



**lismore**  city council

# **Lismore's Urban Green Corridor Plan 2024 Review**

Discussion paper



Lismore City Council acknowledges the Widjabul/Wia-bal people of the Bundjalung Nation, traditional custodians of the land on which we work. We acknowledge their continuing connection to the land, sea and community. We pay our respects to the Widjabul/Wia-bal people, their culture, their elders and community leaders past, present and emerging.

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# 1. Introduction

**Lismore City Council (LCC) is reviewing the Urban Green Corridors Plan 2017 (the Plan). An internal review of planned actions and on-ground condition assessments of the bushland reserves within Lismore’s urban area have been conducted. The community is now invited to provide feedback on the proposed updates to the Plan for continued conservation of Biodiversity values in Lismore. Please review the 2017 plan, this discussion paper and supporting documents and complete the ‘Have your say’ survey. Your feedback will help us refine the updated Plan for 2025-2035.**

The purpose of this Discussion Paper is to a) communicate the evaluation of achievements of the Plan to the Lismore community, and b) seek feedback on the proposed revisions. This Discussion Paper comprises 4 sections: Section 1 introduces the Plan and this review; Section 2 provides background information to inform the community discussion; Section 3 reports on progress against the current plan’s objectives; and Section 4 presents the proposed updates to the Urban Green Corridors Plan and poses several question points as triggers to seek community input.

## 1.1 What is the Urban Green Corridors Plan?

The Urban Green Corridors Plan is an action from Lismore City Council’s Biodiversity Management Strategy (2015). It aims to identify and enhance green corridors within Lismore city areas and provide a strategic and coordinated approach to the conservation and restoration of biodiversity values in the urban area.

The Plan focuses on preserving natural assets such as rainforest remnants, rivers, creeks, wetlands, and koala habitat, using strategies like bush regeneration, weed control, revegetation, ecocultural fire, community partnerships, and education programs. The scope of the plan is limited to ecological restoration and community engagement in such work. Planning and management of recreational activities and infrastructure within urban bushland reserves is outside the scope of the Plan.

The Urban Green Corridors Plan is not a statutory planning instrument and does not categorise land for regulatory purposes. The Plan does not obligate Council or private landholders to manage properties or reserves that may be identified within the corridors. The Plan provides a landscape ecology scale perspective of significant ecological habitats and corridors that can guide management decisions and actions. The Plan helps prioritise Council’s investment in improvements to the green spaces of Lismore and is an informative tool that may help when private citizens and community groups seek grant funding or other assistance.

Photo credit: Wilson River Landcare

## 1.2 Why do we need the Plan?

Within the Lismore City urban area, a total of 1181.6 hectares of vegetation occurs across all land tenures, covering 21.7% of the total area (vegetation mapping produced by Landmark, 2011- 2013).

Of this total area of bushland, Council actively manages 132 hectares of urban bushland spread across 42 different sites (see Figure 1). A further 88 hectares of bushland owned by Council or Crown Lands is not under active management. This is in addition to the many open spaces such as parks, playgrounds, and sporting fields.

These bushland areas create valuable habitats for many plants and animals and form a network of green corridors through our city creating more liveable urban spaces.

## 1.3 The Review

The review of the 2017 Plan is guiding an updated and renewed Plan, including the scoping and implementation of works over the next 10 years, from 2025 to 2035. The review focusses on three key questions:

- Are we meeting the stated objectives?
- Are we using the best available knowledge and techniques?
- How can the UGCP best direct its efforts over the next decade?

The City of Lismore has seen significant changes since 2017. The catastrophic 2022 natural disaster flooding events altered the land use and social structures of much of the urban footprint of Lismore and the buy-back program for flood-damaged houses is still in progress. The Northern Rivers Rail Trail is currently under construction. In addition, Council has a number of new strategies which complement this plan including The Lismore Growth and Realignment Strategy 2022.

This first review of the Plan identifies and resolve gaps and ambiguities in the planned actions, covering areas like budgeting, service delivery, monitoring, reporting, potential expansion, and barriers to implementation. The updated Plan should be a dynamic document, capable of adapting to new opportunities and challenges.

## 1.4 Strategic Links

The Plan has numerous links to Council's strategic planning framework, including those key actions listed in Table 1.

Table 1: Project links to LCC strategies and plans

Action	Strategy Description
<b>Imagine Lismore Community Strategic Plan (2022-2032)</b>	
A1	Our community is safe, happy and healthy.
A2	We recognise our Aboriginal and Torres Strait Islander community and cultures.
C1	Our waterways and catchments are healthy.
C4	Our diverse natural environment is protected and enhanced.
E2	We collaborate with other agencies to achieve great outcomes.
<b>Lismore City Council's Delivery Program (2023- 2027)</b>	
A1.3.4	Undertake fire hazard reduction activities in line with Rural Fire Service

Action	Strategy Description
A2.3.4	Facilitate the implementation of the Reconciliation Action Plan across our workforce
C11.01	Implement and review the Urban Green Corridors Plan
C11.02	Collaborate with the NSW State Government, neighbouring Councils, and community groups to develop and implement strategies to improve the health of the Wilsons and Richmond Rivers.
C4.1.03	Provide support and education for biodiversity conservation to residents and groups in urban areas throughout the Lismore LGA
C4.1.07	Implement Biodiversity Management Strategy (BMS) framework for urban environment
E2.4.02	Actively build, seek and strengthen strategic and working relationships with local and regional organisations and groups
<b>Biodiversity Management Strategy 2015-2035</b>	
3	Establishing comprehensive, authoritative spatial data as a basis for decision-making
6.2	Partner with the local community on projects that have biodiversity outcomes
10.1	Restore and maintain the ecological integrity and connectivity of urban bushland
10.1.1	Continue implementing the bushland restoration works program (UGCP #1)
10.1.2	Continue weed management and bush regeneration in high priority urban riparian areas to improve connectivity
10.1.3	Continue to identify threats to biodiversity and undertake control projects where required
10.2	Provide support for Landcare, schools and community groups undertaking management of urban and/or riparian bushland
10.3	Enable our residents' connection with and stewardship of urban bushland
<b>Inspire Lismore 2040 (Local Strategic Planning Statement) (Lismore City Council, 2020)</b>	
2	Create a city and villages that support active and healthy living. A2.2 Increase landscaping and greening of the CBD as recommended in Shaping the Lismore CBD (HipvHype) and increase urban biodiversity as recommended in the Urban Green Corridors plan.
10	Areas of high biodiversity value and connectivity are protected and enhanced.

## 1.5 Community Engagement

One of the key elements of renewing the UGC Plan is input from community groups, individuals and stakeholders. To-date this has involved ongoing conversations with First Nations Organisations representatives, interviews with internal Council staff, and meetings with external stakeholders such as Landcare groups, bush regeneration professionals, and community organisations like Friends of The Koala and Friends of the Lismore Rainforest Botanic Gardens.

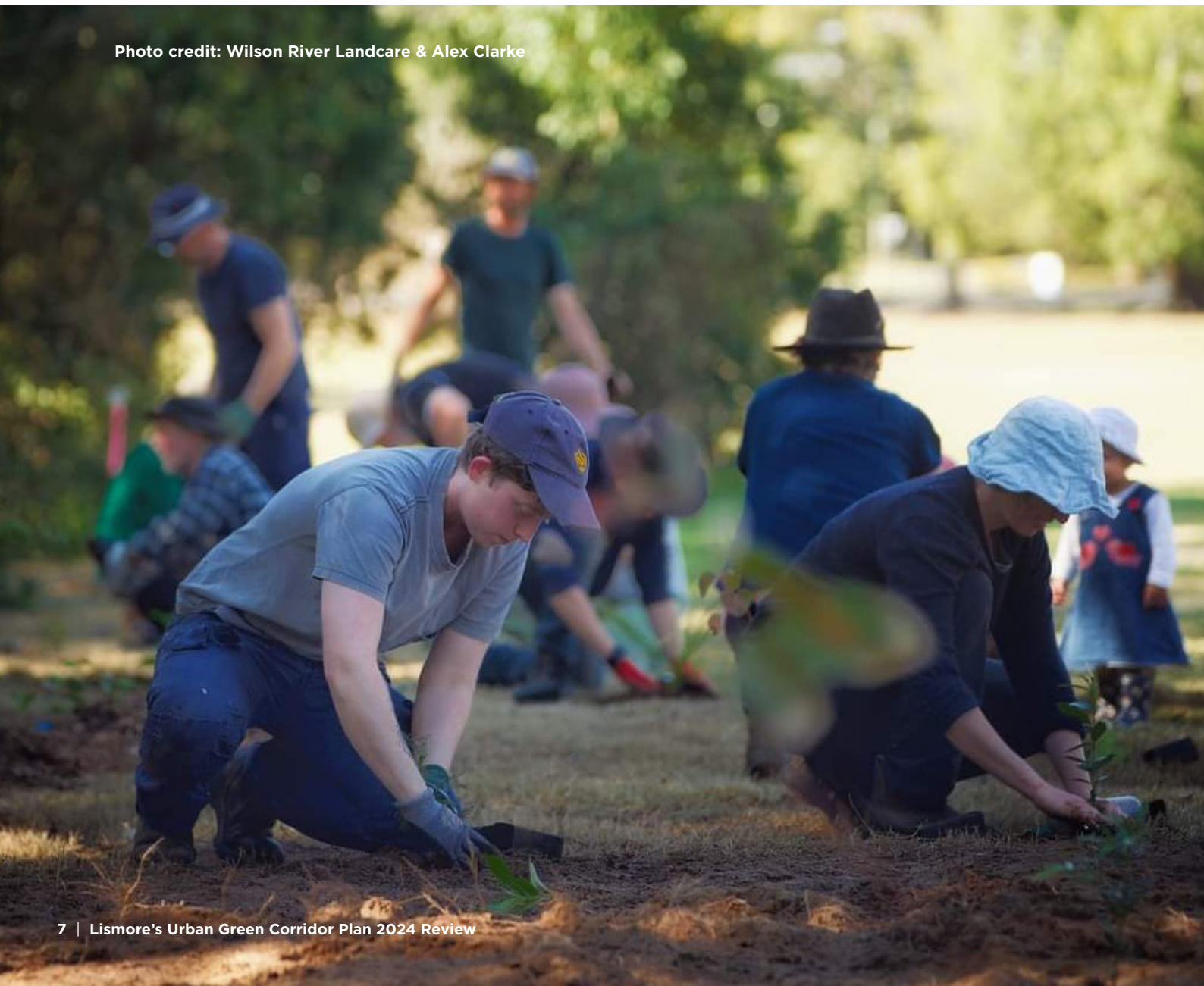
Community input is crucial for shaping future policies and practices, so we strongly encourage everyone to submit their thoughts and ideas.

Online engagement will be available through Council's Your Say page, with a dedicated project page which will include supporting information and documentation, the online survey and online submission portal.

Here's how you can get involved:

1. Read this Discussion Paper and the supporting information on the Your Say page
2. Share your thoughts by:
  - Completing the survey or making a submission via [www.yoursay.lismore.nsw.gov.au/urban-green-corridors-plan-review](http://www.yoursay.lismore.nsw.gov.au/urban-green-corridors-plan-review)
  - Writing a letter to Council at PO Box 23A, Lismore, NSW 2480
  - Emailing us at [council@lismore.nsw.gov.au](mailto:council@lismore.nsw.gov.au).

Photo credit: Wilson River Landcare & Alex Clarke



## 2. Background to the Discussion

### 2.1 Urban Green Corridor Mapping

The role of wildlife corridors in the conservation of biodiversity is widely recognised to reduce isolation, fragmentation, and degradation of native vegetation and wildlife habitats.

A system of key habitats and wildlife corridors was developed for the entire LGA in 2012 (Milledge, 2012). These corridors identify key areas of wildlife habitat, and priority areas for conservation and restoration across the entire LGA. Some of these corridors skirt the urban area, and one extends into Lismore City linking Rotary Park with existing habitat to the south.

The Urban Green Corridor 2017 mapping builds on these LGA wide corridors with a fine-scale focus on identifying a network of wildlife corridors through the Lismore City urban and peri-urban area. This process involved reviewing existing habitat and bushland areas and key linkages between these areas both via vegetation mapping and on-ground inspection.

### 2.2 Urban Green Corridor Area

The current Urban Green Corridors mapping area covers 5,433 hectares and spans the residential areas of Lismore, including Goonellabah, as well as future urban growth areas in Lagoon Grass and North Lismore plateau, as shown in Figure 1. The six individual corridors that make up the Urban Green Corridor network are detailed in the [Urban Green Corridors Plan 2017](#).

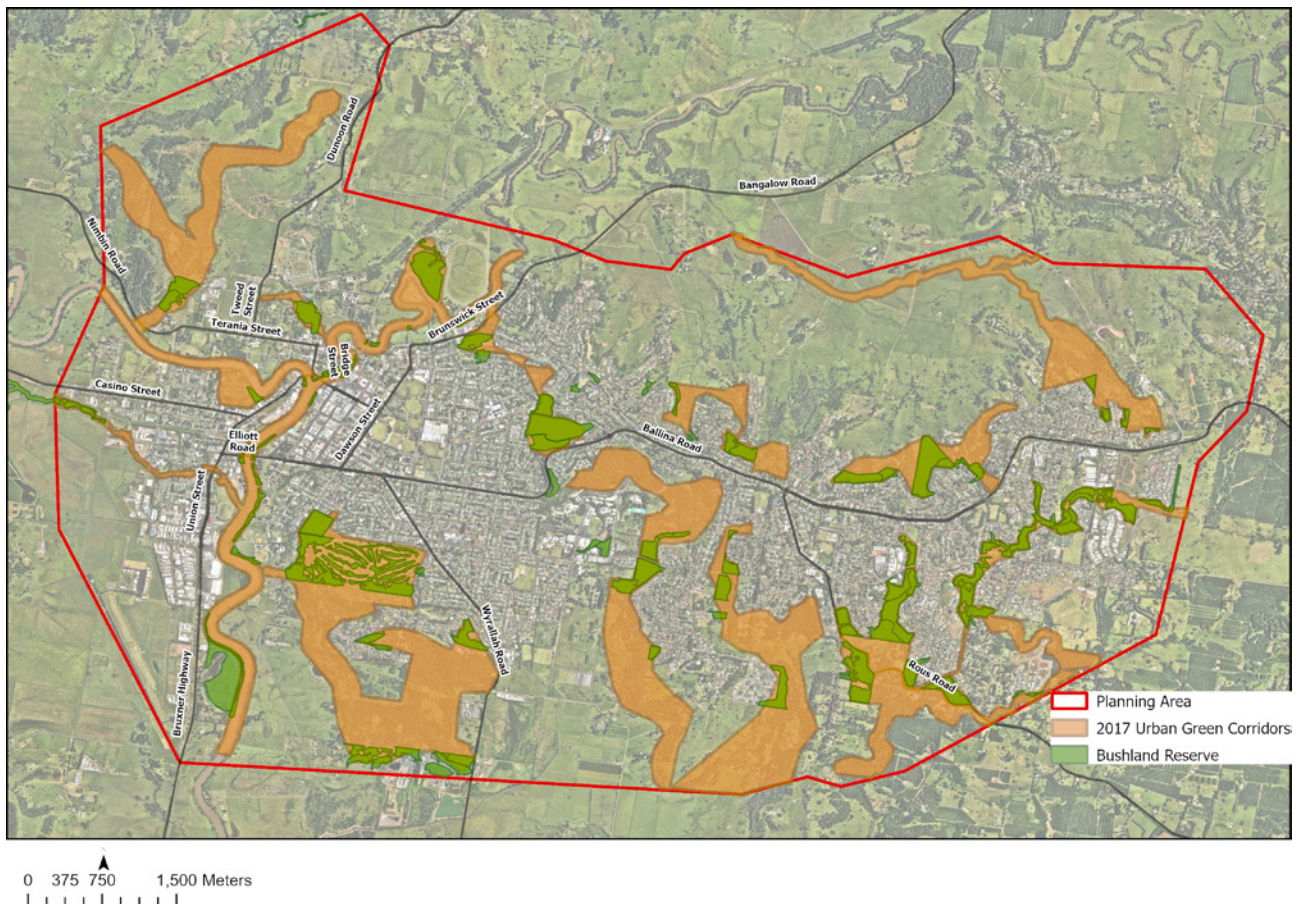


Figure 1 Urban Green Corridors within the Lismore City urban area.

### 2.3 Summary of Ecological Values and Threats

A summary of ecological values, benefits and threats impacting the Urban Green Corridors is included at Appendix 1 and 2. Readers can also consult the original Urban Green Corridors Plan 2017 for detailed analysis of values and threats associated with biodiversity in the Lismore urban environment.



### 3. What has occurred since 2017

**Section 3 presents the results of an evaluation of the Plan's progress to 2024. It quantifies the work done within the corridors network by Council and in partnership with urban Landcare groups and other partners. It reports on updated Condition Assessments completed in 2024 and measures the progress of the actions against the targets set out in the 2017 plan. Many people have been involved with the implementation of the actions from the Plan including Council staff, bush regeneration contractors, Landcare groups and other community groups.**

#### 3.1 Summary of On-ground activity

##### a) Work by Lismore City Council

The Council has worked on 42 reserves throughout the UGCP planning area and also on 8 hectares of river frontage through the Wilsons River Riparian Vegetation Management Plan.

LCC has committed \$1,215,053 between 2017 to 2024 to funding restoration works in urban bushland reserves. Professional Bush Regeneration contractors undertake the majority of works in the priority bushland reserves, supported by Council's Parks and Outdoor and Environmental Strategies staff.

##### b) Work with Urban Landcare

In addition to Council's professional works program 14 sites have had ongoing management by Landcare and volunteer community groups including extensive revegetation along the Wilsons River and tributaries. See List and Map of Urban Landcare groups in Appendix 3.

Since the 2017 was written, support for Landcare groups in Lismore was formalised into the Urban Landcare Program (ULP). The Urban Landcare Program Manual (2018) supports the establishment and ongoing management of environmental volunteer groups working on Council Land in the Lismore urban area. By providing an annual \$1000 grant per group to cover basic expenses and supporting the development of annual site action plans, the ULP ensures that these groups can undertake environmental restoration activities effectively and safely. Between 2017 and 2024, \$137,069 was allocated to Landcare groups to support on-ground action. The delivery of the program was assisted by Richmond Landcare Inc 2019- 2023.

##### c) Work with Other Organisations

Other organisations including Rous County Council, Envite Environment and Richmond Landcare Inc have also undertaken ecological restoration programs involving bush regeneration and revegetation works at a range of sites in Goonellabah and along the Wilsons River to improve stormwater management and increase native riparian habitat.

#### 3.2 Summary of Condition Assessment Outcomes

To effectively manage and monitor bushland reserves, it is important to assess their ecological condition. In 2016/17 a rapid assessment methodology was developed by Lismore City Council largely based on the Tweed Byron Bushland Audit (James, McKinley, Murray & O'Connor, 2010). This methodology was refined in 2024 for the purposes of this review to incorporate updated science relating to ecological monitoring.

The methodology assesses four main variables; vegetation structure and composition, weeds (density and severity), landscape context, and habitat values to determine bushland health. A scoring system is applied to provide an overall condition class for each site.

Across the reserve network 87 bushland management areas were surveyed by ecologists between October and November 2024 (Figures 2 and 3). The surveys were restricted to public land, including Council owned land and Council managed Crown land. Sites which were classified as Condition Class D in the 2016/17 condition assessment and which had not undergone any restoration work in the intervening years were not re-surveyed. It should be noted that the Wilsons River riparian sites were not included in the 2016/17 Condition Assessments but were assessed in 2024 to enable comparison of present condition across all bushland sites in the urban area.

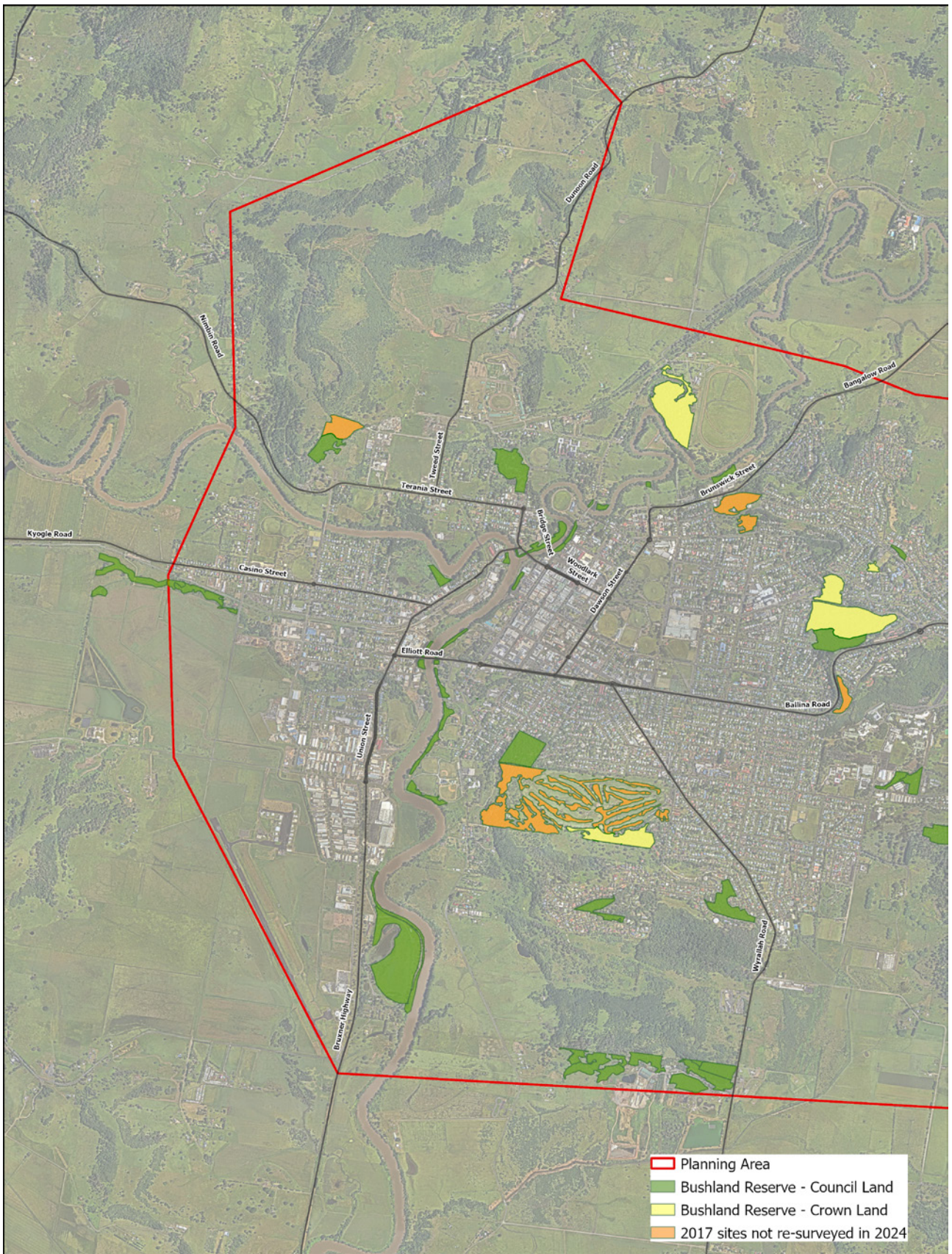


Figure 2 Bushland reserves (west of Planning Area) surveyed in 2024

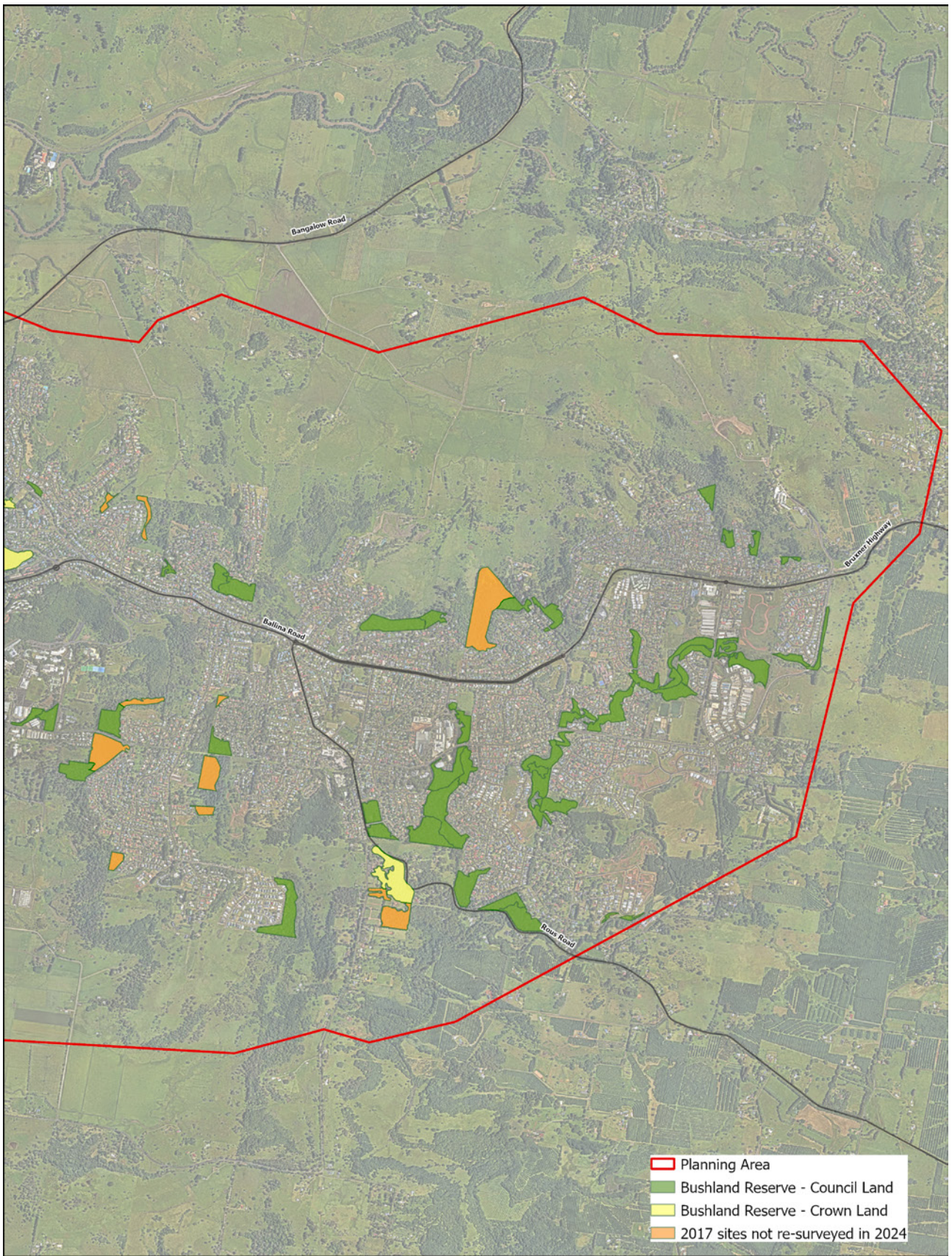


Figure 3 Bushland reserves (east of Planning Area) surveyed in 2024

**Note:** the assessment methodology was not designed to assess altered fire frequency and may overestimate condition of long-unburnt open forest sites. The 2024 survey data suggest that most open forests sites have indicators of poor condition due to long-term fire exclusion, including: midstorey dominated by rainforest pioneers and/or transformer weeds, sparse/absent shade-intolerant ground layer community and increased time since last fire beyond thresholds.

**a) 2024 Survey Results**

During the 2016/17 and 2024 surveys of bushland health, data was collected relating to ecological condition, threats, and management of bushland reserves. In 2024, photo point monitoring was included in the survey process.

Table 2 lists the overall bushland condition class for the 87 sites surveyed in 2024 and Figure 4 shows these conditions mapped.

**Table 2 - Summary of 2024 survey results**

Bushland Condition Class		Number of Sites
<b>A</b>	<b>Condition - Good</b>	<b>38</b>
<b>B</b>	<b>Condition - OK</b>	<b>38</b>
<b>C</b>	<b>Condition - Poor</b>	<b>4</b>
<b>D</b>	<b>Condition - Degraded</b>	<b>7*</b>

\*Note: 12 Sites which were classified as Condition Class D in the 2016/17 condition assessment and which had not undergone any restoration work in the intervening years were not re-surveyed in 2024, bringing the total number of sites in condition class D to 19.

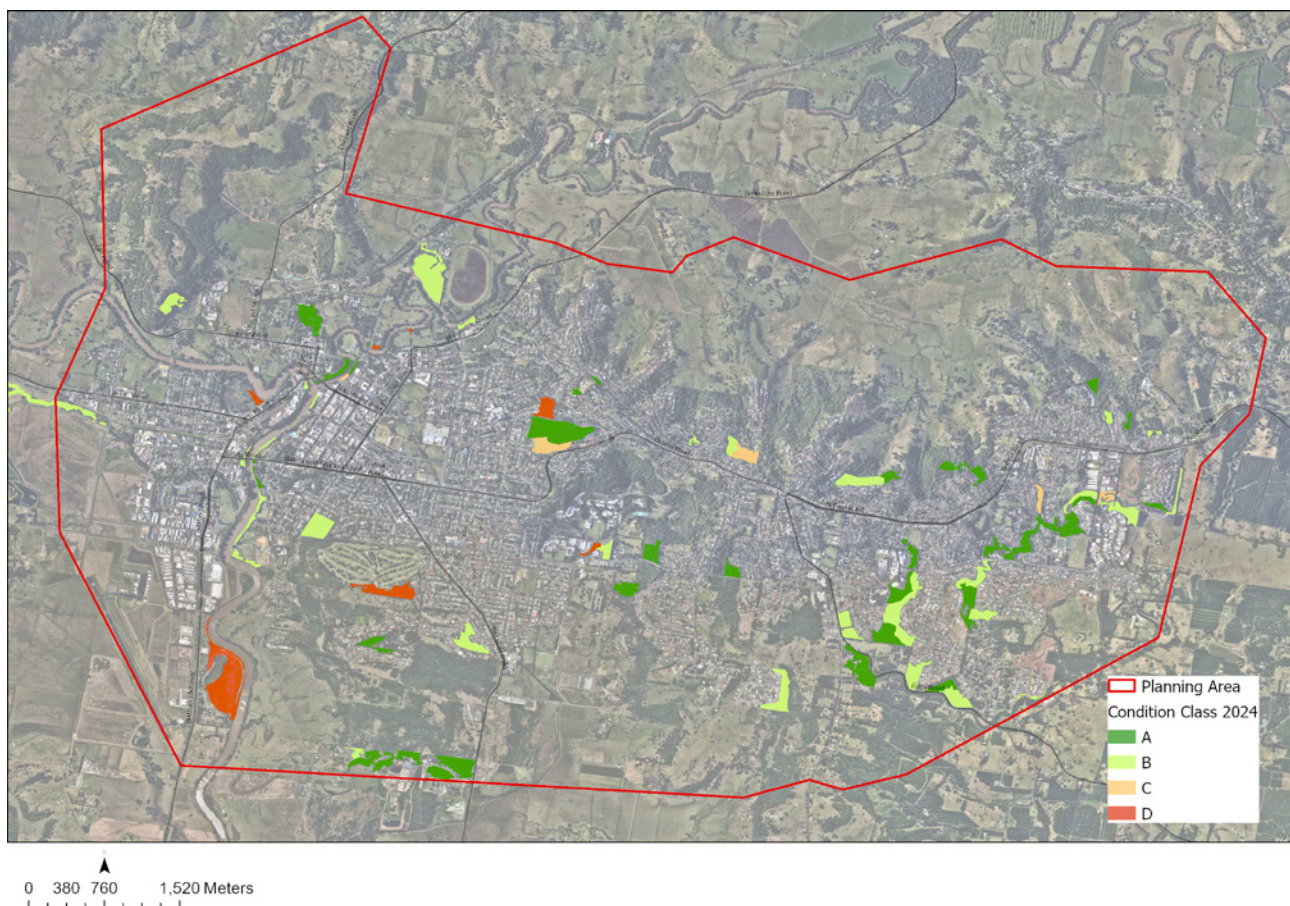


Figure 4 - Bushland Condition Class 2024 Map

## b) Change in Bushland Condition from 2016/17

As Table 3 and Figure 5 illustrate, a substantial number of sites have achieved an improvement in bushland condition between 2016/17 and 2024. Only three sites saw a degradation in condition (Southern Cross University creek line, Joy Street, and Kookaburra South). This decline is due to these reserves being a low priority for restoration, and either no work being undertaken or only part of the reserve being actively restored at this stage.

The story of Rotary Park is shared via the Urban Green Corridors Plan review YourSay page as a case study of the improvements achieved in one of the major bushland areas of the UGCP.

**Table 3 - Summary of bushland condition class between 2016/17 and 2024.**

Bushland Condition Class Change	Total
<b>Improvement</b>	<b>36</b>
<b>No change*</b>	<b>20</b>
<b>Decline</b>	<b>3</b>
<b>2016/17 Sites not re-surveyed in 2024</b>	<b>12</b>
<b>New Survey Sites**</b>	<b>28</b>
	<b>99</b>

\*No change indicates the condition rating has not changed between 2016/17 and 2024.

\*\*Additional sites included in condition assessment not assessed in 2016/17: Wilsons River riparian sites, new bushland areas acquired by LCC through Development processes, expanded work areas at existing sites, and new Landcare sites.

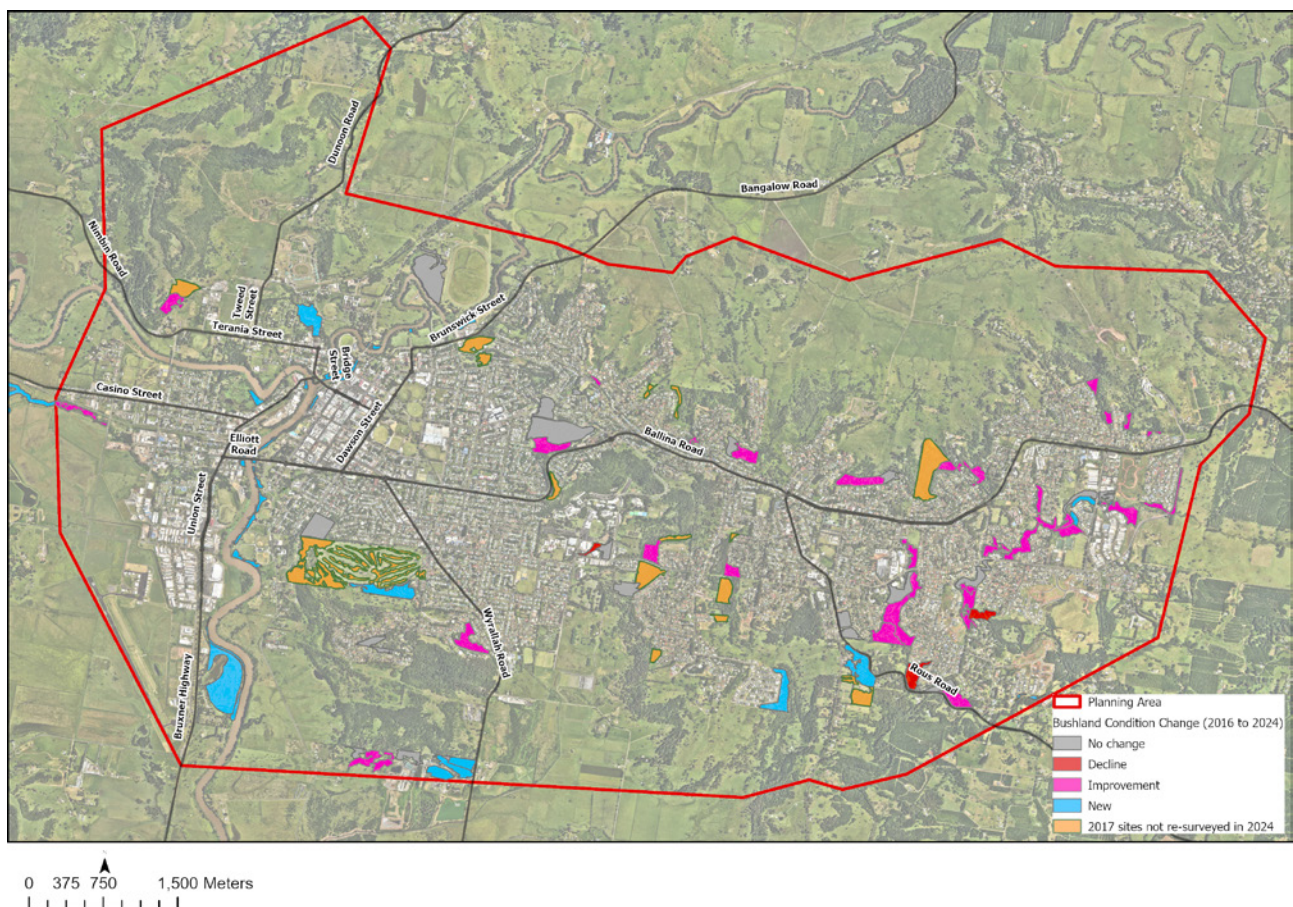


Figure 5 - Change in bushland condition category between 2016/17 and 2024.

### 3.3 Reporting on Progress of Actions

#### a) Summary information:

28 implementation actions were listed in the 2017 Plan, which broadly deliver against the Plan's Vision and Objectives. A review of progress against these actions was conducted by analysing historical documentation and reported activities since 2017.

Table 4 provides a summary of an audit of progress against these actions.

**Table 4 - Urban Green Corridors Actions Progress Tally**

<b>Complete</b>	<b>5</b>
<b>Ongoing (annual progress made)</b>	<b>11</b>
<b>Partially complete</b>	<b>5</b>
<b>Unknown (data not available)</b>	<b>4</b>
<b>Not started</b>	<b>3</b>

### 3.4 Key achievements

The 2017 Plan's vision was to identify and enhance a green corridor within Lismore City area and provide a strategic and co-ordinated approach to the conservation and restoration of biodiversity values. Seven objectives to achieve this vision were identified. This section reflects on the key achievements against these objectives.

Staff capacity and limitations to funding is the major barrier to successful implementation of the plan. Staff change and restructure offers further challenges, compounded by extreme events such as drought, fire, global pandemic, floods and landslides drawing focus and resources to the immediate needs of the community.

Table 5 Provides an assessment of key achievement against the six objectives of the Plan.

**Table 5 - Key achievements of the Urban Green Corridors Plan 2017-2024**

<b>Objective 1. Increase the area of council-managed urban bushland under assisted regeneration within the Urban Green Corridor.</b>	
✓	In 2017 68 hectares of council-managed urban bushland and 8 hectares Wilsons River riparian sites was under assisted regeneration (total 76 hectares)  In 2024 132 hectares of council-managed urban bushland (including Wilsons River riparian sites) was under assisted regeneration.  An increase of 56 hectares.
✓	Implementing the works program- All sites in Appendix 6 of the 2017 Urban Green Corridors Plan have received continuous work since the Plan's inception through the bushland reserves, riparian and/or Landcare program.
✓	31 Site Action Plans have been developed, covering 41 sites.
✓	Over \$100,000 received in external grants since 2022 for flood recovery work and urban koala habitat.  Successfully applied for \$2,000,000 Commonwealth federal grant to support urban riparian reserves works in 2024 in collaboration with a wide range of partners.

**Objective 1. Increase the area of council-managed urban bushland under assisted regeneration within the Urban Green Corridor.**

X	Monitoring and evaluation of vegetation condition change has been irregular.
X	Ecological and cultural burning has not been included in work plans for LCC bushland reserves although the Environmental Strategies team worked with Blakebrook Quarry and compliance staff to undertake a cultural burn in 2024 (outside the UGCP area).

**Objective 2. Undertake revegetation works of native vegetation to improve connectivity and create wildlife habitat within the Urban Green Corridor. A target area of 0.6 Hectares per year for rainforest revegetation and 0.4 Hectares per year for koala habitat revegetation.**

✓	A total of 26.55 Hectares of rainforest revegetation has been undertaken since 2017. Every year the target has been exceeded including an impressive 7.69 Hectares in 2023-2024, largely due to the efforts of Landcare groups particularly Goonellabah Tucki Landcare Inc.
✓	More than 67,000 riparian and rainforest plants have been planted.
✓	A total of 5 Hectares of koala habitat revegetation have been planted since 2017. For two of the seven years the target has been exceeded.
✓	1,360 koala feed trees have been planted
✓	Partnerships have allowed and expanded these opportunities e.g. partnering with Friends of the Koala through the Regional Koala Strategy to support LCC to access additional funding for Koala Habitat Restoration.

**Objective 3. Reduce the impacts of garden dumping and garden escapees into urban bushland areas.**

X	Cases of garden waste dumping are referred to LCC's Regulatory Services team for localised response. Broader community education on this activity has not been a priority without the resource of an Education Officer.
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**Objective 4. Raise awareness in the community about the impacts of pest animals on native animals and the environment and reduce these impacts.**

✓	Feral deer partnership with NENSW/SEQ Cross Border Feral Deer Management Group. Development of feral deer rapid response plan for Lismore LGA.
✓	Indian mynas: long-running control program with LCC providing Indian myna cage traps to LCC residents and supporting control (now concluded). Mail out and a survey sent in 2023.
✓	Domestic dogs - partnered with Friends of the Koala to develop an educational brochure about koalas and dogs. Multiple mail-outs conducted.
✓	Information brochures and resources shared at community events regarding pest animals including cane toads, Indian mynas, carp and feral deer. Participation in and hosting of community events including Carp Musters, Riverfest, Big Scrub Rainforest Day, Science in the Pub etc.

**Objective 5. Support Landcare and community groups undertaking works that contribute to achieving the Vision of the Urban Green Corridors Plan.**

✓	Development of the Urban Landcare Program and an increase in the Urban Landcare Partnership budget to support Landcare groups through annual funding. This action has resulted in an expanded Urban Landcare program.
✓	In-kind support of residents adjoining the corridor e.g. through supply of mulch and arborist support.
✓	Letters of support provided on request for residents and community groups for grant applications.

**Objective 6. Raise community and corporate awareness of the values of urban bushland and how the community can contribute to improving the management and condition of these areas.**

✓	<p>The LCC webpage has hosted UGCP and brochure with a map since development and was updated 2023.</p> <p>Council's publication 'My Local Native Garden - A planting guide to promote biodiversity in the Lismore region' has been distributed to urban landholders, particularly those adjoining urban bushland. Reprint of 1000 booklet complete in 2024.</p>
✓	Urban resident focussed education and engagement events e.g. Seniors Week walks through Upper Tucki Tucki Reserves; Feel Blue Touch Green installed promotional signage at two locations in the CBD, brochures distributed through local mental health network and supported by events; and Wildlife Ways event 'Birds, Bees, Weeds and Trees' at South Lismore Duck Pond.
✓	A range of local partnerships help improve awareness e.g. the long-running Wilsons River Schools Education and Restoration Project- engagement through partnership with Wilsons River Landcare, Envite, and Rous County Council. 6 local schools involved - Trinity Catholic College, Richmond River High School, Woodlawn College, St Carthage's Primary, Albert Park Public and Kadina High School. Activities include tree planting, education days, bush regeneration, and weed control on private/school land.
×	Limited Media releases and promotional activities outlining the activities being undertaken to manage the Urban Green Corridor.
×	Minimal urban education and corporate training programs.



## 4. Proposed Updates to the Urban Green Corridors Plan

**After conducting internal and key stakeholder consultation and reviewing progress of planned actions, the following areas of the Plan are proposed to be amended.**

Community feedback and input into the proposed updates detailed in this section is the focus of this Discussion Paper. Highlighted questions are presented to guide your focus.

### 4.1 First Nations Knowledge and Guidance

In recognition that the 2017 UGCP did not highlight the Cultural significance of the bushland areas and the wider Lismore landscape, the important role of First Nations voices and knowledge will be incorporated into the updated Plan.

Lismore City Council is reaching out to local First Nations organisations including Widjabul Wia-bal Gurrumbil Aboriginal Registered Native Title Body Corporation, Ngulingah Local Aboriginal Land Council, Bundjalung Tribal Society, and the Lismore City Council Aboriginal Advisory Group for input into the Plan to move forward and develop actions that reflect First Nations feedback. Possible actions for incorporating First Nations knowledge and guidance into the Plan include:

- a) Involve First Nations groups in the management of the reserves, including through Cultural Site Assessment, site management advice, and on-ground management of Culturally Significant sites.
- b) Develop an Indigenous Cultural and Intellectual Property (ICIP) Policy for bush regeneration to ensure the protection of Cultural Knowledge and Cultural Protocols.
- c) Include Cultural Values in the assessment and management of bushland reserves.
- d) Training staff and contractors in Indigenous Cultural Heritage Assessment and Indigenous approaches to managing land and water.

How do you think the Plan should incorporate First Nations knowledge and guidance?

Do you support the proposed actions?

Photo credit: Wal Bailey



## 4.2 Updates to Corridor Mapping

In 2017 Lismore City Council developed a mapping layer of the Urban Green Corridors throughout the Lismore City area informed by local vegetation (Stewart, McKinley, Murray & Hall, 2011) and key habitats and corridors system mapping (Milledge, 2012). The objective of this mapping was to acknowledge the network of wildlife corridors that link habitat and bushland areas.

A review of this mapping was undertaken by EarthScapes Consulting in 2024. Consistent with the 2017 methodology, a tenure blind approach based primarily on ecological values across both private and public land was applied during this review. Heavily disturbed areas dominated by Camphor Laurel and other primary weeds were included where they formed linkages with key habitat areas and provided focal points for future ecological restoration programs (UGCP, 2017). Where corridors were extended or new corridors proposed, roads and housing were generally excluded.

The Urban Green Corridor mapping has no regulatory impact but rather provides information on the most likely and effective locations for the enhancement of bushland condition and connectivity.

Since 2017, new data has become available to refine the mapping boundaries and to consider the corridor network in terms of updated planning strategies. Figure 6 illustrates the new corridor linkages that are proposed. These are made up of 4.1 hectares excised from the 2017 mapping and 131.3 hectares added to the 2017 mapping within the urban planning area.

The planning area is focussed on the area contained by the red boundary in Figure 6. However, updated mapping includes an indication of how the urban corridors extend through the peri-urban landscape into rural areas and connect to larger regionally recognised networks or corridors. These peri-urban connectors (turquoise in Figure 6) include identified corridors for priority vertebrate assemblages (Milledge, 2012), koala movement and riparian ecosystems. Many of these “corridors” contain habitat stepping stones, pocket parks, wetlands, and scattered remnant trees. Due to competing land uses, these areas are unlikely to be able to be fully revegetated however, they remain important as they provide connectivity between areas of more functional habitat.

The review has presented proposed updates to the mapping to include:

- a) Removal of 4.1 hectares (cross hatched in Figure 6) from previously mapped corridors where land use change (development, roads) means that the area no longer meets the criteria for a wildlife corridor;
- b) Addition of approx. 130 hectares (light green in Figure 6) to recognise the existing corridors within the core urban planning area where one or more of the following criteria is met: active habitat restoration is underway; land is mapped ‘C Zone’ under Lismore’s LEP; threatened species are known to be crossing the landscape or using areas for habitat; where existing but degraded native vegetation has potential to provide increased connectivity through the urban landscape or offer climate resilience to existing vegetation and human habitation.
- c) Potential future corridors (yellow dashed lines in Figure 6): The Northern Rivers Rail Trail is an asset that could be included in future corridor mapping. There is great potential to regenerate the corridor including planting endemic shade trees.
- d) Potential future corridors (yellow polygons in Figure 6): The NSW Resilient Homes Program’s Home Buyback stream presents opportunities for consolidating existing corridors. With changes anticipated in North Lismore (depopulation) and South Lismore (increased areas of open space) will come opportunities to identify best placement of biodiversity habitat renewal and connection along the Wilsons River and surrounds.

The proposed updates to the mapping are informed by the following strategies:

- Lismore Growth & Realignment Strategy 2022 (Lismore City Council, 2022)
- The Northern Rivers Regional Koala Conservation Strategy 2022 (EarthScapes, 2022)
- The Comprehensive Koala Plan of Management for southeast Lismore (CKPoM) (Lismore City Council, 2013).

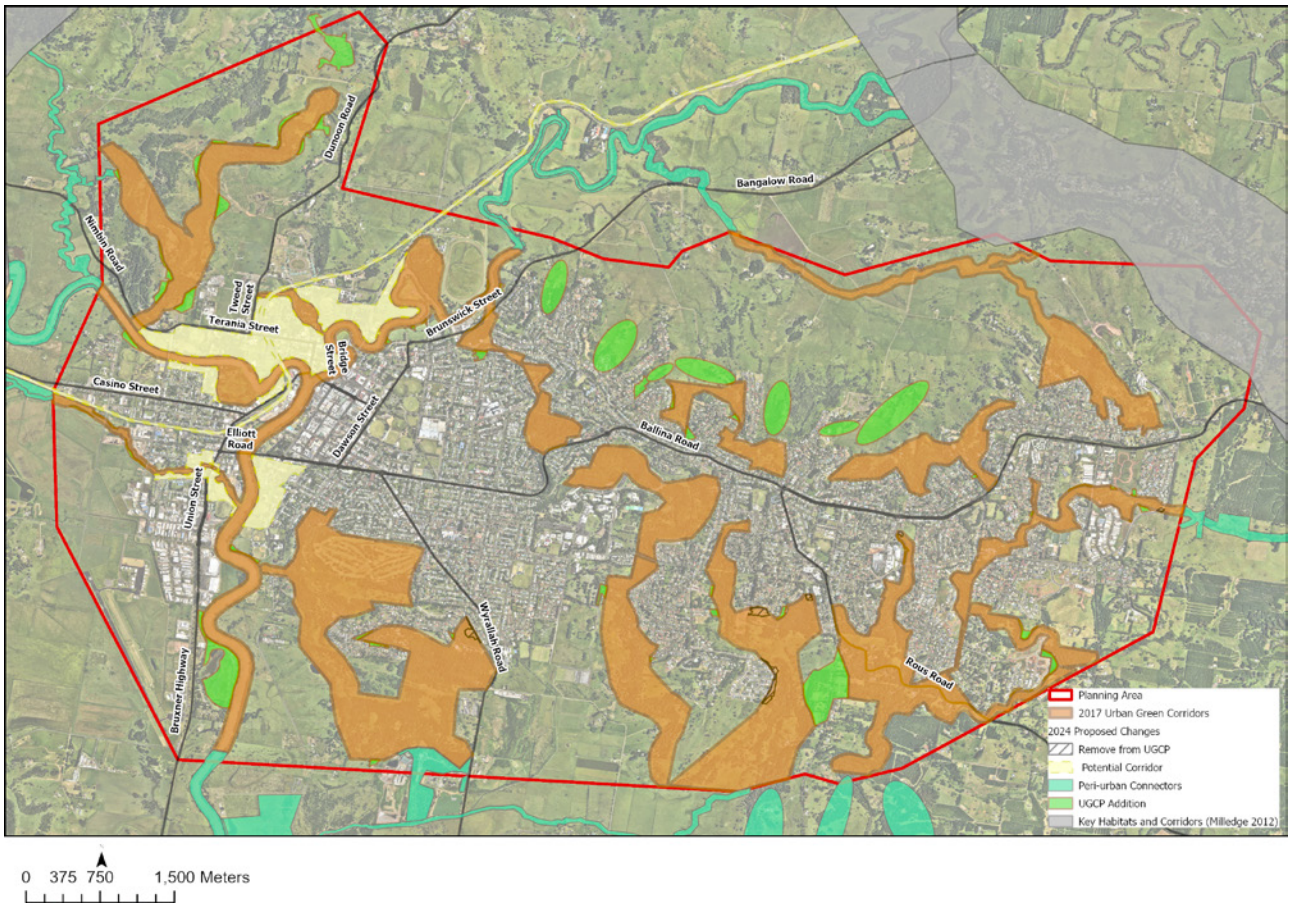


Figure 6 Proposed updates to Urban Green Corridor mapping

Where would you suggest we focus on ecological restoration in floodplain areas in the future?  
Free Text

Do you support the proposed updates to the Urban Green Corridors as mapped in Figure 6?  
Are there ecologically significant areas missing from the mapping?



### 4.3 Restoring Ecological and Cultural Fire

The 2017 Plan identifies the absence of fire as a key management issue in the area, and the need to use fire to restore fire-dependant vegetation communities and reduce bushfire hazards. The proposal for the reviewed plan is to re-emphasize fires importance as an ecological restoration tool. An outcome of the 2024 condition assessments showed that many areas of open forest are being dominated by rainforest understorey and weeds. In the changing legislative landscape and with increased local capacity, fire (both ecological and cultural) may be possible. Fire-dependent dry open-forests comprise 64% of the native remnants covered by the UGCP. These open-forests were carefully nurtured through fine-scale mosaic burning by the Widjabul Wia-bal people before colonisation. Today fire has been excluded from most remnants for over 50 years, placing them at severe risk of habitat decline and local species extinction. These dry open-forests are important cultural landscapes and provide important habitat for over 70% of threatened fauna species recorded in the planning area, including species entirely dependent on open forests (33%) such as the koala, glossy black cockatoo, squirrel glider, and red goshawk.

#### The importance of fire and the consequences of fire exclusion

Fire in dry open-forests keeps the canopy open, allowing sunlight to sustain rich understoreys of shrubs and grasses, which in turn provide unique feeding, sheltering and nesting habitat for a wide diversity of animals. Without fire, dry open-forests are often rapidly invaded by a dense midstorey of rainforest pioneers and transformer weeds (e.g. Camphor Laurel, Privets, Giant Devil's Fig) that shade out understorey plant communities and displace key fauna habitats (Figure 8). Fire is also crucial for the regeneration of most open forest plants and the maintenance of suitable soil conditions and microorganisms. Without fire, Eucalypts can't regenerate, and established trees become more vulnerable to dieback from increased root competition, unfavourable soil conditions, and Bell Miner Dieback.

Exclusion of fire also primes open-forests for uncontrollable wildfires in the most severe weather conditions – maximising losses of biodiversity and property. The recent fires of 2019/20 show that even rainforest can burn under severe fire weather. With careful planning, the sensitive and controlled use of fire in mild weather conditions can minimise wildfire losses, while also restoring and maintaining open-ecosystems and Aboriginal cultural practices.



Figure 7 - Healthy Forest Red Gum forest with a diverse and thriving native ground layer maintained by mosaic burning in Rock Valley (left) and degraded Forest Red Gum forest with a dense midstorey of transformer weeds and invading rainforest pioneers due to 50 years of fire exclusion at Girards Hill (right).

Proposed updated actions include:

- a) Include ecological and cultural fire as a tool in Site Action Plans for open forest sites.
- b) Investigate emerging opportunities for fire management including the capacity to implement cultural burns via Traditional Owner groups.
- c) Provide training to staff to support ecological and cultural burn programs.
- d) Investigate contractors who have experience with ecological and cultural burn programs.
- e) Create partnerships with fire agencies such as Fire & Rescue NSW to reduce bushfire risk.

Do you support the proposed actions for restoring ecological and cultural fire?

#### 4.4 Climate change

In August 2019 Lismore City Council publicly declared a State of Climate Emergency. The public declaration acknowledged the “threats to humanity, civilisation, other species, and the life-supporting capacity of air, water, soil and ecosystems”.

In 2020, Council then adopted a Climate Resilience Policy. The Climate Resilience Policy guides how Council can support the community in preparing for and withstanding the impacts of extreme events in a changing climate and enables the community to thrive in a climate-changed world. It also recognises that reducing greenhouse gas emissions is important to limit further climate change.

The policy includes embedding climate change adaptation and resilience as a core component of Council’s strategic planning, processes, and operations. Mitigation and adaptation are the foundation of building ecological resilience, and the protection and enhancement of the urban green corridors works to deliver positive outcomes. It is proposed that the UGCP will include updates relating to recognising climate change, such as:

- a) In alignment with the LCC Climate Resilience Policy incorporate a brief section highlighting threats due to climate change, as well as opportunities to build resilience through the Lismore Urban Green Corridors Plan.
- b) Deliver site-specific on-ground actions that build climate resilience and adaptation.

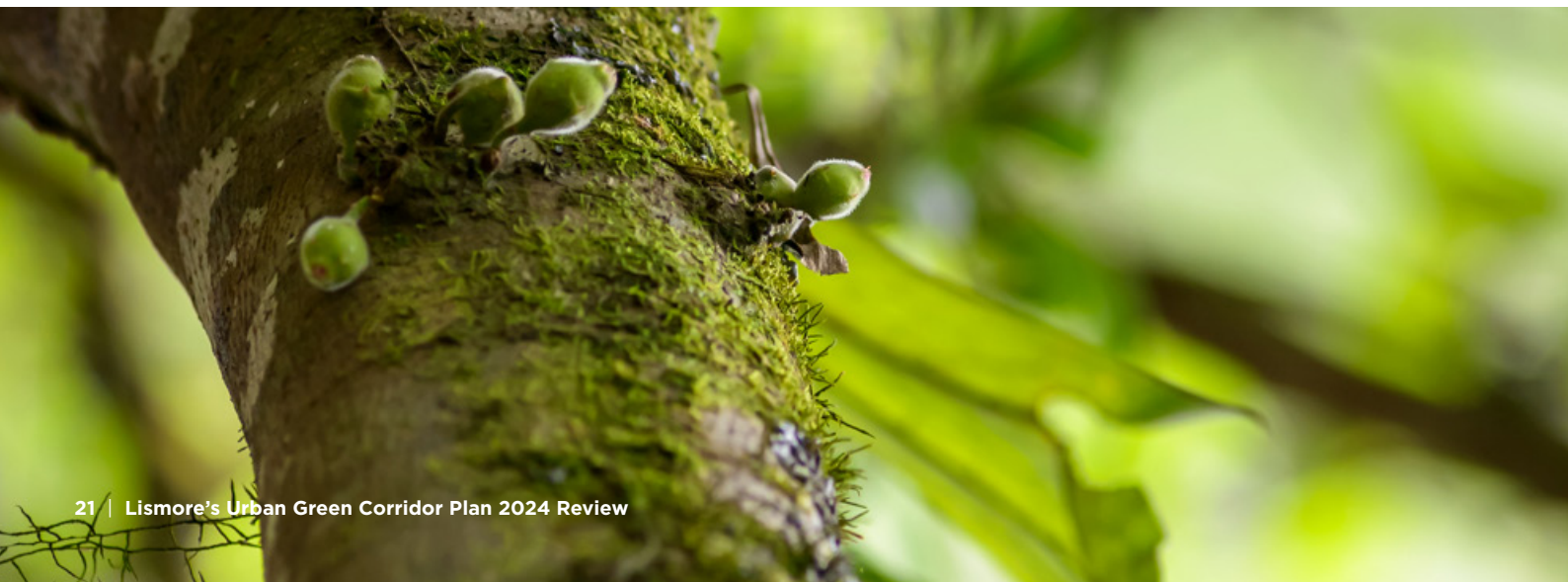
Do you support the protection and enhancement of Lismore’s urban green corridors as a means of building resilience in a changing climate?

#### 4.5 Native fauna management

The 2017 Plan does not include aims or actions relating to native fauna management. It is proposed to add a section of information on the management of native fauna, such as urban flying fox camps which can sometimes degrade the canopy of remnant forests and cause issues with neighbours due to the noise and odour. Other native fauna can also cause issues within bushland reserves including ibis, possums and even koalas. Potential actions could include:

- a) Where native fauna negatively impacts on bushland management e.g. Flying-fox camps, ibis colony roosts, develop adaptive management strategies such as Flying Fox Management strategies.
- b) Engage with appropriate Agencies and improve community awareness and safety when interacting with native fauna including sharing information and signage related to swooping Magpies and Spur-winged Plovers (aka Masked Lapwing), and controlling domestic cats and dogs.
- c) Where key habitat features are lacking in bushland reserves, provide and maintain supplementary habitat such as artificial hollows and nest boxes.
- d) Undertake regular fauna monitoring to inform management of bushland reserves.

Do you support the proposed actions for native fauna management?



## 4.6 Landcare support

Section 4.3 of the Plan details the role of Community Partnerships in supporting urban biodiversity. Since 2017 the Urban Landcare Program has been formalised, and Landcare activity in the urban area has increased. See appendix 3 for further details on local Landcare groups. Proposed updates to the actions are:

- a) Continue to support Landcare groups working on public land through the Urban Landcare Program, including the provision of an annual financial subsidy providing base-level support plus additional allocations of funding based on area of works and activity where budgets allow.
- b) Support local Landcare groups through the provision of technical advice, mapping, education, support to access external grants; and materials including mulch and other supplies or equipment where possible.
- c) Support strategic Landcare projects in partnership with regional environmental groups such as Richmond Landcare Inc and North Coast Regional Landcare.

Do you support the proposed actions for supporting Landcare in the Lismore urban area?



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# APPENDIX 1: Summary of Ecological Values

## Ecological Values

### Threatened Ecological Communities

Six (6) Endangered Ecological Communities (Biodiversity Conservation Act 2016) were identified within the Urban Green Corridor area covering X hectares.

- Lowland Rainforest in the NSW North Coast and Sydney Basin Bioregion
- Lowland Rainforest on Floodplain in NSW North Coast Bioregion
- Subtropical Coastal Floodplain Forest of the NSW North Coast Bioregion
- Swamp Oak Floodplain Forest of the NSW North Coast, Sydney Basin and South East Corner Bioregions
- Swamp Sclerophyll Forest on Coastal Floodplains of the NSW North Coast, Sydney Basin and South East Corner Bioregions
- Freshwater Wetlands on Coastal Floodplains of the NSW North Coast, Sydney Basin and South East Corner Bioregions

### Threatened Species

Thirty two (32) species of plants listed as Vulnerable or Endangered under the Threatened Species Conservation Act 1995 (TSC Act (1995)) and Environmental Protection and Biodiversity Conservation Act 1999 (EPBC Act (1999)), have been recorded within the planning area.

As of December 2024, forty three (43) animal species listed as Vulnerable or Endangered under the TSC Act (1995) and EPBC Act (1999) have been recorded within the urban area. This includes 26 species of bird, three reptiles, and 12 mammals.

### Koala Habitat

414.4 hectares of koala habitat were identified within the Urban Green Corridor area, including 288.9 hectares of Primary habitat and 125.6 hectares of Secondary A habitat. These areas include vegetation communities containing Forest Red Gum (*Eucalyptus tereticornis*) and Tallowwood (*Eucalyptus microcorys*) which are both identified as primary feed trees. Koala habitat is scattered over much of the planning area however it is most dominant in the south east. Key koala habitat areas occur around Robinsons Lookout and Albert Park, southern parts of Goonellabah around Skyline Road, Tucki Tucki Creek, and some reserves on the northern ridges.





## APPENDIX 2: Benefits of and threats to Urban Green Corridors

### Benefits of Urban Green Corridors

#### Flora, fauna and fungi

While remnant vegetation has an important benefit in the preservation of plant, animal and fungal assemblages vital for healthy ecosystems, their long-term ability to survive and reproduce are reduced. Patches of bushland effectively display similar stresses as islands, with increased stresses from edges of weed encroachment, and reduced ability to maintain genetic diversity, and therefore, resilience. Connectivity between patches assists the movement of species, thereby increasing resilience and survivability (Chase et al, 2020).

#### Safety

Works being undertaken by Council staff, contractors and the vital contributions from the community through groups such as Landcare within managed areas can have a number of flow-on benefits for the community. For example, weed mitigation actions improves safety for residents, with reduced habitat for pest animals and lower fire hazards.

#### Water infiltration and purification

Urban Green Corridors enhance water infiltration by allowing rainwater to seep into the ground, reducing runoff, erosion and flooding. This process replenishes groundwater, filters pollutants, and alleviates pressure on stormwater systems. Anecdotal advice based on water bug surveys from Landcare volunteers notes a significant improvement in water quality in Tucki Tucki Creek following restoration work.

#### Microclimate

Urban Green Corridors create beneficial microclimates that improve temperature regulation, air quality, biodiversity, noise reduction, and overall well-being in cities. They help mitigate the urban heat island effect by reducing ambient temperatures. Vegetation provides shade and releases moisture through transpiration, which cools the air. This cooling effect can lower temperatures by several degrees, making cities more comfortable during hot weather. Additionally, these plants absorb pollutants and produce oxygen, which enhances the overall air quality, while reducing noise pollution (Gregory et al., 2021).

#### Emotional and health responses

The connectivity afforded to flora and fauna from managed Urban Green Corridors can also extend to local residents. The well recognised emotional and health benefits that flow from connecting with a local reserve (Pereira et al., 2012) are supported through LCC's Feel Blue Touch Green program. The Birdwing Butterfly walk on Upper Tucki Tucki Creek is an example of a reserve well utilised by the community.



## APPENDIX 2: Benefits of and threats to Urban Green Corridors

### Threats to Urban Green Corridors

Transformer weeds are invasive plants which undermine the ecological processes of native ecosystems and the habitat of associated plants and animals. Numerous weed species thrive in long-unburnt open forest, where they form a dense mid-story and degrade or eliminate understory flora and fauna habitat and reduce ecosystem flammability. Common transformer weeds in the Plan area include: Camphor Laurel, Large-leaved Privet, Small-leaved Privet, Ochna, Night-scented Jasmine, Lantana, Giant Devils Fig, Winter Senna, Purple Morning Glory and Chinese Celtis.

The bushland reserves are located in the centre of Lismore and many are adjacent to residential areas. This results in threats including:

- weed spread due to green waste dumping and garden escapees,
- feral and domestic animals,
- gardens encroaching into reserves,
- transformer weeds in long-unburnt open forests,
- dumping of rubbish,
- disturbance of bushland by unapproved recreational activities eg mountain bikes,
- illegal clearing of trees for views,
- disturbance of bushland by itinerant campers,
- large exotic trees (eg. camphor laurel and eucalypts) close to houses,
- flying fox camps,
- climate change,
- erosion and pollution from overland flow of water.

In addition, the flooding of the Wilsons River and other riparian sites results in ongoing bank erosion and impacts newly planted and existing vegetation. Flood events also spread weeds and household debris from upstream locations.



## APPENDIX 3 : Urban Landcare Groups

There are a wide range of Landcare groups that work on both Council and Crown land throughout the Lismore local government area. Some meet a couple of times a week, others quarterly. All the volunteers from these groups perform an essential role in restoring and maintaining Lismore's Bushland Reserves. The Urban Landcare Program supports Landcare groups working on public land in all urban areas including villages (see table 6 and figure 8). It is recognised that there are many other local Landcare groups working on private land throughout the LGA which provide valuable contribution to the conservation of our local environment (see [www.richmondlandcare.org](http://www.richmondlandcare.org) for further information).

**Table 6: Landcare groups working on public land in Lismore's urban areas**

Name of Landcare Group	Working bees
Aquarius Park Landcare Group (Nimbin)	Monthly
Banyam Baigham Landcare	Currently inactive
Browns Creek Catchment Landcare	Monthly
Bush Fruits LGBTIQ+ Landcare	Quarterly
Clunes Landcare (Clunes)	Irregular
Friends of Lismore Rainforest Botanic Gardens	Weekly Wednesdays
Goonellabah Tucki Creek Landcare Inc	Weekly Friday and Saturday
Hollingworth Creek Landcare	Currently inactive
Just St Community Group	Monthly
Lismore Lake Inc Landcare	Monthly
Martin Drive Landcare	Bi-monthly
South Lismore Duck Pond Landcare Inc	Weekly
Tunable Creek Landcare- Coronation Park subgroup (The Channon)	Weekly
Wilson Nature Reserve Landcare	Second Saturday
Wilson's River Landcare Inc	Irregular
Richmond Landcare Inc	Umbrella district network for Eastern Richmond catchment (Lismore and Ballina LGA's)

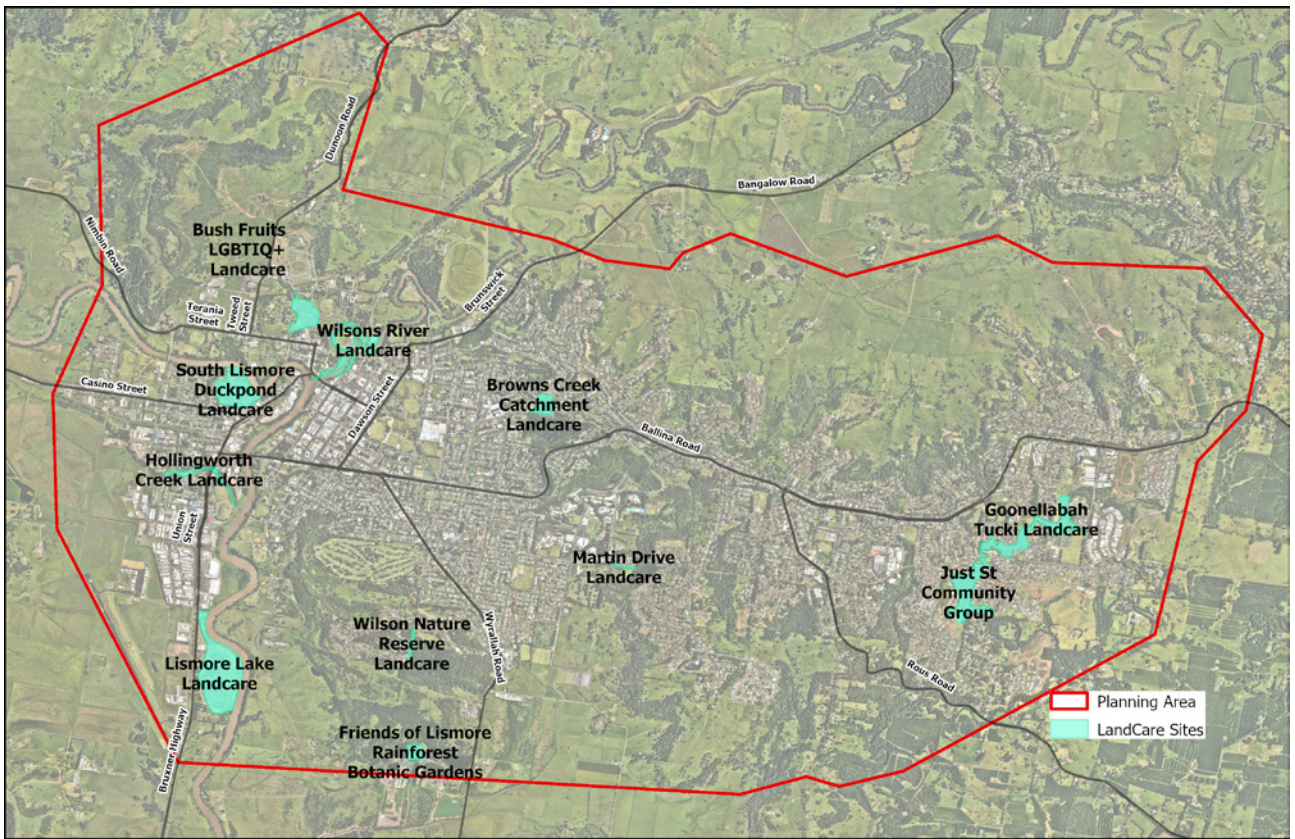


Figure 8: Landcare groups working on public land in the UGCP area

