure 4. Influences on housing supply.....	16
Figure 5. Methodology.....	17
Figure 6. BVSC Policy Documents.....	20
Figure 7. Historical population	21
Figure 8. Forecast population.....	22
Figure 9. Difference between 2019 and 2022 population projection	22
Figure 10. Have Your Say collateral package.....	24
Figure 11. Social media tile and poster.....	25
Figure 12. Survey results - housing supply.....	26
Figure 13. Survey results - land allocation.....	26
Figure 14. Survey results - active travel connections	27
Figure 15. Bega additional opportunities	30
Figure 16. Bega study and opportunity areas	31
Figure 17. Bega precinct - current zoning.....	33
Figure 18. Residential Land Strategy identified study areas	38
Figure 19. Guidance for Development of Small Lots.....	41
Figure 20. Land use context map (east and central).....	43
Figure 21. Land use context map (west).....	45
Figure 22. Current LEP zoning.....	47
Figure 23. Floor space ratio overlay mapping.....	49
Figure 24. Steep slope assessment (black dotted line represents areas of flatter topography).....	50
Figure 25. Flood planning area	51
Figure 26. Bushfire prone land.....	52
Figure 27. Hydrology and Aquatic Habitat (NGH).....	53
Figure 28. Biodiversity values and NSW State vegetation type map (NGH)	54
Figure 29. Biodiversity constraints map (NGH)	54
Figure 30. Aboriginal heritage report - AHIMS sites (NGH).....	56
Figure 31. Aboriginal heritage report - potential aboriginal cultural sensitivity.....	56
Figure 32. Princes Highway upgrades	58
Figure 33. Bega road network and access.....	60
Figure 34. Existing service infrastructure (west and east).....	61
Figure 35. Proposed service infrastructure (west and east)	62
Figure 36. Preliminary biodiversity constraints (NGH).....	65
Figure 37. Preliminary archaeological sensitivity mapping (NGH).....	75
Figure 38. Bega opportunities and constraints plan.....	81
Figure 39. Bega precinct planning objectives	83
Figure 40. Objective - vehicle reduction	84
Figure 41. Objective - sustainability.....	85
Figure 42. Objective - infrastructure	86

Figure 43. Objective - amenity	87
Figure 44. Objective - housing diversity.....	88
Figure 45. Objective - climate resilience	89
Figure 46. Objective - open space and active travel	90
Figure 47. Bega study area precincts	91
Figure 48. Western precinct.....	94
Figure 49. Central precinct	96
Figure 50. Eastern precinct	98
Figure 51. Master structure plan	100
Figure 52. Proposed access considerations.....	101
Figure 53. Proposed zoning.....	102

TABLES

Table 1. Key strategies from Local Strategic Planning Statement.....	36
Table 2. Residential zoning	39
Table 3. Housing diversity	42
Table 4. Development approvals	46
Table 5. Current zoning	48
Table 6. Species with BioNet records within study area	66
Table 7. Plant community types associated with threatened ecological communities.....	67
Table 8. Aboriginal heritage due diligence steps	72
Table 9. Heritage constraint categories.....	74
Table 10. Sport and recreation needs.....	79
Table 11. Western precinct LEP changes	95
Table 12. Central precinct LEP changes	97
Table 13. Eastern precinct LEP changes.....	99
Table 14. Bega developable area and proposed yield	104
Table 15. Bega and Wolumla consolidated developable area and proposed yield.....	105
Table 16. Construction phase benefits	108
Table 17. Operational phase benefits	109

APPENDICES

Appendix A - Have Your Say Engagement Collateral

Appendix B - Economic Impact Assessment

Appendix C - Recreation Needs Assessment

Appendix D - Biodiversity HEV Mapping Validation

Appendix E - Preliminary Aboriginal Heritage Desktop Assessment

Appendix F - Preliminary Contaminated Land Assessment

Appendix G - Additional Aboriginal Engagement

EXECUTIVE SUMMARY

The Bega master structure plan (structure plan - shown below) has been developed to provide a strategic framework around the development of the area to the south of the Bega CBD. Current population forecasts indicate that the Bega Valley Shire will require an additional 1,070 dwellings in the next 14 years. Development of this structure plan would deliver in the order of 2,113 dwellings over an anticipated timeframe of 25 years.

This structure plan and the one developed for Wolumla seek to clearly articulate how this housing can be developed by considering future development land, planning requirements, infrastructure servicing, transport, property ownership and the views of the community.

This analysis identified that there are three precincts within the scoped study area suitable for residential, commercial, retail and open space requirements. This is shown below in the master structure plan:



Planning analysis for the Bega study area has been split into the western precinct, central precinct and the eastern precinct. Precinct development has been determined by the alignment of the Princes Highway which bisects the study area and the cluster of industrial and community land uses in the central precinct which presents opportunity for mixed use development on the periphery of the traditional Bega township. The three precincts are summarised as follows:

- The eastern precinct is bounded by the Princes Highway along its western boundary, and low-lying rural production land which is flood affected to its east. There is established detached residential development to the north of the Bega study area (East) and the new Bega - South East Regional Hospital.
- The central precinct provides opportunities for development for uses which are complimentary to the regional hospital and light industry, to the north-west of the eastern precinct.
- The western precinct is largely undeveloped, with some pockets of large lot residential development and historic rural living / industries on large parcels. The area includes the Sapphire Coast Anglican College and a Place of Worship (Jehovah's Witness). The area is bounded by the Princes Highway to the east and the Bega River to the west. Land along the Bega River is generally low lying and subject to flooding.

Key considerations for new development within the Bega study area include Aboriginal cultural heritage conservation, biodiversity values, flooding, infrastructure service delivery and protection of arable land.

Further residential development in the Bega study area is also constrained by the underlying zoning pattern established by the current Local Environmental Plan. Increasing residential density will require a change to underlying zonings, particularly existing RU1, RU2 and R5 Zones which are intended to maintain rural production and character through larger lots and generally prohibit further sub-division.

In this area the RU2 Zone was applied to land that was previously zoned 'Future Urban' as this zone does not exist in the Standard Instrument. RU2 was used as a holding zone to prevent further subdivision pending a comprehensive analysis of the capacity of the land for urban development (this plan).

The structure plan was developed using the following objectives as a framework:

- Pedestrian friendly neighbourhoods including vehicle reliance reduction;
- Sustainable development to manage growth;
- Efficient use of land and infrastructure;
- Natural features, amenity and character to be protected and enhanced;
- Promote opportunities for housing diversity;
- Builds climate resilience; and
- Contribute to open space and active travel connections.

The draft structure plan was placed on public display for comment. There were 228 submissions with the following outcomes:

- That providing more housing supply is important to the community (80% support in the online survey);
- That delivering more housing could improve affordability (over 50% support for supply in the online survey);
- That there is strong support for more land to be allocated to housing (over 70% support for more land allocation in the online survey);
- There is majority support for the western precinct proposal (Nearly 70% supported or were neutral, 20% were unsure and 11% disagreed);
- There is majority support for the central precinct proposal (Around 66% supported or were neutral, 19% were unsure and 15% disagreed); and
- There is majority support for the eastern precinct proposal (Nearly 65% supported or were neutral, 20% were unsure and 15% disagreed).

As these developments occur, there will be increased capacity requirements for the road network and Princes Highway. The structure plan sought to consolidate the number of connections onto the Princes Highway in recognition that future transport planning will provide a basis for interchange upgrades in the future.

Water is available via bores within the precinct area. Sewer connection would be via the sewer treatment plant located near the new hospital making the eastern precinct the most logical precinct to develop first.

The western and eastern precinct are largely in private ownership however the central precinct has some government owned land indicating that there is an opportunity to develop the type of built form outcomes sought in this location independent of the timeframes of privately owned developments.

This structure plan process has confirmed that this site and the Wolumla site have the potential to meet the housing needs of the Shire for the next few decades.

Stage 1

CONTEXT

PART 1 CONTEXT

1.0 Introduction

Recent population growth in Bega Valley Shire is causing a housing shortage both for purchase and for rent. This has accelerated the need for future urban release areas and the need for housing stock in the short term.

To facilitate this process in a strategic manner this project has been funded by the DPHI's Regional Strategic Planning Fund. It was delivered by Bega Valley Shire Council (BVSC) with Better Cities Group as lead consultant in partnership with Development Directive, Think Economics and NGH Consulting. The two areas being included in this project are Bega and Wolumla with regional context depicted in figure 1.

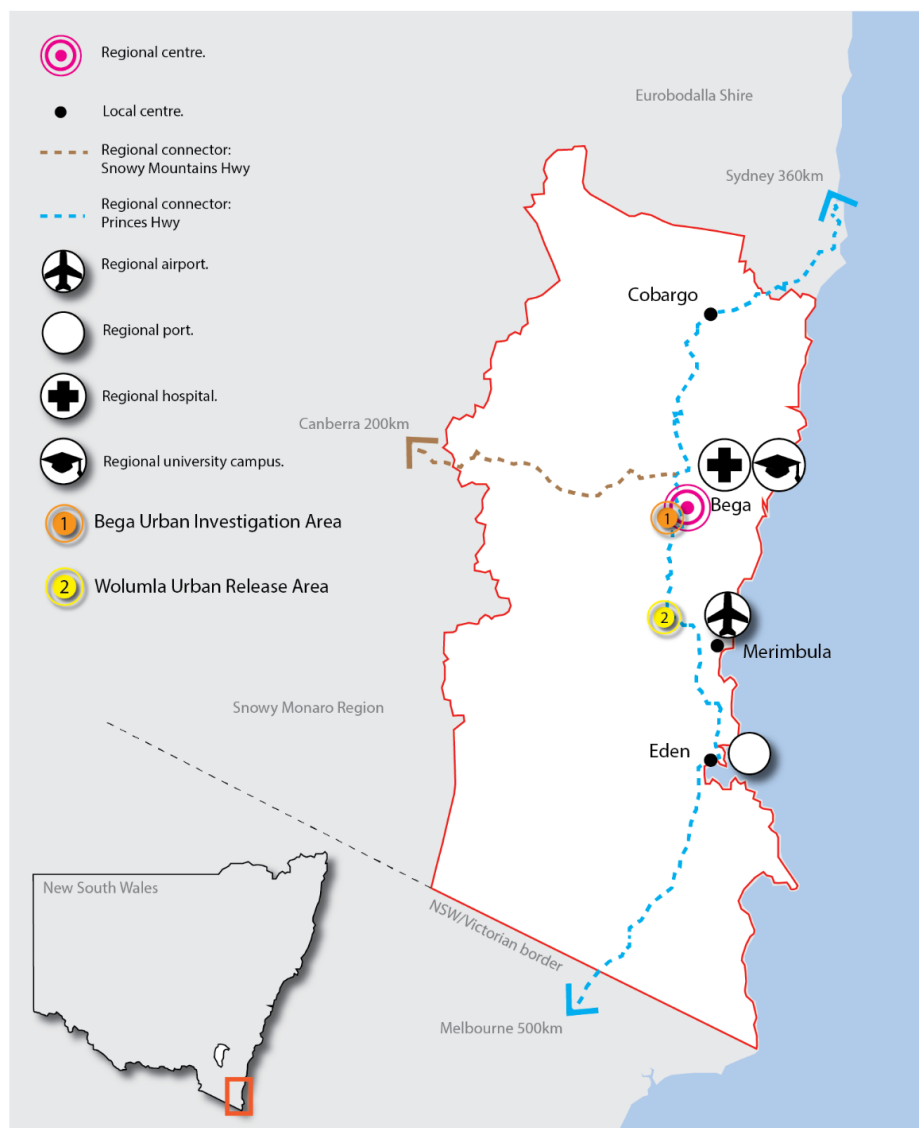


Figure 1. Regional plan

Bega

The Bega Valley Shire Affordable Housing Strategy identifies Bega as one of the three key locations for the provision of affordable housing within the Shire. Bega is the regional centre of the Bega Valley Shire and recent subdivision applications have created a shortage of greenfield land for future residential development.

The originally scoped Bega study area comprising 658ha to the south of the existing township has been identified for assessment of the suitability for urban residential development in this project - this is the study area.

This site has a highly fragmented pattern of ownership and numerous constraints including flood prone land that will affect both the suitability of the land for urban residential purposes and the resulting development pattern. This structure planning analysis further defines these constraints within the context of future residential development.

The study area also includes three investigation areas to the south of the existing Bega township within the BVSC Local Government Area as detailed below.

- Study area - This land comprises 658ha and includes three approved rural residential subdivisions that are not yet completed - this was the original scope of this structure plan. BVSC continue to work with the potential developers of these parts of the study area to provide options that will increase dwelling yield.
- Opportunity Areas - This land comprises 206ha which adjoins the study area and provide additional opportunities for future approval of residential subdivisions - this additional scope has been added during the development of this structure plan.

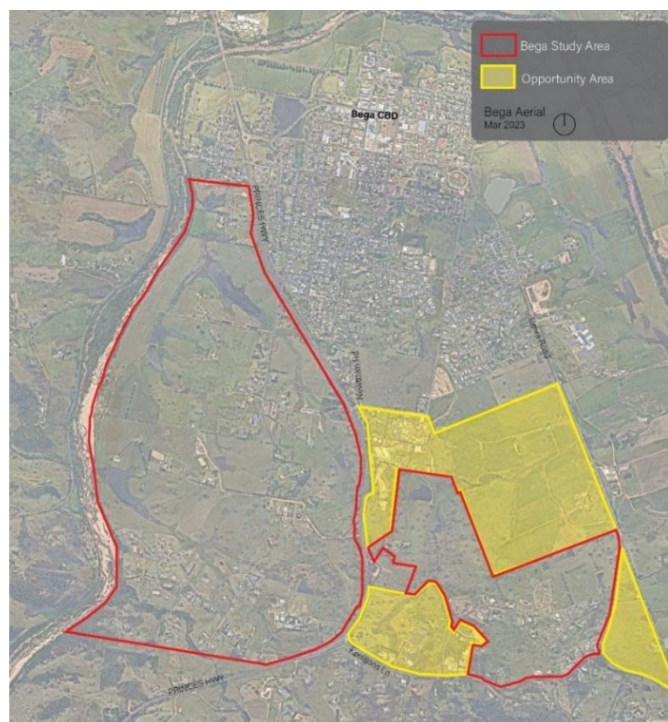


Figure 2. Bega study and opportunity areas

Portions of the site, most noticeably the western edge of the western parcel are flood affected (being part of the Bega River floodplain) and the general topography of the study area and its surrounding area consists of gently rolling hills. The landscape is dominated by hill crests and moderate to gentle spurs, slopes and gullies.



Figure 3. Typical landscape within the Bega study area

1.1 Vision and Objectives

The following project vision and objectives have been developed following review of relevant policy settings and key stakeholder workshops. More detail for how these objectives inform the master structure plan are provided in section 4.5.

Vision

A resilient residential development that meets the needs of a growing Bega Valley community for the next 30 years.

Objectives

- Pedestrian friendly neighbourhoods including vehicle reliance reduction;
- Sustainable development to manage growth;
- Efficient use of land and infrastructure;
- Natural features, amenity and character to be protected and enhanced;
- Promote opportunities for housing diversity;
- Builds climate resilience; and
- Contribute to open space and active travel networks.

1.2 Council's Role

The BVSC plays a significant role in housing delivery in the region. As a local council, BVSC is responsible for planning, development, and infrastructure within the Bega Valley Shire region. The following details Council's contribution to housing delivery:

1. **Planning and Zoning:** Council develops land-use plans and zoning regulations that guide the allocation of land for different purposes, including residential development. They establish policies and regulations that govern housing density, design standards, and development guidelines.
2. **Development Assessment:** Council assesses development applications for new housing projects or modifications to existing properties. They ensure that proposed developments comply with local planning regulations, building codes, and environmental requirements. The council also considers the impact of new developments on the community, infrastructure, and services.
3. **Affordable Housing Initiatives:** Council may initiate and support programs to address the need for affordable housing within the Bega Valley Shire. This can include collaborating with housing providers, community organisations, and state government agencies to develop affordable housing projects or policies.

4. Infrastructure Provision: Council is responsible for providing and maintaining essential infrastructure such as roads, water supply, sewage systems, and public amenities. When new housing developments are approved, the council ensures that the necessary infrastructure is in place to support the increased population.
5. Community Engagement: Council engages with the community to understand housing needs, concerns, and aspirations. They may conduct surveys, hold public consultations, and collaborate with residents, developers, and other stakeholders to ensure that housing delivery aligns with community expectations.
6. Strategic Planning: Council develops long-term strategic plans that consider population growth projections, housing demand, and land availability. These plans help inform decisions about housing policies, infrastructure investment, and the overall development of the Bega Valley Shire.

Whilst it is noted that Council has a role to play in the supply and delivery of appropriate housing there are a number of other factors which Council has only marginal or no influence over. Considerations such as community expectations, building costs & feasibility, timing, neighbouring land and to a degree, infrastructure capacity. However, Council does have significant influence over factors such as land use planning and density. This is illustrated below.

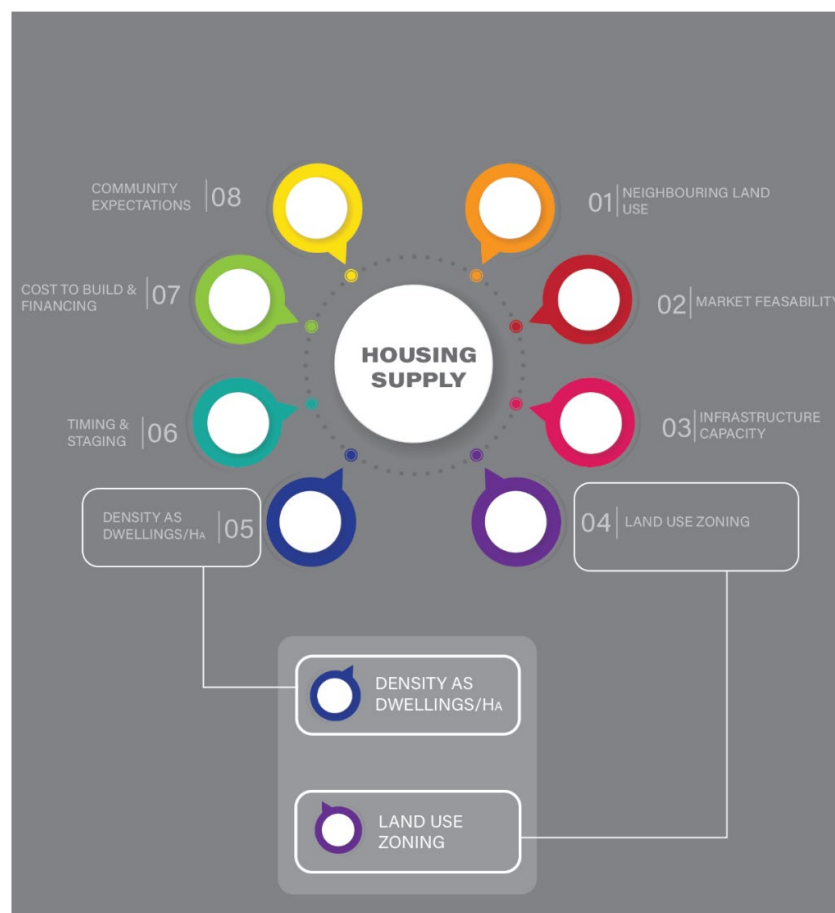


Figure 4. Influences on housing supply

1.3 Methodology

Delivery of this project occurred in four stages as described below:

Stage 1 - Research [May-June 2023]

- Documentation Review
- Site Analysis
- Enquiry by Design

Stage 2 - Design [May-July]

- Opportunities and Constraints Mapping
- Precinct Planning
- Technical Studies

Stage 3 - Community Consultation [August 2023 - November 2023]

- Structured Interviews
- Surveys
- Workshops
- Online - Have Your Say

Stage 4 - Structure Plan Development [November 2023 - February 2024]

- Draft Structure Plan
- Council Presentation
- Final Structure Plan

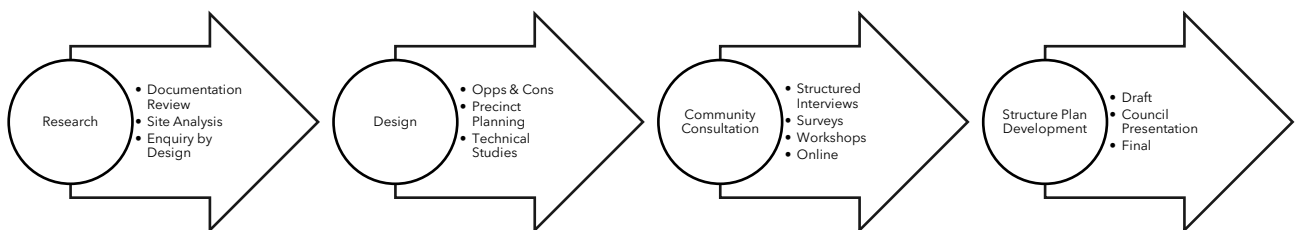


Figure 5. Methodology

2.0 Context

2.1 Policy

Federal Government

The national issue of housing affordability and supply has resulted in significant recent policy movements at the Federal level. These include the National Housing Accord which seeks to support a sustainable, long-term pipeline of additional housing supply and improve affordability by doing the following:

- States and territories to expedite zoning, planning and land release for social and affordable housing;
- The Commonwealth to provide financing options through the Housing Australia Future Fund to facilitate institutional investment in social and affordable housing;
- Working with local governments to deliver planning reforms and free up landholdings;
- Institutional investors to leverage investment that delivers for their members' interests and for the national interest; and
- Construction sector peak bodies to support high energy efficiency rating construction, the training of more apprentices under an extended Australian Skills Guarantee and work to make housing more responsive to demand.

The government has also established the \$10 billion Housing Australia Future Fund to provide a sustainable funding source to increase housing supply and improve service delivery. Investments from the Fund will seek to draw in new investment from state and territory governments and private capital providers to deliver new social housing projects.

The Fund will provide 20,000 new social housing dwellings, 4,000 of which will be allocated to women and children impacted by family and domestic violence and older women at risk of homelessness. It will also provide 10,000 new affordable housing dwellings, including for frontline workers.

The government has also expanded the remit of the National Housing Infrastructure Facility to invest up to \$575 million in unallocated funding with the intention of delivering new social and affordable dwellings and attracting more institutional capital to the sector.

State Government

The project aligns with the following principles and recommendations of the Regional Housing Taskforce:

- Invest in upfront, place-based strategic planning to improve decision-making, provide certainty and enable more efficient assessments;
- Provide a more transparent and certain supply pipeline and activate latent supply by addressing infrastructure requirements and resolving site constraints; and

- Strengthen collaboration by the NSW Government with the Federal Government, local governments, and industry to improve the identification, funding, and delivery of infrastructure to support priority housing.

The project supports the NSW's Government's 20-year vision for housing in NSW which includes:

Supply: to deliver housing supply in the right location at the right time.

- Supporting a pipeline of housing that creates choice for people and households at different prices, enabling people to live in homes of the right size with the right accessibility to well serviced locations, positively shaping the communities of NSW.
- Providing certainty and efficiency to support more stable and predictable supply patterns and market conditions that leverage investment, infrastructure and geography, and respond to changing conditions.

Resilience: to deliver enduring and resilient housing

- Housing design should respond to its environment and integrate with green infrastructure, a changing climate, natural hazards and the dynamic character and demographic profile of a local area.
- Planning for housing and infrastructure should happen together and recognise that the way we plan for new homes shapes the characteristics that make a healthy and resilient community and place.
- Design should address extreme heat, bushfires, flooding and energy use.

Consideration has also been given to the NSW Movement and Place Framework¹ which recognises that streets are not just about moving people and goods - they are also places for people to live, work and spend time.

NSW Movement and Place Framework is a cross-government framework for planning and managing roads and streets across NSW. It is a multidisciplinary and cross-government 'place-based' approach to the planning, design, delivery, and operation of transport networks.

The framework delivers on NSW policy and strategy directions to create successful streets and roads by balancing the movement of people and goods with the amenity and quality of places. It represents a transformative approach to urban planning, emphasising inclusivity, sustainability, and the creation of vibrant public spaces.

¹ <https://www.movementandplace.nsw.gov.au/about/about-movement-and-place>

Bega Valley Shire Council

The Bega Valley Shire Residential Land Strategy provides a vision and framework for residential development in the Shire. It has established the following principles for new urban areas that apply to this project:

- Ensure sufficient residential land for population growth;
- Increase diversity of housing;
- Promote efficient use and provision of infrastructure;
- Build in hazard protection and climate resilience;
- Strengthen and support Bega as the Regional Centre;
- Reinforce existing commercial centres and promote access to shops and services; and
- Preserve agricultural land and areas of high environmental value.

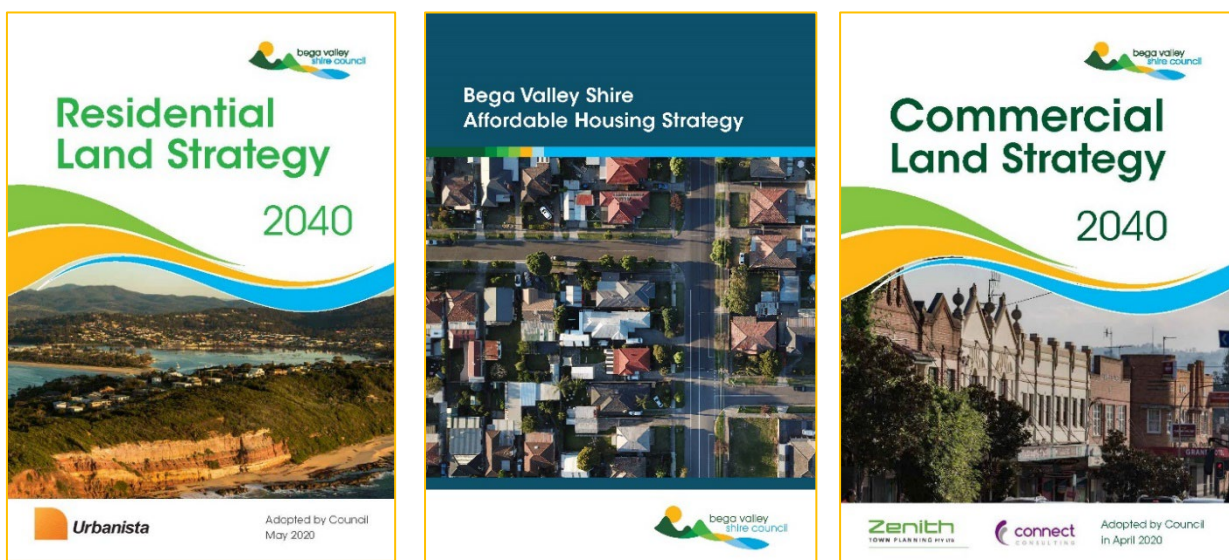


Figure 6. BVSC Policy Documents

2.2 Demographics

Bega Valley Shire Council is a local government area located in the south-eastern part of New South Wales, Australia. It covers an area of approximately 6,279 square kilometres and includes several towns and villages, including Bega, Merimbula, Eden, and Tathra.

The Census usual resident population of Bega Valley Shire in 2021 was 35,942, living in 18,870 dwellings with an average household size of 2.22². Since the previous year, the population has grown by 0.59%. Population growth in Regional NSW was 0.89%.

The area has experienced moderate population growth over the years, driven by factors such as lifestyle opportunities, tourism, and agriculture. The national issue of people migrating to the regions has also driven growth in the region.

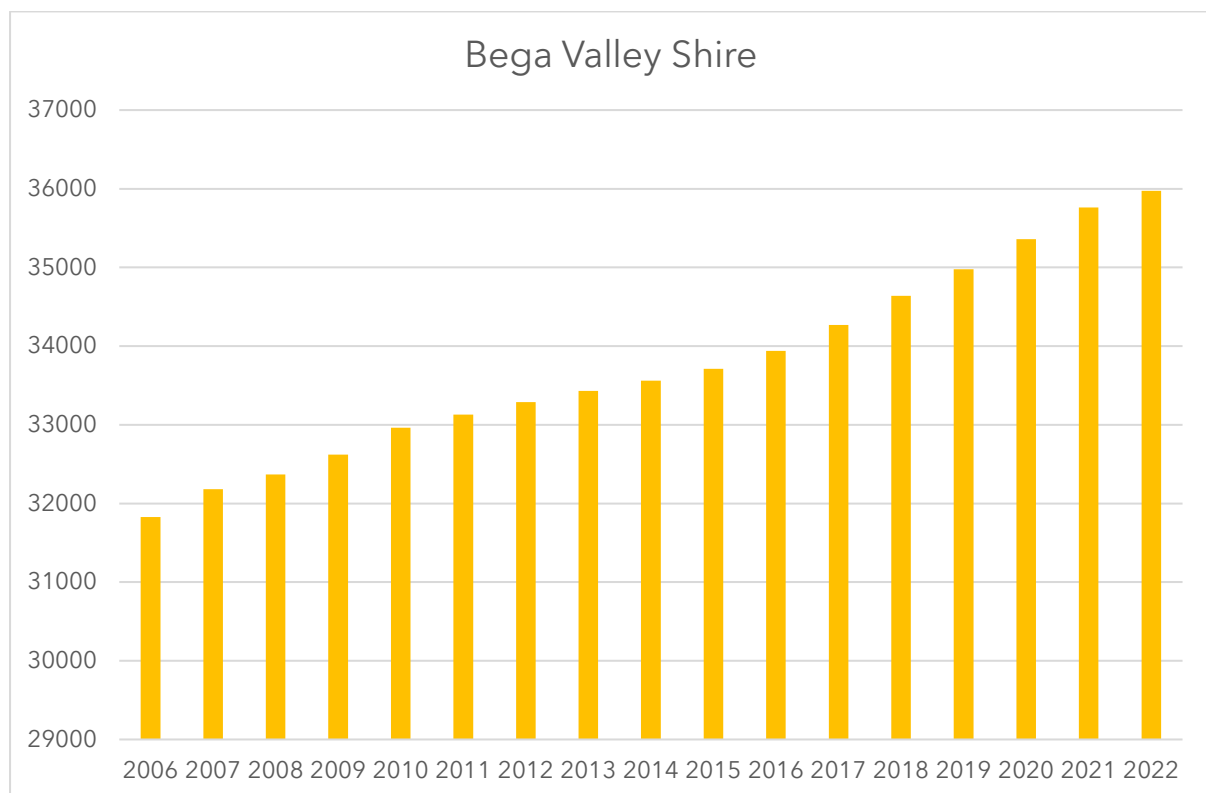


Figure 7. Historical population

² Australian Bureau of Statistics, Regional Population Growth, Australia (3218.0). Compiled and presented by .id (informed decisions)

The Bega Valley Shire population forecast for 2023 is 36,509 and is forecast to grow to 40,709 by 2036³.

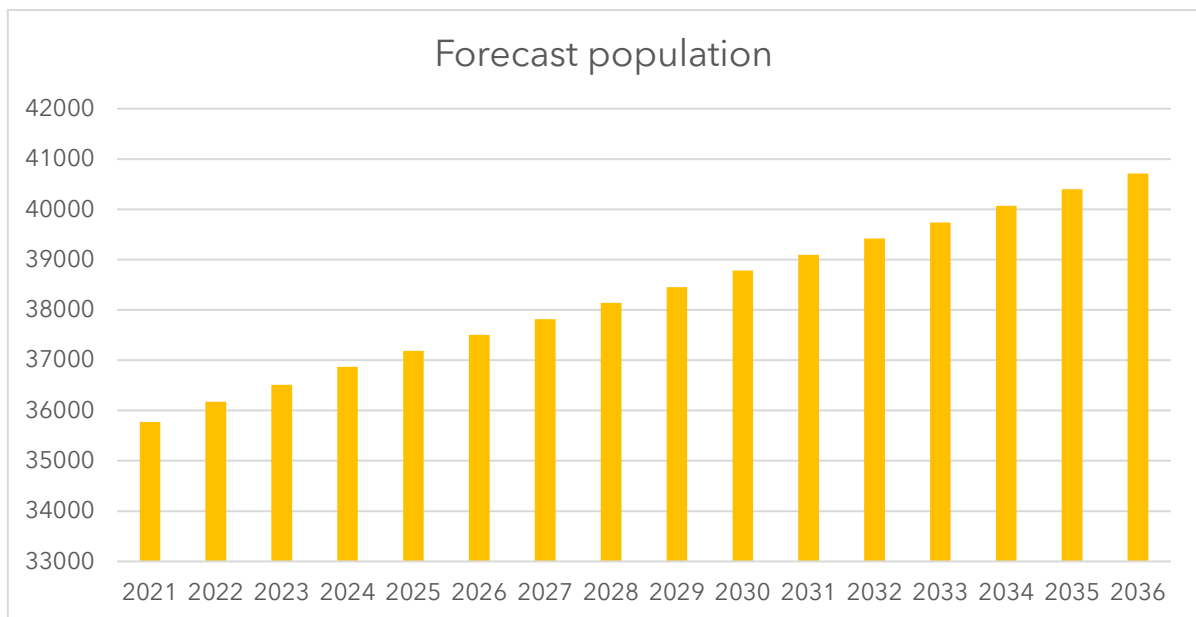


Figure 8. Forecast population

Pre-covid 19 pandemic, Bega Valley Shire Councils' population was projected to decrease by 2041, but in the pandemic the LGA experienced a surge in population due to migration to regional towns. Over the next 20 years this converts to a 3,670 persons difference in population for the LGA⁴.

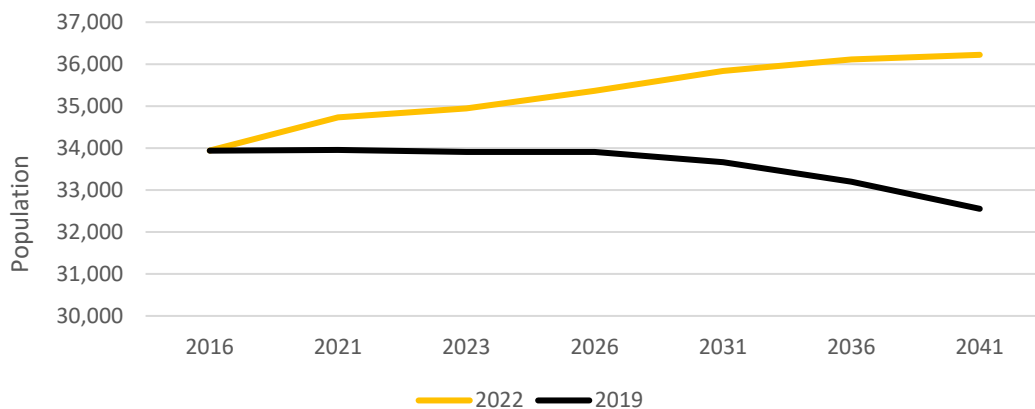


Figure 9. Difference between 2019 and 2022 population projection

³ Population and household forecasts, 2021 to 2036, prepared by id (informed decisions), February 2023.

⁴ NSW Department of Planning and Environment 2022 - it should be noted that NSW Department of Planning and Environment projections have been used which have not yet incorporated the latest ABS ERP figures for 2021



Enquiry by Design process with key stakeholders to accelerate shared knowledge of the site

3.0 Stakeholder Engagement

3.1 How we engaged

The stakeholder engagement plan for this project was completed using IAP2 principles and the BVSC Community Engagement Strategy. The approach was further influenced by the following key principles to influence how people see the structure planning process, their views on the subject, and their willingness to make a submission or provide comment:

- Easy-to-Access - engaging at times and locations to suit participants, using a variety of fit-for-purpose engagement methods and existing channels, including online engagement;
- Open - being accessible and easy to engage with, being available for discussion, and capturing all feedback around the proposed development approach;
- Insightful - Providing knowledge on what is complex technical information in ways that allow people to have useful input via formal submissions;
- Forward-focused - engaging to help shape the future of development in the region;
- Responsive - listening to and incorporating the ideas and responding to the community on their ideas; and
- Appealing - use different engagement methods not used in previous BVSC engagement to capture attention, ignite interest and encourage a broad and diverse range of participants including young people.

The following activities took place throughout the 6-month engagement process:

- 2 Workshops
- 2 Developer interviews
- 2 Media releases
- 2 Project presentations
- 1 Online public exhibition
- 2 social media posts
- 25 project posters
- 228 online survey responses and
- 20 submissions.

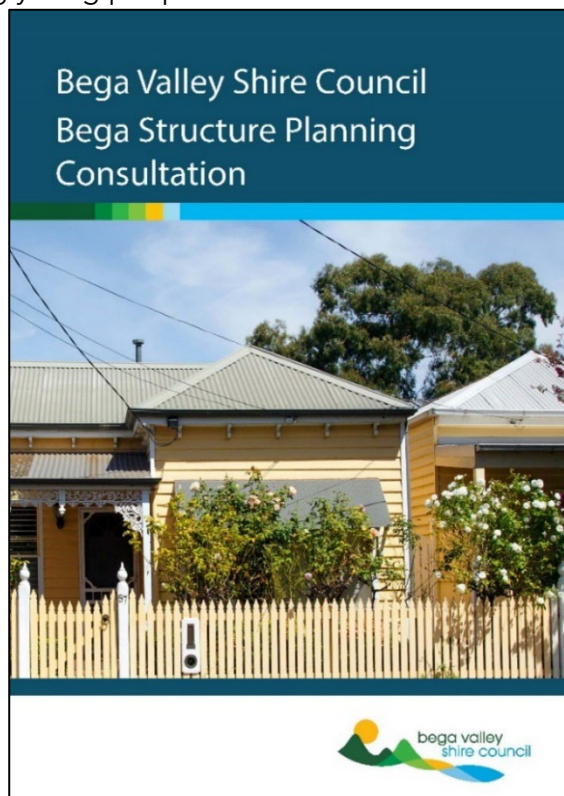


Figure 10. Have Your Say collateral package



Figure 11. Social media tile and poster

3.2 Who we engaged

The Council and project team engaged with the following cohorts of people in the development of this structure plan:

- Council staff;
- Councilors;
- Residents;
- Developers and Property Owners;
- Bega Local Aboriginal Land Council (Bega LALC);
- Djirringanj Elders Federation;
- Department of Primary Industries - Fisheries;
- Department of Education;
- Transport for NSW; and
- NSW Rural Fire Service.

3.3 What we heard

Housing supply

- That providing more housing supply is important to the community (80% support in the online survey)
- The delivering more housing could improve affordability (over 50% support for supply in the online survey)

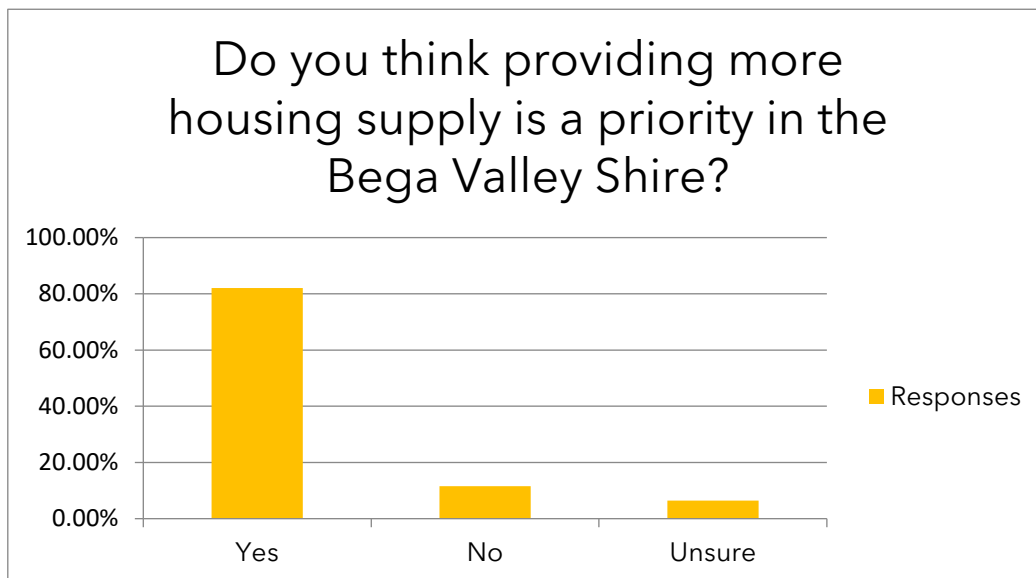


Figure 12. Survey results - housing supply

- That there is strong support for more land to be allocated to housing (over 70% support for more land allocation in the online survey)

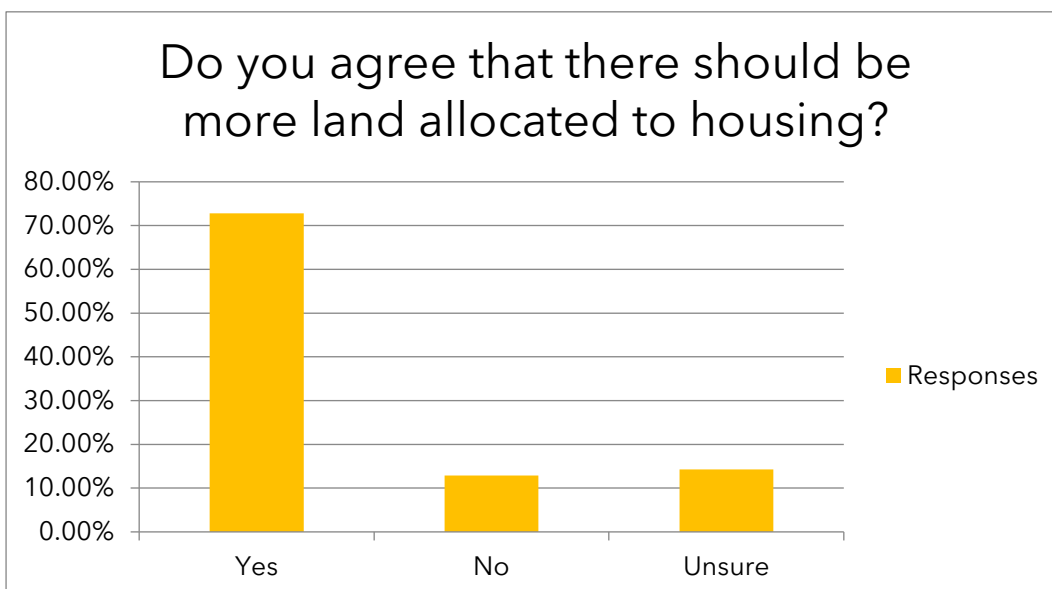


Figure 13. Survey results - land allocation

Type of Built Form

- There is support for a variety of housing types in new Bega development - not just detached dwellings

Structure Plan

- The following are the three highest priorities for housing areas in Bega:
 - Natural features, amenity and character to be protected and enhanced (53%)
 - Efficient use of land and infrastructure (52%)
 - Sustainable development to manage growth (47%)
- Walking and cycling connections from the proposed new development to the Bega Town Centre is very important (nearly 80% support in the online survey)

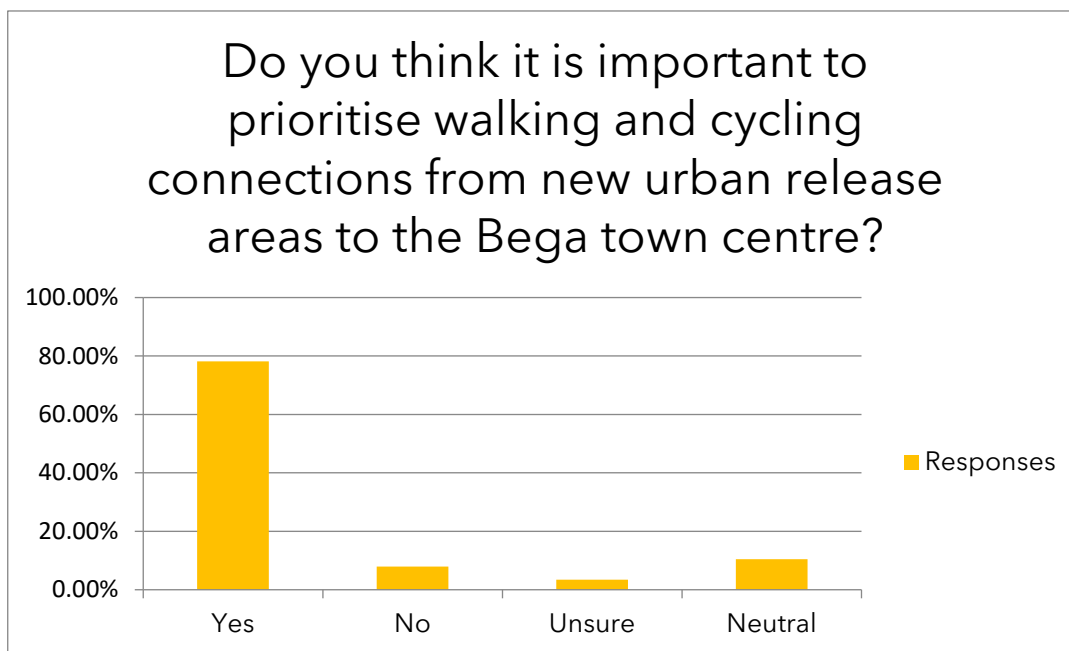


Figure 14. Survey results - active travel connections

Western Precinct

- There is majority support for the western precinct proposal (Nearly 70% supported or were neutral, 20% were unsure and 11% disagreed)
- There is support for a variety of housing types (houses, townhouses and apartments)

Central Precinct

- There is majority support for the central precinct proposal (Around 66% supported or were neutral, 19% were unsure and 15% disagreed)
- There is support for a variety of housing types (houses, townhouses and apartments) however there is a stronger sentiment for higher density in this location

Eastern Precinct

- There is majority support for the eastern precinct proposal (Nearly 65% supported or were neutral, 20% were unsure and 15% disagreed)
- There is support for a variety of housing types (houses, townhouses and apartments)

First Nations

- The landscape south of the township of Bega, including the Project Area for the Bega Structure Plan, is a culturally significant landscape to the Djirringanj people. The area includes the biggest trading ground in the region and was a prime hunting ground as well. There are very significant ceremonial sites in the area.
- This information has long been known to the current Djirringanj people and it is vital that ongoing consultation is undertaken during any planning and development programs.

4.0 Site Analysis

4.1 Additional Opportunities

Site analysis and review of technical study assessment identified the following opportunities to expand the study area for strategic gain. The opportunity areas are described further below:

Opportunity Area 1

Description:

Large RU1 rural single holding west of Tathra Rd and Old Hospital Site and small E3/E4 parcel of Newtown Rd to the immediate north of the Project Site.

Reason for inclusion:

To explore opportunity linkages and land use mix from existing northern housing development through to future southern areas. Also includes Old Hospital & small industry/council depot precinct with possible renewal opportunities.

Opportunity Area 2

Description:

Multiple E4 zoned lots including the Cleanaway Industrial area, Bega Saleyards and land east along Kerrisons Lane to Princes Hwy and abutting Cemetery.

Reason for inclusion:

To explore opportunities associated to possible emerging emergency services precinct along with possible higher access interchange to highway.

Opportunity Area 3

Description:

Single parcel (part of bigger Lot) of R5 adjacent to Tathra Rd

Reason for inclusion:

To explore opportunities associated to housing given the existing R5 zoning and proximity to both the study area and Tathra Rd.

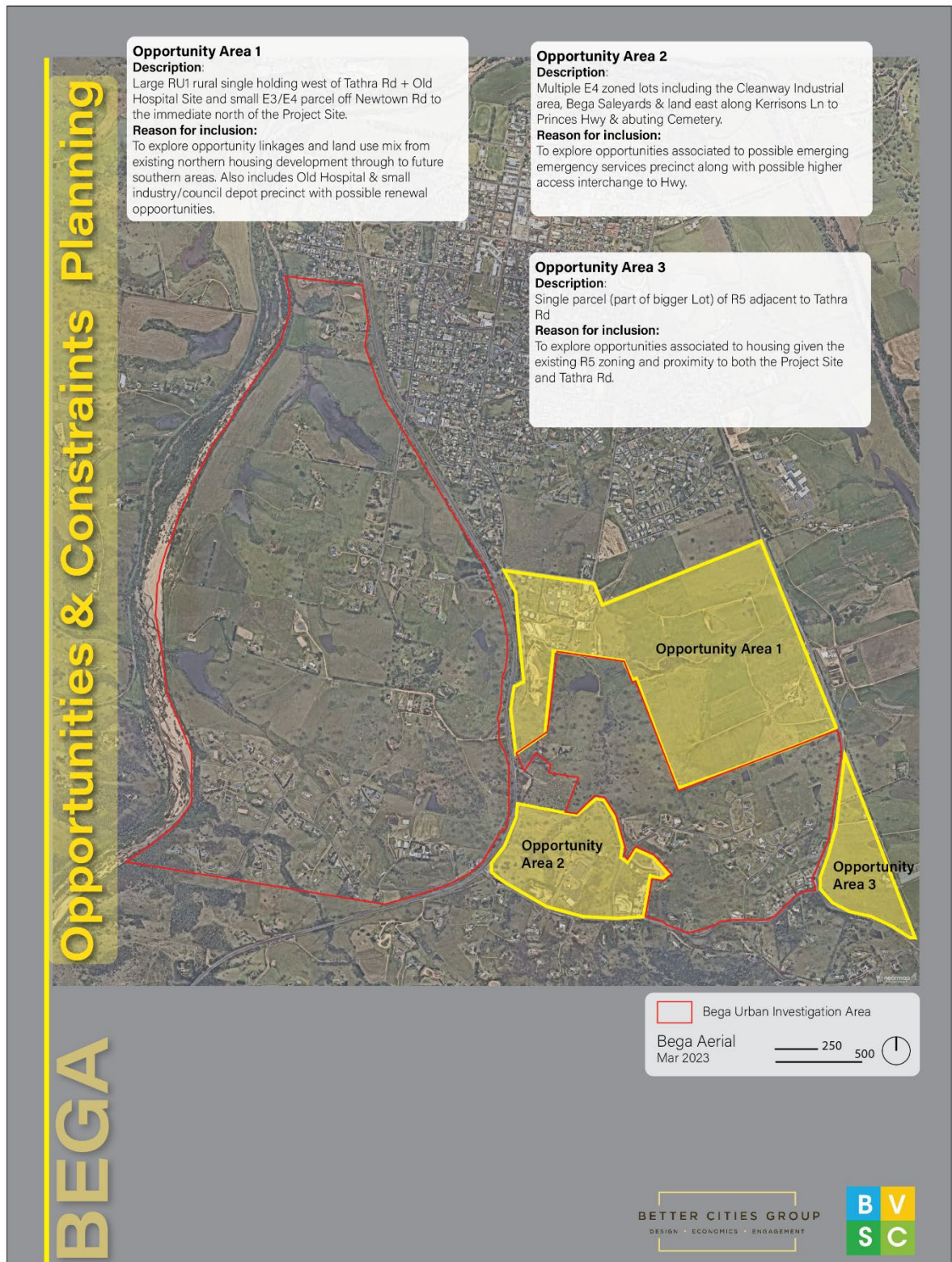


Figure 15. Bega additional opportunities

4.2 Planning Assessment

Background

Intent of advice

The intent of this advice is to provide a background to planning controls for determining development outcomes in Bega study area, as identified in Figure 17 below. The key intent of this advice is to understand opportunities and constraints within the Bega study area to understand opportunities for residential growth, as identified in the Residential Land Strategy 2040.

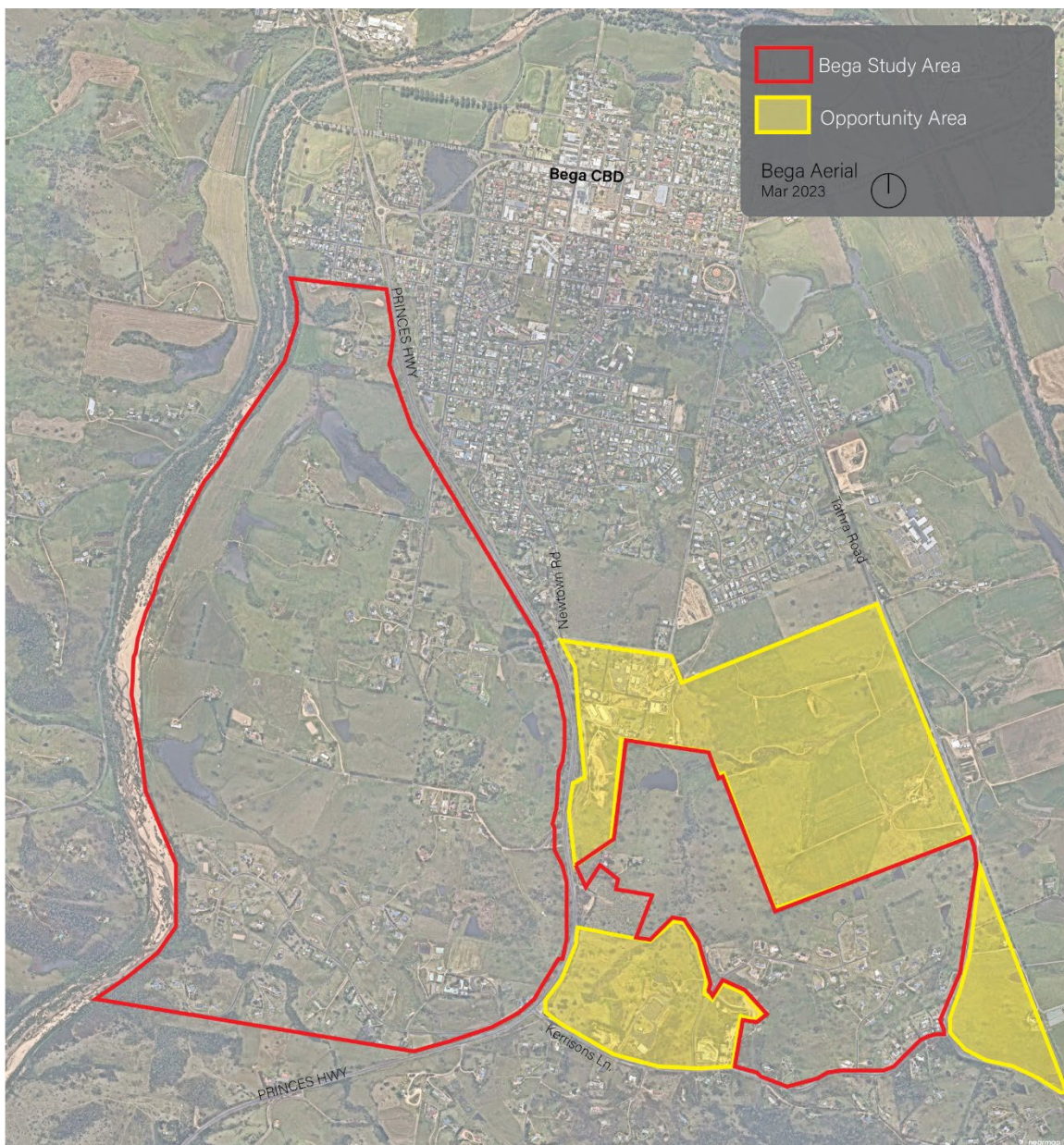


Figure 16. Bega study and opportunity areas

Summary of findings

The land located within the Bega study area comprises a mix of uses, ranging from industrial, primary production, rural landscape, community uses (School, Place of Worship, Cemetery), and large lot residential.

Planning analysis for the Bega study area has been split into the western precinct, central precinct and the eastern precinct. Precinct development has been determined by the alignment of the Princes Highway which bisects the study area and the cluster of industrial and community land uses in the central precinct which presents opportunity for mixed use development on the periphery of the traditional Bega township. The three precincts are summarised as follows:

- The eastern precinct is bounded by the Princes Highway along its western boundary, and low-lying rural production land which is flood affected to its east. There is established detached residential development to the north of the Bega study area (East) and the new Bega - South East Regional Hospital.
- The central precinct provides opportunities for development for uses which are complimentary to the regional hospital and light industry, to the north-west of the eastern precinct.
- The western precinct is largely undeveloped, with some pockets of large lot residential development and historic rural living / industries on large parcels. The area includes the Sapphire Coast Anglican College and a Place of Worship (Jehovah's Witness). The area is bounded by the Princes Highway to the east and the Bega River to the west. Land along the Bega River is generally low lying and subject to flooding.

New residential land development is constrained due to physical constraints including steep slope, flooding, vegetation, heritage and protections of arable land.

Key considerations for new development in the Bega study area include Aboriginal cultural heritage conservations, steep slope, biodiversity values and flooding.

Further residential development in the Bega study area is constrained by the underlying zoning pattern established by the current LEP as shown in the figure below. Increasing residential density will require a change to underlying zonings, particularly RU1, RU2 and R5 Zones which are intended to maintain rural production and character through larger lots and generally prohibit further sub-division or minimise fragmentation of ownership.

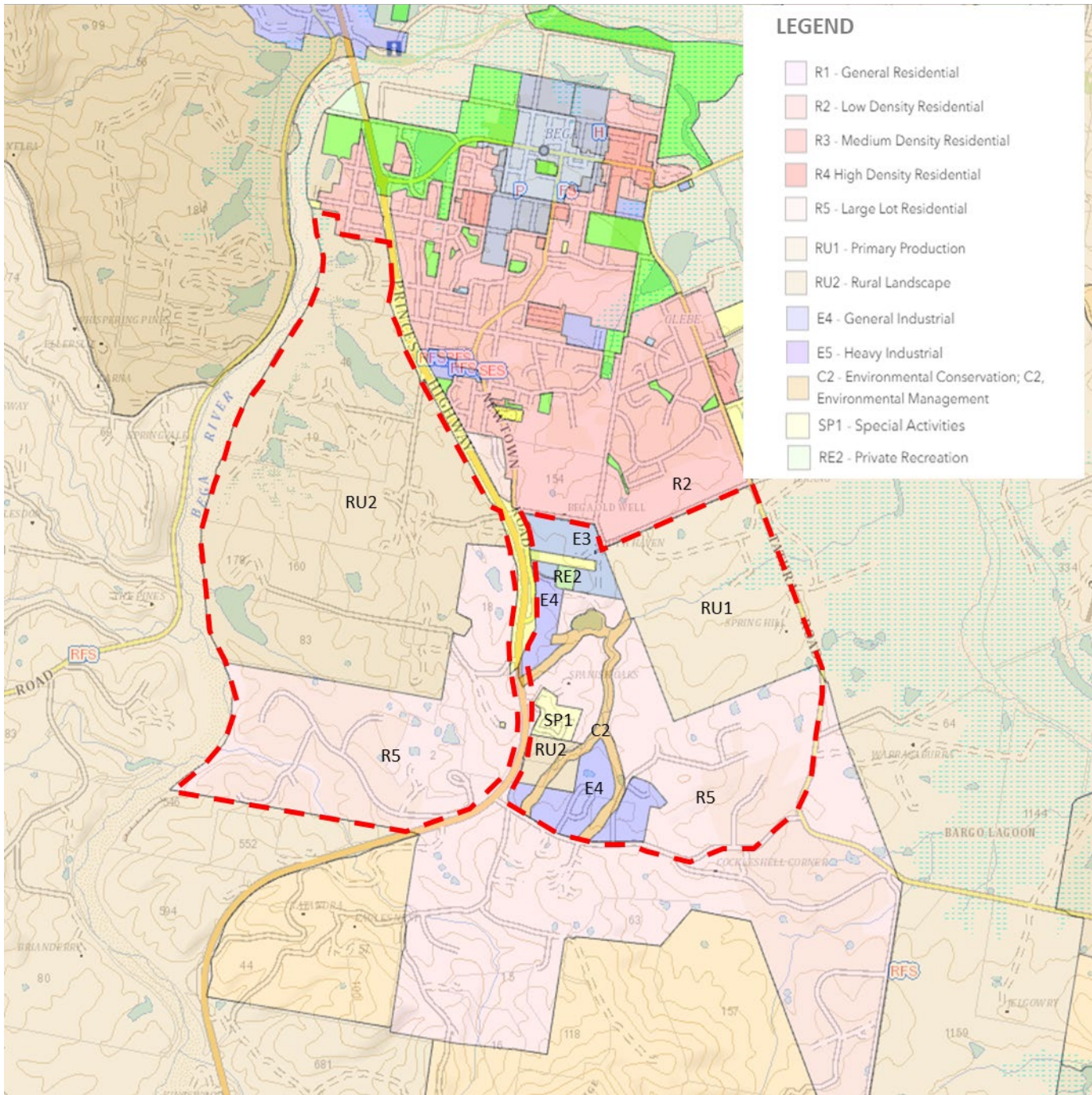


Figure 17. Bega precinct - current zoning

Detailed advice

Background

The Bega master structure plan has been developed to identify opportunities and constraints for urban land release areas to provision sufficient land to meet housing and growth needs, in line with the findings of the Bega Valley Shire Residential Land Strategy.

State Planning Context

South East and Tablelands Regional Plan 2036

The South East and Tablelands Regional Plan 2036 (the Regional Plan) is the regional Plan which is relevant to development within the Bega Valley Shire Council Area. The Regional Plan sets the priorities and directions for the region and must be reflected in Local Environment Plans and any Planning Proposal for making or amending a Local Environment Plan (LEP).⁵

The Regional Plan identifies Bega as a Strategic Centre. Direction 24 of the Regional Plan identifies the need for providing housing options in Strategic Centres and encourages local housing strategies to achieve this goal.⁶

The Regional Plan is, at the time of writing, under review, in which a Draft South East and Tablelands Regional Plan 2041 (the Draft Regional Plan) has been publicly notified. The Draft Regional Plan identifies Bega and Wolumla as part of strategic cluster. As part of the Strategic cluster, the Draft Regional Plan identifies a priority for the strategic cluster as (relevantly):⁷

"understanding the constraints and availability of developable residential and employment lands."

"addressing the availability of visitor accommodation and rental housing"

The structure plan is considered to be consistent with the directions of the Regional Plan and Draft Regional Plan.

⁵ Environmental Protection and Assessment Act 1979, s3.8.

⁶ South East and Tablelands Regional Plan 2036, Direction 24, pg 50 -51.

⁷ Draft South East and Tablelands Regional Plan 2041, pg. 29.

Local Planning Context

Local Strategic Planning Statement 2040

The Local Strategic Planning Statement 2040 (LSPS) is a planning tool that provides direction for land use in the Bega Valley Shire through to 2040 and includes twelve planning priorities, and corresponding strategic directions and actions. The Planning priorities identified by the LSPS include:

- | | |
|--|------------------------------|
| 1. Natural Environment | 7. Tourism |
| 2. Natural Hazards | 8. Transport |
| 3. Carbon neutral | 9. Open Space and Recreation |
| 4. Aboriginal People and Culture | 10. Character |
| 5. Agriculture, Forestry and Aquaculture | 11. Housing |
| 6. Industrial land | 12. Town Centres |

All LSPS planning priorities inform planning decision making within the Bega Shire Valley Council area, however, most relevant to the development of the Bega and Wolumla Structure Plans are outlined in Table 1 below.

Table 1. Key strategies from Local Strategic Planning Statement

Key Strategies from Local Strategic Planning Statement	
Planning Priority 10: Character	
The distinctive character of the landscapes, towns and villages that make our Shire unique is thriving and continues to provide a sense of place and wellbeing to residents and attract visitors.	
Key Future Directions	<ul style="list-style-type: none"> - Apply desired future character statements for towns and villages to ensure new development is consistent with the features that have been identified to be retained or enhanced and is in line with community expectations. - Maintain a compact settlement pattern with clearly designed town and village entry points and prevent ribbon development that joins settlement. - Apply the urban design priorities from the Urban Design Guide for Regional NSW when reviewing or developing plans and planning policies for urban areas to help inform and maintain character in towns and places.
Action 10.1	Support the protection and promotion of Aboriginal heritage within the Shire
Action 10.3	Develop local character statements for Bemboka, Candelo, Cobargo, Kalaru, Pambula, Tathra and Wolumla, to guide the review of planning controls and future planning
Action 10.5	Review planning controls related to the density of urban development, houses on visible ridgelines, road widths, footpaths and street trees to ensure they are consistent with the desired future character of towns.
Planning Priority 11: Housing	
Residential areas provide a range of housing styles, sizes and tenures that suit people of all ages, income levels and household sizes and enable communities to stay connected and healthy as people move through the various stages in life.	
Key Future Directions	<ul style="list-style-type: none"> - Protect good quality agricultural land and areas of high scenic and environmental value by rezoning land for urban residential growth in areas identified in the residential Land Strategy and support rural residential development that aligns with the Rural Residential Strategy 2023. - Increase housing density within established urban areas to minimize additional servicing provision and expansion of the urban/bushland interface and support the viability and vibrancy of town centres and future public transport provision. - Allow for growth and encourage housing diversity and affordability while enhancing the distinct local character of each place. - Encourage residential development in seweraged villages to provide more affordable housing options, minimize land use conflict and the support continued viability of villages. - Work with the NSW Land and Housing Corporation and local community housing providers to identify opportunities for affordable housing.
Action 11.6	Develop plans to guide the future density and form of infill residential development and road servicing requirements in rural villages including Cobargo, Candelo, Bemboka, Wolumla and Wallaga Lake
Action 11.9	Develop and implement urban renewal plans to encourage redevelopment that increases the supply and diversity of housing in Bega, Merimbula and Eden.

Residential Land Strategy 2040

In August 2019, Bega Valley Shire Council initiated a review of its urban areas to address the future need for residential land in Bega Valley Shire and provide a framework and vision for residential development for the coming 20 years. The Residential Land Strategy 2040 (RLS) identified future directions for towns and villages within Bega Valley Shire Council area, including Bega.

Bega Study Area

For Bega, the RLS made the following recommendations:

- 1. Develop an urban renewal strategy for Bega to underpin its role as the regional centre, accommodate growth and housing diversity, promote connectivity and enhance urban amenity.*
- 2. Develop a local character statement for Bega.*
- 3. Investigate rezoning land for higher densities on sites adjacent to the commercial centre.*
- 4. Stage investigation of land that is not flood-prone in Investigations Areas for rezoning as existing capacity is taken up.*
- 5. Review planning controls for existing residentially zoned land close to the centre to promote renewal and housing diversity including student accommodation and seniors housing.*
- 6. Liaise with state government agencies to consider potential for reuse of surplus government sites to support the urban renewal of Bega.*
- 7. Retain the RU2 zone and current lot size for non-flood prone land south west of the existing urban area to enable its consideration for housing in the longer term;*
- 8. Align actions with the Commercial Land Strategy.*

The RLS identified the following investigation areas relevant to the study area:



Figure 18. Residential Land Strategy identified study areas

This study has been commissioned to undertake the investigation and planning of the investigation areas. The study has focused on land in the south of the Bega because of its proximity to the town heart, services and new infrastructure, including the new Bega Regional Hospital.

Bega Local Environmental Plan 2013

The Bega Local Environmental Plan 2013 (LEP) is the overarching planning instrument for Bega Local Government Area. It determines the location and type of residential development that is permitted and provides key planning controls for that residential development, including minimum lot size and floor space ratio (amongst other things). The LEP also provides for specific planning controls in relation to development constraints, such as flood and heritage.

The LEP includes three (3) residential zones as outlined in Table 2 below.

There is a Planning Proposal (Increased Housing Diversity) which is in the finalisation stage. This is discussed in more detail below but is relevant insofar as it provides opportunities for more dense residential development in the R2 Low Density Residential Zone. This has been reflected in the table below.

Table 2. Residential zoning

Table 2: Residential Zoning within Bega Study Area					
Zoning	Key objectives of Zone	Residential Accommodation uses permitted with consent	Minimum Lot size - generally	Floor Space Ratio	
R2 Low Density Residential	To provide for the housing needs of the community within a low density residential environment.	<ul style="list-style-type: none"> - Boarding houses - Dual occupancies - Dwelling houses - Group homes - Hostel - Semi-detached housing - Seniors housing - Secondary dwelling 	550m ²	0.5	
Revised R2 Low Density Residential		<ul style="list-style-type: none"> - Multiple dwelling housing 	350m ² - if: (a) land is serviced by water & sewer; (b) 60% of new lots are greater than minimum lot size; and (c) all lots smaller than minimum are greater than 350m ² and not in battle-axe configuration.	0.5	
R3 Medium Density Residential	To provide for the housing needs of the community within a medium density residential environment. To provide a variety of housing types within a medium density residential environment	<ul style="list-style-type: none"> - Attached dwellings - Boarding Houses - Co-living housing - Dual occupancies - Dwelling Houses - Group homes - Hostels - Multi-dwelling housing - Residential Buildings Flat - Semi-detached dwelling - Seniors housing - Secondary dwellings - Shop top housing 	1000m ²	0.6:1	
R5 Large Lot Residential	To provide housing in a rural setting while preserving and minimizing impacts on environmentally sensitive locations and scenic quality. To ensure that large residential lots do not hinder the proper and orderly development of urban areas	<ul style="list-style-type: none"> • Dwelling houses • Boarding houses • Co-living housing • Dual occupancies • Group homes • Hostels 	5000m ²	N/A	

Discussion of current residential zones

R2 Low Density Residential Development

Detached Dwellings

Based on residential planning controls in the LEP, the predominate 'low density' residential form in Bega is detached dwellings on individual lots of 550m² or greater. This is driven by the minimum lot size requirements in the LEP (which correspond to the R2 Low Density Residential Zone). The current Planning Proposal (Increase Housing Diversity) will enable development below the minimum lot size where the following criteria are met:

- The land is serviced by reticulated water and sewer;
- Up to 40% of the new lots may be smaller than the mapped minimum lot size but shall not be less than 350 square meters; and
- All lots smaller than the mapped minimum lot size shall not be battle axe configuration.

The Planning Proposal (Increase Housing Diversity) will promote the development of smaller, more dense and more diverse housing options in Bega. There may be an opportunity to reduce the minimum lot size mapping in and around Bega (including within the study area) to further increase density around Bega as the administrative centre of the local government area. Some guidance about the desirable location and design of these smaller lots is included in the box over leaf.

Multiple Dwellings

The Planning Proposal (Increase Housing Diversity) will enable the development of Multiple Dwelling Housing if on a lot which is greater than 900m². This change will promote the development of more dense and diverse housing options within the R2 Residential Zone.

However, the R2 Low Density Residential Zone currently has a corresponding floor space ratio of 0.5:1. Applying this Floor Space Ratio to multiple dwellings may be restrictive particularly where the development on the land is intended to be 2 storeys. It may be appropriate to increase the floor space ratio for Multiple Dwelling development in the R2 Low Density Residential Zone.

GUIDANCE FOR DEVELOPMENT OF SMALL LOTS

Location

Smaller lots should be located on land with limited physical constraints, and generally avoid areas of land which have steep slope, flooding, and vegetation.

Minimum Lot Size and Dimensions

For Small Lots (between 350m² - 550m²) the typical frontage for development is 12.5m - 15m+. This is to provide enough space for dwelling elements:

- Bedroom (3.3m wide),
- Hallway / front door (1.2m),
- Garage (3.8m for single or tandem garage on a lot <12.5m, and 5.5m for a double garage on a lot <12.5m)
- Thickness of walls (0.4m)
- Setbacks to side boundary >1m (note: built to boundary wall on low side of block may be appropriate).

Typically, standard small lots will include a depth of 25m - 36m, to provide a standardised shape which suits project home construction for single and double storey product.

More traditional low density residential lots (450m² +) are typically developed with a frontage between 12m and 20m+ with a depth of 25m+. A maximum frontage of 20m should be encouraged to provide a cohesive streetscape. This is consistent to the traditional development pattern in Bega Shire.

Figure 19. Guidance for Development of Small Lots

Smaller lots should be located in proximity to urban services, such as a centre or parkland. Appropriate locations for smaller lots would be along main streets or at block ends. There may be opportunities to encourage 'village' form with introduction of smaller lots around town centres.

Large Lot Residential

Based on residential planning controls in the Bega LEP, the development of Large Lot Residential land is to have a range of lot sizes from 3,000m² to 2ha. Generally the R5 locations skirt the R2 Low Density Residential Zones, providing a transition between R2 land and rural land. However, there are also isolated pockets of R5 land around the Bega Town Centre. This type of development is appropriate in locations of constraint, including steeper slope and flood prone land as a small building envelope can be provided within a constrained lot.

Planning proposal for increasing housing diversity (May 2022)

A planning proposal is currently in finalisation stage which is intended to amend the Bega LEP and DCP to increase housing diversity throughout the Bega Valley Shire while protecting neighbourhood character. The intended outcomes of the planning proposal are

outlined in the below table. Consideration has been given to the below intended outcomes when preparing the structure plan for the Bega Study Area.

Table 3. Housing diversity

Intended Outcome	Description
Enable creation of small lots	Enable up to 40% of lots in R2 Low Density Residential zone subdivisions to be smaller than the mapped minimum lot size, but no smaller than 350m ² .
Enable more sub-division in seweraged villages	Amend the minimum lot size map in villages, including Wolumla, to enable more sub-division
Streamline construction and sub-division of multiple dwellings	Enable construction and sub-division into three to six lots smaller than the minimum lot size to encourage housing diversity, provide certainty and avoid the need for complex staging of development.
Enable multi dwelling housing in low density residential areas and villages	<ul style="list-style-type: none"> - Amend the land use table to permit multi dwelling housing with consent in R2 Low Density Residential and RU5 Village to increase the diversity of housing - Amend clause 4.1A to apply a minimum lot size requirement for multi dwelling housing in zones R2 Low Density Residential and RU5 Village to restrict multi-dwelling housing to larger blocks. - Add a new zone objective to the zone R2 Low Density Residential to encourage housing diversity that is appropriate to the detached character of the zone. - Amend the Floor Space Ratio map to introduce a site coverage control in RU5 Village zones to protect the village character.
Increase supply of one and two bedroom units	<ul style="list-style-type: none"> - Insert a new clause to increase the supply of one and two bedroom dwellings in multi dwelling housing, residential flat buildings and shop top housing developments to provide for the housing needs of current and future residents of the Shire - Amend clause 4.6 to prevent variations to this requirement
Increase supply of adaptable housing	Insert a new clause to increase the supply of adaptable housing to provide a supply of dwellings that can be more easily and affordably retrofitted for accessibility in the future.
Strengthen landscaped area controls	Insert a new clause to strengthen landscape controls to protect character and increase resilience.

Bega Study Area

Bega Study Area - Existing Uses

The land located within the Bega study area comprises a mix of uses, ranging from industrial, primary production, rural landscape, community uses (School, Place of Worship, Cemetery), and large lot residential. Refer to figures 20 and 21 below which identify land uses within the Bega study area in two portions, east and west (respectively).

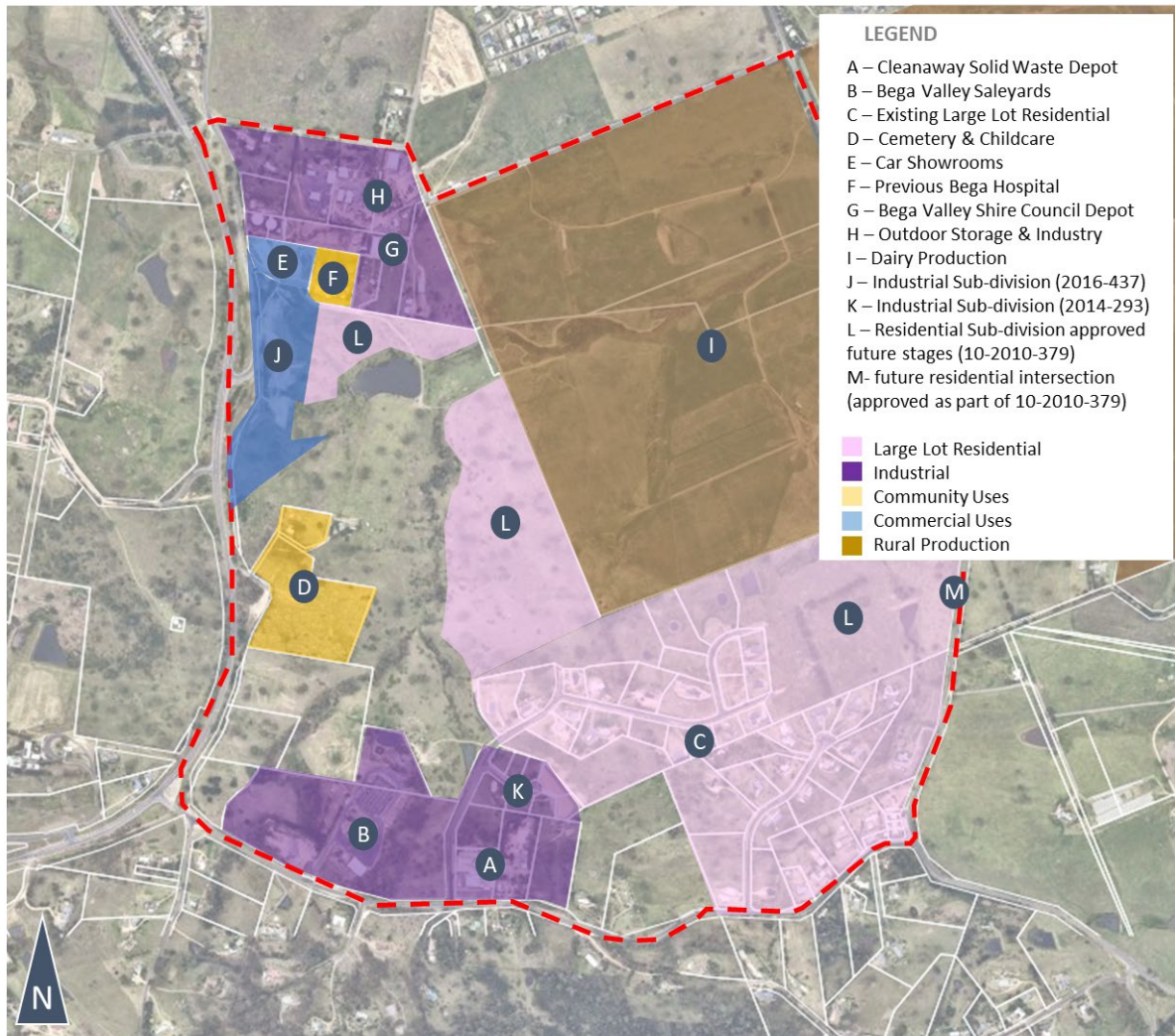


Figure 20. Land use context map (east and central)

The Bega study area (East) comprises a range of uses which have developed independent of each other. Traditionally being used for rural production, industrial areas have established along connector roads onto the Princes Highway.

In the North, the Industrial Area has formed around the previous Bega Hospital (heritage listed) and today contains the Bega Valley Regional Council Depot and other rural industries. This area becomes the central precinct during the precinct planning process.

In the South, the industrial area is made up of key uses, including the Bega livestock saleyards, Essential Energy Depot and Cleanaway solid waste depot.

Between the industrial areas is a cemetery (heritage listed), a childcare centre use and land which is constrained by a drainage corridor. In the last 20 years, land in the south has been developed for large lot residential development. The large lot residential area is existing, but generally inconsistent with the rural production land and surrounding industrial uses. There are a number of relevant development approvals in the area which are outlined below.

The Bega study area (east) is bounded by the Princes Highway along its western boundary, and low-lying rural production land which has flood affected land to its east. There is established detached residential development to the North of the Bega study area (East) and the new Bega - South East Regional Hospital. Accordingly, there are good opportunities for development for uses which are complimentary to the regional hospital, in the north of the Bega study area (east).

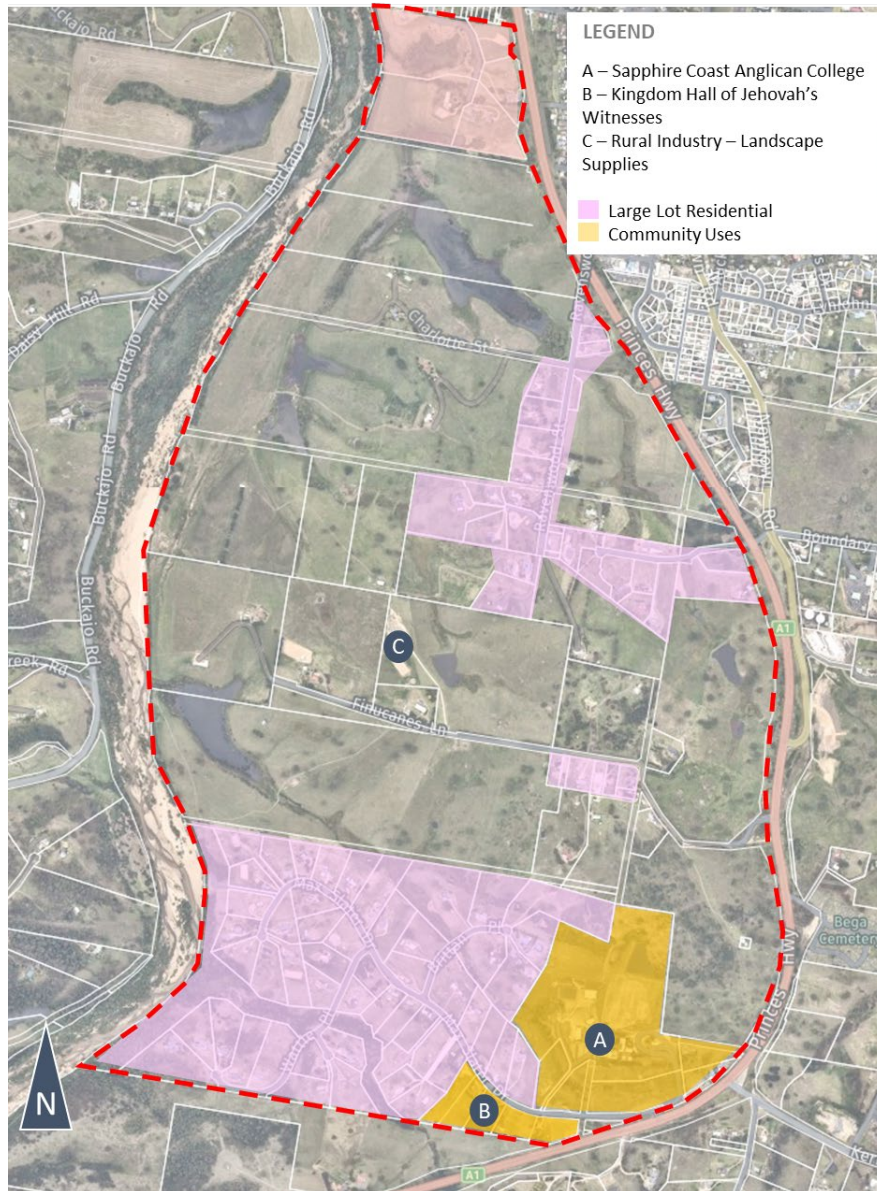


Figure 21. Land use context map (west)

The Bega study area (West) is largely undeveloped, with some pockets of large lot residential development and historic rural living / industries on large parcels. The area includes the Sapphire Coast Anglican College and a Place of Worship (Jehovah’s Witness). The area is bounded by the Princes Highway to the east and the Bega River to the west. Land along the Bega River is generally low lying and subject to flooding.

BEGA STUDY AREA - RELEVANT DEVELOPMENT APPROVALS

Table 4. Development approvals

Development Consent No.	Address	Description	Relevance
2016-437	Numerous - refer to Figure 20 - marked "J".	Sub-division - 11 Lot Industrial Sub-division (2,885m ² - 16,166m ²)	Industrial sub-division within E4 zone within Bega Study Area (East). The Sub-division is along the Princes Highway and takes access off Newtown Road.
2014-293	Numerous - refer to Figure 20 - marked "K".	Sub-division - 8 Lot Industrial Sub-division (2,884m ² - 6147m ²)	Industrial sub-division within E4 zone within Bega Study Area (East). The Sub-division is north of Kerrisons lane and is at access point to large lot residential sub-division.
10-2010-379	Numerous - refer to Figure 20 - marked "L".	Sub-division - 63 Rural residential lots	Large lot residential sub-division in Bega Study Area (East) in the existing Large Lot area (marked as "C" in Figure 3). This approval will result in the development of R5 zoned land between Kerrisons Lane and Dairy Production land. The full development of this site will see the introduction of a new intersection onto Tathra Road, providing a second residential access to the sub-division. Note: there is currently a modification which is being sought to this consent which is currently under assessment. Council Ref: 10-2010-379-3.

Overall Planning Context

Within the Bega study area, the following planning controls are relevant:

- Bega Valley Local Environment Plan 2013 (LEP);
- Bega Valley Development Control Plan 2013 (amended August 2023) (DCP).

Bega Valley Local Environment Plan 2013 (LEP)

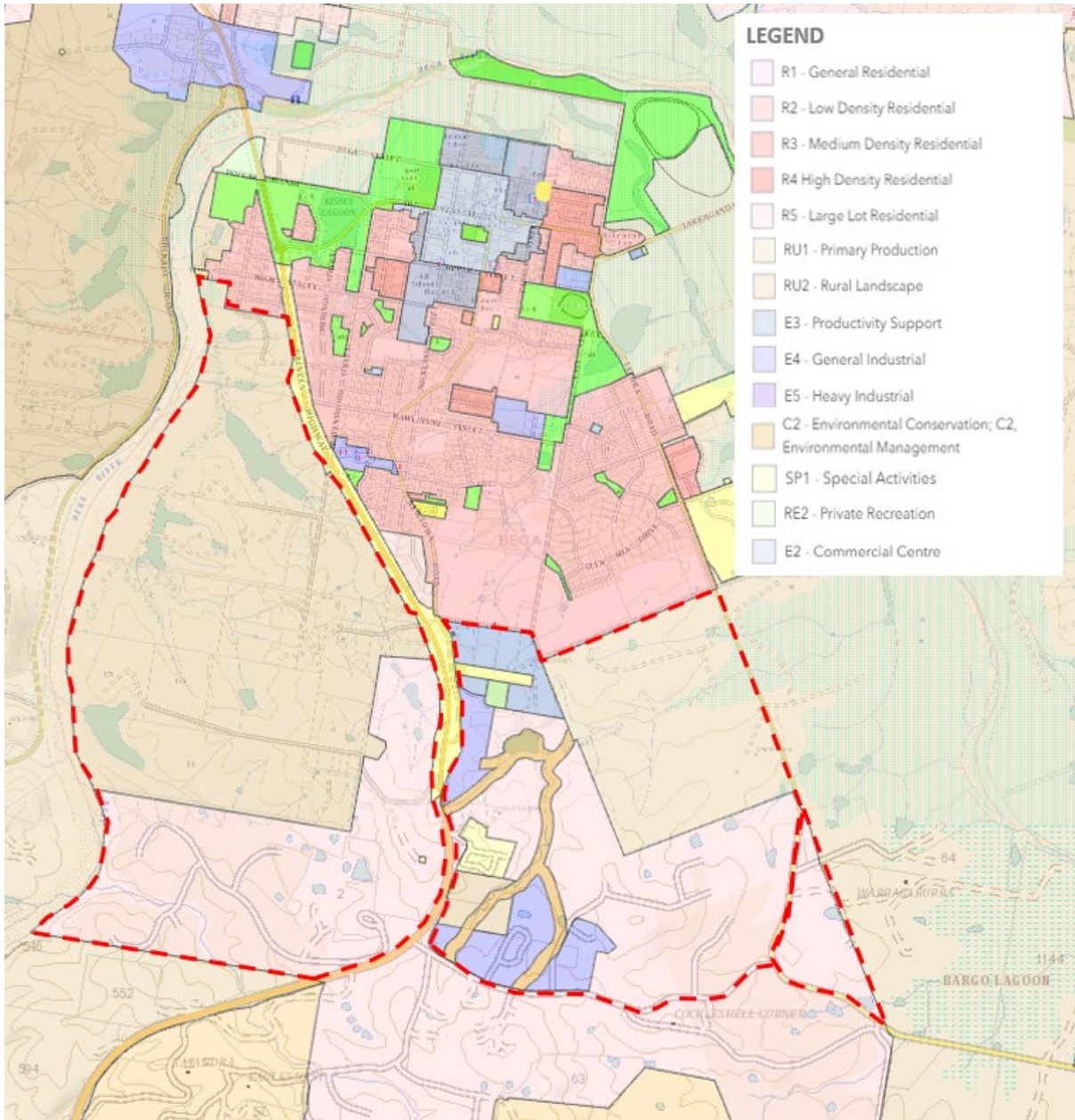


Figure 22. Current LEP zoning

Current Land Use Zoning and Controls

The LEP provides for the following development controls within the Bega study area:

Table 5. Current zoning

Key Areas for accommodation residential growth	Permitted (residential uses)	Uses	Minimum Lot Size	Sub-division below Minimum Lot Size?	Floor Ratio	Space
RU1 Area	Zoned	- Dual occupancies - Dwelling houses	120ha	Yes - if no dwelling house or dual occupancy on created lot or boundary adjustment.	N/A	
RU2 Area	Zoned	- Dual occupancies - Dwelling houses	20ha		N/A	
R5 Zoned Area	-	Dwelling houses	0.5ha - 3ha		N/A	

Table 5. Current Zoning

The DCP provides detailed standards and requirements for development in the Bega Valley Shire Council and is relevant to achieving development outcomes in the LEP. Section 3 (Residential Development), 4 (Rural Development) and 5 (General Development) of the DCP are relevant to residential development within the Bega study area.

Key Planning Considerations

The key planning considerations relevant to the structure planning of the Bega study area, and their relevance to the LEP and DCP are outlined below:

Zoning

Further residential development in the Bega study area is constrained by the underlying zoning pattern established by the current LEP. Increasing residential density will require a change to underlying zonings. In particular, some Rural and Large Lot Residential Land (in the RU1, RU2 and R5 Zones) will need to be transitioned to a R2 Low Density Residential Zone.

Land Use Conflict

Clause 4.2 (Rural Land Use Conflict) of the DCP provides that where dwellings are proposed in rural areas, the Council must be satisfied that normal farming practices on adjacent land are not restricted. Clause 4.2.1 of the DCP also enforces agricultural buffers to manage amenity impacts on residential areas.

Further residential development in the Bega study area (East) may be constrained by the ongoing operation of rural uses, particularly the dairy production land (marked "I" on Figure 19). Accordingly, the immediate development of land within Bega study area (East) may be constrained by the operation of rural activities and will need to consider amenity impacts associated with the ongoing rural activity operations particularly associated with the dairy farm.

Notwithstanding land use conflict, the land within the Bega study area (East) is in proximity to Bega centre and adjacent to Bega - South East Regional Hospital. The land provides a good opportunity for residential development in the future amongst other complimentary uses. Accordingly, this land (including the land to the south of the Dairy Land which forms the balance of the large lot residential estate) should be preserved for urban development over the longer term.

Land within the Bega study area (West) is not subject to land use conflict and is considered to be appropriate for residential development in the immediate term, subject to other constraints and infrastructure services provision.

Floor Space Ratio

The Floor Space Ratio (FSR) overlay map does not impact land within the Bega study area but does apply to the Bega Township and is specifically mapped with the FSR of either 0.5:1 (R2 Low Density Residential) or 0.6:1 (R3 Medium Density Residential) (refer to Figure 22 below).

With the change of zoning to a residential zone, FSR overlay mapping should reflect development reflect the R2 Low Density Residential Zone, subject to comments above regarding FSR restrictions for small lots and multiple dwelling development.

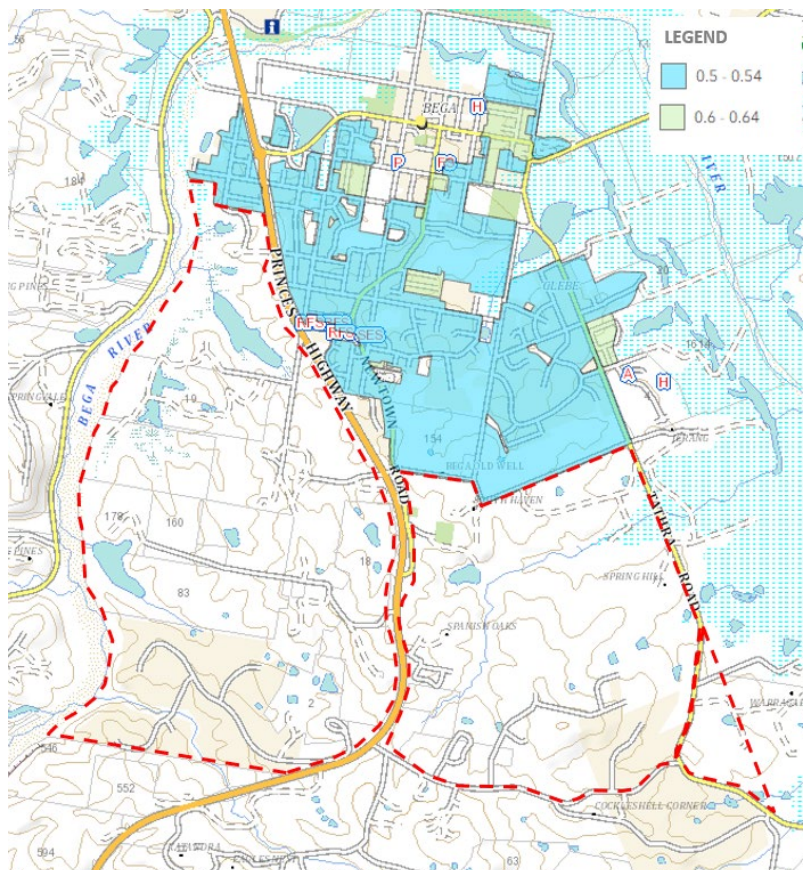


Figure 23. Floor space ratio overlay mapping

Site Constraints - Steep Land

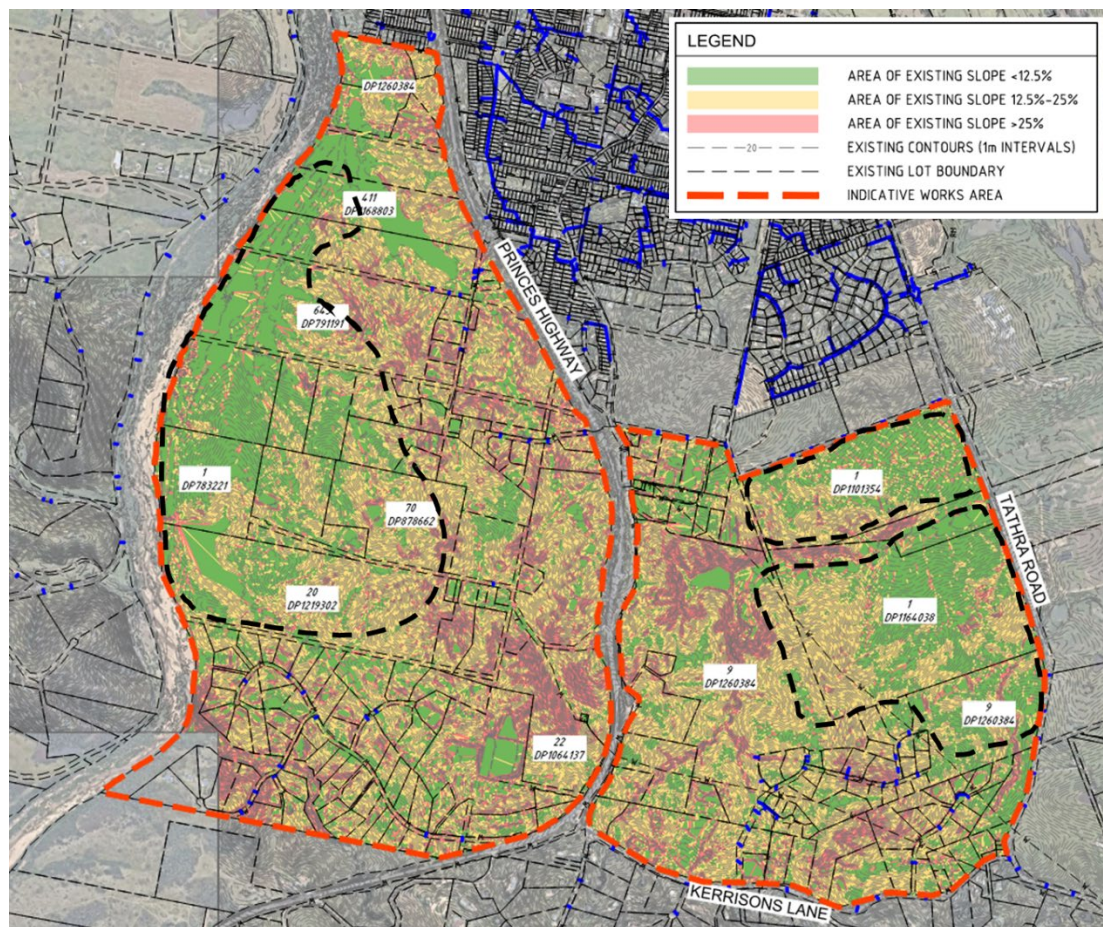


Figure 24. Steep slope assessment (black dotted line represents areas of flatter topography)

There are areas in the east and the west of the study area which contain a flatter topography. It is noted that some of these areas are also flood prone areas, particularly along the Bega River and also along the eastern edge of the study area.

Flatter land (less than 15% gradient) is most conducive to R2 residential development in order to minimize cut/fill impacts associated with the creation of smaller, flat lots. Development of flat land is desirable because it:

- Requires less cut/fill to create level and flat building pads;
- Requires fewer retaining structures between building pads / lots;
- Reduces reliance on more expensive construction methodologies, including split slabs and stilt homes;
- Removes potential maintenance burden of retaining walls from private owner and/or Council; and
- Removes potential amenity impacts associated with large retaining walls on boundary of lots.

The culmination of the above results in more cost effective and better residential development. Notwithstanding, Bega Valley is characterised by undulating topography and therefore flat land is scarce particularly within the Bega study area. Development slope

has been considered in the structure plan and areas which are generally less than 15% are considered to be most appropriate for rezoning to R2 Low Density Residential.

Where residential development does contain steeper slope (>15%), larger residential lots may be considered appropriate (conducive to the R5 Large Lot Residential Zone) in order to provide greater fall across lots (as opposed to taller retaining walls).

This generally aligns with the requirements of clause 3.2.3.3 (Excavation) of the DCP.

Flooding

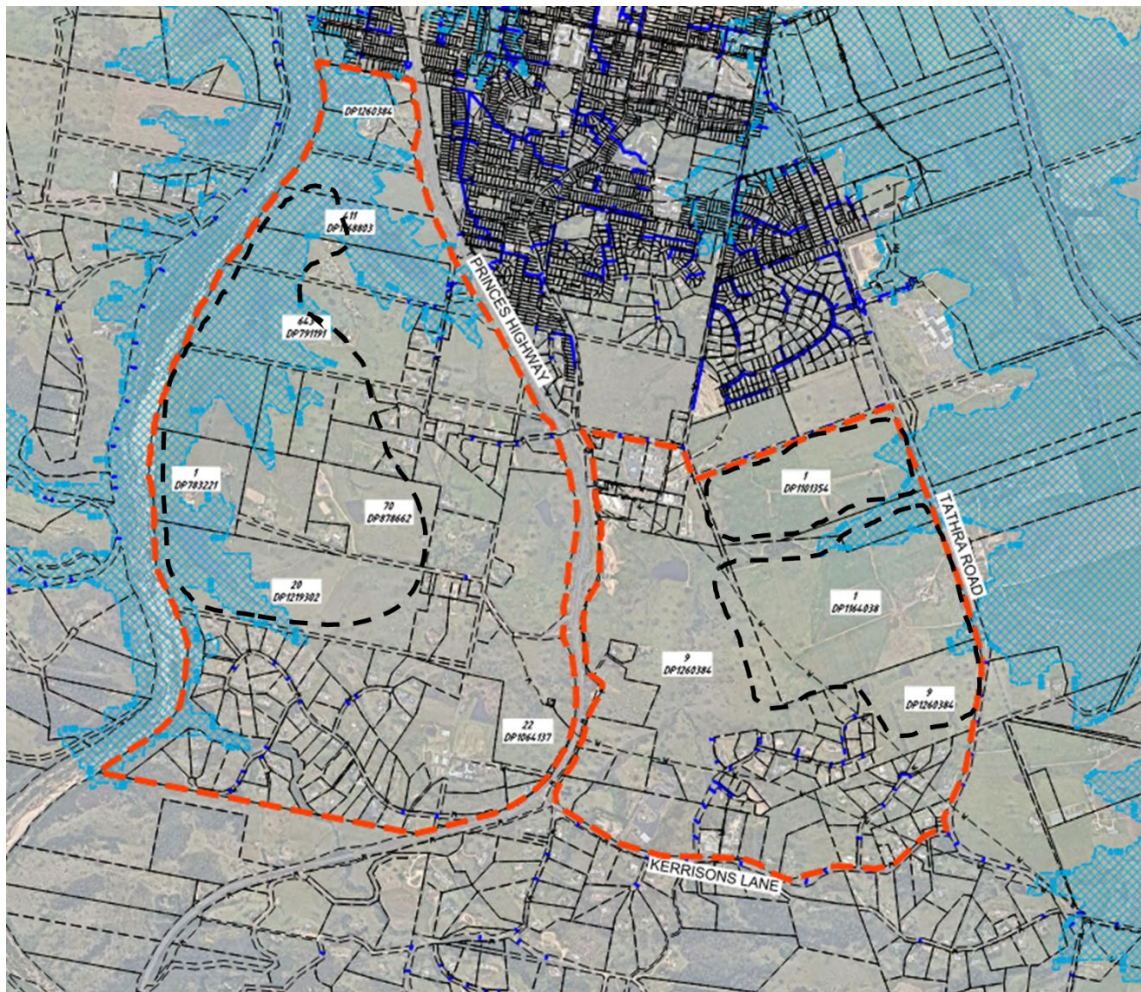


Figure 25. Flood planning area

There are areas within the Bega study area which are impacted by Flood Planning Area on its eastern and western extents. Refer to Figure 25 above.

Clause 5.21 of the LEP includes a flood planning clause which provides that development consent must not be granted on land within the flood planning area unless the consent authority is satisfied the development:

- (a) Is compatible with the flood function and behaviour on the land;
- (b) Will not adversely affect flood behaviour in a way that results in detrimental increases on other properties;

- (c) Will not adversely affect the safe occupation and efficient evacuation of people or exceed evacuation route capacity for an area;
- (d) Incorporates appropriate measure to manage risk to life; and
- (e) Will not adversely affect the environment or cause avoidable erosion, siltation, destruction of riparian vegetation or a reduction in the stability of river banks or water courses.

This clause is also reflected in the DCP, particularly Clause 5.8.1 (Flood Planning).

Generally, development in flood inundation areas may be appropriate where flood impacts can be managed in accordance with Clause 5.21 of the LEP, however this would require detailed flood modelling based on a development specific layout and earthworks plan. For the purposes of the structure plan, land in the flood inundation area has been considered to be constrained and rezoning avoided in these areas.

Bushfire Risk

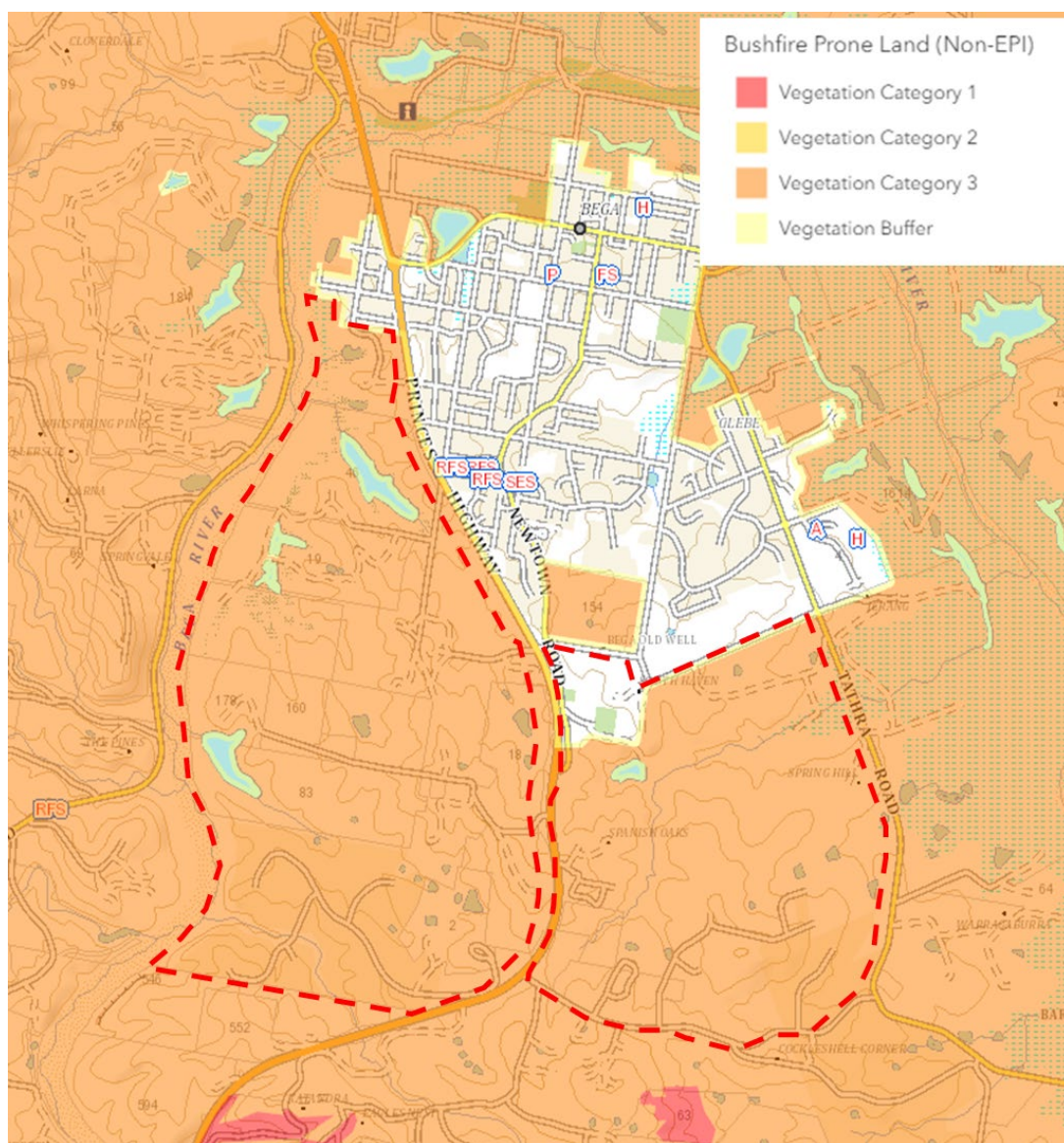


Figure 26. Bushfire prone land

The entirety of the Bega study area is mapped as Bushfire Prone Land, containing Category 3 vegetation. Vegetation Category 3 is considered to be medium bush fire risk vegetation. This category consists of grasslands, freshwater wetlands, semi-arid woodlands, alpine complex and arid shrublands.

Any development on the site which is permitted with consent will be required to:⁸

- (a) Demonstrate conformance with the relevant specification and requirements of Planning for Bush Fire Protection 2019 (PBP); or
- (b) Be accompanied by a certificate by the NSW Rural Fire Service stating that the development conforms to the relevant specification and requirements of PBP; or
- (c) Integrated development section 100B Authority under the NSW Rural Fires Act.

Development consent cannot be granted on Bushfire Prone Land without satisfaction of (a), (b) or (c) above. This requirement is also reflected in the DCP, particularly Clause 5.8.4 (Bushfire Prone Land).

Accordingly, any development within the Bega study area which is permitted with consent will be required to be supported by a Bushfire Assessment Report. Accordingly, The structure plan has taken into account bushfire prone land in its planning, but this has not limited the location and siting of new residential zoning opportunities.

Biodiversity

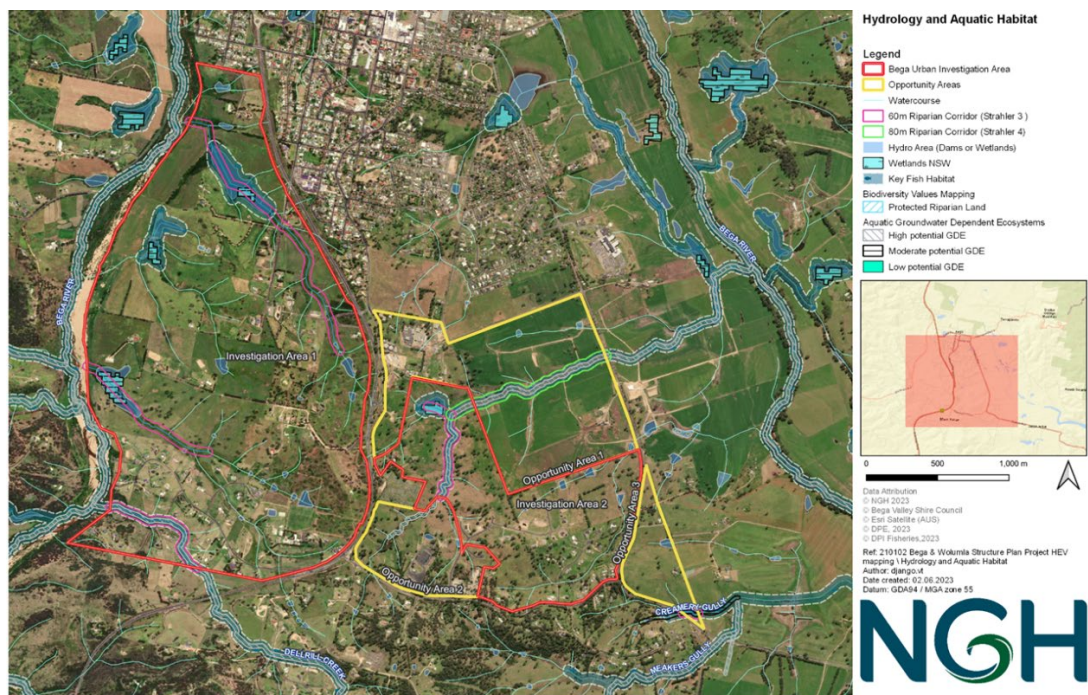


Figure 27. Hydrology and Aquatic Habitat (NGH)

⁸ Environmental Planning and Assessment Act 1979, s4.14.

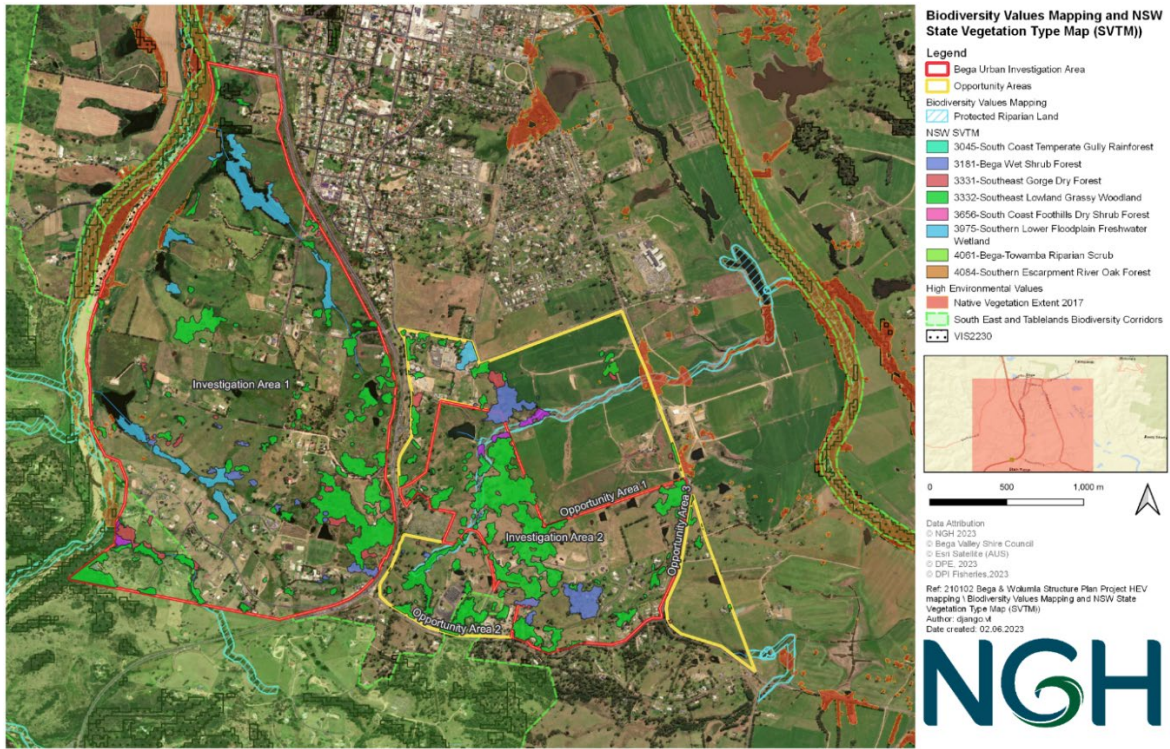


Figure 28. Biodiversity values and NSW State vegetation type map (NGH)

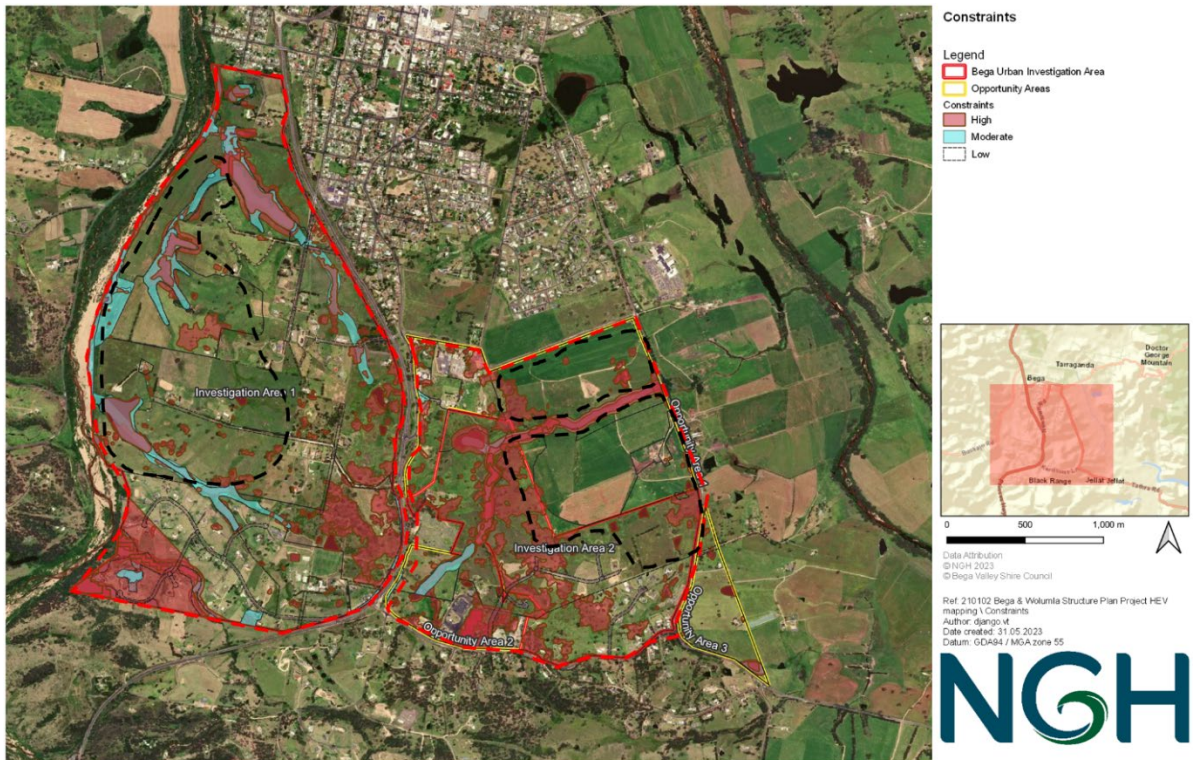


Figure 29. Biodiversity constraints map (NGH)

Note: all biodiversity mapping in NGH report has been undertaken as a desktop exercise and will require ground truthing. Notwithstanding, given the strategic nature of the

structure plan, this level of detail is considered appropriate on the basis that it will be ground truthed when development occurs.

The *Environmental Planning and Assessment Act 1979* (EP&A Act) is the overarching planning legislation in NSW and is subject to the Biodiversity Conservation Act 2016 (Part 7) (BC Act) and the Fisheries Management Act 1994 (Part 7A).

The BC Act is the key piece of legislation in NSW relating to the protection and management of biodiversity and threatened species. The purpose of the BC Act is to maintain a healthy, productive, and resilient environment for the greatest well-being of the community, now and into the future, consistent with the principles of ecologically sustainable development. The BC Act is supported by a number of regulations, including the Biodiversity Conservation Regulation 2017 (BC Regulation).

The BC Act requires consideration of whether a development or an activity is likely to significantly affect threatened species. For Part 4 local developments, projects that significantly affect threatened species trigger the Biodiversity Offsets Scheme (BOS). The BOS is intended to simplify biodiversity assessment and improve biodiversity outcomes by creating consistent assessment requirements to measure the likely biodiversity loss of development proposals and gains in biodiversity value achieved at offset sites through active management. The BOS requires an assessment following the Biodiversity Assessment Methodology (BAM) by an accredited assessor and the preparation of a Biodiversity Development Assessment Report (BDAR).

Development would trigger the BOS if it was considered as likely to significantly affect threatened species, which could occur when:

- (a) It is likely to significantly affect threatened species or ecological communities or their habitats, according to the test of significance in section 7.3 of the BC Act; or
- (b) It exceeds the biodiversity offsets scheme threshold; or
- (c) It is carried out in a declared area of outstanding biodiversity value (AOBV).

The findings of the Biodiversity HEV Mapping Validation, dated May 2023, prepared by NGH (NGH Biodiversity Report) identifies areas of low, moderate and high ecological value within the Bega Study Area and identifies that a BDAR will be likely necessary at the stage of a development proposal.

Clause 5.6 of the DCP seeks to protect native vegetation. For the purpose of structure planning in the Bega Study Area, it should be considered that all significant vegetation has been identified as part of the NGH Biodiversity report. At the time of a development application, the quality and value of vegetation should be assessed on a case-by-case basis.

The areas identified as medium and high ecological significance by the NGH Biodiversity Report have been generally avoided or co-located with RE1 Recreational Open Space or R5 Large Lot Residential in the structure planning exercise.

Aboriginal Cultural Heritage

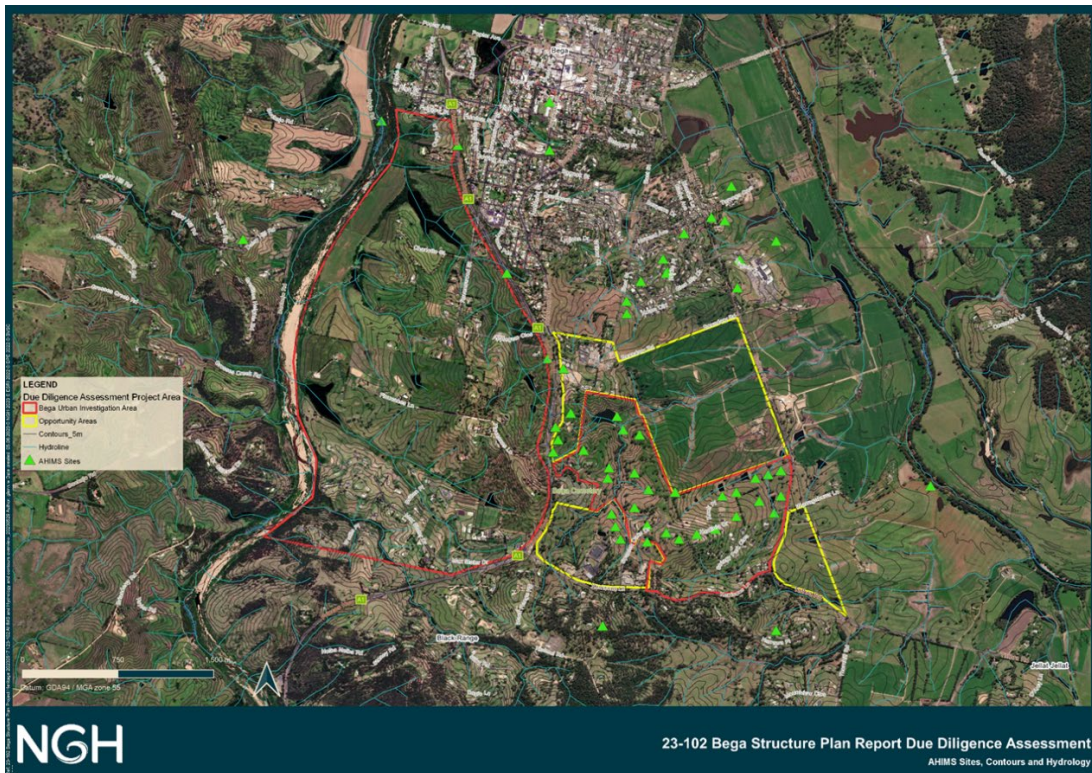


Figure 30. Aboriginal heritage report - AHIMS sites (NGH)

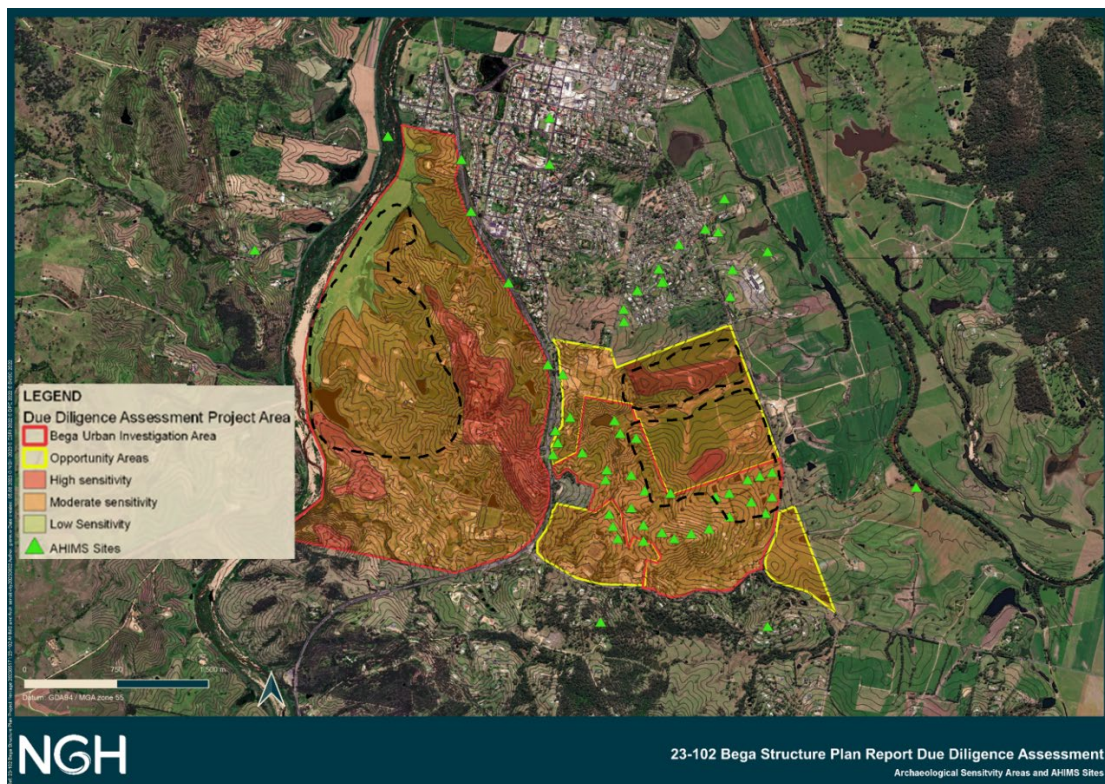


Figure 31. Aboriginal heritage report - potential aboriginal cultural sensitivity

The EP&A Act requires that Aboriginal cultural heritage, and the possible impacts that development may have to Aboriginal heritage be considered, as part of the environmental impact assessment process under the EP&A Act. For most projects requiring assessment under Part 4 and 5 of the EP&A Act, the NPW Act will apply and an Aboriginal Heritage Impact Permit (AHIP) may be required.

Additionally, Clause 5.10 of the Bega Valley LEP requires that development consent be obtained for any proposed activity which will result in impacts to an Aboriginal object or Aboriginal Place. This includes any identified within the LEP itself, or on any other register.

Schedule 5 of the LEP 2010 details the included environmental heritage items covered by the plan.

The Preliminary Aboriginal Heritage Desktop Assessment, dated May 2023, prepared by NGH (NGH Aboriginal Heritage Report) identifies land with potential for low, medium and high sensitivity to Aboriginal cultural heritage. The report identifies that the presence of Aboriginal Cultural Heritage should be subject to further investigations (Aboriginal Cultural Heritage Assessment) and further consultation with the local Aboriginal community, including the Bega LALC and Djirringanj Elders Federation, should be undertaken prior to development of any of the land within the Bega study area (additional engagement has been initiated and is detailed in appendix G).

Aboriginal Cultural Heritage must be considered as part of any future development. For the purpose of structure planning, it should be considered as an important constraint, but not preventative. Where relevant, this will involve an Aboriginal Cultural Heritage Assessment Report being prepared for future development applications over heritage sites. Notwithstanding the Structure Plan has focussed on areas with a low or moderate sensitivity to Aboriginal Cultural Heritage.

Further detail regarding the technical studies is provided in section 4.5.

4.3 Transport & Access

The project site is bisected by the Princes Highway, with a number of intersections and overpasses. The Princes Highway is managed by Transport for New South Wales (TfNSW). Current TfNSW planning documents⁹ shows planning and project delivery occurring north of the subject site as close as Moruya but no planned improvements for the section adjacent to the subject site as planning has not proceeded this far south yet.

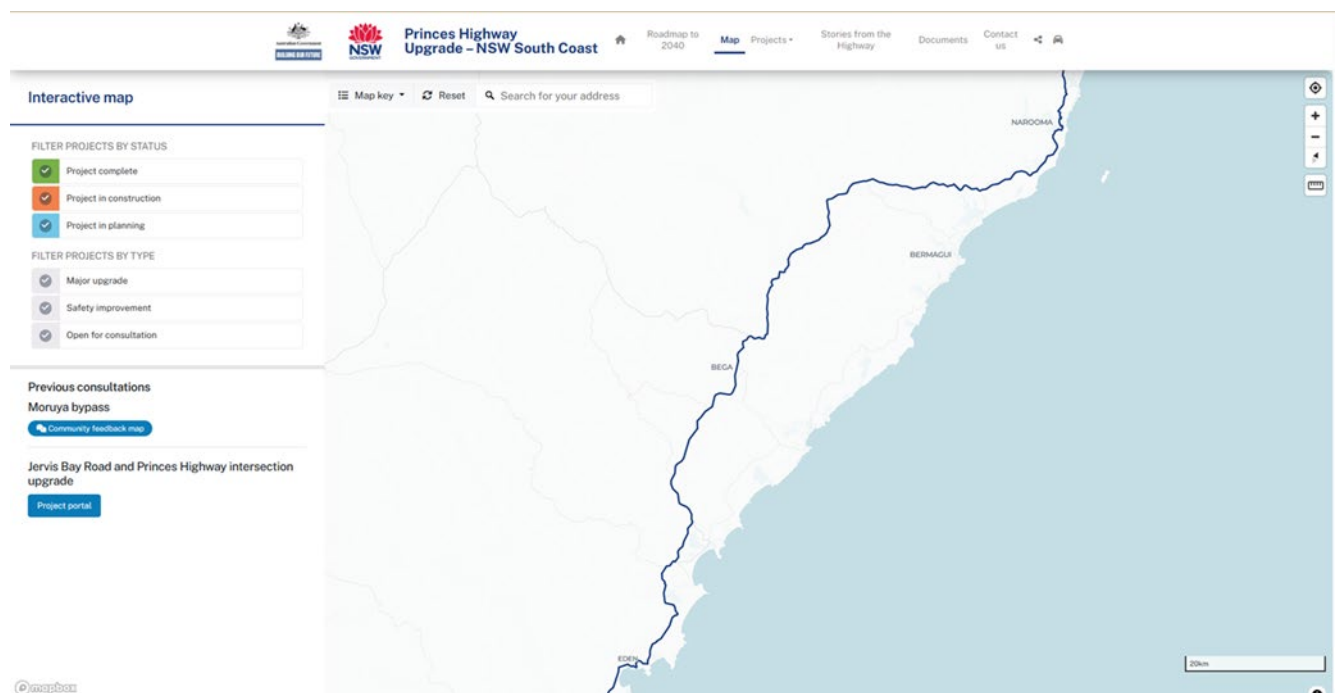


Figure 32. Princes Highway upgrades

Discussion with TfNSW highlighted the following:

Consolidation of access points along Princes Highway

- a. TfNSW generally supports the reduction of access points to the state road network, to minimise conflict points. However, this must be supported with the provision of adequate local road linkages to ensure congestion issues and funneling does not occur.
- b. The extension of Ravenswood Street is seen as an essential sub-arterial road linkage, for accessibility from the western precinct into Bega township, meaning vehicles would not have to use the Highway.
- c. TfNSW would require further consideration before supporting the removal of intersections such as Kerrisons Lane; as indicated by the structure plan there is opportunity to provide an emergency service precinct or other high value land use at the saleyards site.

⁹ <https://princeshighway.nsw.gov.au/tfnsw/phu/map>

Accessibility to the Highway must be considered, particularly for emergency services due to the critical nature of this land use.

d. TfNSW notes that there may be an opportunity to combine Kerrisons Lane to the east of the Highway with Max Slater Drive to the west; the intersections are currently spaced 250m apart on the Highway. This may be considered to provide an inter-precinct connection from east to west and provide access to the School, bus interchange and church.

Reduction of private vehicle usage

a. The structure plan is an opportunity for Council to plan for and influence a reduction in private vehicle usage through public and active transport improvements.

b. It is highlighted that whilst there are strategic active transport links identified in the structure planning for Bega, the active transport routes should connect to existing routes or form part of Council's changes to an updated Walking and Cycling Plan.

c. Council should consider the TfNSW Guidelines for Bus Capable Infrastructure in Greenfield Sites, July 2018 Version 1 (refer to the following link - <https://www.transport.nsw.gov.au/system/files/media/documents/2018/Guidelines-for-Bus-Capable-Infrastructure-in-Greenfield-Sites.pdf>).

d. TfNSW supports mixed land uses which provide commercial and employment opportunities within the precinct minimising trips required to the broader transport network and improving the liveability of the neighbourhood.

Speed Zone Changes

a. TfNSW is responsible for setting speed limits on all roads (state, regional and local) under the Road Transport Act 2013. Speed zone reviews are undertaken in accordance with the NSW Speed Zoning Standards, considering the road environment, road function, safety, minimum speed zone length, etc. Speed zone changes should correspond with changes to the roadside environment and be self-explanatory. Speed zones must balance the function and safety of the road, therefore TfNSW cannot guarantee that a speed zone reduction will occur before a formal review is undertaken.

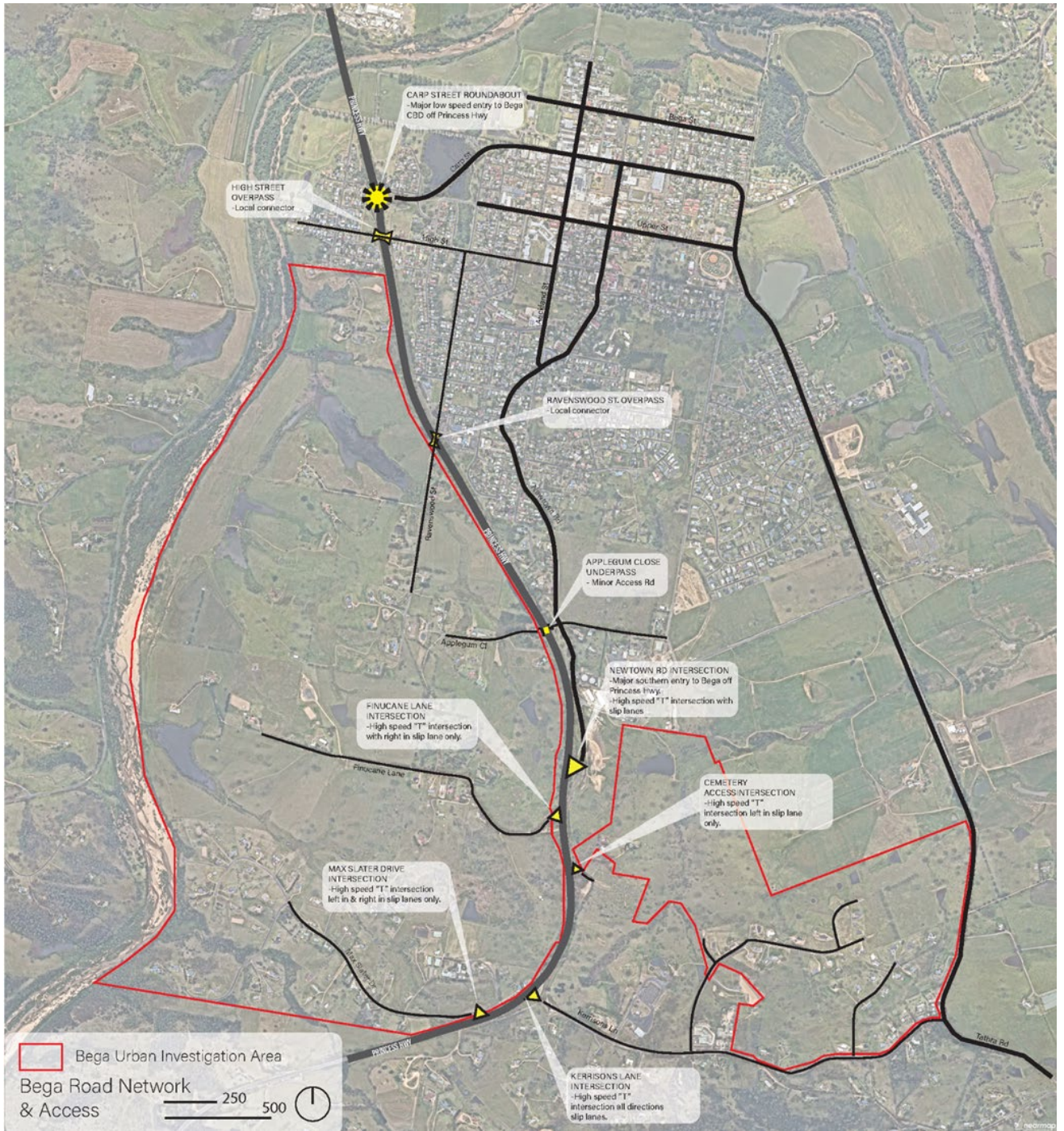


Figure 33. Bega road network and access

The increase in population will increase traffic movements over time. This will be a gradual increase per annum and will require internal and external upgrades (eg road hierarchy, intersections etc.). As the development framework becomes more mature it will be appropriate to conduct a traffic impact assessment which will define the required staging of capital works investment.

4.4 Services

Existing Infrastructure

The site is relatively well serviced with the ability to connect to infrastructure on the perimeter of the subject site. There are two water treatments plants, located at High Street in the north of the subject site and off Newtown Road in the central precinct. There is a sewer treatment plant close to the site which is located at the new hospital. Access to power and telecommunications can be connected to.

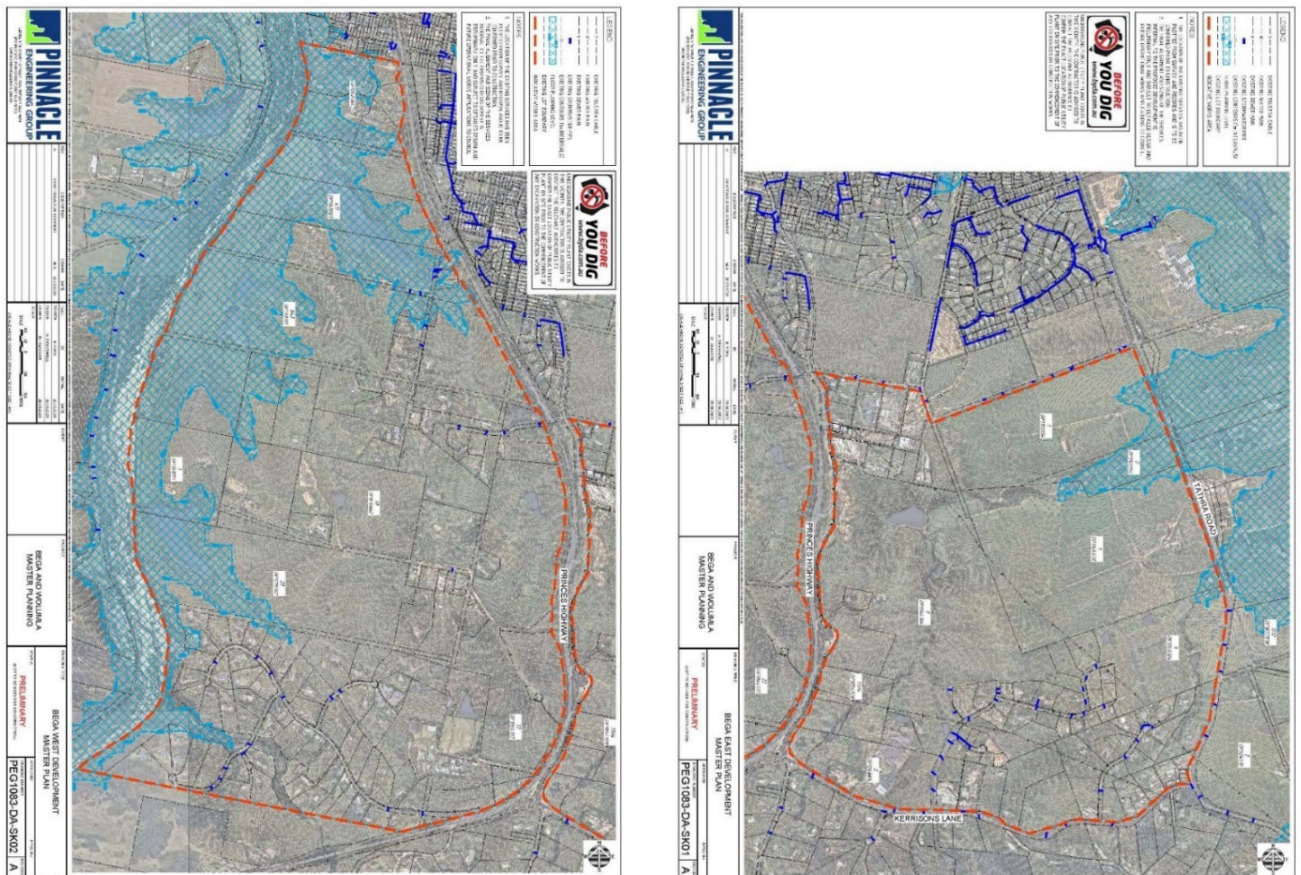


Figure 34. Existing service infrastructure (west and east)

Proposed Infrastructure

This study has considered the servicing strategy for water and sewer as detailed below:

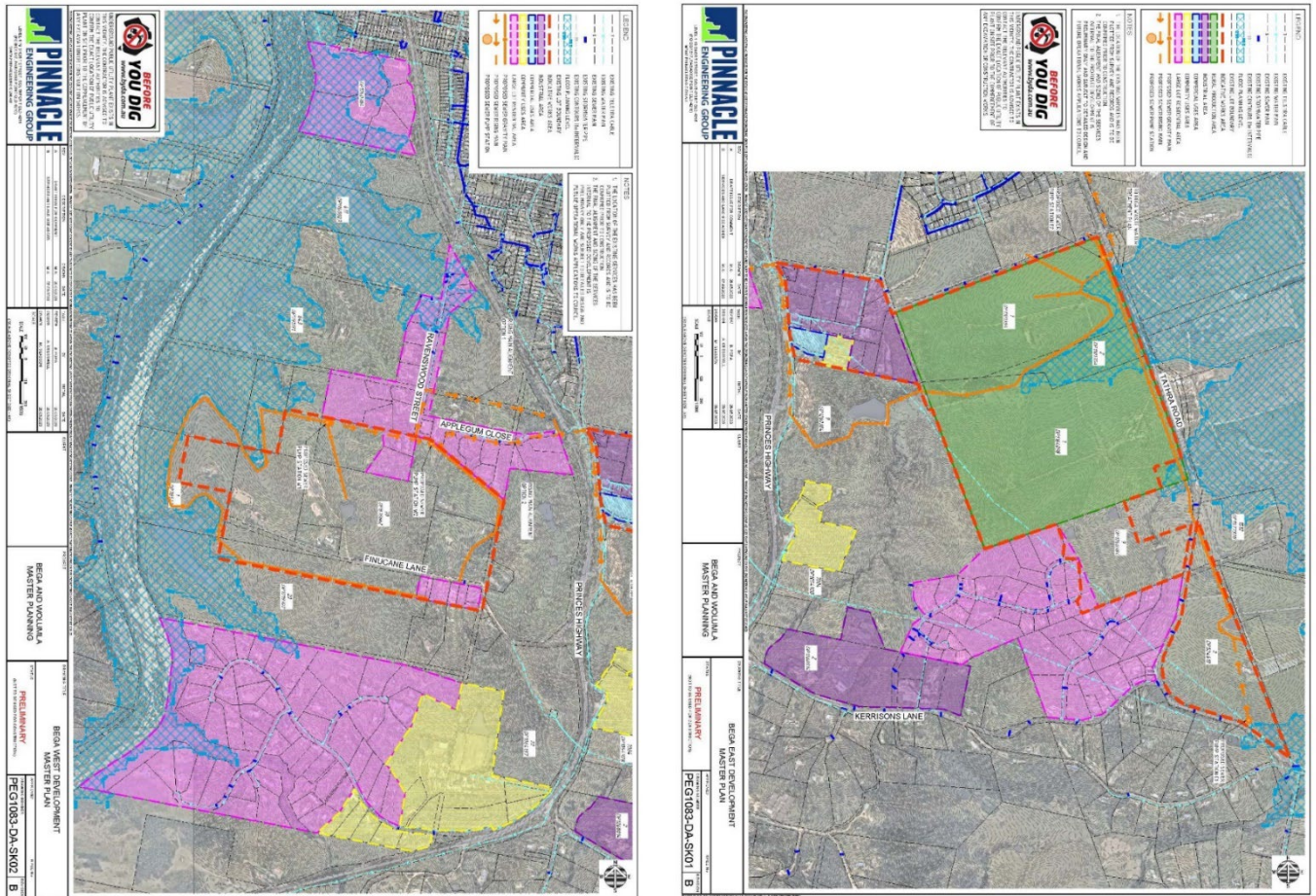


Figure 35. Proposed service infrastructure (west and east)

Water

- It is assumed that the water source would be from bores within the area as is currently the case. It is understood that licences are required for the increased extraction.
- The existing network would be updated as required and the sizing would be determined by Council as development occurred.

Sewer

- To minimise investment in trunk infrastructure it would be appropriate to connect the eastern precinct into the sewer treatment plant at the new hospital site. Pump stations would be provided in accordance with the plan provided.
- The western precinct would follow this development and discharge the rising main into the system in the eastern precinct.

- Upgrades required due to capacity increase would be determined by Council as the areas develop.

Stormwater

- Stormwater management would be subject to detailed design and is subject to the staging of developments.

Electricity

- It is assumed that the existing network will be upgraded as required.

Telecommunications

- It is assumed that the existing network will be upgraded as required.

4.5 Technical Studies

The following technical studies were developed to support the development of the structure plan:

Bega

- Biodiversity Constraints Assessment;
- Preliminary Contamination Investigation Report;
- Aboriginal Cultural Heritage Due Diligence Assessment;
- Recreation Needs Assessment; and
- Economic Impact Assessment.

4.5.1 Biodiversity

Desktop Mapping

This biodiversity constraints assessment (CA) is a preliminary review of existing biodiversity values in the study area. Biodiversity values were identified through a desktop assessment that involved background searches which occurred on 24 May 2023 of State and Commonwealth biodiversity databases. Findings of the desktop assessment results of the database searches informed the mapping of the existing environment in the study area based, including:

- Hydrology including wetlands and Protected Riparian Land, Aquatic Groundwater Dependent Ecosystems (GDE);
- Matters of National Environment Significance (MNES);
- NSW Landuse Map (2017);
- NSW State Vegetation Type Map (SVTM);
- Biodiversity Values Mapping;
- NSW BioNet Atlas;
- Native Vegetation Regulatory Mapping;
- High Environmental Values of the South East Tablelands Planning Region 2022;
- Native Vegetation Extent;
- Category 2 vulnerable Land (Steep or highly erodible land);
- Key Fish Habitat; and
- DPI Fisheries threatened species distribution maps.

Findings from the desktop assessment were then used to map biodiversity values on the site.

Preliminary biodiversity constraints, identified through the desktop assessment, were classified into three constraint ratings and mapped in the study area where possible as shown in figure 36.

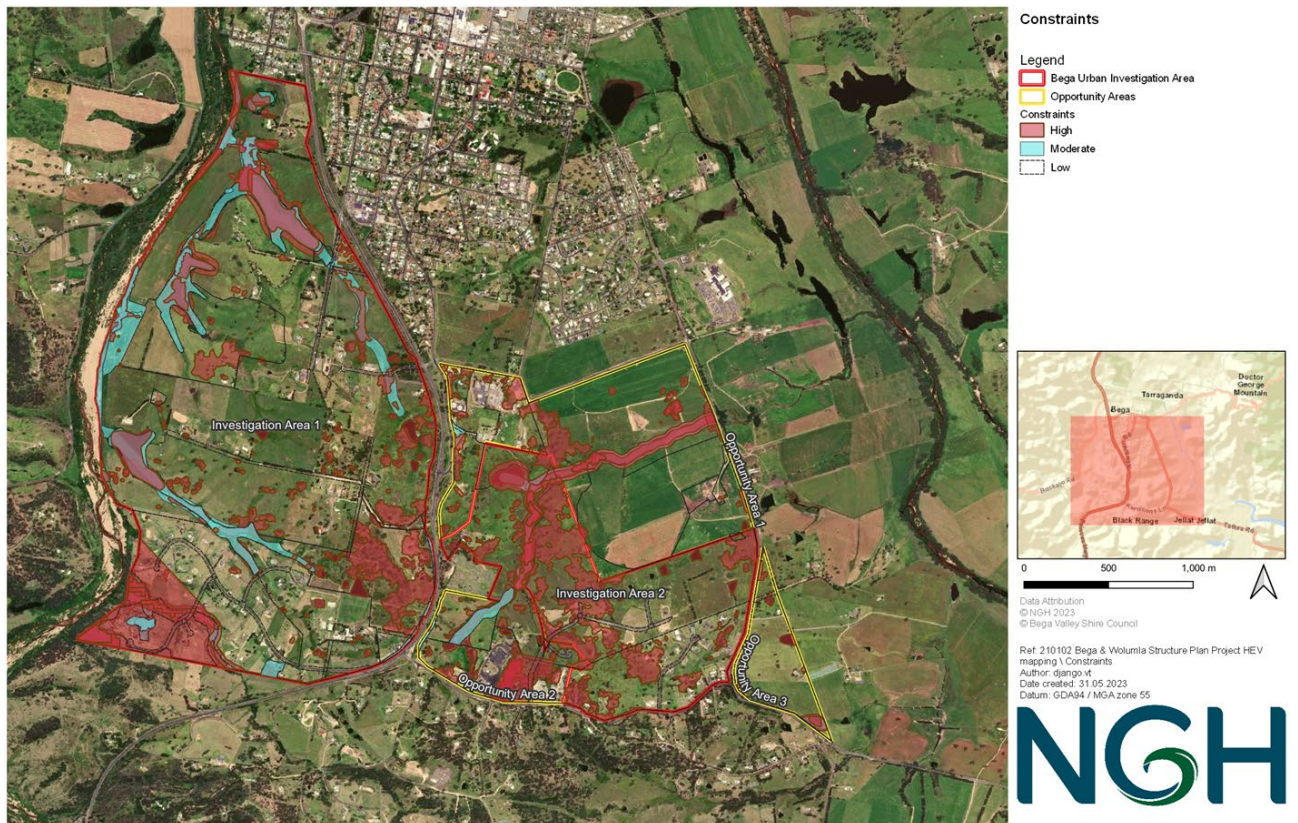


Figure 36. Preliminary biodiversity constraints (NGH)

Limitations

At this preliminary stage these results should be considered as high-level guidance only and will require detailed field assessment to verify the data. For example, areas currently classified as higher constraint may move to a lower category of constraint once validation and ground truthing confirms the condition and extent of Threatened Ecological Communities (TECs) and threatened species habitat.

It is important to note that through desktop assessment only, those areas mapped as having no value or not classified, require field validation and ground truthing to gain a more accurate understanding of the biodiversity constraints.

Results

Database searches for threatened entities were conducted using two search tools. The Protected Matters Search Tool (PMST) for MNES listed under the *Environmental Protection and Biodiversity Conservation Act 1999* (EPBC Act) and the NSW BioNet Atlas search tool for threatened entities listed under the *Biodiversity Conservation Act 2016* (BC Act). The BioNet search is conducted for a 10 km radius surrounding the project area and the PMST search encompasses a broader regional area approximately 10-20 km surrounding the project area.

The PMST search was conducted on 24 May 2023, and returned 83 threatened entities (including 43 birds, 11 mammals, 13 plants, 5 reptiles, 4 frog and 7 fish species) and 5

threatened communities within the search area. Several marine and migratory species were returned in the search due to project proximity to the ocean, for the purpose of this assessment marine and migratory species will not be considered.

The BioNet search was conducted on 24 May 2023 and returned 57 threatened entities (including 36 birds, 16 mammals and 5 plant species). A total of 12 records occur within the project area and include four birds, one plant and six mammals.

Table 6. Species with BioNet records within study area

Species Name	Common Name	Number of records	BC Status	EPBC Status	Record Date
<i>Artamus cyanopterus cyanopterus</i>	Dusky Woodswallow	1	Vulnerable	Not Listed	2019
<i>Calyptorhynchus lathami</i>	Glossy Black-Cockatoo	1	Vulnerable	Vulnerable	1981
<i>Tyto novaehollandiae</i>	Masked Owl	1	Vulnerable	Not Listed	2011
<i>Haliaeetus leucogaster</i>	White-bellied Sea-Eagle	1	Vulnerable	Not Listed	2001
<i>Eucalyptus nicholii</i>	Narrow-leaved Black Peppermint	1	Vulnerable	Vulnerable	2010
<i>Micronomus norfolkensis</i>	Eastern Coastal Free-tailed Bat	1	Vulnerable	Not Listed	2010
<i>Falsistrellus tasmaniensis</i>	Eastern False Pipistrelle	1	Vulnerable	Not Listed	2010
<i>Scoteanax rueppellii</i>	Greater Broad-nosed Bat	2	Vulnerable	Not Listed	2011
<i>Miniopterus orianae oceanensis</i>	Large Bent-winged Bat	1	Vulnerable	Not Listed	2010
<i>Myotis macropus</i>	Southern Myotis	1	Vulnerable	Not Listed	2010
<i>Phascolarctos cinereus</i>	Koala	1	Endangered	Endangered	1989

The Plant Community Types associated with TECs are identified in the table below which is the result of NSW SVTM data mapped and clipped to the Project Area with TECs and benchmarks identified through the use of the NSW DPE Bionet Vegetation Classification database.

Table 7. Plant community types associated with threatened ecological communities

PCT	Name	Threatened Ecological Community comments
3181	Bega Wet Shrub Forest	(Comment TEC1) Relates to the NSW River-Flat Eucalypt Forest on Coastal Floodplains TEC where it occurs on floodplain alluvium and within stated elevation range as per paragraph 1 of the Final Determination. (Comment TEC2) Relates to the Commonwealth River-flat Eucalypt Forest on Coastal Floodplains TEC where it occurs at elevations below 250 m asl and satisfies condition thresholds as per section 5.2 of the Conservation Advice.
3185	Far South River-Flat Wet Forest	(Comment TEC1) Relates to the NSW River-Flat Eucalypt Forest on Coastal Floodplains TEC where it occurs within stated elevation range as per paragraph 1 of the Final Determination. (Comment TEC2) Relates to the Commonwealth River-flat Eucalypt Forest on Coastal Floodplains TEC where it occurs at elevations below 250 m asl and satisfies condition thresholds as per section 5.2 of the Conservation Advice.
3332	Southeast Lowland Grassy Woodland	(Comment TEC1) Relates to the NSW Lowland Grassy Woodland TEC. (Comment TEC2) Relates to the Commonwealth Lowland Grassy Woodland in the South East Corner Bioregion TEC where it occurs within the stated area south of (and including) the Clyde River catchment primarily within the South East Corner bioregion (IBRA Version 7.0) and satisfies condition thresholds as per the Conservation Advice.
3975	Southern Lower Floodplain Freshwater Wetland	(Comment TEC1) Relates to the NSW Freshwater Wetlands on Coastal Floodplains TEC.

Preliminary Biodiversity Constraints

High and moderate constraints should be considered as areas for protection and enhancement through structure planning. The identified constraints include those environmental aspects or biodiversity values listed below within each constraint rating subsection.

An exception here is that unknown constraints were not identified specifically and may be assumed present across the planning area, it is acknowledged that this also may correspond with area of low constraint. Low constraints are mapped across most of the site.

Higher Constraints

- Threatened Ecological Communities;
- Threatened Species Presence;
- Protected Riparian Land; and
- Wetlands.

Riparian Corridor buffers in accordance with Strahler:

- Native Vegetation Extent;
- Category 2 vulnerable Land (Steep or highly erodible land); and
- Key Fish Habitat.

Moderate Constraints

Mapped areas including:

- Grazing native vegetation; and
- Dairy sheds and yards (possible microbat habitat).

Low Constraints

Established and historic:

- Public roads and farm access tracks that do not contain any live groundcover;
- Exotic dominated rural and residential with agriculture paddocks including historically grazed or cultivated areas with low potential for threatened species occurrence. This includes planted exotic and cultivated areas and Grazing on irrigated and unirrigated modified pastures; and
- Service areas.

Unknown Constraints

It is important to note that through desktop assessment only, those areas mapped as having no value or not classified, require field validation and ground truthing to gain a more accurate understanding of the biodiversity constraints.

Discussion

The findings from the assessment found the following biodiversity values within the planning area:

- Threatened Ecological Communities;
- Protected Riparian Land;
- Key Fish Habitat;
- Aquatic habitat for a range of fauna and flora species (some threatened – Australian Grayling, *Prototroctes maraena*); and
- Scattered trees and wooded vegetation, providing threatened species habitat and the possibility of hollow-bearing trees.

Potential planning triggers will require that a Biodiversity Development Assessment Report (BDAR) be prepared in accordance with the BAM pursuant to the BC Act. The BDAR in this case will demonstrate how impacts have been avoided, mitigated and offset as a last resort. The constraints mapping provided in this report and other logistical factors should be scrutinised to ensure that the final impact areas presented have avoided the higher quality site aspects, to avoid impacts on key biodiversity constraints as much as possible, namely:

- Threatened species habitat;
- Watercourses and ephemeral lakes;
- Biodiversity Values Mapped areas; and
- Consider prescribed impacts which are impacts that cannot be quantified through the BAM calculator, resulting from the proposed development.

As part of the BAM process, detailed ecological surveys and further investigation and assessment would be undertaken including:

- Field validation of PCTs;
- Vegetation integrity plots (to confirm the PCTs, TECs, their condition and distribution);
- Targeted surveys for candidate threatened species (generated by the SEARs and BAM process);
- Bird and bat baseline collision risk surveys (as per the prescribed impact process of the BAM);
- Consideration of collision risk in the strong wind and fog prone landscape of the Monaro Tablelands;
- Water bird collision risks with the presence of small ephemeral lakes onsite;
- Recommendations to avoid and minimise impacts;

- Offset calculations to determine the offset obligation of the final proposal; and
- Offset planning, to ensure the offset obligation can be met.

Further assessment under the *Fisheries Management Act 1994* and EPBC Act may be necessary for those impacts to aquatic and/or commonwealth listed species and communities

Full detail is available in Appendix D.

4.5.2 Preliminary Contamination Investigation Report

The objectives of the preliminary contamination investigation assessment are to inform Council of any identified potential soil and / or groundwater contamination associated with the subject land and / or adjoining properties, and to:

- Identify past and present potentially contaminating activities (based on available information);
- Identify potential contamination sources and types;
- Discuss the site condition including any external observations of potentially hazardous materials;
- Provide a preliminary assessment of potential site contamination;
- Assess the need for further investigations;

The scope of work includes:

- A review of historical aerial photographs, previous environmental reports and available databases relating to contaminated land. NGH engaged Lotsearch to provide an Enviro Pro database search report and historical aerial imagery;
- Review available geological and hydrogeological data for the site;
- Develop a preliminary Conceptual Site Model (CSM) for the site; and
- Preparation of this report detailing the results of this scope of works.

Discussion

The results of this assessment indicate that the subject land has been used for the purposes of residential development and grazing (native and modified vegetation). A water supply system occurs to the southeast of the western portion of the subject land. The surrounding land is largely utilised for the purposes of residential development (the town of Bega), and agricultural purposes, namely grazing.

A search of the Contaminated Land Record returned no records for the subject land. Similarly, the subject land is not listed as a contaminated site within NSW.

Data Gaps

Based on the findings of this assessment, the following data gaps have been identified:

- The history of the subject land is limited by the information sources;
- A site walkover was not conducted during the preparation of this PSI; and
- The extent and composition of any fill material that might occur within the subject land, as a result of prior development, is unknown.

Conclusion

The results of the assessment indicate that the subject land has been largely used for residential development, as well as grazing (native and modified vegetation). A water supply system occurs to the southeast of the western portion of the subject land. The surrounding land is largely utilised for the purposes of residential development (the town of Bega), and agricultural purposes, namely grazing.

The site history review identified the following AECs for the subject land:

- AEC1 - Hazardous building materials;
- AEC2 - On and offsite contamination from motor garages and service stations; and
- AEC3 - Offsite contamination from the upgradient cemetery.

Recommendations

Based on the findings of the PSI, it is recommended that a targeted site walkover be conducted, to determine:

- The location and extent of the two on-site motor garages / service stations; and
- The presence / absence of hazardous building materials within developed areas of the subject land.

Targeted survey areas will be determined using historic aerial imagery, prior to the site visit.

The findings of the site walkover will inform further assessment of the site, including targeted sampling locations. This will include land located along the boundary of the cemetery.

Full detail is available in Appendix F.

5.5.3 Aboriginal Cultural Heritage Due Diligence Assessment

Methodology

This report has been drafted in keeping with the sequence of steps identified in the Due Diligence Code of Practice for the Protection of Aboriginal Objects in NSW (Due Diligence Code) (DECCW, 2010) as relevant to undertaking a desktop assessment. The format of the report has been designed to outline the legislative background, archaeological background, constraints overview, and further assessment requirements.

The Due Diligence Code outlines a five-step approach to determine if an activity is likely to cause harm to an Aboriginal object, as defined by the NSW National Parks and Wildlife Act 1974 (NPW Act). The steps follow a logical sequence of questions, and the answer to each question determines the need for the next step in the process in order to:

- Identify whether Aboriginal objects are, or are likely to be, present in the Project Area; and
- Determine whether or not the proposed activities are likely to harm Aboriginal objects (if present) in the Project Area.

Table 8. Aboriginal heritage due diligence steps

	Due Diligence steps
Step 1.	Will the activity disturb the ground surface?
Step 2a.	Search the AHIMS database and use any other sources of information of which you are already aware.
Step 2b.	Are activities proposed in areas where landscape features indicate the presence of Aboriginal objects?
Step 3.	Can you avoid harm to the object or disturbance of the landscape feature?
Step 4.	Undertake a desktop assessment and visual inspection. Is it likely that Aboriginal objects will be impacted by the proposed works?
Step 5.	Further investigations and impact assessment.

If the proposed activities are not 'low impact activities' (a defence for which is provided under the NPW Regulation), the considerations result in a determination of whether or not further approval under the NPW Act is required, in the form of an Aboriginal Heritage impact Permit (AHIP) or if the Due Diligence obligations for the protection of Aboriginal objects are discharged by the process under the Code.

For the purposes of the Due Diligence assessment, disturbed land is defined in the Due Diligence Code. Land is disturbed if it has been the subject of a human activity that has changed the land's surface, with the changes remaining clear and observable. The defence against prosecution offered by following the Due Diligence Code process does not apply to situations where it is known there is an Aboriginal object present. The defence does not authorise harm to Aboriginal objects.

Each section within this report follows the relevant step outlined in the Due Diligence Code (DECCW, 2010).

Aboriginal Consultation

The Aboriginal Due Diligence process does not formally require consultation with Aboriginal community groups however it is considered archaeological best practise to engage the local Aboriginal community when assessing Aboriginal heritage values in the early stages of any proposed development. Therefore, as part of this assessment a limited

program of consultation was undertaken with the local Aboriginal community, specifically with the Bega Local Aboriginal Land Council (Bega LALC) and the Djirringanj Elders Federation.

Email correspondence was sent to the Bega LALC and the Djirringanj Elders Federation on 24 of May 2023 by NGH archaeologist Glenn Willcox to ensure these local Aboriginal community groups were made aware of the project and to seek any information regarding the known Aboriginal heritage values within the Project Area and its broader landscape context.

Responses were received from both parties expressing interest in the Bega Structure Plan project and seeking to ensure that appropriate assessment of the Aboriginal heritage values of the Project Area is undertaken during the planning phase of any future development processes. There was a particular focus on the need for consultation/engagement of the Aboriginal community early in the processes.

On 29 May 2023 John Dixon, a representative from the Djirringanj Elders Federation, verbally provided the following general statements about the cultural values associated with the Project Area and planning for future developments. The wording below which is based on notes taken by Glenn Willcox was approved by John Dixon for inclusion on 29 May 2023.

"At this stage I will provide general information about the area, but more detailed information is known.

The landscape south of the township of Bega, including the Project Area for the Bega Structure Plan, is a culturally significant landscape to the Djirringanj people. The area includes the biggest trading ground in the region and was a prime hunting ground as well. There are very significant ceremonial sites in the area.

This information has long been known to the current Djirringanj people and it is vital that ongoing consultation is undertaken during any planning and development programs. Adequate consultation is the key to avoid a repeat of past damaging impacts from development activity to significant cultural places in the area."

(per comm John Dixon 29/05/2023)

Desktop Assessment

Previously recorded Aboriginal sites and areas of potential archaeological deposits (PAD) are known to be present within portions of the Project Area. The Project Area also has landscape features which are noted to be archaeologically sensitive. While the future development of the Project Area as a whole is unlikely to be able to be relocated to another location, the exact footprint of future development is currently unknown and assumed to be flexible in nature to some degree to ensure the consideration of Aboriginal Heritage.

The desktop assessment alone is therefore not sufficient to conclusively appraise the archaeological potential of the landscape or the location of any additional sites, the next step in the process, a visual inspection, must be conducted to properly appraise the

presence and potential for Aboriginal sites to occur within the Project area. A visual inspection will also allow for the inspection of the previously recorded sites and areas of PAD within the Project Area.

The assessment process is primarily a desktop exercise, using available information such as the AHIMS search results and relevant archaeological reports to develop or refine a model of Aboriginal site prediction based on the type of activity proposed and the level of disturbance of the area. As part of this desktop assessment it has been established that there are a number of valid Aboriginal sites registered on AHIMS within the Project Area as detailed in figure 37.

Preliminary archaeological sensitivity mapping has been developed to identify landforms and areas of high, moderate and low archaeological sensitivity and the Aboriginal heritage constraints within the Project Area. This preliminary mapping may be used to inform the Bega Structure Plan however it must be noted that this modelling has not been ground truthed as no visual inspection was undertaken as part of this scope of works.

The archaeological sensitivity / Aboriginal heritage constraints categories have been defined in terms of site size and significance, with the term 'large' referring to an archaeological site covering an extensive area and/or containing a high density of artefactual material, and 'significance' referring to the importance of the site for scientific/research potential and/or the cultural significance to the local community.

Table 9. Heritage constraint categories

Constraint	Definition
Low (Green)	Low potential to encounter large and significant sites and therefore minimal impacts anticipated on Aboriginal Heritage. At a minimum a visual inspection is required as part of a Due Diligence Assessment.
Moderate (Orange)	Moderate potential to encounter large and significant sites. Impacts should be minimised, where possible. Further assessment and visual inspection required.
High (Red)	High potential to encounter large and/or significant sites. Avoid if possible. Further assessment and visual inspection required.

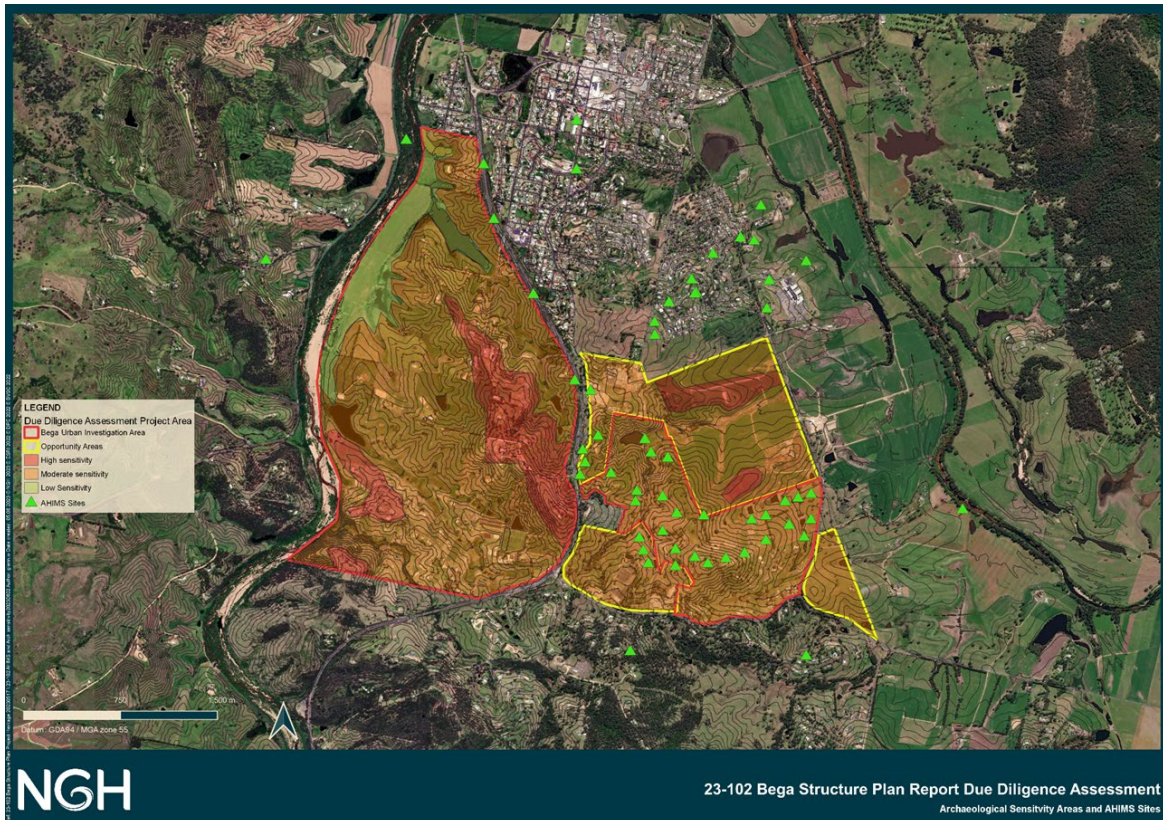


Figure 37. Preliminary archaeological sensitivity mapping (NGH)

It has been established through the desktop assessment that the Project Area is located within a landscape that has the potential for the presence of Aboriginal cultural material to occur across its extent, albeit in varying degrees of sensitivity. A number of Aboriginal sites have also previously been recorded within the Project Area, specifically in the south-eastern most portion of the Project Area which has previously been subject to archaeological assessment and a subsurface test excavation programme.

Given this, it is likely that Aboriginal objects will occur in similar landforms and densities across the Project Area which would be impacted by any future development works. As a general statement, the areas that residential developments prioritise for the placement of dwellings and roads, were also prioritised by Aboriginal peoples in the past for their activities and evidence of this occupation in the form of Aboriginal objects is likely to be encountered across the Project Area.

Based upon the previous archaeological investigations of the local area and the currently recorded AHIMS sites there is potential for a range of site types, in particular PADs, artefact scatters and isolated stone artefacts to occur within the Project Area. Modified trees and ceremonial sites also have potential to occur within the Project Area.

Further Assessment and Recommendations

The Due Diligence Code states that if, after the desktop research is completed, it is evident that harm will occur to Aboriginal objects or heritage places then further and more detailed assessment is required.

It has been established that the Project Area is located within a landscape that has the potential for the presence of Aboriginal cultural material to occur across its extent, albeit in vary degrees of sensitivity. A number of Aboriginal sites have also previously been recorded within the Project Area. Therefore, further investigation and assessment, which must include a visual inspection, is required for any proposed development projects within the Project Area.

The following recommendations are based on a number of considerations including:

- Background Aboriginal heritage research;
- Assessment of Landscape; and
- The NSW National Parks and Wildlife Act 1974 and Aboriginal heritage guidelines in NSW.

It is recommended that:

1. As one of the aims of the Bega Structure Plan is to respect Aboriginal Heritage, the preliminary archaeological sensitivity mapping may be used to inform future development design and planning.
2. Visual inspection of the Project Area is required to ground truth and refine the preliminary archaeological sensitivity mapping identified in this desktop assessment.
3. To appropriately assess the true archaeological sensitivity and potential for Aboriginal objects to be impacted by any proposed development in the Project Area further investigation and assessment, which must include a visual inspection, is required.
4. No old growth native trees may be disturbed without inspection by a qualified archaeologist for scarring or modification.
5. It is an offence under the National Parks and Wildlife Act 1974 to disturb, damage or destroy an Aboriginal object without a valid Aboriginal Heritage Impact Permit (AHIP).
6. A number of previously recorded valid Aboriginal sites are recorded within the Project Area. An AHIP is required to be approved by Heritage NSW to facilitate any proposed impact to these previously recorded valid Aboriginal sites.
7. To comply with current NSW legislation and Aboriginal heritage guidelines, further assessment in the form of a new Aboriginal Cultural Heritage Assessment (ACHA) is required to comply with Aboriginal consultation requirements as part of any AHIP application to Heritage NSW for the land which includes the previously recorded valid Aboriginal sites recorded within the Project Area. It is however noted that further subsurface test excavation of the land previously subject to archaeological assessment by Dibbden (2005a) is unlikely to be required given the extensive testing programme previously undertaken. However, this would be required to be determined by a qualified archaeologist

in consideration of the proposed development design over the parcel of land previously subject to the South Bega archaeological assessment (see Dibden 2005a).

8. Consultation with the local Aboriginal community, including the Bega LALC and Djirringanj Elders Federation, should continue for any proposed land development within the Project Area.

Note. The Bega cemetery and old Bega hospital are both heritage listed

Full detail is available in Appendix E and additional engagement conducted at the completion of this project is available in Appendix G.

4.5.4 Recreational Needs Assessment

Scope and Inputs

The analysis has considered the required scale of recreation facilities within each of the two structure plan areas based on planned population capacity within each structure plan area, as well as the effect on population in the surrounding area and the combined impact on recreation needs.

The recreation needs analysis has been informed by what is considered 'best practice' recreation planning and provision, as well as consideration of existing and planned recreation facilities throughout the relevant surrounding region. This has informed the scale of required recreation facilities based on the capacity of each structure plan area, as well as the timing for when additional recreation facilities are expected to be required.

The recreation needs analysis relies on various inputs including consideration of existing recreation facilities supply, planned additions to this supply, the existing and forecasts population capacity within townships, and the planned population capacity within each structure plan area.

The Bega study area was initially planned to include 2,600 dwellings and an estimated 5,720 people on completion (final structure plan outcomes may differ). This growth is estimated to occur over a 25-year timeframe, indicating an average of 104 dwellings and 230 additional people per annum. The growth within this structure plan area represents approximately 60% of the forecast growth throughout the wider Bega Valley LGA between 2021 and 2036.

These growth capacities and the effect they will have on the wider population capacity within the Bega township are the primary input for demand considerations for additional recreational facilities.

Recreation Planning Review

Planning for sport and recreation planning varies throughout Australia, with no national industry standard on sports field provision. The provision from one region to the next varies

based on various conditions, with one of the key conditions being the variation in sporting participation by region.

There is however some level of consistency when it comes to general land area provision for sporting fields and parks. Based on a review of various sports and recreation planning guidelines, the typical provision for sporting fields is 1.5-2.0Ha per 1,000 people, with the typical provision for recreation parks is up to 3Ha per 1,000 people based on all parks ranging from local parks through to district and major recreational parks.

There are two planning documents that outline the intent for future sports and recreation redevelopment and expansion within the Bega Valley region. These plans apply to the two regional sporting facilities and are the Bega Sporting Complex Master Plan and the Pambula Sporting Complex Master Plan.

The growth within each of these respective sporting precincts will be significant to the region with the regional role, supported by a significant consolidation and colocation of various fields and infrastructure relevant to a range of sporting activities, serving wide catchments covering the extent of the Bega Valley region. These sporting precincts are of the highest order in the region and the scale of existing and planned sporting and recreation infrastructure within each will have an influence on demand and need conditions throughout the surrounding region, including the structure plan area.

Recreation Needs

The main driver of demand and need for sports and recreation facilities within each of the structure plan areas will be the additional population capacity supported by the scale of planned residential development. In addition to this, the relative proximity or remoteness to existing sports and recreation facilities is also a relevant consideration as it impacts accessibility for future residents within each structure plan area.

The Bega structure plan area was initially expected to support an additional 2,600 dwellings and an estimated resident population of 5,720 people (final structure plan outcomes may differ). This future growth capacity will add to the existing population of approximately 5,013 people within Bega (at 2021 based on the suburb boundary) to support a population capacity of approximately 10,700 people.

It is important to also acknowledge the regional role that Bega supports for surrounding townships, including the provision of higher order regional sports and recreation facilities. This is reflected by the Bega Sporting Complex and the scale and mix of sporting activities supported onsite.

Table 10 below assesses sports and recreation park demand based on the planned population capacity within the Bega structure plan area and based on the combined existing and future population capacity.

Table 10. Sport and recreation needs

	Bega SPA	Bega Capacity	Requirement / Need Implications
Population (people)	5,720	10,733	
Recreation Parks (Ha)			
Neighbourhood Rec Park	2.9	5.4	5 neighbourhood recreation parks totalling 2.5-3Ha (Avg of 0.5Ha each)
District Rec Park	2.9	5.4	1 district recreation park (Approx. 5Ha)
Major Rec Park	2.9	5.4	Nil requirement. Provided for within existing township.
Sports Parks (Ha)			
District Sports Park	5.7	10.7	1 district sports park (Between 1Ha and 4Ha)
Major Sports Park	2.9	5.4	Nil requirement. Fulfilled by Bega Sporting Complex.

Source: QLD DILGP PDA guideline, ABS Census, Think Economics

The demand and needs analysis presented in Table 10 indicates that the additional population capacity supported by the structure plan area will create a requirement for up to 7.5Ha of recreation parks. This includes five recreation parks (of approx. 0.5Ha each) within the structure plan area, with one park required every five years based on the estimated rate of growth. It will also require one district recreation park which is expected to be located within the structure plan area but will serve the needs of existing and future residents within the Bega Township, with a new facility located in the south creating improved distribution and accessibility of recreation supply.

The needs for additional sporting facilities are significantly influenced by the existing Bega Sporting Complex which is expected to undergo several upgrades over the next several years. This facility will support regional capacity over the long term and will likely accommodate most local sporting needs also, given the accessibility within the existing Bega township and to the structure plan area.

The sporting facility need is for a single district sports park, which could range between 1Ha and 4Ha depending on the types of sport activities to be supported. It is expected that this facility will be located within the structure plan area and that the timing and sports activities onsite will be determined by the capacity of the Bega Sporting Complex.

Note. Additional residential land provided in the eastern precinct could impact recreational space requirements and will be required to be taken into consideration as development progresses.

4.6 Opportunities and Constraints

Site analysis and technical studies have informed the development of opportunities and constraints plans from both sites. Opportunities and constraints planning defines the approach to precinct planning and the resultant structure plans.

The following opportunities and constraints have been documented and noted on the plan as figure 38.

1. Land area under the probable maximum flood height is considered highly constrained.
2. Opportunity to extend Ravenswood St, Newtown Rd, Kerrisons Lane and Boundary Road to make key inter-precinct connections and link with a possible new intersection.
3. Realise strategic opportunities associated with State and local government land - Old Hospital and Transport Depot.
4. Existing Princes Hwy route impacted by multiple local intersections - opportunity to consolidate.
5. Opportunity to provide a lower speed safe intersection at Finucanes Lane as a southern access to Bega that also links with new western and eastern residential precincts.
6. Existing lifestyle blocks constrain future opportunities to change settlement patterns easily.
7. Opportunity to develop existing saleyards site as new emergency service precinct or other high value land use.
8. Large land areas not impacted by steep slopes or waterways and have capacity to accommodate a mix of housing opportunities.
Note: Some areas adjacent to Parbery Creek and north of the Spanish Oaks development have concentrated high biodiversity and cultural heritage constraints - refer NGH technical studies.
9. Flooding impacts on roadways that are located on strategic inter-precinct connections.
10. Key environmental zone (C2) associated to Parbery Creek - opportunity to improve and integrate into future precinct.
11. Opportunity to develop a mixed use neighbourhood centre and district park on the Tathra Rd network.

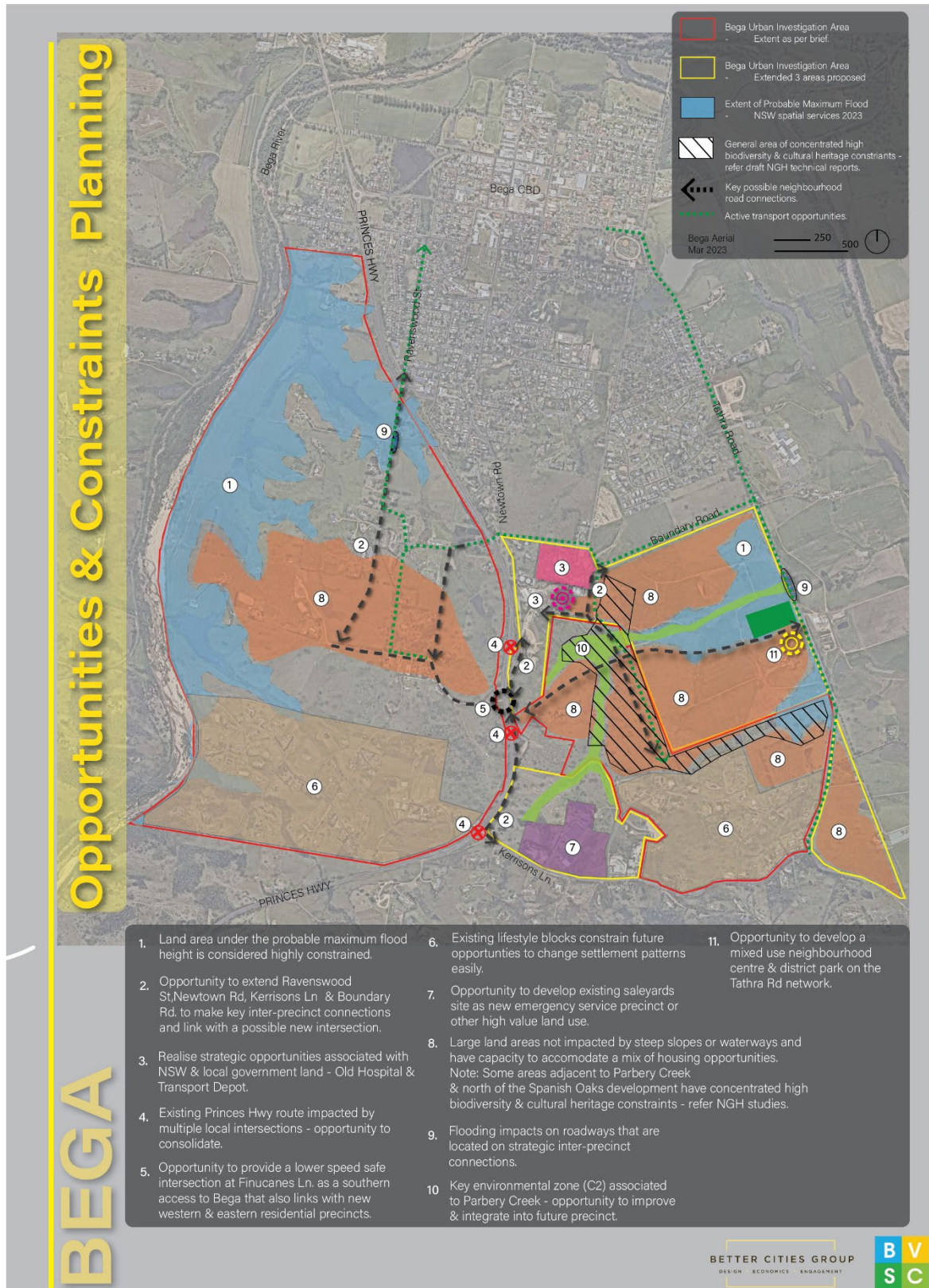


Figure 38. Bega opportunities and constraints plan

4.7 Precinct Planning

The precinct planning process is the result of reviewing site analysis, planning assessment and opportunities and constraints planning. It involves dividing the project site into smaller precincts or zones, each with its own specific land use. The goal of this stage is to create a well-organised and sustainable urban environment that maximizes the efficient use of land while considering the needs and aspirations of the community.

The development of this land use precinct planning process has considered the following:

- Zoning and Land Use;
- Density and Intensity;
- Infrastructure and Utilities;
- Environment and Conservation;
- Transport;
- Community Facilities;
- Economic Development;
- Community Engagement;
- Sustainability and Resilience; and
- Phasing and Implementation.

Site specific objectives have been created for both Bega and Wolumla due to the different considerations of both. The objectives relate to the broader resilience outcomes noted in the Bega Valley Shire Council Residential Land Strategy 2040.

Each objective has driven the precinct planning process and has implications for the design as a whole. This is described further below. The precinct planning process has implications for planning regulation and an assessment of the implications for the regulatory process and zoning is also provided.

This has informed the development of early population forecasting for both precincts based on a potential dwelling per hectare and the current Bega population per household figure of 2.2/household.



Figure 39. Bega precinct planning objectives



PEDESTRIAN FRIENDLY NEIGHBOURHOODS INCLUDING VEHICLE RELIANCE REDUCTION

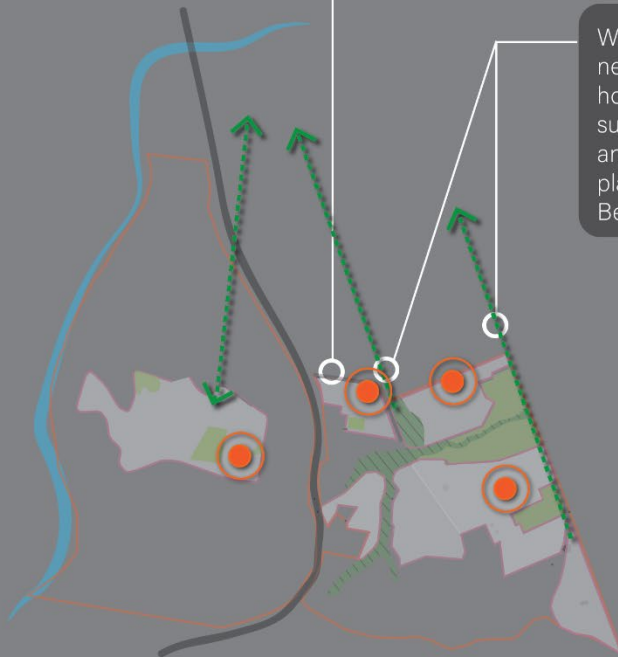
Precinct Planning

BEGA



The Plan will deliver a legible hierarchy of streets that allow pedestrian friendly and vehicle speed reduction opportunities designed into both existing and new neighbourhoods.

With the development of new neighbourhoods along with a mix of housing, the Plan will need to be supported by both public transport nodes and connects into and extends well planned active travel networks within Bega city & surrounds.



BETTER CITIES GROUP
DESIGN • ECONOMICS • ENGAGEMENT



Figure 40. Objective - vehicle reduction



SUSTAINABLE DEVELOPMENT TO MANAGE GROWTH



UNITED NATIONS SDG'S AS ADOPTED BY NSW GOVERNMENT

Precinct Planning

BEGA

The Plan stitches together areas of disconnected existing residential development and seeks to activate government land for a mix of uses supporting sustainable growth around neighbourhood nodes, transport modes, appropriate housing densities and environmental protection of key corridors/adjacent land uses.



Figure 41. Objective - sustainability



EFFICIENT USE OF LAND & INFRASTRUCTURE

Precinct Planning

BEGA



The Western Precinct is supported by proposed extension of existing service infrastructure and seeks to leverage development occurring along the axis of Ravenswood Street and Finucanes Ln.

The Eastern & Central Precincts provide key access & infrastructure connections between southern (existing) development to proposed and existing northern residential development.



BETTER CITIES GROUP
DESIGN • ECONOMICS • ENGAGEMENT



Figure 42. Objective - infrastructure



NATURAL FEATURES, AMENITY & CHARACTER TO BE PROTECTED & ENHANCED



Manage the integration of wetland wildlife and urban impacts through sufficient buffers and landscape scale riparian zone green space planning.

The protection of critical waterways and floodplains is central to the Plan and the proposed Western Precinct layout. Areas of high biodiversity and environmental/natural amenity are to be retained, integrated into planning and enhanced where appropriate.

Central to the planning for the Eastern Precinct is the opportunity to both protect and improve the important Parbery Creek waterway and surrounding habitat. This includes managing inflow stormwater with best practise WSUD, habitat rehabilitation to improve both flora and fauna corridors and provide environmental awareness for local community.

Key riparian areas to be integrated into public reserves and open space areas.

Precinct Planning

BEGA

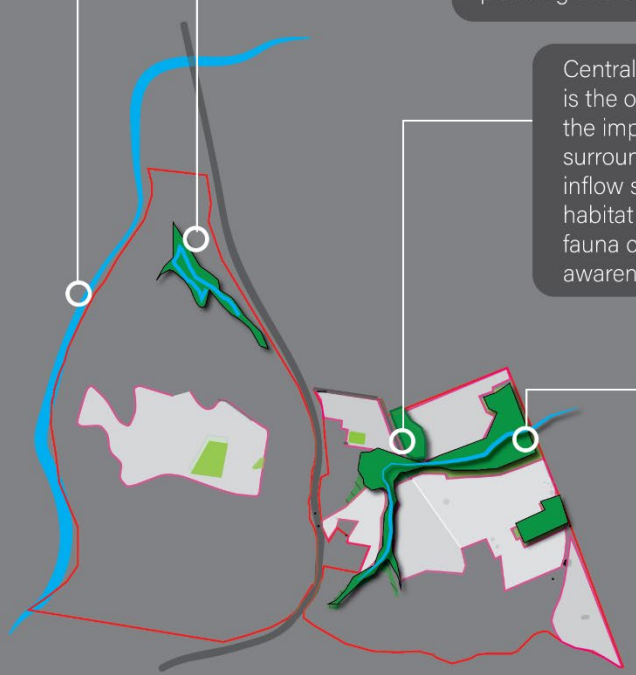


Figure 43. Objective - amenity



PROMOTE OPPORTUNITIES FOR HOUSING DIVERSITY



Precinct Planning

BEGA

Housing diversity can be actively supported with a mix of housing typologies, lot sizes & density importantly anchored around neighbourhood centres with mixed use services and public/active transport links.

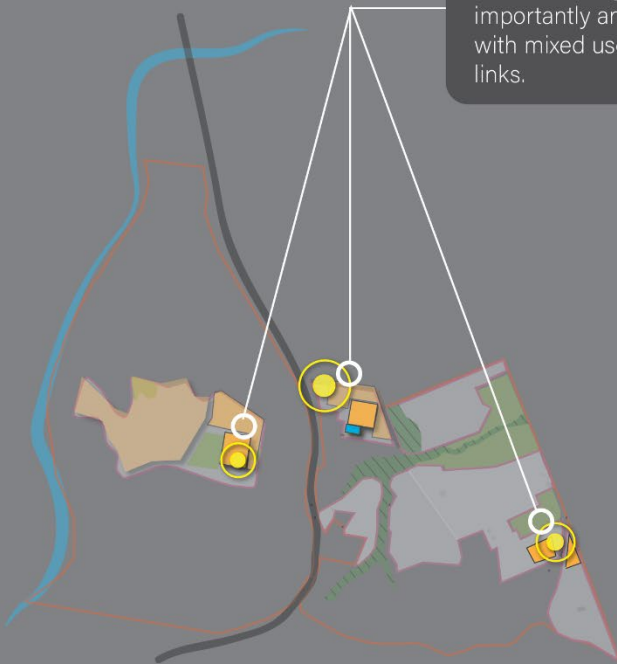


Figure 44. Objective - housing diversity



BUILDS CLIMATE RESILIENCE



Precinct Planning

BEGA



Well shaded existing & new streetscapes will provide microclimate control locally. Parks and waterways as heat sinks & to provide high quality local flora and fauna habitats ensuring the village is well integrated environmentally.

Develop appropriate land use responses in flood risk areas to manage inundation in extreme events.



Figure 45. Objective - climate resilience



CONTRIBUTE TO OPEN SPACE & ACTIVE TRAVEL NETWORKS



Precinct Planning

BEGA



Retain natural waterways and adjacent inter-development floodplain as open space mixed with rehabilitated waterways. Includes active travel networks both north-south and east-west via Kerrisons Lane. The above will support RE1 provision.

The Plan to provide appropriately sized (local) level parks to serve local community needs and to support the active recreation network/playing fields within the Bega catchment. This is outlined in the recreation needs assessment.



BETTER CITIES GROUP
DESIGN • ECONOMICS • ENGAGEMENT



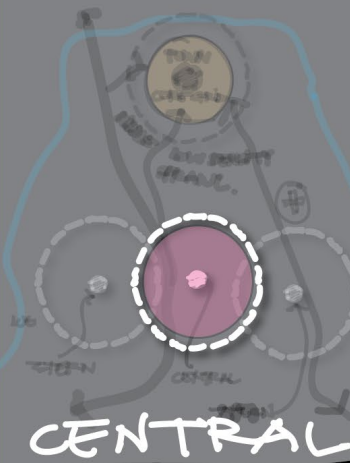
Figure 46. Objective - open space and active travel

Precinct Planning

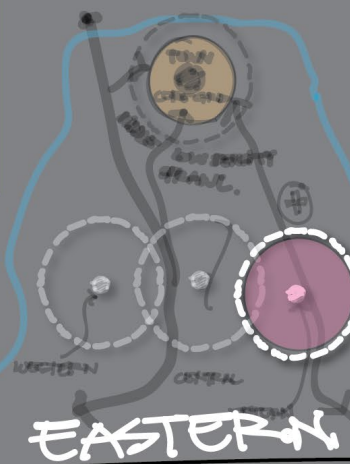
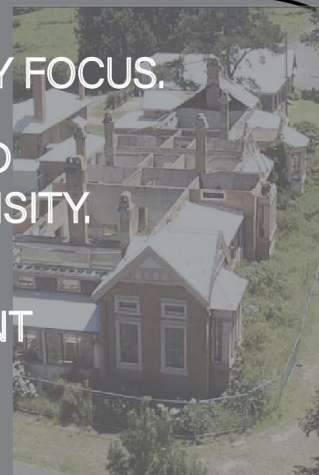
BEGA



- MIX OF LOT SIZES.
- SMALL NEIGHBOURHOOD CENTRE.
- LOCAL ENVIRONMENTAL & OPEN SPACE FOCUS.



- COMMUNITY FOCUS.
- MIX OF LAND USES & DENSITY.
- ACTIVATE GOVERNMENT LAND.



- STRATEGIC LOCATION STITCHING TOGETHER FUTURE HOUSING.
- SIGNIFICANT NEIGHBOURHOOD CENTRE & PARK AS ANCHOR - DENSITY MIX.



Figure 47. Bega study area precincts

Stage 2

STRUCTURE

PLAN

PART 2 STRUCTURE PLAN

The master structure plan consists of three precincts – western, central and eastern precinct. The respective precinct structure plans detail the following:

- Proposed land use and zoning;
- Indicative road layout;
- Proposed interchange connections;
- Open space allocation;
- Commercial zones; and
- Conservation areas.

The structure plans highlight where there is a proposed change to current land use regulation or transport infrastructure. The balance of the project area that is not rendered remains as is. The rationale for retaining the status quo relates to development constraints such as flooding, topography, biodiversity or heritage which will impact approvals and feasibility. The areas selected for future development may also have constraints and these will need to be resolved in future development approval processes.

The proposals shown are not solely under the mandate of BVSC and will require continued engagement and negotiation to progress. For instance, TfNSW is responsible for connections to the Princes Highway and private property owners are responsible for future development on their property.

This process acknowledges that there are many parties involved in the ongoing progression of this structure plan. The intention is to provide a logical framework based on holistic analysis, stakeholder engagement and land development assessment.

5.0 Precincts

5.1 Western Precinct

The western precinct proposes diversity of lot sizes with large lot residential and low-density residential development. It also has a strong focus on open space with provision of a central park.

Ravenswood Street would be connected to Finucanes Lane for improved connections which reduce the need to get on and off the highway. A consolidated Princes Highway interchange from Finucanes Lane is proposed.

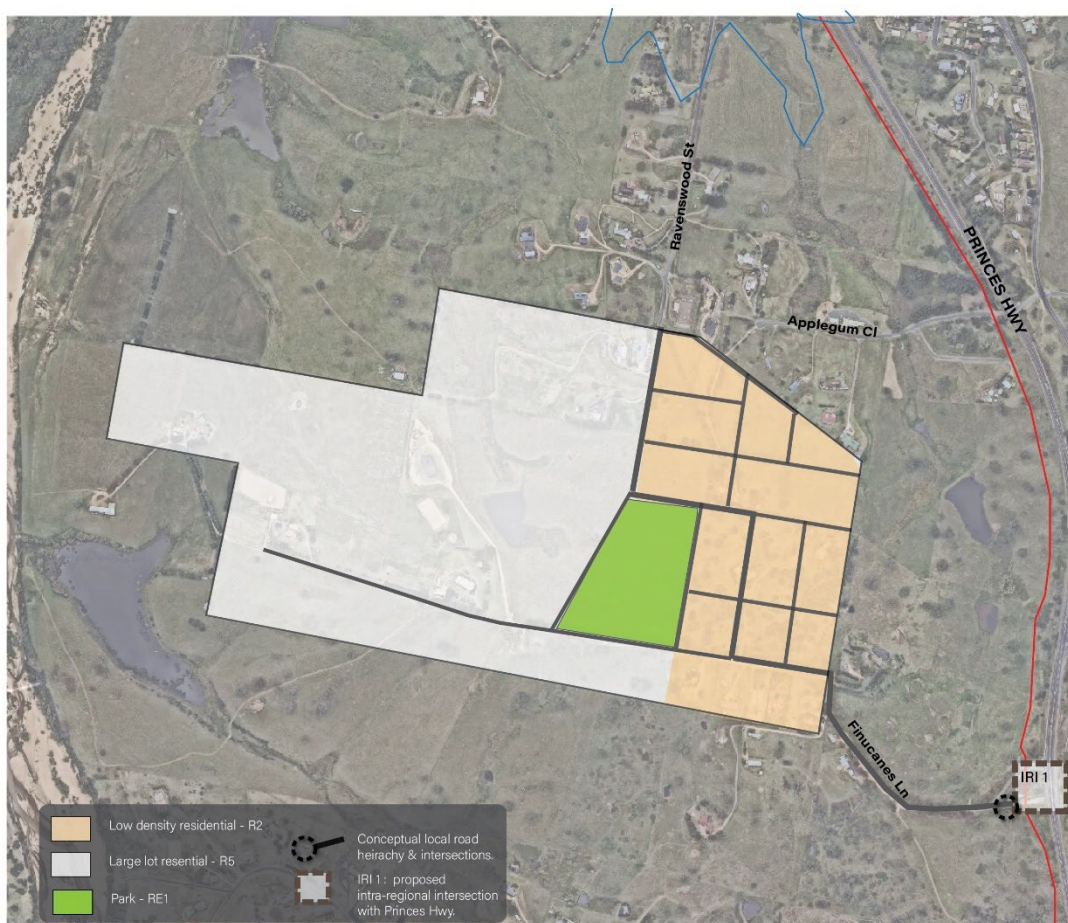


Figure 48. Western precinct

The required LEP changes to achieve the intent of the western precinct is described in the table below:

Table 11. Western precinct LEP changes

Western Precinct		
Zone	Associated Minimum Lot Size	Development Intent for Zone
R2 Low Density Residential Zone	550m ²	R2 Low Density Residential Zone Land generally aligns with unconstrained gentle-moderately sloped land which is appropriate for sub-division. Due to the topography of this precinct, it is intended that generally development of smaller lots or multiple dwellings would be limited. This is aligned with the objectives for this zone in the LEP.
R5 Large Lot Residential Zone	5,000m ²	R5 Large Lot Residential Land is intended on land which is constrained by slope or flooding. Larger lots provide for less reliance on retaining walls on steeper slopes. On flooded sites, constrained land can be utilised for yard space whilst a smaller unconstrained building footprint can be provided. This is aligned with the objectives for this zone in the LEP.
RE1 Public Recreation	N/A	The RE1 Public Recreation Zone will provide a central recreation park for the precinct and the existing surrounding residential area. This is aligned with the objectives for this zone in the LEP.
Other Changes - to LEP and DCP		
The DCP should be amended to provide for site specific development outcomes for the Western Precinct.		

5.2 Central Precinct

The central precinct promotes diversity of land use with provision made for light industrial, large format retail, local shopping and mixed use residential. The Newtown Road highway connection would run further south to consolidate the interchange connection with Finucanes Lane.

There is opportunity to lead development outcomes in this precinct due to government ownership rather than sole private ownership.



Figure 49. Central precinct

The required LEP changes to achieve the intent of the central precinct is described in the table below:

Table 12. Central precinct LEP changes

Central Precinct		
Zone	Associated Minimum Lot Size	Development Intent for Zone
E2 Commercial Centre Zone	N/A	The E2 Commercial Centre Zone is intended to provide a mixed use area providing employment and residential /accommodation uses in one location. Employment and residential/employment uses are intended to support the Bega South-East Regional Hospital and administrative functions in this area. Residential accommodation should be provisioned through shop-top housing. This is aligned with the objectives for this zone in the LEP.
E1 Local Centre Zone	N/A	The E1 Local Centre is intended to provide for local convenience shopping to support the surrounding residential development. This is aligned with the objectives for this zone in the LEP.
E3 Productivity Support Zone	N/A	The E3 Productivity Support Zone is intended to maintain light industrial, large format retail and car sales uses located with highway frontage. This is aligned with the objectives for this zone in the LEP.
RE1 Public Recreation	N/A	The RE1 Public Recreation Zone is intended to provide for the public use of the old Bega Hospital. Additional permitted uses should be provided by Schedule 1 of the LEP to enable the commercialisation of this facility, in a public setting. For example, a micro-brewery with a public lawn. This is aligned with the objectives for this zone in the LEP.
Other Changes - to LEP and DCP		
As outlined above, the LEP may be amended to allow for a smaller minimum lot size in the R2 Residential Zone as it relates to the Study Area.		
The DCP should be amended to provide for site specific development outcomes for the Central Precinct.		

5.3 Eastern Precinct

The eastern precinct provides the majority of the yield for the project area. Significant areas of low-density residential development are provided for. This will be supported by conservation areas through Parberry Creek and open space and sports field allocations. Additional R2 residential land (to the east and west of Parberry Creek) was included following the engagement process. These parcels were excluded from earlier planning due to constraints on the land and these will need to be resolved through future development approval processes.

This residential yield allows for the development of a local centre to be easily accessible on Tathra Road.

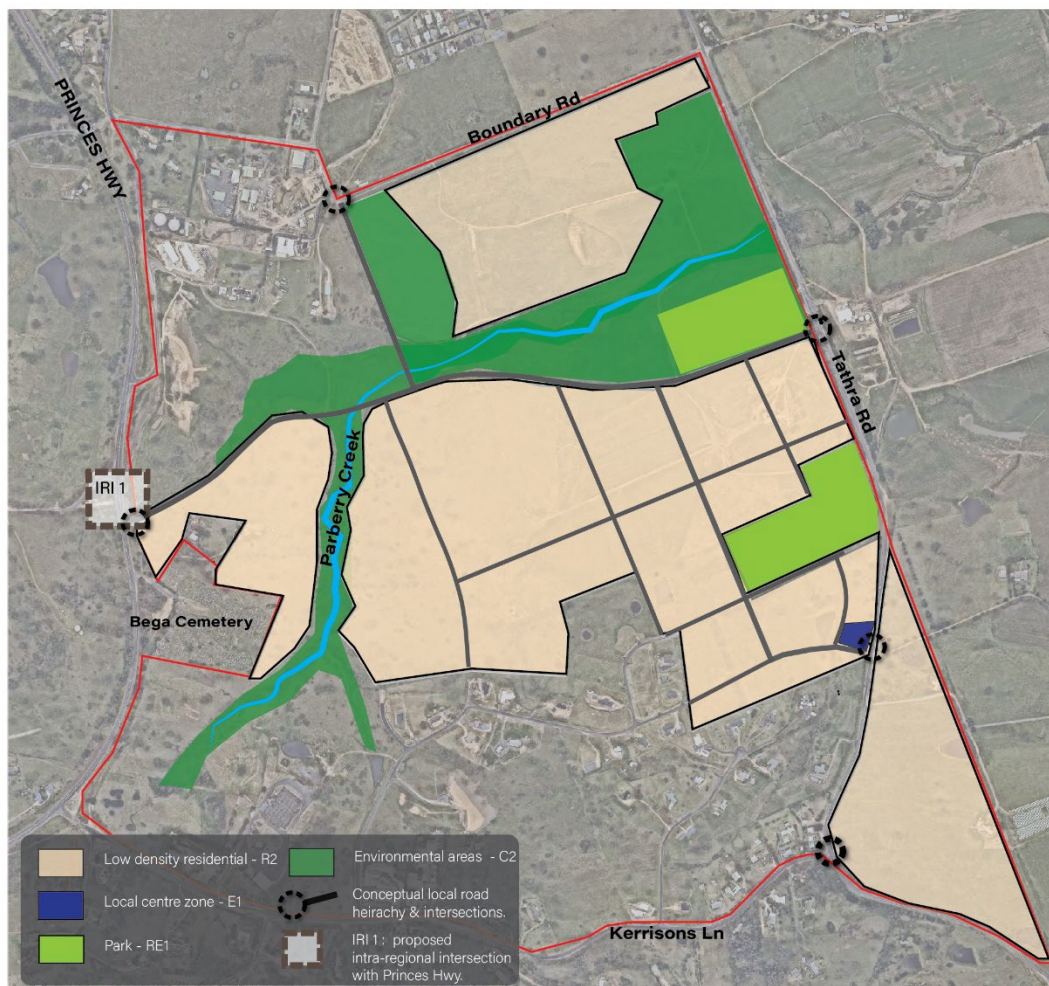


Figure 50. Eastern precinct

The required LEP changes to achieve the intent of the eastern precinct is described in the table below:

Table 13. Eastern precinct LEP changes

Eastern Precinct		
Zone	Associated Minimum Lot Size	Development Intent for Zone
R2 Low Density Residential Zone	60% at 550m ² <i>note: potential to reduce to 450m² with Planning Proposal</i> 40% at 350m ²	R2 Low Density Residential Zone Land generally aligns with unconstrained gentle-moderate sloping land which is appropriate for sub-division. Areas which are adjacent to recreation space, local or commercial centre and/or the Bega South-East Regional Hospital are intended for greater densities. In accordance with the Planning Proposal (Increase Housing Diversity) the 'areas for greater density' are intended for smaller lots (350m ²) or multiple dwelling development.
E1 Local Centre Zone	N/A	The E1 Local Centre Zone is intended to provide for local convenience shopping to support the surrounding residential development. This is aligned with the objectives for this zone in the LEP.
RE1 Public Recreation	N/A	It is envisaged that these areas will provide formalised parkland and local recreational opportunities for current and future residents of Bega. This is aligned with the objectives for this zone in the LEP.
C2 Environmental Conservation	N/A	The C2 Environmental Conservation Zone is intended to protect areas of ecological value in constrained parts of the site. This is aligned with the objectives for this zone in the LEP.
<p>Other Changes - to LEP and DCP As outlined above, the LEP may be amended to allow for a smaller minimum lot size in the R2 Residential Zone as it relates to the Study Area. The DCP should be amended to provide for site specific development outcomes for the Eastern Precinct.</p>		

6.0 Master Structure Plan

The consolidation of site analysis, stakeholder engagement, infrastructure review and planning analysis results in the following master structure plan as shown below.



Figure 51. Master structure plan

The master structure plan proposes two intra regional intersections to consolidate access from Newtown Road and Finucanes Lane at one interchange and Max Slater Drive and Kerrisons Lane at the second interchange. It also promotes a number of internal road connections which will improve local access and minimise the need for short highway trips.

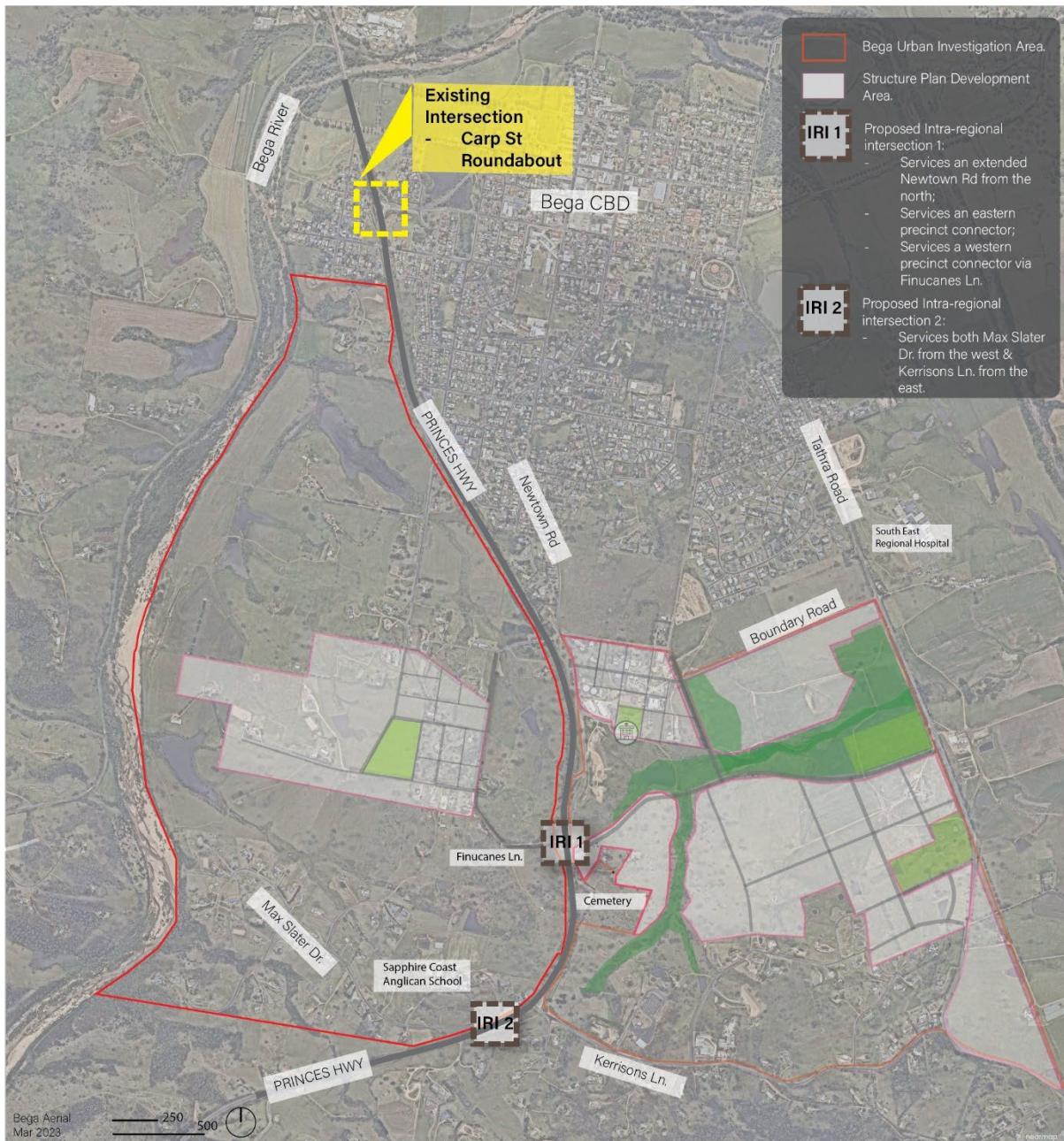


Figure 52. Proposed access considerations

The master structure plan has taken into account physical and planning constraints to identify opportunities for residential growth. To reflect the desired outcomes of the structure plan and align it with the current LEP, the following changes should be considered to planning controls within the Bega study area.

The proposed zoning to support the structure plan is outlined in Figure 54.

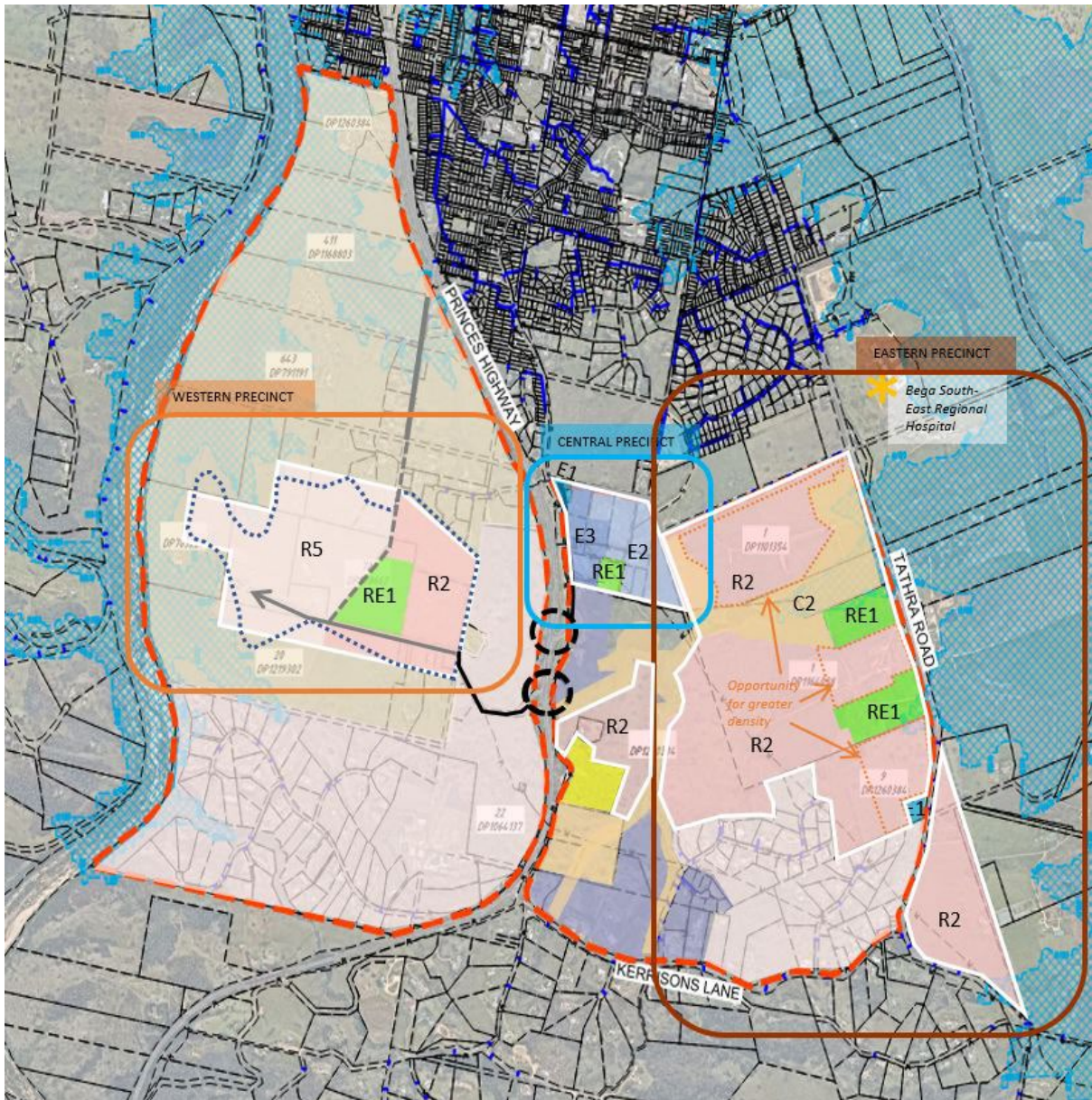


Figure 53. Proposed zoning

7.0 Developable Area

The aim of this project is to prepare structure plans for two major urban release areas that will accommodate current and future demand for housing in the Bega Valley Shire. A key element of that is determining the yield and resultant population that this structure plan could facilitate.

Gross Developable Area (GDA) refers to the total area of land shaded on the structure plan as white and represents the usable land available for development. The GDA includes roads, verges, and drainage areas but exclude conservation and open space areas. For the Bega structure plan the GDA is 261.5 Ha.

Net Developable Area (NDA) is the usable land for development within a site or project. It is calculated by subtracting the area of land that is encumbered or reserved for public purposes from the total land area. For example, NDA excludes land for open space, drainage and roads. NDA is often used to estimate the potential yield of a development site.

For the purposes of this structure plan the NDA has been calculated as approximately 70% of the GDA. The amount of dwellings per hectare of the NDA is then provided based on the zoning. For Bega this means that approximately 2113 dwellings can be achieved that could support a population of approximately 4649 people.

Structure Plan	Precinct	Gross Developable Area	Sub precinct	Area	Dwellings/Ha (average lot size)	Dwellings	Projected Population (2.2 average house)	Zoning	Service Centre	Recreation Needs	
Bega	Bega Western Precinct	85Ha	East of Ravenswood	60	2 dwellings/Ha (5000m ²)	120	264	R5		5 Ha	
			West of Ravenswood	20	12 dwellings/Ha (600m ²)	240	528	R2			
	Bega Central Precinct	19Ha	Local Centre Zone	0.5 Ha	NA	NA	NA	E1	2500m ² fronting Newtown Road	1.5 Ha	
			Commercial Centre Zone	5 Ha	5 dwellings/Ha (assumption)	25	55	E2			
			Productivity Support Zone	12 Ha	NA	NA	NA	E3			
	Bega Eastern Precinct	157.5Ha	Low Density Residential	144 Ha	12 dwellings/Ha (600m ²)	1728	3802	R2	500m ² fronting Tathra Road	13.5 HA including 5 Ha district sports fields	
	subtotal		261.5Ha				2113	4649		3000m ²	20 Ha

Table 14. Bega developable area and proposed yield

Structure Plan	Precinct	Gross Developable Area	Sub precinct	Area	Dwellings/Ha (average lot size)	Dwellings	Projected Population (2.2 average household size)	Zoning	Service Centre	Recreation Needs
Bega	Bega Western Precinct	85Ha	East of Ravenswood	60	2 dwellings/Ha (5000m ²)	120	264	R5		5 Ha
			West of Ravenswood	20	12 dwellings/Ha (600m ²)	240	528	R2		
	Bega Central Precinct	19Ha	Local Centre Zone	0.5 Ha	NA	NA	NA	E1	2500m ² fronting Newtown Road	1.5 Ha
			Commercial Centre Zone	5 Ha	5 dwellings/Ha (assumption)	25	55	E2		
			Productivity Support Zone	12 Ha	NA	NA	NA	E3		
	Bega Eastern Precinct	157.5Ha	Low Density Residential	144 Ha	12 dwellings/Ha (600m ²)	1728	3802	R2	700m ² fronting Tathra Road	13.5 Ha including 5 Ha district sports fields
	Subtotal with rec needs		261.5Ha				2113	4649		3000m ²
Wolumla	Wolumla	133Ha	Ochre	57Ha	9 dwellings/Ha (800m ²)	513	1129	R2	2500m ²	2.5 Ha
			West	17Ha	9 dwellings/Ha (800m ²)	153	337	R2		
			Central	10.5Ha	12 dwellings/Ha (600m ²)	126	277	R2		
			East	15Ha	12 dwellings/Ha (600m ²)	180	396	R2		
			North	31Ha	4 dwellings/Ha (1800m ²)	124	273	R5		
Subtotal with rec needs		133Ha				1096	2412		2500m ²	2.5 Ha
TOTAL		394.5Ha				3209	7060			

*Confirmation will be required within Council regarding the quantum of conservation and recreation space due to issues associated with asset ownership, maintenance and quality of open space provision for community.

Table 15. Bega and Wolumla consolidated developable area and proposed yield

8.0 Economic Impact Assessment

Scope

The assessment of economic benefits considers the range of impacts associated with both the construction phase and completion phase of each structure plan area, based on the scale of planned development within each area, and has included the modelling of direct and indirect benefits.

The benefits analysis considers the employment, economic output, regional value add, and income impacts associated with each structure plan area, including how these will benefit the Bega Valley region and surrounding regions.

The evaluation has considered the contribution towards strategic and economic planning objectives and targets relevant to the Bega Valley region. Detail regarding the methodology applied is provided in Appendix B.

Assessment Inputs and Assumptions

The economic benefit modelling has been based on the planned scale of development within the Bega Structure Plan area. This includes the scale and extent of required infrastructure construction, and the planned built form structures including residential houses and non-residential land uses (i.e. centres, childcare centre).

following provides a summary of the key assumptions and inputs that have informed the benefit assessment, including required infrastructure and built form investment.

General Assumptions:

- 2,113 residential homes
- 3,000sqm of commercial uses (across three centres)
- 1 childcare centre
- Estimated project timeframe of 25 years (which considers forecast growth throughout the wider Bega Valley LGA).

Infrastructure & Landscaping

Road upgrades:	\$9.8 million
Sewer and water:	\$35.5 million
Earthworks, civil, communications, open space:	\$260 million

Residential & Commercial Built Form

• Residential construction:	\$1,281.1 million
• Commercial construction:	\$8.1 million

Based on the assumptions presented above, the planned 2,113 residential houses are expected to be delivered over approximately 25 years with overall investment in the structure plan area estimated at \$1,405 million. This indicates an average of 85 new

houses constructed per annum and an average investment of \$56.2 million per annum within the structure plan area.

These assumptions and estimates have informed the benefit analysis presented below based on the construction phase and completed phase for that planned development and growth within the structure plan area.

Construction Phase Benefits

The scale of the proposed redevelopment project will support significant construction investment and impacts, which will be sustained throughout the construction phase of the project. The direct construction investment will also support a range of indirect benefits that will be realised throughout the Bega Valley region and surrounding regions.

This initial project investment will generate a range of direct and indirect project benefits associated with economic output, gross value add, income and employment. These benefits are presented in Table 16 over the page, including direct, indirect and total benefits.

The construction related investment of \$1,405 million in the structure plan area is estimated to support up to \$3,692 million in economic output, \$1,384 million in gross value add, and \$712 million in income based on the combined direct and indirect benefits attributed to the project.

In addition, the anticipated construction within the structure plan area is expected to support an average of 356 fulltime equivalent (FTE) jobs per annum during the estimated 25 year project timeframe. This includes direct and indirect jobs, with 124 jobs estimated onsite per annum with an additional 233 jobs supported in construction related industry sectors per annum.

Of these total benefits, the direct benefits will predominantly be realised within the structure plan area while much of the indirect benefit is expected to be realised within the Bega Valley region and surrounding region's economies based on the capacity within the construction sector and related industry sectors.

Table 16. Construction phase benefits

DIRECT BENEFITS	
Output (\$M)	\$1,405
Gross Value Added (\$M)	\$425
Income (\$M)	\$227
Employment (FTE per annum)	124
INDIRECT BENEFITS	
Output (\$M)	\$2,287
Gross Value Added (\$M)	\$959
Income (\$M)	\$485
Employment (FTE per annum)	233
TOTAL BENEFITS	
Output (\$M)	\$3,692
Gross Value Added (\$M)	\$1,384
Income (\$M)	\$712
Employment (FTE per annum)	356

*Figures may not sum due to rounding

Source: ABS National Accounts (2021), Think Economics (2023)

Completion Phase Benefits

Once complete, the structure plan area will support a range of ongoing investment and employment activities related to the new commercial centres and childcare centre anticipated onsite. This onsite economic and employment activity supports offsite economic activity and employment opportunities in the related sectors, such as wholesale trade, transport and logistics, manufacturing, and service industries.

The following table provides a summary of the net increase in completion phase benefits, expressed as economic output, value add, income and employment. It is noted that the timing of these benefits will be dependent on when those planned employment land uses become operational, with benefits then becoming permanent and recurring.

The planned net increase in employment land uses onsite is expected to support a total of 135 FTE jobs, which is expected to generate an overall economic impact of \$37 million per annum in economic output, \$20 million per annum in gross value add and \$12 million per annum in income based on the combined direct and indirect impacts (attributed to economic flow on effects). The combined direct and indirect operational employment impacts are estimated as a total of 181 FTE jobs per annum.

Table 17. Operational phase benefits

DIRECT BENEFITS	
Output (\$M)	\$21
Gross Value Added (\$M)	\$12
Income (\$M)	\$8
Employment (FTE per annum)	135
INDIRECT BENEFITS	
Output (\$M)	\$16
Gross Value Added (\$M)	\$8
Income (\$M)	\$4
Employment (FTE per annum)	46
TOTAL BENEFITS	
Output (\$M)	\$37
Gross Value Added (\$M)	\$20
Income (\$M)	\$12
Employment (FTE per annum)	181

*Figures may not sum due to rounding

Source: ABS National Accounts (2021), Think Economics (2023)

In addition to those regional economic benefits indicated above, the increase in residential dwellings will also increase General Rates paid to Council. The planned 2,113 additional dwellings within the structure plan area will generate \$1.42 million per annum once completed (based on the Bega Valley 2023-24 rates schedule).

Rates Base

The planned development within both the Bega and Wolumla structure plan areas will grow the residential rates base of the region, providing the economic capacity for Council to grow their maintenance teams and service provision throughout each area as well as more broadly throughout the Bega Valley region. This ongoing growth will create increased financial capacity, allowing Council an improved ability to strategically allocate funds to regional projects and ongoing maintenance that will benefit the whole community.

Based on the average Residential General Rates charge (for 2023-24) in Bega Valley, the planned scale of development within the Bega and Wolumla Structure Plan Areas will support a total increase of \$1.42 million and \$0.74 million annually (in 2023-24 dollars), respectively. The total increase in Residential General Rates charges is estimated at \$2.16 million per annum.

Note. Additional residential land provided in the eastern precinct could impact economic impact and will be required to be taken into consideration as development progresses.

Bega Structure Plan

HAVE
YOUR SAY



View the recommendations and
submit your feedback

begavalley.nsw.gov.au/BSP



Proudly funded by the NSW Government in
association with Bega Valley Shire Council

Stay Connected



begavalley.nsw.gov.au
[begavalleyshirecouncil](https://www.facebook.com/begavalleyshirecouncil)

council@begavalley.nsw.gov.au
02 6499 2222



Poster

Bega Valley Shire Council Bega Structure Planning Consultation



Proudly funded by the NSW Government in
association with Bega Valley Shire Council



Have Your Say Report Cover

Better Cities Group
ABN 79 483 836 832
Bega Structure Plan

Bega Structure Plan

HAVE
YOUR SAY



View the recommendations and submit your
feedback by 3 December at 2023



begavalley.nsw.gov.au/BSP

Social Tile

Appendix B - Economic Impact Assessment (provided separately)

Appendix C - Recreation Needs Assessment (provided separately)

Appendix D - Biodiversity HEV Mapping Validation (provided separately)

Appendix E - Preliminary Aboriginal Heritage Desktop Assessment (provided separately)

Appendix F - Preliminary Contaminated Land Assessment (provided separately)

Appendix G – Additional Aboriginal Engagement

Prior to completion of the project, the master structure plan was shown to the Djirringanj Elders Federation and the Bega Local Aboriginal Land Council (Bega LALC) once more with the intent of further defining the location of ceremonial sites within the developable area. The outcomes of this additional engagement conducted by Glenn Willcox, Senior Heritage Consultant of NGH are provided below:

The following are authorised responses from the Djirringanj Elders Federation and the Bega Local Aboriginal Land Council (Bega LALC) that resulted from the consultation process undertaken. The text below represents summary statements that was provided to the Aboriginal community stakeholders following both email and telephone interactions with each of them.

Confirmation was received from both stakeholders to endorse the summary statements as drafted and provided to them.

- Point 1 from the Djirringanj Elders Federation relates specifically to the primary matter that this consultation process sought to clarify. Namely to confirm that the known significant ceremonial sites mentioned by the Djirringanj Elders Federation during the initial consultation for the Preliminary Aboriginal Heritage Desktop Assessment for the Bega Structure Plan are outside areas identified for future residential development as part of this project. Other key comments were also captured and provided for consideration for the project.

Authorised summary statements are provided below.

Djirringanj Elders Federation (DEF) – John Dixon

- 1) The known ceremonial grounds that DEF referred to in comments made during consultation in May 2023, including those mentioned in an email dated 21/02/2024 to be at Black Range, and those currently registered on AHIMS, are not located within the investigation area for this project.
- 2) There may be yet to be identified ceremonial grounds within the investigation area for this project.
- 3) That all future development proposals in the investigation area should be subject to comprehensive assessments of the Aboriginal cultural values, and this should include consultation with the Djirringanj Elders Federation and the South Coast Peoples Native Title Claimants.
- 4) The cultural values and knowledge associated with the cultural landscape in which the township of Bega and surrounds sits has been inappropriately impacted in the past by development activity, in part due to a lack of consultation with knowledge holders, and important knowledge has been lost.

5) It's important that stories of Djirringanj cultural activity are available to be shared where appropriate with all people who live on Djirringanj Country.

Bega LALC - Peter Dixon

1) During the discussion it was confirmed that in accordance with the email response dated 22/02/2024 that the Bega LALC want to emphasise the importance of the cultural landscape of the township of Bega and surrounds.

2) Due to the sensitivity of this landscape the Bega LALC want to ensure that all future developments in the investigation area for this project are subject to comprehensive assessments of the potential impact on Aboriginal cultural values.

BETTER CITIES GROUP

DESIGN • ECONOMICS • ENGAGEMENT