BUNGENDORE
Structure Plan
2048

QPRC

Acknowledgement of Country

We pay our respect to the Traditional Custodians of the Queanbeyan-Palerang area on whose land we live and work. We acknowledge that these lands are Aboriginal lands and pay our respect and celebrate their ongoing cultural traditions and contributions to our surrounding region.

We also acknowledge the many other Aboriginal and Torres Strait Islander peoples from across Australia who have now made this area their home, and we pay respect and celebrate their cultures, diversity and contributions to the Queanbeyan-Palerang area and surrounding region.

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Executive Summary

The Bungendore Structure Plan 2018-2048 has been prepared to guide the growth of Bungendore in a co-ordinated and efficient manner, in a direction that reflects the views of the community and their land use vision for Bungendore:

> *Bungendore is set amongst productive rural landscapes where its rural entry roads are retained and lead into a village/townscape setting with a country/heritage feel that appeals to residents and visitors, together with a strong sense of rural living, and space that extends the Common and other green spaces to allow pedestrian and other non-motorised connections throughout the town where caring for the natural environment and living sustainably is valued. This contributes to Bungendore being a friendly, safe and well serviced community where the village scale and shopping experience is protected while improving the local employment and vitality of the town.*

The key drivers for growth are directly related to the proximity to Canberra and the employment and economic growth it provides. The community submissions received in response to the Draft Bungendore Structure Plan Discussion Paper raised issues related to the impacts that growth would have on the village and country lifestyle, and the desire to retain the point of difference that Bungendore offers. It has a lifestyle and housing product that is low scale and open in character and unlike the higher density city characteristics of new residential areas of Canberra, Googong and the future South Jerrabomberra.

In responding to this vision and desired character for Bungendore, it is important for change to be gradual. The current growth rate (3.3% growth per annum, which equates to approximately 37 dwellings per annum), sits just below the medium growth scenario presented in the Draft Bungendore Structure Plan Discussion Paper and is considered appropriate.

At this growth rate, there would be a need to accommodate 1,400 additional dwellings over the 30 year time period covered by this Plan. Approximately 460 could be accommodated within the existing urban zoned area of Bungendore (known as infill development), although the preference would be to encourage the retention of larger residential blocks in established areas and accommodate growth in greenfield areas beyond the current town boundary. It is recommended that this be managed via the progressive rezoning, from rural to residential, of greenfield areas to the north and east of the town as illustrated in Map 6 Bungendore Structure Plan Map. All rezonings are to have regard to the land use vision and it's supporting detailed Key Development Principles, to ensure that the character of Bungendore is retained. A high-level sequencing for the future rezoning of land for residential development is recommended to help manage a gradual change and the costs associated with effective provisioning of infrastructure and facilities.

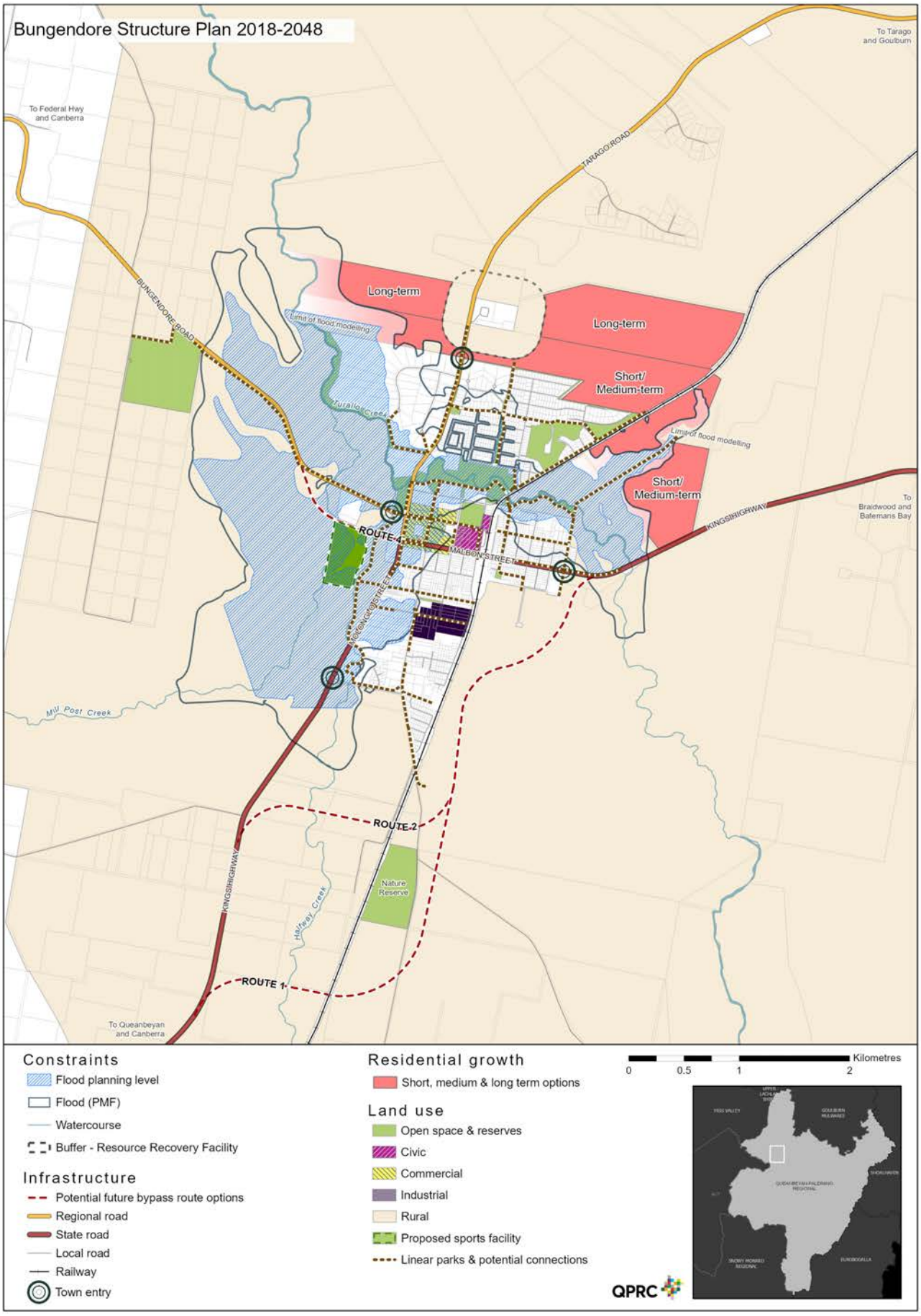
Additional employment lands will be required to support the growing population. Identifying suitable areas for this land-use from the desktop options presented in the Discussion Paper will require further analysis before a preferred direction can be adopted and formally incorporated into this Structure Plan. Accordingly, the existing industrial area is to be retained until this analysis is complete and additional land identified.

A number of other recommendations are included to guide the implementation of the present Plan as follows:

- Ensure the vision for Bungendore and the Desired Character forms the basis of the planning instruments that affect the town. This includes, but is not limited to the Local Strategic Planning Statement, Queanbeyan–Palerang Local Environmental Plan, and the current and future reviews of the Palerang Development Control Plan (PDCP).
- Rezone land for residential development in the sequence generally described within this Plan, while ensuring that rezoned areas are clear of development constraints such as flooding and the buffer zone around the Resource Recovery Facility.
- As part of considering rezoning proposals, review the means of mitigating or reducing the visual impact of residential development where dwellings will overlook Bungendore or be visible from the Kings Highway. Without careful planning and ongoing management, development in the northern areas could also result in loss of natural temperate grasslands. Whilst some issues can be addressed through regular reviews of the Local Environmental Plan and Development Control Plan, the loss of grasslands should be avoided due to their environmental value.
- Monitor the supply of residential land and housing and ensure that this Plan is reviewed as required.
- Ensure that the minimum lot sizes in in land to be rezoned continues to reflect the desired character of Bungendore. This means that the minimum for new release areas should not be less than 850m2 to retain the rural village character of Bungendore and its differentiation from other residential release areas in the region.
- Confirm that precinct controls articulated in the Palerang Development Control Plan are capable of conserving the character of any infill development that occurs within the original village area.
- Review and update contribution plans for infrastructure (roads, stormwater, water and sewer) to ensure equitable apportionment of costs for new infrastructure required for growth.
- Investigate the use of Local Planning Agreements as an alternative to contributions plans.
- Ensure that potential bypass routes are not compromised by incompatible development or rezonings.
- Review the current zoning of land to the west of town (recreation zoned land north of Bungendore Road and west of Turallo Creek and the rural zoned land west of Molonglo Street) that was or is intended to accommodate the Bungendore Sports Hub to ensure that appropriate land uses are supported.
- Develop a streetscape plan for Precincts 1 and 2 (as identified in the PDCP), taking into account work previously undertaken by the former Palerang Council.
- Assess the effectiveness of the multi-dwelling housing controls, in the R1 General Residential land use zone in the Palerang LEP, in retaining the desired character of Bungendore. This assessment should incorporate broader consideration of factors impacting infill development and the use of laneways.
- Upon the State Government's selection of a site for the new Bungendore High School, review and action any necessary zoning amendments.

Ongoing monitoring is an important part of the implementation and review process associated with all planning documents and this Structure Plan is no exception. Account should be taken of the supply and take-up of new residential lands and the associated identification of biodiversity offsets and provision of open space. Recreation and employment lands are key areas to monitor to ensure that this Structure Plan is delivering on its intent and responding to emerging issues and trends.

Map 1 - Bungendore Structure Plan Map 2048



Introduction

Bungendore

The town of Bungendore, with a current population of 3,317 (UCL 115031, ABS, 2016) is located on the Kings Highway, thirty minutes east of Queanbeyan in NSW. Over the last fifteen years the town has experienced substantial growth.

Current character of Bungendore

Bungendore is a rural town with a strong visual setting on the open plain south of Lake George, bounded by significant ridges to the east, west and south. There is a clear divide between the rural landscape and the town. The town itself is sectioned by Turallo Creek running east–west and the Sydney-to-Canberra railway line running north–south. The creek and its reserve (The Common) is the only dominant natural land feature within the village.

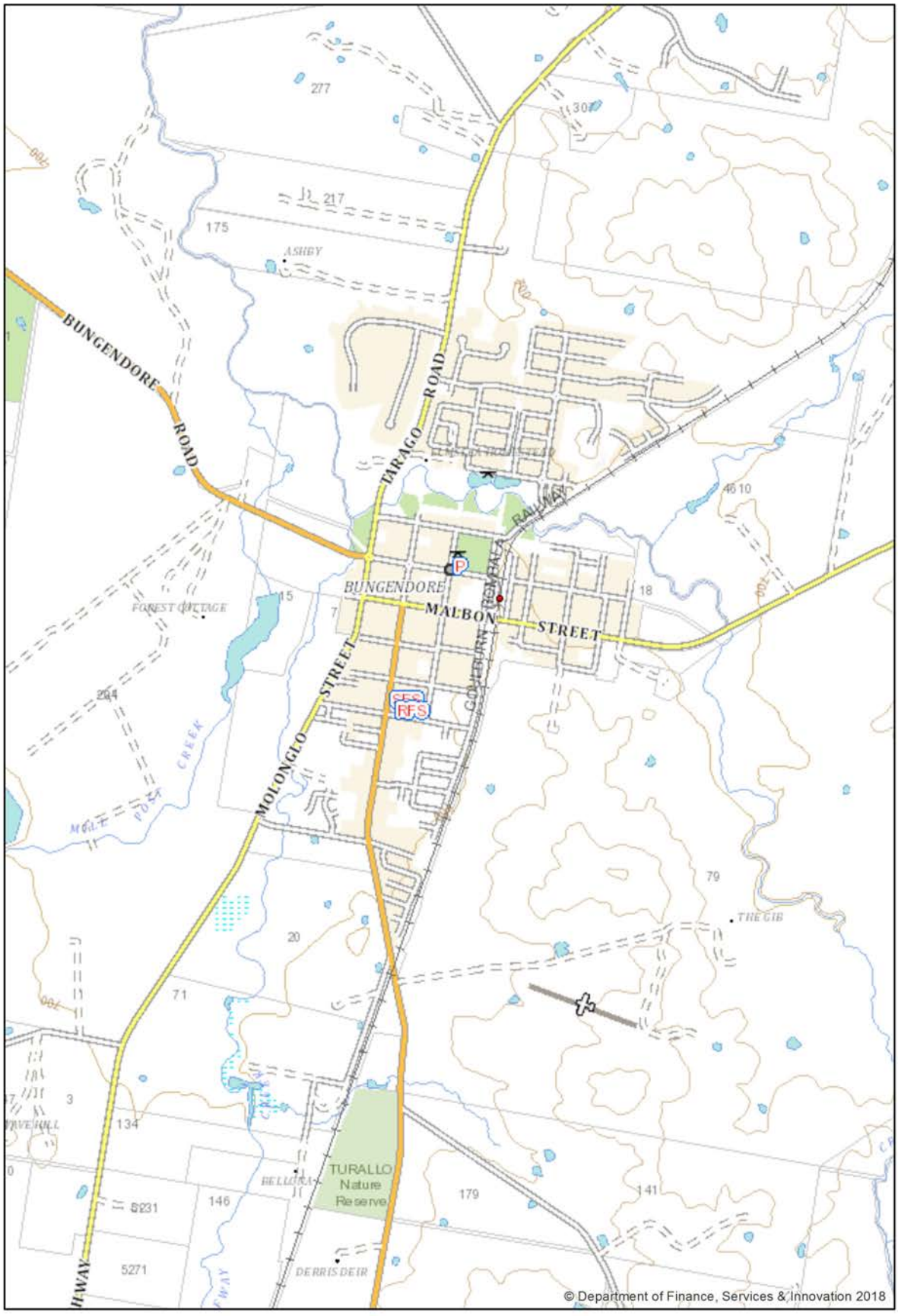
Four roads converge on the town, linking it with Braidwood and the south coast, Queanbeyan, Canberra, Goulburn and Sydney. From the east, the Kings Highway (Malbon Street) has views of older dwellings, the cemetery and the new housing development in the northern part of the village. From the south, the Kings Highway includes a mix of heritage buildings and rural commercial suppliers. From the west, Bungendore Road offers views of the rural landscape and passes by the showgrounds, racecourse and the town water and sewerage treatment plants. From the north, the tree-lined Tarago Road passes by the Resource Recovery Facility and more recent residential developments before it crosses over Turallo Creek.

The east-west grid subdivision pattern and low scale development of the original settlement creates an open, informal and spacious character that contributes to the rural village character of Bungendore. This area is bounded by Molonglo Street, Rutledge Street, Majara Street and Turallo Terrace. There is a clear delineation between the historic nineteenth century village and more recent residential developments.

The small commercial and light industrial areas provide local employment and services to residents in the town and the surrounding rural community. Bungendore accommodates high numbers of tourists including day trippers from Canberra and Queanbeyan and travellers passing through en route to or from the South Coast

The major open landscape features within the town are the treed and open spaces consisting of the Turrallo Creek reserve (The Common), Frogs Hollow, Bungendore Park, Days Hill (Spooks Hill), Turallo Reservoir Hill and the Bungendore cemetery.

Map 2 - Bungendore Context - Source: NSW Spatial Services



Map 3 - Bungendore Aerial Perspective

The purpose of the Structure Plan

The Bungendore Structure Plan 2018-2048 has been prepared to ensure that the growth of Bungendore occurs in a co-ordinated and efficient manner and in a direction that reflects the views of the community. The Structure Plan builds on the Bungendore Land Use Strategy and Structure Plan (2010 Strategy and Structure Plan) which was adopted by Council and endorsed by the NSW Department of Planning in 2010.

The present Structure Plan has been aligned with the Integrated Water Cycle Management Strategy, which includes Bungendore, adopted by Council on 27 February 2019 and will inform the QPRC Local Strategic Planning Statement. It is intended that this Structure Plan be reviewed and updated regularly over its life in concert with the Integrated Water Cycle Management Strategy.

Vision

The land use vision for Bungendore articulated in the 2010 Strategy is still relevant and has been guiding development through the current Palerang Local Environmental Plan 2014 (PLEP 2014) and the Palerang Development Control Plan (PDCP).

Bungendore is set amongst productive rural landscapes where its rural entry roads are retained and lead into a village/townscape setting with a country/heritage feel that appeals to residents and visitors, together with a strong sense of rural living, and space that extends the Common and other green spaces to allow pedestrian and other non-motorised connections throughout the town where caring for the natural environment and living sustainably is valued. This contributes to Bungendore being a friendly, safe and well serviced community where the village scale and shopping experience is protected while improving the local employment and vitality of the town.

Background

Regional Context

Bungendore is located 40km east of Canberra along the Kings Highway. It is 13km from Australian Defence Force Headquarters Joint Operations Command (HQJOC) and 26km from Queanbeyan. Canberra and to a lesser extent Queanbeyan provide the main employment sources for the town. It is one of the larger towns within the Queanbeyan-Palerang Regional Council (QPRC) area. Growth in the QPRC area is directly influenced by its proximity to Canberra, the employment opportunities this provides and the affordability of the local housing product. The main growth areas within QPRC are the Googong and South Jerrabomberra urban release areas. Bungendore offers a different lifestyle and character to these areas, with larger lot sizes within a historic rural village setting.

The regional context of Bungendore is also captured in the NSW Government's South East and Tablelands Regional Plan 2036, which recognises that Canberra's transport connections, educational institutions, tertiary health services and employment are accessed by people within NSW, and the region (including Bungendore) continues to offer a greater diversity of housing, experiences and opportunities beyond the Australian Capital Territory's limits. The South East and Tablelands Regional Plan 2036 takes a cross-border approach to economic investment, infrastructure delivery, servicing provision and housing development to facilitate sustainable growth and optimise economic prospects. It also sets out Settlement Planning Principles to inform decisions around the most suitable locations for new housing. These principles require:

- consideration of the compatibility of land uses
- the availability of road connections and service infrastructure
- avoiding or mitigating the impacts of hazards, including the implications of climate change
- protecting areas with high environmental value and/or cultural heritage value and important biodiversity corridors
- identifying a sustainable water supply
- protecting the region's water supply and the environmental qualities of rivers and streams
- considering the impact of aircraft noise
- protecting areas that contain important resources and minimising the potential for land use conflict
- protecting important agricultural land to capitalise on its potential to produce food and fibre now and in the future, and
- identifying and designing new neighbourhoods so they are environmentally sustainable, socially inclusive, easy to get to, healthy and safe

Current Land-Use

Residential

A residential land use audit undertaken in July 2018 using a refined GIS method noted that there were 1,357 dwellings within the Bungendore township (refer to Appendix A and B for the respective mapping and the method used, as included in the Discussion Paper).

The 2016 census (ABS) reported that there were 1,125 dwellings (occupied or unoccupied) in Bungendore. Of the occupied private dwellings in Bungendore, 97.3% were separate houses, 1.7% were semi-detached, row or terrace houses, townhouses etc., 0.7% were flats or apartments and 0.4% were other dwellings (ABS). The 2016 Census also records that the average Bungendore household size is three people, which is indicative of a young family demographic.

The majority of residential land within Bungendore is low density, currently with a minimum lot size of either 850 m2 or 1,000m2. There is a small amount of residential land zoned R1 General Residential in the centre of Bungendore where medium density residential development is permitted, although there has been limited take-up of this housing form since the introduction of this zoning. There are larger properties within the rural residential estate on the north-western side of Bungendore, where lot sizes range from one to five hectares. Much of this land is, however, flood-affected. Further north along Tarago Road there are two isolated, community title rural residential estates comprising individual properties of less than one hectare. Residential growth has historically taken place north of The Common, which is essentially the Turallo Creek corridor. This has allowed the main core of the village of Bungendore to retain its heritage and character while accommodating residential growth to the north of the town. Recent growth has also occurred in infill areas in the south of Bungendore and has also included industrial and rural land rezoned for residential development.

Industrial

In October 2016, Council undertook a land use audit of the area zoned IN2 Light Industrial. The audit noted that there were eighteen industrial land use activities, ranging from self-storage units, vehicle repair businesses, a concrete batching plant and landscaping/rural supplies. Some of the lots accommodate multiple land uses and there were eleven vacant lots. The Council depot is located adjacent to this area. Since the audit, one of these lots has been rezoned for Low Density Residential use in conjunction with an adjacent residential development and approximately 13 ha of unoccupied land zoned for industrial use remains. The light industrial zone is now surrounded by growing residential development that is impacting on both the general residential amenity and operational activities within the industrial area.

Commercial

In the October 2016 land use audit, the commercial land uses in the zones B2 Local Centre and B4 Mixed Use were also considered. The audit noted approximately sixty individual land use activities, ranging from galleries, business premises, including health professionals, and food and drink premises to a vehicle repair business. The proposed Council carpark is also located in this area. Within these zones there are four vacant sites of varying sizes. There are numerous lots that have multiple land uses, including residential. There are also pre-existing commercial land uses within the R1 General Residential and R2 Low Density Residential land use zones. Land uses in these zones include a function centre, motel and shops, reflecting the original broad village zoning. There are also a large number of home businesses operating outside the commercially zoned areas, but as yet there is no government data collected to ascertain the number. Bungendore's location on the Kings Highway has also resulted in a tourist commercial area, adjacent to the historical town centre, focused on land with frontage to the Kings Highway (Malbon Street/Ellendon Street).

Whilst its proximity of Canberra and Queanbeyan makes it unlikely that Bungendore will attract large scale commercial and retail businesses, the location of the town in a rural setting, just thirty minutes away, provides an ongoing opportunity for businesses orientated towards visitors, notably accommodation and food and drink premises. In addition, the higher than average personal income of Bungendore residents provides opportunity for a diverse range of businesses beyond just those based on surrounding agricultural activities.

Rural

The land surrounding Bungendore is used for broad-acre farming, primarily grazing. Sand and gravel extraction also occurs to the north of Bungendore in the Lake George (Cullerin) basin. The agricultural classification of the land is generally Class 3 and 4 (refer to Appendix C for Map 25 of the Discussion Paper, illustrating this information). A small intensive agricultural land use occurs to the south of the Bungendore town limit.

The rural area to the west, above the escarpment and approximately five kilometres from Bungendore contains the extensive rural residential areas of

Bywong and Wamboin. These areas offer a distinctive rural lifestyle choice for the residents in close proximity to the major employment centre of the ACT. Bungendore provides education (primary school), shopping and entertainment options for residents in these areas.

The Bungendore Racecourse and Showgrounds, to the west of the township, are also set in the rural landscape against the backdrop of the Lake George (Cullerin) escarpment and the treed mountain range beyond Bungendore to the east.

Recreation and Open Space

The open space within Bungendore is centred on the Turallo Creek corridor. This provides the main passive recreation areas, including Frogs Hollow, The Common, Elmslea Park (located on the northern side of The Common), the dog off-leash area and Days Hill further to the north. The majority of these locations are cleared and affected by flooding. Paths within the areas range from bitumen shared paths to informal gravel paths. This area also includes Warren Little Oval, a small AFL field with a central cricket pitch.

Bungendore Park is the primary recreation facility in Bungendore and hosts Mick Sherd Oval, three tennis courts and associated club-room, two cricket nets and the swimming pool. The facility allows for rugby league, rugby union, the local Oz-tag competition, and school athletics and soccer training. The 25 metre pool includes five demarcated competition lanes with starter blocks. The existing pool has been identified as inadequate for the current population, does not meet current standards and has a number of other deficiencies.

There are currently insufficient sporting and recreation facilities for Bungendore and surrounding areas. Council's Sports Facilities Strategic Plan reports that based on current standard levels of provision, the projected population growth will ultimately require at least five sports fields and upgraded or new swimming pool facilities.

The former Palerang Council had investigated several options and alternate sites for upgraded facilities, and zoned an area on the western edge of the town for this purpose. Given ongoing concerns relating to land use conflicts, there are other sites in the area still under consideration for this purpose.

There are three playgrounds in Bungendore, two in Bungendore Park and a smaller facility in Wild Terrace, Elmslea. The Bungendore Skate Park is located on McMahon Drive, on the northern side of The Common. Bungendore also has a number of buildings that can be used for recreation, including the School Library, the Memorial Hall, the Multipurpose Hall, located within the school grounds, and the Country Women's Association Rooms. The private recreation facilities within Bungendore are limited to the Bowling Club, with a single bowling green and a small gym, and a dance school operating from the building on the corner of Gibraltar and Molonglo Streets.

The Bungendore Showground is the largest recreational facility, located approximately 5km west of the town at the foot of the Lake George Escarpment. The facility is managed by a Trust. In addition to equestrian events and dog competitions, it hosts a number of cultural events including the Bungendore Show and Bungendore Country Muster. The site is currently difficult to access by any means other than car due to narrow road shoulders and the absence of a footpath.

Infrastructure

Resource Recovery Facility

The Bungendore Resource Recovery Facility is located north of Bungendore and provides storage, separation and transfer, for both council and private waste collection services and resident drop-offs, to a variety of locations for subsequent processing, recycling or disposal. Residential development is not currently permitted within a 500 metre buffer zone surrounding the site, to protect both the amenity of surrounding residential development and the efficient on-going use of the facility. Ongoing monitoring of the site has indicated that a 250 metre buffer may be sufficient in the future, subject to finalisation of risk assessments and consultation with relevant State Government agencies. Appendix D includes Map 35 adapted from the Discussion Paper which shows the location of the facility and buffers.

Sewage treatment plant

Bungendore has a sewage treatment plant with current capacity for 5,000 equivalent population (EP) and upgrade potential to support a further 3,000 EP. The buffer of 400 metres that is accepted for sewage treatment plants is largely intact with the exception of some historic residential development along Molonglo Street being located within approximately 300 metres. The main town water treatment plant is also located within this buffer.

The sewerage network that extends to the current town boundaries utilises gravity reticulation mains and a number of sewage pump stations. Appendix E includes Map 37 from the Discussion Paper illustrates the Bungendore sewage network. Effluent from the Bungendore sewerage treatment plant is treated and available as a non-potable supply for road works and construction. It is also piped to Bungendore Park for use in irrigating the oval.

Water treatment plants

Bungendore is supplied with potable water sourced from a number of groundwater bores. Water from the Turallo Borefield is treated in the Bungendore water treatment plant on Bungendore Road while that from the recently commissioned Currandooly Borefield is processed at the water treatment plant on Tarago Road.

The capacity and upgrading of the plants and network are covered in the Integrated Water Cycle Management Strategy (IWCM) adopted on 27 February 2019. This strategy, as required by state government, covers a period of 30 years and addresses the interactions and connections between elements of the urban water cycle (water supply, sewage and stormwater), the physical operating environment, legislative and regulatory requirements and community expectations. The Strategy will 'right size' any necessary capital works projects and ensure that appropriate, affordable, cost-effective urban water services are provided to the satisfaction of the community and protection of public health and the environment.

With the location of new fractured-rock water sources from the Lachlan Fold belt, Council has recently been granted an increase in its water access licence, which will support projected population growth and provide additional security of supply.

Roads

Bungendore is serviced by three major access roads: the Kings Highway (state road), to the east and south, and the two regional roads, Tarago Road, to the north, and Bungendore Road, to the west. In addition to servicing the needs of Bungendore residents, these roads convey visitors to Bungendore and provide a route between the ACT, NSW South Coast and the Illawarra Region.

Bungendore is heavily dependent on motor vehicle transport. According to the 2016 ABS census, 78.2% of the population used a car (as either driver or passenger) to travel to work. Only 2.4% of the population walked to work and only 0.9% of employed people used public transport (train, bus) as at least one of their methods of travel to work.

Given the strong connection between Bungendore, Canberra and Queanbeyan, this dependence on cars is unlikely to change until Bungendore reaches sufficient size to sustain a larger commercial, educational and social base.

Council's Integrated Transport Strategy provides the overall direction for the provision of transport infrastructure. The range of transport options, from public transport to heavy vehicle management, have all been considered with regard to future road planning and integration with ACT and NSW networks. Bungendore also includes a growing network of shared use (pedestrian & cyclist) paths.

The Kings Highway corridor is an important route between the ACT and the coast. During peak times, traffic volumes can restrict the ability of residents to move easily around the town, particularly for those south of Malbon Street, which separates them from the town's commercial centre. Council has considered a number of bypass route options for Bungendore and has had preliminary discussions with NSW Roads and Maritime Services in relation to route and funding options. There has been no detailed environmental

analysis of any route but matters for consideration would include the allowance of a 100 metre corridor, groundwater, native flora and fauna, the impact on the Bungendore retail environment, Aboriginal cultural heritage, topography and current traffic counts particularly on weekends and accident statistics. Appendix F includes Map 30 from the Discussion Paper which illustrates possible bypass routes for Bungendore.

Environmental Attributes and Constraints within Bungendore

Bushfire

The bushfire prone land around Bungendore is shown on the Palerang Bushfire Plan, July 2014 (Refer to Appendix G). While it is primarily grassland of a type that has often been excluded from bushfire planning maps, most of the land surrounding Bungendore is currently mapped as Category 2 rated bushfire prone land. The explicit inclusion of a grasslands category following recent reviews of bushfire mapping will thus not have any significant impact on the identification of bushfire risk in the areas of interest.

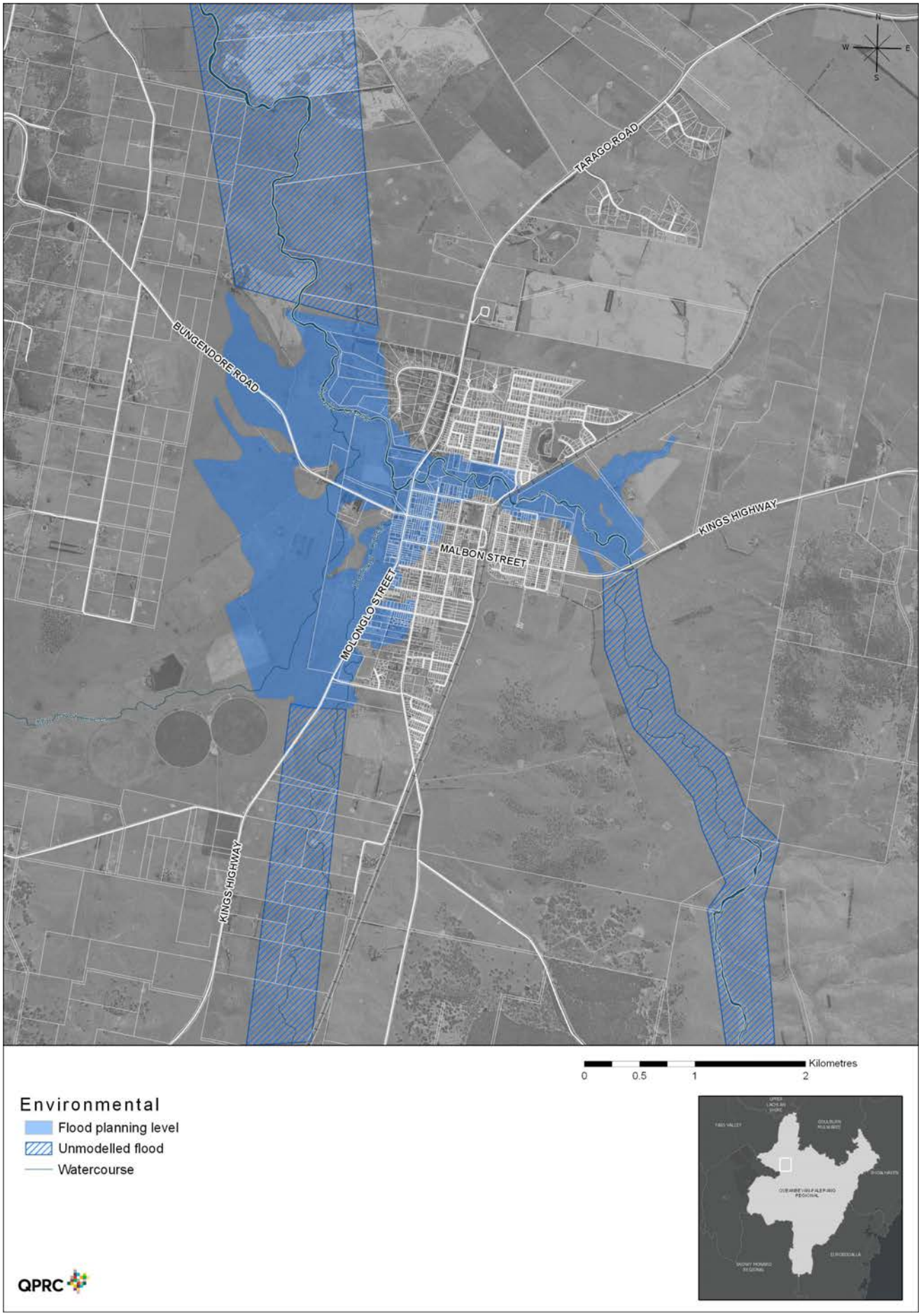
None of this will prevent development, although additional measures will be required to reduce the risks associated with bushfires in the planning and design stage of new residential areas for Bungendore.

Flooding

Bungendore's location at the confluence of three watercourses, Turallo, Halfway and Millpost Creeks, together with the flat nature of the local topography make it very susceptible to flooding. The Bungendore Floodplain Risk Management Study and Plan (Worley Parsons 2014) adopted by Council identifies a number of strategies to help mitigate the impact of flooding within the town. Recent and proposed greenfield developments to the north and potential greenfield sites to the east and west, are all separated from the town centre in times of flood.

Any residential expansion within Bungendore should be accommodated on land that is outside of the Flood Planning Area. Other uses, such as recreational or open space, or commercial or industrial uses that meet the necessary design criteria, may nonetheless be accommodated in flood affected areas.

Map 4 - Flood Hazard (Map 10 from Discussion Paper)



High Environmental Value Vegetation

Apart from the Days Hill area there is very little native vegetation in the existing urban area of Bungendore. Because of its location in a frost hollow between the Great Dividing Range and Lake George escarpment, much of the original vegetation in the area would have been Natural Temperate Grasslands, with grassy woodlands and snow gum woodland on the slopes surrounding the town. There are also good but unsecured grassland remnants north of the town and smaller remnants scattered through the area. Turallo Nature Reserve and Gidleigh Travelling Stock reserve to the south are more substantial and diverse Native Temperate Grasslands remnants. Lake George is an example of ephemeral lakebed grassland, part of the critically endangered Natural Temperate Grasslands of the South East Highlands ecological community. Brooks Hill, located to the south of the town is a substantial and significant Box Gum Woodland reserve extending to the ACT Border. The Days Hill area comprises 12.95 hectares of native grassland and exotic vegetation on the north side of Bungendore. The area was set aside as part of the Elmslea residential development (north Bungendore).

Map 8 in the Discussion Paper (refer to Appendix H) shows areas immediately surrounding Bungendore with patches of native vegetation that may meet the definition of the endangered ecological community Natural Temperate Grassland of the Southern Tablelands of New South Wales and the Australian Capital Territory which is listed under the Environment Protection and Biodiversity Conservation Act 1999 (Commonwealth). Map 7 in the Discussion Paper (refer to Appendix I) shows the areas of native vegetation determined as being High Environmental Value by the NSW Office of Environment and Heritage. It should be noted that areas of native grassland may contain listed grassland reptiles such as Delma impar (Striped Legless Lizard) and Suta flagellum (Little whip snake).

Native vegetation and areas of High Environmental Value Vegetation surrounding Bungendore are major constraints. As such careful planning is required to ensure this is not at the expense of land with high environmental value as the supply of land that can be utilised for urban purposes is finite. In addition, there may be added costs due to the requirement to fund and acquire Biodiversity Offset sites.

European and Aboriginal heritage

There are numerous Aboriginal heritage sites in the vicinity of Turallo Creek and in the rural areas surrounding Bungendore. It is likely that as development occurs beyond the existing urban area of Bungendore that Aboriginal cultural heritage will be disturbed. The Lake George area is a known significant Aboriginal cultural heritage site. Any planning proposal to rezone land where there is the potential that Aboriginal cultural heritage may be impacted will, as part of the process, require further detailed studies.

European heritage items and the street grid pattern provide key elements in the inner part of Bungendore, which in turn contribute to the strong and unique character of the town.

There are numerous older items in Bungendore, particularly buildings that have not been heritage listed that nonetheless warrant consideration together with the overall approach to the management of local European heritage. The completion of the recent Bungendore Heritage Strategy 2019 and the resulting work for potential new listings should help to address this issue.

Current Land-Use Planning Controls

The land use planning controls for the area within the Bungendore Structure Plan are contained within a number of key documents. The State Environmental Planning Policies set the controls that are applied throughout NSW, the Local Environmental Plan sets the local controls and zoning for council areas, Development Controls Plans set the additional detailed controls to support the objectives set out in the LEP and the Contributions Plans set out controls to require contribution payments from new developments toward the additional demand on infrastructure and services.

Local Environmental Plan

Development within Bungendore is managed under the Palerang Local Environmental Plan 2014 (PLEP 2014). Specific land use zones, such as business, residential, industrial and rural, have been applied to areas of Bungendore, together with minimum subdivision lot sizes and building height limits. Heritage items are also identified in Bungendore under this plan together with controls to conserve their heritage significance.

The local environmental plan also includes local provisions and controls to address flood affected land, riparian land and watercourses, drinking water catchments, biodiversity, steep land and land affected by salinity and highly erodible soils. The PLEP 2014 will be superseded by the comprehensive Queanbeyan-Palerang Local Environmental Plan, which will combine the various individual Local Environmental Plans that currently apply in the Queanbeyan-Palerang Local Government Area (LGA).

Development Control Plan

The Palerang Development Control Plan 2015 (PDCP) applies to Bungendore and includes the identification and description of the desired future character of both the town in general and the inner precincts in particular. Specific controls for individual precincts are included with the objective to ensure this character is maintained or achieved. The controls related to heritage also complement this objective. The PDCP also includes controls relating to limiting visual impacts, particularly where viewed from major transport corridors together with the more general controls for residential, business, industrial, tourist and rural land uses and developments.

Development Contribution Plan

Section 64 Development Servicing Plans

Section 64 Development Servicing Plans (DSP) apply to areas serviced by water, sewer or stormwater infrastructure. They are reviewed every 5 years and require a submission be made to IPART prior to coming into force. Council currently has two plans in place for Bungendore—a Water DSP and a Sewerage DSP. Council does not currently have a Stormwater Drainage DSP. There are provisions for the making and application of such a Plan under section 496A NSW Local Government Act 1993 and this would, for example, allow for the extension or augmentation of stormwater drainage services required as a consequence of development. This could include stormwater work currently managed under certain Palerang Section 94 (Part 7) Plans.

Part 7 Local Infrastructure Contributions Plans (formally known as Section 94 Contributions Plans)

Part 7 local infrastructure contributions are able to be levied under the Environmental Planning and Assessment Act 1979. They are currently capped at $20,000 per dwelling. Exemptions to the cap are available but they must be submitted to the Independent Pricing and Regulatory Tribunal (IPART) for approval.

There are currently eight plans that may apply to development in the town of Bungendore or surrounds, these are:

1. *Palerang Section 94 Plan No 7 For The Provision of Recreation Facilities at Bungendore*
2. *Palerang Section 94 Plan No 8 For Provision of Pathway Network at Bungendore*
3. *Palerang Section 94 Plan No 9 For Street Upgrading at Bungendore*
4. *Palerang Section 94 Plan No 10 For The Provision of Kings Highway Culverts at South Bungendore*
5. *Palerang Section 94 Plan No 11 For The Provision of Public Off-Street Carparking at Bungendore*
6. *Yarrowlumla Council Section 94 Plan No. 1 Bungendore*
7. *Yarrowlumla Council Section 94 Contribution Plan (No. 2) For Provision of Access Roads*
8. *Yarrowlumla Council Section 94 Plan No. 3 Provision of Community Facilities*

Bungendore Structure Plan

Key Principles

The built and natural environment of Bungendore, as with any town, will evolve over time. This Structure Plan seeks to manage growth pressures and facilitate this evolution in a way that reflects the desired future character while responding appropriately to the constraints that exist. This character has been articulated in the Bungendore Land Use Strategy and Structure Plan, 2010 and the PDCP and was reinforced by the results of recent community consultation. To ensure a gradual transition and to minimise any negative impacts of growth, the following development principles, which reflect the desired future character of Bungendore, will guide growth and development in Bungendore.

The key principles are:

1. Rural industry and Landscape
    a. Agricultural land surrounding Bungendore contributes to the identity and sense of place, future development needs to ensure this character is not lost.
    b. Rural industries and agricultural landscapes should be protected.
    c. Development should provide for certainty and security of agricultural enterprises.

2. Character
    a. The rural character of entry roads are to be retained (i.e. not dominated by housing).
    b. Development is to allow heritage items to remain as dominant features in Bungendore because they are a key part of the town's country/heritage identity.
    c. The visual corridors and open vistas of Bungendore should be protected.
    d. Development should allow the town to retain its surrounds of productive rural landscapes and its strong sense of rural living and space.
    e. Development is to be low in scale and provide the distinct divide between the town and the surrounding rural landscape.
    f. The historic grid street pattern is to be retained and where practical a grid pattern is used in new development.
    g. Outside the commercial area, development is generally to be of a low density with buildings well separated.
    h. New buildings shall relate to the existing town character by having sympathetic forms and external materials.

i. Maintain the landscaped setting of Bungendore which includes mature trees and shrubs, grassed verges and gardens, all of which combine exotic and native species, and where street trees are predominantly deciduous species.
j. The Common and other green spaces are to be preserved, improved and extended to allow for walking, cycling, dog walking, horse riding etc. connections through the town to recreation spaces.

3. Growth
   a. Bungendore is to grow within the capacity of the town's water allocation which has recently been increased by the NSW government.
   b. New residential development are not to be located in the Flood Planning Area.
   c. Development is to occur in an ecologically sustainable development manner.
   d. Areas of High Environmental Value native vegetation should be avoided for rural residential, residential, commercial and industrial development.
   e. New greenfields development should be contiguous with the existing urban area.
   f. Development should proceed in an orderly fashion with future development taking place sequentially where it is close to existing infrastructure.
   g. Rural residential, residential, commercial and industrial development should not be located in the areas that contain extractive industries or have the potential for extractive industry.
   h. Provide opportunities for affordable and adaptable housing, appropriate policies should encourage the development of multi dwelling housing in the R1 zone in locations close to transport corridors and within close proximity to centres.
   i. Medium density dwellings should be located within one kilometre of the centre of Bungendore.

4. Infrastructure:
   a. Future development should maximise the efficient use of existing infrastructure and services and minimise the need for additional infrastructure where possible.
   b. In determining future infrastructure, the cost of installation and long term maintenance, functionality and ease of operation, together with sequencing, should be considered in addition to its fit with the desired future characteristics.
   c. Critical infrastructure is not be located within the Flood Planning Area.
   d. A 400 metre buffer is to be retained around the water and sewerage treatment plants and is to exclude residential development.
   e. A 250 metre buffer is to be retained around the Resource Recovery Facility to protect its current and future operation.
   f. Pedestrian and cycling opportunities for all ages should be provided with links across all areas of the town.
   g. Pedestrian links throughout the central business district are to be encouraged.
   h. Development should allow for public transport networks.
   i. Road access from the Kings Highway to individual precincts shall be limited to ensure the continued effectiveness and safety of the road.

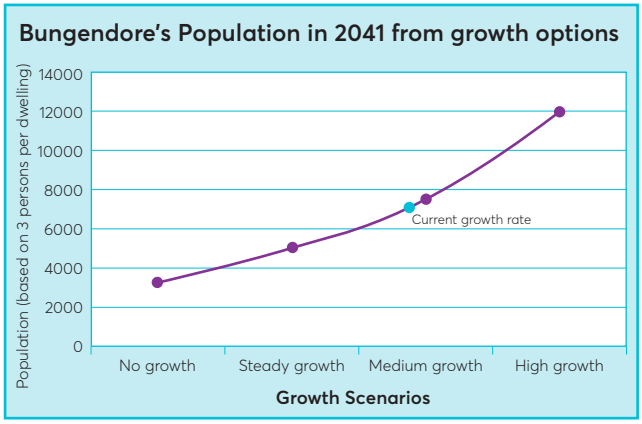
5. Economy
   a. Implement strategies appropriate to a growing town from the Smart Cities Plan (Australian Government), three pillars—Smart Investment, Smart Policy and Smart Technology.
   b. Recognise that the rural and heritage environment, ease of moving around and the internet provide the opportunity for innovative commercial and industrial businesses.
   c. The commercial area is to provide local employment, vitality and a range of services but no large shopping centre.
   d. There should be opportunity for creative industries.
   e. Protection of existing industrial precincts within Bungendore shall occur until additional viable industrial land can be investigated and rezoned.

Growth

The exhibition version of the Structure Plan provided options for the growth of Bungendore; being steady, medium and high growth scenarios.

Based on community consultation and the desire for the retention of the village character and for gradual rate of change, further analysis of the historical and current growth rates was undertaken. The current growth rate (3.3% growth per annum which equates to approximately 37 dwellings per annum) achieves a growth that is between the Steady and medium growth scenarios presented in the Discussion Paper.

Figure 1 - Bungendore Growth Options from Discussion Paper



Growth in Bungendore must be considered in the context of the wider Canberra region, the Queanbeyan-Palerang area in particular. The key drivers for growth are directly related to the proximity to Canberra and the employment and economic growth it provides. Community comment has drawn attention to the need to consider impacts on the village and country lifestyle and the point of difference that Bungendore has compared to the lifestyle and housing in other parts of the region. For Bungendore to continue to provide this lifestyle and a housing product that is low scale and open in character, new developments need to be carefully planned. In this regard, the ability for Bungendore to provide a different housing product, lifestyle and environment to that in the Googong and South Jerrabomberra urban release areas should be protected.

Table 1: Population based on Current Growth Rate on the following page shows the rate of population change and the likely additional dwellings for a growth rate that reflects the current rate.

The current rate of growth will produce an additional 4152 residents into Bungendore by 2041. This equates to an additional 1384 dwellings.

Residential Growth

An analysis of land and potential for residential subdivision (based on the current minimum lot size and only single dwellings) undertaken in July 2018 revealed that an additional 462 dwellings could be created within the existing Bungendore town area (refer to Appendix B for the method and to Appendix A - Discussion Paper Map 21). Note that there is a high probability that not all these opportunities would be taken up as infill development (subdivision and dwellings), due to constraints such as laneways, heritage items, existing dwellings in the centre of the lots and the existing lots being long and narrow. Furthermore, this is not the preferred style of development within Bungendore as it invariably results in the subdivision of larger lots that contribute to the character and amenity of the older parts of the town.

Nonetheless, options to accommodate this style of growth include the uptake of development opportunities within the town that are afforded under existing development controls in the PLEP 2014 to increase density and diversity of housing stock in the town.

Outside of the existing urban area, there is currently a planning proposal to rezone rural land for approximately 300 residential lots on the northern side of Bungendore. This proposal has a Gateway determination, which is the first approval from the Department of Planning, Industry and Environment, for the proposal to proceed to the community and agency consultation stage. If the planning proposal proceeds, this could potentially result in an additional 900 people (see Map 5).

A Gateway determination for a planning proposal to rezone rural land to the east of Bungendore is currently with the Department and awaiting completion of this Structure Plan. If this proposal proceeds it could result in a further population increase of approximately 981 people (based on theoretical potential of approximately 327 dwellings).

Clause 4.1C of the Palerang LEP allows the creation of three or more lots at a minimum lot size of 350m^2 in the R1 Residential land use zone (which applies to some of the residential zoned land close to the central business area) provided that the subdivision application includes an application for all the dwellings on the proposed lots. There has been no analysis of the potential number of new lots or dwellings that may be created using this particular clause, nor has it been used to date by developers. There is potential to combine the use of this clause with the use of some of the laneways as the primary access, although again, to date there has been little interest in exploring this option further.

It is estimated that approximately half the dwellings in Bungendore are less than 15 years old based on there being 628 dwellings (occupied and unoccupied) at the time of the 2001 census and the 2016 finding that there were 1,125 dwellings (occupied and unoccupied) in addition to the dwellings erected since the 2016 census.

The need for housing for older people who require assistance has been recognised for some time as an issue in Bungendore. Without this type of housing it will continue to be necessary for people who are otherwise socially connected to Bungendore to leave when they are no longer independent. It is suggested that this is not appropriate for either them or their families as they lose contact with their friends and family and these people have to travel, which can be expensive and time consuming to be with their family member. Development approval was given in 2016 for independent living dwellings for older people in the South Bungendore precinct and construction is now underway on the first stage of this development. A site adjoining Council's offices in Majara Street permitting Seniors Housing with development consent was also zoned for such in 2018. At this stage it is yet to be developed.

Population growth and demographic change are the key drivers informing strategic decision-making with respect to future development. This in turn will influence the demand for additional residential development in Bungendore. In addition, the needs of the changing demographics of the population will need to be met. The monitoring of population demographics and changing trends are therefore an important part of the process of planning for growth. For example, the ageing population will need to be catered for in terms of housing needs and facilities like aged care homes and medical facilities. Another example are smaller household sizes which may result in changing requirements for the housing market, e.g. higher demand for town houses on smaller blocks. Demographic changes and trends need to be monitored.

For the current growth scenario the additional housing demand can be met through both infill development and residential land releases adjacent to the current town boundary, although the latter is to be preferred in order the retain as much of the existing character of the older part of the town as possible. Greenfield development alone could comfortably accommodate an additional population of 3,450. Such growth will place additional demand on services and facilities. For example, more traffic to commute to work outside of Bungendore could result in a requirement for upgrading road infrastructure. There is a potential requirement to upgrade water and sewer infrastructure. There will be more demand on services such as health services, schools, child care, and emergency services however, a larger population may also justify additional services. Where Council is the service provider for infrastructure, new development will be required to fund this in part, although some contribution is likely to be required from existing ratepayers. This cost impost and the benefits of containing the footprint of the town to achieve a more cost effective provision and maintenance of infrastructure for new residential areas is an important factor in the future of the town

With respect to the land available to accommodate greenfield development, the land identified in the Discussion Paper including the land identified on Map 40 Rezoning Requests in particular, has been reviewed (refer to Map 5). The table below sets out the review, which was based on the development principles articulated earlier in this plan.

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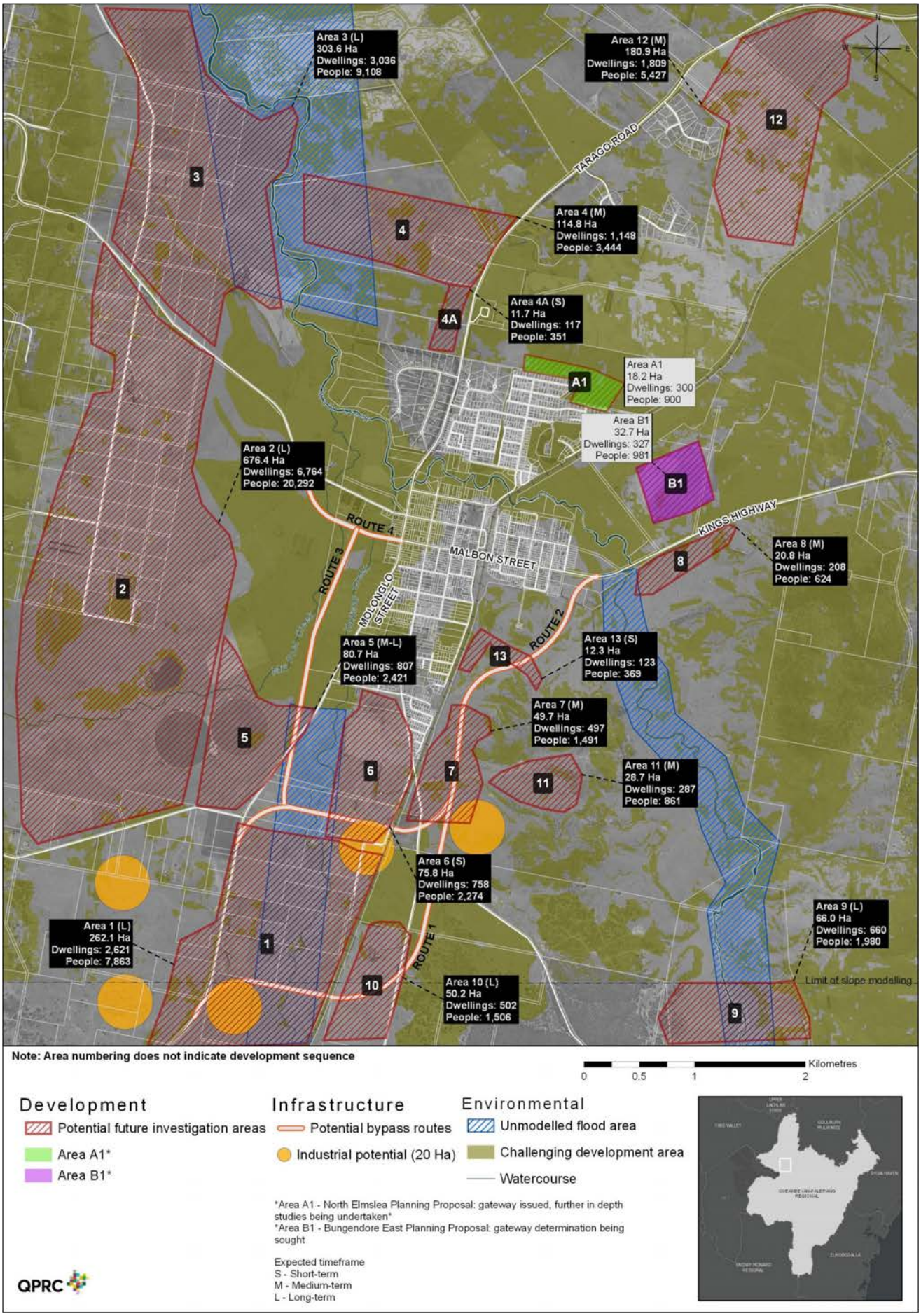
Table 1: Population based on Current Growth Rate

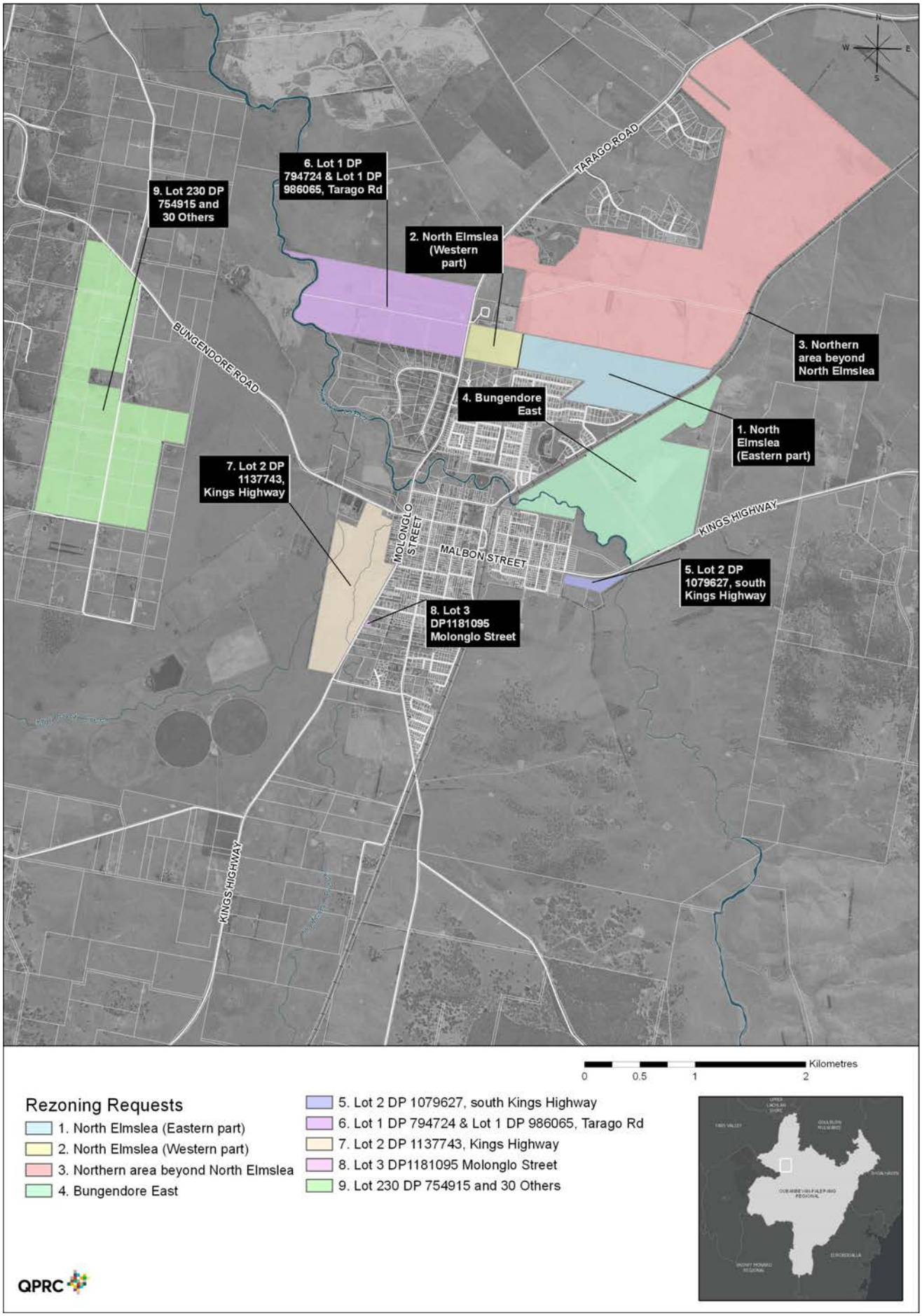
Year	Population	Growth Rate	Additional Dwellings (3ppl per dwelling)
2001	1685*		
2006	2183*	+3%	
2011	2754*	+2.6%	
2016	3317*	+2.0%	
2021	3901	+3.3% (average growth rate from 2001-2016)	195
2026	4589	+3.3% (average growth rate from 2001-2016)	
2029	5059	+3.3% (average growth rate from 2001-2016)	386
2031	5398	+3.3% (average growth rate from 2001-2016)	339
2036	6350	+3.3% (average growth rate from 2001-2016)	
2039	6999	+3.3% (average growth rate from 2001-2016)	534
2041	7469	+3.3% (average growth rate from 2001-2016)	470
		Total additional dwellings:	**1384**

** ABS Census*

Map 5 - Potential Investigation Areas (Map 5 in Discussion Paper)



Map 6 - Rezoning Requests (Map 40 in Discussion Paper)



Review of Potential Residential Development Areas

Map 4 Ref.	Map 5 Ref.	Land Area (Ha)	Growth potential	Status	Consistency with Development Principles	Recommendation
A1	1	18.2	900 pop. 300 dwellings	• Planning Proposal prepared • Gateway determination issued • Additional Water allocation issued • Public exhibition commenced	**North Elmslea (eastern)** Part Lot 1 DP 798111 No. 174 Tarago Road • Land identified in 2010 Structure Plan for residential development • Areas of High Environmental Value native vegetation cover significant portion of the land. Significant Offsets required • Land is not located within the Flood Planning Area or the Probable Maximum Flood (PMF) area • Area is separated from town centre in a flood event • Part of the land is located within the buffer for Resource Recovery Facility • Land is immediately adjacent to existing urban area with ready connection to existing infrastructure • Limited impact on rural nature of the entry roads - One entry from Tarago Road likely and no additional entry required to Kings Highway • Rural vista somewhat impacted by additional housing on northern boundary of the town and amongst some elevated land • Will result in loss of agricultural land • Agricultural setting of the town is maintained Other: • The rezoning of this land has progressed on the basis of its inclusion in the 2010 Structure Plan and has reached the Public Exhibition Stage • RFS advise the need for North Elmslea emergency refuge / large community space • Land has the potential for 8 years land supply based on current growth rates	• That the rezoning proposal for this land from Rural to Residential to be progressed • That this land be considered as a viable option for providing additional land for residential growth

Map 4 Ref.	Map 5 Ref.	Land Area (Ha)	Growth potential	Status	Consistency with Development Principles	Recommendation
B1	4	32.7	900 pop. 300 dwellings	• Planning Proposal Prepared • Gateway determination requested and further information required: - additional water allocation (completed) - the finalisation of the Structure Plan	**Bungendore East** Lot 1 DP747767, Lot 273 DP 754915, Lot 279 DP 754915, Lot 275 DP 754915 and Lot 1 DP 193988 No. 4610 Kings Highway • Areas of High Environmental Value native vegetation cover some portions of the land. Offsets are likely to be required • Some parts of this land are located within the flood planning area and also Probable Maximum Flood (PMF) area • Area is separated from town centre in a flood event • Land is not located within any buffers for infrastructure • Land is not immediately adjacent to existing urban area linked through the Turallo Creek corridor, providing an opportunity for incorporation of new open space and extension of The Common • Will impact on rural nature of the entry road to Bungendore with the extension of housing along the Kings Highway • Will require additional access(es) from Kings Highway, which has heavy traffic volumes at peak times • Rural vista impacted by additional housing on eastern entry to the town • Will add to the cumulative impact of housing in Elmslea visible from Kings Highway approach • Will result in loss of agricultural land Other • Council has already agreed to the preparation of the planning proposal for the rezoning of this land for residential development and to request a Gateway determination • The NSW Government have not issued a Gateway determination and required the completion of this Structure Plan to provide strategic justification for the proposal • Has the potential for nine years land supply based on current growth rates	• That the rezoning proposal for this land from Rural to Residential be progressed • That this land be considered as a viable option for providing additional land for residential growth

Map 4 Ref.	Map 5 Ref.	Land Area (Ha)	Growth potential	Status	Consistency with Development Principles	Recommendation
4A	6	114.8	750 pop. 250 dwellings	• No Planning Proposal • Preliminary enquiry	**Ashby** Lot 1 DP 794724 and Lot 1 DP 986065) No. 175-217 Tarago Road • Areas of High Environmental Value native vegetation cover significant portions of the land. Offsets are likely to be required • Western portion of land is located within the flood planning area, Probable Maximum Flood (PMF) area and the unmapped/modelled area of the creek • Area is separated from town centre in case of flood event • Part of land located within the buffer for Resource Recovery Facility • Land is immediately adjacent to existing urban area with ready connection to existing infrastructure. • Limited impact on rural entry roads - one entry from Tarago Road likely and no additional entry required to Kings Highway • Limited impact on rural vista by additional housing on Tarago Road adjoining existing large lot residential area • Will result in loss of agricultural land • Land use conflict with extractive industries to the north may need to be managed • Agricultural setting of the town is maintained Other: • RFS advise the need for North Elmslea emergency refuge / large community space. Would require additional fire protection as it is located on the northern side of town - ideally community emergency refuge located on south eastern side of town • Has the potential for 10 years land supply based on the current growth rate	• That the portion of land within the Resource Recovery Facility buffer area be excluded from Residential zoning and development • That the land outside buffer and flood planning area be considered for residential zoning.

Map 4 Ref.	Map 5 Ref.	Land Area (Ha)	Growth potential	Status	Consistency with Development Principles	Recommendation
-	7	65	Not calculated	• No Planning Proposal • Preliminary enquiry	**Kings Highway Molonglo St** Lot 2 DP 1137743 • This site is not located on the Potential Investigation Areas Map • Very small areas of High Environmental Value native vegetation on the land. Offsets are unlikely to be required • Land is located within the flood planning area and also Probable Maximum Flood (PMF) area • Area is difficult to evacuate due to small lead times and will be isolated in flood event • Land is located within the buffer for the Sewerage Treatment Plant • Land is adjacent to existing urban area with ready connection to existing infrastructure. The land is physically separated by the Kings Highway • Limited impact on Rural Entry road to Bungendore, however, additional access(es) from Kings Highway will be required • Rural vista impacted by additional housing on southern entry to the town • Will result in loss of agricultural land • Agricultural setting of the town is impacted by development of this rural edge Other • The land is constrained by multiple easements	• The rezoning of this land for residential development not be supported due to its flood affectation.

Map 4 Ref.	Map 5 Ref.	Land Area (Ha)	Growth potential	Status	Consistency with Development Principles	Recommendation
-	3	99	900 pop. 300 dwellings	• No Planning Proposal • Preliminary enquiry	**North of North Elmslea** Part Lot 1 DP 880087 No. 266 Tarago Road • Areas of High Environmental Value native vegetation cover significant portion of the land. Significant Offsets required • Land is not located within the flood planning area or the Probably Maximum Flood (PMF) area • Area is separated from town centre in case of flood event • Part of land located within the buffer for Resource Recovery Facility • Limited impact on rural nature of the entry roads - one entry from Tarago Road likely and no additional entry required to Kings Highway • Rural vista somewhat impacted by additional housing on northern boundary of the town and amongst some elevated land • Will result in loss of agricultural land • Agricultural setting of the town is maintained • Land is contiguous with the proposed residential greenfield area of North Elmslea Other: • RFS advise the need for North Elmslea emergency refuge / large community space. Would require additional fire protection as it is located on the northern side of town—ideally community emergency refuge located on south eastern side of town • This land has the potential for 10 years land supply based on the current growth rate)	• That the portion of land within the buffer area for the Resource Recovery Facility, be excluded from residential development / zoning • That the land outside the buffer area be considered for residential zoning in the long term

Map 4 Ref.	Map 5 Ref.	Land Area (Ha)	Growth potential	Status	Consistency with Development Principles	Recommendation
2	9	187 approx	Not calculated	• No Planning Proposal • Preliminary enquiry	**Matthews Lane** Lots 145, 150, 210 – 216, 220-221, 223-227, 229-235, 238-244 DP 754915 • Small areas of High Environmental Value native vegetation on the land. Offsets are unlikely to be required • Land is not located within the flood planning area nor Probable Maximum Flood (PMF) area • Land is not located within any buffers for infrastructure • Land is not immediately adjacent to existing urban area with ready connection to existing infrastructure. The land is physically separated by approximately 2-3km of rural land • Will impact on rural entry road to Bungendore with an isolated pocket of housing along Bungendore Road • Rural vista will be impacted by additional housing in the western rural visual catchment of Bungendore • Will result in loss of agricultural land with potential for increased land use conflict due to isolated nature • Will impact upon the agricultural setting of the town	• That the rezoning of this land for residential development not be supported due to its remoteness from the town and the significant impact on the agricultural setting, rural vistas and costs associated with servicing land remote from existing infrastructure
5	-	-	Not calculated	• No Planning Proposal • Preliminary enquiry	Lot 2 DP 1079627 South side Kings Highway • Land is within the Flood Planning Area and PMF • Impact on rural entry road to Bungendore • Impacts on preferred potential bypass route.	• That this land not be further investigated due to flooding, impacts on the rural entry from Kings Highway and impact on the future potential bypass route

Map 4 Ref.	Map 5 Ref.	Land Area (Ha)	Growth potential	Status	Consistency with Development Principles	Recommendation
13	-	12.3 Ha	369 people 123 dwellings	• No Planning Proposal • No Preliminary enquiry	Part Lot 24 DP 709547 Opposite King St - Majara St intersection and east of Railway Line • Small areas of High Environmental Value native vegetation on the land. Offsets are unlikely to be required • Land is not located within the flood planning area nor Probable Maximum Flood (PMF) area • Land is not located within any buffers for infrastructure • Land is located along the proposed bypass route and may impact the future use for a bypass route • Land is isolated by Railway line and Turallo Reservoir Hill from the current urban area • Limited (if any) impact on rural entry road to Bungendore • Rural vista may be impacted by additional housing in the eastern rural visual catchment of Bungendore • Will result in loss of agricultural land with potential for increased land use conflict due to isolated nature • Land is not contiguous with the existing urban area.	• That the suitability of the land be reviewed following confirmation of the alignment for the town bypass
1, 6, 7, 10, 11	-	Various	Not calculated	• Nil	These sites have not been reviewed in detail due to their proximity to the preferred potential bypass routes and / or potential locations for employment lands.	• That the suitability of lands in this vicinity that have access to Kings Highway and bypass routes, be reviewed for employment lands, following further research on employment land type and size need

Growth implications for Employment Land

The context of the major employment sources being located in Canberra, and to a lesser extent Queanbeyan, must be recognised. No expansion of the business zones is required for commercial growth, which can be accommodated within the existing CBD.

When Council adopted the PLEP 2014 it identified a need to consider the future of the existing industrial area in South Bungendore. Adjacent land has been progressively developed for residential purposes, resulting in land use conflicts between the operational activities of the industrial land uses and the amenity of the residential properties.

The Discussion Paper presented options for greenfield industrial land further south of Bungendore to allow for expansion of local business and employment opportunities. An area of 20 hectares could accommodate the relocation of industries that currently adjoin or are within the residential areas of Bungendore, together with the Council depot and additional new light industries and supporting land uses.

Selecting suitable additional industrial/employment land from the desktop options presented in the Discussion Paper requires further analysis before being formally incorporated into the Structure Plan Map. As such the existing industrial area is to be retained until this analysis is complete and additional land identified.

Planning for the growth of Bungendore needs to ensure that the processes also facilitate economic development opportunities. This could result in the creation of more local jobs, increasing the range and choice of local jobs, reducing the need to commute elsewhere to work, reduce the need for out-migration of young people and increased community income and wealth, which potentially means more money spent locally.

Growth implications for Rural Land

For the current growth rate of Bungendore, the requirement for additional urban land is likely to impact on the surrounding rural lands of Bungendore and careful planning is required to protect lands of high agricultural value.

Future development and growth of Bungendore will need to ensure that it is consistent with the relevant Government policies, which seek to protect rural lands from fragmentation and loss. Agricultural land is categorised into Classes from Class 1 (the most productive) to Class 5 (least productive) and while the rural areas around Bungendore may not comprise the most productive agricultural lands when compared with the rest of the state, the most productive agricultural land in the LGA should be retained and protected. Detailed further investigations will be required as part of any planning proposal to ensure that land of higher agricultural value is protected. Consideration should be given to the following agricultural principles:

- land with the best combination of soil, climate, topography and water for agricultural production is a limited resource in NSW and should be maintained for future generations.
- agricultural land should not be alienated directly through lands being used for non-agricultural purposes and indirectly by incompatible developments on adjacent land restricting routine agricultural practices.
- agricultural industries are a fundamental asset to the state of NSW as they provide a long term means of providing employment, raw materials and fresh safe secure food while supporting regional communities.

In addition there is a need to ensure the existing agricultural and extractive industries are not impeded by residential development.

Growth implications for Community and Open Space

The investigation and designs for the Bungendore Sports Hub in the area zoned RU1, west of the town, may result in the existing land zoned for open space north of Bungendore Road becoming surplus to requirements. If this is the case, the zoning of this land should be reviewed.

The shared access pathway network through the open spaces and riparian corridors provide important connections through the town and The Common. The extension of these pathways has the potential to also provide access to the future sports hub and even to the more remote facilities like the racecourse and showground.

It is noted that the State Government has made a commitment that there will be a high school in Bungendore to cater for the increased demand of the growing population. This will complement the existing primary school. Upon site selection by the state, any necessary changes in zoning should be actioned.

The current capacity of the Bungendore cemetery and any need to expand the extent of current zoning should be investigated in the context of the growing population and potentially aging demographic.

Structure Plan mapping

Having regard to the Key Development Principles, community consultation and the implications for growth, the following is a summary of the key aspects that the Structure Plan seeks to accommodate and address over the next 30 years. These matters are presented spatially on the following Structure Plan map.

Requirements and Land Use impacts for growth at the current rate

- Total 1,400 residential dwellings/lots (3 people per lot) will support the current growth rate.
- The urban zones currently identified under the PLEP 2014 could accommodate infill of approximately 460 single residential dwellings although development that would result in the subdivision of larger lots in the older parts of the town is not a preferred option.
- The preference will be to accommodate most growth in greenfield areas outside the current town boundary.
- The progressive rezoning of rural zoned land immediately adjacent to the urban area of Bungendore has the potential to accommodate the additional dwellings, having regard to the development principles of this Structure Plan.
- The progressive rezoning of areas to the north and east of the town, from rural to residential, over the life of this Structure Plan will be required to supply the necessary 940-1400 dwellings/lots and is the recommended option to maintain the desired character of Bungendore.
- There will be a change in land use in these areas from rural landscape to residential estates.
- The retention of the single storey dwellings with separation between will be important in addressing the desired future character.
- The existing primary school is to be maintained and the State Government has made a commitment that there will be a high school in Bungendore.
- The extension of The Common and inclusion of green space and recreational areas will help to retain the rural amenity of the town
- New open space and recreational facilities are planned in the Sports Hub to the west of the town. These facilities could include a new swimming pool, depending on funding.
- Potential significant upgrades to water and sewer infrastructure resulting from growth. Infrastructure provided for development with some contribution by developers and also likely from existing ratepayers.
- Potential upgrade of key intersections that feed into the western entry roads, including the Macs Reef Road and Federal Highway intersections on Bungendore Road.
- Additional intersections on Tarago Road and Kings Highway required to service development.
- Additional infrastructure from new residential release areas.
- Potential bypass route for Bungendore to be identified and confirmed and Kings Highway traffic diverted around the town environs. The bypass removes through traffic from the centre of Bungendore to improve traffic movement.

Possible implications

- The lack of industrial/employment land reduces local employment opportunities and diversity of businesses for the town and surrounding population.
- Significant proportion of residents will still travel to Canberra, and to a lesser extent Queanbeyan, for employment, education, services and recreation.
- A larger population may enable more health, education, community and emergency services to be located in Bungendore.
- There may still not be the population or consistently high traffic flows to warrant the construction of a bypass so that the town must continue to accommodate through-traffic, which may be seen as positive for some local businesses.
- The preferred bypass corridor should be identified and protected into the future.

The Structure Plan map (Map 1) illustrates the land use response to accommodate growth in Bungendore at the current rate (37 dwellings per annum average).

Implementation

Planning Controls

In order to implement the Structure Plan there are a number of steps required. The following outlines the recommended steps related to the planning controls for Bungendore.

- Ensure the vision for Bungendore and the Desired Character forms the basis of the planning instruments that affect the town. This includes, but is not limited to the Local Strategic Planning Statement, Queanbeyan–Palerang Local Environmental Plan, and the current and future reviews of the Palerang Development Control Plan (PDCP).
- Rezone land for residential development in the sequence generally described within this Plan, while ensuring that rezoned areas are clear of development constraints such as flooding and the buffer zone around the Resource Recovery Facility.
- As part of considering rezoning proposals, review the means of mitigating or reducing the visual impact of residential development where dwellings will overlook Bungendore or be visible from the Kings Highway. Without careful planning and ongoing management, development in the northern areas could also result in loss of natural temperate grasslands. Whilst some issues can be addressed through regular reviews of the Local Environmental Plan and Development Control Plan, the loss of grasslands should be avoided due to their environmental value.
- Monitor the supply of residential land and housing and ensure that this Plan is reviewed as required.
- Ensure that the minimum lot sizes in land to be rezoned continues to reflect the desired character of Bungendore. This means that the minimum for new release areas should not be less than 850m2 to retain the rural village character of Bungendore and its differentiation from other residential release areas in the region.
- Confirm that precinct controls articulated in the Palerang Development Control Plan are capable of conserving the character of any infill development that occurs within the original village area.
- Review and update contribution plans for infrastructure (roads, stormwater, water and sewer) to ensure equitable apportionment of costs for new infrastructure required for growth.
- Investigate the use of Local Planning Agreements as an alternative to contributions plans.
- Ensure that potential bypass routes are not compromised by incompatible development or rezonings.
- Review the current zoning of land to the west of town (recreation zoned land north of Bungendore Road and west of Turallo Creek and the rural zoned land west of Molonglo Street) that was or is intended to accommodate the Bungendore Sports Hub to ensure that appropriate land uses are supported.

- Develop a streetscape plan for Precincts 1 and 2 (as identified in the PDCP), taking into account work previously undertaken by the former Palerang Council.
- Assess the effectiveness of the multi-dwelling housing controls, in the R1 General Residential land use zone in the Palerang LEP, in retaining the desired character of Bungendore. This assessment should incorporate broader consideration of factors impacting infill development and the use of laneways.
- Upon the State Government's selection of a site for the new Bungendore High School, review and action any necessary zoning amendments.

Further Work

The Discussion Paper identified a number of matters, related to the land use planning and future growth of Bungendore, that require further work over coming years to fully integrate services and facilities as the town grows. These matters include investigation of additional employment lands, capacity of the existing cemetery, bypass routes, parking supply, active travel, native vegetation and options for biodiversity offsets.

1) Employment Lands

a) Expand upon the land use audit and the Regional Economic Development Strategy to identify opportunities to increase local employment in Bungendore and to facilitate the corresponding supply of employment land. The utilisation and protection of the bypass corridors around Bungendore are also to be considered in the identification of suitable land for employment uses.

b) New employment lands should be able to cater for general industrial activities including a freight centre, possibly a council depot and green waste facility.

2) Cemetery Capacity

a) Investigate the current capacity of the Bungendore cemetery and any need to expand the extent of current zoning.

3) Transport

a) Continue to advocate with the Roads and Maritime Services and Transport for NSW for the future bypass routes around Bungendore.

b) Implement the Integrated Transport Strategy including identifying a connected and accessible path hierarchy and way finding strategies for active travel.

c) Review parking demand, supply and restrictions in Bungendore.

4) Native Vegetation Review

a) Council's native vegetation map (Appendix H) identifies areas of native vegetation surrounding Bungendore that require further investigation, primarily critically endangered Natural Temperate Grasslands and grassy Box-Gum Woodland, and endangered Tablelands Snow Gum ecological communities. Development of areas containing critically endangered communities or threatened flora and fauna may have severe and irreversible impacts. In these circumstances, developments cannot be approved by Council alone and requires the concurrence of the Biodiversity and Conservation Branch of Department of Planning, Industry and Environment. Consideration should be given to thoroughly mapping grasslands, which are at this stage unable to be mapped using satellite or aerial photography.

b) Review the opportunities presented by the high environmental value vegetation in and around Bungendore in relation to biodiversity reforms that may allow Council to proactively conserve these remnants and to derive a modest income though the Biodiversity Offset Scheme.

Monitoring

Monitoring is an important part of the implementation and review process of planning documents. It allows for reviews to be focussed on the current trends and issues that arise and to allow for timely responses to emerging trends. To assist it is recommended that land use databases in GIS format be maintained.

Areas to monitor are:

- Number of lots approved (residential)
- Number of dwelling approvals
- Percentage of dwelling approvals by type
- Median dwelling and residential land prices
- Population composition by age group
- Population growth
- Area of residential land affected by flooding
- Area of land set aside for biodiversity conservation/offset
- Area of land available for open space and recreation
- Area of land available for employment uses
- Proportion of population with access to public transport
- Proportion of population employed within Bungendore.

Appendices

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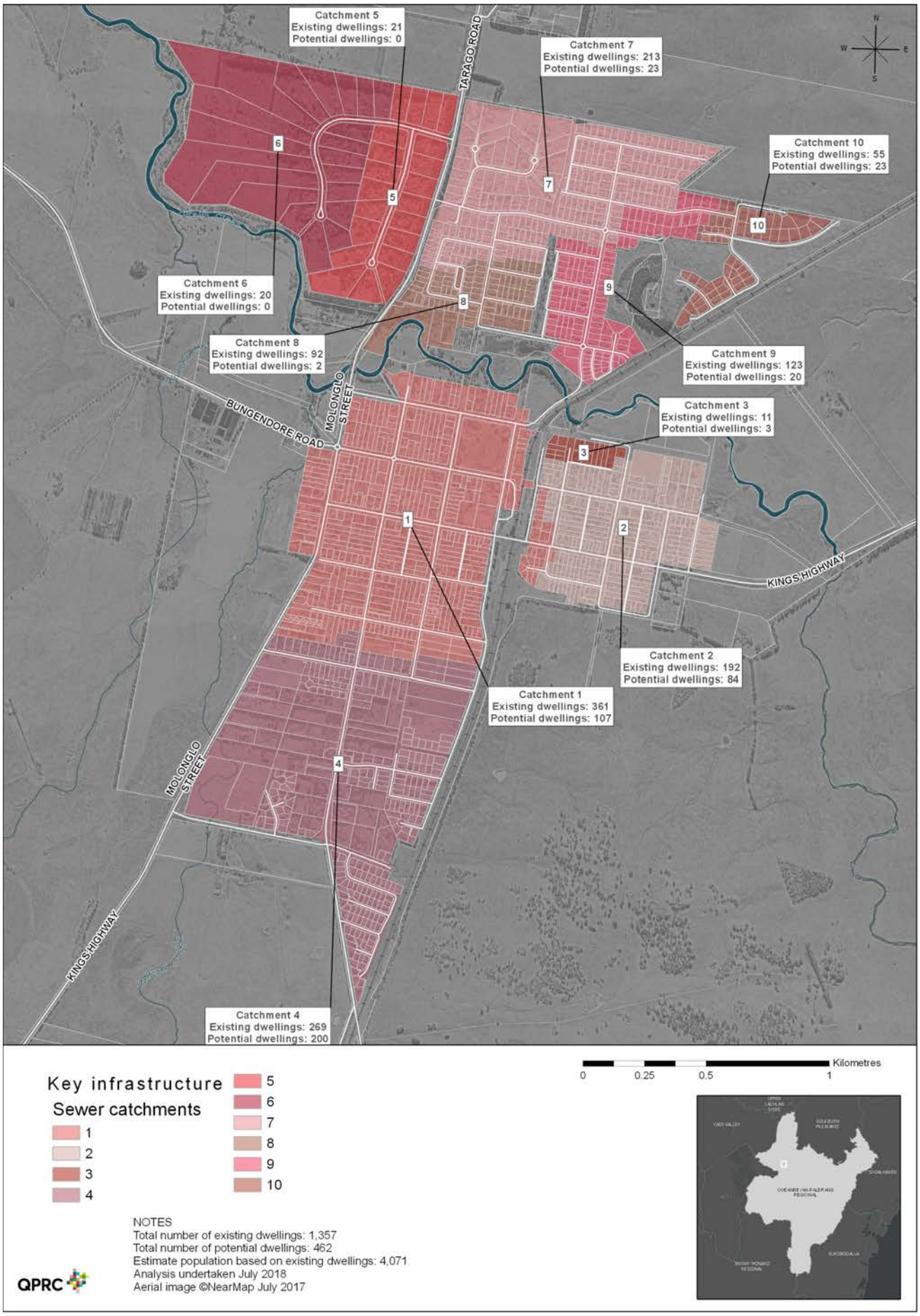
Appendix A - Discussion Paper Map 21 – Dwelling Audit

Discussion Paper Map 21 - Number of existing dwellings and subdivision potential for single dwellings, August 2018



Appendix B - Discussion Paper Dwellings Audit Method

Discussion Paper Appendix 2 – 2018 Existing Dwelling and Potential Dwellings Audit Method

The method used to determine the number of existing dwellings and potential number of single dwellings is outlined below:

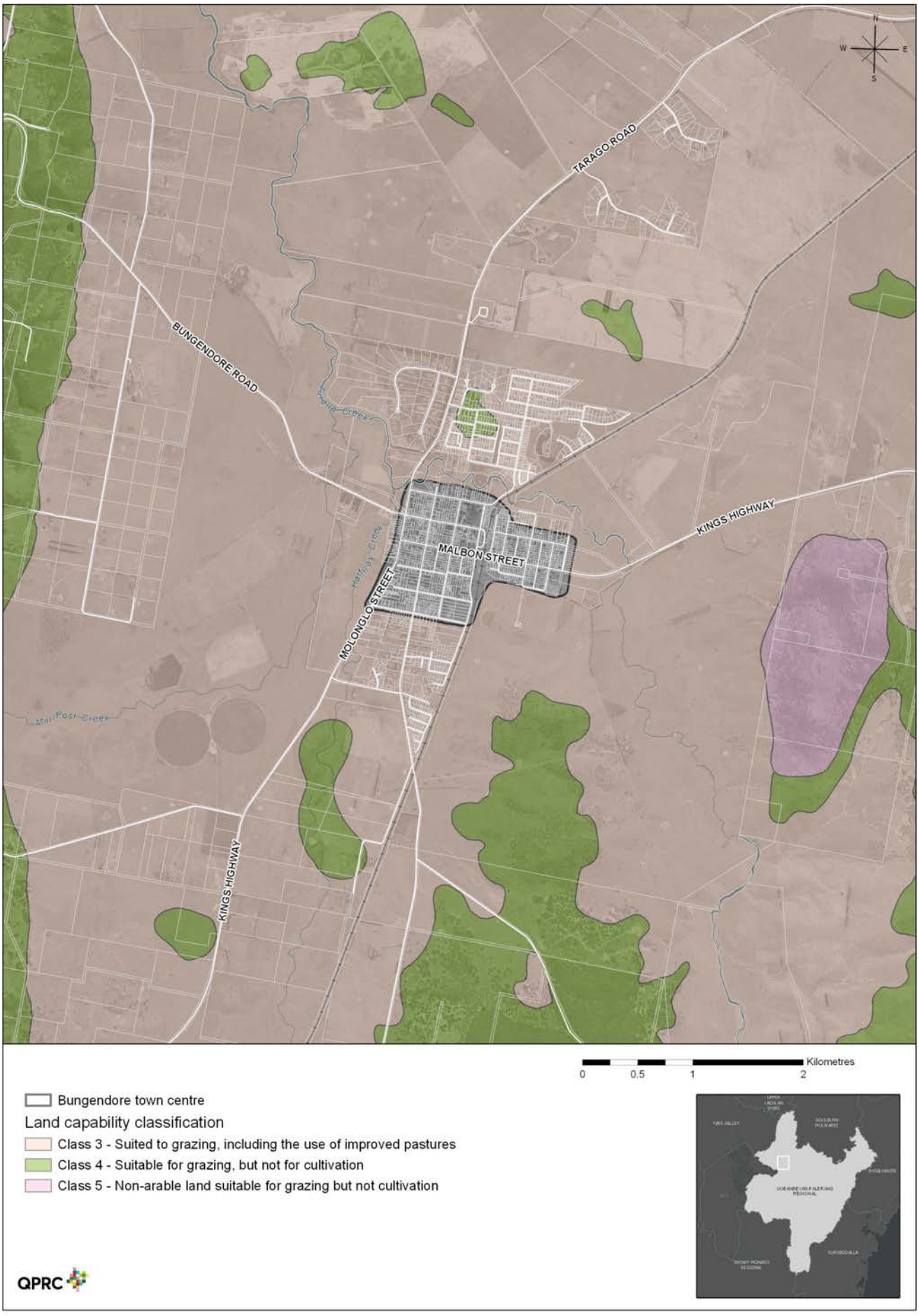
- The following GIS data was used; latest cadastre and PLEP data:
  - landuse zones, as of 21 July 2018
  - minimum lot size, as of 21 July 2018
  - flood planning, as of 21 July 2018
  - heritage items as of 21 July 2018
  - geolocated water meter data from 17 July 2018
- GIS data from water meters was used as a proxy for dwellings on a lot. Initially a one-to-one spatial join of water meters within lots was undertaken, with the number of water meters that are active being used to determine the number of dwellings
- data was then visually checked, and lots with a strata manually counted using Nearmaps imagery from 21 July 2018
- Empty lots were then verified by site inspection to account for recent development
- Spatial joins were done of lots to land use zones and minimum lot size
- An erase operation was then applied to the lots using the flood layer, thus leaving partial unaffected lots where a lot was not entirely affected by flood
- All lots not zoned R1,R2 or R5 zoned were deleted
- One lot, which was only partially within a minimum lot size zone, was cut at the boundary so as to only include the area with a minimum lot size zone in the analysis
- Lots within a heritage overlay were flagged and given a usable percentage based on the planners' expertise
- The final calculation used the formula floor(([area of lot]*[percent usable])/[minimum lot size]) – [number of houses on the lot] to arrive at the potential number of lots that could be created from each lot

Note

1. the number of dwellings counted by this method generally equates with the dwellings counted as part of the 2016 Population and Housing Census which used a different method

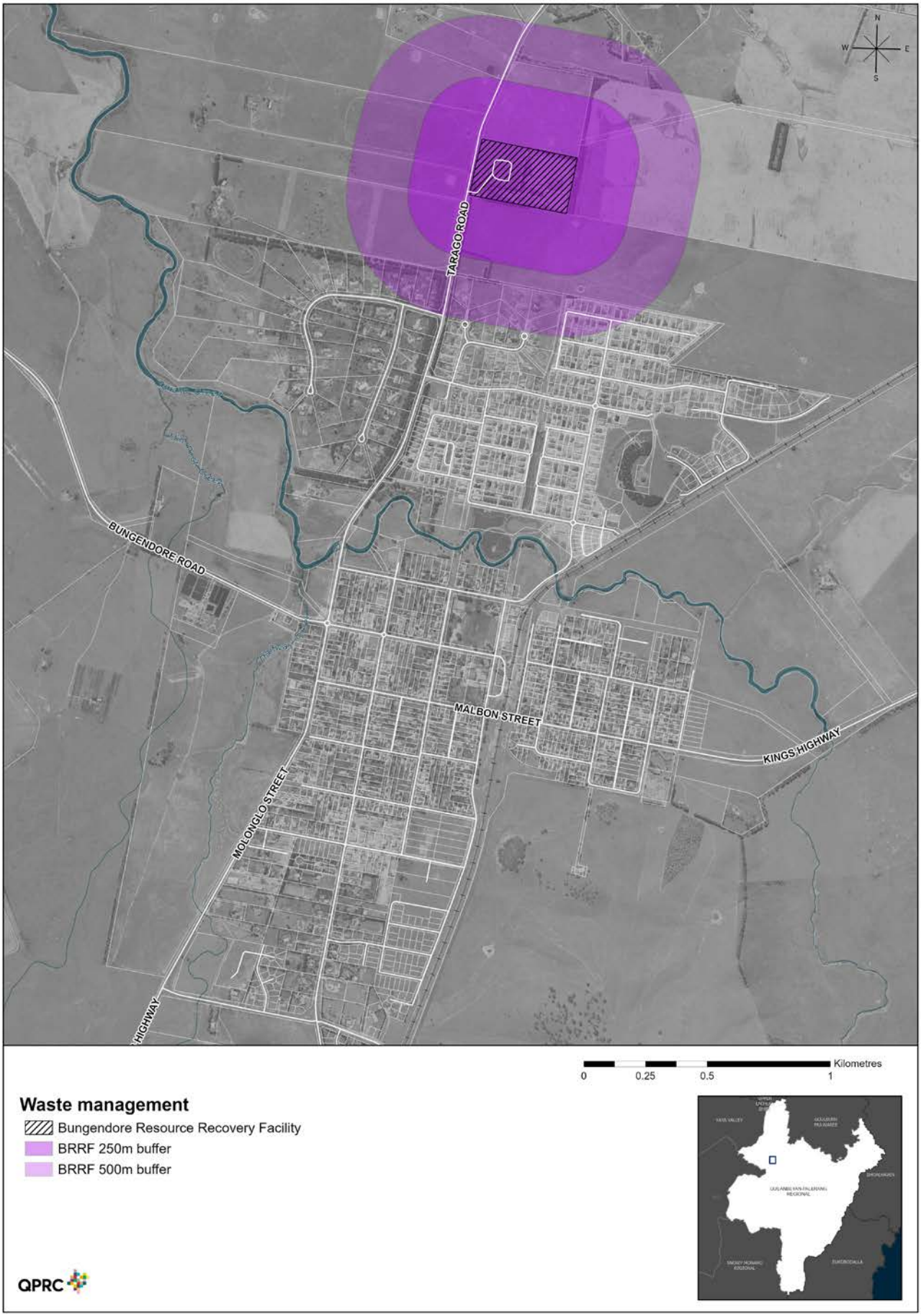
Appendix C - Discussion Paper Map 25 – Agricultural Classification

Discussion Paper Map 25 - Agricultural classification of the land surrounding Bungendore



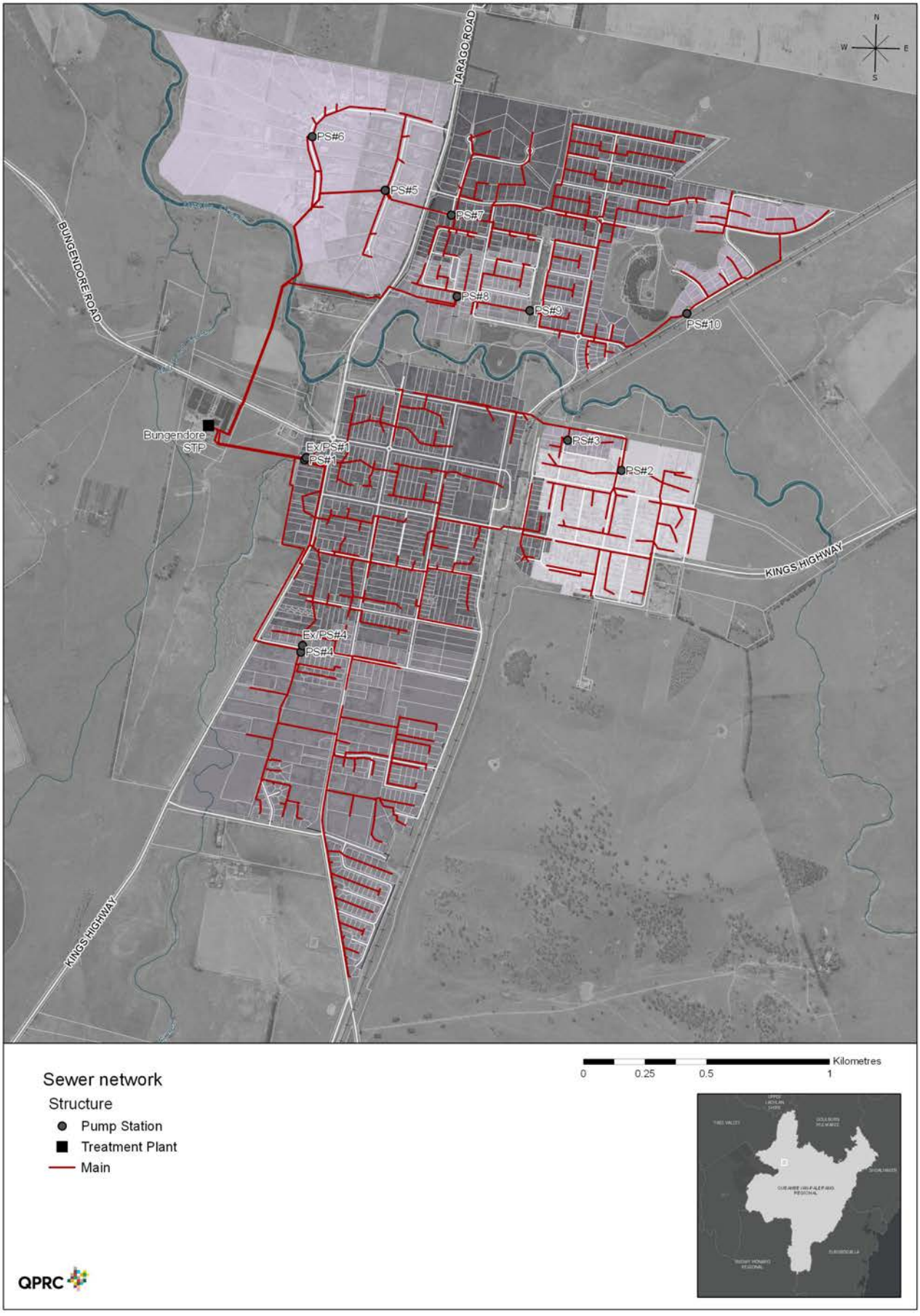
Appendix D - Discussion Paper Map 35 – Resource Recovery Facility

Adapted from Discussion Paper Map 35 - Location of the Bungendore Resource Recovery Facility



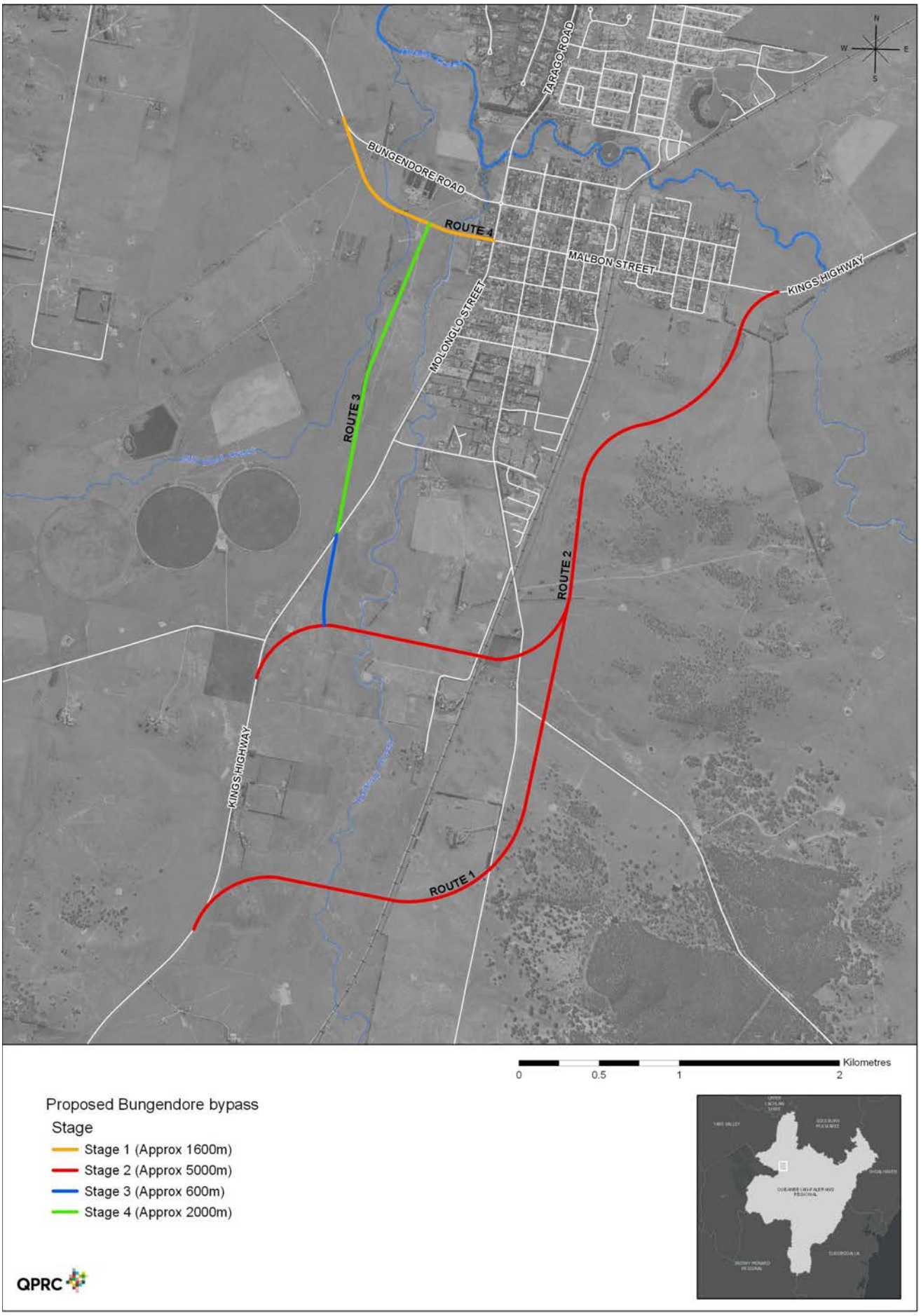
Appendix E - Discussion Paper Map 37 – Sewage Network

Discussion Paper Map 37 - Bungendore sewage network



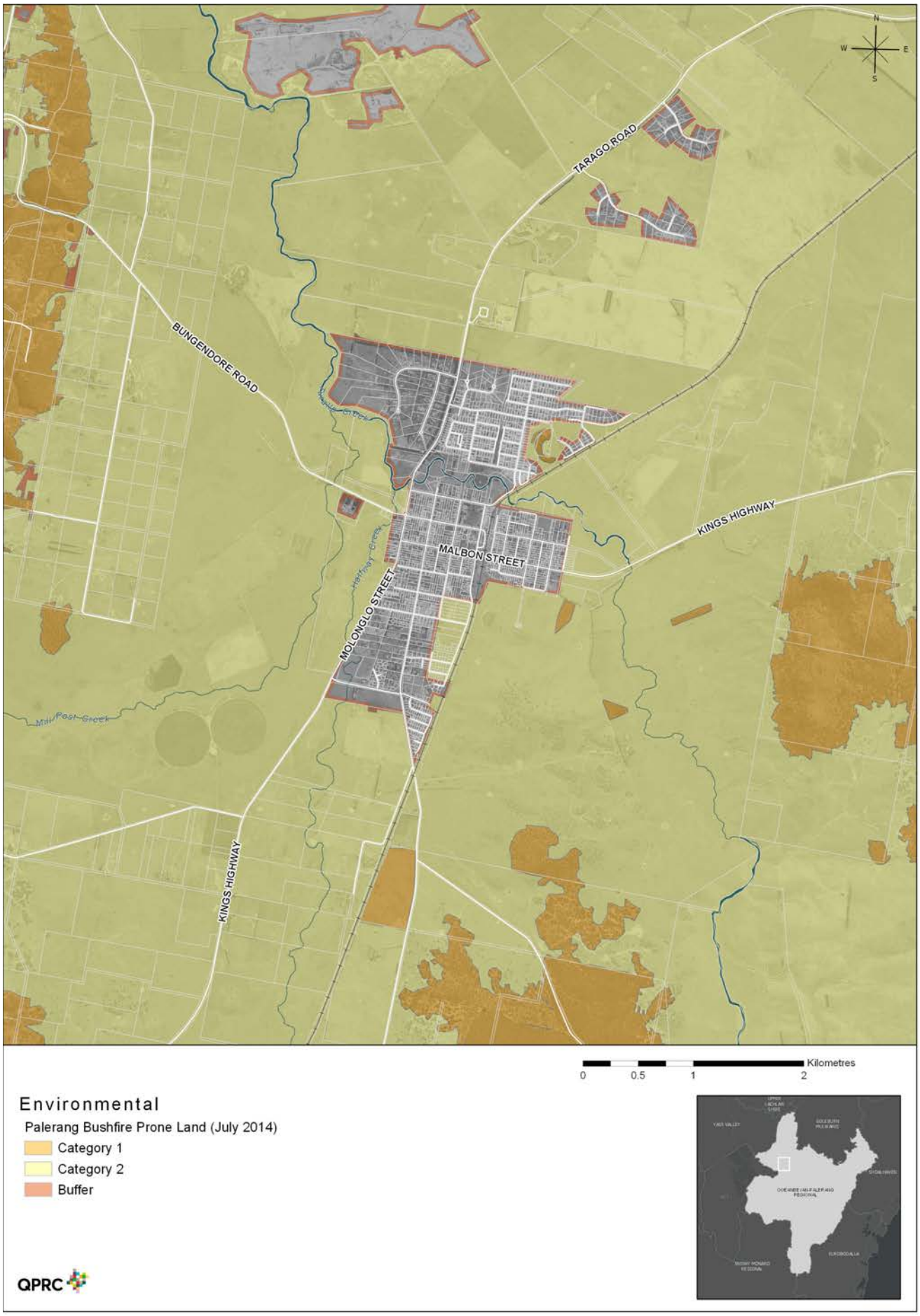
Appendix F - Discussion Paper Map 30 - Bypass

Discussion Paper Map 30 - Possible bypass routes



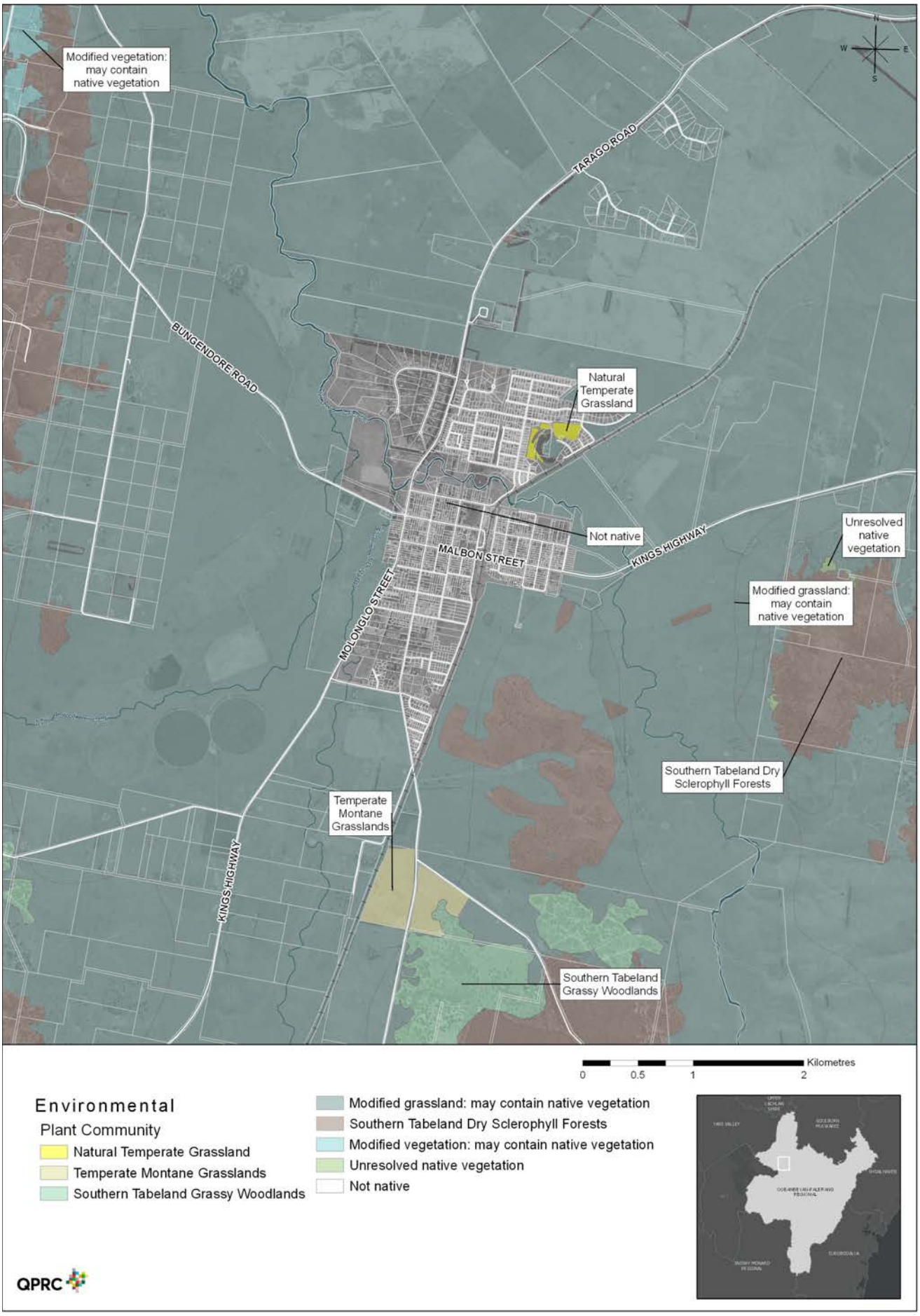
Appendix G - Discussion Paper Map 9 - Bushfire

Discussion Paper Map 9 - Bushfire prone land



Appendix H - Discussion Paper Map 8 – Native Vegetation

Discussion Paper Map 8 - Native vegetation type and contours



Appendix I - Discussion Paper Map 7 – High Environmental Value

Discussion Paper Map 7 - High Environmental Value Native Vegetation (NSW Office of Environment and Heritage)

Queanbeyan-Palerang Regional Council

Offices: Council headquarters - 256 Crawford St Queanbeyan
Bungendore Office - 10 Majara St Bungendore
Braidwood Office - 144 Wallace St Braidwood

Contact: Phone: 1300 735 025
Email: council@qprc.nsw.gov.au
Web: www.qprc.nsw.gov.au

QPRC