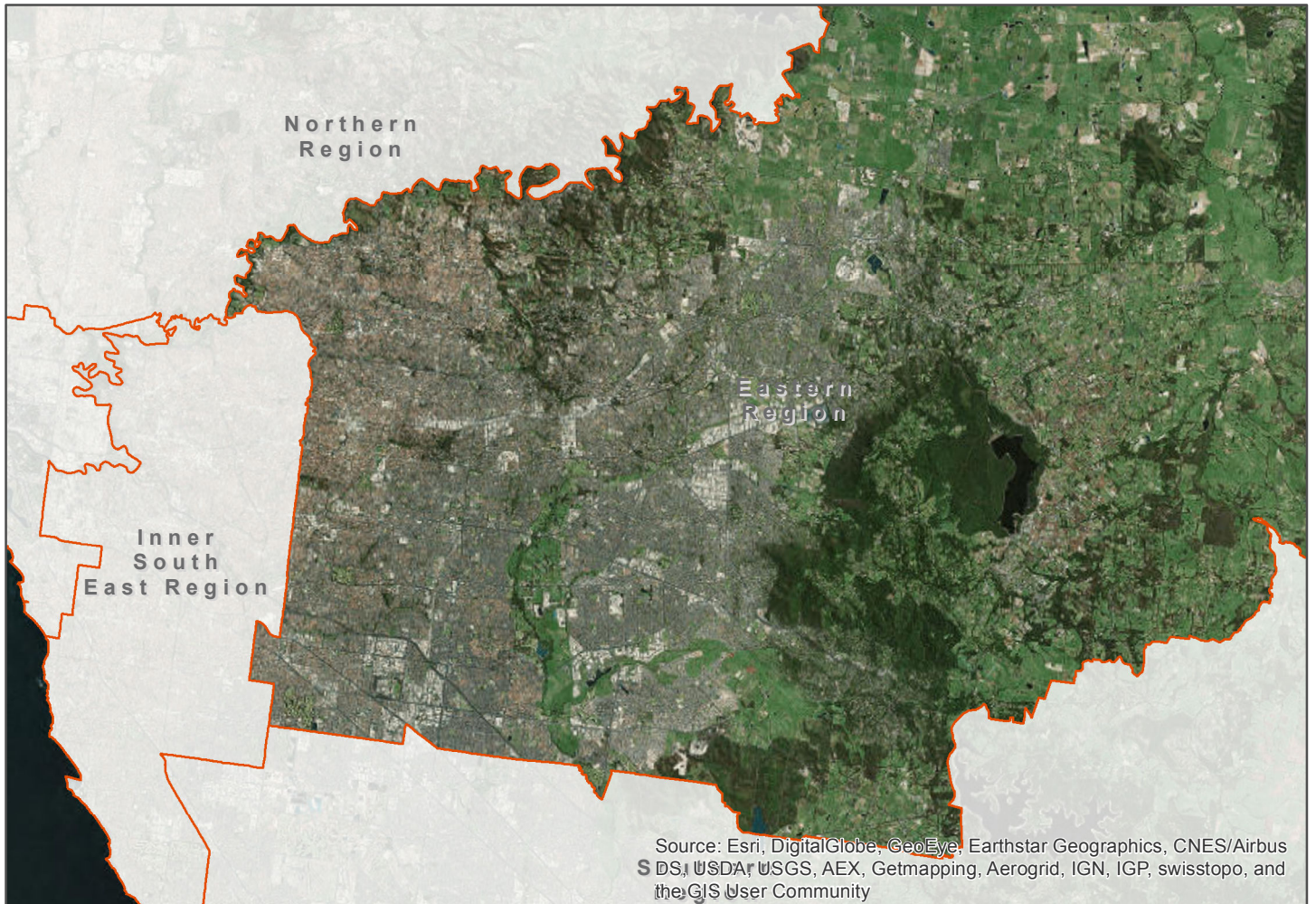


# Melbourne Urban Vegetation Cover 2018 Eastern Region



Environment,  
Land, Water  
and Planning



Date: 19/6/2019

Project: Metropolitan monitoring and analysis of vegetation cover, heat and land use

Client: Department of Environment, Land, Water and Planning, Victorian Government

Report: Melbourne Urban Vegetation Cover 2018, Eastern Region

Project Team:

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Reference: Hurley, J., Saunders, A., Amati, M., Boruff, B., Both, A., Sun, C., Caccetta, P., and Duncan, J. (2019) *Melbourne Vegetation Cover 2018, Eastern Region*, Department of Environment, Land, Water and Planning, Melbourne, Australia.

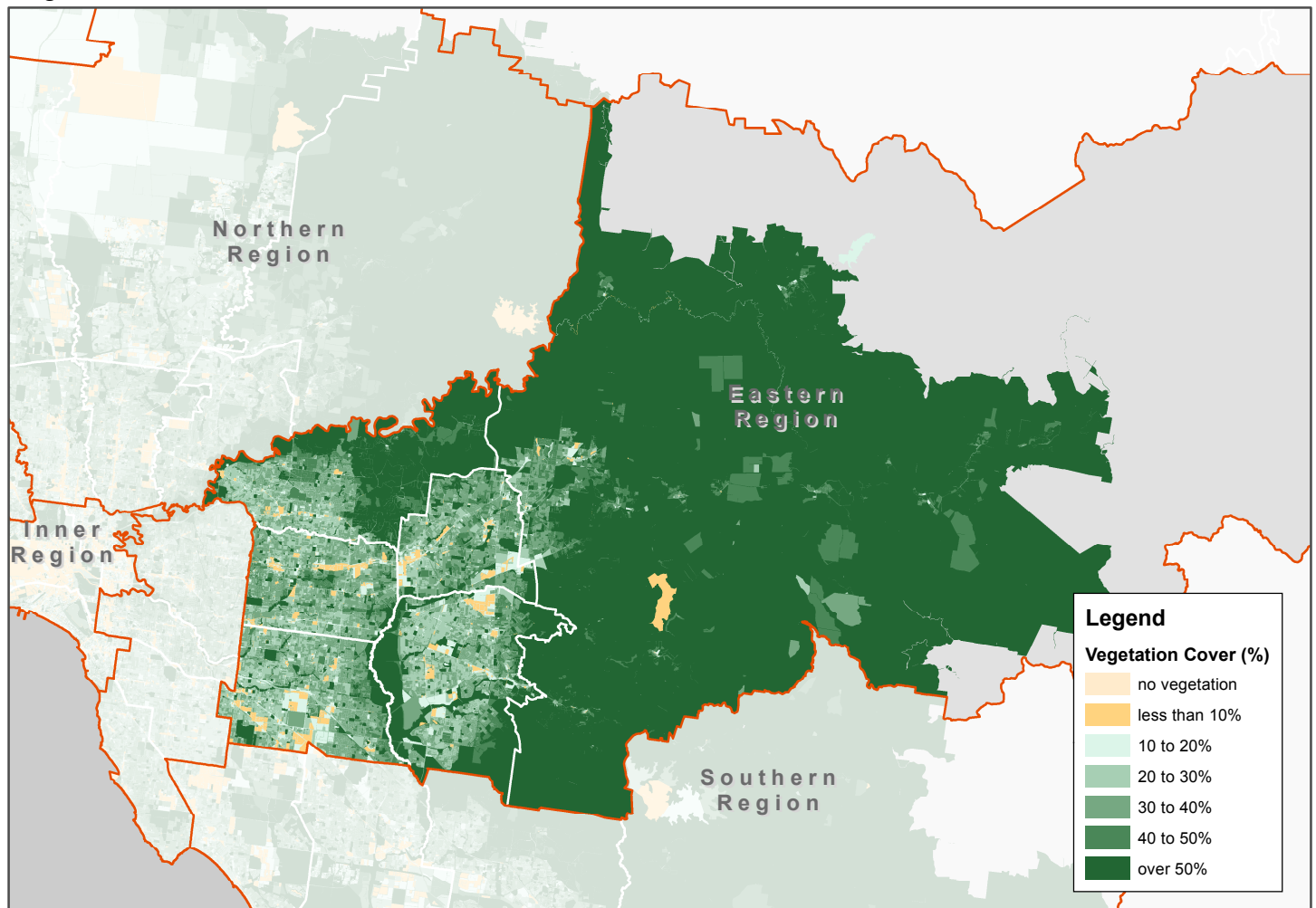




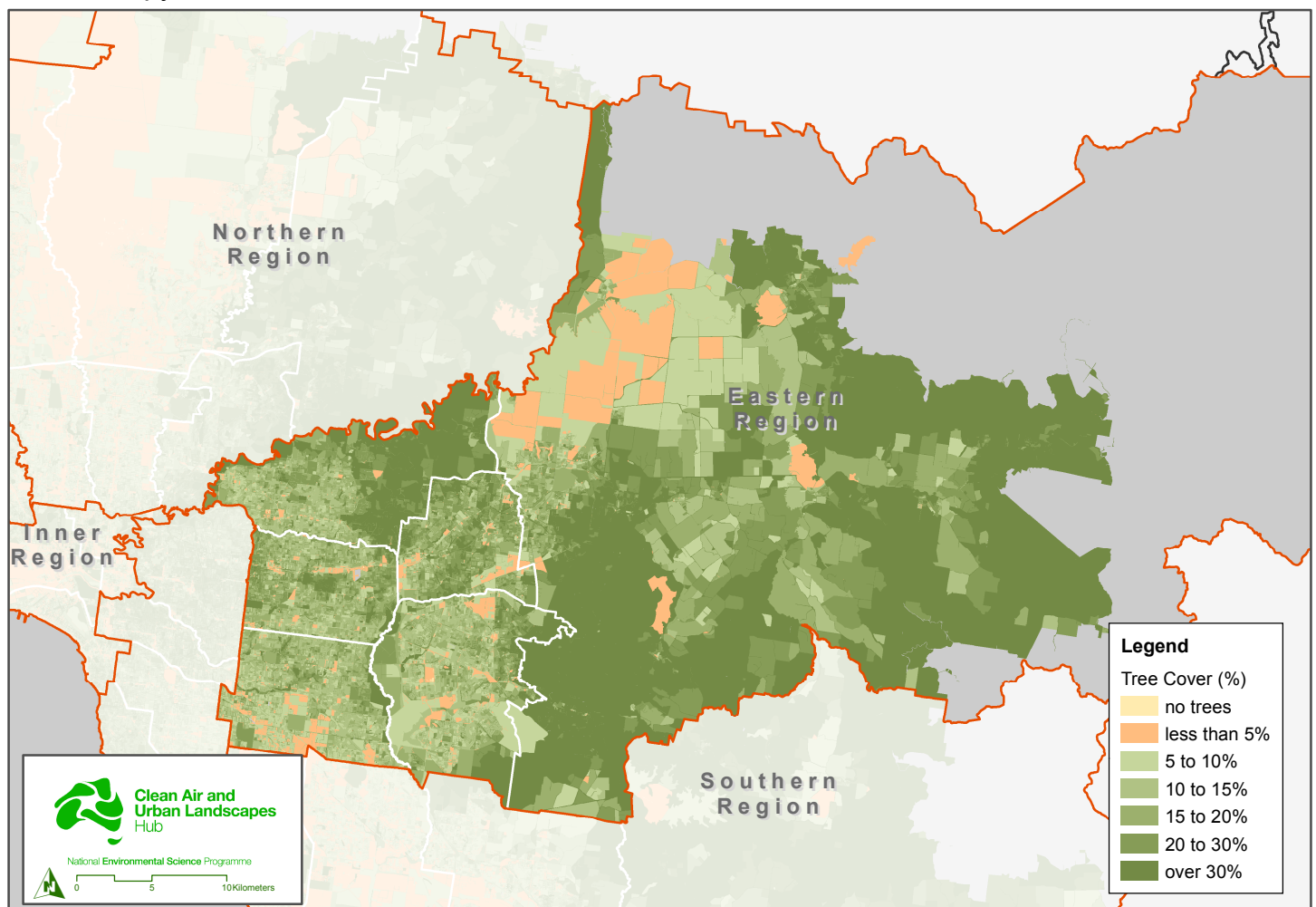
# Eastern Region

# Vegetation Cover and Tree Canopy

Vegetation Cover - Modified Mesh Block



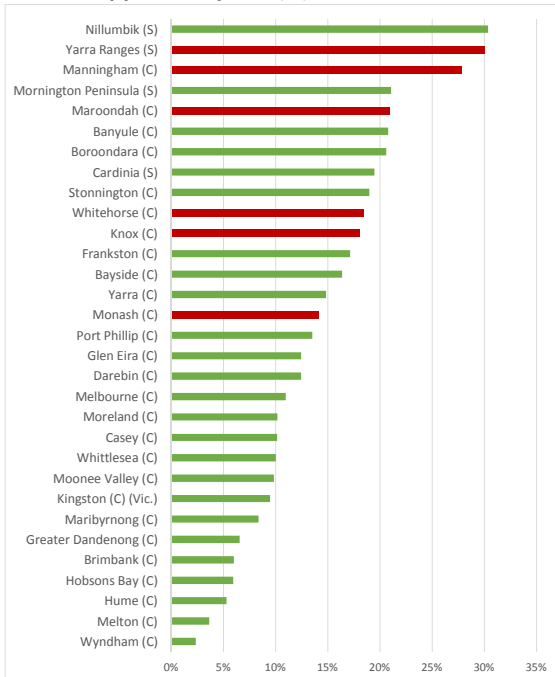
Tree Canopy - Modified Mesh Block



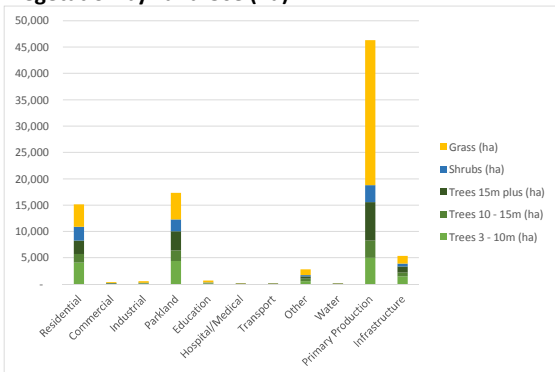
## Vegetation Cover and Tree Canopy (2018)

### Eastern Region - Urban and Non-urban Areas

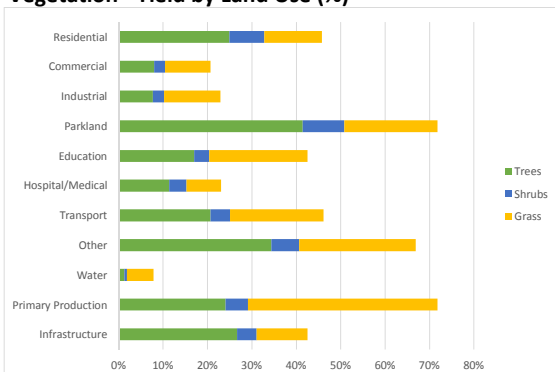
#### Tree Canopy Cover by LGA (%)



#### Vegetation by Land Use (ha)



#### Vegetation - Yield by Land Use (%)



Notes:

1. Analysis based on the 2018 data capture (limited to features where data coverage is greater than 90%), combining both urban and non-urban areas.
2. Mesh Blocks classified as "other" are representative of land uses which could not be easily placed in one of the other nine categories due to the nature of the land use, or due to evidence of high mixed use.

## Melbourne Metropolitan Region

### Vegetation and Tree Canopy (2018)

#### Highlights

High tree canopy yield on primary production land (24.1% compared with 12.4% for the whole metropolitan region).

Low percentage of total vegetation on "other" land (3.2% compared with 14.6% for the whole metropolitan region).

Low percentage of tree canopy on "other" land (3.7% compared with 15.6% for the whole metropolitan region).

High tree canopy yield on industrial land (7.7% compared with 4.5% for the whole metropolitan region).

High tree canopy yield (27.1% compared with 16.2% for the whole metropolitan region).

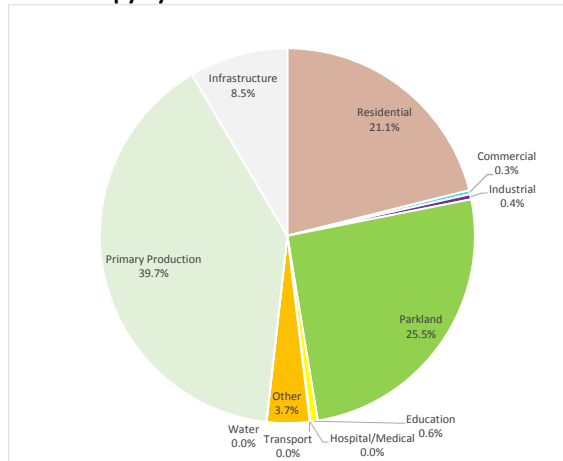
High tree canopy yield on commercial land (8.8% compared with 5.1% for the whole metropolitan region).

High tree canopy yield on "other" land (34.4% compared with 22.2% for the whole metropolitan region).

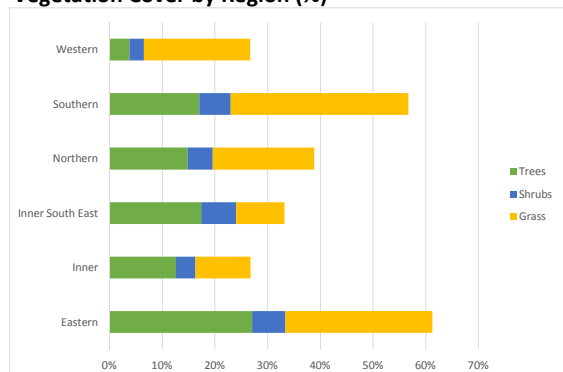
High tree canopy yield on residential land (25.5% compared with 16.2% for the whole metropolitan region).

High total vegetation yield on primary production land (71.8% compared with 47.6% for the whole metropolitan region).

#### Tree Canopy by Land Use



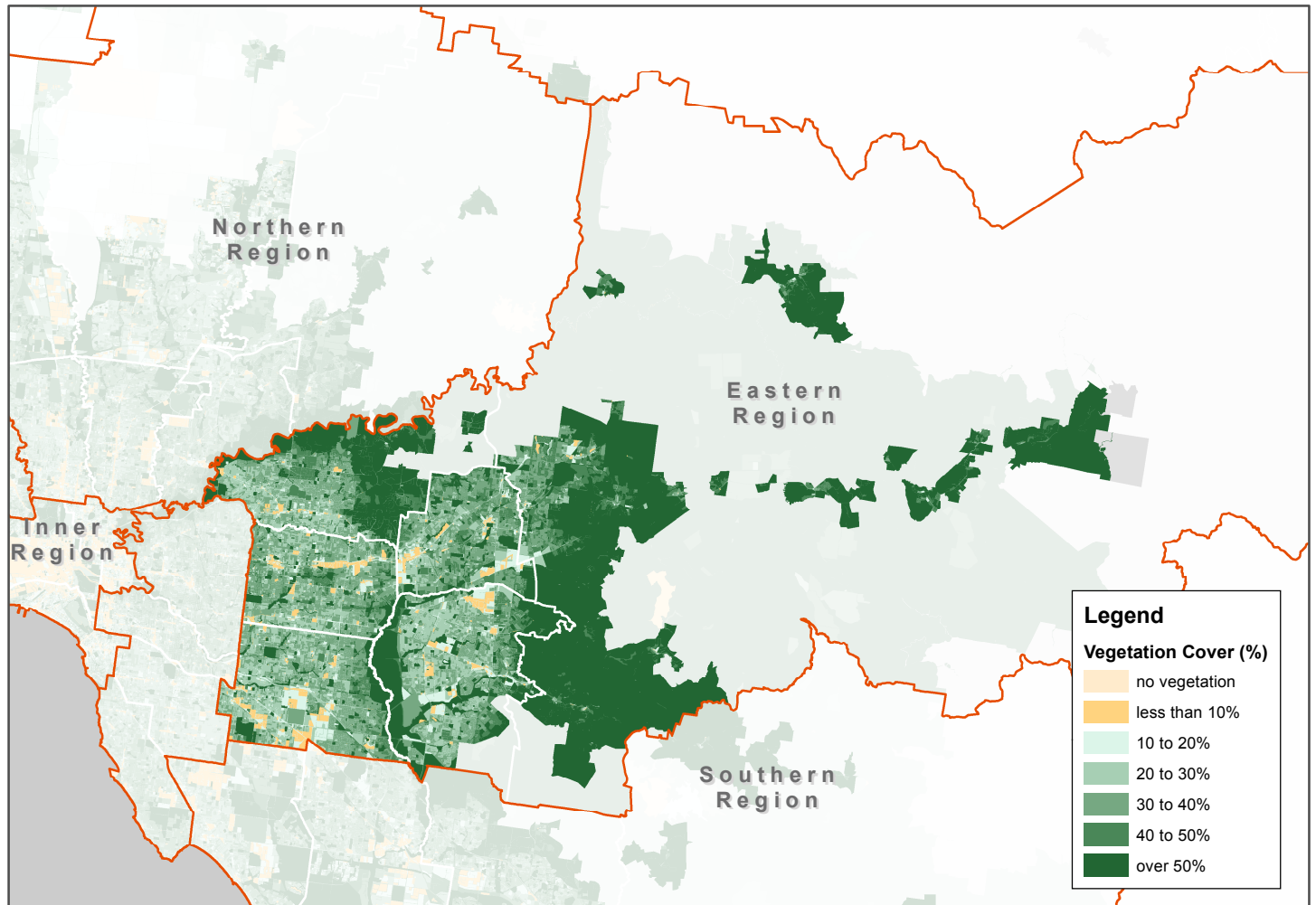
#### Vegetation Cover by Region (%)



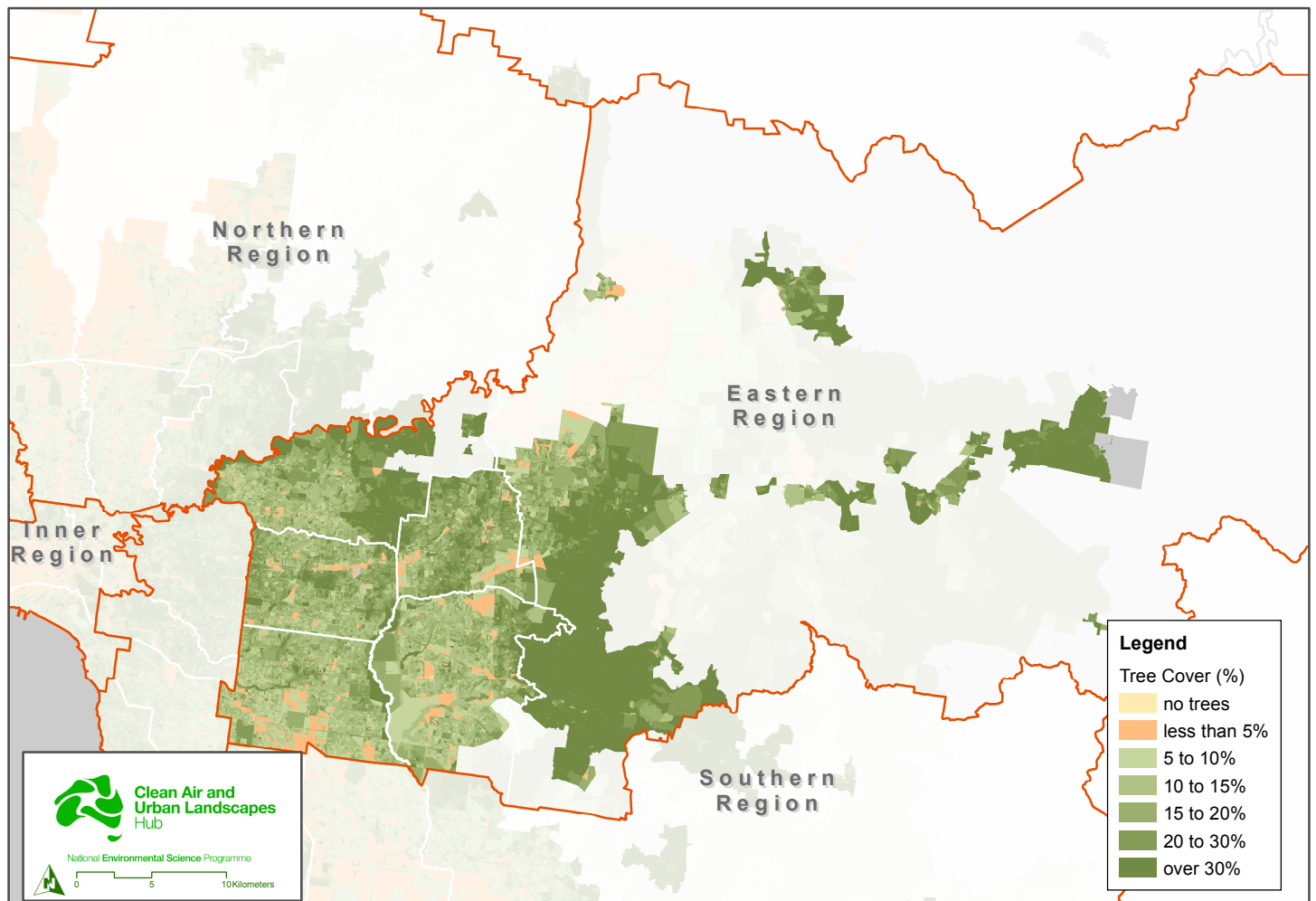
# Eastern Region

## Vegetation Cover and Tree Canopy Urban Centres and Localities Only

Vegetation Cover - Modified Mesh Block



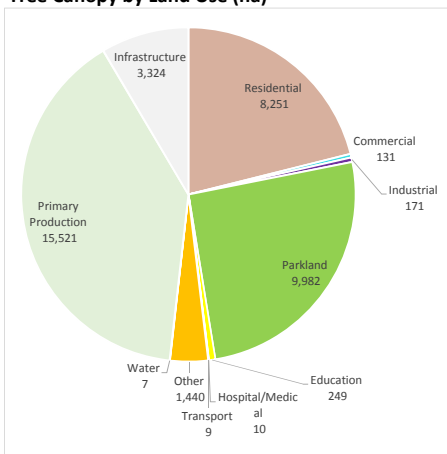
Tree Canopy - Modified Mesh Block



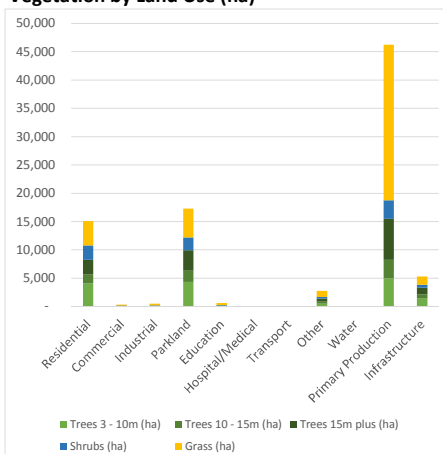
## Vegetation Cover and Tree Canopy (2018) Eastern Region

### Data Summary - Whole of Eastern Region

#### Tree Canopy by Land Use (ha)



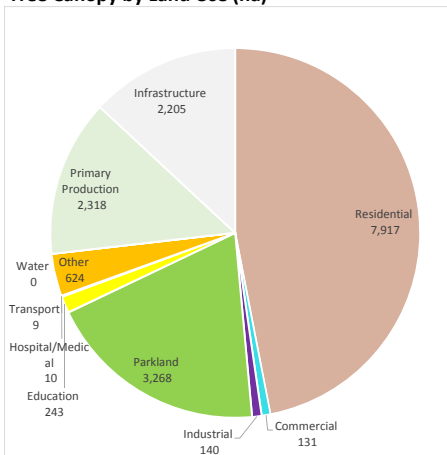
#### Vegetation by Land Use (ha)



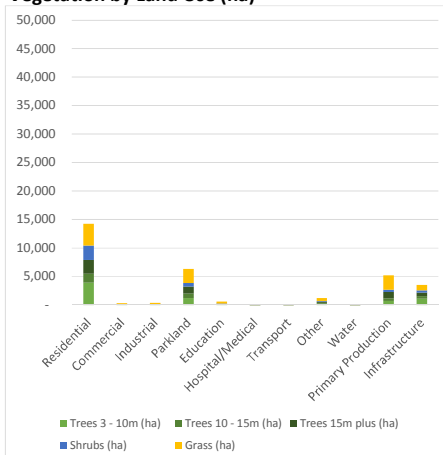
Key Statistics	Melbourne Overall	Eastern Region
Tree Canopy Cover (%)	16.2%	27.1%
Total vegetation Cover (%)	47.2%	61.3%
Shrub Cover (%)	5.1%	6.3%
Grass Cover (%)	25.9%	27.9%
Percentage of tree canopy on residential land	20.6%	21.1%
Percentage of tree canopy on parkland	20.1%	25.5%
Percentage of tree canopy on infrastructure	10.0%	8.5%
Percentage of tree canopy on "other" land	15.6%	3.7%
Percentage of tree canopy on primary production land	31.2%	39.7%

### Data Summary - Urban Centres and Localities in Eastern Region

#### Tree Canopy by Land Use (ha)



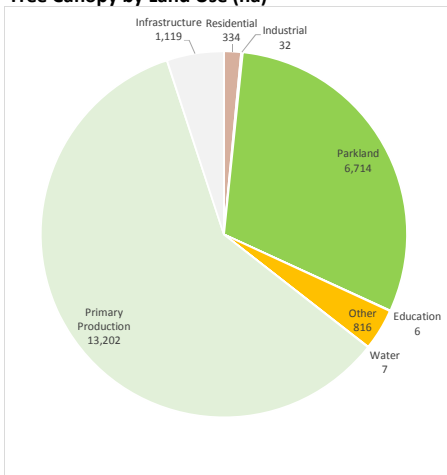
#### Vegetation by Land Use (ha)



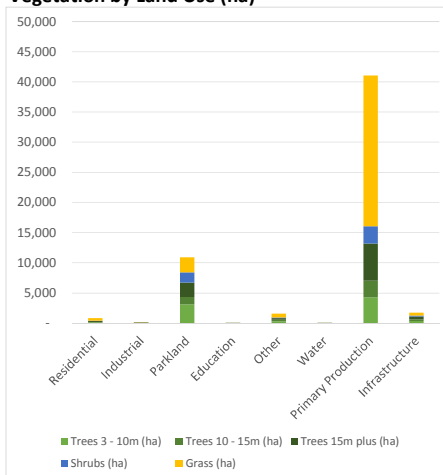
Key Statistics	Melbourne Urban Areas	Eastern Region
Tree Canopy Cover (%)	15.3%	25.9%
Total vegetation Cover (%)	42.0%	49.1%
Shrub Cover (%)	6.1%	6.3%
Grass Cover (%)	20.7%	16.9%
Percentage of tree canopy on residential land	46.7%	46.9%
Percentage of tree canopy on parkland	18.5%	19.4%
Percentage of tree canopy on infrastructure	15.7%	13.1%
Percentage of tree canopy on "other" land	6.6%	3.7%
Percentage of tree canopy on primary production land	7.2%	13.7%

### Data Summary - Non-urban areas in Eastern Region

#### Tree Canopy by Land Use (ha)



#### Vegetation by Land Use (ha)



Key Statistics	Melbourne Non-urban Areas	Eastern Region
Tree Canopy Cover (%)	17.0%	28.1%
Total vegetation Cover (%)	51.3%	71.3%
Shrub Cover (%)	4.4%	6.2%
Grass Cover (%)	29.9%	36.9%
Percentage of tree canopy on residential land	2.3%	1.5%
Percentage of tree canopy on parkland	21.2%	30.2%
Percentage of tree canopy on infrastructure	6.1%	5.0%
Percentage of tree canopy on "other" land	22.0%	3.7%
Percentage of tree canopy on primary production land	48.1%	59.4%

#### Notes:

1. Analysis based on the 2018 data capture (limited to features where data coverage is greater than 90%), combining both urban and non-urban areas.
2. Whole region analysis uses all available data; urban area analysis is restricted to areas defined by ABS Urban Centres and Localities 2016; non-urban area analysis is restricted to areas outside ABS Urban Centres and Localities 2016.
3. Mesh Blocks classified as "other" are representative of land uses which could not be easily placed in one of the other nine categories due to the nature of the land use, or due to evidence of high mixed use.



## Eastern Region - Data Tables

### Land Use and Vegetation - Urban and Non-urban areas

#### Vegetation Area (ha)

Land Use	Grass (ha)	Shrubs (ha)	Trees 3 to 10m (ha)	Trees 10 to 15m (ha)	Trees 15m plus (ha)	Total Trees (ha)	Total Vegetation (ha)	Total Land Area within Study (ha)
Residential	4,284	2,580	4,060	1,626	2,565	8,251	15,115	33,012
Commercial	169	40	72	36	23	131	340	1,641
Industrial	280	56	91	48	33	171	507	2,209
Parkland	5,046	2,268	4,340	2,021	3,621	9,982	17,295	24,079
Education	324	49	110	72	67	249	622	1,461
Hospital/Medical	7	3	6	2	2	10	19	84
Transport	9	2	4	3	2	9	19	42
Other	1,098	260	533	454	454	1,440	2,799	4,182
Water	32	3	2	1	4	7	43	541
Primary Production	27,520	3,256	4,982	3,289	7,250	15,521	46,297	64,462
Infrastructure	1,425	548	1,443	732	1,149	3,324	5,298	12,454
<b>Total</b>	<b>40,193</b>	<b>9,066</b>	<b>15,642</b>	<b>8,284</b>	<b>15,169</b>	<b>39,096</b>	<b>88,354</b>	<b>144,167</b>

#### Vegetation Cover (%)

Land Use	Grass (%)	Shrubs (%)	Trees 3 to 10m (%)	Trees 10 to 15m (%)	Trees 15m plus (%)	Total Trees (%)	Total Vegetation (%)
Residential	13.0%	7.8%	12.3%	4.9%	7.8%	25.0%	45.8%
Commercial	10.3%	2.4%	4.4%	2.2%	1.4%	8.0%	20.7%
Industrial	12.7%	2.5%	4.1%	2.2%	1.5%	7.7%	22.9%
Parkland	21.0%	9.4%	18.0%	8.4%	15.0%	41.5%	71.8%
Education	22.2%	3.4%	7.5%	4.9%	4.6%	17.1%	42.6%
Hospital/Medical	7.8%	3.9%	6.7%	3.0%	1.8%	11.4%	23.1%
Transport	21.1%	4.4%	9.7%	6.0%	5.0%	20.7%	46.2%
Other	26.3%	6.2%	12.7%	10.8%	10.9%	34.4%	66.9%
Water	6.0%	0.6%	0.4%	0.3%	0.7%	1.3%	7.9%
Primary Production	42.7%	5.1%	7.7%	5.1%	11.2%	24.1%	71.8%
Infrastructure	11.4%	4.4%	11.6%	5.9%	9.2%	26.7%	42.5%
<b>Total</b>	<b>27.9%</b>	<b>6.3%</b>	<b>10.9%</b>	<b>5.7%</b>	<b>10.5%</b>	<b>27.1%</b>	<b>61.3%</b>

\* Data tables on this page based on the 2018 data capture (limited to features where data coverage is greater than 90%), combining both urban and non-urban areas.

## Eastern Region - Data Tables

### Urban and Non-urban areas

#### Tree Canopy Cover by Local Government

Local Government	Region	Trees 3 to 10m (ha)	Trees 10 to 15m (ha)	Trees 15m plus (ha)	Total Trees (ha)	Trees 3 to 10m (%)	Trees 10 to 15m (%)	Trees 15m plus (%)	Total Trees (%)
Nillumbik (S)	Northern	6,173	4,072	2,860	13,105	14.3%	9.4%	6.6%	30.4%
Yarra Ranges (S)	Eastern	10,747	6,072	13,448	30,267	10.7%	6.0%	13.4%	30.0%
Manningham (C)	Eastern	1,493	914	744	3,151	13.2%	8.1%	6.6%	27.8%
Mornington Peninsula (S)	Southern	8,664	3,539	3,073	15,276	12.0%	4.9%	4.2%	21.1%
Maroondah (C)	Eastern	703	331	252	1,287	11.5%	5.4%	4.1%	20.9%
Banyule (C)	Northern	740	324	236	1,300	11.8%	5.2%	3.8%	20.8%
Boroondara (C)	Inner South East	851	262	127	1,241	14.1%	4.4%	2.1%	20.6%
Cardinia (S)	Southern	5,959	3,577	6,420	15,956	7.3%	4.4%	7.8%	19.5%
Stonnington (C)	Inner South East	348	102	37	488	13.6%	4.0%	1.5%	19.0%
Whitehorse (C)	Eastern	777	261	147	1,185	12.1%	4.1%	2.3%	18.4%
Knox (C)	Eastern	1,111	482	460	2,053	9.8%	4.2%	4.0%	18.0%
Frankston (C)	Southern	1,580	462	180	2,222	12.2%	3.6%	1.4%	17.2%
Bayside (C)	Inner South East	467	103	40	610	12.6%	2.8%	1.1%	16.4%
Yarra (C)	Inner	179	67	44	290	9.1%	3.4%	2.3%	14.8%
Monash (C)	Eastern	810	225	118	1,153	9.9%	2.8%	1.4%	14.2%
Port Phillip (C)	Inner	194	64	22	280	9.4%	3.1%	1.1%	13.5%
Glen Eira (C)	Inner South East	403	60	20	483	10.4%	1.5%	0.5%	12.5%
Darebin (C)	Northern	488	122	58	667	9.1%	2.3%	1.1%	12.5%
Melbourne (C)	Inner	219	113	79	411	5.9%	3.0%	2.1%	11.0%
Moreland (C)	Northern	395	89	35	519	7.8%	1.7%	0.7%	10.2%
Casey (C)	Southern	2,757	914	503	4,174	6.7%	2.2%	1.2%	10.2%
Whittlesea (C)	Northern	2,289	1,121	749	4,158	5.5%	2.7%	1.8%	10.0%
Moonee Valley (C)	Western	336	64	26	426	7.8%	1.5%	0.6%	9.9%
Kingston (C) (Vic.)	Southern	643	155	70	868	7.0%	1.7%	0.8%	9.5%
Maribyrnong (C)	Western	210	37	14	261	6.7%	1.2%	0.4%	8.4%
Greater Dandenong (C)	Southern	574	176	102	851	4.4%	1.4%	0.8%	6.6%
Brimbank (C)	Western	563	126	56	745	4.6%	1.0%	0.5%	6.0%
Hobsons Bay (C)	Western	309	57	16	383	4.8%	0.9%	0.3%	6.0%
Hume (C)	Northern	1,731	619	274	2,624	3.5%	1.3%	0.6%	5.3%
Melton (C)	Western	1,254	439	160	1,853	2.5%	0.9%	0.3%	3.7%
Wyndham (C)	Western	839	207	95	1,141	1.7%	0.4%	0.2%	2.4%
<b>Total</b>	-	<b>53,808</b>	<b>25,155</b>	<b>30,465</b>	<b>109,427</b>	<b>8.0%</b>	<b>3.7%</b>	<b>4.5%</b>	<b>16.2%</b>

\* Data tables on this page based on the 2018 data capture (limited to features where data coverage is greater than 90%), combining both urban and non-urban areas.

\* Partial data coverage only for some outer LGAs including - Cadinia, Melton, Whittlesea, Wyndham and Yarra Ranges.



## Eastern Region - Data Tables

### Land Use and Vegetation - Urban Areas

#### Vegetation Area (ha)

Land Use	Grass (ha)	Shrubs (ha)	Trees 3 to 10m (ha)	Trees 10 to 15m (ha)	Trees 15m plus (ha)	Total Trees (ha)	Total Vegetation (ha)	Total Land Area within Study (ha)
Residential	3,832	2,524	3,952	1,559	2,406	7,917	14,273	31,865
Commercial	169	40	72	36	23	131	340	1,641
Industrial	215	44	74	39	27	140	398	2,030
Parkland	2,514	581	1,207	799	1,262	3,268	6,363	9,379
Education	315	48	107	70	66	243	606	1,428
Hospital/Medical	7	3	6	2	2	10	19	84
Transport	9	2	4	3	2	9	19	42
Other	478	120	225	172	228	624	1,223	1,854
Water	1	0	0	0	0	0	1	8
Primary Production	2,529	369	717	485	1,116	2,318	5,217	7,124
Infrastructure	939	399	1,100	470	635	2,205	3,543	9,721
<b>Total</b>	<b>11,007</b>	<b>4,130</b>	<b>7,464</b>	<b>3,635</b>	<b>5,767</b>	<b>16,866</b>	<b>32,003</b>	<b>65,177</b>

#### Vegetation Cover (%)

Land Use	Grass (%)	Shrubs (%)	Trees 3 to 10m (%)	Trees 10 to 15m (%)	Trees 15m plus (%)	Total Trees (%)	Total Vegetation (%)
Residential	12.0%	7.9%	12.4%	4.9%	7.5%	24.8%	44.8%
Commercial	10.3%	2.4%	4.4%	2.2%	1.4%	8.0%	20.7%
Industrial	10.6%	2.2%	3.6%	1.9%	1.3%	6.9%	19.6%
Parkland	26.8%	6.2%	12.9%	8.5%	13.5%	34.8%	67.8%
Education	22.0%	3.4%	7.5%	4.9%	4.6%	17.0%	42.4%
Hospital/Medical	7.8%	3.9%	6.7%	3.0%	1.8%	11.4%	23.1%
Transport	21.1%	4.4%	9.7%	6.0%	5.0%	20.7%	46.2%
Other	25.8%	6.5%	12.1%	9.3%	12.3%	33.7%	65.9%
Water	9.5%	1.2%	1.7%	0.9%	0.7%	3.3%	13.9%
Primary Production	35.5%	5.2%	10.1%	6.8%	15.7%	32.5%	73.2%
Infrastructure	9.7%	4.1%	11.3%	4.8%	6.5%	22.7%	36.5%
<b>Total</b>	<b>16.9%</b>	<b>6.3%</b>	<b>11.5%</b>	<b>5.6%</b>	<b>8.8%</b>	<b>25.9%</b>	<b>49.1%</b>

\* Data tables on this page based on the 2018 data capture (limited to features where data coverage is greater than 90%), limited to urban areas as defined by ABS Urban Centres and Localities 2016.

## Eastern Region - Data Tables

### Urban Areas

#### Tree Canopy Cover by Local

Local Government	Region	Trees 3 to 10m (ha)	Trees 10 to 15m (ha)	Trees 15m plus (ha)	Total Trees (ha)	Trees 3 to 10m (%)	Trees 10 to 15m (%)	Trees 15m plus (%)	Total Trees (%)
Yarra Ranges (S)	Eastern	3,071	1,835	4,431	9,338	12.1%	7.2%	17.4%	36.7%
Nillumbik (S)	Northern	913	681	467	2,061	13.8%	10.3%	7.0%	31.1%
Manningham (C)	Eastern	1,132	603	507	2,241	12.8%	6.8%	5.7%	25.4%
Cardinia (S)	Southern	874	510	1,163	2,548	8.5%	5.0%	11.4%	24.9%
Mornington Peninsula (S)	Southern	4,082	1,043	554	5,679	15.7%	4.0%	2.1%	21.8%
Maroondah (C)	Eastern	703	331	252	1,287	11.5%	5.4%	4.1%	20.9%
Banyule (C)	Northern	740	324	236	1,300	11.8%	5.2%	3.8%	20.8%
Boroondara (C)	Inner South East	851	262	127	1,241	14.1%	4.4%	2.1%	20.6%
Stonnington (C)	Inner South East	348	102	37	488	13.6%	4.0%	1.5%	19.0%
Whitehorse (C)	Eastern	777	261	147	1,185	12.1%	4.1%	2.3%	18.4%
Frankston (C)	Southern	1,580	462	180	2,222	12.2%	3.6%	1.4%	17.2%
Bayside (C)	Inner South East	467	103	40	610	12.6%	2.8%	1.1%	16.4%
Knox (C)	Eastern	970	380	312	1,662	9.5%	3.7%	3.1%	16.3%
Yarra (C)	Inner	179	67	44	290	9.1%	3.4%	2.3%	14.8%
Monash (C)	Eastern	810	225	118	1,153	9.9%	2.8%	1.4%	14.2%
Port Phillip (C)	Inner	194	64	22	280	9.4%	3.1%	1.1%	13.5%
Glen Eira (C)	Inner South East	403	60	20	483	10.4%	1.5%	0.5%	12.5%
Darebin (C)	Northern	488	122	58	667	9.1%	2.3%	1.1%	12.5%
Melbourne (C)	Inner	219	113	79	411	5.9%	3.0%	2.1%	11.0%
Moreland (C)	Northern	395	89	35	519	7.8%	1.7%	0.7%	10.2%
Casey (C)	Southern	1,726	491	232	2,449	7.0%	2.0%	0.9%	9.9%
Moonee Valley (C)	Western	336	64	26	426	7.8%	1.5%	0.6%	9.9%
Kingston (C) (Vic.)	Southern	643	155	70	868	7.0%	1.7%	0.8%	9.5%
Maribyrnong (C)	Western	210	37	14	261	6.7%	1.2%	0.4%	8.4%
Whittlesea (C)	Northern	582	190	122	894	5.2%	1.7%	1.1%	7.9%
Greater Dandenong (C)	Southern	574	176	102	851	4.4%	1.4%	0.8%	6.6%
Hume (C)	Northern	989	313	123	1,425	4.4%	1.4%	0.6%	6.4%
Brimbank (C)	Western	563	126	56	745	4.6%	1.0%	0.5%	6.0%
Hobsons Bay (C)	Western	309	57	16	383	4.8%	0.9%	0.3%	6.0%
Wyndham (C)	Western	500	82	28	609	3.5%	0.6%	0.2%	4.2%
Melton (C)	Western	402	82	31	515	3.2%	0.7%	0.2%	4.1%
<b>Total</b>	-	<b>26,030</b>	<b>9,411</b>	<b>9,648</b>	<b>45,089</b>	<b>8.8%</b>	<b>3.2%</b>	<b>3.3%</b>	<b>15.3%</b>

\* Data tables on this page based on the 2018 data capture (limited to features where data coverage is greater than 90%), limited to urban areas as defined by ABS Urban Centres and Localities 2016.

\* Partial data coverage only for some outer LGAs including - Cardinia, Melton, Whittlesea, Wyndham and Yarra Ranges.

## Eastern Region - Data Tables

### Land Use and Vegetation - Non-urban areas

#### Vegetation Area (ha)

Land Use	Grass (ha)	Shrubs (ha)	Trees 3 to 10m (ha)	Trees 10 to 15m (ha)	Trees 15m plus (ha)	Total Trees (ha)	Total Vegetation (ha)	Total Land Area within Study (ha)
Residential	451	56	108	67	159	334	842	1,147
Industrial	65	12	17	9	6	32	108	179
Parkland	2,532	1,687	3,133	1,222	2,359	6,714	10,932	14,700
Education	9	1	3	2	2	6	16	33
Other	621	140	308	282	226	816	1,576	2,328
Water	31	3	2	1	4	7	42	533
Primary Production	24,991	2,887	4,264	2,804	6,134	13,202	41,081	57,338
Infrastructure	486	149	343	263	514	1,119	1,755	2,733
<b>Total</b>	<b>29,186</b>	<b>4,936</b>	<b>8,179</b>	<b>4,649</b>	<b>9,402</b>	<b>22,230</b>	<b>56,352</b>	<b>78,990</b>

#### Vegetation Cover (%)

Land Use	Grass (%)	Shrubs (%)	Trees 3 to 10m (%)	Trees 10 to 15m (%)	Trees 15m plus (%)	Total Trees (%)	Total Vegetation (%)
Residential	39.4%	4.9%	9.4%	5.8%	13.9%	29.2%	73.4%
Industrial	36.2%	6.7%	9.5%	4.8%	3.3%	17.6%	60.4%
Parkland	17.2%	11.5%	21.3%	8.3%	16.0%	45.7%	74.4%
Education	27.8%	3.7%	8.4%	5.2%	4.6%	18.1%	49.6%
Other	26.7%	6.0%	13.2%	12.1%	9.7%	35.1%	67.7%
Water	5.9%	0.6%	0.3%	0.2%	0.7%	1.3%	7.8%
Primary Production	43.6%	5.0%	7.4%	4.9%	10.7%	23.0%	71.6%
Infrastructure	17.8%	5.5%	12.5%	9.6%	18.8%	41.0%	64.2%
<b>Total</b>	<b>36.9%</b>	<b>6.2%</b>	<b>10.4%</b>	<b>5.9%</b>	<b>11.9%</b>	<b>28.1%</b>	<b>71.3%</b>

\* Data tables on this page based on the 2018 data capture (limited to features where data coverage is greater than 90%), limited to non-urban areas being those areas outside ABS Urban Centres and Localities 2016.

Eastern Region - Data Tables

Non-urban Areas

Tree Canopy Cover by Local Government

Local Government	Region	Trees 3 to 10m (ha)	Trees 10 to 15m (ha)	Trees 15m plus (ha)	Total Trees (ha)	Trees 3 to 10m (%)	Trees 10 to 15m (%)	Trees 15m plus (%)	Total Trees (%)
Manningham (C)	Eastern	361	311	237	910	14.4%	12.4%	9.5%	36.3%
Knox (C)	Eastern	141	101	148	391	11.8%	8.5%	12.4%	32.7%
Nillumbik (S)	Northern	5,260	3,390	2,394	11,044	14.4%	9.3%	6.6%	30.3%
Yarra Ranges (S)	Eastern	7,676	4,236	9,017	20,930	10.2%	5.6%	12.0%	27.8%
Mornington Peninsula (S)	Southern	4,582	2,496	2,519	9,598	9.9%	5.4%	5.4%	20.7%
Cardinia (S)	Southern	5,085	3,067	5,257	13,409	7.1%	4.3%	7.3%	18.7%
Whittlesea (C)	Northern	1,707	931	627	3,264	5.7%	3.1%	2.1%	10.8%
Casey (C)	Southern	1,031	423	271	1,725	6.4%	2.6%	1.7%	10.6%
Hume (C)	Northern	742	305	151	1,199	2.8%	1.1%	0.6%	4.5%
Melton (C)	Western	852	358	128	1,338	2.2%	0.9%	0.3%	3.5%
Wyndham (C)	Western	339	125	67	531	1.0%	0.4%	0.2%	1.6%
Total		27,778	15,744	20,816	64,338	7.3%	4.2%	5.5%	17.0%

\* Data tables on this page based on the 2018 data capture (limited to features where data coverage is greater than 90%), limited to non-urban areas being those areas outside ABS Urban Centres and Localities 2016.

\* Partial data coverage only for some outer LGAs including - Cadinia, Melton, Whittlesea, Wyndham and Yarra Ranges.