

**NORTHERN TERRITORY OF AUSTRALIA**  
**PROPOSAL TO AMEND NT PLANNING SCHEME**

**PA2022/0011**

**PROPOSAL TO AMEND THE NT PLANNING SCHEME 2020 TO INCLUDE THE HOLTZE  
TO ELIZABETH RIVER SUBREGIONAL LAND USE PLAN AS A POLICY DOCUMENT  
AND CONSEQUENTIAL UPDATES TO THE LITCHFIELD SUBREGIONAL LAND USE  
PLAN AND DARWIN REGIONAL LAND USE PLAN**

The Minister for Infrastructure Planning and Logistic is seeking comments on a proposal to amend the NT Planning Scheme.

The proposed amendment is to include the Holtze to Elizabeth River Subregional Land Use Plan within Part 2 of the NT Planning Scheme 2020. The Holtze to Elizabeth River Subregional Land Use Plan will introduce new statements of planning policy and accompanying text to guide the long term development of the subregion.

The Holtze to Elizabeth River Subregional Land Use Plan will supersede existing sections of the Litchfield Subregional Land Use Plan and the Darwin Regional Land Use Plan that will be removed and/or updated.

An explanation of the proposed changes can be found on page 3 of this document.

**Period of Exhibition and Lodging a Submission**

The exhibition period is from Friday 18 March 2022 to Friday 15 April 2022.

Written submissions about the proposed planning scheme amendment are to be received by 11:59pm on Friday 15 April, 2022 and made to:

Director Lands Planning  
Department of Infrastructure Planning and Logistics  
GPO Box 1680  
DARWIN NT 0801; or

Email: [planning.ntg@nt.gov.au](mailto:planning.ntg@nt.gov.au); or

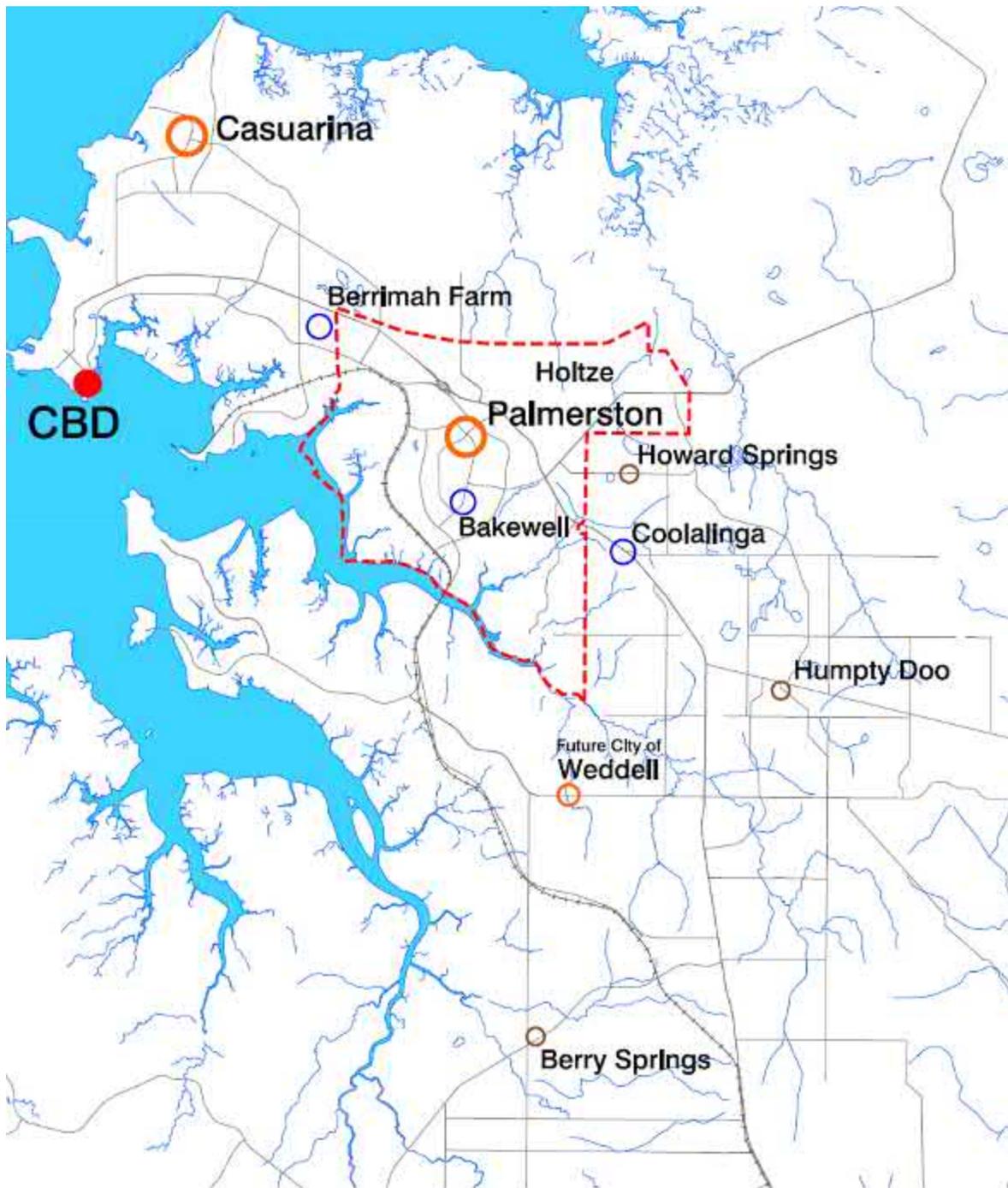
Online: <https://www.ntlis.nt.gov.au/planning/lta.dar.list>

Fax: (08) 8999 7189; or

Hand delivered to Level 1, Energy House, 18 - 20 Cavenagh Street, Darwin

For more information please John-Paul MacDonagh, Lands Planning on telephone 8999 6036 or email [john-paul.macdonagh@nt.gov.au](mailto:john-paul.macdonagh@nt.gov.au)

## Locality Map – Holtze to Elizabeth River Subregion



### Locality Plan

-  Study Area Boundary
-  Central Business District
-  Primary Activity Centre
-  Secondary Activity Centre
-  Rural Activity Centre



## **1. Background – Proposed Holtze to Elizabeth River Subregional Land Use Plan**

The Holtze to Elizabeth River Subregional Land Use Plan (HESLUP) is a long-term plan that identifies land to support growth and confirming strategic corridors for main roads, rail and utilities. The HESLUP refines the extent of the area shown in the Darwin Regional Land Use Plan for fully serviced residential development, including 'Kowandi North', the former Commonwealth Defence establishment. This land is close to existing transport and utility corridors as well as Palmerston CBD, Yarrowonga commercial area and the Palmerston Regional Hospital.

The HESLUP includes Statements of Planning Policy to guide the long-term growth of the subregion. A copy of the HESLUP document is provided at **Attachment A1**.

Extensive community and stakeholder consultation has been incorporated into the preparation of the HESLUP, informing a balanced approach that allows for change whilst preserving the valued character of the study area.

Preparation of the HESLUP included two stages of consultation with members of the public, government agencies and industry groups. Key issues raised by stakeholders during Stage Two consultation which have been considered and responded to within this version of the draft HESLUP include:

- Identification of 'Industry' over land between the Tivendale and Pinelands Industrial areas;
- Identification of 'Service Commercial' over land adjacent to Stuart Highway;
- Greater detail being provided in regard to existing environmental conditions and the inclusion of a topographical map;
- The recognition for a sensitive interface and transition of land uses between future development and existing rural Wallaby Holtze Road locality; and
- The refinement of the strategic movement network in regard to proposed alignments and intersections.

A copy of the Stage Two Consultation Report is provided at **Attachment A2** to this document.

## **2. Current Situation**

The Northern Territory Planning Commission has finalised the draft Holtze to Elizabeth River Subregional Land Use Plan in consultation with major stakeholders and the community and recommended that the Minister for Infrastructure Planning and Logistics consider a formal amendment to the NT Planning Scheme 2020 to include the HESLUP policy document.

## **3. Update to the Strategic Framework of the NT Planning Scheme**

Under the *Planning Act 1999*, a consent authority is to make decisions consistent with policies contained within Part 2 – Strategic Framework of the NT Planning Scheme. Inclusion of the HESLUP within Part 2 of the NT Planning Scheme 2020 therefore legally establishes its role as a policy and provides for its effective implementation.



NORTHERN TERRITORY  
**PLANNING  
COMMISSION**

Attachment A1



# **Holtze to Elizabeth River**

Strategic Corridors and Land Use Framework

**Subregional Land Use Plan 2022**

Version	Amendment No.	Date Published	Details
0.1		29.10.21	First draft of the plan for stage two consultation.
0.2		25.01.22	Draft following stage two consultation

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# Foreword



***Good planning is based on collaboration with the community on long-term objectives; on a region-wide approach; and using sound evidence that is open to scrutiny.***

The Northern Territory Planning Commission is pleased to present the draft Holtze to Elizabeth River Subregional Land Use Plan 2022 (HESLUP).

The HESLUP is a plan for the long-term, identifying and confirming strategic corridors for main roads, rail and utilities, and responding to the pattern of current and future land uses.

Average growth in this subregion is expected to continue at approximately 2.5% p.a. The purpose of the HESLUP is to prepare for change brought about by this predicted population growth.

This draft plan refines the extent of the area shown in the Darwin Regional Land Use Plan for fully serviced residential development, including 'Kowandi', the former Commonwealth Defence establishment. This land is close to existing transport and utility corridors as well as Palmerston CBD, Yarrowonga commercial area and the Palmerston Regional Hospital.

In drafting the HESLUP, it was necessary to consider land within the municipality of Palmerston and adjacent land in Litchfield as a single study area. However, this plan does not propose to change local government boundaries or local government rate systems as these are outside of the scope of this land use planning exercise. If there were proposals in the future to change either local government boundaries or rates, they would be subject to separate processes, guided by the relevant legislation.

This draft subregional plan incorporates feedback from the community on a wide range of issues received through the first two stages of consultation. The Planning Commission recognises and appreciates the time and effort taken by members of the community to get involved in helping to shape the future of their region.

The area encompassed by this draft Holtze to Elizabeth River Subregional Land Use Plan has one of the fastest growth rates in the Territory. In starting to develop this draft subregional plan, the key message we heard from the community was that open space has community, economic, and environmental value and must be retained. This plan has been developed so that the inevitable change this growth will bring is shaped around existing community assets – including protection of open space.

The Planning Commission responded to community feedback by ensuring the first draft of the plan identified that the remnant pine plantation, and some other areas of open space that had previously been considered for more intensive development, would be retained as open space for outdoor recreation and to provide corridors between important wildlife habitats. Importantly this plan recognises the need for sensitive transition of land uses between existing private landholdings and areas proposed for new development.

I am confident that, with this draft plan, we have achieved an appropriate balance in planning for the future of the Holtze to Elizabeth River Subregion.

Dr David Ritchie

Chairman

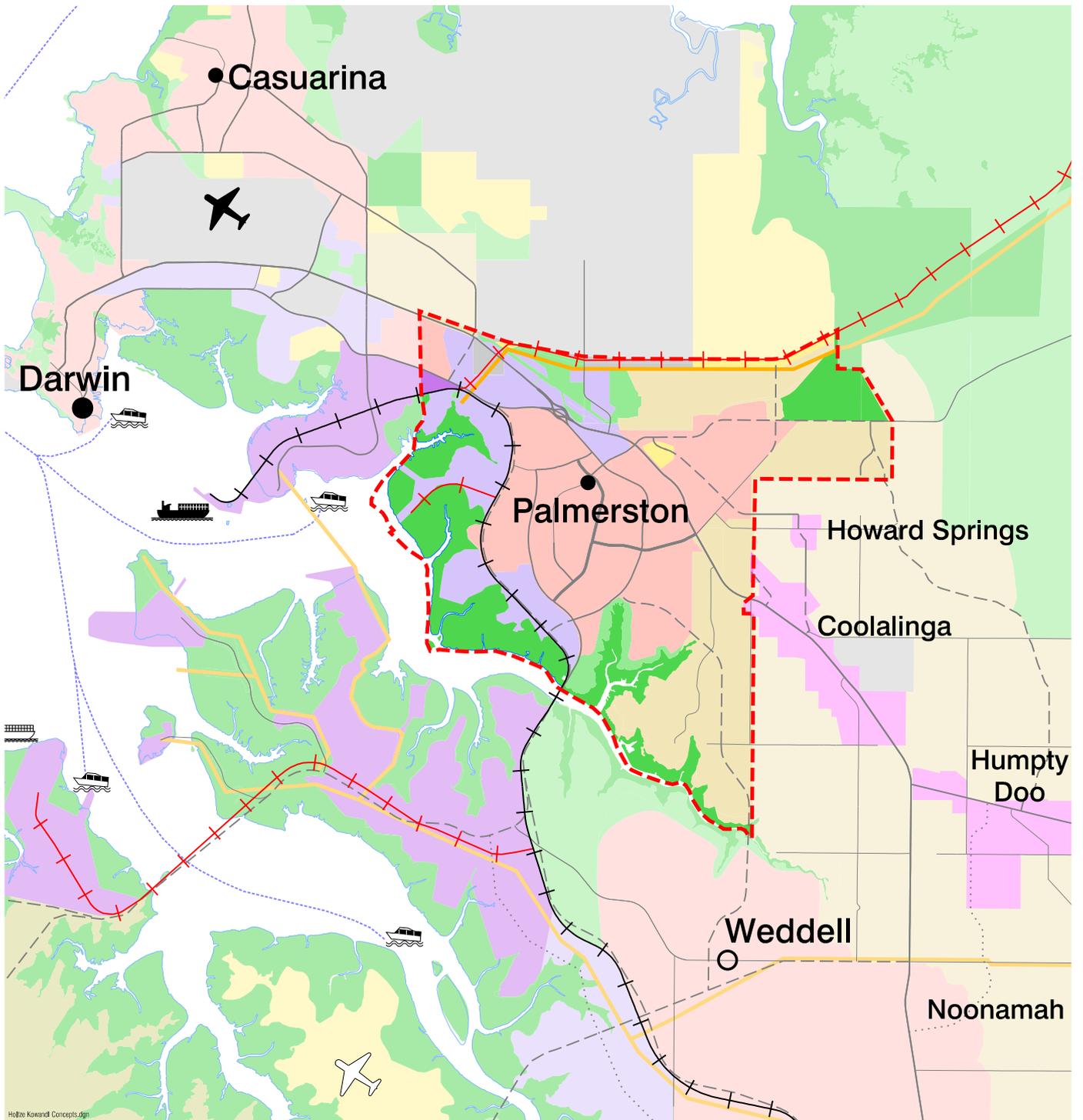
Northern Territory Planning Commission

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<b>Planning terms</b>	<b>Definitions</b>
<b>Active Transport</b>	Non-motorised transport, such as by foot, horse, or bicycle and the like.
<b>Activity Centre</b>	A compact commercial centre providing convenient retail, access to public transport and services to the surrounding community.
<b>Land Capability</b>	The ability of land to support different land uses, especially relating to natural constraints to land use such as slope, drainage and soil type.
<b>Peri-Urban Development</b>	Primarily residential development at the transition between urban and rural areas, also known as semi-rural.
<b>Planning Proposal</b>	A proposal to use or develop land, such as a subdivision application; or to change planning policy, such as a rezoning application.
<b>Seasonally Waterlogged Soils</b>	Soils that, during the wet season, become waterlogged and unsuitable for some land uses, especially urban residential.
<b>Social Infrastructure</b>	Schools, community centres, parks, recreation facilities, health, childcare etc. supporting the needs of a community.
<b>Trunk Infrastructure</b>	The ‘big’ pipes, wires and installations that enable reticulated services, such as power, water and sewerage.
<b>Urban Development</b>	Single and multiple dwellings, supported by social infrastructure that accommodates people living in a town environment.



Holtze Kowand Concepts.jpg

**LEGEND**

- |                           |   |                                    |
|---------------------------|---|------------------------------------|
| Study Area Boundary       | Rural Activity Centre                     | Existing / Planned Ferry Terminal  |
| Urban / Peri-Urban        | Grazing / Agriculture                     | Existing / Planned Regional Centre |
| Rural Lifestyle           | Utility Corridor                          |                                    |
| Community / Government    | Existing / Planned Railway                |                                    |
| Open Space / Natural Area | Existing / Planned Ferry Route            |                                    |
| Mangrove / Conservation   | Existing / Planned Arterial Road Corridor |                                    |
| Industry                  | Existing / Planned Collector Road         |                                    |
| Strategic Industry        | Existing / Planned Airport                |                                    |
| Commonwealth              | Existing / Planned Sea Port               |                                    |

**Land Use Structure**

Figure 1: Land Use Structure Plan as per the Darwin Regional Land Use Plan 2015 overlaid by the Holtze to Elizabeth River Subregional Land Use Plan study area

# Part 1: Context and Purpose

## Introduction

The Planning Commission has developed this subregional land use plan over an area around Palmerston that extends into Litchfield. This extent, over two local government areas, allows for the convergence of strategic corridors to be addressed under one land use plan.

The boundary of the Holtze to Elizabeth River Subregional Land Use Plan (HESLUP) in relation to the regional land use structure is shown at Figure 1. The boundary in relation to local government areas is shown at Figure 3.

The HESLUP is informed by the Darwin Regional Land Use Plan but provides more detailed definition of the strategic road, rail and utility corridors, and more informed guidance for future areas of land use. The HESLUP interfaces with the Litchfield Subregional Land Use Plan.

Approximate time frames used in this plan are:

- near term - within ten years
- mid term - ten to thirty years
- far term - beyond thirty years

## Regulatory context of land use plans

The *Planning Act 1999* establishes the NT Planning Commission with functions that include carrying out community consultation before preparing strategic plans for the Minister for Infrastructure, Planning and Logistics to consider as proposals to amend the NT Planning Scheme.

The Planning Commission conducted the first stage of community and stakeholder consultation, before preparing a first draft of this subregional plan for feedback on the draft plan from the community and stakeholders.

Stage Two feedback further informed the draft HESLUP.

The HESLUP is intended for inclusion in the Planning Scheme's strategic framework as a subregional land use plan for the environs of Palmerston and part of Litchfield, providing a far term view with greater focus than the Darwin Regional Land Use Plan.

The Planning Scheme's *strategic framework* has a hierarchy of land use plans shown at Figure 2 below. The regional plan provides the overarching structure which guides subregional planning, that in turn informs preparation of more detailed area plans.

Within the boundary of this subregional plan, uses and development of land that require impact assessment will need to accord with the relevant concepts and policy in this document; or, if the land is subject to an area plan, accord with that more detailed level of the strategic framework.

## What is a Subregional Land Use Plan

Subregional plans contain concepts, principles and objectives to give decision makers, industry, and the community confidence regarding the future changes to, and the long-term pattern of land use to accommodate growth.



Figure 2: The Hierarchy of Land Use Plans

The HESLUP provides a far-term framework for future land use that:

- responds to stakeholder and community input comment and is informed by population, transport and infrastructure studies;
- respects the amenity of established localities while enhancing connectivity and services; and
- identifies opportunities to protect or feature areas of environmental, cultural and recreation value, in balance with areas for growth.

This subregional plan will guide planning for infrastructure to support population growth; and the included concepts will provide a starting point for the Planning Commission to engage the community in developing area plans.

### **The study area for the Holtze to Elizabeth River Subregional Land Use Plan**

The outer boundary of the study area for the HESLUP is shown at Figures 1 and 3.

The study area includes focus areas as well as adjacent areas of influence that are outside the study area but have a strategic implication for the study area. The focus areas, and areas of influence, are discussed further in Part Three of this document.

The four focus areas are:

- The 'Greater 11 Mile' locality, which includes Pinelands into Holtze, and the proposed site for relocation of the Passenger Rail terminal;
- The 'Greater Holtze' locality which includes 'Kowandi' Commonwealth land and Government land in Howard Springs;
- Archer and Mitchell West; and
- Virginia South West.

### **Local Government Boundaries**

A far term view of a land use structure for growth relies on identifying and confirming the strategic corridors for road, rail and utilities. These corridors extend across the subregion and cross different local government areas.

The extent of the Holtze to Elizabeth River Subregional Land Use Plan was established to clearly show the convergence of strategic corridors around Palmerston and into Litchfield. Consequently, parts of the municipalities of both

Palmerston and Litchfield Councils are subject to this subregional plan, as shown at Figure 3.

It is important to note that creating a plan for the subregion does not change Local Government boundaries or Local Government rates processes as these are both entirely separate processes to the land use planning process.

### **The content of this Subregional Plan**

This Subregional Plan has three parts.

**Part 1** explains the role and legislative context of subregional plans, as well as describing the extent and context of the subject area.

**Part 2** presents planning themes central to understanding land use within the subregion.

The natural environment, demography, corridors for transport and utilities, and social infrastructure are overviewed. Planning principles and objectives relevant to each theme are included in blue boxes as shown below.

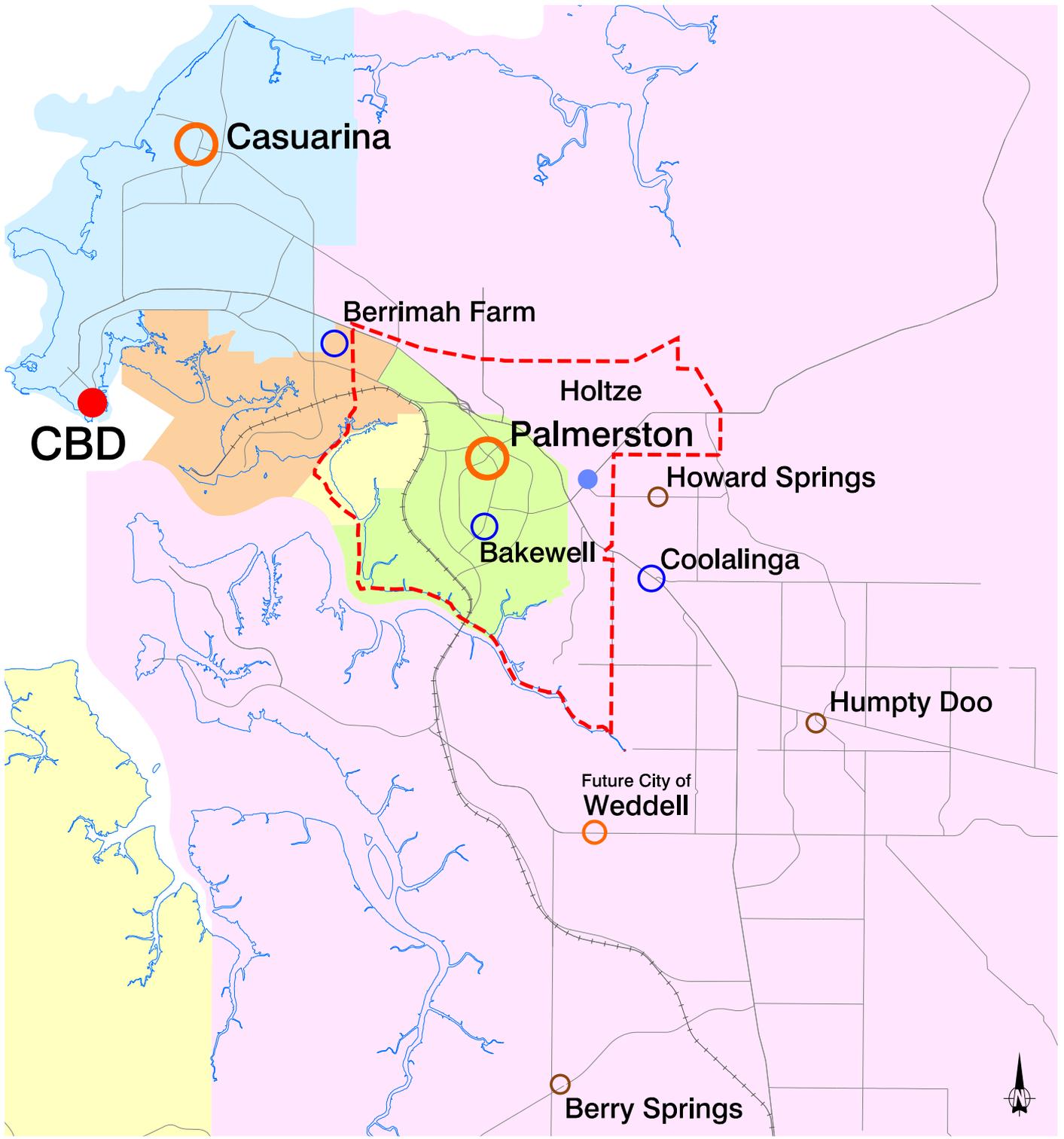
#### **00. Planning principle (a statement of policy).**

- an objective that supports the above planning principle; and further objectives

The policy presented in this plan may relate directly to the use and development of land, or may refer to further investigation being necessary to inform future land use and development.

**Part 3** looks at particular focus areas which are likely to experience changes in land use over time. Some locations within the focus areas require further investigation to inform the future land use structure and policy. Issues associated with the focus areas are addressed and followed by relevant planning principles and supporting objectives.

Planning principles and supporting objectives identify issues to be addressed where relevant to particular planning proposals.



Proposed PoSLUP & Palmerston LGA Ext - May 2021.dgn

**LEGEND**

- Central Business District
  - Primary Activity Centre
  - Secondary Activity Centre
  - Specialised Centre
  - Rural Activity Centre
- Study Area Boundary
  - Un-Incorporated Area
  - Northern Territory Rates Act Area
- Litchfield Municipality
  - Darwin Municipality & Waterfront Precinct
  - Palmerston Municipality

Figure 3: Extent of the Subregional Plan in relation to the local government areas

# Part 2: Land Use Structure

## Introduction

The natural environment informs this Plan. Land form and natural drainage are presented along with areas of environmental value. The intent is to retain a network of corridors and habitats to support biodiversity across the Greater Darwin region.

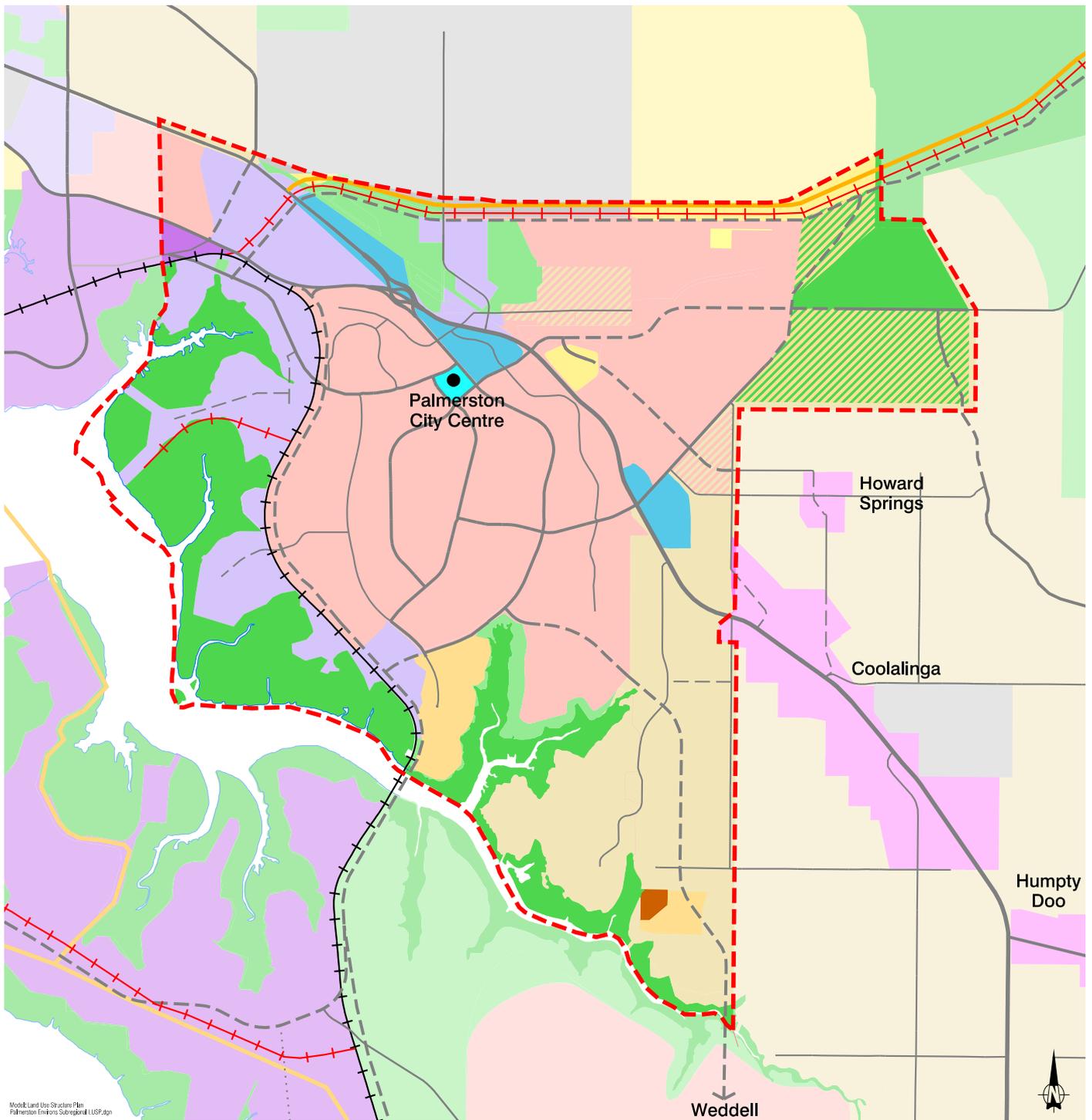
The built environment, especially the strategic corridors for movement and transport is also an essential element of this Plan. Main roads, railways, cycleways, as well as corridors for trunk utilities and product pipelines, combine to form a framework that defines areas of land use.

Land use changes must respond to growth and the demand for housing, community facilities and commercial premises and consider the natural environment. As the opportunities to service land for growth are identified, so the need to extend social infrastructure apace with growth can be assessed, along with the demand for expanded utility networks to service new development areas.

The study area for this subregional plan is shown at Figure 4. The focus of the subregional plan is land along the north of Palmerston into Litchfield; and land along the south of Palmerston into Litchfield.



Figure 4: Subregional boundary identifying focus areas



Multi-Land Use Structure Plan  
Palmerston Empress Subregional LUSP.dgn

**LEGEND**

- |                             |   |   |
|-----------------------------|---|---|
| Study Area Boundary         | Strategic Industry                                      | Howard Springs North Investigation Area                 |
| Urban / Peri Urban          | Commonwealth  | Utility Corridor  |
| Far Term Urban / Peri-Urban | Rural Activity Centre                                   | Coastline   |
| Rural Lifestyle             | Central Business  | Existing / Planned Railway                              |
| Community / Government      | Service Commercial                                      | Existing / Planned Arterial Road and Transport Corridor |
| Open Space / Natural Area   | Further Investigation Area                              | Existing / Planned Collector Road                       |
| Mangrove / Conservation     | Retained Section of Historic Surveyed Virginia Township | Existing Regional Centre                                |
| Industry                    |   |   |

Figure 5: Draft Subregional Land Use Structure Plan - Holtze to Elizabeth River

# The Natural Environment

## Land Form and Natural Features

The landscape of this subregion features drainage catchments that flow from the higher land of central Palmerston - either north to Shoal Bay, or south into Darwin harbour. The seven catchments are identified on the plan at Figure 6 and broadly described below.

## Drainage Catchments of the Study Area

Catchments A and B are headwaters of Kings Creek, which drains north to Shoal Bay. Catchment A is notable for its large seasonally waterlogged area with ephemeral wetlands - fed by Knuckey Lagoon in major flood events. Infrastructure development proposed in this catchment will need to address significant stormwater management issues. Catchment B has some seasonally waterlogged areas, but also has large upland areas with the potential for future urban uses.

Catchment C, a headwater of the Howard River, is fed by the Wadhams and Dutchies Lagoons and flows northward alongside the Howard Springs Nature Park into Howard Creek. Land uses in this catchment include established rural living areas and over 300 hectares of pine forest plantation.

Catchment D is Mitchell Creek, and Catchment E is Brooking Creek. Both creeks drain via Elizabeth River into Darwin Harbour. The seasonal wetlands north of Stuart Highway that feed Mitchell Creek are retained by the Holtze Urban Area Plan. Mitchell Creek flows through Palmerston's eastern suburbs and receives stormwater discharge from urban drainage systems. Brooking Creek also sources from north of the Highway but flows through areas of natural bush and rural living.

Catchments F and G drain directly and via Hudson Creek into the East Arm of Darwin Harbour. The tidal mangrove fringe and associated slow draining lowlands characterises both catchments. These catchments are constrained by seasonal waterlogging and exposure to storm surge.

All of these catchments discharge into receiving environments and eventually, the marine environment. All future development must recognise and respond to any potential impact on the natural drainage system and, where identified, the sensitivity of the receiving environment.

## 01. Avoid detrimental impacts on hydrological flows.

- area planning and planning proposals recognise the natural drainage regime and minimise impact on the hydrological flow regime; and
- the discharge of concentrated stormwater does not exceed pre-development flows or have detrimental impacts on the receiving environment.

## Natural Constraints

Associated with this landscape and the tropical climate are natural constraints to land use, such as flooding and exposure to biting insects.

Riverine flooding, especially in the northern catchments, is a potential constraint to the extent of new residential areas. Detailed planning for the focus areas of this subregional plan may need to include hydrological studies to model flood exposure. Future area plans informed by this work may need to include flood mapping and flood management strategies.

## 02. Identify the extent of riverine flooding.

- area plans and planning proposals are informed by modelling and mapping of exposure to riverine flooding.

Biting insects can be a significant constraint to residential land use. Areas of the lower southern catchments are exposed to biting midges which limit urban residential and community land uses.

The northern catchments experience seasonal exposure to saltmarsh and fresh-water mosquitoes. Future urban development in these areas will rely on an effective mosquito management program.

## 03. Mitigate the impact of biting insects on public health and residential amenity.

- area plans and planning proposals limit residential development within areas of higher exposure to biting insects; consider options for the provision of separation buffers and/or transition of land uses, and management responses; and
- proper regard is given to the Department of Health's advice on the mitigation of biting insects.

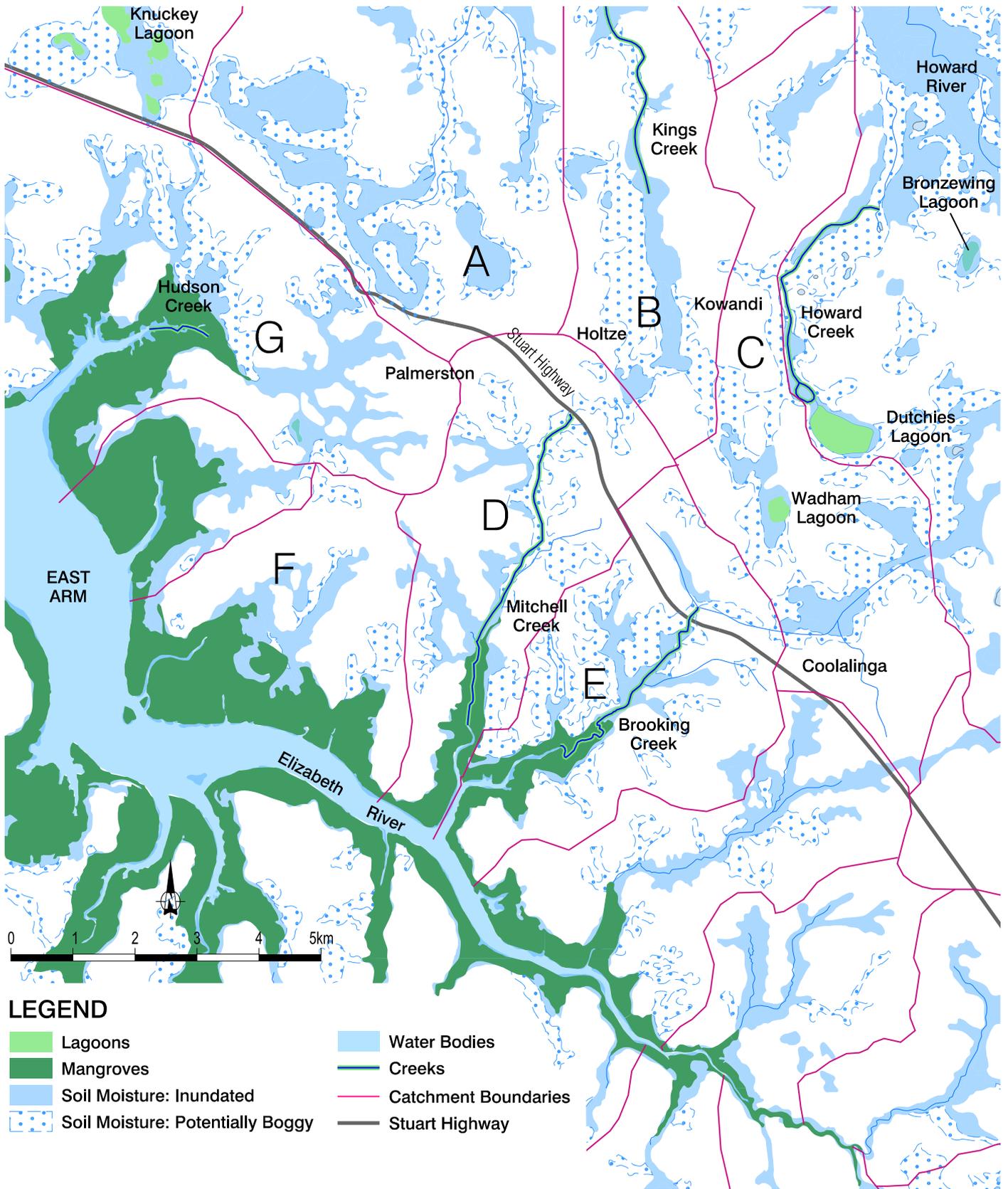


Figure 6: Holtze to Elizabeth River Catchment Map

## Areas of Environmental Value

Areas of natural environment are identified on Figure 7.

In the northern catchments, these corridors include riparian vegetation, sandsheet heath and habitat of identified threatened species. Habitats of threatened species are also present within woodland areas. These and other areas of natural value, require further consideration as part of a Regional Conservation Strategy.

The mangrove fringe and inlets of the southern catchments are largely protected by the CN (Conservation) zoning of the harbour's perimeter.

### 04. Identify areas with significant environmental value and minimise impacts on those areas.

- area planning and planning proposals respond to areas with significant environmental value and minimise impacts on those areas.

## Threatened Species

Habitats of threatened flora and fauna are known to occur throughout the subregion.

Likely and confirmed habitats of threatened species, such as the black-footed tree-rat and *Typhonium praetermissum* (a perennial herb), are identified in parts of the higher, otherwise unconstrained land. The habitat requirements of threatened species will need to be considered as part of a Regional Conservation Strategy.

Wildlife corridors and/or offset areas linking retained areas of suitable habitat will assist threatened species. A Regional Conservation Strategy that considers the protection of threatened species will be needed prior to land development. The identified areas will require ongoing management to retain their values.

### 05. Manage the conservation of identified habitats of threatened species.

- habitats of significant value are identified and retained to support conservation of threatened species; and
- areas identified to be protected are managed to avoid habitat degradation.

## Green Network

As well as areas identified for their particular environmental significance such as the habitats of native flora and fauna or in recognition of amenity or shared environment potential, it is important

to retain a network of green corridors to enable the movement of wildlife across the region. This important objective can be achieved through a green network based around natural drainage systems including riparian corridors, lagoons and wetlands.

### 06. Identify, retain and improve corridors of natural value to form a green network.

- area planning and planning proposals respond to areas with significant environmental value and minimise impacts on those areas;
- area plans and planning proposals respond to land capability assessment and opportunities to network corridors of native vegetation with appropriate amenity;
- areas where existing vegetation can be retained are identified;
- areas that can be improved with additional native vegetation are identified;
- area plans identify opportunities to locate suitable land uses such as schools public open space and/or community purpose sites adjacent to the green network; and
- area plans identify the purpose of the 'green corridors' with consideration of elements of conservation and natural areas, drainage and amenity.

## Land Capability

### Groundwater and Water Supply

Future urban land uses proposed by this subregional plan require the provision of full urban services, including reticulated town water.

The future urban areas will not draw from groundwater. Hydrological knowledge of the aquifers should inform future urban development, especially regarding large impervious areas and channelised stormwater systems, which have the potential to reduce wet season recharge of groundwater.

Any proposed areas of rural residential would need to be contingent upon connection to reticulated water and must consider the potential impact on groundwater from on-site effluent disposal.

### 07. Facilitate efficient use of capable land.

- provide a land use structure that enables the highest and best use of well-situated capable land; and
- ensure that more detailed area planning responds to the opportunities of capable land in convenient locations.

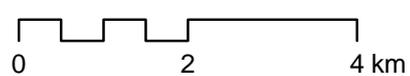
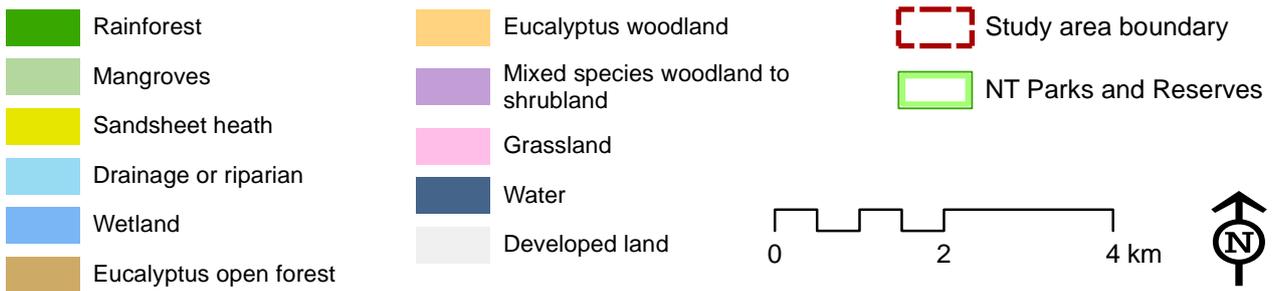
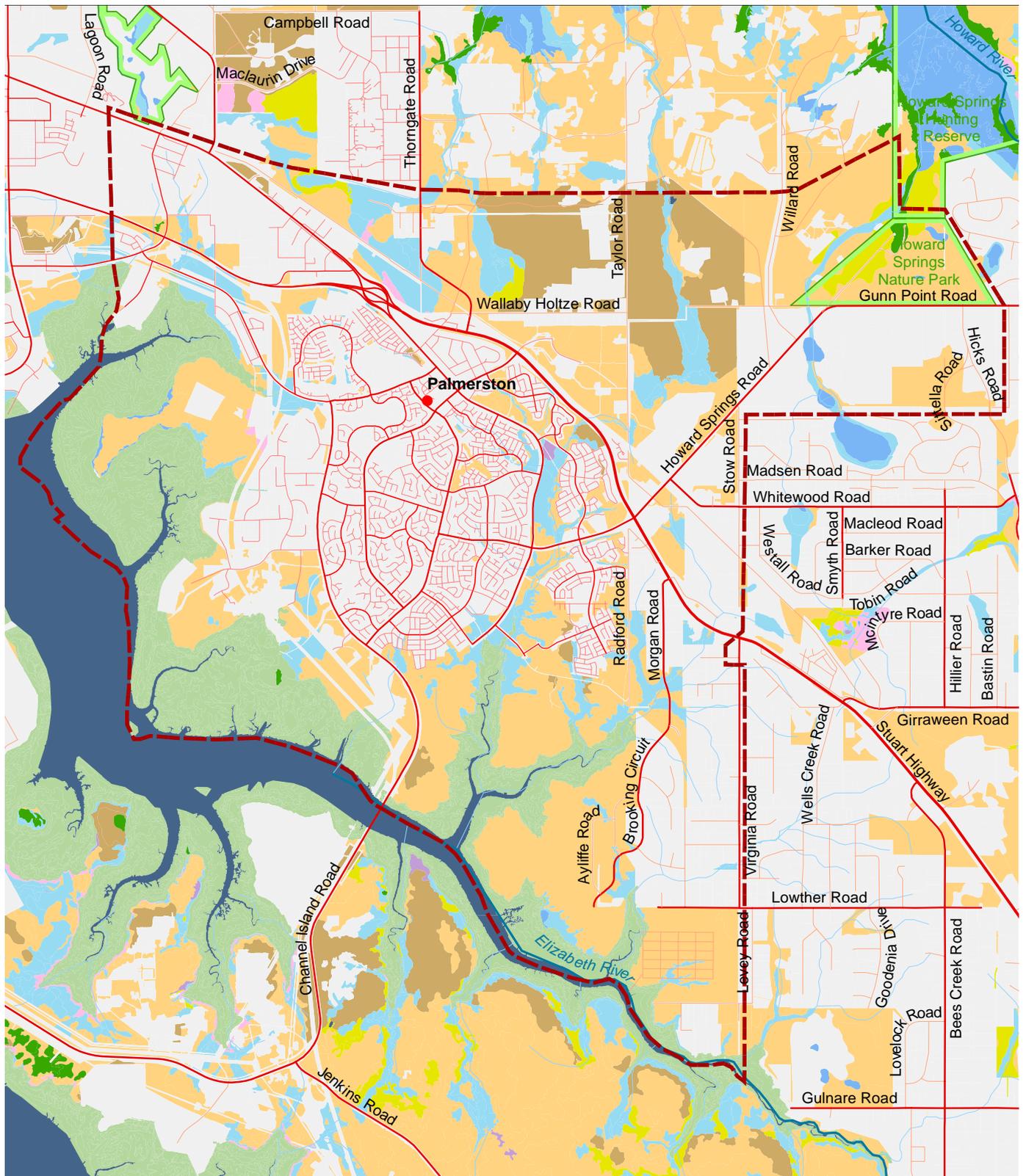


Figure 7: The Green Network Map

Land for urban residential development should be free from flooding and not require costly engineering for roads or construction of underground services.

Based on an understanding of the physical capability of the land and proximity to existing infrastructure and amenities, possible future land uses include:

- urban residential and associated community facilities;
- rural living and rural land uses;
- industrial and commercial uses; and
- open space for conservation, passive recreation and field sports etc.

Land with very few constraints is sought for urban residential development. Rural land uses are less sensitive to constraints such as moderate waterlogging and exposure to biting insects. Similarly, industrial and commercial land uses are less sensitive to these constraints.

Land subject to severe seasonal waterlogging or within a floodway has limited uses other than as open space for passive or active recreation.

#### **08. Manage land use change and future development to minimise adverse impacts on groundwater.**

- area planning and future development extends the reticulated water network to minimise demand on groundwater;
- loss of groundwater quality through contamination is avoided; and
- loss of groundwater recharge by impervious areas and channelised stormwater systems is minimised.

#### **Impact of Industry on Land Capability**

Conflicting land uses can restrict capable land.

Within this subregional plan there is existing industrial land and potential areas for expansion of industry or alternately a 'refocusing' of industrial activities.

There is a need for adequate separation distance between industrial and sensitive land uses. NTEPA guidelines suggest separation distances for various industrial activities.

Typical buffers of 500 to 1000m can significantly limit the residential development of potential otherwise capable land.

#### **09. Provide for adequate separation between sensitive land uses and industrial land.**

- area plans and planning proposals are in accord with NTEPA guidelines - *Recommended Land Use Separation Distances*.

## **Growth and Demand**

### **Population and Housing**

Providing for population growth in areas close to social infrastructure and facilities is complex in the Darwin region. The peninsular location and natural constraints, such as flooding and exposure to biting insects, tend to constrict urban residential development into an inefficient linear rather than concentric settlement pattern.

The amenities and facilities of Palmerston have capacity to support additional population, if new areas of land close to Palmerston and suitable for urban development can be identified and serviced.

### **Land Supply to Meet Demand**

An ongoing priority for the NT Government is to plan for the continued supply of serviced land to meet demand, especially for dwelling lots.

For the Darwin region there is currently a twenty year strategy to supply serviced land to meet the near to medium term housing demand.

This subregional plan supports land release by confirming future urban areas in Holtze around the Palmerston Regional Hospital, and in the Holtze, and Kowandi areas.

The preparation of the Greater Holtze Area Plan is discussed further within Section 3.

#### **10. Develop area plans commensurate with NT Government's land release strategy.**

- detailed area planning supports:
  - the efficient release of capable residential land; and
  - housing choice in locations with good access to social infrastructure.

### **Supply of Non-Residential Land**

The study area includes or abuts significant areas of commercial and industrial land. East Arm, Berrimah, Tivendale Road, Pinelands, and Yarrowonga together offer a broad range of industrial and areas of service commercial land. Palmerston CBD has capacity for higher end commercial development.

The current over supply of commercial floor space in Palmerston will be absorbed in the near term, however planned expansions of existing commercial development will maintain an oversupply into the mid-term.

Residential growth in the Berrimah and Holtze areas will generate demand for commercial land in local centres to support convenience retail, and service commercial land in locations that will benefit from passing trade.

In the medium term, the Greater Holtze area will support approximately 6000m<sup>2</sup> of retail floor space in a secondary commercial centre, and in the far term this could grow to 19 000m<sup>2</sup>.

More detailed area planning will be needed to determine the location and configuration of a future secondary activity centre and additional local centres to meet future demand.

#### **11. Provide new urban areas with adequate non-residential land to meet demand.**

- detailed area planning provides for the:
  - allocation of sufficient commercial land in secondary and/or local activity centres to accommodate convenience retail and community services;
  - identification of appropriate locations for non-residential land uses such as office and service commercial; and
  - identification of appropriate locations for community purpose land.  
(refer to planning principle 15)

## **Movement and Transport**

The Stuart Highway, Tiger Brennan Drive and the corridors for future arterial roads, connect Darwin and its port to the region and beyond. The regional main roads converge and pass Palmerston to the north and south. These are identified on the transport plan at Figure 8.

Government maintains a Regional Transport Network model to guide the continued development of the regional arterial network. To remain consistent with transport modelling and transport design solutions, this subregional plan will need to be reviewed from time to time.

The extension of Linco Road to Howard Springs Road was identified within the 2015 Holtze Urban Area Plan and has been retained within this Subregional Plan.

Proposed upgrades to the regional transport network such as the Linco Road extension and

the extension of Stow Road to Stuart Highway and Smyth Road extension to Girraween Road are intended to promote an interconnected local road and shared transport network.

There will be a continued reliance upon the arterial network i.e. Stuart Highway for direct, high speed transport between areas not suited to local road connections.

#### **12. Provide a coordinated, efficient and interconnected transport network.**

- the permeability and connectivity of development areas is enabled through connections to the arterial network;
- the safety and efficiency of the arterial network is supported by managing the number and location of intersections and access points in accordance with the Darwin Regional Transport Plan;
- a bus interchange is co-located with an activity centre that is easily accessible with intermodal facilities including, but not limited to, a park and ride area(s);
- all new major road infrastructure includes provision for pedestrians and cyclists; and
- an interconnected local road and active transport network is promoted.

#### **Connection to Gunn Point Peninsula**

Main road access to Gunn Point Peninsula will continue to be via Gunn Point Road in the near to mid-term and will include the extension of Gunn Point Road as shown at Figure 8. The construction of Gunn Point Road as a sub-arterial road will support intersections that enable movements to and from future urban residential areas of Kowandi and Holtze North. In addition, Howard Springs Road is identified for upgrading as a main road connection to Gunn Point Road.

The Glyde Arterial Road is identified beside the rail and utility corridor – refer Figure 8.

The Glyde Arterial will accommodate significant traffic movements between existing urban areas and Murrumujuk / Glyde Point.

Similar to the early stages of Weddell, the early stages of Murrumujuk Township are anticipated to require frequent trips to and from established urban areas for goods and services. The volume of these is expected to decrease over time as the township develops and local provision of goods and services increases.

## Palmerston to Weddell

### The Weddell Freeway

The Weddell Arterial Corridor for the future Weddell Freeway extends from Tiger Brennan Drive, through Archer and across Elizabeth River Bridge, to the future town of Weddell. This corridor is preserved for the primary arterial connection between Weddell and Darwin City. Its alignment and connection with Palmerston are addressed further under the Archer/Mitchell West focus area in Part 3.

### The North-South Weddell Connector

The North-South Connector is a zoned arterial corridor from Roystonea Avenue via Bertram Road across Virginia. A bridge is proposed to cross the Elizabeth River near Bennetts Creek, thus providing a direct main road connection from Palmerston to Weddell. The corridor alignment through Virginia is discussed under the Virginia South-West focus area in Part 3.

East-west local road connections south of the Stuart Highway within Virginia, Coolalinga and Freds Pass are generally limited. This limitation may result in concentrations of traffic on local roads, such as Lowther Road. This subregional plan recognises the opportunity for improvements to the east-west local road network that may have larger benefits to the overall locality.

### Potential Rail Network Expansion

A corridor is identified for the future provision of a rail link between East Arm and a potential deep water port and associated industry at Glyde Point. The corridor is secured and zoned for all but a short section within the 11 Mile locality.

Further investigation is required to confirm the future need for rail extension and to review the preferred alignment so that adjacent road and land use responses can be progressed.

The relocation of the Darwin Passenger Rail Terminal to an Intermodal Passenger Hub will be informed by progress of the Potential Rail Network Expansion investigation.

## 13. Identify and protect strategic corridors for transport and infrastructure.

- existing strategic corridors are protected;
- land in identified corridors acquired and rezoned as necessary;
- the allocation of road reserve space considers all transport modes;
- demand and potential for public transport priority on the arterial and sub arterial road network including intersections and freeway entry/exit lanes is investigated; and
- development meets the requirements of service authorities responsible for the strategic corridors.

### Transit Network

The Holtze to Elizabeth River subregion accommodates a nexus of transport and transit routes which are expected to increase in the future. The subregion is in close proximity to existing areas of Litchfield and also the future Weddell and Murrumujuk Townships.

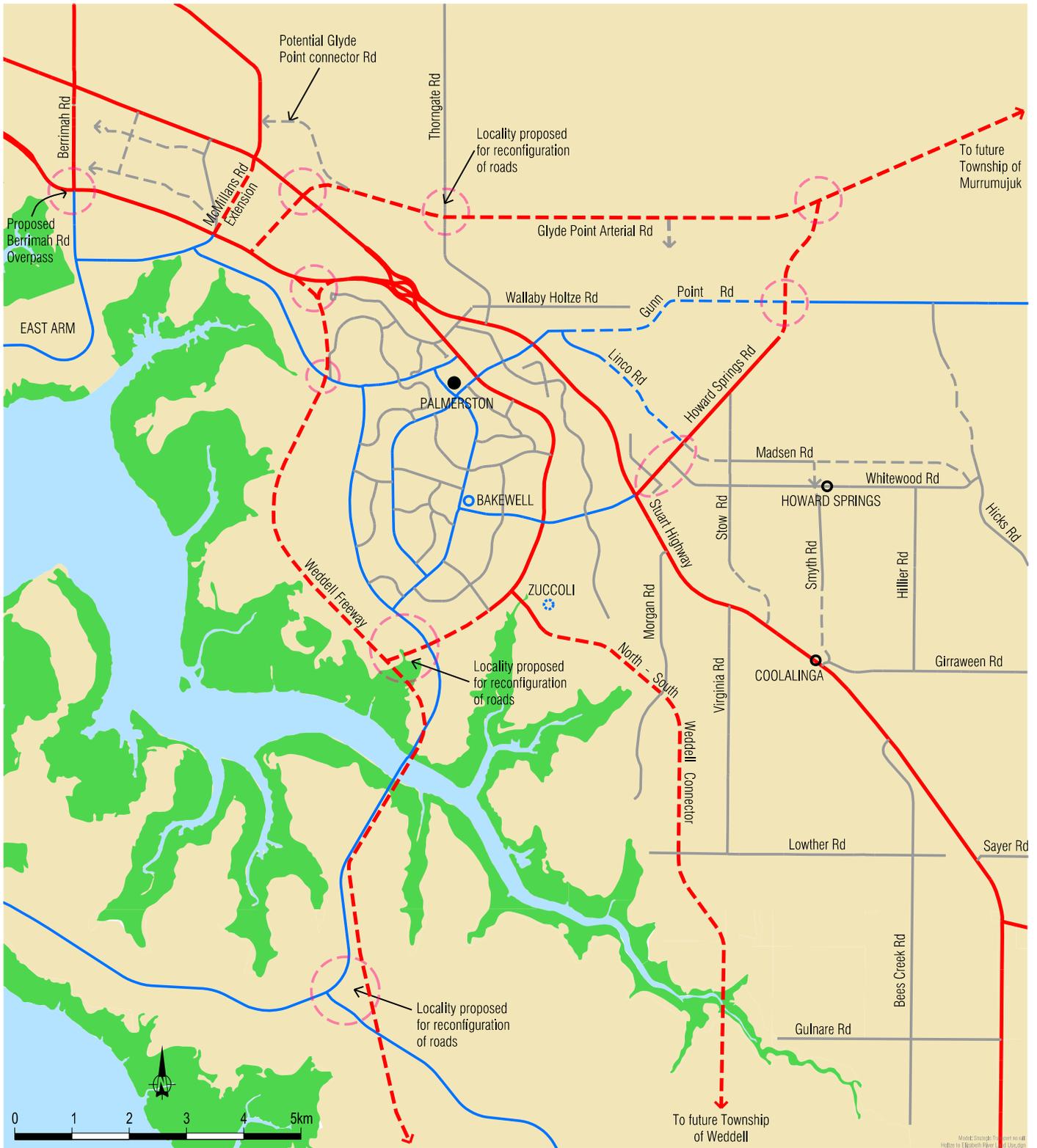
Transit corridors/Rapid Transit routes will need to be investigated and planned to support land use planning objectives. These objectives recognise that frequent, reliable and comfortable public transport can support: livable neighborhoods; vibrant mixed use activity centres; and economic development through the efficient connection of workforces to workplaces.

The Darwin Regional Land Use Plan highlights that the demand for public transport is likely to grow in the Darwin region. This is expected to increase the viability of introducing new modes and/or patterns of public transport in the mid to far term. This could include potentially bus rapid transit and light rail, along established bus routes.

It will be important to identify and plan for future rapid transit. The identification and preservation of transit corridors is recognised for the importance that an efficient transit network has to a growing city. There is also the opportunity to prioritise transit within shared movement corridors via prioritised signalised intersections and/or dedicated bus lanes/connections.

A Rapid Transit Corridor has been identified within this subregional plan extending from Palmerston City Centre to Darwin via Tiger Brennan Drive.

Opportunities for Rapid Transit routes are identified in Figure 9. These may be further considered at a future time and may require dedicated corridors.



**LEGEND**

- Secondary Activity Centre
- ⊗ Proposed Secondary Activity Centre
- Rural Activity Centre
- Existing / Planned Arterial Road
- Existing / Planned Sub-Arterial Road
- Existing / Planned Road
- ⊗ Locality for future new or reconfigured intersection and potential grade separation

Figure 8: The Strategic Transport Network Map

## **Integrating Transport and Land Use**

Land use and transport are fundamentally linked and this subregional plan responds to the Darwin Regional Transport Plan. The subregional plan identifies where growth in population, jobs and other key elements of urban structure can be anticipated. The Transport Plan responds by highlighting key transport routes and corridors which will serve the expected land use pattern.

The land use structure facilitates development which may support frequent public transport and shorter trips achievable by cycling and walking.

The identification of centralised transit routes through development areas will assist in the detailed design of subdivisions to accommodate a local road network that supports bus services.

Increased densities are appropriate in proximity to local bus routes to increase the population in proximity to transit services. Rear-loaded residential lots serviced by laneways may be suitable along bus routes in recognition that bus stops and layover areas may conflict with access to front-loaded, narrow lots.

The establishment and early stages of development of the Weddell and Murrummujuk townships will rely on the provision of higher order goods and services within established areas and good private and public transport connections to existing centres and employment generators.

It is likely that park and ride facilities will need to be co-located with activity centres. These Park and Ride facilities may then, upon sufficient demand for developable land in proximity to activity centres, be converted to more intensive land uses and built forms.

## **Social Infrastructure**

Social infrastructure contributes to healthy and sustainable communities, providing facilities for health, education, culture, sport and recreation. This subregional plan has a primary focus on subregional and regional level infrastructure. The identified demand for social infrastructure will also inform more detailed area planning.

The Holtze to Elizabeth River Regional Social Infrastructure Assessment was completed for this Plan and is discussed in the supporting Land Capability and Needs Assessment document.

## **Existing Regional Social Infrastructure Provision**

The subregion enjoys a high provision of regional health services, community health and social support centres, community centres, and non-government middle and senior level schools.

The subregion is identified as already having generous open spaces, and the proposed 'green network' will deliver additional open space, especially natural environment for passive enjoyment.

The subregion is identified as having insufficient aged care facilities, art and cultural facilities, with some aspects of sporting facilities present.

## **Future Social Infrastructure Provisions**

The current demographic profile of the subregion is expected to continue into the future and therefore a similar demand on social infrastructure can be expected.

Best practice trends across Australia suggest movement towards the establishment of community hubs and multi-purpose facilities with fewer but better, more centrally located facilities.

Locating social infrastructure adjacent to and within mixed-use centres allows people to combine trips to the facility with other activities.

Future demand for social infrastructure is expected to be highest in 'greenfield' and infill developments. Accordingly, Greater Holtze and Central Palmerston are recognised as key locations for future social infrastructure facilities in the subregion. Locating future social infrastructure within Central Palmerston will also contribute to its role and sustainability as a regional business and activity centre.

## **Other Influences on Social Infrastructure Provision**

Some existing regional social facilities are an influence on the needs of this subregion, including the range and high standard of sports infrastructure at Marrara, the equestrian and sports facilities at Freds Pass Reserve, and the capacity and high standard of secondary government schooling facilities at Taminmin College in Humpty Doo.

Some planned facilities, such as the upgrade to the Palmerston aquatic facility meet anticipated demands.

Informal social and recreational activities can indicate a community demand for those



**LEGEND**

- |   |                                 |  |
|---|---------------------------------|--|
| Potential Interstate Passenger Railway Terminal/ Rapid Transit Terminal | Railway Corridor                | Potential Rapid Transit (Weddell)  |
| Secondary Activity Centre   | Existing Railway                | Potential Rapid Transit (Weddell)  |
| Proposed Secondary Activity Centre                                      | Potential Ferry Terminal        | Potential Rapid Transit (Murrumujuk)   |
| Rural Activity Centre   | Existing / Planned Roads        | Potential Rapid Transit (Murrumujuk) to be further considered in preparation of Greater Holtze Area Plan |
|   | Existing Rapid Transit Corridor |  |

Figure 9: Transit Rail and Ferry Plan

activities. The Howard Springs remnant pine forest, is an area that has been informally adopted by the public for recreational activities suggesting a need and opportunity to formalise active recreation in the subregion.

The remnant pine forest locality may also provide a potential location to co-locate other future recreation facilities including equestrian sports, adventure tourism activities, and organised sports.

The warm tropical climate of the region can influence the appeal and practicality of utilising outdoor recreational facilities during daytime hours. Provision of lighting to some outdoor recreational facilities enables use during cooler evening times and may contribute to higher levels of facility utilisation and sports participation rates within the community.

Figure 10 shows the existing social infrastructure considered at the regional level.

#### **14. Ensure that land use and development address any shortfall and future needs in social infrastructure relevant to the location.**

- area plans and development proposals in this subregion are informed by and respond to the *Holtze to Elizabeth River Regional Social Infrastructure Assessment* by identifying well-located and suitable land for:
  - an additional community health and social support facility;
  - additional aged care facilities;
  - an additional community / civic centre facility;
  - additional youth centre / services facilities;
  - additional art and cultural facilities;
  - an additional central library;
  - additional open space, grassed and hard court sporting areas and recreation facilities;
- additional government and non-government secondary schools. future social infrastructure provision considers the co-location of facilities, access to the arterial road network, appropriate access to the public and active transport network, the provision of lighting to outdoor facilities, and the potential impact of social infrastructure on other areas of the community; and
- facilitate future social infrastructure close to new population fronts within central Palmerston and / or Howard Springs North areas.

## **Trunk Services and Utilities**

The extension of trunk reticulated services will enable the land use opportunities of this Plan. This subregional plan supports the sequential and cost-effective provision of infrastructure to assist with the coordination of design, development and funding for required infrastructure upgrades.

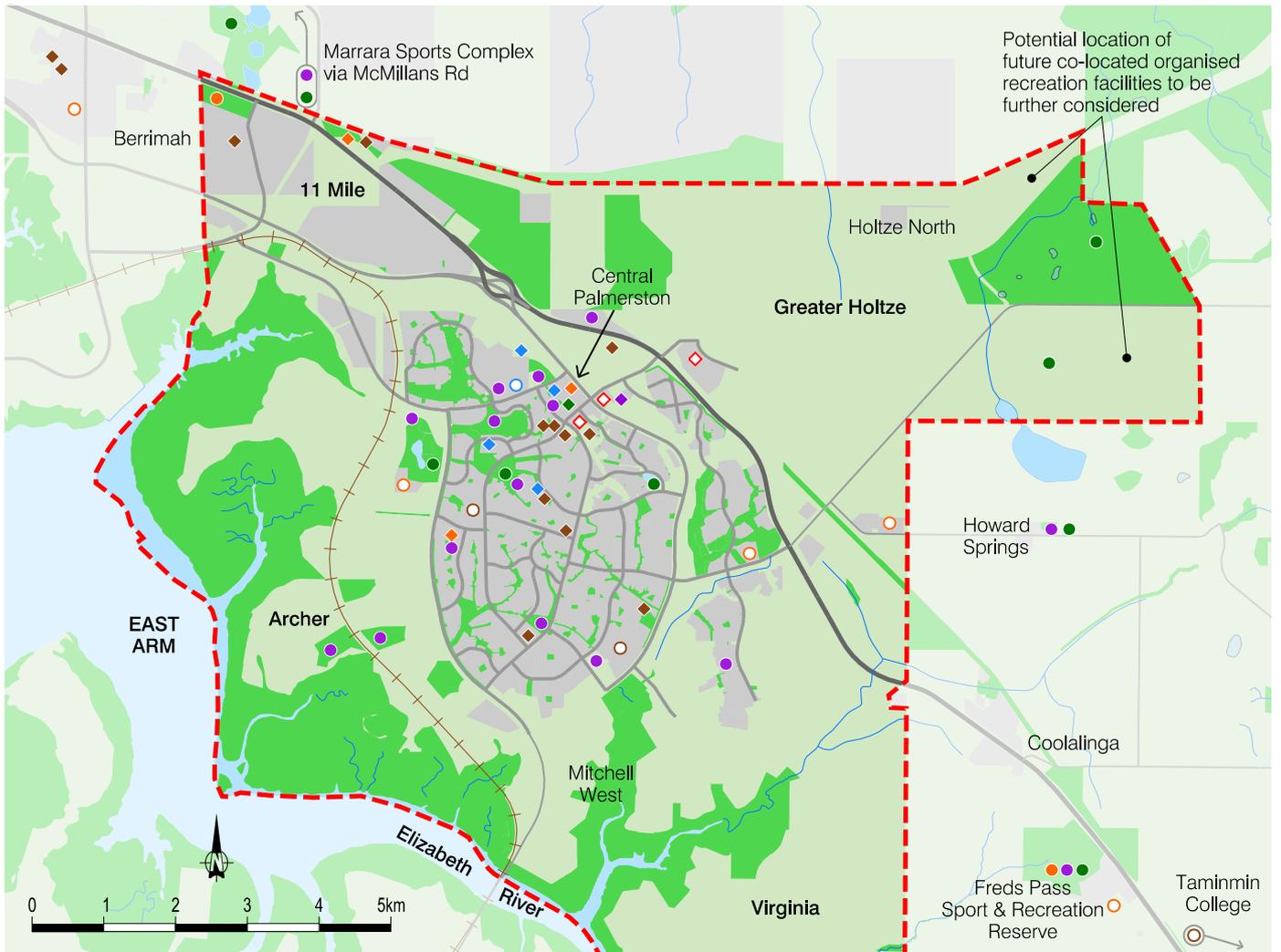
Infrastructure planning at the subregional level supports the delivery of services over time. This subregional plan promotes integrated provision of land use, transport, and infrastructure.

This subregional plan also supports planning for growth as a sequential and staged response to growth and demand for serviced land.

To support the rational provision of infrastructure, the following policy calls for a Trunk Infrastructure Plan for the 'greenfield' focus areas. For future area planning, infrastructure contribution schemes will be required, at least for the private land holdings identified for change.

#### **15. Support the timely and cost efficient provision of enabling trunk infrastructure and utilities.**

- a Trunk Infrastructure Plan is consistent with this subregional plan and with the requirements of utility agencies;
- area plans prepared under this subregional plan are consistent with the Trunk Infrastructure Plan;
- an infrastructure contribution plan is prepared in conjunction with the development of an area plan; and
- future development of the subregional land release areas is informed by an area plan and the Trunk Infrastructure Plan.



### LEGEND

- |                            |  |  |
|----------------------------|--|--|
| Study Area Boundary        | Existing Regional Health Facility              | Existing Government Secondary School       |
| Developed Areas            | Existing Assisted Living Aged Care             | Existing Non-Government Secondary School   |
| Conservation/Natural Areas | Existing Regional Community/Civic Centre       | Existing Tertiary Education Campus         |
| Water Bodies               | Existing Regional Youth Services               | Existing Organised Sports Facility/Complex |
| All Other Land             | Existing Regional Central Library              | Existing Major Equestrian Facility         |
| Roads                      | Existing Regional Health/Social Support Centre | Existing Regional Park/Open Space          |

Work - Social Infrastructure  
Notes to Elizabeth River Land Use Plan

Figure 10: Social Infrastructure Map

# Part 3: Focus Areas

The four focus areas that comprise this plan are each in turn subject to direct and indirect influences from adjacent areas. These are shown on Figure 12 as "areas of influence". These adjoining areas of influence are likely to drive land use change over time and interdependencies between land uses in these areas can be of strategic importance.

External influences will cause change in the four focus areas - the 'Greater 11 Mile', 'Greater Holtze', Virginia South-West and Archer and Mitchell West. The focus areas and adjacent areas of influence are shown at Figure 12.

The 'Greater 11 Mile' focus area will be influenced by the alignment of transport and utility corridors and future land use changes such as relocation of the passenger rail terminal and residential development in Tivendale Road.

The 'Greater Holtze' focus area has both the potential to accommodate growth adjacent to Palmerston and provide significant natural areas of environmental value.

The Palmerston Regional Hospital is a driver for land use change. This facility has established demand for adjacent ancillary medical and support services including accommodation for health workers. Complementary land development in the vicinity of the regional hospital will shape the nature and density of neighboring urban development.

The 'Greater 11 Mile' and 'Greater Holtze' focus areas are close to the primary destinations and facilities of central Palmerston – see Figure 11 below. This proximity and convenient access to amenities and employment will also precipitate land use change.

The **Archer and Mitchell West** focus area is structured around utility and transport corridors, and land use is limited by natural constraints. Strategic industry on Middle Arm may influence future land uses in the south of this focus area.

The **Virginia South-West** focus area is not identified as an area for change, but the future main road connection to Weddell will have an impact.

## 16. Ensure that future planning of focus areas responds to all potential areas of influence.

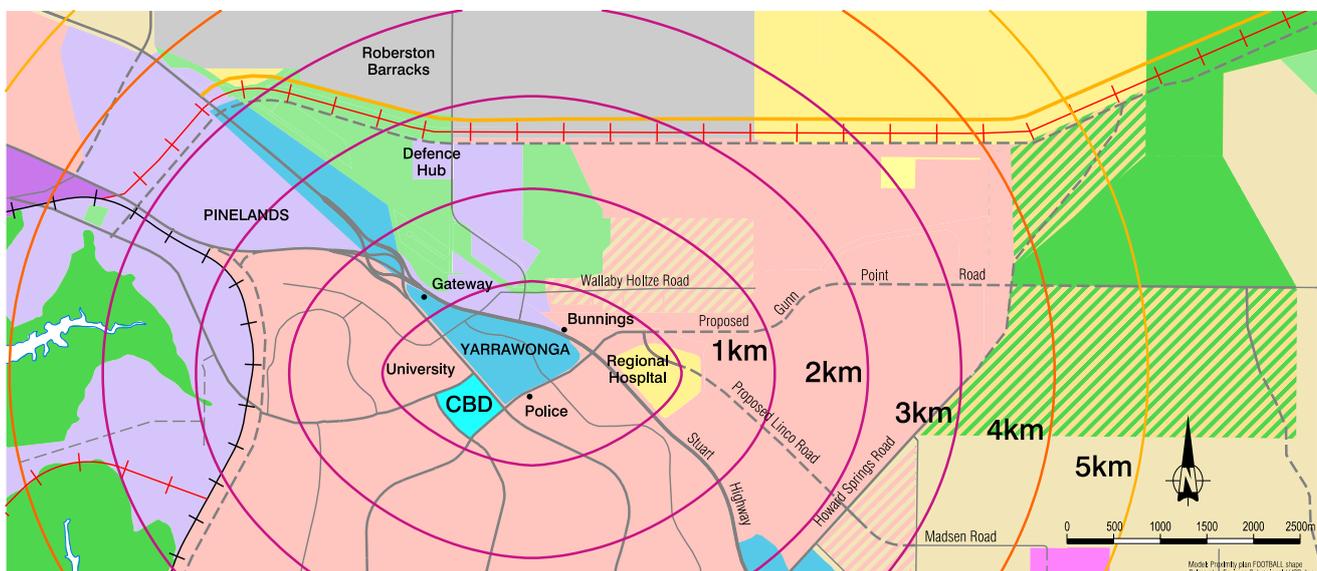
- the development of area plans under this subregional plan consider the areas of influence, especially with regard to:
  - appropriate separation of land uses; and
  - potential synergies in transport and utility infrastructure.

It is envisaged that area plans will be prepared for parts or all of the focus areas over time. The preparation of some, such as the Greater Holtze Area Plan, will commence soon; while work on the other area plans may be some years off. In the meantime the policy and concepts in this part have a role in guiding land use and development.

## 17. Land use concepts may guide the consideration of planning proposals.

- in the absence of an area plan, relevant planning principles and land use concepts of this subregional plan guide the consideration of planning proposals.

Figure 11: Proximity to Social Amenities and Infrastructure



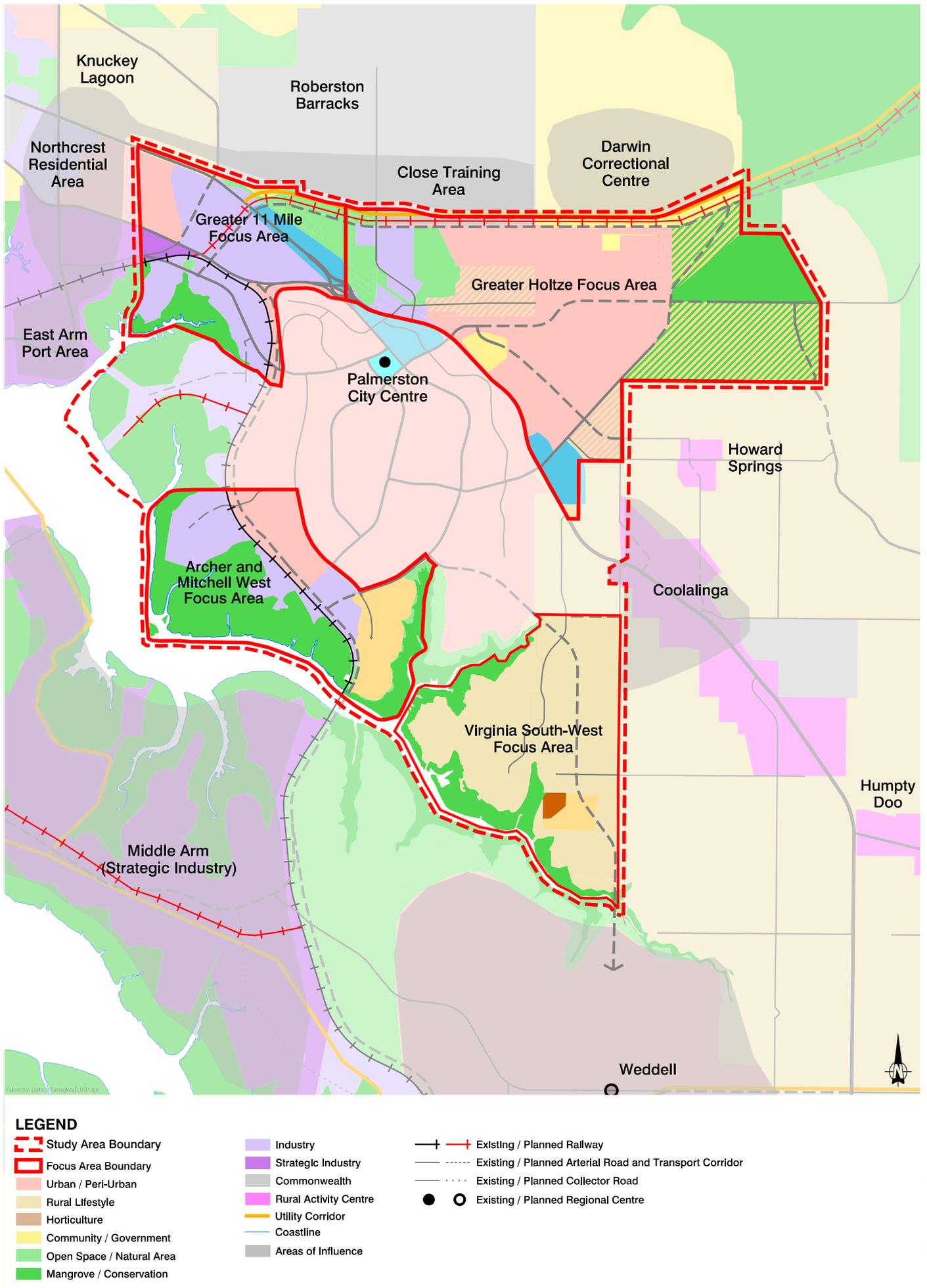


Figure 12: Focus Areas - Areas of Change and Areas of Influence

## Greater 11 Mile Focus Area

The Greater '11 Mile' Area, shown at Figure 13, extends east from 'Northcrest' in Berrimah to include Pinelands and Holtze to Thorngate Road. The northern extent is the Stuart Highway and the Glyde rail/utility corridor. To the south, the area extends to Kirkland Road to include a new location for the passenger rail terminal.

The landscape of the 11 Mile slopes from higher land along the Stuart Highway down to natural drainage areas along Tiger Brennan Drive. While much of the area has been cleared for various uses, significant pockets of native vegetation remain in the lower drainage areas.

The road, rail and utility corridors that traverse the locality serve the greater Darwin region and connect to the national road network, railway and product pipelines. While most of these corridors are secured and zoned, this Plan identifies some outstanding gaps in the rail and utility networks. Further investigation by service authorities and responsible agencies will allow the alignments to be finalised, gaps closed and corridors preserved.

### Rail Network and Passenger Rail Terminal

An engineering review of the existing rail corridor to Glyde Point will test different alignment options and confirm a preferred corridor. This Plan preserves two options for connection to the existing railway.

Utility and main road corridors may need to respond to the preferred horizontal and vertical geometry for the railway. The preferred alignment may also have implications for the relocation of the Passenger Rail Terminal.

The current location of the Darwin Passenger Rail Terminal within East Arm port limits the strategic industrial uses for which East Arm is intended.

Figure 13 shows an alternate location to be tested through further engineering investigation.

### 18. Confirm the future location of the passenger rail terminal and preserve a corridor for future rail to Glyde Point.

- engineering assessment and tenure review inform an amendment to this subregional plan to clarify and guide the:
  - future location of the passenger rail terminal;
  - respond to the drainage challenges south of Robertson Barracks; and
  - alignment, without gaps, of the future Glyde Point rail corridor, including treatment at intersections with other strategic corridors.

### Main Road Network

The main roads across the study area connect the region's commercial and employment centres, residential areas and regional destinations.

### McMillans Road Extension

The road reserve for the future extension of McMillans Road to the Tiger Brennan Drive/Wishart Road intersection is identified.

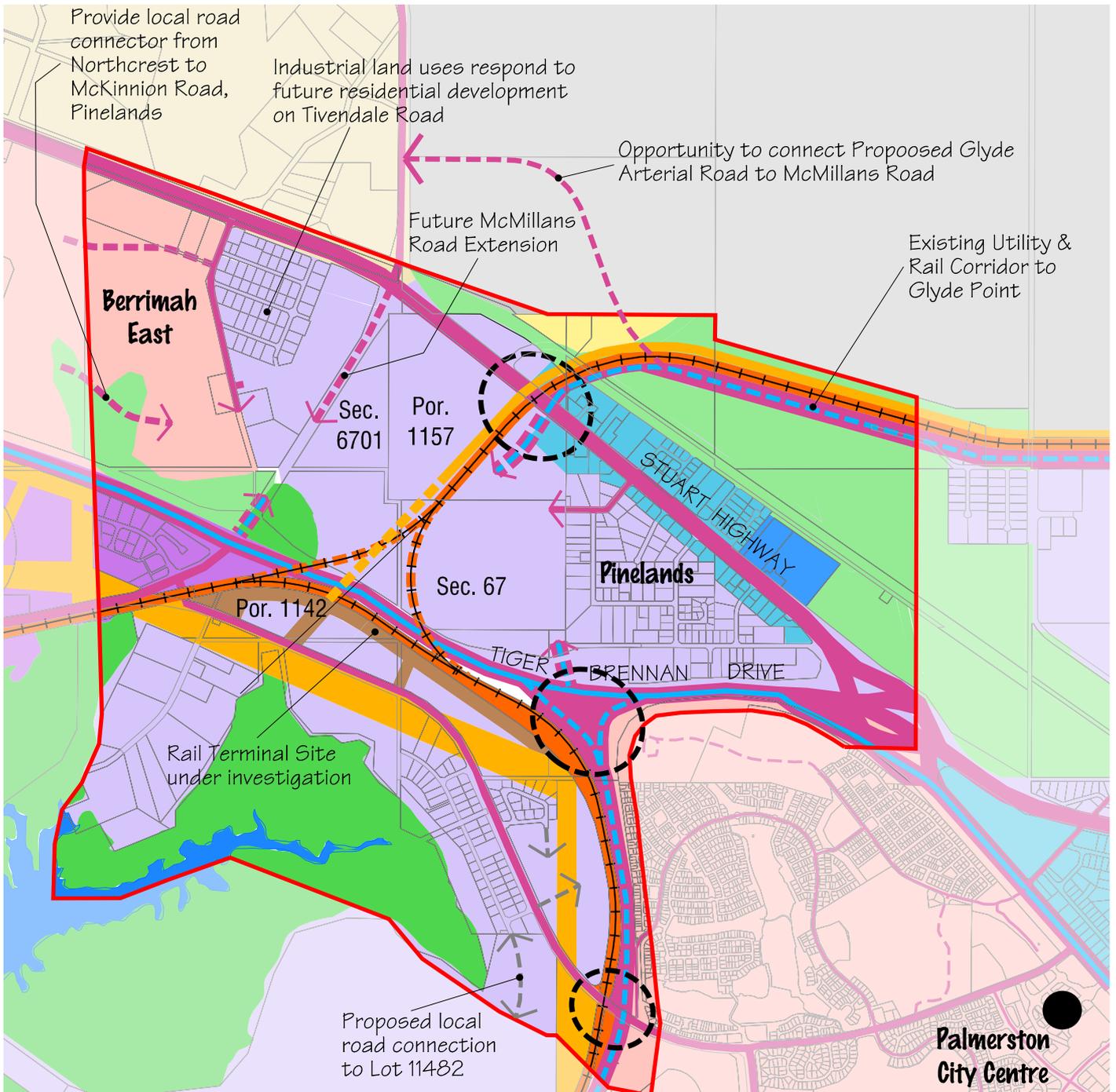
The extension of McMillans Road will require the reconfiguration of the current three-way Stuart Highway/McMillans Road intersection and the realignment of Tivendale Road.

### Glyde Point Corridor – Glyde Arterial

The future Glyde Arterial road is realigned away from Temple Terrace to now run beside the rail and utility corridors to Glyde. Access to this corridor from either McMillans Road or the Stuart Highway is a subject of further investigation.

### 19. Facilitate resolution of the future rail corridor to Glyde Point.

- the current Glyde Point rail corridor is completed, preserved and appropriately zoned whilst alternate alignments are investigated and evaluated; and
- the confirmed Glyde Point rail corridor is informed by an engineering assessment; and
- if necessary, land for an alternate corridor is acquired and appropriately zoned.



### LEGEND

- |  |  |  |  |
|--|--|--|--|
|  | 11 Mile Focus Area Boundary  |  | Utility Corridor   |
|  | Open Space/Natural Area  |  | Potential Utility Corridor                                     |
|  | Rail Terminal Site under investigation   |  | Railway  |
|  | Industry   |  | Potential Railway Connection subject to separate investigation |
|  | Strategic Industry   |  | Main Road  |
|  | Residential  |  | Main Road and Future Rapid Transit Corridor                    |
|  | Community and Government   |  | Main Road with potential Rapid Transit                         |
|  | Potential Service Commercial   |  | Nominal alignment of main road with potential Rapid Transit    |
|  | Tourist Commercial   |  | Nominal alignment of main road                                 |
|  | Commonwealth   |  | Coastline  |
|  | Mangrove/Conservation  |  | Existing Collector Road  |
|  | Locality proposed for reconfiguration of transport network that may include potential grade separation |  | Existing Regional Centre                                       |

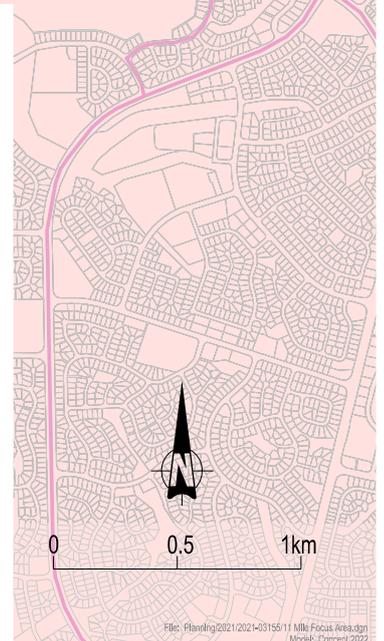


Figure 13: Greater 11 Mile Land Use Concept

## Berrimah East and Tivendale Road

The Berrimah East urban/peri-urban area, as identified in the Darwin Regional Land Use Plan, extends from Northcrest residential estate east to Tivendale Road. It includes the old Berrimah gaol, the Don Dale Youth Detention Centre, and the Robbie Robins Reserve.

Residential development of Berrimah East will require the management of existing and potential conflicts such as:

- identifying separation buffers and/or management of, biting insect constraints;
- identifying buffers from existing industrial land uses that may require separation to sensitive land uses;
- enabling land uses that do not constrain or impact nearby sensitive development; and
- responding to seasonally waterlogged areas.

## Robbie Robins Reserve

There is an opportunity for the relocation of equestrian activities of the Robbie Robins Reserve within the Howard Springs North investigation area of Greater Holtze.

The identification of potential alternate venue(s) for existing equestrian activities will support the future urban/peri-urban development of Robbie Robins Reserve.

## Tivendale Road Industrial Area

Development is generally concentrated within the north-west portion of the Tivendale industrial area adjacent to Stuart Highway and Tivendale Road. Undeveloped, vacant land exists behind the developed area and is an area of transition to the parent lot of Section 6701.

The Tivendale Road industrial area is in Zone GI (General Industry) but is substantially developed for service commercial uses. Service commercial land uses have become increasingly desired by the market within areas that have proximity to Stuart Highway. Service Commercial land uses are supported as a 'refocussing' of industrial activities within the Tivendale industrial area. Supporting this trend will assist in managing the risk of land use conflict with the proposed residential area.

Land uses within the Tivendale industrial area will require management to avoid the introduction or intensification of land uses that may conflict with the future development of Berrimah East for urban/peri urban land uses.

## 11 Mile to Pinelands Investigation Area

Figure 13 identifies Section 6701, Portions 1142, 1157 and Section 67, as an Investigation Area to afford flexibility on future land uses.

The possibility of residential land uses within the Pinelands Investigation Area is limited by existing land uses within Zone GI, for which the NTEPA recommends separation from residential areas.

The extension of McKinnon Road is essential to this locality, as well as a connecting corridor through to Tivendale Road, Berrimah East and beyond.

In recognition of natural values, surface hydrology and drainage, the paperbark swamp east of Tiger Brennan Drive / Tivendale Road is identified by this plan as 'Conservation'.

## Industrial Areas in Transition

The Pinelands and Tivendale industrial areas are likely to continue to experience land use change and transition from industry to service commercial. For example, property along the Stuart Highway will become increasingly attractive for commercial uses, especially if site conditions include:

- lot and/or built form oriented to the Highway providing exposure to passing trade; and
- access from service roads that support safe traffic movement and convenient parking.

In addition, planned upgrades to the Stuart Highway, such as signalised intersections, will support land use transition.

## 20. Ensure that area plans for the Greater 11 Mile locality respond to the identified potential for land use change.

- area plans are informed by the far term land use structure and specific initiatives in this subregional plan, including:
  - the development Berrimah East;
  - the extension of McKinnon Road to Tivendale Road;
  - land use change from general industry to the potential of service commercial; and
  - the management of general industry land uses to avoid conflict with sensitive land uses.

# Greater Holtze Focus Area

The Greater Holtze Focus Area, shown at Figure 14, extends north-east from Palmerston into Litchfield and is close to community facilities.

In 2015, construction of the Palmerston Regional Hospital and introduction of the Holtze Urban Area Plan began a process of land use change in Holtze. In 2016, the Litchfield Subregional Land Use Plan showed the Holtze and 'Kowandi' area for urban/peri-urban development.

## 21. Develop a staged area plan to guide land use change in the Greater Holtze area.

- an area plan, consistent with this subregional plan, is prepared to guide land use change for the Greater Holtze area;
- the area plan accommodates areas of high biodiversity value;
- the area plan is informed by land capability assessment and engineering investigation necessary to respond to the constraints and opportunities of the locality; and
- the area plan is consistent with service agency requirements, in particular:
  - arterial and local road requirements, and
  - power and water network requirements.

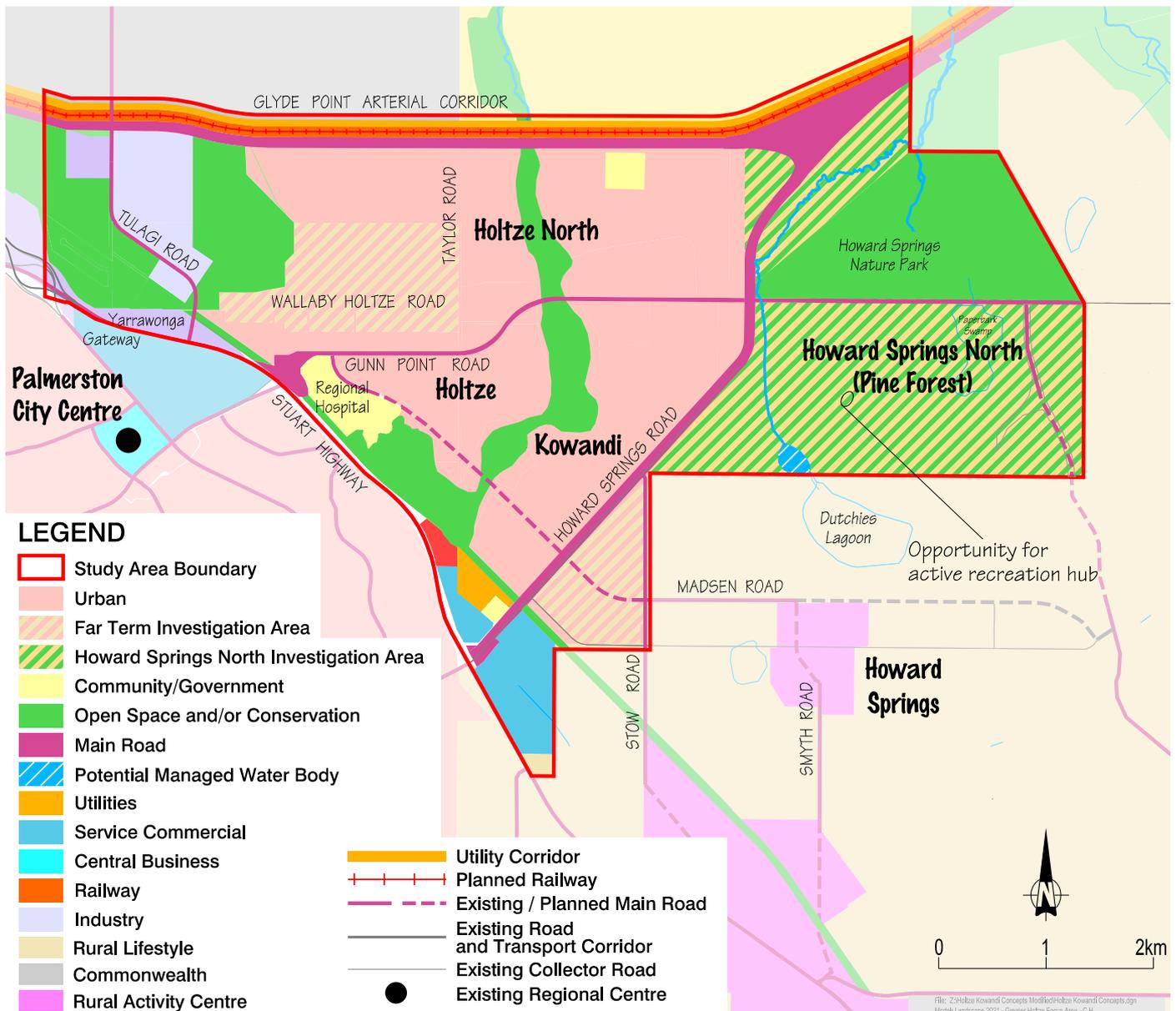


Figure 14: Greater Holtze Focus Area

## The Holtze-‘Kowandi’ Area

The current Holtze Urban Area Plan provides for approximately 700 dwellings around a small neighbourhood centre next to the Hospital.

The availability of the (former) Commonwealth Defence establishment land ‘Kowandi North’ (Kowandi), and conterminous Crown land to the north and east creates the potential for approximately 5000 dwellings to be developed in the near to mid-term through staged land releases.

A preliminary concept plan for the Holtze, Kowandi and Holtze North areas is shown at Figure 15. This land use structure is consistent with the Litchfield Subregional Land Use Plan 2016.

In the Holtze and Kowandi area, near to mid-term development will result in the staged release of residential land. Detailed area planning will have a focus on creating high amenity urban areas. A range of housing options will be integrated with an active transport network providing convenient access to open space, community facilities and local shops.

### **22. Provide a local land use plan for Holtze - Kowandi within the Greater Holtze Area Plan.**

- a detailed land use plan for Holtze - Kowandi, forming part of the Greater Holtze Area Plan, consistent with this subregional plan that:
  - provides for new residential areas of high urban amenity;
  - offers housing choice and affordability;
  - develops mixed-use activity centres within ‘walkable’ catchments with higher housing densities closer to community facilities;
  - includes ‘green’ networks that balance capable land with native vegetation and/or natural areas of environmental value;
  - includes environmental design to mitigate natural disaster risk from bushfire and flooding; and
  - integrates an active transport network.

## Holtze North Potential Area for Change

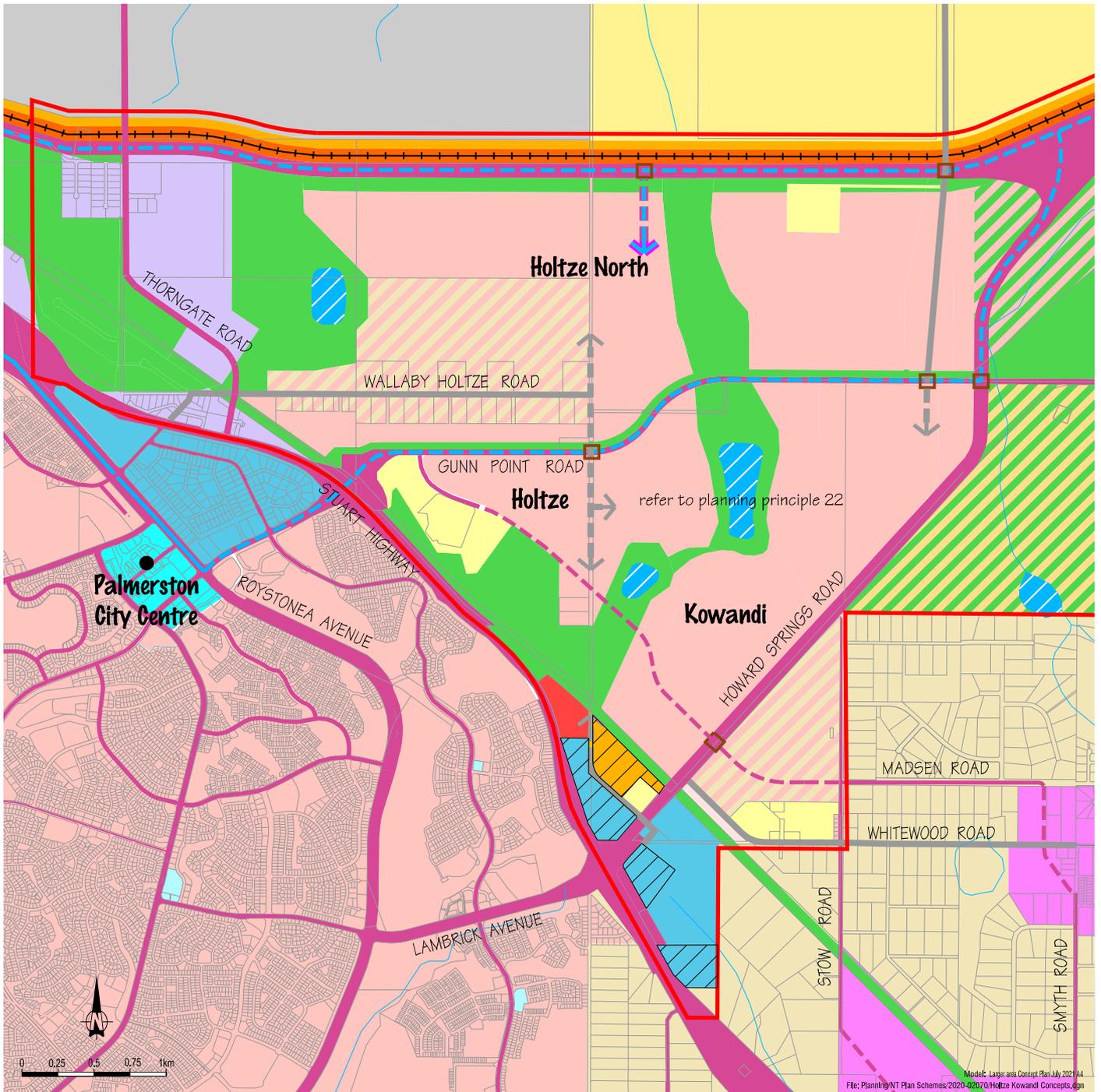
The Holtze North Investigation Area includes landholdings under private ownership. The Wallaby Holtze Road locality is in close proximity to amenities and employment generators such as the Palmerston city centre and Palmerston Regional Hospital. Additionally, population growth in the far-term, after the development of Greater Holtze is likely to increase demand for capable land in proximity to areas of activity and/or amenity. For this reason, this plan identifies that in the far-term this area will require further consideration as part of separate investigation and consultation processes.

The staged approach of the proposed Greater Holtze Area Plan will allow a high level structure for future urban development to be included for the far term, without compromising current rural living land uses.

The identification of private landholdings of the Wallaby Holtze Road locality as a ‘Far Term Investigation Area’ does not rezone land, require the land to be developed, alter existing land use rights or prevent the continued use of the land in accordance with current zoning.

This subregional plan identifies the potential for urban land uses adjacent to the Wallaby Holtze Road locality. It is important that development of areas in proximity to the Wallaby Holtze Road locality carefully consider opportunities for the transition of land uses and densities between new and existing areas. The potential for a sensitive interface and transition of land uses to minimise potential conflicts and maintain rural amenity is recognised.

The identification of the Wallaby Holtze Road locality as a ‘Far Term Investigation Area’ allows service providers to provisionally consider different development and non-development scenarios. In doing so, services providers may identify capacity to upgrade trunk infrastructure that, if required, may respond to increased demand.



**LEGEND**

- |  |                                |   |
|--|--------------------------------|---|
| Focus Area Boundary  | Community/Government           | Potential Managed Water Body                                |
| Urban / Peri Urban   | Open Space and/or Conservation | Main Road   |
| Far Term Investigation Area  | Rural Lifestyle                | Main Road with Rapid Transit Corridor                       |
| Opportunity for development outside Far Term Investigation areas to be designed to integrate with, and transition land uses and Lot sizes to, Far Term Investigation areas | Utilities                      | Main Road with Potential Rapid Transit                      |
| Howard Springs North Investigation Area A  | 15 Mile Community Palmerston   | Nominal alignment of Main Road with potential Rapid Transit |
| Howard Springs North Investigation Area B  | Industry                       | Existing/Planned Local Road                                 |
| Potential Area for Change  | Commonwealth                   | Access from Arterial Road                                   |
|  | Central Business               | Existing Regional Centre                                    |
|  | Commercial                     |   |
|  | Service Commercial             |   |

Figure 15: Holtze - 'Kowandi' Land Use Concept

### **23. Provide for the orderly development of Holtze North.**

- a land use structure for Holtze North forms part of the Greater Holtze Area Plan, is consistent with this subregional plan, and;
  - provides future residential areas that demonstrate sensitive interfaces to existing private residences;
  - identifies potential locations for mixed-use activity centres within 'walkable' catchments;
  - includes 'green networks that balance capable land with natural areas of environmental value;
  - includes environmental design to mitigate natural disaster risk from bushfire and flooding; and
  - integrates an active transport network.

### **24. Provide for the orderly future development of Howard Springs North.**

- any amendment to the Howard Springs North locality of this subregional plan is informed by further investigation and confirmation of active recreation opportunities, and may include:
  - a land use concept for a future active recreation hub, or similar initiative, that enjoys the broad support of the community and meets the requirements of land holders and service authorities; and
  - planning principles that guide more detailed area planning towards achievement of the land use concept.

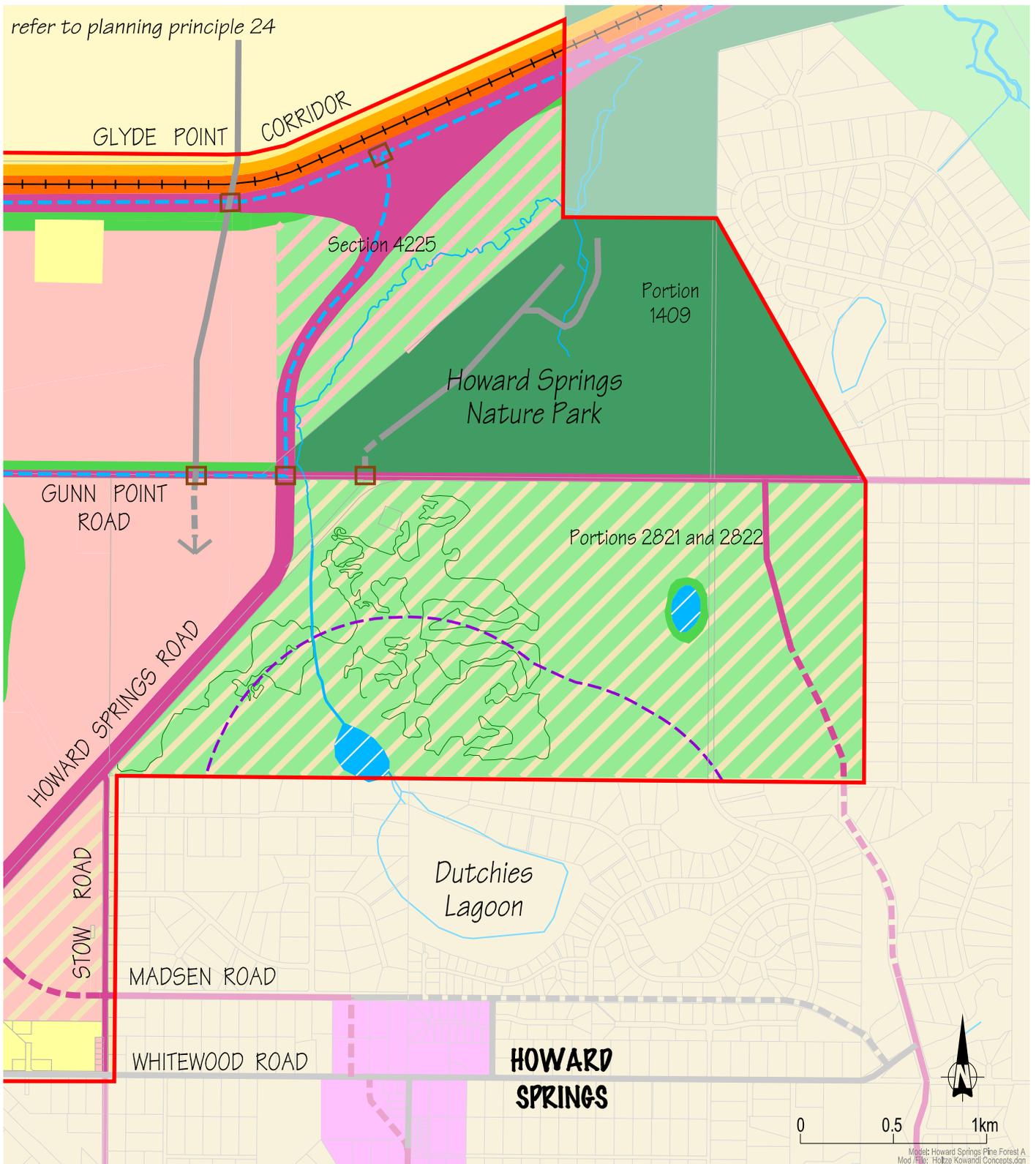
### **Howard Springs North Area**

This area, identified as Howard Springs North, comprises Crown land on Section 4225, Howard Springs Nature Park on Portion 1409 and the area referred to as the 'pine forest' on portions 2821 and 2811. All of this area is managed by or on behalf of the NT Government. The combined area is shown at Figure 16.

The future use of the Howard Springs North area is subject to further investigation and may include consultation for specific proposals. There is community support for continued open space and recreation with potential improvements in the provision of amenities and the formalisation of access and parking. There is also potential for a regional active-recreation and/or sporting hub. A range of activities may be suitable for further consideration.

Considering the above, any future land use change across the Howard Springs North area should consider the potential of retained natural areas to support both organised and passive recreation.

Future opportunities for the northern Crown land and 'pine forest' areas should be considered in conjunction with a review of future opportunities for the Howard Springs Nature Reserve.



### LEGEND

- |                       |   |   |
|-----------------------|---|---|
| Focus Area Boundary   | Open Space and/or Conservation  | Existing/Planned Main Road  |
| Urban / Peri Urban    | Conservation  | Existing/Planned Road   |
| Community/Government  | Howard Springs North Investigation Area A - Government use - Vacant Crown Land  | Buffer to biting insects - Full extent of buffer to be determined |
| Main Road             | Howard Springs North Investigation Area B - Northern Territory Land Corporation | Access from Arterial Road   |
| Railway               | Far term investigation area   | Off Road Cycle Trails   |
| Utility Corridor      |   | Main Road with Potential Rapid Transit                            |
| Rural Lifestyle       |   |   |
| Rural Activity Centre |   |   |
| Focus Area Boundary   |   |   |

Figure 16: Howard Springs North Future Opportunities

# Virginia South-West Focus Area

Southwestern Virginia is an established rural area with a range of rural lifestyle lots. There is no plan to change this, or to provide infrastructure for more intense land use. However, this focus area is located between Palmerston and the future town of Weddell. The development of Weddell is likely to stimulate land use changes in the area.

## The North-South Weddell Connector

At Figure 17, the Zone PM (Proposed Main Road) corridor through the focus area refers to the *North-South Connector* from Palmerston to Weddell. Preliminary planning for Weddell has suggested that this connector road will be needed early in the new town's development.

When Weddell develops, this focus area's location between the new town and Palmerston will potentially increase demand for land and housing in close proximity to both town centres.

However, a large part of Virginia South-West is constrained by either soil waterlogging, storm surge, or exposure to biting insects. A nominal biting insect buffer is shown at Figure 17.

Without effective measures to mitigate biting midges, the highest and best use of land within the insect buffer is probably rural residential.

The natural constraints will substantially lessen opportunities for land use change.

### 25. Ensure that any future changes in land use respond to community expectations and identified development constraints.

- the preparation of an area plan in consultation with the community precedes any proposed land use changes; and
- an area plan recognises and maps the natural constraints to denser land uses in this locality.

## The Old Virginia Townsite

An important heritage feature of this locality is the original townsite of Virginia surveyed in 1869, and evidenced by original survey markers. The grid layout of 304 half-acre lots (2023m<sup>2</sup>) is a part of the cadastre. All the lots are Crown land.

Figure 17 shows the portion of this original survey that is now a declared heritage place.

The balance of the townsite is an opportunity for further investigation; noting the need to open a road reserve for the North-South Connector.

### 26. Explore the future development opportunities of vacant Crown land.

- the development of an area plan:
  - responds to natural constraints and identifies the highest and best uses of vacant Crown land;
  - recognises opportunities for alternate land uses in this locality;
  - facilitates the interpretation and better appreciation of the heritage registered original townsite of Virginia; and
  - provides for an interconnected local road network.

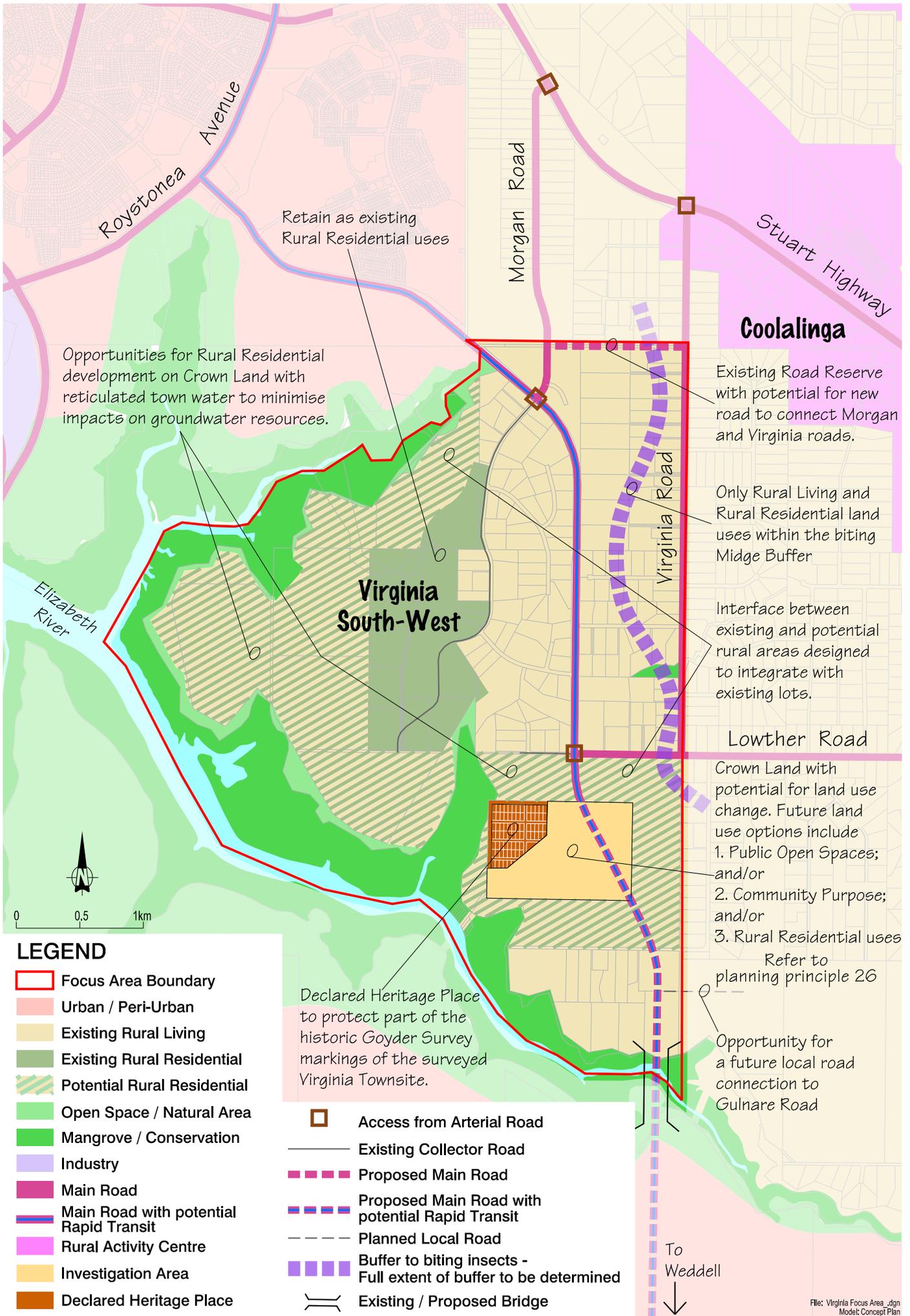


Figure 17: Virginia South West Land Use Concept

# Archer and Mitchell West Focus Area

The dominant zone of both Archer and Mitchell West is Zone FD (Future Development), intended to facilitate development in accordance with the Palmerston Eastern Suburbs Area Plan. However, Archer and Mitchell West both experience high exposure to biting insects, which limits the potential of land proposed for commercial and community use. Both areas are affected by seasonal waterlogging and storm surge, and Archer is limited by strategic corridors for arterial roads, railway and power transmission.

There is an apparent need to review the Palmerston Eastern Suburbs Area Plan with regard to Archer and Mitchell West. The review should include, but not be limited to, consideration of the following matters and associated statements of policy. A preliminary land use concept is provided at Figure 18.

## Construction of the Weddell Freeway

Concept design of the Weddell Freeway through Archer should clarify the treatment of the future interchange of Roystonea and Elrundie Avenues. A potential benefit could be future road access to Zone FD land south-west of the railway.

A bridge to carry Catalina Road over the railway and Weddell Freeway will likely be necessary to maintain access to residential properties and the Power and Water Corporation wastewater treatment facility.

The design of these intersections will inform future access to, and configuration of, the local road network and areas of future land use.

### 25. Ensure that arterial transport corridors inform land use structure to enable viable future development.

- an area plan identifies and is informed by the alignment of railway and main road corridors including the nature of future intersections; and
- an area plan confirms the intended access points to the local road network.

## Develop Land in Response to Constraints

Land for industry and some community purposes may be acceptable with a degree of exposure to storm surge, but access to properties should be maintained in a primary storm surge event. Wherever practical, local roads should be aligned and constructed to maintain property access during peak flood and storm surge events.

### 28. Ensure that future land development responds to identified constraints.

- an area plan identifies local roads along alignments that provide:
  - practical access to allow development of all land parcels; and
  - viable access during a 5% AEP flood or primary storm surge event.

## Power Water Corporation Water Treatment Facility

Power Water Corporation (PWC) has a need to expand the wastewater treatment facility. The area for this should be identified, and future local roads west of the railway aligned so they do not impact on existing or future PWC infrastructure.

## Alternate Uses for Mitchell West

Mitchell West is an area where Roystonea Avenue is identified to connect with the Weddell Freeway. The lot boundaries that result from the design of the transport network will inform future land uses in this locality. Further consideration of biting insect constraints and potential proximity to strategic industry across the Elizabeth River suggests that a variety of land uses may be further considered, including the retention of this area as open space such as an artificial lake.

### 29. Ensure key infrastructure and future land use opportunities are protected.

- an area plan identifies any required expansion of the Palmerston wastewater treatment facility, including:
  - continued access arrangements to the site; and
  - future corridors for trunk sewers.
- an area plan confirms the highest and best land use opportunities for the significant sites in Archer and Mitchell West.

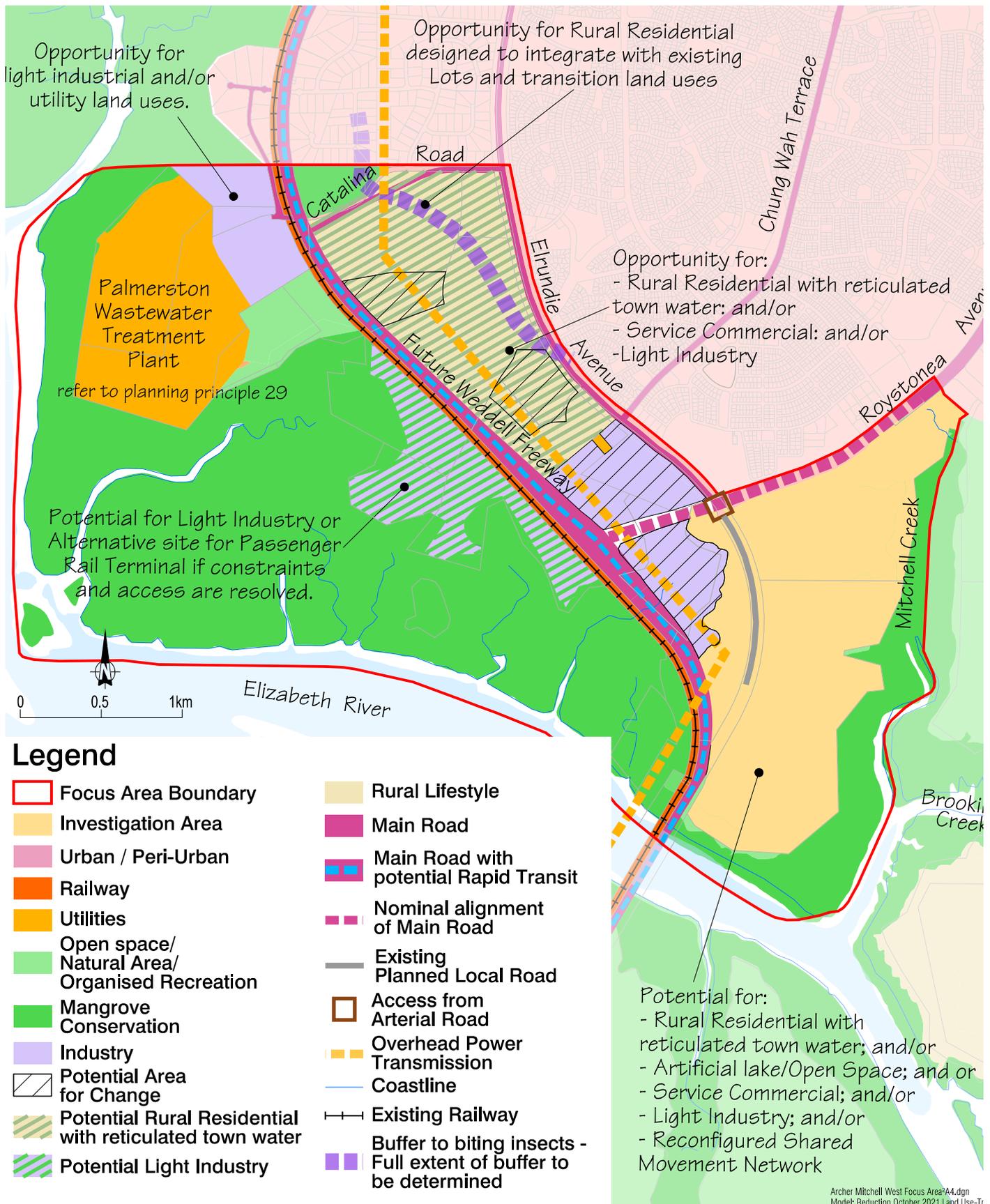


Figure 18: Land Use Concept for Archer - Mitchell West

## For More Information

Visit: [www.haveyoursay.nt.gov.au](http://www.haveyoursay.nt.gov.au)



Email: [ntpc@nt.gov.au](mailto:ntpc@nt.gov.au)



Phone: 08 8924 7540

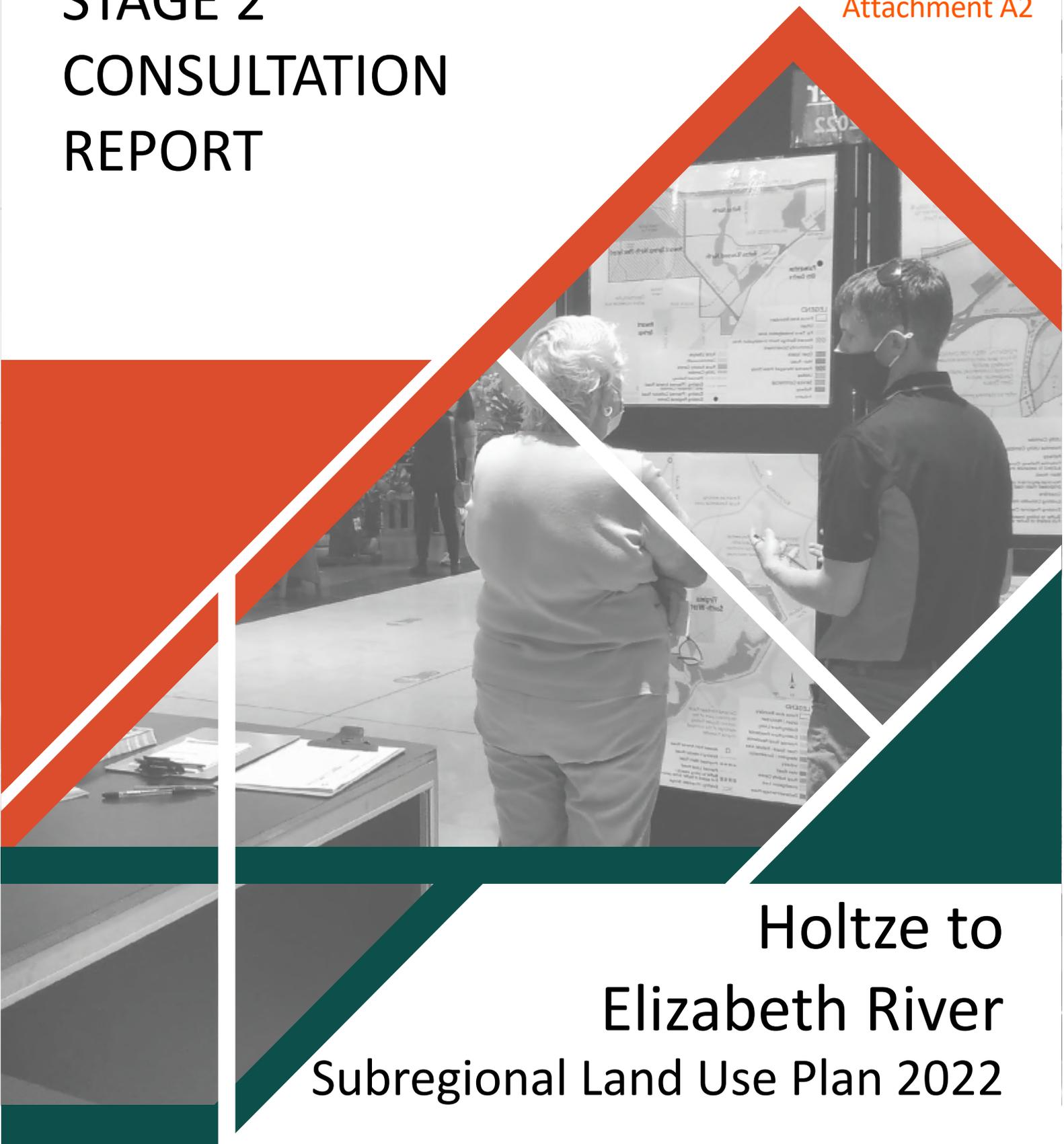


Northern Territory Planning Commission  
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[www.planningcommission.nt.gov.au](http://www.planningcommission.nt.gov.au)

# STAGE 2 CONSULTATION REPORT

Attachment A2



## Holtze to Elizabeth River Subregional Land Use Plan 2022

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*Front Cover Image - Gateway Shopping Centre - Information Stall.*

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# INTRODUCTION

In October 2021, the Northern Territory Planning Commission commenced the second stage of public consultation by releasing the first draft Holtze to Elizabeth River Subregional Land Use Plan and a first draft Needs Assessment and Land Capability documents.

Subregional Plans contain concepts, principles and objectives to give decision makers, industry, and the community confidence regarding the future changes to, and the long-term pattern of land use to accommodate growth.

The information provided in the first draft Holtze to Elizabeth River Subregional Land Use Plan was guided by:

- feedback and information received from Stage One consultation;
- the Darwin Regional Land Use Plan; and
- specific information provide from investigations such as social infrastructure studies.

The first draft Subregional Land Use Plan responded to the findings of Stage One by identifying:

- appropriate and best use of land within the study area, including areas for urban and rural residential living;
- infrastructure necessary to support the projected future growth for the area;
- future transport and utility corridors;
- continued support to protect the environment and recreational value of the area including the pine forest, and opportunities for future recreational uses; and
- potential options for the relocation of the Darwin Passenger Rail Terminal.

This report summaries the key findings identified by stakeholders during Stage Two consultation. This information will now assist the Planning Commission in finalising the draft Subregional Land Use Plan. The Planning Commission will then request that the Minister for Infrastructure, Planning and Logistics consider including the plan in the NT Planning Scheme.

Should the Minister decide to consider amending the NT Planning Scheme to include the Subregional Plan, the draft Holtze to Elizabeth River Subregional Land Use Plan will be presented to the public for further consideration by stakeholders and the community as part of Stage Three.

## Consultation Objectives

Stage Two consultation on the Holtze to Elizabeth River Subregional Land Use Plan sought to:

- ensure the engagement process allowed stakeholders and community access to relevant information about the project;
- respond to the themes and issues presented and raised during Stage One consultation and seek clarification that the first draft Subregional Land Use Plan accurately reflected the feedback received;
- promote improved knowledge and understanding of the land use planning process and it's roles in the identification and delivery of land to accommodate population growth; and
- provide a variety of feedback opportunities to encourage comment from all stakeholders.

We are here

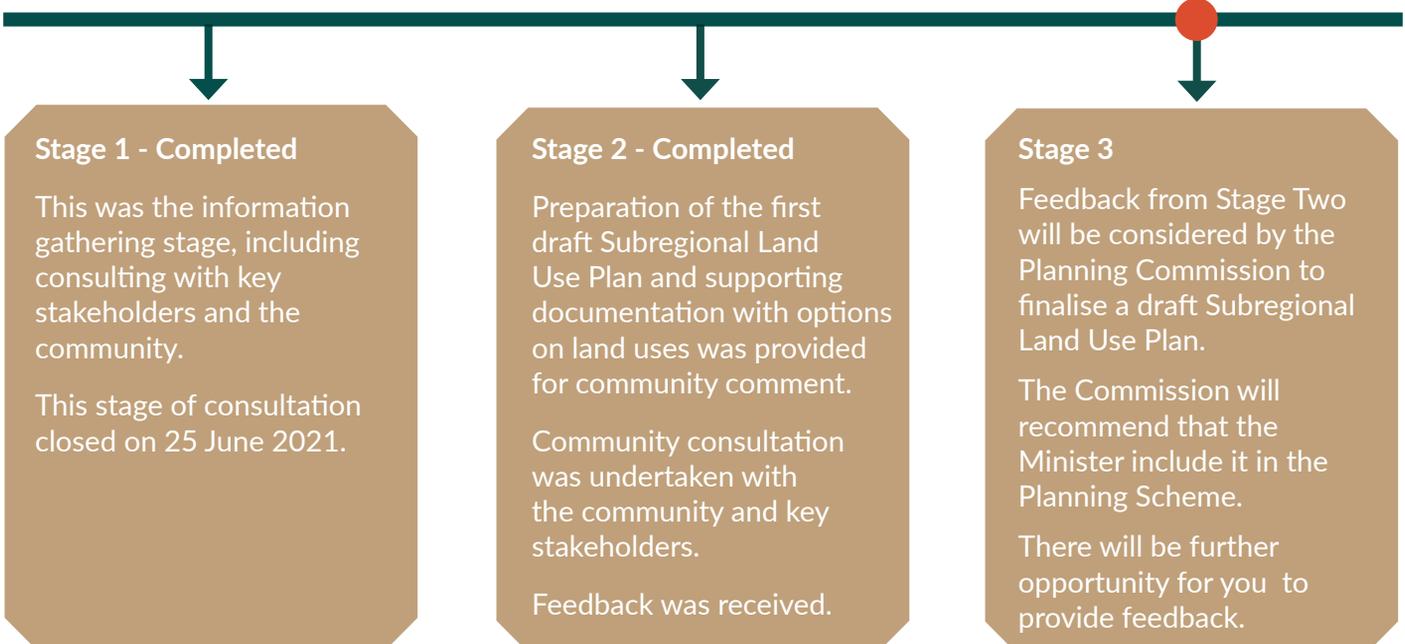
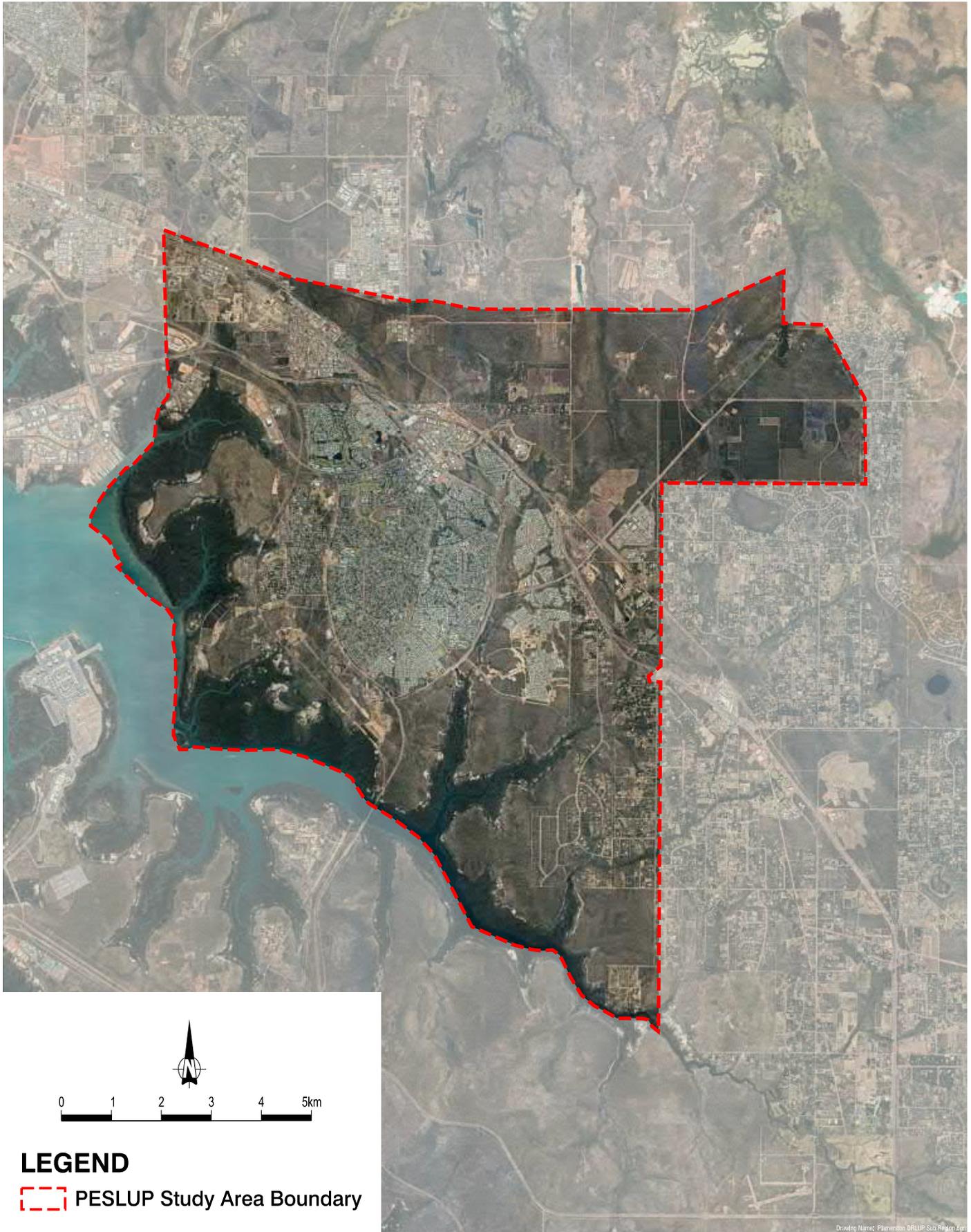


Figure 1: Engagement process for Holtze to Elizabeth River Subregional Land Use Plan.



*Figure 2: The Holtze to Elizabeth River Subregional Land Use Plan project Study Area.*

# ENGAGEMENT WITH STAKEHOLDERS

The second stage of consultation on the first draft Holtze to Elizabeth River Subregional Land Use Plan commenced on Friday 29 October 2021 for a four week period.

Stakeholders particularly involved in this stage of consultation included:

- landowners and residents;
- Litchfield Council;
- City of Palmerston Council;
- local elected representatives;
- industry;
- government agencies and service authorities;
- recreational groups; and
- community organisations.

## Face to face consultation

Three information stalls, attended by 94 people, were held at Freds Pass Markets, Coolalinga Central and Gateway Shopping Centre. During the consultation period a number of locations were affected by Covid-19 restrictions.

## Stakeholder meetings

A presentation was provided to the Planning Institute of Australia (Northern Territory branch) on 25 November 2021. Their submission is summarised in this report.

A meeting was organised by Member for Goyder, Keiza Purich to be held at a resident's property on Wallaby Holtze Road, 9.00am, 27 November 2021. Residents within and adjacent to Wallaby Holtze Road were invited to attend the meeting.

Planning Commission Chairman, Dr David Ritchie, presented the first draft Subregional Land Use Plan and fielded questions. There were 18 attendees including the Member for Goyder and the Member for Nelson, Gerard Maley.

Outcomes from the meeting included but not limited to the following:

- a strong desire to remain within Litchfield Council;
- an understanding of the intent of the Subregional Land Use Plan to support the need for growth in the far term;
- a need for buffers to retain the separation from new development and to protect their rural amenity and limit the number of neighbours on their boundaries; and
- objection to the identification of properties as 'Far Term Investigation Area.'

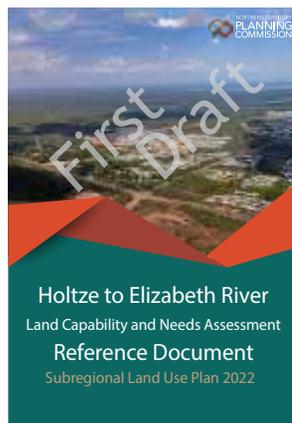
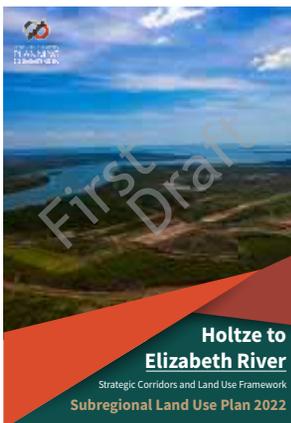


Image: Documentation presented during Stage Two engagement.



Image: Mailable materials to property owners.



Image: Information Stalls

## Print and Radio Media

Nine News Darwin covered the consultation launch with Planning Commission Chairman Dr David Ritchie and the Minister for Infrastructure, Planning and Logistics on 3 November 2021.

Three feature articles ran in the NT News on 4, 10 and 18 November 2021.

The articles related to future land uses around Palmerston over the next 50 years as well as potential options to relocate the Darwin Passenger Rail Terminal.

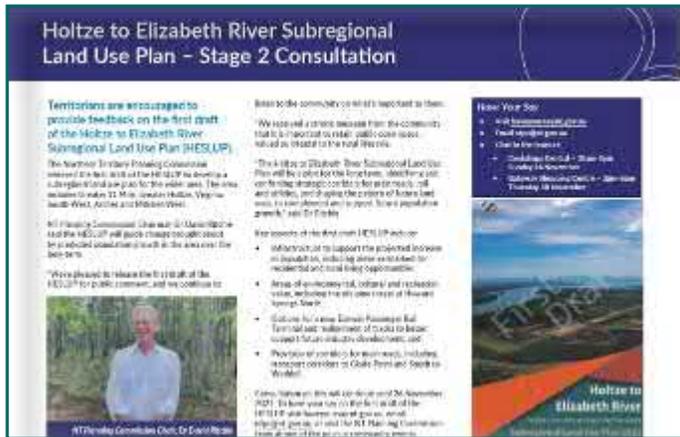
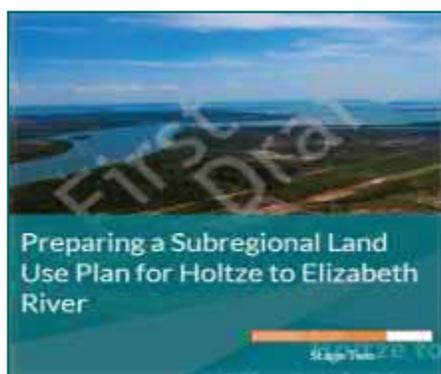


Image - NT News 10 November 2021



Image: Department of Infrastructure, Planning and Logistics Facebook Post.



## Online Engagement

The Planning Commission utilised online platforms including the Northern Territory Government's Have Your Say portal, the Planning Commission website and the Department of Infrastructure, Planning and Logistics Facebook page.

The 'Have Your Say' portal had 657 visits with 493 documents downloaded and 28 online surveys and drop a pin map contributions.

The Facebook post reached 801 people.

## Visitors Summary



## Highlights



Figure 3: Have Your Say Online Portal

# INTERACTIVE MAP

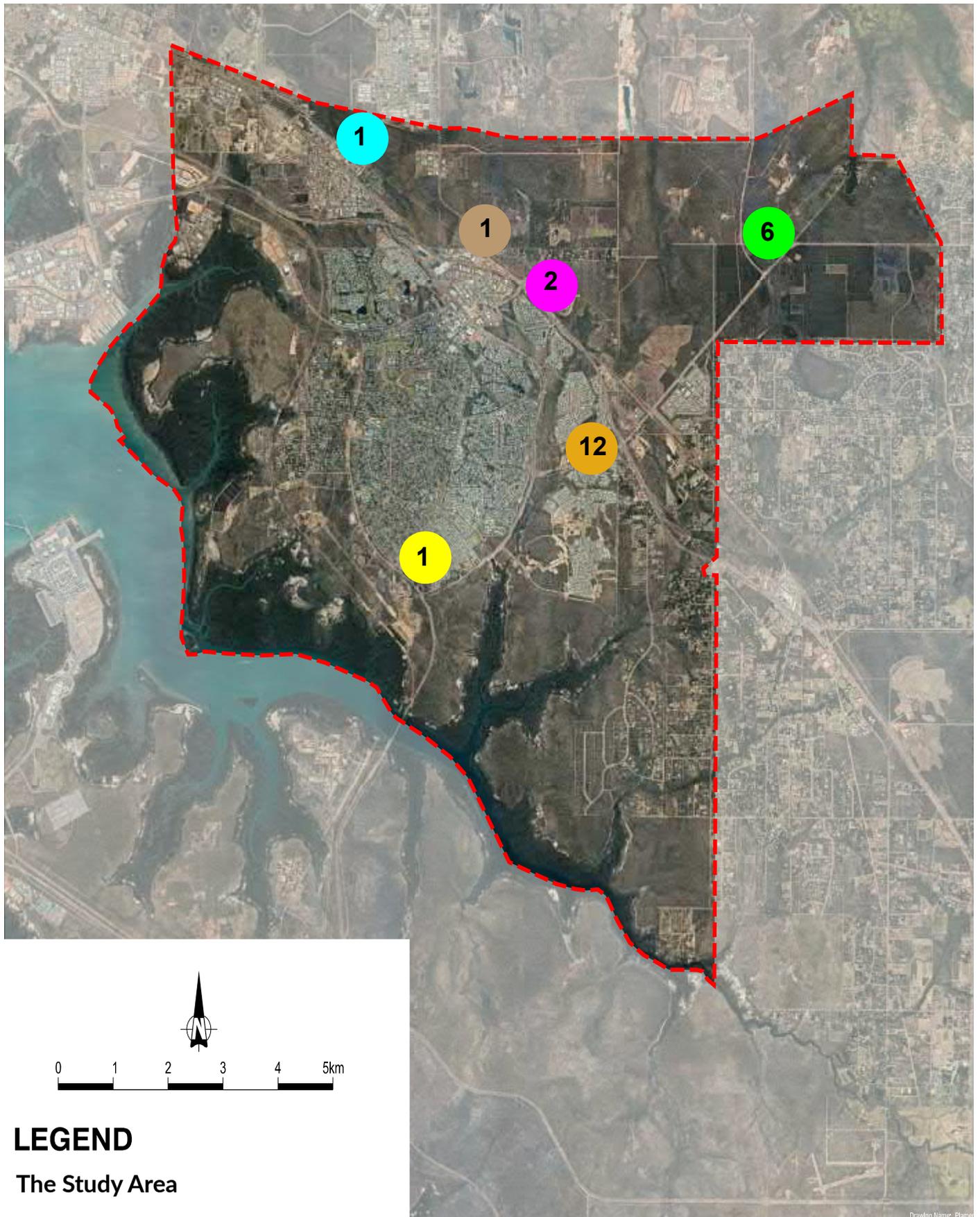


Figure 8: Map identifying areas commented on 'Have Your Say'.

Comments received through the online interactive map are summarised below.

The numbers within coloured circles reflect the number of comments received in the general vicinity of the circle.

12

- At this location there is WW2 infrastructure still present. Friends of Mitchell Creek maintain and remove rubbish from the bushlands. Parts of the area around Mitchell Creek should have protection through relevant zoning.
- Consider closing Hawker Street due to the increased traffic into a peaceful rural road.
- There is a parcel of land at this location, should be set aside as a reserve to protect the habitat and create a surrounding buffer to Brooking Creek.
- Relocate the Howard Springs Waste facility to free up this section of land for future development.
- There are pockets of vacant land in this area which could be maintained by the City of Palmerston Council and set aside as conservation reserves.
- The rural residential area on Fellows Road is on septic tanks, should be connected to the reticulated effluent system.

1

- A pocket of land at this location should be set aside as a conservation reserve.

6

- The Pine Forest east and west of Howard Springs Road be retained for recreational space.
- The section of open grassland / forest to the east of Howard Springs Road should be maintained. The verge on the eastern side be developed as a carpark for Pine Forest users.
- The existing Pine Forest south of the Howard Springs Nature Park be retained as green space.

2

- The escarpment ridge near the Palmerston Regional Hospital, has informal mountain bike trails. These trails should be recognised and funded as part of Darwin's riding network, conveniently accessed by Palmerston residents.

1

- Consider for future transport planning options to ensure the safely transit from the north side of the Stuart Highway between Mander Road and Butler Place during peak hour.

1

- Is it proposed to change the future land use on Tulagi Road.



Image 4: Recreational bike path Pine Forest (east of Gunn Point Road).

# IDENTIFIED STAKEHOLDERS

## Residents and Landowners

Postcards and flyers were distributed to over 800 addresses across and adjoining the project study area. The intent of this correspondence was to inform recipients of the project and encourage participation in the planning process.

Residents and land owners were invited to meet with Planning Commission staff at our information stalls to discuss the project.

## Litchfield Council

The northern and eastern part of the study area for the proposed Holtze to Elizabeth River Subregional Land Use Plan is within the Litchfield Municipality.

The Planning Commission provided a briefing to Litchfield Council members and staff on Tuesday 9 November 2021 at council chambers.

## City of Palmerston Council

The western side of the Holtze to Elizabeth River Subregional Land Use Plan study area falls within the City of Palmerston local government area.

The Planning Commission met with council members and staff on Tuesday 2 November 2021 to provide an overview of the information presented during Stage Two engagement.

## Elected Representatives

Planning Commission Chairman, Dr David Ritchie briefed the Member for Goyder Ms Kezia Purick MLA on Wednesday 27 October 2021 as well as the Member for Nelson Gerard Maley MLA on Monday 1 November 2021.

## Project Control Group

The Project Control Group (PCG) is an advisory group with technical specialists representing government agencies, Power and Water Corporation and the local Councils. The role of the PCG is to provide strategic direction and specialist knowledge throughout the planning project.

The PCG met in early October 2021 to review and provide comment on the first draft Subregional Land Use Plan, prior to commencement of engagement.

## Government agencies and service authorities

Government agencies with a role in planning for the future of the study area were invited to and provided submissions during Stage Two engagement. These submissions are summarised in this report.

## Industry

An email was sent to industry groups inviting review and feedback on the first draft Subregional Land Use Plan. Submissions received from industry groups, and individual businesses are summarised in this report.

## Community and interest groups

Identified community and interest groups were emailed on launch of stage two engagement, inviting review and comments on the first draft Subregional Land Use Plan.

# SUBMISSIONS

## Community Feedback

The Planning Commission received eighteen formal submissions, including seven completed surveys, from members of the community. These are summarised below.

Feedback received at our information stalls, as well as at meetings and other discussions with land owners and residents, are also included in the summary below.

### **Subregional Land Use Plan**

Feedback received from the community relating to the need for planning and the consultation process for this project included:

- support for far term planning, acknowledging the need to progress and prepare for future population growth;
- a few comments were seeking clarification on the use of 'urban / peri-urban'; and
- concern around the potential impact of the project on existing rural lifestyles and amenity.

### **Movement and Transport**

The study area contains the highest concentration of regional road and rail alignments within Greater Darwin.

It was clear that many community members were aware of the railway corridor to Glyde Point, and the previous planning for this alignment contained within the Darwin Regional Land Use Plan and the Litchfield Subregional Land Use Plan. A number of comments and suggestions were received with regard to roads including:

- concern around increased traffic into the Howard Springs rural area when Madsen Road is extended;
- suggestions that traffic surveys should be considered as there are two proposed roads crossing Taylor Road (within a short distance); and
- consider future planning options to ensure the safe transit from the north side of the Stuart Highway between Mander Road and Butler Place during peak hour.

### **Environment**

A number of community members recognised the importance of the environment and the need to retain open space, native vegetation and wildlife corridors.

There was continuing support for retention of the Pine Forest for recreational purposes, and the community appear accepting of how this area was addressed in the first draft Subregional Land Use Plan.

### **11 Mile Focus Area**

The submissions received from the landowners were generally supportive of the planning principles presented in the first draft Subregional Land Use Plan, particularly for land with Stuart Highway frontage to transition from industry to service commercial.

The following suggestions were provided:

- commercial development is supported but must complement the intended service commercial function of the area;
- support for the area south of the Stuart Highway to remain an investigation area, affording flexibility on future land uses;
- increase services to the locality as an employment and tourist accommodation hub;
- provide services to commuters traveling between Darwin and Palmerston; and
- development be reflective of the location (major commuter route) and the adjoining suburb of Northcrest.

### **Greater Holtze Focus Area**

Extending north-east from Palmerston into Litchfield, the Greater Holtze Focus Area is close to community facilities.

There were differing views presented relating to this focus area.

- A suggestion was made to retain natural bushland as a buffer to the residential area that will be around the Palmerston Regional Hospital.
- Holtze and Kowandi North were identified by some members of the community as appropriate for larger rural lots along Howard Springs Road.
- Some residents expressed concern about future lot sizes and the potential impact of a population spike in the proposed location.
- Wallaby Holtze Road was identified by some community members and land owners as desirable to remain rural living for future generations.
- Community members identified potential for urban development to affect the water and soil quality around Kings Creek.

- There was some advocacy for additional green corridor(s) to protect Agile Wallabies, particularly, and also identifying additional species of wildlife that travel between Wallaby Holtze Road and Kings Creek.
- Feedback identified the proximity of this focus area to Defence facilities and aviation activities, noting potential noise generation activities from training activities. Flight paths for RAAF exercise and helicopter training were identified as potentially impacting on development in the area.

### ***Virginia South-West***

In response to feedback received during Stage One consultation the Planning Commission identified no change to the rural character of existing private land holdings in the first draft Subregional Land Use Plan.

Virginia South-West residents were notified of the commencement of stage two engagement. The residents who made contact with the Planning Commission provided the following responses to the first draft Subregional Land Use Plan.

- Acknowledgment that there is potential use of Crown Land for future rural residential or community purpose.
- Acknowledgment that the North-South Weddell Connector will be required in this area when Weddell develops in the future.
- Some concerns expressed that any future development around the Old Virginia Townsite will encroach on the amenity of existing rural living lifestyles.
- Residents expressed a need for better planning for public transport access in the rural areas.
- Biting insects due to close proximity to mangroves are a constraint.

### ***Archer and Mitchell West Focus Area***

No comments were received from the community specific to this focus area.

### ***Out of Scope Feedback***

The Planning Commission received comments from the community that can't be addressed by the Subregional Land Use Plan. These include but are not limited to the following concerns:

- Local Government representation for the Greater Holtze area; and
- potential impact of the future arterial road to Gunn Point on the Howard Swamp Hunting Reserve and Shoal Bay Hunting area.

## Litchfield Council

Litchfield Council (Council) welcomed the opportunity to comment on the first draft Holtze to Elizabeth River Subregional Land Use Plan (HESLUP).

Council noted the strategic work being undertaken in preparation of the first draft Subregional Land Use Plan and expressed appreciation that the Planning Commission was able to respond and address feedback raised during Stage One.

Council has a leading strategic role in planning for the servicing and development of the future Litchfield Community. Council looks forward to the ongoing advancement of Subregional Land Use Plan through and continued collaboration through its role on the Project Control Group.

Council is also undertaking the strategic assessments, in partnership with the relevant Government agencies, required to accommodate new urban growth in the Litchfield Municipality.

## City of Palmerston

City of Palmerston (Council) expressed appreciation at the opportunity to provide comment on the first draft Holtze to Elizabeth River Subregional Land Use Plan.

Council acknowledged that the first draft Subregional Land Use Plan identifies the natural environment as an asset for the study area, ensuring biodiversity outcomes are considered to better inform future detailed area planning.

Council also welcomed the promotion of greater co-ordination with Government as it relates to land use planning. A key concept that needs to be highlighted is the complementary activities between activity centres. This will support sustained growth and be beneficial to existing and future communities, creating diverse places to live, work and play.

Council include reference to alignment and consideration of the Palmerston Local Economic Plan, highlighting the relationship between land use and economic development. Proposals and site investigations contained within the first draft Subregional Land Use Plan relate directly to the existing local economic efforts identified by Council. Aligning these strategic priorities will support economic opportunities for Palmerston and the wider subregion.

Council noted the importance of the Subregional Land Use Plan as a document for the future, allowing for industrial growth in the region alongside population growth.

Council provided the following specific feedback on the first draft Subregional Land Use Plan.

### ***Non-residential land supply and the city centre***

The first draft Subregional Land Use Plan identifies the important role of amenities and facilities of Palmerston in supporting growth in future urban areas, leveraging from existing facilities, networks and opportunities. Utilising the existing centre will benefit and support Central Palmerston's role as a primary activity centre.

Supporting the growing residential population in the subregion, non-residential land supply will be crucial. The draft Subregional Land Use Plan seeks to provide new urban areas with adequate non-residential land. Identification of suitable uses for this non-residential land should consider the relationship to surrounding activity centres.

### **Social Infrastructure**

Planning Principle 14 of the first draft Subregional Land Use Plan identifies the role of area plans to address potential shortfalls in social infrastructure. Future Area Plans will be guided by the *Holtze to Elizabeth River Regional Social Infrastructure Assessment*. Future area plans developed under the Subregional Land Use Plan should also consider and respond to other existing area plans.

Council is currently undertaking consultation for Zuccoli Community Hub, which is accessible by other local communities, addressing short term outcomes (5yrs) for social infrastructure. The community hub will offer walking trails, and link other projects to similar active recreation pursuits recreational and environmental opportunities throughout Palmerston Escarpment and the wider Mitchell Creek catchment.

While outside the scope of the subregional plan, the Charles Darwin University campus could evolve as an important asset in training and educational needs, particularly for the expected demographic within the subregion.

Development centered around precincts such as the Palmerston Regional Hospital can also trigger development of allied services and indirect opportunities. This enables a residential population to stay local for work. The precinct around the hospital will be further developed under the Subregional Land Use Plan. Its proximity to Palmerston Centre would be a benefit in building relationship between the two centres.

### **Archer Mitchell West Focus Area**

#### **Archer**

Council noted that land use envisioned for the Archer and Mitchell West Focus Area is industrial and/or service commercial. Existing land use assessments state there is an oversupply of industrial land in the subregion. It is referenced in the draft Subregional Land Use Plan that further work is been undertaken to accommodate expansion of strategic industry. Resulting demand will impact land use changes for the former Archer Sporting Complex.

Future area planning will need to consider the role of the Weddell Freeway and its connections to employment destinations and residential communities via Roystonea Avenue. Construction of the freeway may allow downgrading of Elrundie Avenue to a local road as noted in the draft Subregional Land Use Plan.

### **Palmerston Recreational Lake**

Council is currently undertaking preliminary investigations into the potential to develop a recreation lake in Palmerston. The location identified is in the future suburb of Mitchell. The draft Subregional Land Use Plan identifies this as an investigation area, with potential for rural residential development or land uses ancillary to the Middle Arm industry.

Provisions for a recreational reserve in this location supports community lifestyle, whilst leveraging proximity to population and existing centres.

It is recommended that the Subregional Land Use Plan identify an opportunity for a recreational lake in line with Council's investigations.

### **Darwin Passenger Rail Terminal**

Council continues to support the rail terminal relocation from East Arm to the Palmerston municipality, aligning with the Palmerston Local Economic Plan. This would support potential tourism benefits and activate underutilised portions of Palmerston. Investigations into site selection, and how best to integrate with wider Palmerston community infrastructure are ongoing.

## Department of Defence

The Department of Defence (Defence) thanked the Planning Commission for the opportunity to comment on the first draft Holtze to Elizabeth River Subregional Land Use Plan. Defence notes that the draft plan is informed by the Darwin Regional Land Use Plan however provides more detail on the strategic rail, road, utility corridors and future land use. Defence noted the study area is focused around the centre of Palmerston, south of Robertson Barracks and east of RAAF Base Darwin.

Defence understands the Planning Commission needs to ensure there is a supply of land to support urban growth. Whilst this is acknowledged, it is requested that future development considers protecting Defence facilities from incompatible and encroaching development.

Defence raised concerns with the proposed change to land use south of Robertson Barracks, which is a major operational base and a key component of Australia's Defence capability. The first draft Subregional Land Use Plan proposes land adjoining the southern boundary of the barracks change from rural to urban and peri-urban. There is potential for noise to be a nuisance for future residents, which may in turn limit Defence ability to conduct operations without disruption. Defence suggested that a more considered approach be taken with the identification of land in this area and suggest implementation of an open space buffer along the southern boundary of Robertson Barracks, or retain the current rural land uses in order to protect the Defence estate from encroachment.

More broadly, any future urban development proposals proximate to Defence bases and training areas need to consider their potential impact on Defence activities.

Planning for development needs to take into considerations:

- aircrafts noise (training area noise and vibrations);
- aircraft safety such as Defence Regulations;
- bird strike;
- security; and
- traffic and access.

Defence appreciates the opportunity to participate in the ongoing strategic planning for Darwin and look forward to continue involvement in the process.

## Land Development Corporation

As a landowner in the study area, Land Development Corporation (LDC) have an interest in the project through its industrial development projects in Holtze and provided the comments below.

### ***The Natural Environment***

The first draft Subregional Land Use Plan puts emphasis on ensuring stormwater discharge can be managed appropriately to:

- ensure that flows offsite do not detrimentally impact surrounding land; and
- assist with recharge of underlying groundwater resources.

The first draft Subregional Land Use Plan identifies future development on the ground, which allows planning for infrastructure components such as basins and treatment systems (Gross Pollutant Traps) to capture and treat water. These assets are vital to development and achieve the principles set out in the draft plan and buy-in from Local Government to maintain such assets once built.

It is suggested that further context be included within the Needs Assessment document relating to ongoing control and maintenance of stormwater assets by Local Government. The development and implementation of a supporting Stormwater Management Plan by the local authorities is recommended.

### ***Land Capability***

LDC noted that the first draft Subregional Land Use Plan has maximised an urban/peri-urban footprint within the Holtze area. In some places this is close to existing industrial areas. Buffers and sensitivities between land uses require further consideration.

The proposed land use concepts for Holtze should acknowledge the existing uses, and as-of-right uses zone DV (Development) and GI (General Industry). Given the intent of these zones and the likelihood of emissions, land uses surrounding these established areas should be appropriately transitioned. This transition should be demonstrated through planning policy at this level to set the tone for future Area Planning.

## ***Movement and Transport***

It is important that strategic movement corridors remain protected to ensure development does not encroach upon future opportunities to service the region.

The proposed Glyde Point Corridor (GPC) as it intersects with Thorngate Road at Holtze (existing and proposed developments at this location) may limit opportunity for future connections onto the arterial corridor. This should be further investigated.

Importance factors to consider for the future design of the GPC is the management of conflicts between industrial and residential traffic, through the provisions of appropriate connections to specific land uses areas.

## **Planning Institute of Australia (PIA NT)**

The Planning Institute of Australia (PIA NT) noted that the focus of the draft Subregional Land Use Plan is land north and south of Palmerston into Litchfield, identified as four Focus Areas. PIA NT supports the strategic direction of the plan.

### ***11 Mile Focus Area***

The 11 Mile Focus Area identifies industrial land along the Stuart Highway for potential service commercial uses. The purpose of Zone SC is to provide for retail, commercial and other activities that individually require a large floor area. Service commercial land is often approved and developed for smaller retail and office uses and tenancies better placed in commercial activity centres. PIA NT provided a number of examples of smaller retail office uses in service commercial areas in McCourt Road and Georgina Crescent Yarrowonga as well as Gateway Shopping Centre.

The Planning Commission should reconsider the provision of service commercial land in the 11 Mile Focus Area which could potentially compromise the beneficial social, economic and environmental outcomes derived from concentrating commercial and retail activities in local and regional activity centres.

### ***Greater Holtze Focus Area***

The Greater Holtze Focus Area provides for the development of large Crown Land parcels into new urban residential neighbourhoods to support future population growth in the region. This will result in clearing of native vegetation; it is therefore important the development of this area have sound planning principles.

With the development of urban greenfield in the Greater Darwin area, planning principles for development should retain existing vegetation and landforms in the creation of vegetated corridors, passive open space and where possible verge treatments and stormwater management systems.

The CSIRO's 'Developing a Darwin Heat Mitigation Strategy' identifies artificial wetlands, fountains and ponds as a strategy for combatting urban heat. There is support for the identification of managed water bodies, and the inclusion of objectives relating to green networks, active transport networks and walkable catchments (planning policies 22 and 23).

Providing precincts to encourage contemporary housing choices, particularly in an around the Palmerston Regional Hospital, such as small terrace housing that can cater for first home buyers or young professionals. The provision of 'innovation precincts' may not currently align with the existing suite of zones in the NT Planning Scheme, however consideration should be given to encourage the innovation in the delivery of housing lots, tropical design and market needs.

Greater Holtze and Central Palmerston are the key locations for the provision of future social infrastructure. It is suggested that future planning in the Greater Holtze Focus Area endeavour to identify mixed-use community centres and encourage the co-location of recreation facilities with other community uses, such as schools, to maximise the potential for cross utilisation.

More broadly, it is suggested that the Subregional Land Use Plan should identify community purpose land for diverse cultures and backgrounds. PIA NT suggest that a defined hierarchy of community facilities be identified, similar to the hierarchy of activity centres.

### ***Virginia South West Focus Area***

Virginia South West provides opportunities for rural residential development on Crown Land with reticulated town water. It is noted that this area is subject to the Restricted Clearing of Native Vegetation Overlay (RCNV) which limits the clearing of native vegetation. PIA NT support the inclusion of this overlay in all new rural areas and suggest this could be incorporated into an objective of planning policy 26.

## NT GOVERNMENT AGENCIES

The following NT Government agencies and service authorities provided comments on the first draft Holtze to Elizabeth River Subregional Land Use Plan.

- Department of Health (NT Health - Medical Entomology)
- Department of Industry, Tourism and Trade
- Aboriginal Areas Protection Authority
- Northern Territory Police, Fire and Emergency Services
- Department of Environment, Parks and Water Security Department of Industry Tourism
- Department of Infrastructure, Planning and Logistics
  - Transport and Civil Services
  - Land Development
  - Strategy Policy and Legislation

### NT Health - Medical Entomology

The Department of Health's, Medical Entomology Unit took the opportunity to provide the following comments on the first draft of the Holtze to Elizabeth River Subregional Land Use Plan.

The Darwin region is tidal and has freshwater wetlands. The potential for mosquito problems is recognised in the first draft Subregional Land Use Plan.

Swamp drainage and filling of mosquito breeding sites in the Darwin urban area have been carried out, as well as ongoing routine aerial and ground insecticide control programs. Urban exclusion zones (biting insect buffers) have also been established adjacent to wetlands.

Mosquito mitigation in Palmerston has mostly been achieved by engineering measures, such as deepening Marlow Lagoon, and in low lying areas by creating lake subdivisions. Construction of trunk drainage and lateral drains in low lying areas have also provided mosquito mitigation. Urban exclusion buffers are created to minimise the impact of biting midges, it also limits the need to carry out mosquito control in most areas. The localised areas of Mitchell Creek require ground insecticide treatment.

The statements presented the maps showing biting insect buffers and the potential managed water bodies are in line with general principles to reduce biting insects or avoid urban development in the worst affected areas.

The proposed urban areas of Holtze/Kowandi North, Holtze North and Berrimah East do not currently have a mosquito management program in place. In the absence of mosquito mitigation programs, the abundance of freshwater mosquito species in this area exceeds numbers within developed areas.

Mosquito mitigation measures are required on the proposed future urban areas identified in the draft Subregional Land Use Plan. Suggested mosquito mitigation measures are detailed in two Holtze and Kowandi North baseline biting insect assessments and Berrimah East desktop biting insect assessment. Holtze North is still to be assessed via baseline biting insect investigations; this will commence shortly.

The most effective measure to reduce mosquito breeding is habitat modification, such as removing surface water ponding by creating deeper, open water bodies populated with fish. This recommendation is recognised in Figures 13 and 14 of the first draft Subregional Land Use Plan via the inclusion of 'Potential Managed Water Body' polygons for shallow swamps and for the large paperbark swamp.

Aerial mosquito control in urban areas might not be feasible due to aviation law and land ownership. Engineering mitigation measures appear to be the best solution to achieve mosquito control in the long term. Wetland modifications will require some form of environmental assessment, similar to the Marlow Lagoon mosquito engineering works.

Despite the distance of Greater Holtze from tidal areas, high seasonal salt marsh mosquito dispersal occurs in the proposed urban areas of Greater Holtze, arising from the brackish water swamps associated with Kings Creek and the Howard River. The species can fly 5-10km in high pest numbers. To reduce the seasonal impact and associated disease risk, an aerial survey and insecticide control program is required.

While mosquito control is achievable, there are aspects that need consideration. Under the Public and Environmental Health Regulations 2014, the landowner is responsible for mosquito mitigation. Northern Territory Police Fire and Emergency Services

## Department of Industry, Tourism and Trade

The Department of Industry, Tourism and Trade provided the following comments:

- the Greater 11 Mile Focus Area could be an appropriate location for a 'Sustainable Development Precinct' such as manufacturing, agribusiness or other key piece of enabling infrastructure due to:
  - proximity to road, rail and utilities corridors with connections to Glyde/Gunn Point future development areas and Middle Arm Industrial Precinct
  - utilisation of gas as feedstock, which could enable production of fertiliser and other end products, creating new industries for the NT, and
  - the location amongst existing Zone GI (General Industry) land between Berrimah and Pinelands.
- the Department supports subdivision, rezoning and public release of vacant Crown Land in "Virginia South-West Focus Area" (surveyed Virginia Townsite) as a future commercial/ industrial precinct to service the future town of Weddell and developing Middle Arm industrial precinct, piggyback on the proposed North-South Weddell Arterial Connector.

## Aboriginal Areas Protection Authority

The Aboriginal Areas Protection Authority ('The Authority') is Independent Statutory body established under the *Northern Territory Aboriginal Sacred Sites Act 1989*. It is responsible for the protection and registration of sacred sites.

The Authority notes there are sacred sites and restricted works area in and around the study area.

The Authority strongly recommends an Authority Certificate be obtained for any works proposed under the Subregional Land Use Plan.

The Authority will continue to work with relevant agencies and future developers to ensure the protection of sacred sites.

## Department of Environment, Parks and Water Security

The Department of Environment, Parks and Water Security (DEPWS) reviewed the first draft of the Holtze to Elizabeth River Subregional Land Use Plan (HESLUP) and gave the following comments:

### Flora and Fauna Division

Comment and proposed rephrasing of environmental terminology suggested within the Natural Environment theme to better reflect natural environment sensitivities, the presence of threatened species, natural habitat considerations and the purpose of retained open space.

Additional mapping information was provided that clarified typographical information relevant to the study area.

Feedback regarding groundwater dependent ecosystems was provided to inform area planning. The potential impacts of groundwater extraction or alteration of aquifer recharge patterns was highlighted as important considerations for land use planning.

### Parks and Wildlife Division

Advice was provided that recognised the importance of water flows to receiving environments both within and nearby the study area including: Knuckey Lagoon Conservation Reserve; Howard Springs Nature Park; Shoal Bay Coastal Reserve; and Howard Springs Hunting Reserve.

It was noted that an increase in the population of the study area is likely to increase visitation to the Howard Springs Nature Park. It was noted that the Nature Park is nearing its recreational capacity and it was recommended that the Planning Commission consider retaining existing open space and identify the development of new recreational spaces.

### Water Resources Division

The Discussion Paper stated that the intended water supply for future development is reticulated water services. The first draft Subregional Land Use Plan presented at Stage Two should comment on potential changes to water supply infrastructure and/ or intentions to utilise local groundwater resources. Use of groundwater resources will be subject to the suitability and availability of the resources.

The majority of the study area is outside of a water control district, however there is overlap between the eastern boundary and the Darwin Rural Water Control District. Groundwater resources in the study area include Palmerston Dolostone Aquifer and the Pine Creek Orogen. An assessment completed in 2021 found most of these water resources to be over used or approaching full use (more than 90% is likely to be used).

Future rural subdivision in high use areas will likely cause the water resource to be unsustainably used.

Within the Palmerston area there is a risk of seawater intrusion in coastal areas. Taking groundwater in coastal areas should be done in a manner to minimise the risk of seawater intrusion.

The 'green network' is based on drainage lines and areas subject to moderate to severe waterlogging. Avoiding development in these areas is supported.

It was noted that the identified green networks may support existing natural water regimes.

In urban and peri-urban areas there are significant risks to water quality from stormwater entering waterways. Stormwater management should be designed to maintain water quality to support water dependent ecosystems and water quality in Darwin Harbour.

## **Northern Territory Police, Fire and Emergency Services**

The Northern Territory Police, Fire and Emergency Services advise that any further growth areas proposed for Palmerston and surrounds will require due consideration for the appropriate response capability and capacity of services, in accordance with the *Fire and Emergency Act 1996*.

## **Department of Infrastructure Planning and Logistics**

### **Transport and Civil Services**

The Department of Infrastructure, Planning and Logistics, Transport and Civil Services Division, provided detailed comment on the first draft Holtze to Elizabeth River Subregional Land Use Plan that are summarised below.

- The potential alignments of the road rail and utility corridors comprising the Glyde Corridor require update as follows, North to South: Rail Corridor; Utility Corridor; Road alignment.
- Several major and minor roads and intersections, predominantly shown as dashed lines or accompanied by terminology such as 'nominal' or 'potential' are recognised as subject to separate feasibility and detailed design processes and subject to confirmation.
- The Strategic Transport Network Map should be updated to identify the potential ferry terminal and to incorporate Transport comment for the identification for the potential reconfiguration of roads.
- Various figures to be updated in regard to Transport comment reflecting intersection design consideration i.e. potential grade separation, associated with future considerations related to major arterials including the Weddell Freeway.
- Various figures to be updated to identify significant roads, such as Willard Road.

### **Land Development Unit**

The Land Development Unit (LDU) gave comment on the first draft Holtze to Elizabeth River Subregional Land Use Plan.

LDU suggested a number of changes to the wording of the draft planning principles to more accurately reflect infrastructure requirements and terminology used throughout the document. Such things as 'Kowandi North' be referred to as 'Kowandi' and changing the 'Green Network' to 'Areas of Existing Natural Environment'.

### **Strategy Policy and Legislation Unit**

The following comments from Strategy Policy Legislation are drawn from the Darwin Regional Transport Plan (DRTP), which was prepared to integrate transport and land use planning for public transport, private and commercial vehicles, cycling and walking.

Several figures are suggested to be updated to include references to 'Transit' to support principles of a multi-modal transport network.

It was also suggested to include the following as identified in the Darwin Regional Transport Plan:

- identify and reserve future transport corridors for rapid transit; and
- all new major road infrastructure to include provision for pedestrians and cyclists.

The future Weddell Arterial/Transit corridor would connect with future rail passenger terminal(s).

The Passenger Transport unit provided the following suggested for inclusion to the Subregional Land Use Plan.

### ***Movement and Transport***

- Road width should be a standard road width for bus lane excluding on street parking, this should include roundabouts or U turns where applicable.
- Bus stops to be included on the road network with separation distance between 400-600 meter apart.
- Planned rapid transit or public transport should consider seasonal road/area condition changes like flooding and fire risks, planned areas for evacuation, in case required, should also be included.
- A bus interchange should ideally take a central location of the new development area that is easily accessible with consideration of a park and ride space.
- Road network connectivity to be considered even before completed development of the suburbs to allow bus operation.

### ***Social Infrastructure***

- Social/Events infrastructure to consider bus stops that includes adequate waiting areas with appropriate shelter for planned capacity.
- If social infrastructure includes event areas, adequate free access and maneuvering area should be included in the design for standard public transport buses which includes low floor and high floor charter buses.
- Social/Events infrastructure must include road accessibility and connectivity to arterial roads.

## SUMMARY

Stage Two consultation ran for four weeks until 26 November 2021. This stage offered the community an opportunity to have their say on developing the Subregional Land Use Plan for the area referred to as Holtze to Elizabeth River.

The feedback provided to the Planning Commission throughout this stage of engagement was generally supportive of the Subregional Land Use Plan, with key themes of the feedback including:

- continued support for retaining the Pine Forest and future opportunities for organised recreational activities in this location.
- preference for rural and/or rural residential development in Greater Holtze.
- concerns were shared around potential impacts of traffic within existing rural activity centres such as Howard Springs and Virginia.
- acknowledgement that the future of the area should be considered, but there is a need for consultation and minimising impact on the rural lifestyle.
- awareness that the plan will provide for far-term planning framework for future development, including consideration of transport and service corridors.

## NEXT STEPS

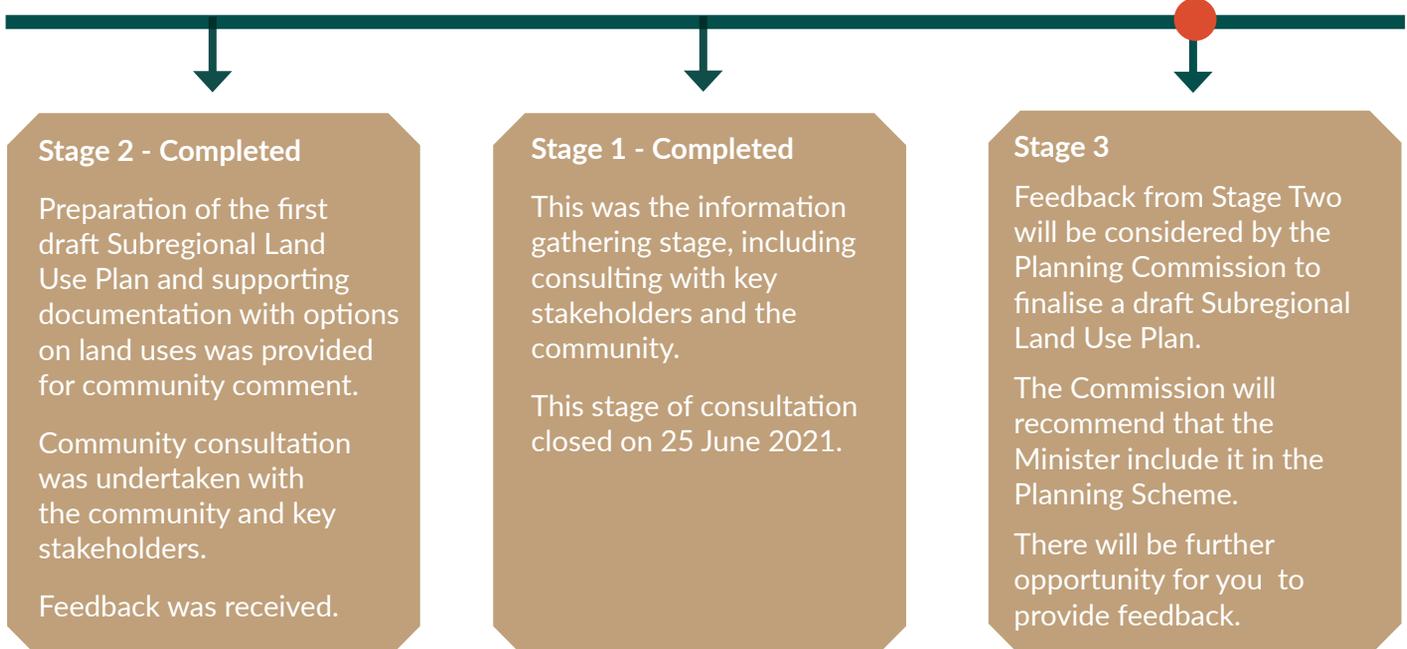
This report covers only consultation and engagement during Stage Two of the Planning Commission's Holtze to Elizabeth River Subregional Land Use Plan. This report is intended for use by the Planning Commission to assist in refining and finalising the Subregional Land Use Plan.

Once the Planning Commission finalise the draft Subregional Land Use Plan, the next stage of the process will commence.

Stage Three is anticipated to be undertaken in early 2022 and will require the Planning Commission to recommend that the Minister for Infrastructure, Planning and Logistics consider the Holtze to Elizabeth River Subregional Land Use Plan as a proposed amendment to the NT Planning Scheme.

At that stage, there will be formal exhibition of the draft plan and the community will be given one more opportunity to comment on the land use plan. Comments received during this third stage will be considered by the Minister.

We are here



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