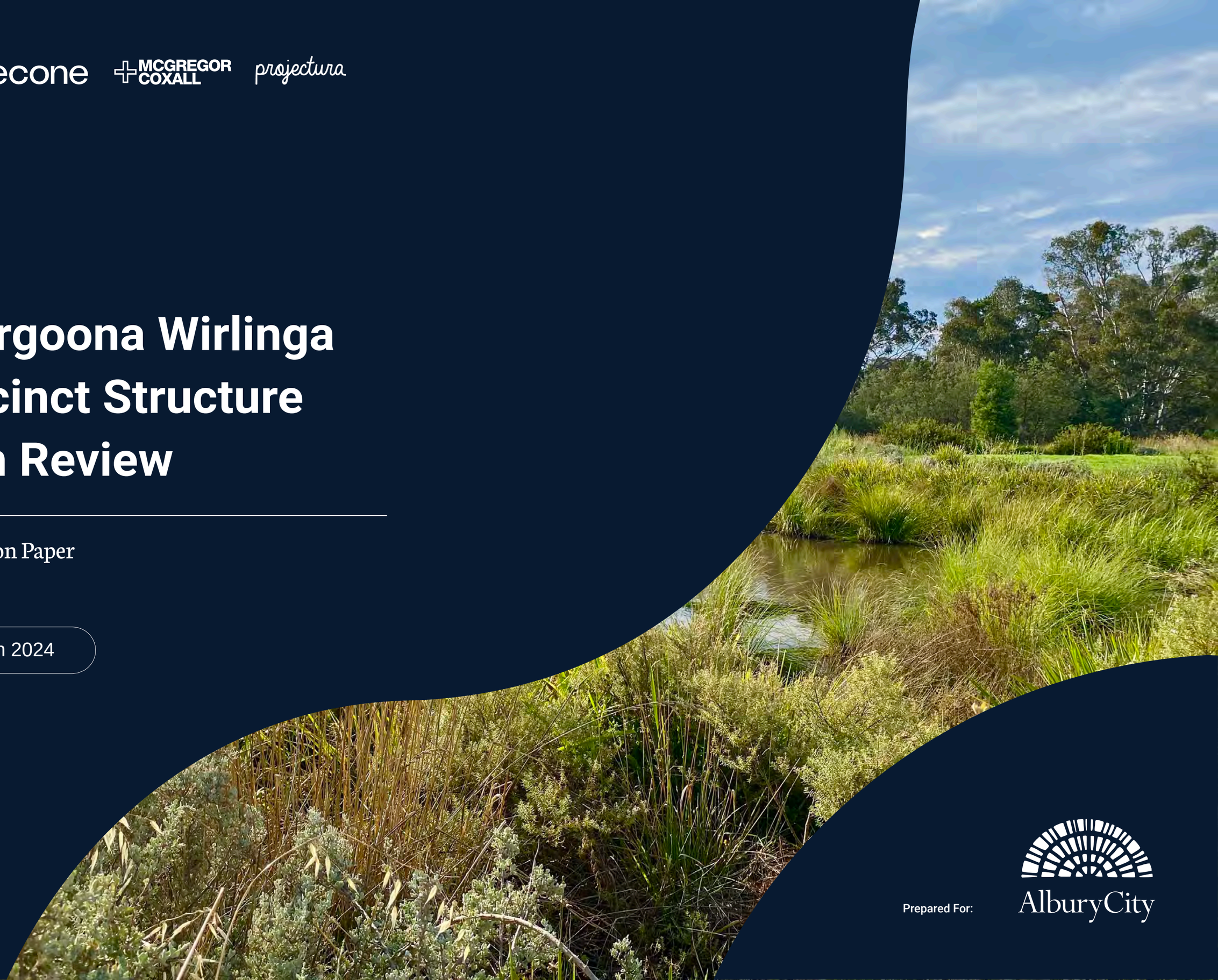
Mecone MCGREGOR COXALL projectura

Thurgoona Wirlinga Precinct Structure Plan Review

Discussion Paper

March 2024

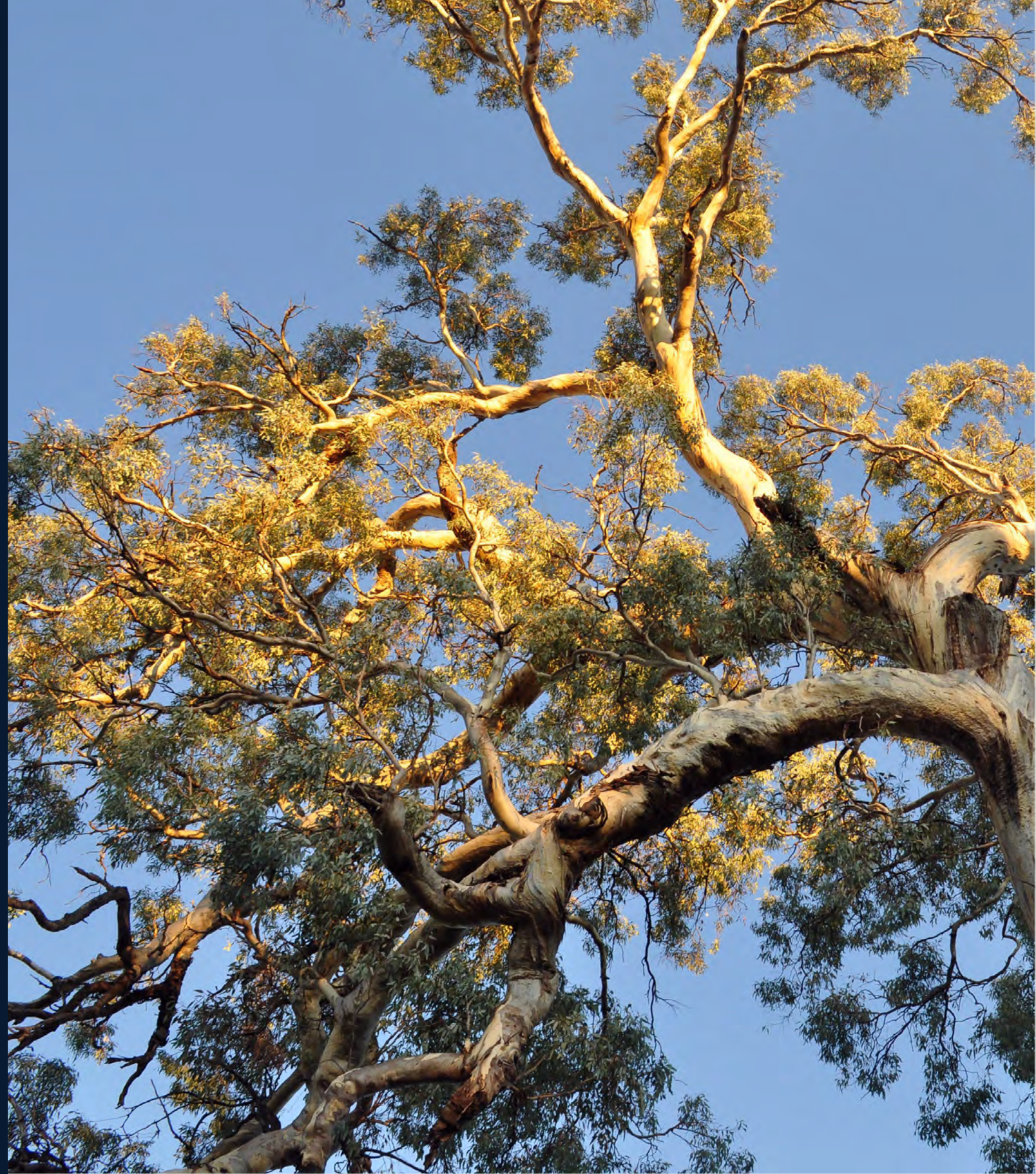


Prepared For:

AlburyCity

Acknowledgement of Country

AlburyCity acknowledges the Wiradjuri people as the traditional custodians of the land in which we live and work and we pay our respects to Elders past, present and future for they hold the memories, culture, tradition and hopes of Aboriginal and Torres Strait Islander people that contribute to our community.



Project Client: Albury City Council
Project Name: Thurgoona Wirlinga Structure Plan Review

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B	Revised Draft Discussion Paper	04/03/24
C	Final Draft Discussion Paper	06/03/24
D	Final Discussion Paper	11/03/24

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Contents

Section 1

Introduction

1.1 Overview

As a nationally significant regional city, Albury is experiencing sustained population and economic growth. AlburyCity is committed to facilitating this growth in diverse, well-designed built environments with affordable housing opportunities in both infill and greenfield areas.

Thurgoona Wirlinga is Albury's primary greenfield growth area with capacity to meet projected dwelling demand for the next 40 years. To best accommodate and support coordinated growth, we're taking a fresh look at the Precinct Structure Plan for Thurgoona Wirlinga. We have prepared this Discussion Paper to update the community on the Structure Plan review and receive feedback on the potential options for the future of Thurgoona Wirlinga.

1.2 Purpose

The 2013 Thurgoona Wirlinga Precinct Structure Plan has helped shape the precinct's development. While many of the 2013 Structure Plan principles remain relevant, much has changed in the last decade.

This Discussion Paper proposes a selection of options to update the plan in response to what you've told us, revised planning policies, updated strategies, new construction projects, and contemporary approaches to greenfield development. It seeks to explore the potential trade-offs and compromises linked to decisions we can make regarding the future of the precinct.

The Structure Plan aims to:

1. Provide greater certainty to the community and investors about Council expectations for the future development form;
2. Manage growth to ensure the precinct is a vibrant and attractive place to live, work and play;
3. Optimise the allocation of Council resources and investments in ways that most benefit the local community;
4. Create a plan to achieve Council objectives and provide landowners and investors with guidance about preferred future development;
5. Respond to the range of community input and feedback we've been collecting on the key elements our community would like addressed.

1.3 What We've Heard

We've pulled together a range of community input and feedback Council has collected for many years on the key elements the community would like addressed in Thurgoona Wirlinga. This includes community feedback from recent projects such as Towards Albury 2050, the Albury Local Housing Strategy, MOVE Albury Wodonga Integrated Transport Strategy and Growing Thurgoona Community Conversations (November 2018).

Specific to this Structure Plan review project, Council ran a survey in early 2023 receiving 270 responses. The survey identified the top areas of highest community concern including addressing traffic congestion at peak times, and more community infrastructure.

In mid-2023, further consultation included community and industry sessions with approximately 200 attendees. These sessions identified strong community sentiment for a more proactive approach to planning the future, and passion for striking the right balance between housing expansion and conserving the unique character of the natural environment.

In late 2023, Council collected community feedback on the open space and community facility needs from consultation for development of the Social Infrastructure Strategy.

We've also been meeting with key stakeholder organisations such as utility providers, major landholders, Schools Infrastructure NSW, Department of Defence, Charles Sturt University, and TAFE NSW.

Thank you to everyone who has participated in these community consultation activities so far.

Further community feedback is summarized under "what we've heard so far" for each theme in this document.




Figure 1: Community and Industry input and feedback sessions

1.4 What's Next

The options outlined in this Discussion Paper represent a range of initial ideas, revised strategies and new approaches for how we want the Thurgoona Wirlinga area to develop now and into the future.

We invite your feedback on this Discussion Paper to help us prepare an updated Thurgoona Wirlinga Precinct Structure Plan for public exhibition later in 2024.

To learn more and have your say visit haveyoursay.alburycity.nsw.gov.au

HAVE YOUR SAY

Section 2

Context

2.1 Regional Context

Located on the northern banks of the Murray River, Albury is a nationally significant regional city with a diverse and resilient economy, pristine natural environment and growing communities. Together with Wodonga in Victoria, the twin cities have a population of about 100,000 residents and a combined gross regional product of almost $9.24 billion.

Albury-Wodonga is a central hub for South-East Riverina Murray as well as North-East of Victoria. As a major regional city, the area provides jobs and services for the surrounding population catchment of around 200,000 people.

Amongst key strategic opportunities and assets driving growth and prosperity for Albury's communities are:

- A unique natural environment and proximity to the Murray River and Snowy Mountains;
- Strategic location on Australia's busiest inland transport route;
- Significant education offering, with increased collaboration between Council, Charles Sturt University, and TAFE NSW;
- A growing health precinct with major investment in the redevelopment of the Albury Hospital;
- A significant Regional Job Precinct (NEXUS), enabling development across a range of sectors such as freight and logistics, agribusiness and manufacturing;
- Albury Airport, presenting opportunities for freight export and other aviation industries;
- Significant infill and greenfield zoned capacity to provide housing for a growing population.

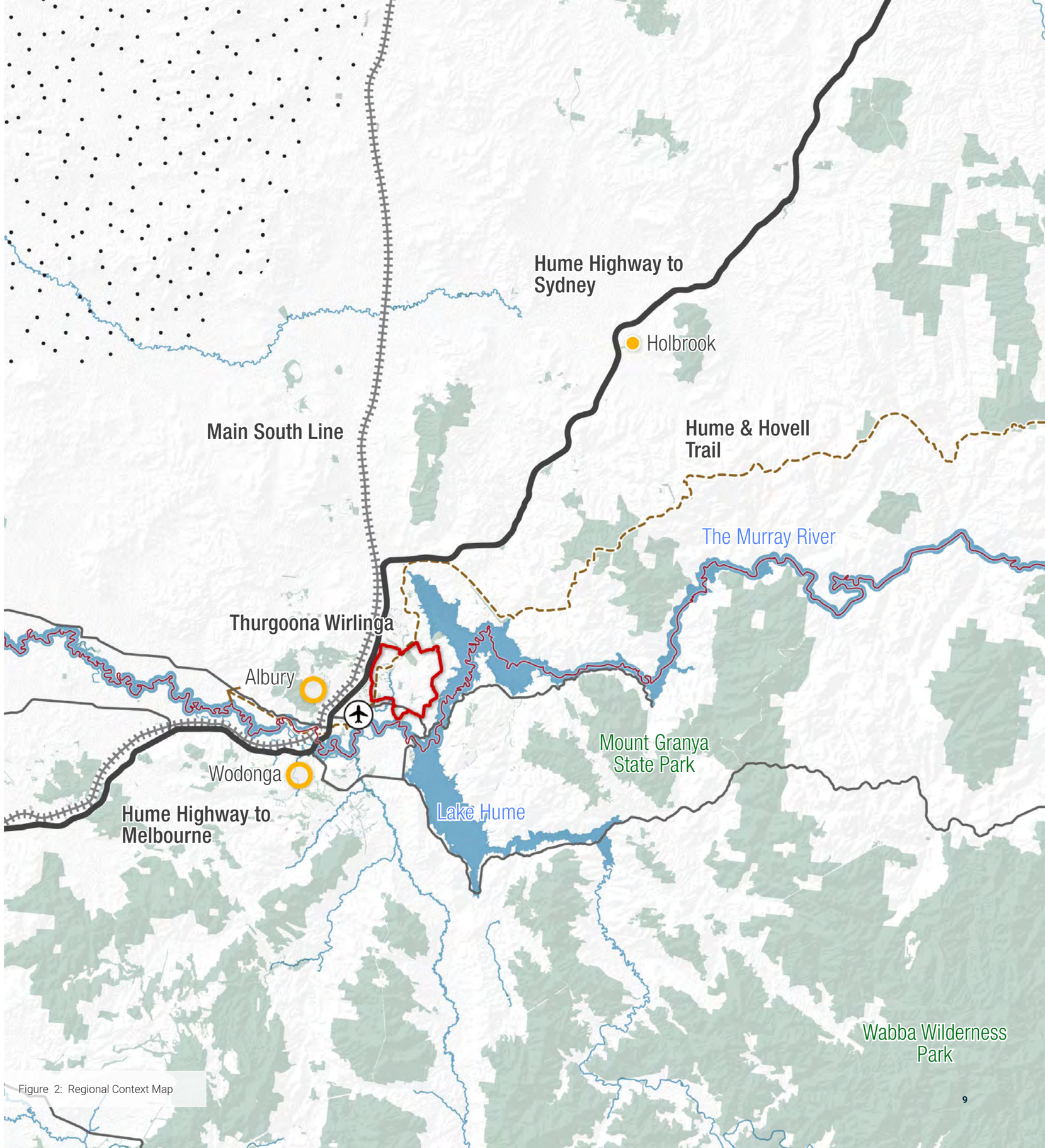


Figure 2: Regional Context Map

2.2 Thurgoona Wirlinga Precinct

Located to the north-east of Albury CBD, Thurgoona Wirlinga is Albury's primary growth area. It covers an area of approximately 4,500 ha – that is about 15% of the area of the Albury LGA. Existing development is primarily concentrated to the west of Kerr Road while the eastern part of the precinct is subject to future development.

The precinct provides capacity to accommodate up to 50,000 people by 2060, based on the 2013 Structure Plan.

Key existing land use features within the precinct include the Charles Sturt University, TAFE NSW, Thurgoona Country Golf Club Resort and Thurgoona Plaza, along with a number of residential suburbs. Existing social and community infrastructure include the Thurgoona Primary School and Thurgoona Community Centre. A large area of Defence Force land is also located in Wirlinga.

Notable environmental features include:

- Woolshed Creek and its associated tributaries, running in both north-south and east-west directions;
- Hillscapes to the east and north-west of the precinct with peaks at around 350m;
- Flora and fauna with significant biodiversity values.

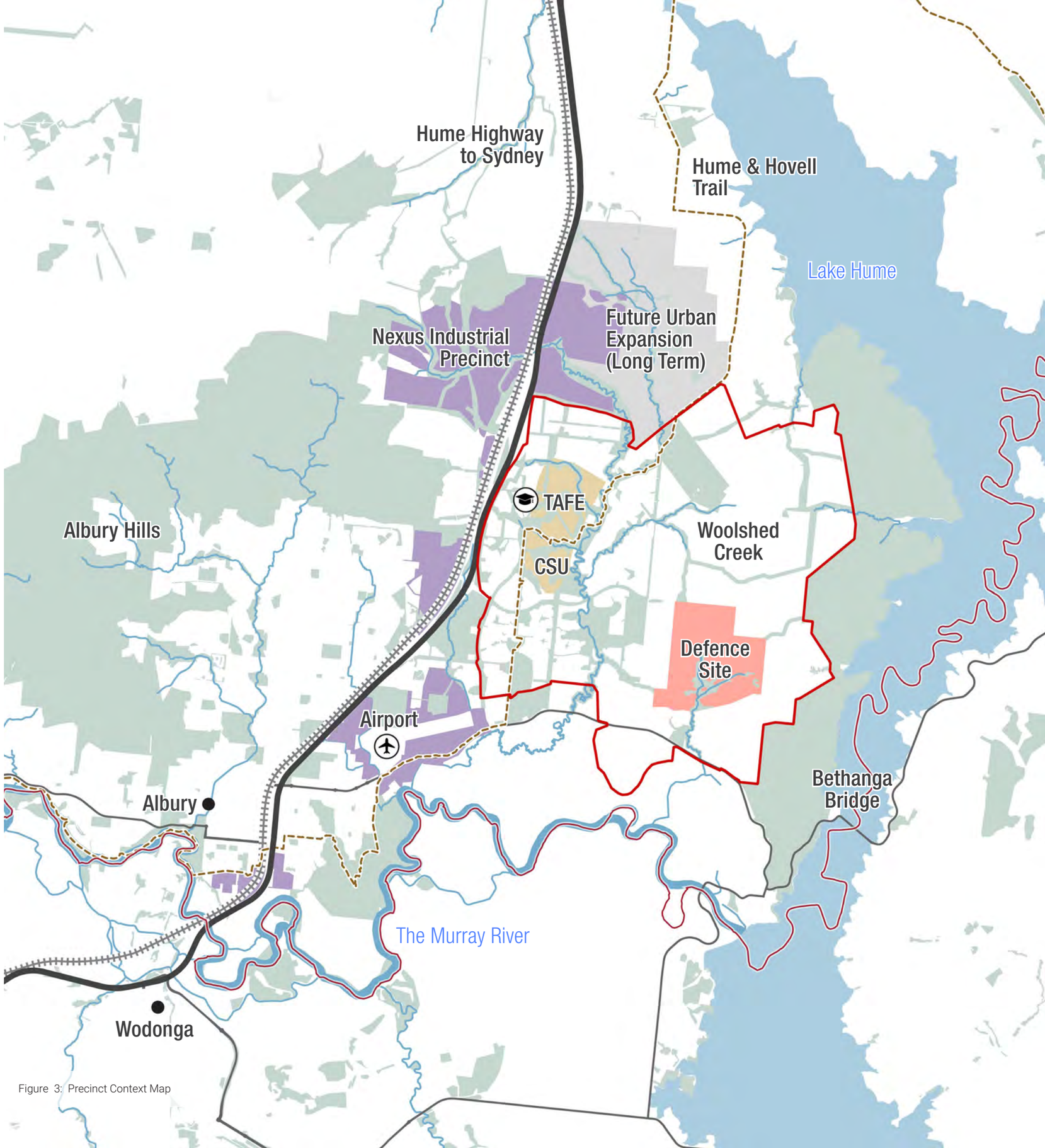


Figure 3: Precinct Context Map

2.3 2013 Structure Plan

The current Thurgoona Wirlinga Precinct Structure Plan 2013 was developed with community and stakeholder input. It set a bold vision for the future of the area:

- To establish a living environment that promotes and is defined by a 'sense of place' and a 'sense of community' that is uniquely Australian and reflects the rural heritage of the district;
- A sustainable living environment that offers all members of its community convenient and affordable access to a wide range of recreational, educational, residential and employment opportunities;
- An inclusive community that has access to efficient public transport, bike paths and walkable proximity to diverse and extensive open space networks;
- A community that values both its heritage and natural environment, while considering the needs of both today's residents and the residents of tomorrow;
- A community that is proud of this safe and vibrant place that draws inspiration and life from its heritage and connection to the majestic Murray River.

The Structure Plan 2013 provides a framework to deliver:

- More than 20,000 new dwellings and 6,600 new jobs;
- One district centre (future expansion of existing major neighbourhood centre);
- New major neighbourhood centres;
- Village centres;
- Government primary and secondary schools;
- Private schools (P-12);
- Community facilities;
- Childcare centres.

The Structure Plan 2013 also outlines targets for achieving sustainable water management and stormwater treatment, a future transport network, a list of required enabling infrastructure works and indicative costing and staging of delivery.

There are ten key objectives, as outlined below:

- Establishes a sense of place and community;
- Creates greater housing choice and affordable places to live;
- Provides for local employment and business activity;
- Creates highly accessible, vibrant activity centres and community facilities;
- Provides an integrated, accessible, dynamic network of passive and active open space and recreation facilities;
- Provides better transport choices;
- Responds to climate change, biodiversity, heritage, natural hazards and integrated water management;
- Delivers a safe, efficient and integrated transport network;
- Identifies and resolves any potential land use conflicts;
- Delivers accessible, integrated and adaptable utilities and other necessary infrastructure services.

The Structure Plan 2013 is implemented through the Albury Development Control Plan 2010.

Information

This review has identified that the vision and many of the objectives and principles of the 2013 Structure Plan remain relevant.

The review focuses on refining the Structure Plan to ensure the directions best reflect site conditions, biodiversity and other environmental considerations, and in response explores revised spatial arrangements to fit with contemporary planning approaches and to improve the implementation of the plan.

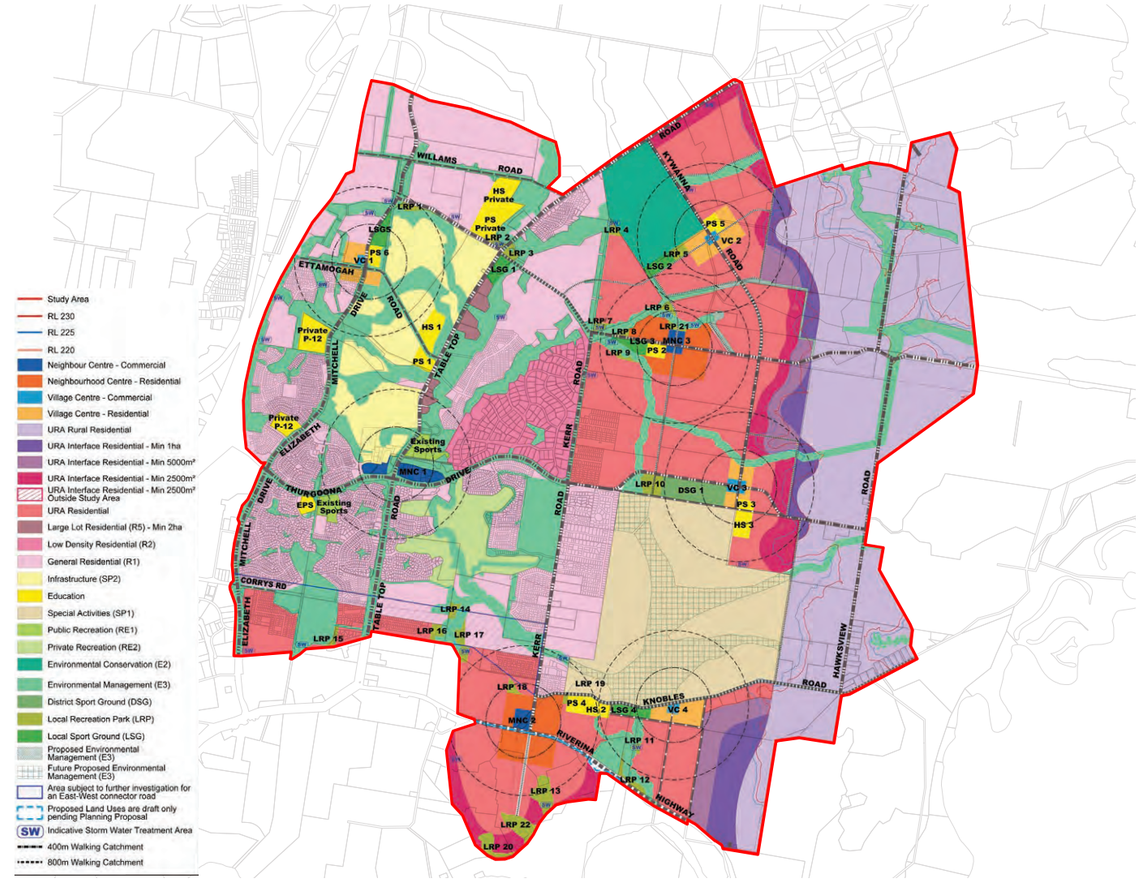


Figure 4: 2013 Structure Plan Map

2.4 Planning Framework

Growth and development in the precinct is guided by a cascade of plans, policies and legislation at State, local and precinct level.

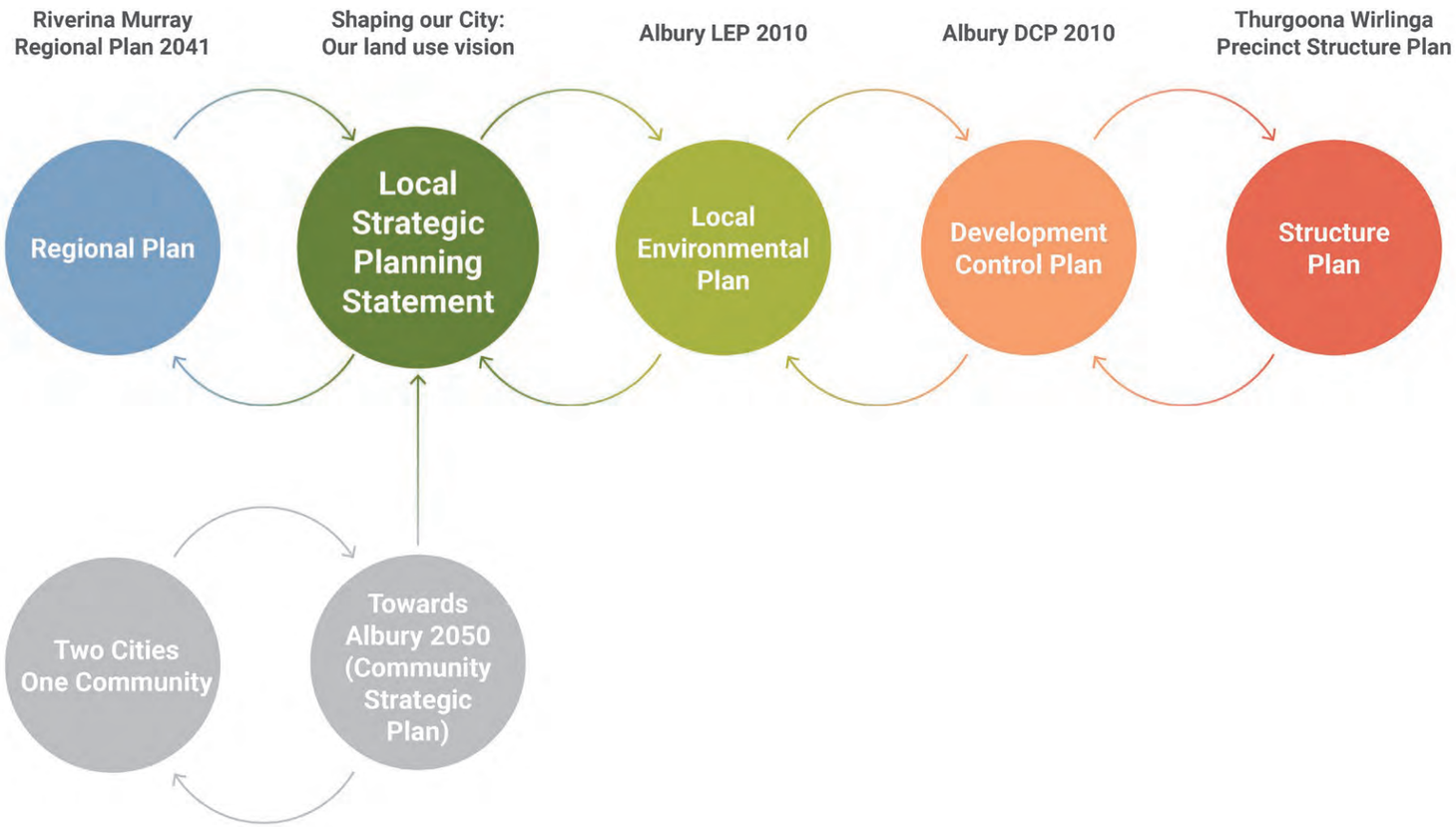
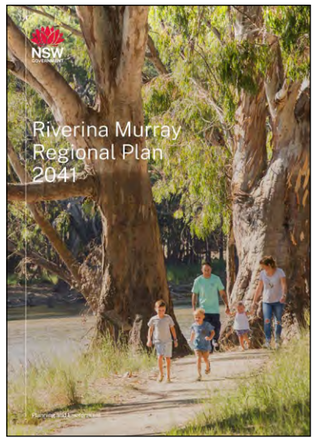


Figure 5: Planning Framework

The Riverina Murray Regional Plan

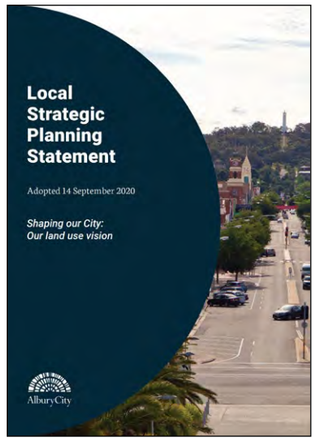


The Riverina Murray Regional Plan 2041 sets the framework, vision and direction for strategic planning and land use planning in the region.

Our approach for this review is generally consistent with the following key objectives under the Riverina Murray Regional Plan:

- Protect, connect and enhance biodiversity throughout the region;
- Support housing in regional cities and their sub-regions;
- Ensure housing supply, diversity, affordability, and resilience;
- Strategically plan for health and education precincts;
- Support Aboriginal and Torres Strait Islander aspirations through land use planning, and;
- Plan for resilient places that respect local character.

Albury Local Strategic Planning Statement



The Albury Local Strategic Planning Statement (LSPS) sets out the vision for AlburyCity, how change will be managed and identifies local land-use priorities.

A key action for AlburyCity in the LSPS is to support and promote sustainable growth through planning and supporting infrastructure. Aligning with Planning Priority 7: Coordinated and well-planned growth precinct, Action 1.3.2 focuses on supporting and promoting sustainable growth through planning and infrastructure. The review is consistent with the Strategy's priorities to provide employment opportunities, housing choice and community facilities.

Albury LEP 2010


Albury Local Environmental Plan 2010

[2010-433]

New South Wales

Status Information

Currency of version

Provisions in force

About this plan

Authorisation

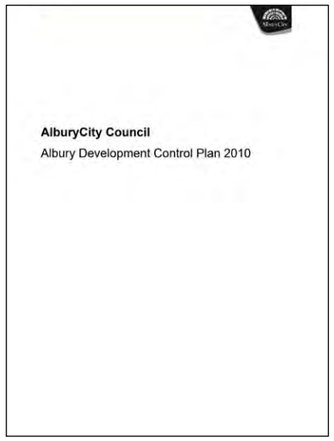
File last modified 15 December 2023

The Albury Local Environmental Plan (LEP) 2010 outlines the planning controls in AlburyCity. It sets out what development types are permissible in each zone, including their legal definitions. It also contains key development standards and provisions to address local land constraints.

Part 6 of the LEP outlines requirements for development in Urban Release Areas, of which Thurgoona Wirlinga is the primary area for Albury. This includes arrangements for designated State public infrastructure, public utility infrastructure and requirements for the preparation of a development control plan for development on land in an Urban Release Area.

It is noted that AlburyCity has since received advice from the NSW Department of Housing and Infrastructure that satisfactory arrangements are in place for the provision of designated State public infrastructure in respect of land identified as an urban release area on the Albury LEP 2010 Urban Release Area Map.

Albury DCP 2010



The Albury Development Control Plan (DCP) 2010 provides detailed planning and design guidelines to support the planning controls set out in the Albury LEP when designing a development. It contains several parts, maps and appendices to refer to depending on the proposed development.

Part 19 of the Albury DCP contains objectives and controls to guide development in Urban Release Areas, of which Thurgoona Wirlinga is the primary area for Albury. Part 10 of the Albury DCP is structured in several divisions for each major type or category of residential development, including subdivision and various dwelling typologies.

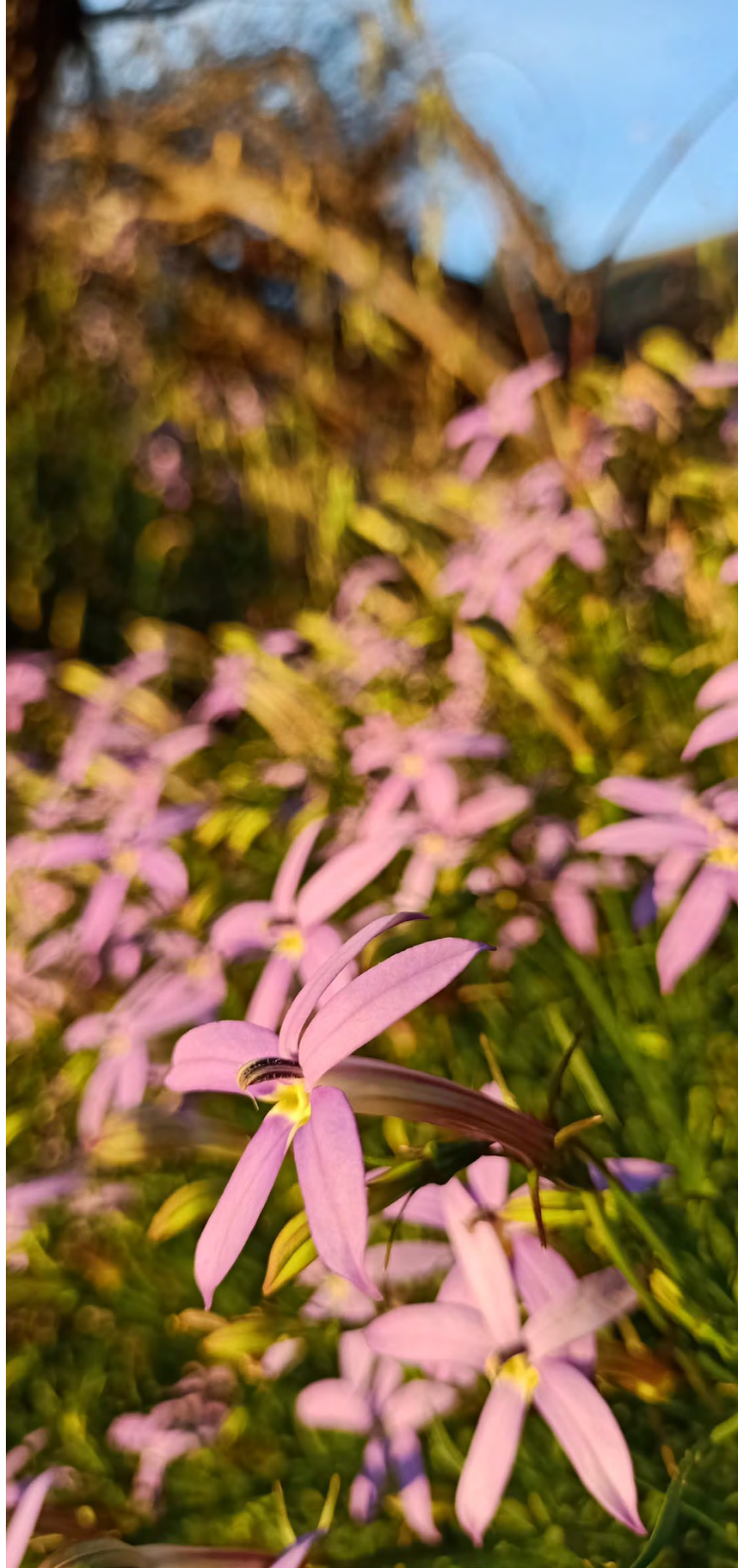
Compliance with Part 6 of the Albury LEP, in particular the requirement to prepare a development control plan addressing specified matters, is deemed to be satisfied by Albury DCP 2010 - Part 19 Urban Release Areas as it provides a cross-reference to relevant Thurgoona Wirlinga Precinct Structure Plan 2013 recommendations and Albury DCP 2010 objectives and controls.

Thurgoona Wirlinga Precinct Structure Plan

The Thurgoona Wirlinga Precinct Structure Plan 2013 is a strategic document that guides the long-term growth and development of the Thurgoona Wirlinga precinct in the Albury Local Government Area. Serving as a vital blueprint, it outlines the vision, objectives, and key strategies for the area's land use, transportation, open space, infrastructure, and environmental conservation over a 30-50 year period.

The purpose of the plan is to ensure that development occurs in a coordinated and sustainable manner. It aims to create a vibrant community with high-quality living environments, ample public spaces, effective transportation systems, diverse employment opportunities, and responsible management of natural resources.

The Thurgoona Wirlinga Precinct Structure Plan 2013 serves as an advisory blueprint for long-term growth, working with statutory instruments like LEP and DCP. While not legally binding, the plan guides the LEP's statutory zoning regulations and forms part of the DCP's detailed development guidelines (Albury DCP Part 19). By informing these instruments, it ensures a unified approach towards achieving a sustainable vision for the Thurgoona Wirlinga precinct. The 2013 Structure Plan is supported by a range of technical studies, much of which still remains relevant.



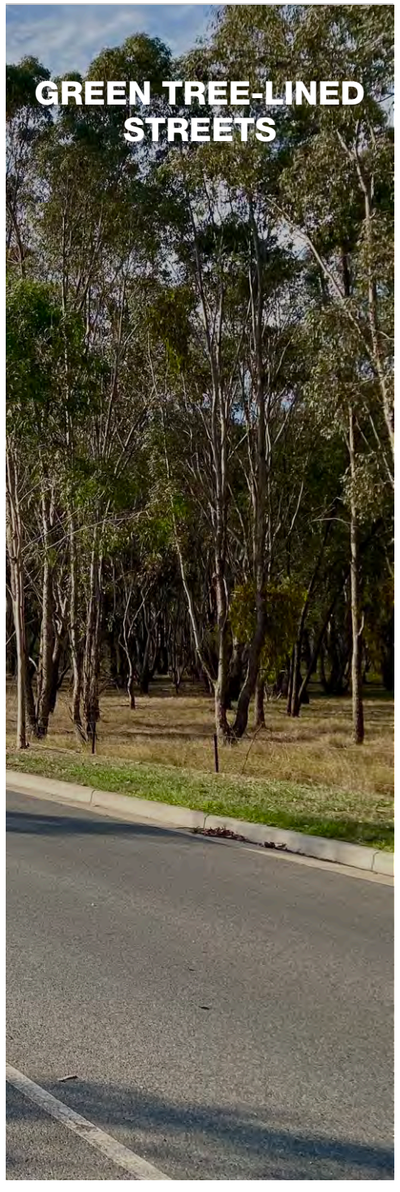
2.5 Key Assets

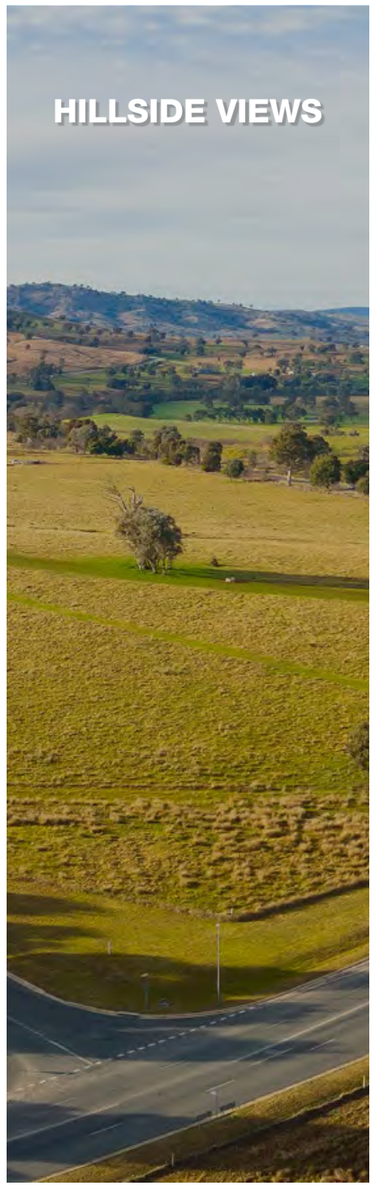
Thurgoona Wirlinga is distinguished by its significant natural and community assets. These assets not only contribute to the area's distinct character but also play a vital role in shaping its future development in a manner that is both environmentally responsible and beneficial to the community.

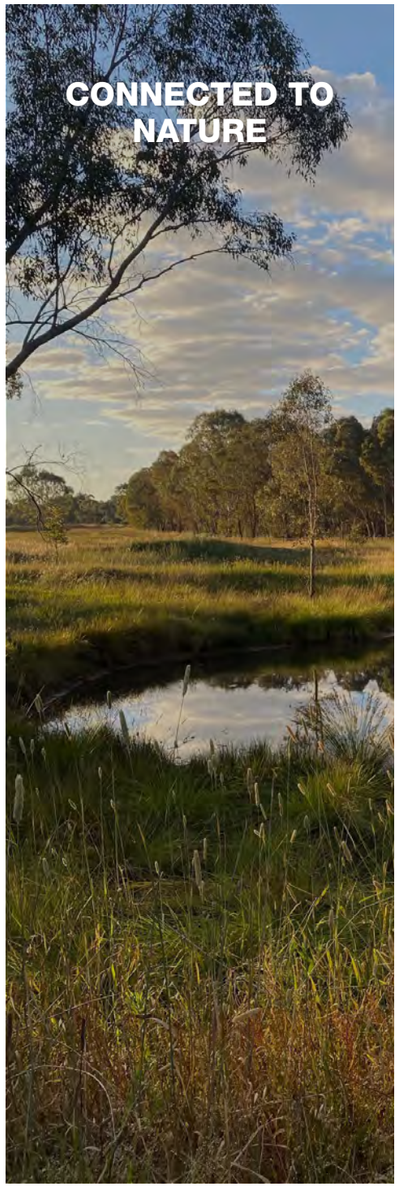
These assets are a valued part of the present landscape and crucial in achieving the precinct's long-term strategic vision.

Legacy assets valued by the community:

- Green tree-lined streets;
- Hillside views;
- Connection to the natural environment, fostering stewardship;
- Communities set in landscape.







2.6 Key Challenges

2.6.1 Macro challenges identified

As we examine the evolving urban landscape of Thurgoona Wirlinga, it becomes evident that the area is confronted with a range of macro challenges. These challenges necessitate a thoughtful and proactive response through the Structure Plan review to ensure that both environmental sustainability and community needs are adequately addressed. The following points elaborate on these emerging challenges:

Pressure on Natural Systems

Thurgoona Wirlinga is increasingly facing pressures on its natural systems, manifested through bushfires, stormwater, floods, biodiversity loss, and urban heat. The revised Structure Plan must incorporate strategies to mitigate these environmental risks, enhancing the resilience of natural ecosystems and ensuring sustainable development that aligns with the area's ecological capacities.

Changing Movement Preferences

There is a growing need in Thurgoona Wirlinga for diverse transport options. As more sustainable and varied modes of transport are encouraged, the revised Structure Plan must adapt to accommodate these changes. This includes the development of infrastructure that supports not just traditional vehicular traffic but also cycling, walking, and public transport, thereby promoting a more integrated and sustainable mobility landscape.

Housing Affordability and Diversity

Australia is currently grappling with the challenges of housing affordability and diversity. Amidst a broader housing crisis, the changing housing needs of the local community must be a central focus of the revised Structure Plan. This entails providing a range of housing options that are not only affordable but also cater to the diverse needs of the population, ensuring equitable access to quality living conditions for all residents.

Community Needs and Expectations

As Thurgoona Wirlinga continues to grow, the needs and expectations of its community are also evolving. The revised Structure Plan must address the increasing demand for access to community facilities, open spaces, parks, and community hubs. These amenities are essential for fostering a sense of community, promoting social cohesion, and ensuring that the growing population has adequate access to essential services and recreational spaces.

2.6.2 Focus areas for improvement

While significant progress is being made so far in delivering the Thurgoona Wirlinga Precinct Structure Plan, there are notable areas where focused improvement is needed. Addressing these implementation challenges is key to ensuring that the plan's objectives are fully realised. The following points detail these specific areas of concern:

Improve Subdivision Outcomes

One of the challenges faced is the issue of fragmented subdivision outcomes creating segregated communities and poor interfaces with Defence land. This fragmentation has not resulted in optimal land use and layout, which detracts from the cohesive development envisioned in the Structure Plan 2013. There is a need for more integrated subdivision planning, with local roads connecting to new areas and cohesive urban design across the precinct to reduce fragmented neighbourhoods and better addresses the Defence site.

Better Centres

The existing retail centres within Thurgoona have not been developed as originally envisaged in the Structure Plan 2013. This deviation from the planned vision has implications for the area's urban character and functionality. There is a need to reassess future retail centres to ensure they meet the intended objectives of the Structure Plan 2013, such as fostering community engagement, providing more choices in the variety of shops and dining options and other essential services, and enhancing the area's overall liveability.

Increase Community Infrastructure

A significant challenge in Thurgoona Wirlinga is that new development is outpacing the provision of community infrastructure, such as childcare centres, multipurpose community centres, cultural venues, and parks. This imbalance can lead to inadequate access to essential services and facilities for residents. To address this, there is a need for a more synchronised approach to development and infrastructure provision, ensuring that as new residential areas are developed, they are accompanied by the necessary community facilities.

Environmental Protection

Improved environmental protection measures are required in Thurgoona, particularly in light of new information and evolving environmental standards. This entails updating and strengthening policies and practices related to environmental conservation and sustainability. The focus should be on preserving natural habitats, managing ecological impacts of development, and incorporating contemporary environmental best practices into the planning.

Section 3

A City in Nature

Garden City 2.0

Survey Question

Please indicate your level of support for the proposed ‘Garden City 2.0 - City in Nature’ vision for Thurgoona Wirlinga? Is there anything else you would like to tell us about the Garden City vision?

3.1 Vision and Legacy

Thurgoona Wirlinga is a place that has developed over time.

The legacy of these plans, evident in the structure of the place and the elements the community and Council value, includes transitioning from a car-centric, low-density, dispersed pattern to development that is fully integrated with nature.

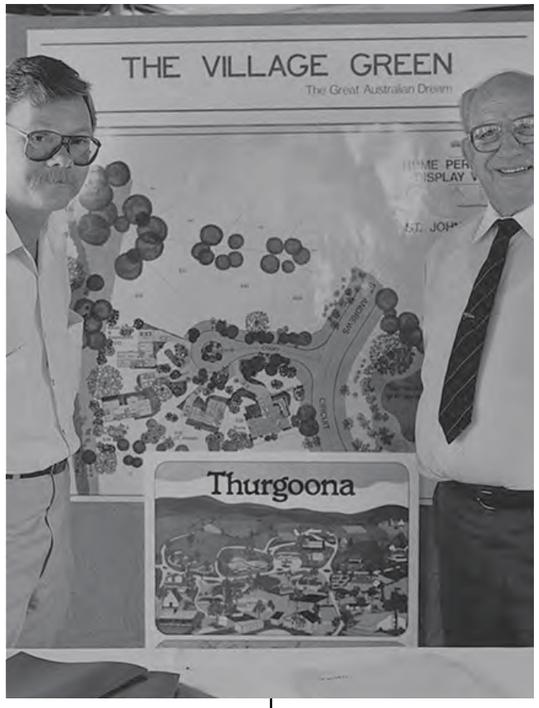
The updated vision for the Precinct Structure Plan reflects a stronger return to Garden City principles. This City in Nature vision for Thurgoona Wirlinga entails:

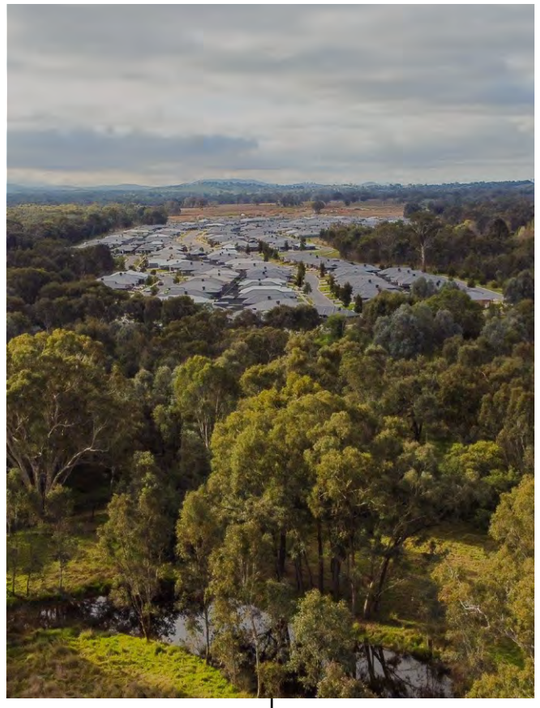
- Healthy environment: Protecting, connecting, and restoring the environment;
- Healthy movement: Fostering healthy movement patterns connected to the natural character;
- Healthy places: Embedding places and communities in the landscape.

Garden City 2.0 envisions a landscape defined by fine grain, and human scale. Designing from the place and the community to:

- Create a community connected to nature, embedding connection to Country from the start;
- Establish continuous, fine grain mobility including pedestrian trails and cycleways aligned to green links;
- Better integrate uses with green networks (open space, cafes etc.);
- Employ built form and neighbourhood design that embraces nature as an asset.

The Structure Plan focuses on those areas where change can still happen, while integrating with the wider will have greater influence on areas that are yet to be developed.





1980

Albury Wodonga Development Corp

2013

Thurgoona Wirlinga Structure Plan

2023

Thurgoona Wirlinga Structure Plan Review

Figure 6: Timeline of key Thurgoona Wirlinga Plans

3.2 Developed Areas

A significant proportion of the Thurgoona Wirlinga precinct has been developed or is subject to an approved development application. The updated Precinct Structure Plan focuses on those areas where change can still happen, while integrating with the wider precinct. While the structure plan review provides an opportunity to integrate existing development, it will have greater influence on areas that are yet to be developed.

When undertaking engagement with key stakeholders, we've heard from Charles Sturt University that they would like to help meet community needs on their University campus site. The Structure Plan can look at what infrastructure such as a high school might be suitable to be collocated with the University.

We've heard from the Australian Government Department of Defence that there are no plans to divest their land in the near future. While this limits opportunity for change on the Defence site, the Structure Plan can look at the interface along the site boundaries to minimise impacts like noise.

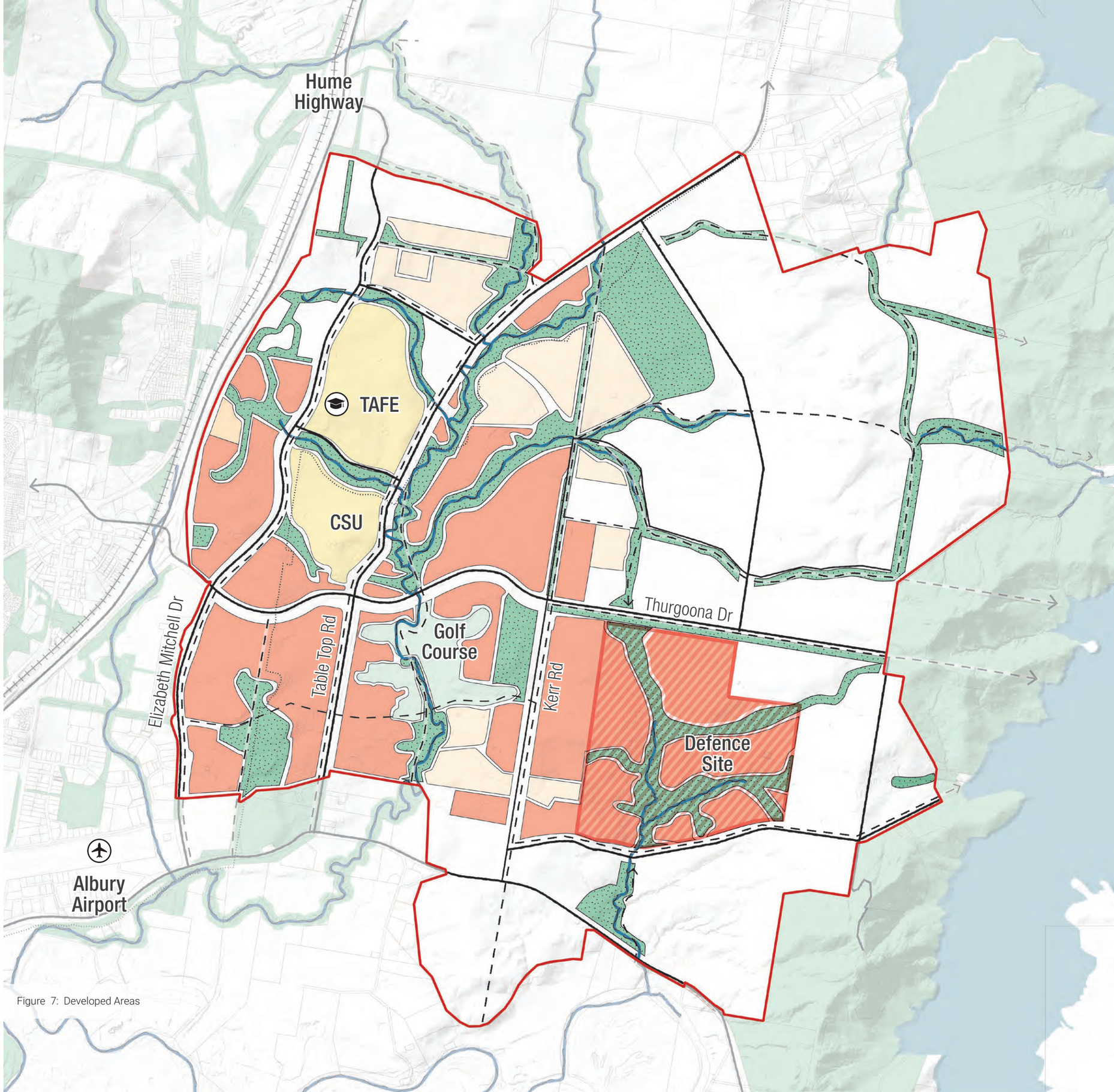


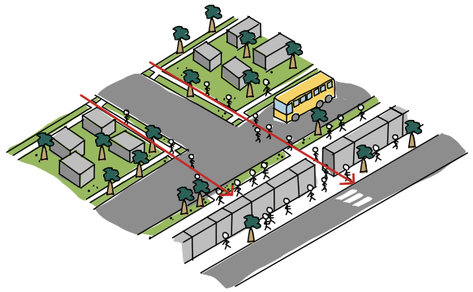
Figure 7: Developed Areas

3.3 Four Themes

The following sections discuss the opportunities for change under the four themes of:

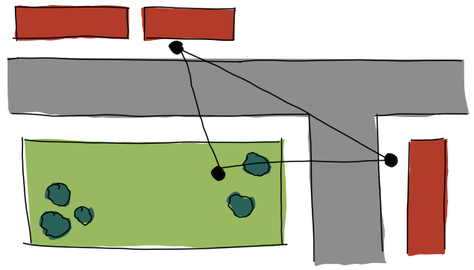
Heritage and Environment

There is a delicate balance between preserving the cultural heritage and natural environment of Thurgoona Wirlinga, while also supporting future development. It covers the protection of Aboriginal and non-Aboriginal heritage items, as well as flora, fauna and natural landscapes that hold ecological significance.



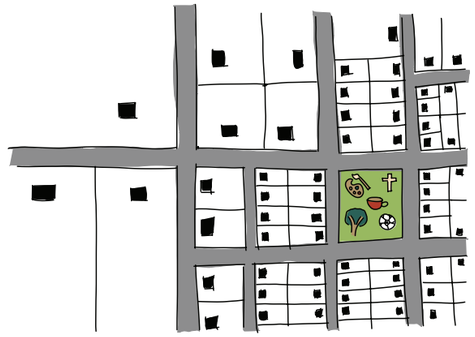
Transport and Movement

Good connectivity and mobility within and around Thurgoona Wirlinga is an essential feature of daily life. This covers existing transport networks, sustainable transportation methods, and the development of pedestrian and cyclist-friendly infrastructure. It also delves into strategies for improving traffic flow, reducing congestion, and ensuring easy access to public transportation, all the while taking into account the need for safety and accessibility for all demographics.



Community Infrastructure and Urban Centres

The planning and development of community facilities, services and urban centres needs to 'play catch up' to support the fast-growing population of Thurgoona Wirlinga. It includes plans for schools, health facilities, recreational and sports facilities, as well as shopping and dining establishments. The goal here is to create lively, thriving urban centres that cater to the community's diverse needs and promote social interaction, thereby fostering a strong sense of community and enhancing the quality of life.



Housing Density and Character

Housing Density and Character is concerned with ensuring that the provision of residential development aligns with the retention of Thurgoona Wirlinga's unique character. This entails maintaining the existing friendly, welcoming, and family-orientated community identity, while diversifying housing options to accommodate the needs of new residents. This theme deals with strategies for the creation of diverse, affordable, and sustainable housing options that cater to various demographic groups. At the same time, it underscores the importance of maintaining the lifestyle appeal and distinct natural landscape assets in the area.

Section 4

Heritage and Environment

4.1 Precinct Context

Environmental assets make Thurgoona Wirlinga a uniquely attractive place to live. The need to protect this unique biodiversity has been catalysed by our changing climate, where an improved response to natural hazards is needed to ensure the longevity of natural environments and our communities.

The community has expressed the desire to protect these areas and to provide better quality developments that integrate environmental values.

Attitudes in planning and design over the last decade have shifted from viewing the environment as a constraint to be managed to an asset to be protected and celebrated.

Current best practice approaches to new communities embed blue-green networks as living infrastructure into structure planning for the benefit of people and the environment. The opportunity for Thurgoona Wirlinga is to create a community that stands out amongst all others, where living infrastructure enhances the health, connectivity and quality of the natural environment to ensure the environment is protected and celebrated.

Information

The current planning controls and Structure Plan do not reflect full extents of environment and heritage significance.

The Sloane's Froglet is an endangered frog species with a very small distribution within the floodplains of the Murray Darling Basin. Notably, one of the largest known populations in New South Wales is found within the suburbs of Thurgoona-Wirlinga. It's important to note that this species was not identified in Thurgoona-Wirlinga at the time of the 2013 Structure Plan. Therefore, it necessitates suitable consideration in this review to ensure its conservation and habitat preservation.

4.2 What We've Heard so Far

Better protection of environmental land

Protect endangered species, natural habitats like old trees, vegetation and wildlife corridors.

Improve stormwater management

Improve storm water management to minimise flooding and improve water quality.

Acknowledge Aboriginal and Torres Strait Islander People, culture, and history

Protect historical sites and give more recognition to local culture and history.

Sustainable development

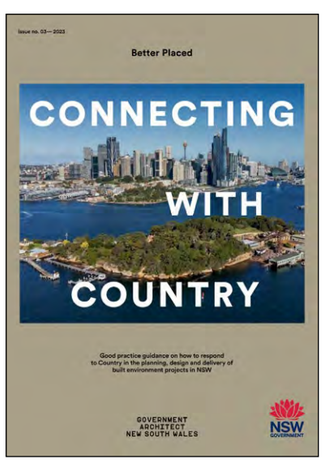
Embed sustainability considerations so new residential development supports higher liveability and wellbeing outcomes.

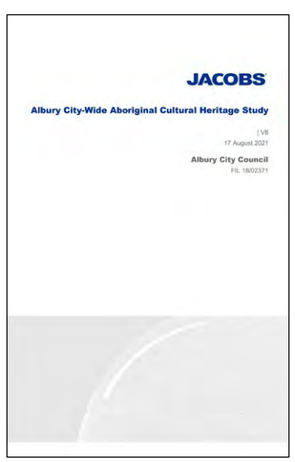
Other comments and ideas you've shared

- Maintain the beautiful bushland and garden setting of Thurgoona Wirlinga's residential estates, with lots of green gardens and views to mountain landscapes;
- Connect to local creeks for conservation and recreation;
- Use more Aboriginal and Torres Strait Islander place names;
- Plant more trees, especially bushfire tolerant, and showcase native gardening;
- Further support for renewable energy/ regenerative power;
- Create new community gardens, growing food in the landscape/edible plantings;
- Prevent the unnecessary removal of old trees, particularly in new developments;
- Encourage tree planting and large green spaces;
- Set aside land to connect high-value environmental areas;
- Importance of Water Sensitive Urban Design (WSUD), trees, and parks;
- Rezoning farming lands adjoining residential areas is a concern;
- Higher-density housing might allow for the conservation of farmland and natural habitats;
- Involve community groups in raising conservation awareness;
- Address fuel loads and fire management near residences;
- Improve readiness to deal with the impacts of climate change;
- Address the urban heat island effect;
- Consider new technologies such as community solar batteries (micro servicing);
- Protect wildlife (encourage cat containment, corridors for kangaroos);
- Support landholders who want to revegetate their property;
- Provide links to Lake Hume.

4.3 How We're Responding

City-wide Aboriginal Cultural Heritage (ACH) Study 2021



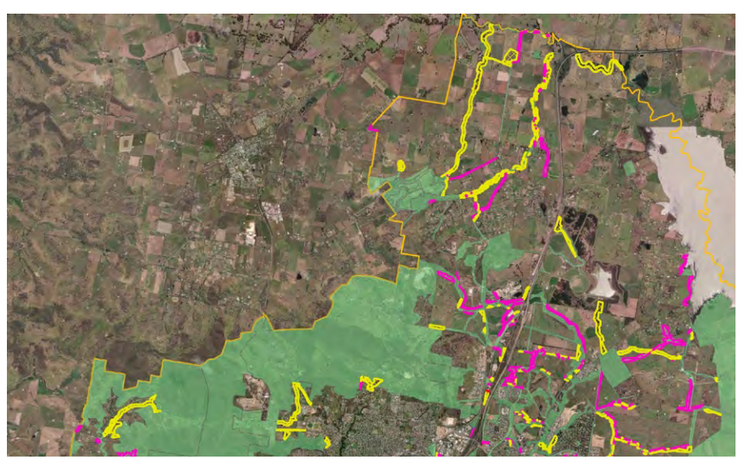


The City-wide Aboriginal Cultural Heritage (ACH) Study provides a framework for Aboriginal Cultural Heritage Management of places and objects in the Albury LGA. The ACH Study along with NSW Government Architect Connecting with Country guidance, archaeological studies and consultation with Wiradjuri Elders will be used to inform our approach. AlburyCity are undertaking a Heritage Review Project including Heritage Strategy to address locations where dual naming of sites can be respectfully considered.

The Regional Natural Environment Strategy 2020-2032

The Regional Natural Environment Strategy 2020-2032 is a Two Cities One Community initiative of AlburyCity and Wodonga Council's. This is an overarching framework to protect and enhance the natural environment throughout the Albury Wodonga region. The Action Plan requires the implementation of the Sloane's Froglet Guidelines in the Thurgoona LAMP Area and monitoring of Squirrel Glider, Sloane's Froglet, Brushtailed Phascogale and Woodland Bird communities.

Biodiversity Assessment and Conservation Zone Lands Review



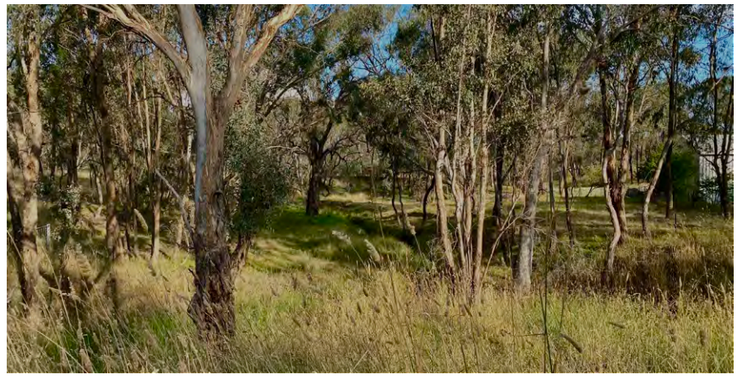
A Biodiversity Assessment has been completed across the investigation area prepared by environmental consultants Biosis Pty Ltd in accordance with the scientific method, known as Stage 1 of the Biodiversity Assessment Method (BAM). The Biodiversity Assessment is a review of the environmental values within the investigation area in the context of protected entities listed under the *Biodiversity Conservation Act 2016 (BC Act)* and any Matters of National Environmental Significance (MNES) listed under the *Commonwealth Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act)*. If deemed suitable, this assessment will also assist AlburyCity to progress towards the contemporary framework known as Biodiversity Certification (*Biodiversity Conservation Act 2016*). This information has been used to inform the Nature Based Framework to reduce the impact of development on land with environmental value. AlburyCity is also due to finalise the Conservation Zone Lands Review in mid 2024 to better align the zone mapping with land identified as having significant environmental value.

4.4 Case for Change

Biodiversity

A number of key existing habitats and connectivity features occur within the investigation area. The 2013 Structure Plan identified conservation zones under Biodiversity Certification in the Albury LEP 2010.

The Albury City Local Government Area (LGA) is currently subject to a Biodiversity Certification order until February 2026. Since 2010 there have been various changes to New South Wales (NSW) biodiversity legislation and additional listing of threatened species in the Albury LGA. Among these changes was the introduction of the Biodiversity Assessment Methodology (BAM) in 2016. In response, a Biodiversity Assessment has been completed across the investigation area prepared by environmental consultants Biosis Pty Ltd in accordance with the scientific method, known as Stage 1 of the Biodiversity Assessment Method (BAM). The assessment undertaken by Biosis has defined areas of high, medium and low ecological value and outlined key areas of habitat and connectivity within the investigation area.



Aboriginal Cultural Heritage

The 2013 Structure Plan identified areas of Aboriginal cultural heritage around creek lines in the southern precinct. Updated mapping has been prepared as part of the Albury City-Wide Aboriginal Cultural Heritage Study (2021). This mapping has been based on a predictive framework and identifies areas with a potential likelihood (low, medium, high) of containing Aboriginal cultural heritage sensitivity. Key areas of change include:

- Additional areas of high sensitivity identified along higher order creek lines, including Eight Mile and Woolshed Creeks;
- Areas of moderate sensitivity identified along lower order creek lines.

Integrated Stormwater Management

The 2013 Structure Plan initially identified preferred stormwater treatment locations, which have since been refined in the Thurgoona Wirlinga Drainage Strategy. The drainage strategy identifies 30 new Wetland Retarding Basins (WLRB) to be constructed across the Thurgoona Wirlinga area. These revised basin locations will be included in the Structure Plan review.

Proposed changes involve reflecting the revised basin plan from the 2020 Drainage Strategy in the Structure Plan review. This includes:

- Adding a secondary network of smaller wetland/Sloan's Froglet basins throughout the Thurgoona Wirlinga precinct to enhance connectivity and gene flow between populations. These smaller basins, designed to mimic Gilgai landforms, aim to protect overflow/flooded habitat;
- Aligning basin locations with linear open space linkages to create multi-functional wetland habitats with walking trails, making them nature reserves and future public destinations.

4.5 Principles and Drivers

Protect Biodiversity

Waterways

Conservation Land

- *Recognise and protect existing areas of significant biodiversity, including for waterways wetland environments and land-based habitats.*
- *Prevent habitat fragmentation.*
- *Explore mechanisms for implementation.*

A primary principle is the recognition and protection of existing areas of significant biodiversity. This includes safeguarding waterways, wetland environments, and land-based habitats from degradation. An essential aspect of this principle is the prevention of habitat fragmentation, ensuring that ecological networks remain intact. The review also focuses on exploring effective mechanisms for the implementation of biodiversity conservation strategies, ensuring that these natural assets are preserved for future generations.

Connected Habitat

Wildlife Movement

- *Identify key environmental corridors to protect fauna movements east-west and north-south.*
- *Support fauna movement between critical habitats (Regional Natural Environment Strategy 2020-2032).*

Identifying and protecting key environmental corridors is crucial to facilitate fauna movements in both east-west and north-south directions. This approach is aligned with the Regional Natural Environment Strategy 2020-2032, emphasising the importance of supporting fauna movement between critical habitats. Woodland patches are a key habitat feature, providing refuge and breeding habitat for fauna species. Opportunities exist to incorporate woodland patches (0.5 hectares or greater) and scattered trees into natural and open space parklands to preserve their longevity. Connectivity to woodland patches can be maintained through environmental/conservation corridors, aquatic habitat and both land sharing and land sparing urban design. By maintaining these corridors, the review aims to preserve the ecological integrity of the region, ensuring that wildlife can thrive and ecosystems remain resilient.

Create Room for Water

Waterways

- *Adopt an integrated water management approach*
- *Support multifunctional stormwater infrastructure for improved management of flood prone lands.*
- *Provide habitat for sensitive species including Sloanes Froglet.*

Key aquatic habitat features occur within the investigation area supporting a diverse array of species, these are farm dams, creeks, riparian corridors, and watercourses and Gilgai formations.

Recognising the value of water in the landscape is another fundamental driver. This principle supports the development of multifunctional stormwater infrastructure (water sensitive urban design), which plays a vital role in the improved management of flood-prone lands. Additionally, such infrastructure provides crucial habitat for endangered species, such as the Sloane's Froglet (*Crinia Sloanei*), contributing to the overall ecological diversity of the area. This approach underscores the importance of taking an integrated water management approach with environmental conservation, ensuring water bodies are both protected and optimally utilised within the urban landscape.

Survey Question

Please indicate your level of support for protecting Aboriginal and Torres Strait Islander cultural heritage, including around creek lines within the precinct.

4.6 Options and Approaches

4.6.1 Consideration of High Value Heritage

Overview

The 2013 Structure Plan identified areas of Aboriginal cultural heritage around creek lines and in the southern part of the precinct, these are shown on the adjacent map as 'Known areas of Significance.'

The Aboriginal Heritage Information System (AHIMs) is a mechanism for consideration of Aboriginal Cultural Heritage with known sites recorded across the precinct. Updated mapping has been prepared as part of the Albury City-Wide Aboriginal Cultural Study 2021 (ACH Study). This mapping has been based on a predictive framework and identifies areas with a potential likelihood (low, medium, high) of containing Aboriginal cultural heritage sensitivity. Key areas of change include:

- Additional area of high sensitivity have been identified around higher order creek lines, including Eight Mile Creek, Woolshed and Sandy Creek;
- Areas of moderate sensitivity have been identified around lower order creek lines.

In accordance with the recommendations of this ACH Study in mapped areas of low cultural heritage sensitivity a due diligence assessment is required for development (in accordance with the Due Diligence Code of Practice (DECCW 2010c). In areas mapped moderate or high cultural heritage sensitivity an Aboriginal Cultural Heritage Assessment Report (ACHAR) is required, pending the outcomes of a Due Diligence Statement. Based on the predictive mapping within the ACH Study, these areas may require further investigation (and protection, where required) particularly around creek lines.

Additionally, the NSW State Government Connecting with Country and Designing with Country Framework, provides a mechanism for meaningful engagement with Aboriginal and Torres Strait Islander people to deliver positive outcomes for Country. The framework requires a connecting with Country approach in all NSW built environment projects.

Proposed Change

To achieve the outcomes outlined within the Connecting with Country Framework, we will be further engaging with the local Indigenous community in the urban design process to identify elements for recognising and embedding Aboriginal history and connection to Country within the precinct. It is recommended that developments mapped in areas of High or Moderate cultural heritage sensitivity within the growth areas move straight to the ACHAR process, as there are considerable areas with potential for Aboriginal cultural heritage.

Figure 8: Aboriginal Heritage Map

4.6.2 Conservation Zoned Land

Overview

AlburyCity has recently undertaken a review of the Conservation Zones within the Thurgoona Wirlinga precinct (as part of city-wide investigations). These zones, which are integral to the Albury Local Environmental Plan 2010, designate areas of high environmental significance requiring protection and careful management.

Proposed Change of Conservation Zones

The finalisation of the Conservation Zoned lands review by AlburyCity will inform the revised Structure Plan. This ensures that ecological considerations are at the forefront of planning and development within the precinct. AlburyCity's review has identified key areas for zoning adjustments, which include;

Proposed Addition of Conservation Zones

Rezoning of additional lands to be included within the Conservation Zone. This expansion targets areas where significant environmental values have been confirmed, thereby extending protection to these ecological assets.

Proposed Removal of Conservation Zones

Where lands currently within the Conservation Zone do not exhibit significant environmental values, a rezoning to more appropriate adjacent zone is proposed. This refinement ensures that Conservation Zones are precisely delineated to cover areas that warrant such categorisation, allowing for more focused conservation efforts.

This review will be incorporated into the Structure Plan review.

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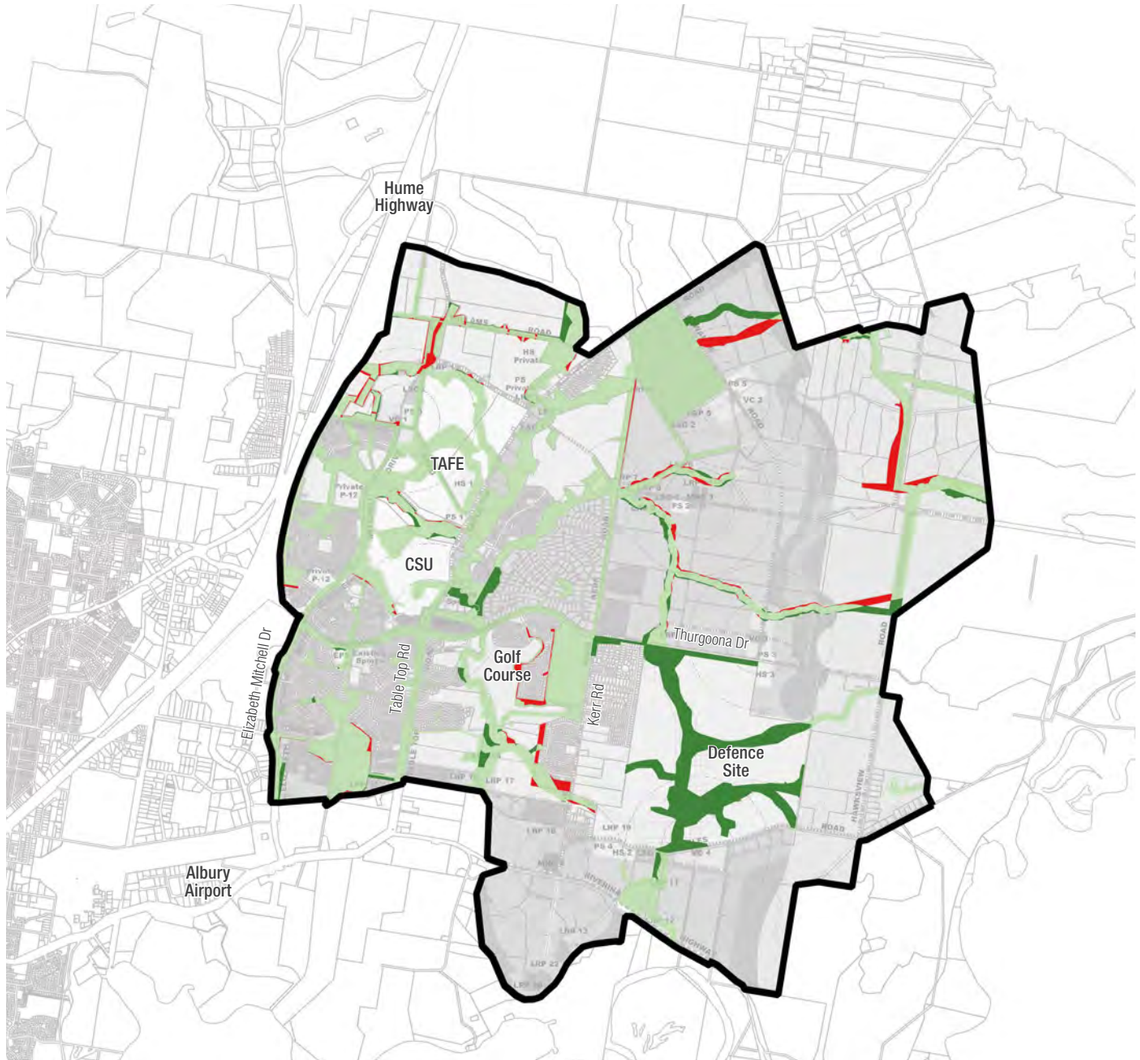


Figure 9: Proposed Conservation Zones Land Review Map*

**Conservation Zoned lands review as exhibited. Updates expected following public consultation.*

4.6.3 Consideration of High Value Biodiversity

Overview

The Thurgoona Wirlinga Precinct investigation area represents a unique suite of habitat niches set within an expanding peri-urban setting. The presence of distinct woodland and hydrological habitats and landforms provides unique habitat opportunities for a range of species with relatively distinct or defined habitat requirements.

To mitigate this challenge, a precinct level biodiversity assessment for the Structure Plan is being undertaken to highlight and enhance the area's unique environmental values.

Proposed Change

The recently completed Biodiversity Assessment Report identifies key considerations for biodiversity protection and enhancement, including:

- Incorporating existing hydrological features into open space planning and green zone development;
- Planning for enhancement and protection of hydrological features to maintain and enhance longitudinal connectivity. Incorporating stormwater runoff and retention areas into the Thurgoona Wirlinga Drainage Strategy 2020 to provide multiple aquatic habitat types (niches) within the retained hydrological features;
- Ensuring hydrological corridors are planted/ enhanced with suitable native species that are climate change resilient and also provide appropriate habitat for migratory species, semi-aquatic and true aquatic species;
- Incorporating existing woodland habitat corridors into green space and planning for habitat linkages within the developable land, with appropriate buffers;
- Maintaining and enhancing habitat linkages between roadsides and major habitat areas within the precinct area;
- Incorporating isolated paddock/habitat trees into open space where possible and allowing appropriate tree protection and retention zones;
- Identification of low constraint areas where key infrastructure such as services, roads and footpaths might be located to allow for appropriate urban growth while minimising disturbance to riparian or woodland areas.

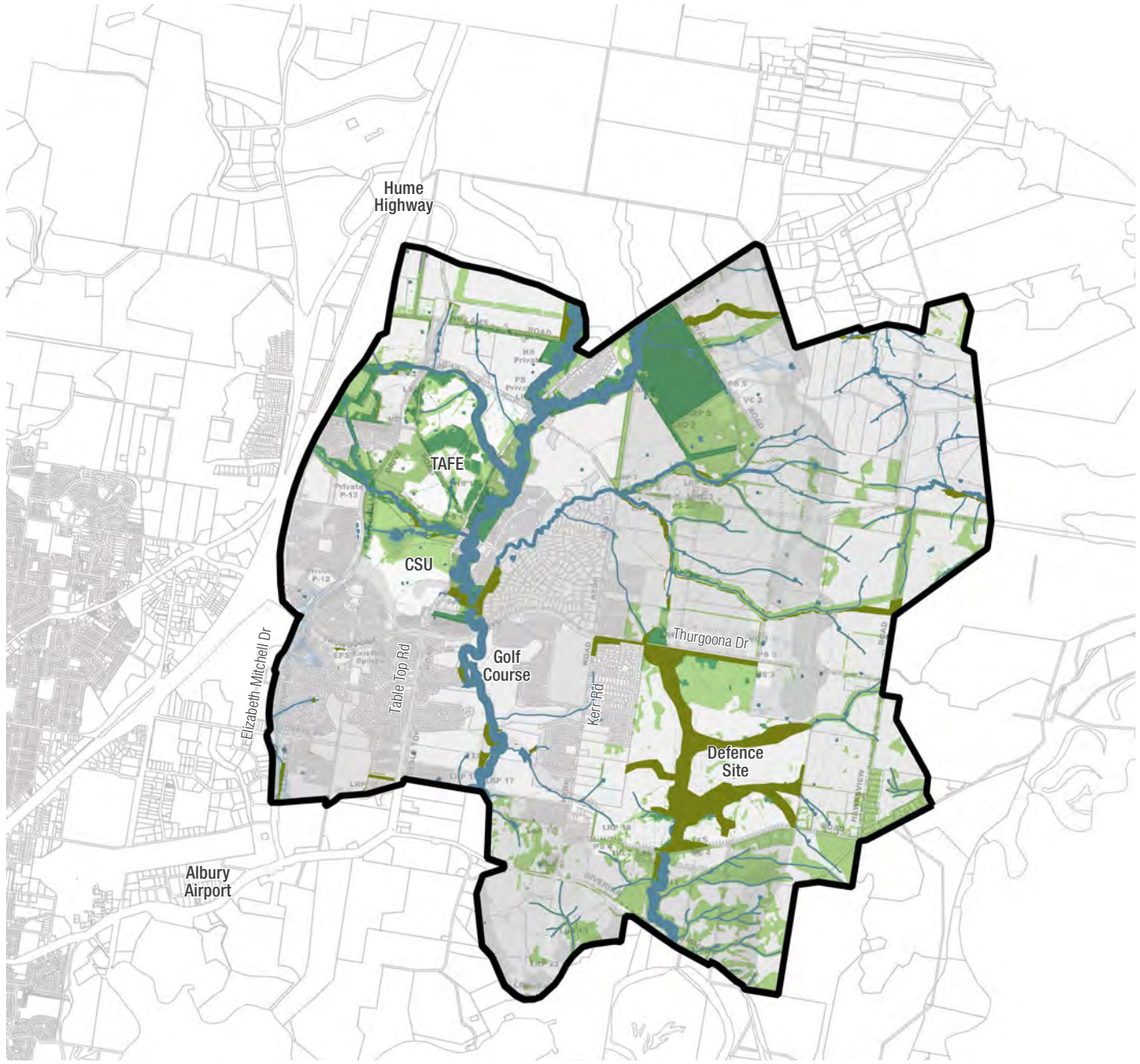


Figure 10: Biodiversity Map

**Conservation Zoned lands review as exhibited. Updates expected following public consultation.*

Survey Question

Please indicate your level of support for reviewing mechanisms for the preservation of high value biodiversity areas.

4.6.4 Review Mechanism for Preserving Areas of High Value Biodiversity

In NSW, there are varying mechanisms for preserving areas of high value biodiversity.

Biodiversity Certification

Biodiversity Certification in NSW, governed by the Biodiversity Conservation Act 2016, streamlines land use and development assessments regarding ecological impacts. It involves pre-assessing large areas to identify critical biodiversity values and suitable development sites. Certification mandates biodiversity offsets for unavoidable impacts, simplifying the approval process by removing the need for individual biodiversity assessments.

Biodiversity Stewardship Agreements

In NSW, these agreements allow Landowners to commit part or all of their land to enhance and protect biodiversity. In return, they can receive credits under the Biodiversity Offsets Scheme, which they can sell to developers who need to offset their environmental impact. This approach incentivises Landowners to manage and improve environmental values on their land.

Voluntary Conservation Agreements

These are legally binding agreements between private Landowners and the government, where Landowners commit to manage their land for conservation purposes. In exchange, they might receive benefits like financial incentives or technical support.

Local Environmental Plan Clause

An LEP clause can protect high-value environmental land by mandating the preservation of biodiversity and ecological processes. They require development consents to consider environmental impacts, focusing on avoiding, minimising, and mitigating ecological harm while maintaining habitat connectivity and minimizing fragmentation. Examples include Cl 7.2 Wollondilly LEP 2011, Cl 6.3 Precincts Central River City SEPP, Cl 7.2 Campbelltown LEP 2015, Cl 7.2 Blacktown LEP 2015.

Environmental Zoning Tools

Tools like C4 Conservation (Environmental Living) Zones or C3 Conservation (Environmental Management) Zones can be used to restrict the type and scale of development, ensuring that environmental values are considered and protected in any development.

Development Control Plans (DCPs)

DCPs provide detailed planning and design guidelines to support the objectives of Local Environmental Plans (LEPs). By incorporating environmental protection controls and guidelines in DCPs, local councils can ensure that any development respects and maintains the environmental values of the area.

Conservation Covenants

These are private agreements between a landowner and a conservation organisation. The covenant, which is usually permanent, places restrictions on the use of the land to conserve its natural, cultural, or historical values.

Benefits and Tradeoffs

Mechanism	Biodiversity Certification	Biodiversity Stewardship Agreement	Conservation Covenants	Voluntary Conservation Agreements	LEP Biodiversity	Environmental Zoning	Development Control Plans (DCPs)
Pros	Streamlined development approvals, requires offsets for unavoidable impacts.	Strong legal framework, financial incentives through biodiversity credits.	Permanent protection, tailored to specific needs.	Legally binding, offers incentives like grants.	Provides protection at the discretion of Council at a DA stage.	Effective in controlling land use.	Detailed guidelines, adaptable to local contexts.
Cons	Complex process that risks inadequate protection. (Current approach due to expire).	Complex setup, dependent on credit market demand.	Restrictive for Landowners, hard to modify.	Reliant on landowner participation, not guaranteed.	Does not prohibit development from impacting protected heritage and biodiversity.	Subject to policy changes, less strict than conservation zoning.	Enforcement challenges, less weight than LEP zoning.
Protection Level	High	High	High	Medium - High	Medium	Medium	Medium

Figure 11: Benefits and Tradeoffs Table

Survey Question

Please indicate your level of support for improving wetland/stormwater basin locations.

4.6.5 Flooding, Stormwater Management, and Wetland Habitat

Overview

Thurgoona Wirlinga is located in the Eight Mile Creek Catchment which extends to the north and north-west beyond the investigation area. The 2013 Structure Plan identified preferred stormwater treatment locations which have since been refined in the Thurgoona Wirlinga Drainage Strategy.

The Drainage Strategy identifies 30 new wetland/ retarding bio-basin locations to be constructed across the Thurgoona Wirlinga area.

The Strategy aims to:

- Mitigate the potential flooding impacts;
- Achieve 'Best Practice' stormwater treatment objectives;
- Provide additional environmental and habitat benefits by providing 'open-space' parklands with walking trails making them nature reserves and future public destinations.

The bio-retention basins ensure future development in the catchment does not seek to increase flood risk, Section 10.6 of the Albury Floodplain Risk Management Study & Plan 2016 (AFRMSP) and the Eight Mile Creek Flood Study 2012.To ensure adequate consideration has been given to flooding impacts, further consultation with the Department of Climate Change, Environment and Water will be undertaken as part of the consultation process.

Currently, the presence of Sloane's Froglet basins (beyond those stipulated in the drainage strategy) is largely dictated on the individual development basis in consultation with the Department of Climate Change, the Environment and Water.

Proposed Change

Reflect the revised basin plan from the 2020 Drainage Strategy in the Structure Plan review with the addition of a secondary network of smaller wetlands and Sloane's Froglet basins throughout the Thurgoona Wirlinga precinct to provide added connectivity and subsequently gene-flow between populations. These smaller basins mimic Gilgai landforms and allow for the protection of overflow/flooded habitat.

Further to this, aligning basin locations with linear open space linkages creates wetland habitats that are multi-functional (recreation, habitat, stormwater). By enhancing these linkages with Sloane's froglet habitat, additional habitat benefits would be created for threatened species such as, Squirrel Glider, Swift Parrot, Regent Honeyeater, Latham's Snipe and for River-swamp Wallaby-grass as well as a range of local wetland dependent species.

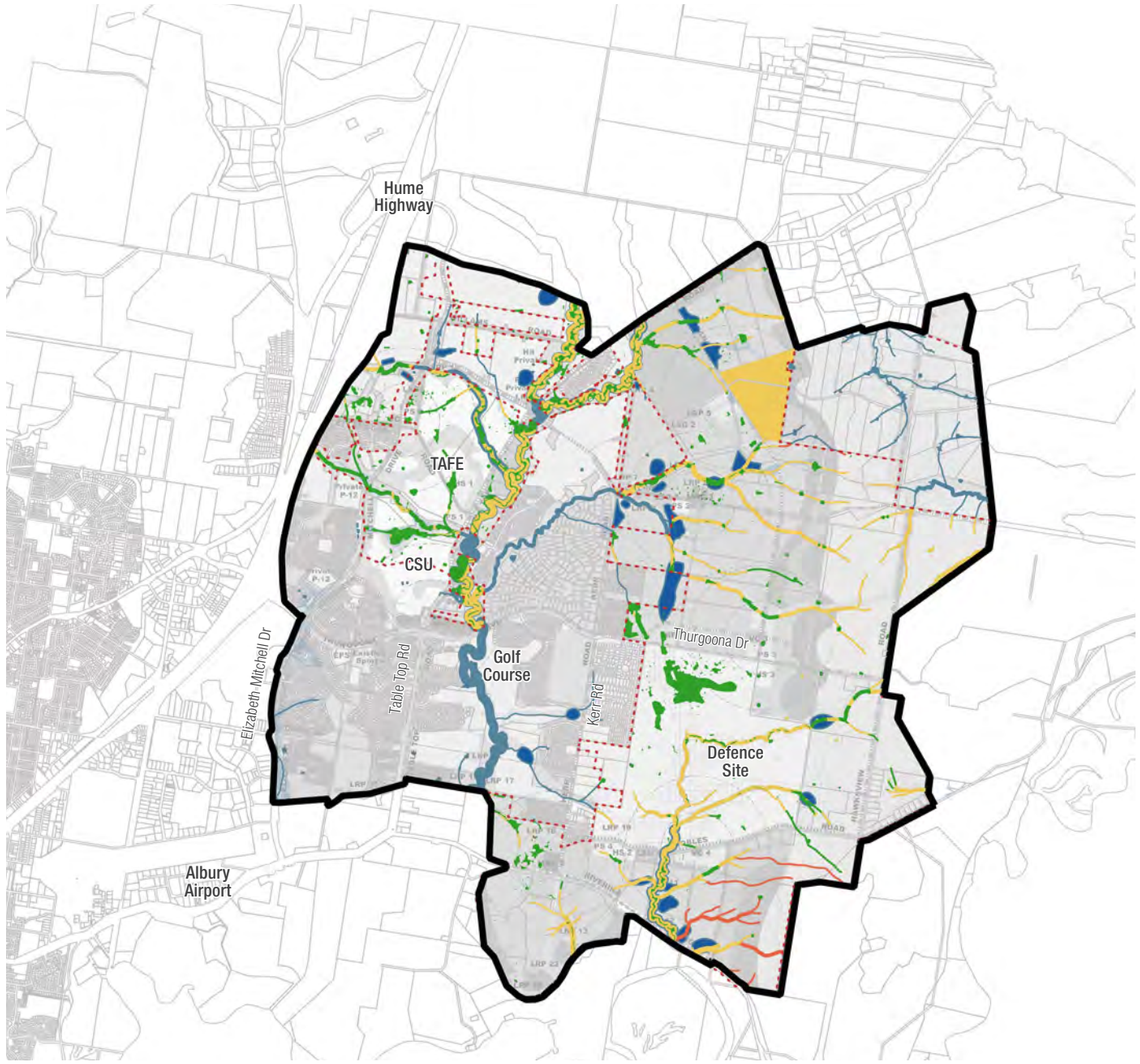


Figure 12: Flooding, Stormwater Management and Wetland Habitat Map

Survey Question

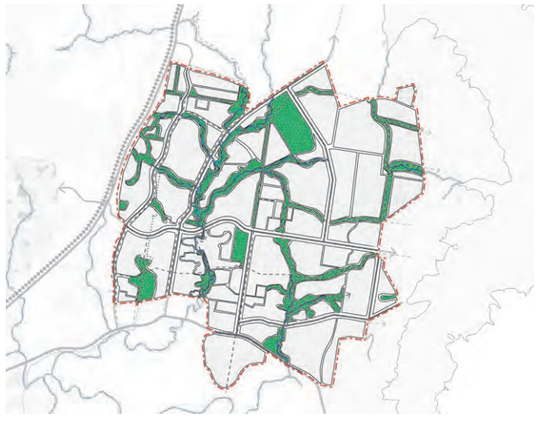
Please indicate your level of support for the Nature-Based Framework. Do you have any further comments about the Heritage and Environment theme?

4.7 Nature-Based Framework Plan

The Nature-Based Framework is a spatial plan on a page that guides the subsequent options and changes in direction. This plan:

- Reflects a spatial vision for the place;
- Reflects a nature-based approach;
- Locks in key elements of value;
- Is flexible and allows for change over time to occur;
- Demonstrates opportunities for elements to be considered holistically.

The nature-based framework is defined by three principles:



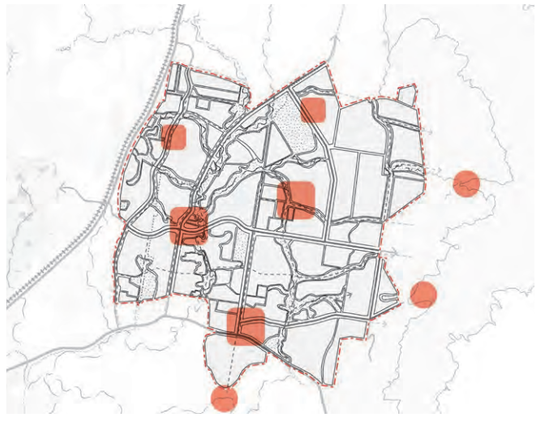
01 Healthy Environment

Defining high level blue and green networks to support healthy waterways, connected habitat and biodiversity. Woodland connectivity is formed throughout the investigation area in the form of wooded riparian watercourses, roadside vegetation and/or remnant and planted vegetation. These woodland vegetation areas link to form major connectivity corridors leading to core areas of biodiversity value such as Bells Travelling Stock Reserve.

Aquatic connectivity corridors are generally formed by vegetated creek lines, however, within the context of the investigation area, smaller aquatic features such as gilgai mosaics and undefined watercourses have been considered. These less notable features are an important aspect for consideration, especially in respect to future developments, where opportunities exist to buffer and enhance these corridors to improve and preserve connectivity of both major and minor aquatic corridors.

02 Healthy Movement

Defining high level movement networks to promote fine grain, healthy, and enjoyable mobility. This fosters active living, emphasising a public domain network enhanced by existing natural corridors. Capitalising on the unique natural features of the landscape can also protect priority green corridors and establish a network of walking trails, cycle paths and open spaces along creeks and riparian corridors. Furthermore, this approach can enhance the connectivity and legibility of recreational trails, particularly areas of higher density.



03 Healthy Places

Defining places and destinations that are fundamentally connected to nature is established through coordinated planning and design of ‘green elements’ such as existing natural elements, street trees, green walls/ roofs, canopy trees, cool pavements and water sensitive urban design. By promoting water and greencover in the landscape and around housing, the urban heat island effect can be mitigated. Other benefits such as improved local amenity, comfort, health, reduced stormwater runoff, improved air and water quality and energy and resource efficiency can also be achieved.

Development Strategy

	Definition	Approach
Malleable Areas	Areas with greatest ability for structural changes.	Focus for structural change in line with changed development context and Nature-based Framework.
Flexible Areas	Areas with flexibility to respond to changes, but with attributes to be maintained.	Investigate minor amendments as required.
Fixed Areas	Areas that are largely developed with limited opportunity for large scale change.	Maintain structure plan framework and review in line with Nature Based Framework.

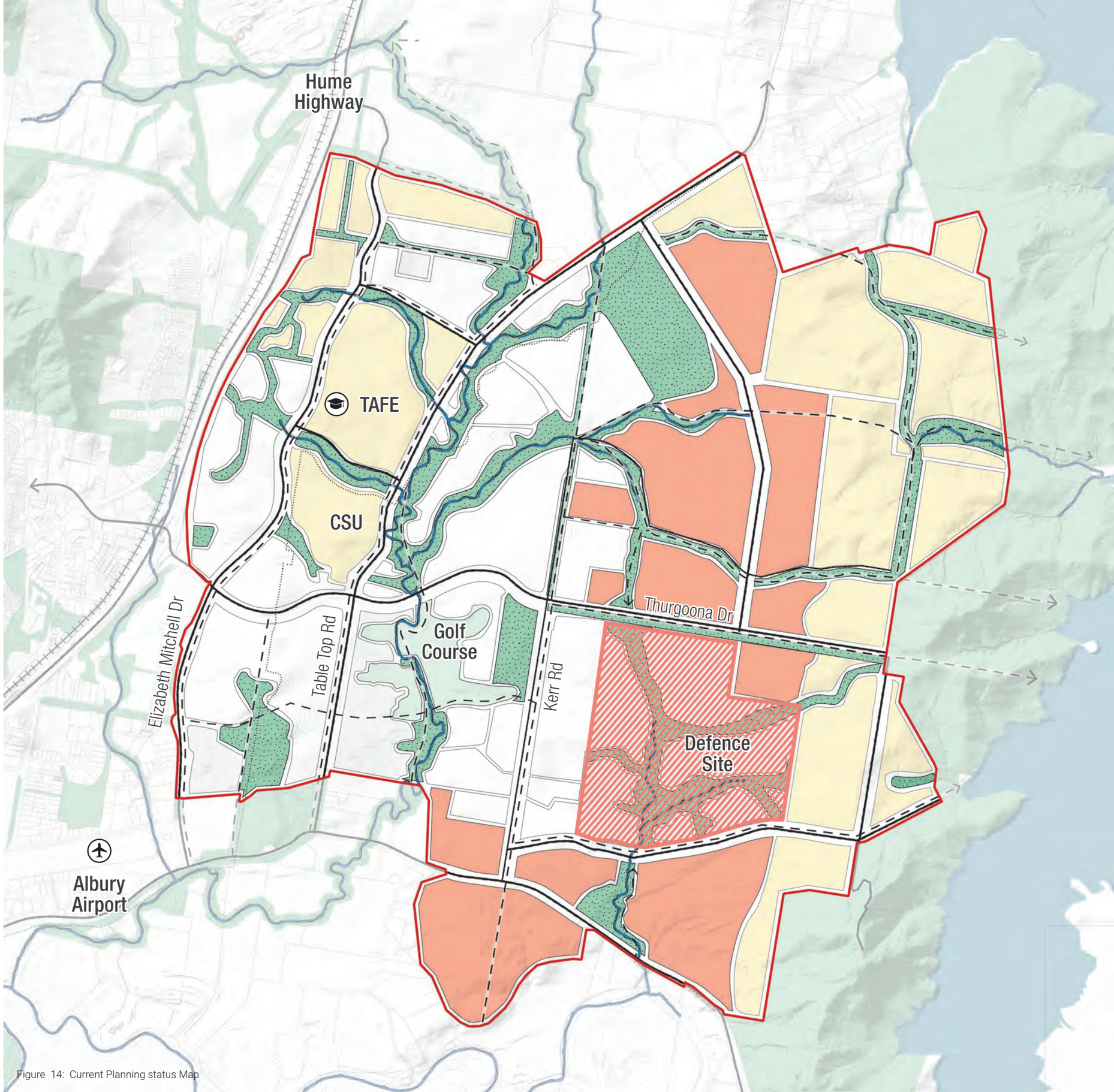


Figure 14: Current Planning status Map

Section 5

Transport and Movement

5.1 Precinct Context

The ongoing growth of Thurgoona Wirlinga underscores the crucial role of transport and movement in infrastructure planning and public discourse. Meeting the needs of a growing community necessitates the implementation of a forward-thinking, sustainable, and efficient transportation system. In alignment with global trends promoting healthier, more environmentally friendly practices, a shift in priorities is occurring towards active and public transportation. The promotion of walking, cycling, and public transport use is intended to cultivate a vibrant, connected, and community-oriented precinct.

Significant initiatives are being undertaken to expand and improve the region's transport network. The current Structure Plan identifies a substantial expansion of the eastern transport networks to service new development, ensuring that the growing demands of the region are met efficiently. Alongside this, street development below the collector level has been unfolding within lot development, aligning with urban expansion needs. This approach ensures that local road delivery keeps pace with the rapid growth of the area.

Traffic congestion issues during peak times are recognised, particularly near freeway interchanges, and dedicated efforts are underway to find solutions that enhance traffic flow and connectivity. The proposed Thurgoona Link Road is currently going through a Federal Government approval process which assesses its environmental impacts. These efforts assist in mitigating traffic congestion and improving road access, demonstrating a commitment to a more fluid and efficient transport infrastructure.

The Traffic and Transport Study produced as part of the 2013 Plan assesses the anticipated traffic and transport implications on the local road network, and the ability of the road network to accommodate the future demand generated by the proposed development. At a fundamental level the transport needs remain. The road network will be reconfigured to improve the connections across the precinct for walking, cycling and vehicle movements, and for better alignment with the nature-based framework.

Furthermore, the Structure Plan encourages the development of bus-ready collector roads to serve future urban areas. This initiative, coupled with the recent provision of new bus services, forms part of a broader public transport strategy aimed at promoting more sustainable modes of transport. In addition, the expansion of the cycle network along key corridors and to schools is prioritised, promoting cycling as a viable, safe and environmentally-friendly transport alternative.

Finally, the Structure Plan emphasises creating pedestrian links to key community destinations, especially within 800 meters of activity centres. This focus not only supports a healthier lifestyle but also fosters a sense of community and connectedness within the region.

5.2 What We've Heard so Far

Ease peak congestion

Around schools, shops and freeway interchanges.

Improved public transport

More public transport choices connecting to local centres.

More pedestrian crossings

Address hazards arising from busy roads and congestion.

Cycle friendly shared paths

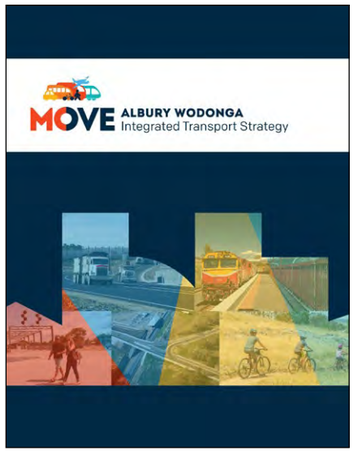
Bike lanes and footpaths, especially near schools.

Other comments and ideas you've shared

- Mitigate noise, air and light pollution impacts on new housing developments from roads;
- More road connections to the Hume Highway;
- Ensure safety, quality (sealing) and maintenance of local roads;
- Address hazards arising from busy roads, congestion and traffic jams at peak hours (especially Hume Freeway interchange at Thurgoona Drive, around the schools and the Shopping Centre);
- Traffic calming mechanisms, especially around school zones;
- Provide pedestrian and bicycle facilities across Hume Freeway to connect Thurgoona to Lavington (e.g. at Thurgoona Drive);
- Link and ring roads where people can connect quickly;
- Trams or other improved public transport options connecting Albury and Wodonga;
- New roundabouts and traffic lights at busy intersection (e.g. Riverina Highway from Elizabeth Mitchell Drive, Table Top Road and Kerr Road);
- Expand shared paths for pedestrians and cyclists (e.g. Somerset Rise, to Ettamogah, to Lake Hume, along watercourses);
- Upgrade bus stops and expand bus routes to new estates and to the Albury Airport;
- Future proof the Hume Highway intersection;
- Accept the cars are typically the preferred mode of transport;
- More lanes along Thurgoona Drive;
- Better roadside plantings and lighting;
- More turning (slip) lanes into local facilities like the golf club and shops;
- Improve the Hume and Hovell track;
- Better parking provision near shops, schools and sports spaces;
- Additional bike parking and seating along walking paths.

5.3 How We're Responding

MOVE: Albury Wodonga Integrated Transport Strategy



The AlburyCity and Wodonga Council MOVE: Albury Wodonga Integrated Transport Strategy presents a comprehensive approach to addressing current and future transportation needs. Key relevant actions include addressing gaps in the Thurgoona Wirlinga walking and bike network.

Transport for NSW (TfNSW) manages state road upgrades this includes the Riverina and Hume Highway. TfNSW is currently developing design options for the Hume Highway and Thurgoona Drive intersection upgrade.

Borella Road and Riverina Highway Corridor Strategy

The Borella Road and Riverina Highway Corridor Strategy provides a long-term plan for the corridor between the Hume Highway and Kerr Road.

The strategy specifically highlights required treatment (e.g. roundabout or traffic lights) to the following Riverina Highway Intersections, Elizabeth Mitchell Drive, Table Top Road and Kerr Road.

As Borella Road and Riverina Highway are State Highways controlled by TfNSW, this strategy is primarily used for advocacy and funding efforts toward major road and intersection projects. The strategy also informs strategic planning and capital works program.

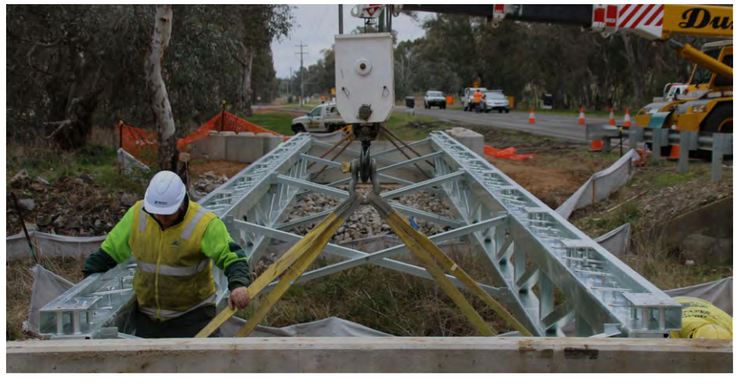
16 Regional Cities Services Improvement Program + Engineering Guidelines

In January 2023, TfNSW delivered new services and bus routes under the 16 Regional Cities Services Improvement Program including services to Albury Airport and Albury Train Station.

In Thurgoona Wirlinga specifically, new bus routes were introduced (Route 908) and the existing service (Route 909) was made more efficient for users of this service. In the planning of new housing estates, AlburyCity worked with developers to ensure the most direct and efficient bus route can be achieved between housing estates and destinations.

The AlburyCity Engineering Guidelines and the planning controls in the Albury Development Control Plan 2010 (Part 10, as revised) contain requirements and standards for a connected local road network in new developments. Once constructed, local roads are primarily managed by AlburyCity.

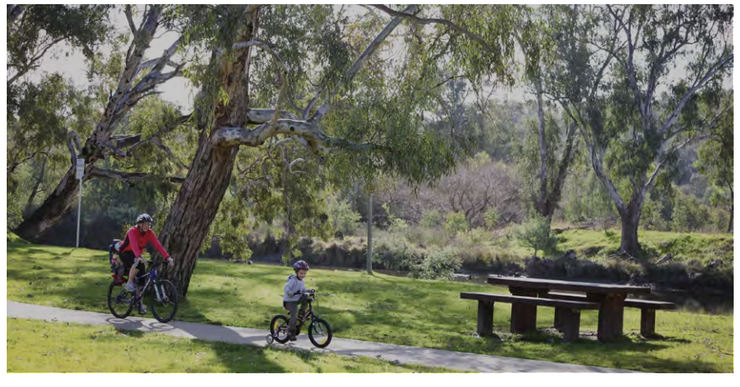
5.4 Case for Change



Ecological Impact of Roads

- *Review road alignments to avoid ecological corridors and habitat, including established trees.*

A significant consideration is the ecological impact of road development. It's essential to review road alignments to ensure they avoid critical ecological corridors and habitats, including areas with established mature trees. Roadside habitat connectivity is important for seed dispersal, gene flow and movement of many fauna species. Although roadside habitat connectivity leads to collision risk for many fauna species, they still form a key feature within the investigation area. Aligning roads alongside conservation corridors can help minimise environmental disruption and maintain ecological integrity. This approach underscores the importance of integrating road development with environmental conservation objectives.



Connected Active Transport Network

- *Continue to improve and expand active transport networks to encourage use.*
- *Embed planning for active transport in street designs and structure planning.*

The ongoing improvement and expansion of active transport networks are crucial for encouraging their use. This entails embedding active transport considerations in street designs and structure planning. By prioritising walking and cycling paths, and ensuring their seamless integration into the urban fabric, the plan aims to promote healthier, more sustainable modes of transport and reduce reliance on vehicles.

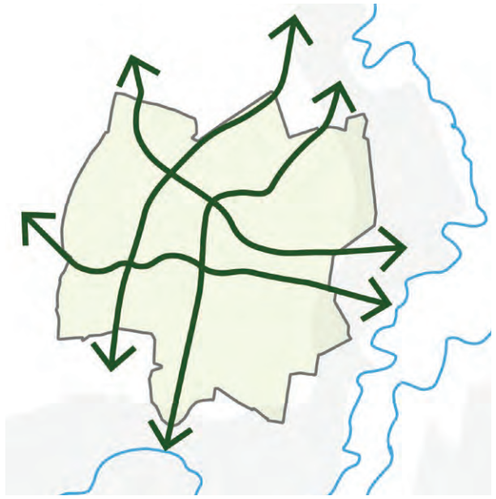
Fragmented Local Road Networks

- *Ensure new subdivisions provide through connections, with roads on lot boundaries.*
- *Reduce fragmentation of residential road networks by taking a networked approach.*

New subdivisions should provide through connections and avoid cul-de-sacs, with roads built on lot boundaries to enhance accessibility and connectivity. This strategy aims to reduce the fragmentation of residential road networks by adopting a more networked approach. By ensuring better connectivity within subdivisions, the future development will facilitate easier movement, reduce travel times, and improve overall urban efficiency.

5.5 Principles and Drivers

Major Movement Corridors



Align Major Movement Corridors to Green Networks

- *Provide movement choice aligned with blue-green corridors.*
- *Respond to the existing character of Thurgoona Wirlinga – city in nature.*
- *Provide movement aligned with amenity.*

One of the fundamental principles is the provision of diverse movement choices that align with blue-green corridors. This approach responds to the existing character of Thurgoona Wirlinga as a 'Garden City 2.0', ensuring that the development of major movement corridors enhances rather than detracts from the natural environment. Furthermore, these corridors are designed to provide movement options that are in harmony with the local amenity, offering residents a blend of convenience, accessibility, and natural beauty.

A Connected Network

Expand Existing Tracks

Proposed New Links

- *Build on the existing active transport network.*
- *Provide active transport links aligned with blue/green networks for amenity.*
- *Provide connection to Lake Hume and Murray River and key community destinations.*

Another key driver is the expansion and enhancement of the existing active transport network. Building on the current infrastructure, the plan aims to provide active transport links that are aligned with blue/green networks, enhancing the overall amenity and appeal of these routes. This includes creating connections to significant natural and recreational areas such as Lake Hume and the Murray River, as well as key community destinations. By doing so, the plan not only promotes active lifestyles but also strengthens the bond between the community and its natural surroundings.

5.6 Options and Approaches

5.6.1 Major Movement Corridors

Overview

In the context of Thurgoona's ongoing development, the location of major movement corridors is a pivotal, guiding element of the Structure Plan. These corridors are essential in shaping the region's transportation and environmental landscape. Drawing on the legacy of Thurgoona, we intend to continue this green, tree-lined movement character by aligning major movement corridors alongside environmental corridors, waterways and extents of mature trees.

This it to:

- Connect people to nature.
- Preference walking and cycling alongside vehicle movement.
- Create shade and amenity.
- Protect environmental corridors by limiting crossing points of major roads.

Proposed Change

Aligning proposed major movement networks beside/ parallel to our green networks enhances the ecological value of these corridors, seamlessly integrating them into the natural landscape and promoting an urban environment that is both functional and environmentally conscious.

This review has identified that the location of two major movement networks proposed in the 2013 Structure Plan should be realigned. One new road link is proposed through the Education Precinct. The East West Corridor Road from the 2013 Structure Plan was removed from the plan in 2014 due to environmental constraints and following further investigation, community consultation and reporting to Council.

Survey Question

Please indicate your level of support for the proposed alignment of major movement corridors.

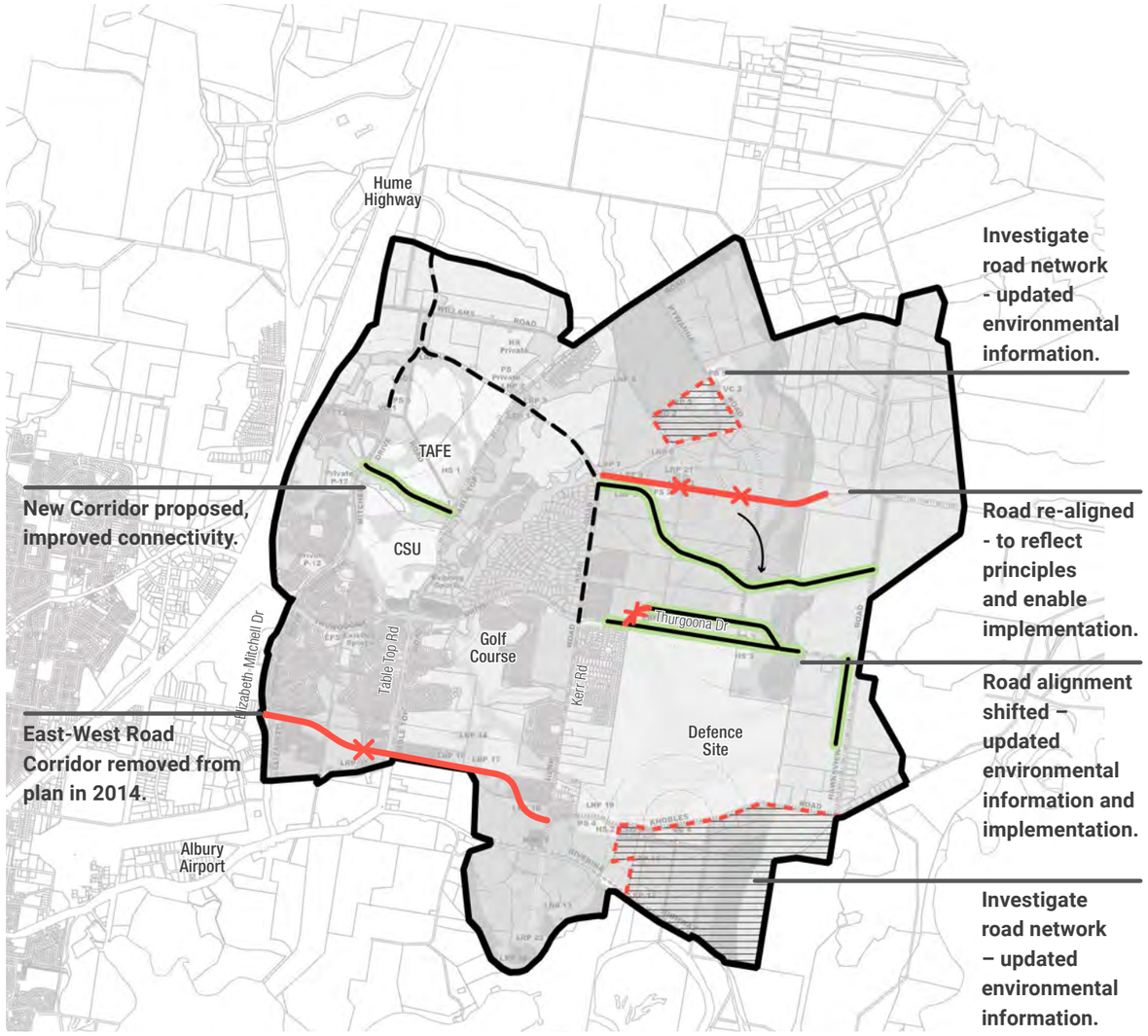


Figure 15: Major Movement Corridors Map

Legend

- Thurgoona Link Road (subject to Federal Government Environmental Assessment)
- Proposed New / Revised Road
- Removed Road
- Road Network Review Area

0 0.5 1 2km

Survey Question

Please indicate your level of support for proposed intersection upgrades.

5.6.2 Intersection Upgrades

Overview

The ongoing development and growth in the precinct have necessitated a focus on improving road infrastructure, particularly at key intersections. The current Structure Plan has identified the need for intersection upgrades throughout the precinct to accommodate the increasing traffic and enhance overall road safety. Intersection upgrades have continued to be delivered in-line with the growth of precinct, however there are still opportunities to further improve existing intersections.

Thurgoona Drive Intersection Upgrade

AlburyCity, in ongoing consultation with Transport for NSW, is advocating for further upgrades to the Thurgoona Drive interchange. These upgrades are aimed at reducing congestion and improving active transport links in the area, making it safer and more convenient for pedestrians and cyclists. Additionally, there is a consideration for the potential signalisation of some intersections. This is in response to ongoing community feedback regarding traffic congestion at peak hours and ensuring long-term capacity as the precinct continues to develop.

Riverina Highway Upgrades

Another key area of focus is the Riverina Highway. Transport for NSW are exploring the implementation of the Borella Road and Riverina Highway Corridor Strategy, with AlburyCity advocating for a potential signalisation of the Kerr Road intersection in the medium term as the surrounding land is developed. This upgrade would address the challenges posed by increased traffic and improve the overall efficiency and safety of the intersection (including for active transport connections across Riverina Highway). Signalisation at this junction is particularly crucial given its strategic importance as a connector within the precinct and its role in managing the flow of traffic between key areas.

Remaining Precinct

As the Thurgoona Wirlinga precinct continues to grow and evolve, further intersection upgrades are planned to align with this development. These upgrades are a vital part of ensuring that the transport infrastructure adequately supports the changing dynamics of the precinct. The locations and types of intersections to be upgraded are currently under review as part of the ongoing Structure Plan review.

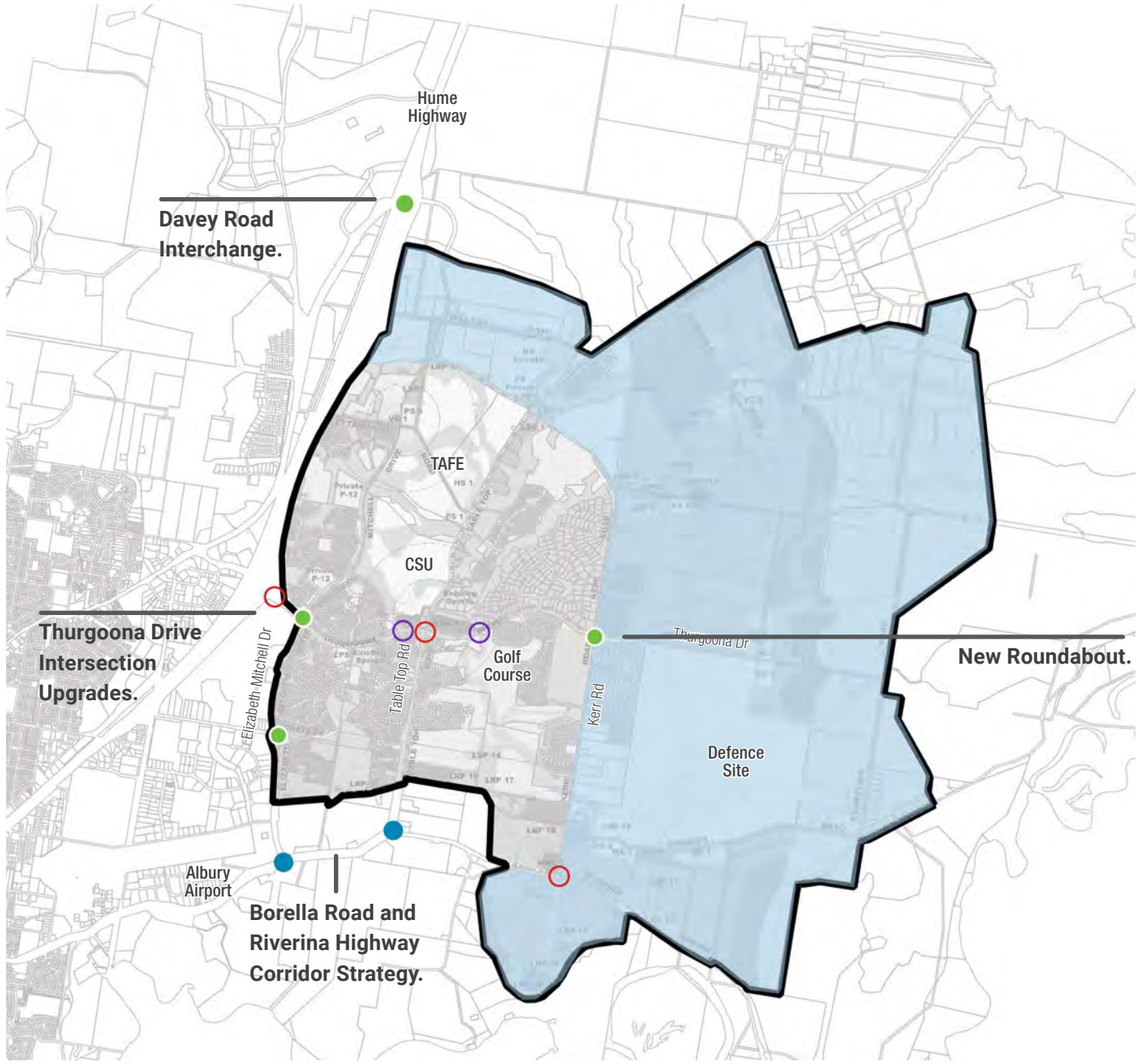


Figure 16: Intersection Upgrades Map

Survey Question

Please indicate your level of support for the proposed alignment of active transport links beside green networks. Do you have any further comments on the Transport and Movement theme?

5.6.3 Active Transport

Overview

In the context of the Thurgoona Wirlinga Precinct Structure Plan, a significant emphasis is placed on the development and enhancement of active transport networks. This focus on active transport is aligned with the recently adopted Integrated Transport Strategy and broader vision of maintaining and promoting the area's green movement character, and promoting more sustainable transport modes.

This approach to active transport draws inspiration from the legacy of Thurgoona, aiming to continue the area's green movement character. This involves aligning major movement corridors with environmental corridors, waterways, and areas with mature trees. The objectives behind this strategy are multifaceted:

- To connect people to nature, enhancing their interaction with and appreciation of the natural environment.
- To give preference to walking and cycling alongside vehicle movement, promoting these modes of transport as viable and attractive options for residents.
- To create shade and amenity along these corridors, which improves the overall environmental quality and user experience.
- To protect environmental corridors by strategically limiting crossing points along major roads, thereby preserving the continuity and integrity of these natural spaces.

Proposed Change

The revision of the Structure Plan will involve realigning proposed major active transport networks adjacent to green networks, aiming to elevate the ecological significant of these corridors and seamlessly integrate them into the natural surroundings. This re-alignment aims to enhance the urban environment, by facilitating environmentally conscious and safe modes of active transport, such as walking and cycling.

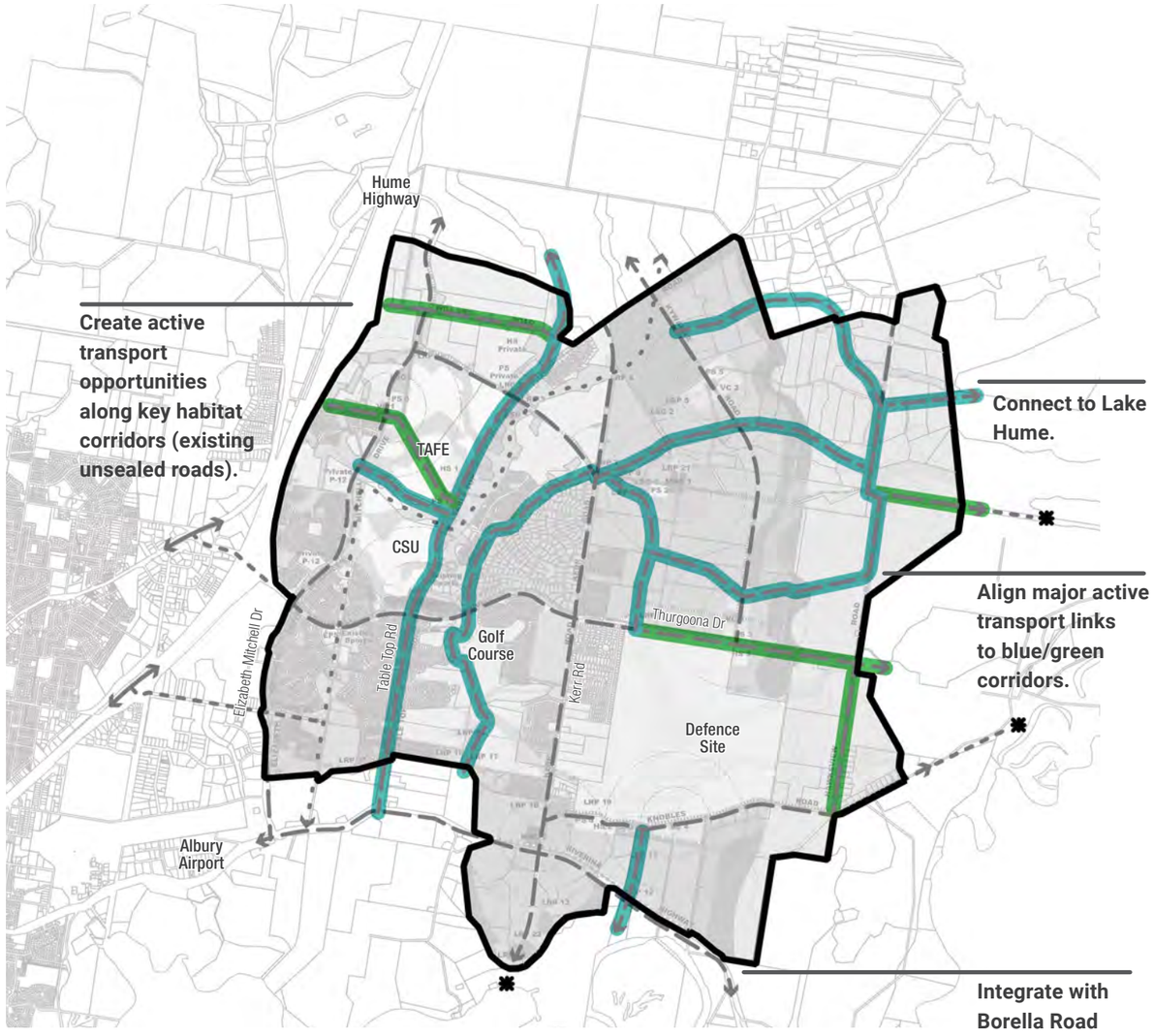


Figure 17: Active Transport Map

5.6.4 Public Transport

Overview

Thurgoona Wirlinga is currently served by two, hourly bus routes; the 908 and 909. The new 909 service was introduced in January 2023 as part of the Transport for NSW 16 Regional Cities Services Improvement Program. Despite these recent new services, approximately 3,200 dwellings in outer residential areas of Thurgoona Wirlinga are not located in walking distance of the precinct's bus service.

As per the 2013 Structure Plan, major movement corridors will be bus capable, supporting future routes and linking centres by a network of movement corridors. Future bus services will be determined by Transport for NSW and will rely on adequate population utilising these services.

Increasing residential and employment density around future urban centres fosters an environment conducive to bolstering public transport provision. Conversely, the existing low-density pattern in many areas makes it challenging to justify the expansion of public transport services, leading to a lack of connectivity and availability of public transport services within the community.

Proposed Change

To support additional and more frequent public transport services, future urban centres must be surrounded by higher residential densities than those being delivered now. This may include low-rise apartments, terrace houses, and duplex developments.

Figure 18: Public Transport Map