



Department of Planning,  
Lands and Heritage

*We're working for  
Western Australia.*

A stylized, semi-transparent map of a coastal area, likely the Shire of Cocos (Keeling) Islands, showing a network of land parcels, roads, and a river or coastline. The map is rendered in shades of blue and green, blending into the dark blue background of the lower half of the cover.

# Indian Ocean Territories Land Capacity Analysis

## Shire of Cocos (Keeling) Islands

November 2020

## Executive Summary

The Regional North Land Capacity Analysis provides an overview of existing and future land capacity based on forecast population growth for the settlements in the Shire of Cocos (Keeling) Islands. In particular, it examines the land identified for residential, rural residential, commercial and industrial use that is capable of substantial further development.

This study categorises current and future land uses according to broad land-use types. The land use types are effectively a rationalisation of existing zones and reserves of the local planning scheme. The 'future' land use types have been identified through consideration of a number of strategic documents, including local planning strategies and structure plans and growth plans where relevant.

For this report the following planning instruments that have informed the settlement land-use mapping:

- Shire of Cocos (Keeling) Islands Local Planning Scheme No. 1.

When these planning instruments are reviewed, it is anticipated that the land capacity analysis will be used to guide and inform their future preparation.

Ultimately this analysis establishes the potential population yield of current and future residential lands for each relevant settlement, and then considers possible implications for the local government area's land supply situation in the context of the *Western Australia Tomorrow 2031* population forecasts.

Based on the current extents of zoned residential land and land identified for future residential purposes, this analysis suggests a potential shortfall of developable residential land to accommodate a considerable expansion of the Shire of Cocos (Keeling) Islands' population under certain scenarios. However, it is important that this is read in the context of the methodology and assumptions of the analysis, particularly as:

- there is currently no applicable local planning strategy for the Shire of Cocos (Keeling) Islands to inform the land-use mapping, particularly with regard to designating areas for future land use;
- the population scenarios identified are nominal only. They do not necessarily reflect historical or likely future trends, nor do they necessarily reflect the Shire's aspirations. Currently, the State Demographer does not produce official population forecasts for the Shire of Cocos (Keeling) Islands.

Reviewing the Shire's local planning framework may provide an opportunity to identify sufficient residential land to accommodate aspirational population targets.

# Contents

1. Introduction	1
2. Settlement land use mapping	1
2.1 Current and future land use	1
2.2 Development status	5
3. Capacity analysis	6
3.1 Potential capacity of residential and rural residential lands	7
3.2 Comparison of potential capacity estimates with the <i>Western Australia Tomorrow 2031</i> population forecasts	9
Table 1: Shire of Cocos (Keeling) Islands – development status of land in relevant settlements	5
Table 2: West Island – development status of land	5
Table 3: Home Island – development status of land	6
Table 4: Shire of Cocos (Keeling) Islands – estimated capacity of residential deemed capable of substantial further development in relevant settlements	7
Table 5: West Island – estimated capacity of residential lands deemed capable of substantial further development	8
Table 6: Home Island – estimated capacity of residential lands deemed capable of substantial further development	8
Table 7: Shire of Cocos (Keeling) Islands – estimated potential population capacity	9
Table 8: Shire of Cocos (Keeling) Islands – nominal population scenarios	9
Table 9: Shire of Cocos (Keeling) Islands – estimated additional residential land requirements to accommodate population forecasts	10
Map 1 – West Island settlement land use plan	3
Map 2 – Home Island settlement land use plan	4

The Department of Planning, Lands and Heritage acknowledges the traditional owners and custodians of this land. We pay our respect to Elders past and present, their descendants who are with us today, and those who will follow in their footsteps.

## Disclaimer

This document has been produced by the Department of Planning, Lands and Heritage. Any representation, statement, opinion or advice expressed or implied in this publication is made in good faith and on the basis that the Government, its employees and agents are not liable for any damage or loss whatsoever which may occur as a result of action taken or not taken, as the case may be, in respect of any representation, statement, opinion or advice referred to herein. Professional advice should be obtained before applying the information contained in this document to particular circumstances.

© State of Western Australia

Published by the  
Department of Planning, Lands and Heritage  
Gordon Stephenson House  
140 William Street  
Perth WA 6000  
Locked Bag 2506  
Perth WA 6001  
Published November 2020

website: [www.dplh.wa.gov.au](http://www.dplh.wa.gov.au)  
email: [info@dplh.wa.gov.au](mailto:info@dplh.wa.gov.au)

tel: 08 6551 8002  
fax: 08 6551 9001  
National Relay Service: 13 36 77

This document is available in alternative formats on application to the Department of Planning, Lands and Heritage Communications Branch.

# 1. Introduction

The Indian Ocean Territories Land Capacity Analysis provides a broad overview of the existing and future land capacity of the settlements on Christmas Island and the Cocos (Keeling) Islands with respect to potential population growth. In particular, it examines land identified for residential, commercial and industrial development.

This document presents the land use mapping and associated analysis as it relates to the applicable settlements in the Shire of Cocos (Keeling) Islands local government area.

The information presented in this document may provide a basis for a range of strategic planning including:

- assisting planning and provide direction for strategic infrastructure coordination;
- informing the preparation and/or review of local planning strategies, schemes and structure plans; and
- more detailed land supply analysis, including further investigation into the infrastructure requirements to service potential development of the future land supply.

Given the dynamic nature of planning and development, it is intended that this paper will be amended periodically to reflect future updates to local planning instruments as relevant.

It is important to read the outputs of this analysis in the context of its methodology and assumptions, particularly as they relate to the Shire of Cocos (Keeling) Islands. Additionally, reviewing the Shire's local planning framework may provide an opportunity to identify sufficient residential land to accommodate aspirational population targets.

Notwithstanding this, the information contained in this document has been prepared for guidance purposes only.

# 2. Settlement land use mapping

The Department of Planning, Lands and Heritage (DPLH) has prepared mapping that captures the spatial extents of current and future land use in applicable settlements. Within the Shire of Cocos (Keeling) Islands, this includes:

- West Island (**Map 1**); and
- Home Island (**Map 2**).
- Further context on how this mapping has been developed is provided below.

## 2.1 Current and future land use

For the purpose of this study, the mapping categorises current and future land uses into broad land-use types. It effectively rationalises and consolidates existing zones and reserves in local planning schemes with intended future land uses identified in a number of strategic documents, including local planning strategies and structure plans.

The areas identified on the maps are based on the general consideration of:

- current zonings and reservations within applicable local planning schemes; and
- other strategic planning documents including local planning strategies, structure plans, layout plans and/or growth plans where relevant.

The extent of current land uses generally reflect that of applicable existing zones and reserves in current local planning schemes; and future land uses generally reflect where land has been identified in other documents for a different (typically more intensive) land use than that identified in the current scheme.

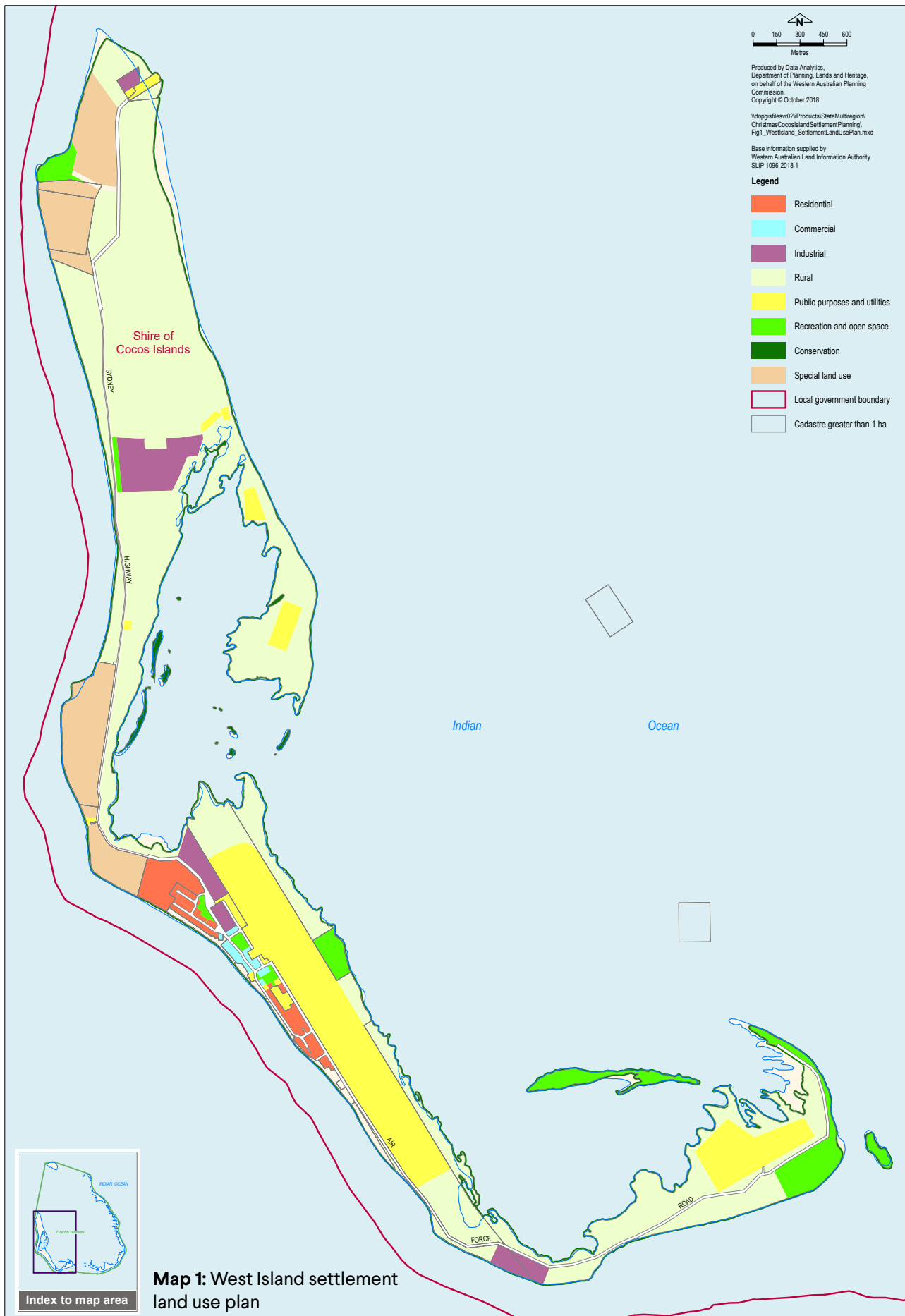
Planning instruments that have informed the preparation of the settlement land-use mapping within the Shire of Cocos (Keeling) Islands include the:

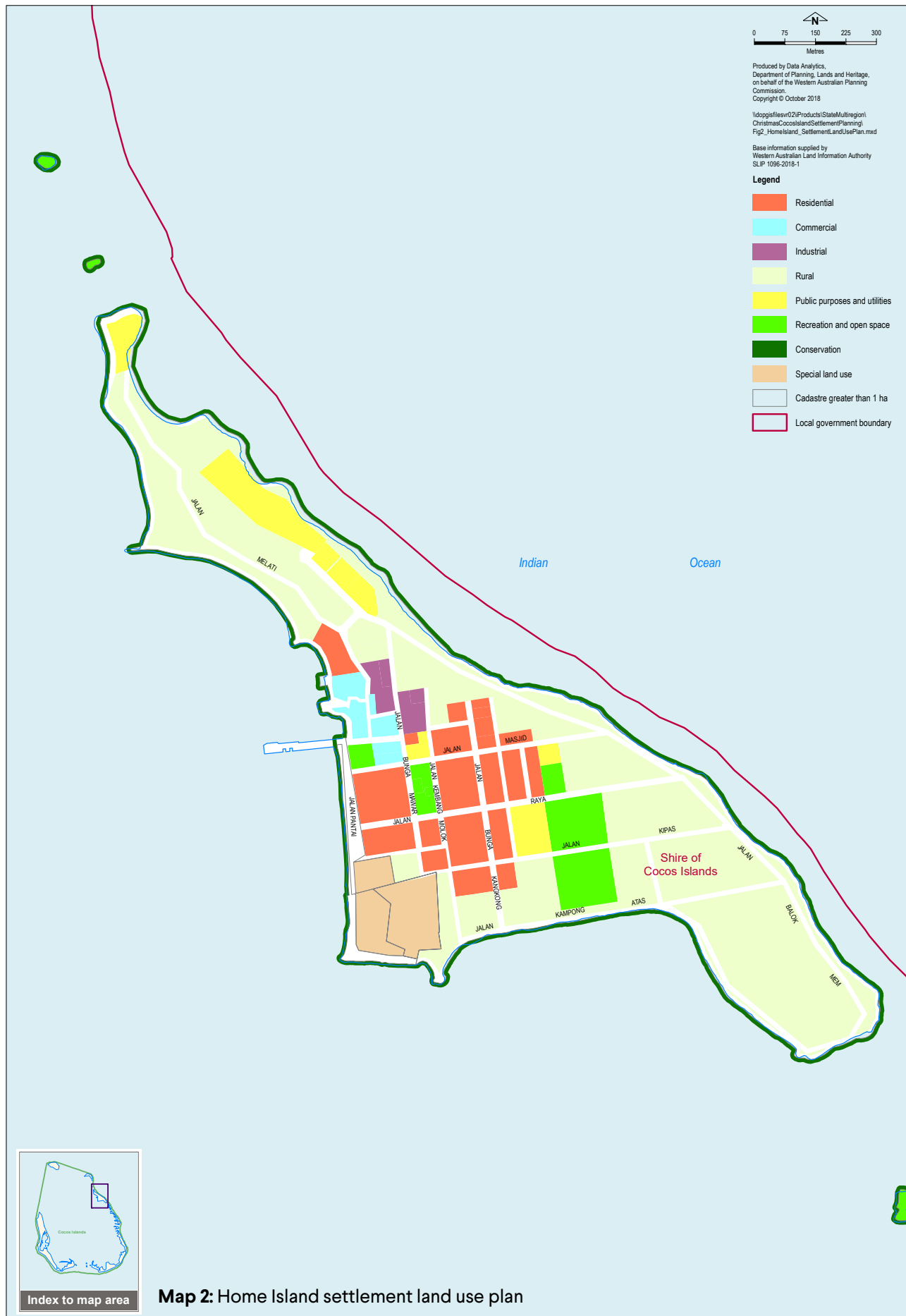
- Shire of Cocos (Keeling) Islands Local Planning Scheme No. 1.



As a general guide, a broad description of what each land-use category considers is provided below:

<b>Residential</b>	Areas that are predominantly currently zoned in relevant local planning schemes for residential land uses
<b>Future residential</b>	Areas that have been identified predominantly for future residential land uses through relevant strategic planning processes
<b>Rural residential</b>	Areas that are predominantly currently zoned in relevant local planning schemes for rural residential land uses
<b>Future Rural Residential</b>	Areas that have been identified predominantly for future rural residential land uses through relevant strategic planning processes
<b>Rural smallholdings</b>	Areas that are predominantly currently zoned in relevant local planning schemes for rural smallholdings land uses
<b>Future Rural Smallholdings</b>	Areas that have been identified predominantly for future rural smallholdings land uses through relevant strategic planning processes
<b>Commercial</b>	Areas that are predominantly currently zoned in relevant local planning schemes for commercial land uses
<b>Future commercial</b>	Areas that have been identified predominantly for future commercial land uses through relevant strategic planning processes
<b>Industrial</b>	Areas that are predominantly currently zoned in relevant local planning schemes for industrial land uses
<b>Future industrial</b>	Areas that have been identified predominantly for future industrial land uses through relevant strategic planning processes
<b>Rural</b>	Areas that are predominantly currently zoned in relevant local planning schemes for rural land uses
<b>Future Rural</b>	Areas that have been identified predominantly for future rural land uses through relevant strategic planning processes
<b>Infrastructure and Public Purposes</b>	Areas that are predominantly currently reserved in relevant local planning schemes for infrastructure and/or public purposes
<b>Future Infrastructure and Public Purposes</b>	Areas that have been identified predominantly for future infrastructure and/or public purposes through relevant strategic planning processes
<b>Recreation</b>	Areas that are predominantly currently reserved in relevant local planning schemes for recreation purposes
<b>Future Recreation</b>	Areas that have been identified predominantly for future recreation purposes through relevant strategic planning processes
<b>Conservation</b>	Areas that are predominantly currently reserved in relevant local planning schemes for conservation purposes
<b>Future Conservation</b>	Areas that have been identified predominantly for future conservation purposes through relevant strategic planning processes
<b>Special land use</b>	Areas that are currently zoned in relevant local planning schemes for specific purposes that do not align with other broad land-use categories as described, or where their inclusion may unduly distort the results of the associated analysis
<b>Investigation area</b>	Areas that have been identified through relevant strategic planning processes where alternative future land uses may be considered subject to further investigation. This may include areas from plans in preparation or in draft form





## 2.2 Development status

To gain a general understanding of the potential capacity of currently zoned and potential future-zoned land within each settlement, a broad assessment has been undertaken of the development status of applicable land identified for **residential, commercial, industrial, rural residential** and **rural smallholdings** purposes. Generally, the assessment involved a visual interpretation of aerial photography and cadastral information.

This assessment has been undertaken for those settlements where the applicable land uses exist within the map extents.

Applicable areas within the Cocos (Keeling) Islands map extents have been assessed and considered as being 'developed' or 'capable of substantial further development' as described below.

**Developed:** 'broadly considered as land where development exists or where the necessary infrastructure and services to accommodate development exist. Subdivision is generally consistent with its zoning, however existing urban areas that could potentially accommodate increases in density through urban infill are considered to be 'developed.'

**Capable of substantial further development:** Land 'capable of substantial further development' consists of undeveloped or underdeveloped land on greenfield sites, where subdivision reflective of its zoning is yet to exist. In some instances however, land may have conditional subdivision approval or be part of a broader structure planning process that still needs to be finalised. It is important to note that the development of areas that are currently considered to be capable of substantial further development may be subject to a number of constraints; including scheme amendments, structure planning, infrastructure provision, environmental and heritage issues.

**Table 1** summarises the development status of each applicable land-use category for all relevant settlements, representing a set of total figures for the entire local government area. It consolidates all data from **Tables 2 and 3**, which summarise the development status of each applicable land-use category as it relates to the individual settlements.

**Maps 3 and 4** show the spatial extents of areas within relevant settlements that have been considered capable of substantial further development as part of this analysis.

**Table 1: Shire of Cocos (Keeling) Islands**  
– development status of land in relevant settlements

	Total (ha)	Developed (ha)	Capable of substantial further development (ha)
Residential	27	16	11
Future Residential	0	0	0
<b>Residential and Future Residential</b>	<b>27</b>	<b>16</b>	<b>11</b>
Commercial	5	4	1
Future Commercial	0	0	0
<b>Commercial and Future Commercial</b>	<b>5</b>	<b>4</b>	<b>1</b>
Industrial	29	4	25
Future Industrial	0	0	0
<b>Industrial and Future Industrial</b>	<b>29</b>	<b>4</b>	<b>25</b>

**Table 2: West Island – development status of land**

	Total (ha)	Developed (ha)	Capable of substantial further development (ha)
Residential	16	7	9
Future Residential	0	0	0
<b>Residential and Future Residential</b>	<b>16</b>	<b>7</b>	<b>9</b>
Commercial	3	3	0
Future Commercial	0	0	0
<b>Commercial and Future Commercial</b>	<b>3</b>	<b>3</b>	<b>0</b>
Industrial	27	3	24
Future Industrial	0	0	0
<b>Industrial and Future Industrial</b>	<b>27</b>	<b>3</b>	<b>24</b>

**Table 3:** Home Island – development status of land

	Total (ha)	Developed (ha)	Capable of substantial further development (ha)
Residential	11	9	2
Future Residential	0	0	0
<b>Residential and Future Residential</b>	<b>11</b>	<b>9</b>	<b>2</b>
Commercial	2	1	1
Future Commercial	0	0	0
<b>Commercial and Future Commercial</b>	<b>2</b>	<b>1</b>	<b>1</b>
Industrial	2	1	1
Future Industrial	0	0	0
<b>Industrial and Future Industrial</b>	<b>2</b>	<b>1</b>	<b>1</b>

### 3. Capacity analysis

The assessment of development status of current and future land use areas enables a broad-level capacity analysis of the potential capacity of currently zoned and potential future-zoned land within the Shire of Cocos (Keeling) Islands. The Department of Planning, Lands and Heritage has prepared such an analysis that:

- estimates the potential additional population yield of current and future residential, rural residential and rural smallholdings lands; and
- considers possible implications with regard to the local government area's residential land situation in the context of a number of nominal population scenarios.

The tables in section 3.1 summarise the estimated additional capacity of each applicable land-use category within the Shire of Cocos (Keeling) Islands. Further analysis is presented in section 3.2 that relates this information to three nominal population scenarios.

When considering the outputs of the analysis, it is important to note that additional capacity is assumed to be accommodated exclusively in areas that are currently considered as being capable of substantial further development. means that the estimates generally do not account for possible land capacity increases due to infill and/or redevelopment of existing developed areas, and from this perspective are considered broad in nature and likely underestimate the potential overall capacity.

Please note that 'relevant settlements' are considered to be those extents that are mapped and contain the applicable land uses subject to analysis.

A capacity analysis for commercial and industrial lands necessarily requires assumptions to be made on employment density. There are currently limitations in the available data required in order to make reasonable assumptions in this regard. In particular, relatively small statistical sample sizes – something that is prevalent in regional and remote areas – compromise the reliability of using the available data for such an application. It is considered that further investigation is required to ascertain representative rates of employment density for commercial and industrial lands in regional areas, and accordingly such an analysis is not included in this paper at this stage.

### 3.1 Potential capacity of residential lots

For **residential**, land uses, potential capacity has been calculated according to scenarios that assume different average development densities that are applicable to each of those land uses. Potential additional lot and population yields have been estimated for each respective current and future land use as they relate to each relevant settlement in the Shire of Cocos (Keeling) Islands.

**Table 4** presents the total potential additional lot and population yields for all relevant settlements across the local government area.

**Tables 5 and 6** present the potential additional lot and population yields for individual settlements relevant to this analysis.

(Note: Table 4 consolidates all data from Tables 5 and 6, and essentially represents a set of total figures for the entire local government area.)

Based on the potential population yield calculations in **Table 4**, estimated total population figures for the Shire of Cocos (Keeling) Islands are provided for low, medium and high density development scenarios, which are presented in **Table 7**. Within each scenario, two subsets are considered:

- **'A'** considers the potential additional population yield of all residential, rural residential and rural smallholdings land capable of further development at the average density or lot sizes attributable to that particular scenario; and
- **'B'** considers the potential additional population yield of all residential, future residential, rural residential, future rural residential, rural smallholdings and future rural smallholdings land capable of further development at the average density or lot sizes attributable to that particular scenario.

These figures assume that all additional population in the local government area is accommodated on residential, rural residential and rural smallholdings lands deemed capable of substantial further development within the settlements considered.

**Table 4:** Shire of Cocos (Keeling) Islands – estimated capacity of residential deemed capable of substantial further development in relevant settlements

Estimated capacity of residential and rural residential lands deemed capable of substantial further development				Estimated potential population yield from additional lots <sup>2</sup>
Relevant land-use category	Area (ha)	Average density / average lot size	Potential lot yield <sup>1</sup>	
Residential	11	R10	72	266
		R20	143	529
		R30	215	796
Future Residential	0	R10	0	0
		R20	0	0
		R30	0	0
Residential and Future Residential	11	R10	72	266
		R20	143	529
			215	796

<sup>1</sup> For residential land, the 35 per cent of land necessary to support land requirements for public open space and streets (Liveable Neighbourhoods, 2007) has been factored into these figures. For rural residential and rural smallholdings lands, a 25 per cent allowance from gross land areas has been applied to account for the relevant land requirements to support development for these particular land uses.

<sup>2</sup> The population yield per dwelling is calculated at 3.7 people per dwelling unit (average people per household for the Cocos (Keeling) Islands SA2 – Australian Bureau of Statistics, 2016 Census).



**Table 5: West Island – estimated capacity of residential lands deemed capable of substantial further development**

Estimated capacity of residential and rural residential lands deemed capable of substantial further development				Estimated potential population yield from additional lots <sup>2</sup>
Relevant land-use category	Area (ha)	Average density / average lot size	Potential lot yield <sup>1</sup>	
Residential	9	R10	59	218
		R20	117	433
		R30	176	651
Future Residential	0	R10	0	0
		R20	0	0
		R30	0	0
Residential and Future Residential	9	R10	59	218
		R20	117	433
			176	651

<sup>1</sup> For residential land, the 35 per cent of land necessary to support land requirements for public open space and streets (Liveable Neighbourhoods, 2007) has been factored into these figures. For rural residential and rural smallholdings lands, a 25 per cent allowance from gross land areas has been applied to account for the relevant land requirements to support development for these particular land uses.

<sup>2</sup> The population yield per dwelling is calculated at 3.7 people per dwelling unit (average people per household for the Cocos (Keeling) Islands SA2 – Australian Bureau of Statistics, 2016 Census).

**Table 6: Home Island – estimated capacity of residential lands deemed capable of substantial further development**

Estimated capacity of residential and rural residential lands deemed capable of substantial further development				Estimated potential population yield from additional lots <sup>2</sup>
Relevant land-use category	Area (ha)	Average density / average lot size	Potential lot yield <sup>1</sup>	
Residential	2	R10	13	48
		R20	26	96
		R30	39	144
Future Residential	0	R10	0	0
		R20	0	0
		R30	0	0
Residential and Future Residential	2	R10	13	48
		R20	26	96
		R30	39	144

<sup>1</sup> For residential land, the 35 per cent of land necessary to support land requirements for public open space and streets (Liveable Neighbourhoods, 2007) has been factored into these figures. For rural residential and rural smallholdings lands, a 25 per cent allowance from gross land areas has been applied to account for the relevant land requirements to support development for these particular land uses.

<sup>2</sup> The population yield per dwelling is calculated at 3.7 people per dwelling unit (average people per household for the Cocos (Keeling) Islands SA2 – Australian Bureau of Statistics, 2016 Census).

**Table 7:** Shire of Cocos (Keeling) Islands – estimated potential population capacity

Scenario <sup>1</sup> (average density of residential land / average lot size of rural residential land)		Current population <sup>2</sup>	Estimated potential population yield from additional lots <sup>3</sup>	Estimated total population <sup>4</sup>
1. Low-density scenario (R10 / 4 ha / 40 ha)	1A	548	266	814
	1B	548	266	814
2. Medium-density scenario (R20 / 2 ha / 20 ha)	2A	548	529	1,077
	2B	548	529	1,077
3. High-density scenario (R30 / 1 ha / 8 ha)	3A	548	796	1,344
	3B	548	796	1,344

<sup>1</sup> Scenarios consider the estimated potential population capacity of the Shire of Cocos (Keeling) Islands through estimating the potential additional population capacity of land within all relevant settlements with a residential land use that has been deemed capable of substantial further development.

<sup>2</sup> Cocos (Keeling) Islands Statistical Area Level 2, 2017 Preliminary Estimated Residential Population (Australian Bureau of Statistics, 3218.0 – Regional Population Growth 2016–17).

<sup>3</sup> As per the relevant assumptions as described for **Table 4**.

<sup>4</sup> The 'estimated total population' is the sum of the 'current population' and the 'estimated potential population yield from additional lots' columns.

## 3.2 Comparison of potential capacity estimates with population scenarios

Currently, the State Demographer does not produce official population forecasts for the Shire of Cocos (Keeling) Islands.

To provide a point of comparison for interpreting the potential capacities of residential land as determined through this analysis, three population scenarios are considered. These are presented in **Table 8**.

The figures in the 'additional population' column are the difference between each scenario and the Cocos (Keeling) Islands' 2017 Preliminary Estimated Residential Population from the Australian Bureau of Statistics, 3218.0 – Regional Population Growth 2016–17.

**Table 8:** Shire of Cocos (Keeling) Islands – nominal population scenarios

	Population	Additional population
Current population	548	-
<b>Scenario A</b>	<b>750</b>	<b>202</b>
<b>Scenario B</b>	<b>1000</b>	<b>452</b>
<b>Scenario C</b>	<b>1250</b>	<b>702</b>

It is important to note that these scenarios are nominal only and do not necessarily reflect historical or likely future trends. The rate of population growth on the Cocos (Keeling) Islands will inevitably be linked to future economic development and the rate at which this occurs.

### 3.2.1 Estimated additional residential land requirements to accommodate population forecasts

**Table 9** presents estimates for the amount of residential land that would be required to accommodate the additional population for each of the population forecasts. Estimates are presented according to three different average densities of residential development, being R10, R20 and R30.

These estimates are compared to the total of all current residential and future residential land identified in relevant Shire of Cocos (Keeling) Islands settlements as being capable of substantial further development.

The figures under the 'surplus' column indicate the magnitude of the potential surplus of residential land from the extents currently identified once the additional forecast population been allowed for. A negative figure in this column indicates a shortfall in the identified areas of residential lands with respect to that required to accommodate the additional population from the relevant forecast.

The estimates in **Table 9** assume:

- all population growth occurs on residential and future residential land that has been identified as being capable of substantial future development in this analysis. To keep the calculations relatively straightforward, they do not consider additional population being accommodated on rural residential or rural smallholdings lands, nor do they take into account potential increases in population occurring due to infill development. They therefore likely overestimate residential land requirements;
- a 35 per cent allowance from gross land areas for various requirements to support development (e.g. public open space, streets, other infrastructure); and
- the number of people per dwelling remains constant.

Please note that this component of the analysis only considers the local government as a whole as opposed to each individual settlement. This is primarily due to the alignment of available data inputs at this geographic scale.

Under the assumptions set out in this paper, the analysis suggests a potential shortfall of developable residential land to accommodate a considerable expansion of the Shire of Cocos (Keeling) Islands' population under certain scenarios. However, it is important that this is read in the context of the methodology and assumptions of the analysis, particularly as:

- there is currently no applicable local planning strategy for the Shire of Cocos (Keeling) Islands to inform the land-use mapping, particularly with regard to designating areas for future land use;
- the population scenarios identified are nominal only. They do not necessarily reflect historical or likely future trends, nor do they necessarily reflect the Shire's aspirations. Currently, the State Demographer does not produce official population forecasts for the Shire of Cocos (Keeling) Islands.

Reviewing the Shire's local planning framework may provide an opportunity to identify sufficient residential land to accommodate aspirational population targets.

**Table 9:** Shire of Cocos (Keeling) Island – estimated additional residential land requirements to accommodate population forecasts

WA Tomorrow forecast bands	Additional population	Current and future land capable of substantial further development (ha) <sup>2</sup>	Residential <sup>1</sup>					
			R10 average density		R20 average density		R30 average density	
			Estimated land required to accommodate additional population (ha) <sup>3</sup>	Surplus (ha) <sup>4</sup>	Estimated land required to accommodate additional population (ha) <sup>3</sup>	Surplus (ha) <sup>4</sup>	Estimated land required to accommodate additional population (ha) <sup>3</sup>	Surplus (ha) <sup>4</sup>
Scenario A	202	11	8	3	4	7	3	8
Scenario B	452	11	19	-8	9	2	6	5
Scenario C	702	11	29	-18	15	-4	10	1

<sup>1</sup> These estimates assume that all population growth occurs on residential and future residential land that has been identified as being capable of substantial future development in this analysis. To keep the calculations relatively straightforward, they do not consider additional population being accommodated on rural residential or rural smallholdings lands, nor do they take into account potential increases in population occurring due to infill development. They therefore likely overestimate residential land requirements.

<sup>2</sup> Total area of current and future residential lands capable of substantial further development for entire local government area as per relevant figures from **Table 1**.

<sup>3</sup> A 35 per cent allowance from gross land areas to support land requirements for public open space and streets (Liveable Neighbourhoods, 2007) and a population yield per dwelling of 3.7 people per dwelling unit (average people per household for the Cocos (Keeling) Islands SA2 – ABS 2016 Census) have been factored into the estimated areas of residential land required to accommodate forecast additional populations.

<sup>4</sup> A positive figure in this column indicates that the additional population under the relevant population forecast should be able to be accommodated within the areas of residential and future residential land currently identified, without additional residential land being required. A negative figure represents the shortfall in the identified areas of residential lands with respect to that required to accommodate the additional population.