DRAFT

Infrastructure Strategic Planning Report





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Infrastructure Strategic Planning Report

1.0 Preliminary

This Trunk Infrastructure Strategic Planning Report is the LGIP Extraneous Material to support the Local Government Infrastructure Plan in accordance with the requirements of the Planning Act 2016.

2.0 Locality Infrastructure Networks.

Livingstone Shire has a land area of 11,780.4 km² but a land and sea area of 46,979 km², and receives an average rainfall of 920mm per year. The Shire area has 65 localities.

The Queensland Government Statistician's Office has indicated for Livingstone Shire local government area that the June 2016 Estimated Resident Population (ERP) is some 37,400 persons and the predicted June 2036 ERP to be some 57,000 persons. This is a predicted average growth rate of 2.2% pa. The distribution of the residence location of the existing and future population is not uniform across the Shire and particular localities have attributes which support residential and employment development. The RRC Planning Assumption Model (PAMv2) has attempted to document this non-uniform development pattern.

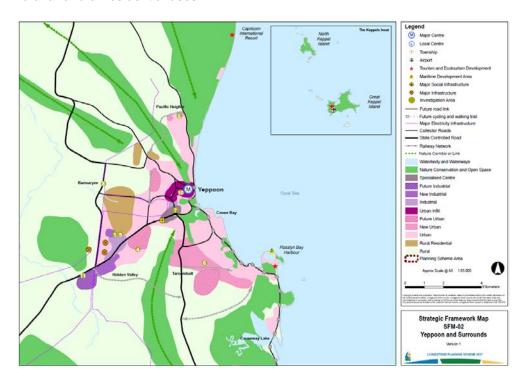
The trunk infrastructure required to serve the existing and future development needs is presented by each locality. The presentation is at a strategic or functional level, not a detailed engineering planning report of options or design capacity level. The detailed planning reports on both trunk and non-trunk infrastructure will be undertaken progressively and separate from this strategic planning report.

Replacement valves for existing and future trunk assets are presented in the SoW spreadsheet.

2.1 Adelaide Park.

Town Planning.

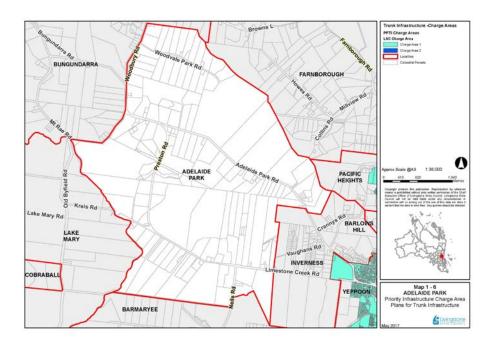
The locality has a land area of 2415 Ha and has 191 parcels of land. The land uses in the locality mainly involve: rural and rural-residential uses.



There are no strategic travel Destinations of schools, shops, industrial, religious, recreation, halls, and libraries within the locality.

The strategic plan indicates rural uses and nature conservation and open space uses.

The locality is not within any part of the PIA.



Population Projections.

The ABS Census 2011(SSC30005) recorded 406 persons as Place of Usual Residence.

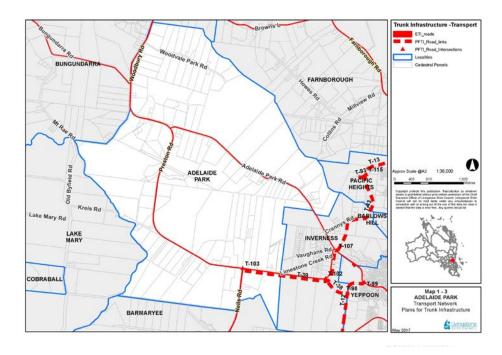
The PAM 2015 Estimated Resident Population is 361.8

The PAM projections are

Year	Estimated Resident	Est	Est Retail GFA	Est Industrial GFA
	Population	Commercial GFA		
2015	361.8	0	0	0
2016	361.8	0	0	0
2021	361.8	0	0	0
2026	361.8	0	0	0
2031	361.8	0	0	0
Ultimate	361.8	0	0	0

This indicates no expected urban growth within the locality.

Transport Infrastructure Network.



There are eight existing trunk road transport infrastructure within the locality of which four are State Road assets and four are LSC trunk road infrastructure. Refer to Existing Trunk Assets in the SoW spreadsheet for replacement costs. Pedestrian and bicycle trunk infrastructure within the locality has not been analysed.

This existing trunk road infrastructure is serving origin catchments within Adelaide Park locality and outside for Pacific Heights, Farnborough, Byfield, Bungundarra, and other.

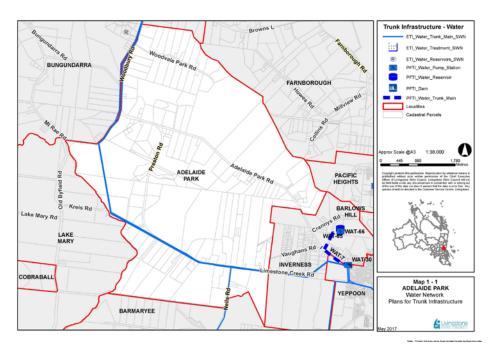
The State Roads of Woodbury Rd 11420-13550, Limestone Creek Rd 7900-5600, Preston Rd 11420-7900, and Neil's Rd 5600-4600 are considered to have adequate capacity for development within the planning horizon.

LSC managed trunk road transport infrastructure roads within the locality of Adelaide Park Rd 7100-2950, Mt Rae Rd 1550-0, and Old Byfield Rd 19900-19710 are considered to have adequate capacity for development within the planning horizon. However Limestone Creek Rd 2700-1800 capacity is some 3000 vpd while the loading within the planning horizon is some 6000vpd.

To meet Council's Desired Standards of Service will require 2 PFTI's within the locality being:

Map No.	Network	Item ID	Project Name	Future Infrastructure Asset Description	Infrastructure Value (2015\$)	Estimated Year of Completion
1-3	Transport	T-103	Intersection -Limestone Creek Road & Neil's Rd	Signalised intersection	\$1,323,000	2021
1-3	Transport	T-39 part	Limestone Creek Road upgrade 2700-1800	Upgrade to Rural Major Collector	\$540,000	2021

Water Supply Infrastructure Network.

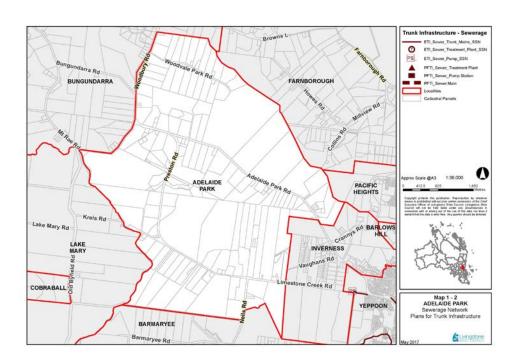


There are three existing trunk water infrastructure assets within the locality. This existing trunk infrastructure is serving no service area within the locality and is serving the Capricorn Coast water service area being outside of the locality.

The capacity of the existing trunk water infrastructure within the locality is considered adequate to meet the water demands within the planning horizon.

There are no PFTI proposed within the locality during the planning horizon.

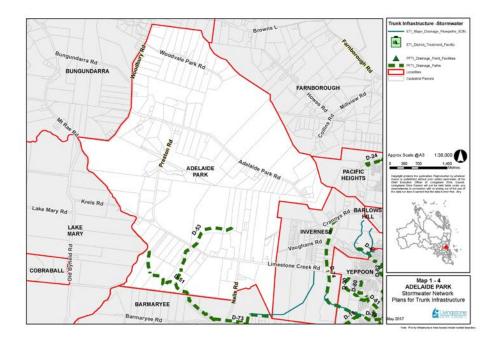
Sewerage Infrastructure Network.



There are no existing trunk sewerage infrastructure assets within the locality.

There are no known future catchments either within or outside the locality within the planning horizon which will require future trunk sewerage infrastructure to be provided within the locality.

Drainage Infrastructure Network.



There are no existing trunk drainage infrastructure assets within the locality. However there are two natural drainage paths that are identified as significant and will require ultimate term corridor protection via property tenure rights documentation.

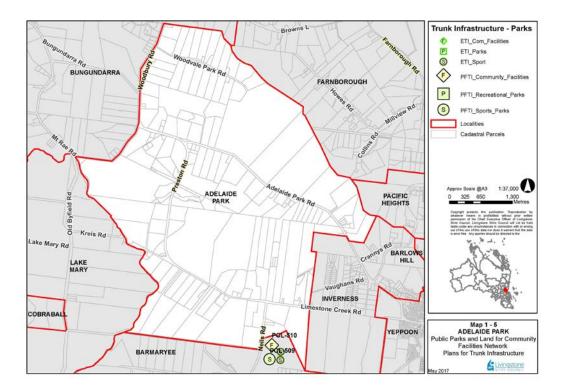
The existing natural trunk drainage path of Corduroy Creek serves significant drainage catchments in Barmaryee and Inverness localities. These localities have some urban development and may result in some drainage loading downstream.

The hydraulic capacities of the natural drainage paths are not analysed at present. No drainage capital works are envisaged during the planning horizon within the locality however ultimate planning horizon corridor protection via property tenure (normally drainage easements) for connectivity and Q100 flowpath is required.

To meet Council's Desired Standards of Service will require 2 PFTI's within the locality being:

Map No.	Network	Item ID	Project Name	Future Infrastructure Asset Description	Infrastructure Value (2015\$)	Estimated Year of Completion
1-4	Drainage	D-51 (part)	Corduroy Creek	Establish tenure - major drainage system connectivity	\$371,990	2031
1-4	Drainage	D-53	Corduroy Creek Tributary B	Establish tenure - major drainage system connectivity	\$232,778	2031

Community Facilities Infrastructure Network.



There are no existing trunk community facility infrastructures within the locality.

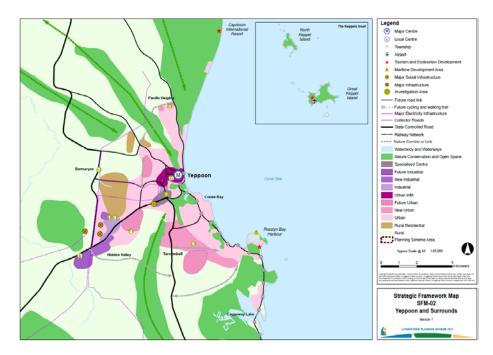
The locality relies on Community Facilities in the adjacent localities particularly Yeppoon, which is within a reasonable distance.

There are no known future catchments either within or outside the locality within the planning horizon which will require future trunk community facilities infrastructure to be provided within the locality.

2.2 Bangalee.

Town Planning.

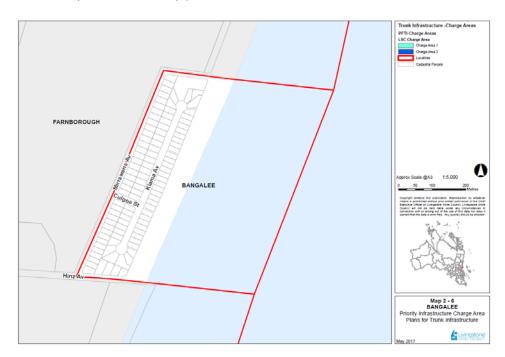
The locality has a total area of 271.6 Ha of which only land area is 6.6 Ha and the remained is ocean. There are 106 parcels. The land uses in the locality involve: only urban zoning types.



There are no strategic travel Destinations of schools, shops, industrial, religious, halls, libraries within the locality however there is an existing import recreation destination of Bangalee beach access.

The strategic plan indicates urban uses.

The locality is not within any part of the PIA.



Population Projections.

The ABS Census 2011(SSC30097) recorded 177 persons as Place of Usual Residence.

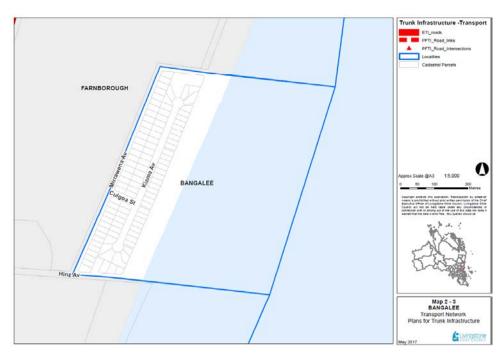
The current PAM 2015 Estimated Resident Population is 242.9

The PAM projections are

Year	Estimated Resident	Est	Est Retail GFA	Est Industrial GFA
	Population	Commercial GFA		
2011	243	0	0	0
2016	281	0	0	0
2021	281	0	0	0
2026	281	0	0	0
2031	281	0	0	0
Ultimate	292	0	0	0

This indicates no expected urban growth within the locality.

Transport Infrastructure Network.

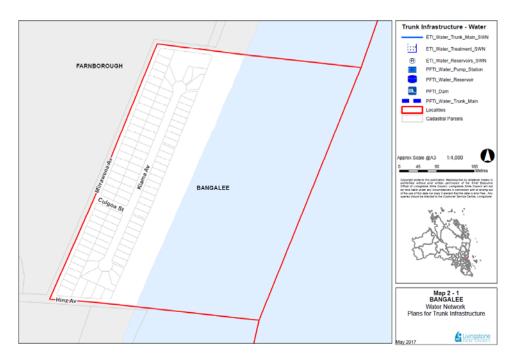


There are no existing trunk road transport infrastructures within the locality of either State Road assets or LSC trunk road infrastructure. Pedestrian and bicycle trunk infrastructure within the locality has not been analysed.

The locality relies on trunk road infrastructure in the adjacent locality of Farnborough plus the Capricorn Coast transport network in general.

There are no PFTI proposed within the locality during the planning horizon.

Water Supply Infrastructure Network.

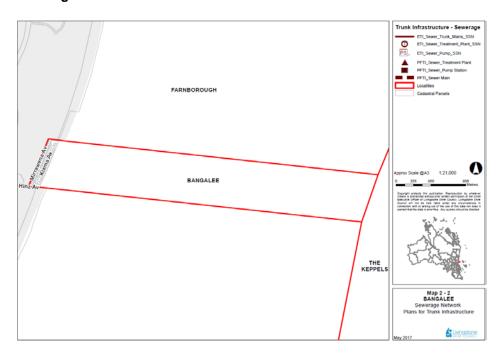


There are no existing trunk water infrastructure assets within the locality. There is a reticulated water service to the urban area within the locality. This existing trunk infrastructure is serving the service area within the locality and is serving the Capricorn Coast water service area being outside of the locality.

The capacity of the existing trunk water infrastructure for the locality is considered adequate to meet the water demands within the planning horizon, however significant water demands are expected in the immediate adjacent area of the Iwasaki Resort in the future.

There are no PFTI proposed within the locality during the planning horizon.

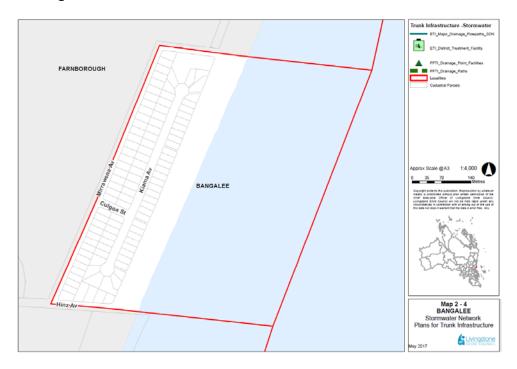
Sewerage Infrastructure Network.



There are no existing trunk sewerage infrastructure assets within the locality.

There are no known future catchments either within or outside the locality within the planning horizon which will require future trunk sewerage infrastructure to be provided within the locality.

Drainage Infrastructure Network.

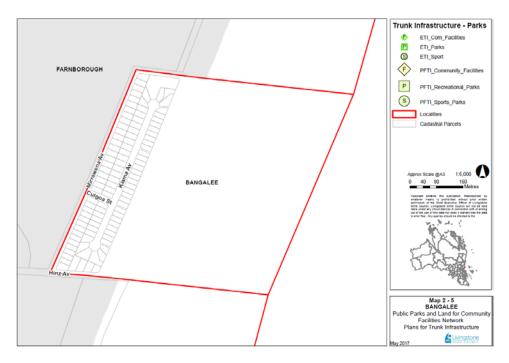


There are no existing trunk drainage infrastructure assets within the locality. However the urban area is within a natural coastal wetland environment and a significant area of coastal parallel sand dune system. This results in a 'drainage problem area' where there is no conventional drainage path due to the very flat terrain and prolonged high water table causes: flooding, residual water ponding, pests, restricted access, damage to utility assets and building foundations.

Development is constrained by the stormwater drainage problems as conventional gravity drainage design is not able to meet the Desirable Standards of Service for ponding and utility maintenance. Special drainage design guidelines and facilities for wetlands or swamp will need to be adopted in order to achieve the DSS. Investigations and research are being undertaken.

The locality is within the Barwells Creek catchment and the hydraulic capacities of the environment are not been understood or analysed completely at present. No drainage capital works are known at present however it is envisaged that significant works and plans will be required. This will result in an amendment of this LGIP Schedule of Works.

Community Facilities Infrastructure Network.



There is one existing trunk community facility infrastructure within the locality being the beach access ramp.

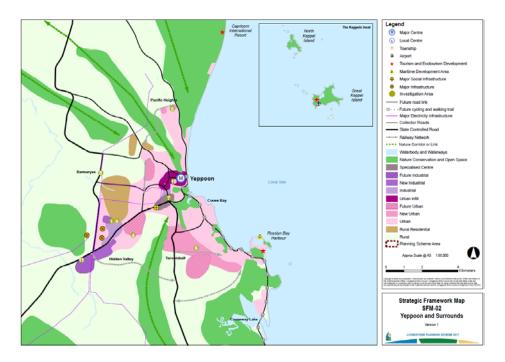
The locality relies on Community Facilities in the adjacent localities particularly Yeppoon, which is within a reasonable distance.

There are no known future catchments either within or outside the locality within the planning horizon which will require future trunk community facilities infrastructure to be provided within the locality.

2.3 Barlows Hill.

Town Planning.

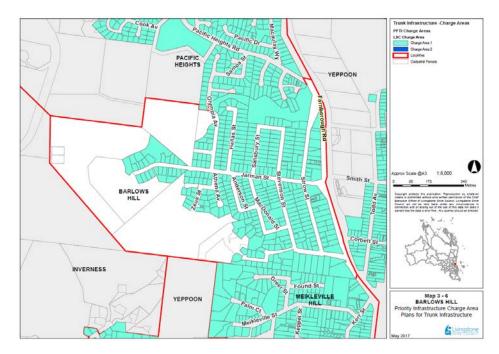
The locality has a land area of 94.2 Ha and 411 parcels of land. The land uses in the locality involve urban residential uses.



There are no strategic travel Destinations of schools, shops, industrial, religious, halls, libraries or recreation areas within the locality. Pedestrian and bicycle trunk infrastructure within the locality has not been analysed.

The strategic plan indicates urban uses, and nature conservation and open space uses.

The locality is within the PIA.



Population Projections.

The ABS Census 2011(SSC30107) recorded 719 person for Place of Usual Residence.

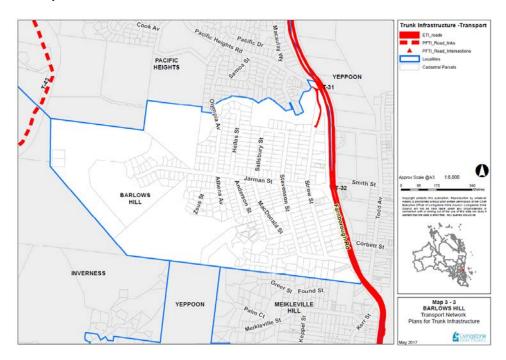
The current PAM 2016 Estimated Resident Population is 1038

The PAM projections are

Year	Estimated Resident	Est	Est Retail GFA	Est Industrial GFA
	Population	Commercial GFA		
2015	944	0	0	0
2016	1038	0	0	0
2021	1038	0	0	0
2026	1068	0	0	0
2031	1249	0	0	0
Ultimate	1313	0	0	0

This indicates some expected urban growth within the locality.

Transport Infrastructure Network.



There is one existing trunk road transport infrastructure within the locality of which none are State Road assets. The one LSC trunk road infrastructure has a replacement value of some \$2.3 M. Pedestrian and bicycle trunk infrastructure within the locality has not been analysed.

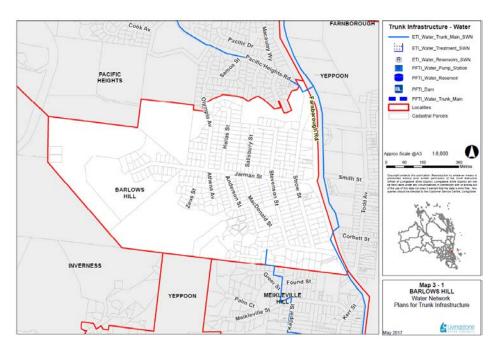
This existing trunk road infrastructure of Farnborough Road 2940-1960 as a Rural arterial hierarchy is serving origin catchments within the Barlows Hill locality and outside for Pacific Heights, Farnborough, and Byfield.

LSC managed trunk road transport infrastructure roads within the locality of Farnborough Road 2940-1960 is considered to have adequate capacity of some 30,000 vpd for development within the planning horizon however there is a limitation at the intersection of Farnborough/Jarman/Smith.

To meet Council's Desired Standards of Service will require 1 PFTI within the locality at a cost of some \$2.956 M being:

Map No.	Network	Item ID	Project Name	Future Infrastructure Asset Description	Infrastructure Value (2015\$)	Estimated Year of Completion
3-1	Transport	T-32	Intersection - Farnborough / Jarman / Smith	Major intersection upgrade and associated works	\$2,956,700	2021

Water Supply Infrastructure Network.

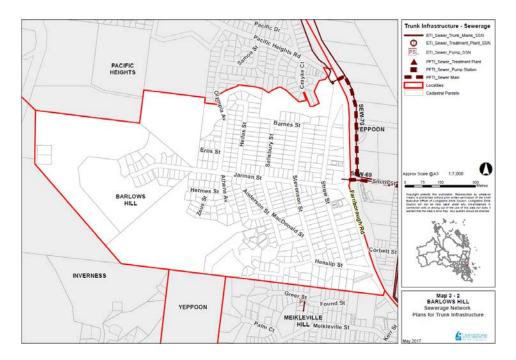


There are 2 existing trunk water infrastructure assets within the locality. This existing trunk infrastructure is serving urban areas within localities of Bangalee, Barlows Hill, Farnborough, Pacific Heights and Yeppoon which is generally the northern suburbs of the Capricorn Coast water service area being outside of the locality.

The capacity of the existing trunk water infrastructure within the locality is considered adequate to meet the water demands within the planning horizon.

There are no PFTI proposed within the locality during the planning horizon.

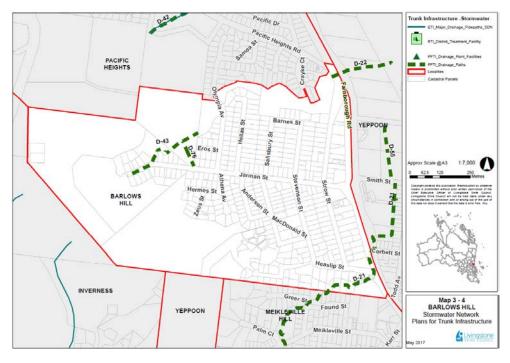
Sewerage Infrastructure Network.



There are no existing trunk sewerage infrastructure assets within the locality however trunk sewerage infrastructure in the adjacent locality of Yeppoon serves the urban areas of the locality.

The future urban areas either within or outside the locality and within the planning horizon, will not require future trunk sewerage infrastructure to be provided within the locality.

Drainage Infrastructure Network.



There are six existing trunk drainage infrastructure assets within the locality, mainly as multi-use linear parks. However there are two natural drainage paths that are identified as significant and will require ultimate term corridor protection via property tenure rights documentation.

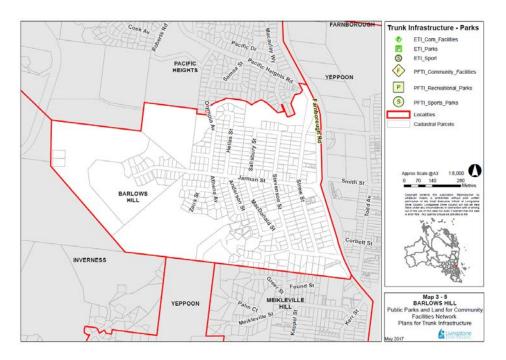
The existing natural trunk drainage path of Barlows Hill Gully serves a sub-catchment of Barlows Hill urban area and the Meikleville Hill Gully serves the urban areas of Barlows Hill and Meikleville Hill. These localities have significant urban development effect on the sub-catchments and result in significant drainage loading downstream.

The hydraulic capacities of the natural drainage paths are not analysed at present. No drainage capital works are envisaged during the planning horizon within the locality however ultimate planning horizon corridor protection via property tenure (normally drainage easements) for connectivity and Q100 flowpath is required.

To meet Council's Desired Standards of Service will require four PFTI's within the locality at a cost of some \$39,000 being:

Map No.	Network	Item ID	Project Name	Future Infrastructure Asset Description	Infrastructure Value (2015\$)	Estimated Year of Completion
3-4	Stormwater	D-43	Barlows Hill Gully – Jarman to Farnborough Rd	Establish tenure - major drainage system connectivity	\$15,000	2026
3-4	Stormwater	D-21(part)	Meikleville Hilly Gully – Meikleville St to Smith St	Establish tenure - major drainage system connectivity	\$5,600	2021
3-4	Stormwater	D-76(part)	Jarman St Gully – L2 RP602748	Establish tenure - major drainage system connectivity	\$9,000	2026
3-4	Stormwater	D-76(part)	Jarman St Gully – L100 SP174134	Establish tenure - major drainage system connectivity	\$11,000	2026

Community Facilities Infrastructure Network.



There are four existing trunk community facility infrastructure within the locality being Widdowson Park, Barnes St Park, Bradford Park and Jarman St Park. All of these parks are Linear Recreation category and have a multi-use with drainage.

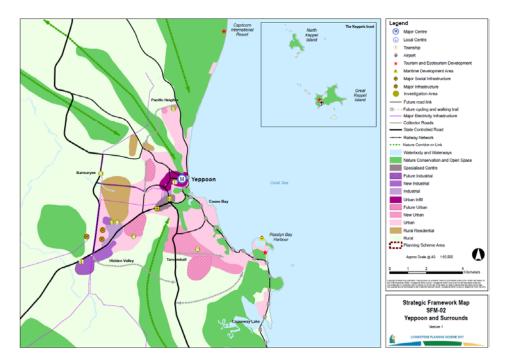
The locality relies on Community Facilities in the adjacent localities particularly Yeppoon, which is within a reasonable distance.

There are no known future catchments either within or outside the locality within the planning horizon which will require future trunk community facilities infrastructure to be provided within the locality.

2.4 Barmaryee.

Town Planning.

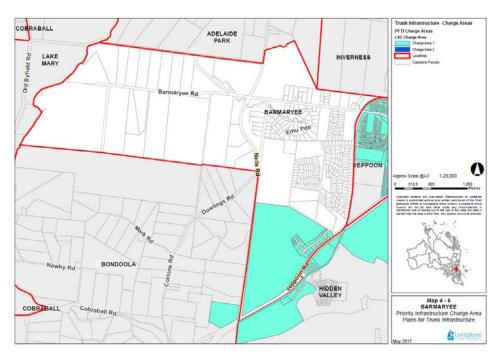
The locality has a land area of 1267.7 Ha and 366 parcels of land. The land uses in the locality involve: rural, rural residential, sporting, industrial and utility facilities.



There are six strategic travel Destinations within the locality being: Jabiru Drive industrial estate, racecourse, landfill, motor cross, pony club, country music, and multi-sports.

The strategic plan indicates rural uses and rural-residential uses.

The locality is partly within the PIA.



Population Projections.

The ABS Census 2011(SSC30108) recorded 747 persons for Place of Usual Residence.

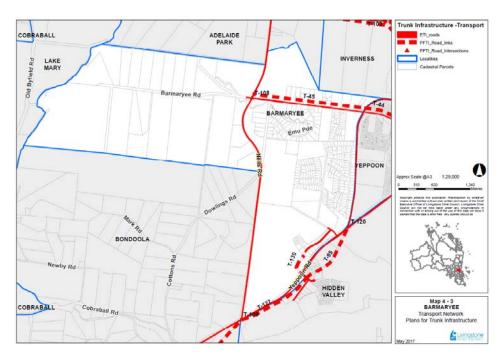
The current PAM 2016 Estimated Resident Population is 756

The PAM projections are

Year	Estimated Resident Population	Est Commercial GFA	Est Retail GFA	Est Industrial GFA
2015	657	0	10	20217
2016	756	0	10	23993
2021	756	0	10	65993
2026	783	0	10	76493
2031	873	0	10	76493
Ultimate	1014	0	10	76493

This indicates expected urban growth within the locality.

Transport Infrastructure Network.



There is four existing trunk road transport infrastructure within the locality of which two are State Road assets. The two LSC trunk road infrastructure has a replacement value of some \$1.3 M. Pedestrian and bicycle trunk infrastructure within the locality has not been analysed although the existing Rail Trail Ch 2385-4416 is recognised as trunk pedestrian and cycling asset.

This existing trunk road infrastructure is serving origin catchments within Barmaryee locality and outside for Pacific Heights, Farnborough, Byfield, Bungundarra, and other.

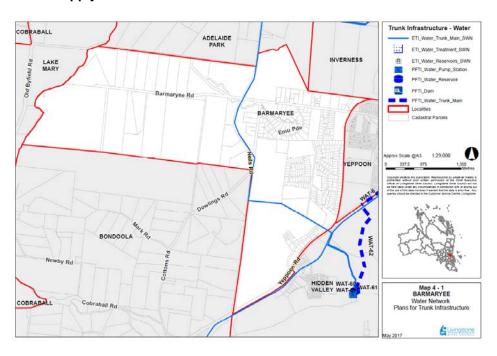
The State Roads of Neils Rd Ch 0-4600, and Yeppoon Rd Ch 32850-30400 are considered to have adequate capacity for development within the planning horizon.

LSC managed trunk road transport infrastructure roads within the locality of Barmaryee Rd Ch 750-2700 capacity is some 3000 vpd while the loading within the planning horizon is some 6000vpd.

To meet Council's Desired Standards of Service will require one PFTI within the locality being:

Мар No.	Network	Item ID	Project Name	Future Infrastructure Asset Description	Infrastructure Value (2015\$)	Estimated Year of Completion
4-3	Transport	T-45	Intersection - Farnborough / Jarman / Smith	Major intersection upgrade and associated works	\$2,956,700	2021

Water Supply Infrastructure Network.

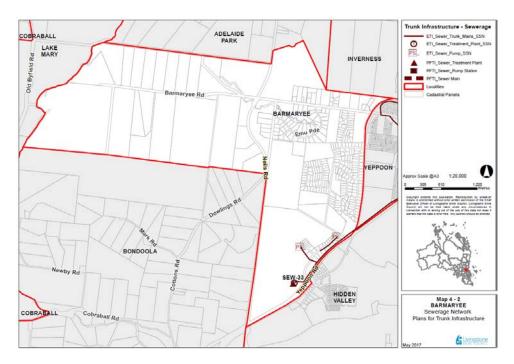


There are 2 existing trunk water infrastructure assets within the locality. This existing trunk infrastructure is serving urban areas within localities of Bangalee, Barlows Hill, Farnborough, Pacific Heights and Yeppoon which is generally the northern suburbs of the Capricorn Coast water service area being outside of the locality.

The capacity of the existing trunk water infrastructure within the locality is considered adequate to meet the water demands within the planning horizon.

There are no PFTI proposed within the locality during the planning horizon.

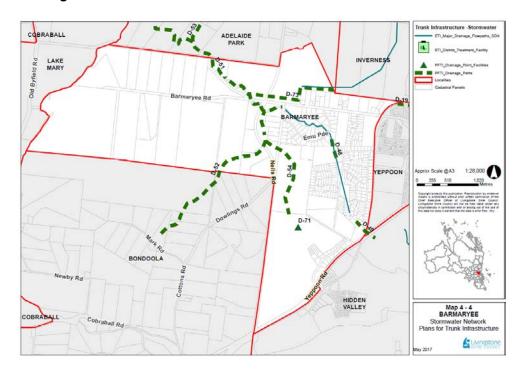
Sewerage Infrastructure Network.



There are no existing trunk sewerage infrastructure assets within the locality however trunk sewerage infrastructure in the adjacent locality of Yeppoon serves the urban areas of the locality.

The future urban areas either within or outside the locality and within the planning horizon, will not require future trunk sewerage infrastructure to be provided within the locality.

Drainage Infrastructure Network.



There are six existing trunk drainage infrastructure assets within the locality, mainly as multi-use linear parks. However there are two natural drainage paths that are identified as significant and will require ultimate term corridor protection via property tenure rights documentation.

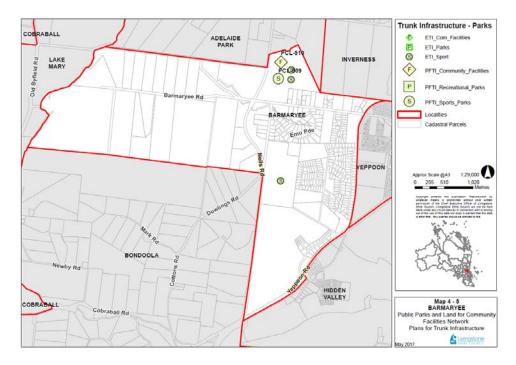
The existing natural trunk drainage path of Barlows Hill Gully serves a sub-catchment of Barlows Hill urban area and the Meikleville Hill Gully serves the urban areas of Barlows Hill and Meikleville Hill. These localities have significant urban development effect on the sub-catchments and result in significant drainage loading downstream.

The hydraulic capacities of the natural drainage paths are not analysed at present. No drainage capital works are envisaged during the planning horizon within the locality however ultimate planning horizon corridor protection via property tenure (normally drainage easements) for connectivity and Q100 flowpath is required.

To meet Council's Desired Standards of Service will require four PFTI's within the locality being:

Map No.	Network	Item ID	Project Name	Future Infrastructure Asset Description	Infrastructure Value (2015\$)	Estimated Year of Completion
3-4	Stormwater	D-43	Barlows Hill Gully – Jarman to Farnborough Rd	Establish tenure - major drainage system connectivity	\$15,000	2026
3-4	Stormwater	D-21(part)	Meikleville Hilly Gully – Meikleville St to Smith St	Establish tenure - major drainage system connectivity	\$5,600	2021
3-4	Stormwater	D-76(part)	Jarman St Gully – L2 RP602748	Establish tenure - major drainage system connectivity	\$9,000	2026
3-4	Stormwater	D-76(part)	Jarman St Gully – L100 SP174134	Establish tenure - major drainage system connectivity	\$11,000	2026

Community Facilities Infrastructure Network.



There are four existing trunk community facility infrastructure within the locality being Widdowson Park, Barnes St Park, Bradford Park and Jarman St Park. All of these parks are Linear Recreation category and have a multi-use with drainage.

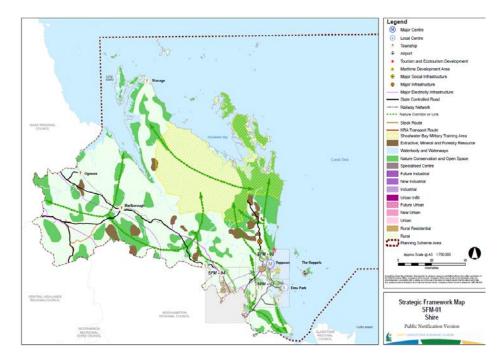
The locality relies on Community Facilities in the adjacent localities particularly Yeppoon, which is within a reasonable distance.

There are no known future catchments either within or outside the locality within the planning horizon which will require future trunk community facilities infrastructure to be provided within the locality.

2.5 Barmoya.

Town Planning.

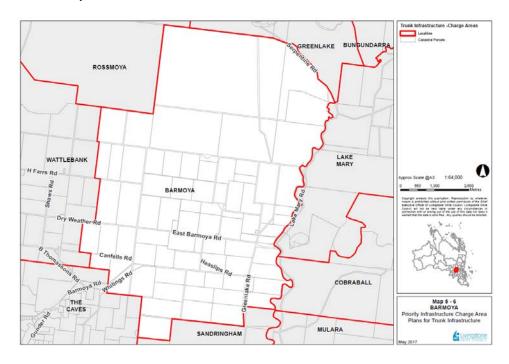
The locality has a land area of 7721.8 Ha and 105 parcels of land. The land uses in the locality involve rural.



There are no strategic travel Destinations of schools, shops, industrial, religious, halls, libraries or recreation areas within the locality.

The strategic plan indicates rural land uses.

The locality is not within the PIA.



Population Projections.

The ABS Census 2011(<u>SSC30</u>109) recorded 230 persons for Place of Usual Residence however this part of a larger census data area.

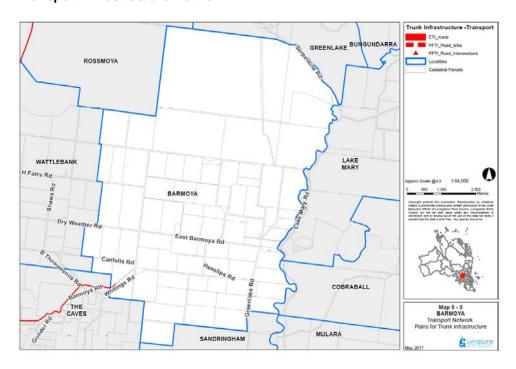
The current PAM 2015 Estimated Resident Population is 51.

The PAM projections are

Year	Estimated Resident	Est	Est Retail GFA	Est Industrial GFA
	Population	Commercial GFA		
2011	51	0	0	0
2016	51	0	0	0
2021	51	0	0	0
2026	51	0	0	0
2031	51	0	0	0
Ultimate	51	0	0	0

This indicates no expected development growth within the locality.

Transport Infrastructure Network.



There is no existing trunk road transport infrastructure within the locality of which is either a State Road asset or a LSC managed asset. Pedestrian and bicycle trunk infrastructure within the locality has not been analysed.

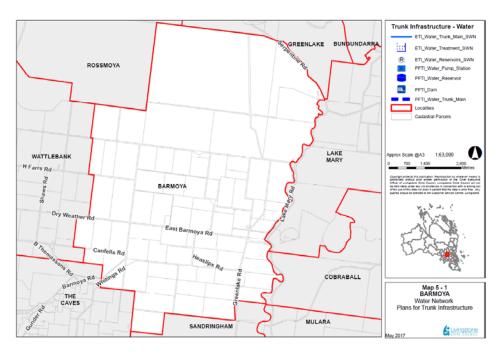
This existing non-trunk road infrastructure is serving origin catchments within Barmoya locality and outside of Lake Mary, Greenlake and others.

The State Roads serving the area are considered to have adequate capacity for local development within the planning horizon.

LSC managed non-trunk road transport infrastructure roads within the locality are considered adequate capacity for local development within the planning horizon.

There are no Transport FTI's within the locality.

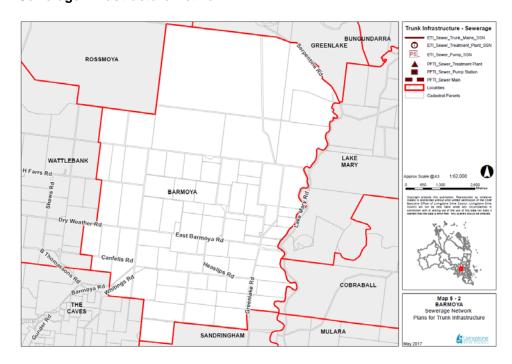
Water Supply Infrastructure Network.



There are no existing trunk water infrastructure assets within the locality.

There is no Water Supply PFTI proposed within the locality during the planning horizon.

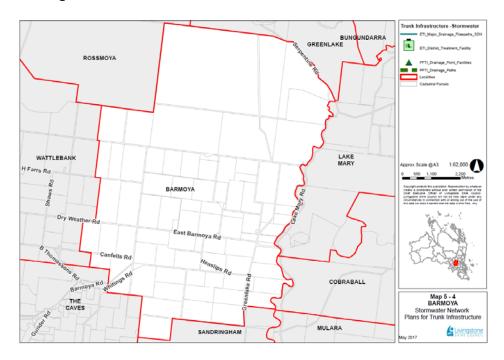
Sewerage Infrastructure Network.



There are no existing trunk sewerage infrastructure assets within the locality.

There is no Sewerage PFTI proposed within the locality during the planning horizon.

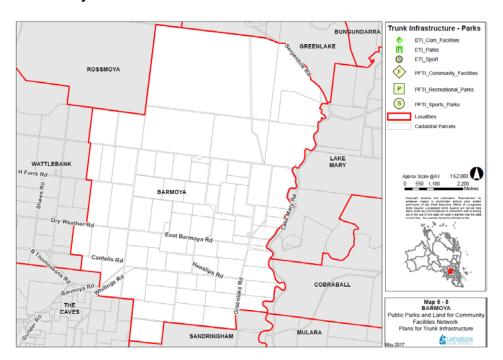
Drainage Infrastructure Network.



There are no trunk drainage systems which have been identified as relevant for development within the locality, at this time. The Fitzroy River, watercourses, drainage features and floodplains are significant natural watercourse features.

There is no Drainage PFTI proposed within the locality, at this time.

Community Facilities Infrastructure Network.



There are no trunk Community Facilities infrastructure which have been identified within the locality, at this time.

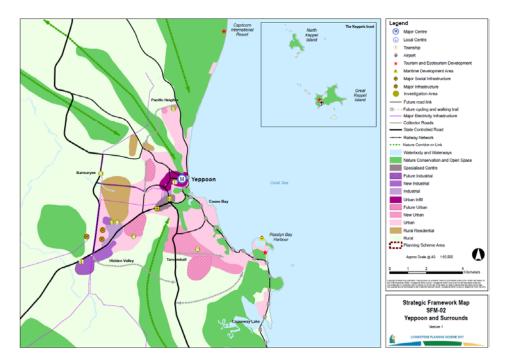
The rural locality relies on Community Facilities in the adjacent localities particularly The Caves, and Rockhampton which are within reasonable distance.

There are no known future catchments either within or outside the locality within the planning horizon which will require future trunk community facilities infrastructure to be provided within the locality.

2.6 Bondoola.

Town Planning.

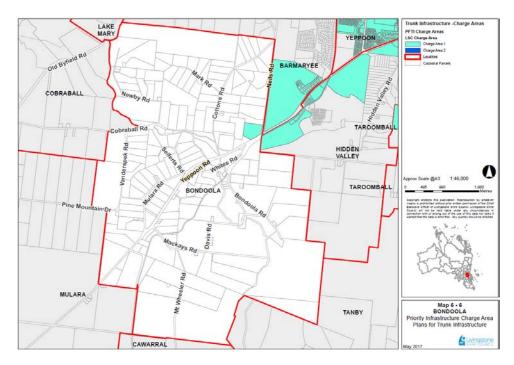
The locality has a land area of 3892.2 Ha and currently 226 parcels of land. The land uses in the locality involve: rural, rural residential, sporting, industrial and utility facilities.



There are three strategic travel Destinations being: Bondoola Sawmill, Bondoola Wreckers and a Gold Driving Range. There are no shops, schools, residential areas, commercial, and community facilities within the locality.

The strategic plan indicates that area includes: rural, future industrial, and nature conservation and open space.

The locality is not within the PIA.



Population Projections.

The ABS Census 2011(SSC30193) recorded 489 persons for Place of Usual Residence.

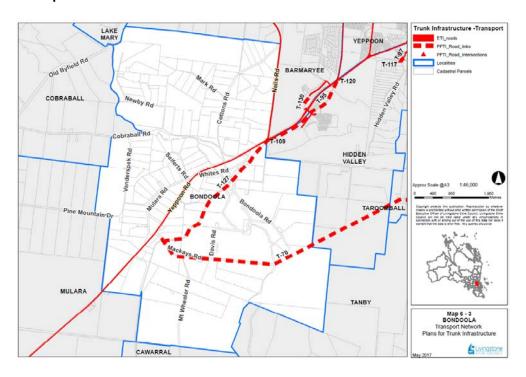
The current PAM 2016 Estimated Resident Population is 470.

The PAM projections are

Year	Estimated	Est	Est Retail GFA	Est Industrial GFA
	Resident Population	Commercial GFA		
	Topulation			
2011	467	0	781	0
2016	470	0	781	0
2021	470	0	781	0
2026	470	0	781	18750
2031	470	0	781	62500
Ultimate	470	0	781	62500

This indicates some expected development growth for Industrial within the locality.

Transport Infrastructure Network.



There is one existing trunk road transport infrastructure within the locality of which is either a State Road asset or a LSC managed asset. Pedestrian and bicycle trunk infrastructure within the locality has not been analysed.

This existing trunk road infrastructure is serving origin catchments within Bondoola locality and outside of the Capricorn Coast.

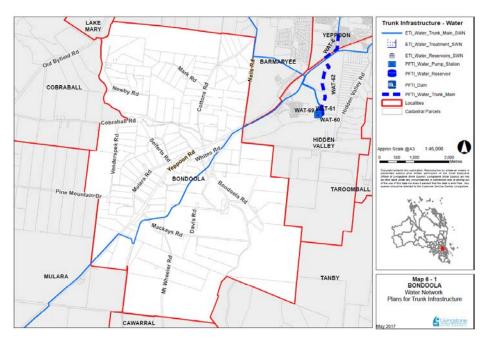
The State Roads of Yeppoon Rd Ch 24300 – 30400 is considered to be fully loaded and requires additional capacity for local development within the planning horizon.

LSC managed non-trunk road transport infrastructure roads within the locality are not considered adequate capacity for local development within the planning horizon.

To meet Council's Desired Standards of Service will require PFTI's within the locality being:

Map No.	Network	Item ID	Project Name	Future Infrastructure Asset Description	Infrastructure Value (2015\$)	Estimated Year of Completion
6-3	Transport	T-70(part)	Coucom Rd	New, Rural Major Collector, Ch 5200 - 7500	\$1,701,000	2031
6-3	Transport	T-127	Rail Trail Stage 3,	New, shared path, Ch 5600 - 10931	\$360,000	2031

Water Supply Infrastructure Network.

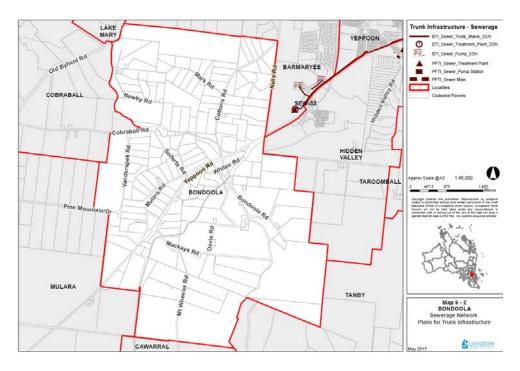


There is one existing trunk water infrastructure assets within the locality being the 600mm trunk water main connecting Boundary Water Reservoir to the Capricorn Coast Water Supply Scheme.

The Water trunk infrastructure is considered of adequate capacity for local development within the planning horizon.

There is no Water Supply PFTI proposed within the locality during the planning horizon.

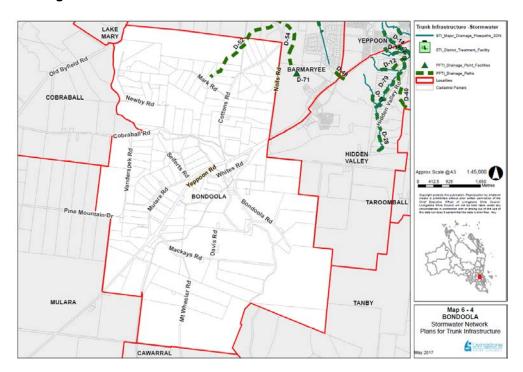
Sewerage Infrastructure Network.



There are no existing trunk sewerage infrastructure assets within the locality.

There is no Sewerage PFTI proposed within the locality during the planning horizon.

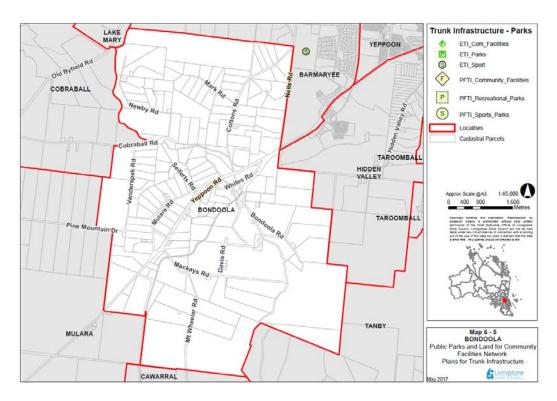
Drainage Infrastructure Network.



There are no trunk drainage systems which have been identified as relevant for development within the locality, at this time. The Fitzroy River, watercourses, drainage features and floodplains are significant natural watercourse features.

There is no Drainage PFTI proposed within the locality, at this time.

Community Facilities Infrastructure Network.



There are no trunk Community Facilities infrastructure which have been identified within the locality, at this time.

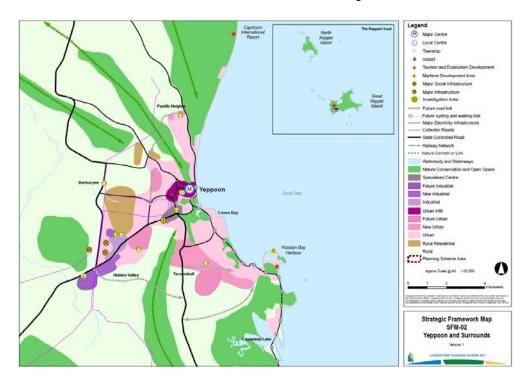
The rural locality relies on Community Facilities in the adjacent localities particularly The Caves, and Rockhampton which are within reasonable distance.

There are no known future catchments either within or outside the locality within the planning horizon which will require future trunk community facilities infrastructure to be provided within the locality.

2.7 Bungundarra.

Town Planning.

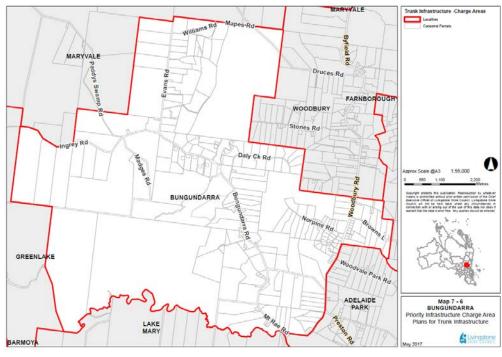
The locality has a land area of 6920.3 Ha and currently has 293 parcels of land. The land uses in the locality involve: rural, rural residential, fruit and timber intensive agriculture.



There are three strategic travel Destinations of: pineapple farming, tropical fruit farming and timber plantations within the locality. There are no shops, schools, residential areas, commercial, industrial, and community facilities within the locality.

The strategic plan indicates rural, and nature conservation and open space uses.

The locality is not within the PIA.



Population Projections.

The ABS Census 2011(SSC30266) recorded 424 persons for Place of Usual Residence.

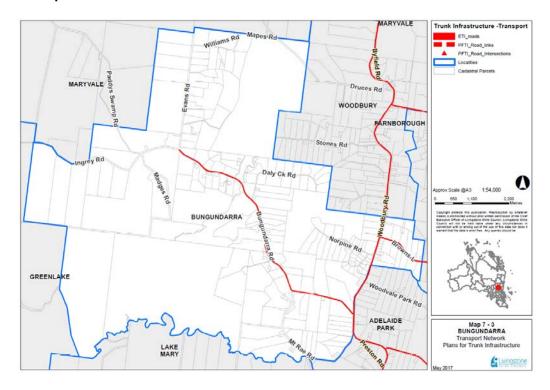
The current PAM 2016 Estimated Resident Population is 397

The PAM projections are

Year	Estimated Resident	Est	Est Retail GFA	Est Industrial GFA
	Population	Commercial GFA		
2015	397	0	0	7776
2016	397	0	0	7776
2021	397	0	0	7776
2026	397	0	0	7776
2031	397	0	0	7776
Ultimate	397	0	0	7776

This indicates no expected urban growth within the locality.

Transport Infrastructure Network.



There are two existing trunk road transport infrastructure within the locality being Bungundarra Road Ch 0-7860 as a Rural Major Collector and Woodbury Road Ch 13550 - 15100. Pedestrian and bicycle trunk infrastructure within the locality has not been analysed.

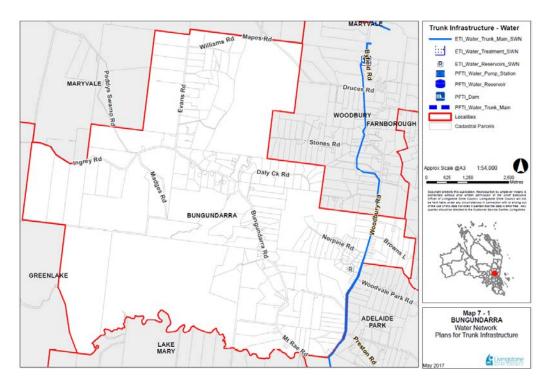
This existing trunk road infrastructure is serving origin catchments within Bungundarra locality and outside for Maryvale and Greenlake, and others.

The State Roads of Woodbury Rd Ch 13550-15100 is considered to have adequate capacity for development within the planning horizon.

LSC managed trunk road transport infrastructure road within the locality of Bungundarra Rd Ch 0 - 2700 capacity is considered adequate for the planning horizon although an augmentation is foreseen in the long term.

There are no transport PFTI proposed within the locality during the planning horizon.

Water Supply Infrastructure Network.

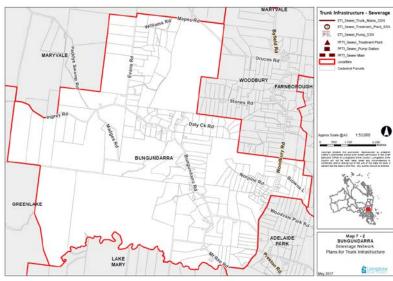


There is 1 existing trunk water infrastructure assets within the locality. This existing trunk infrastructure is serving the whole capricorn Coast urban areas being outside of the locality.

The capacity of the existing trunk water infrastructure within the locality is considered adequate to meet the water demands within the planning horizon.

There are no PFTI proposed within the locality during the planning horizon.

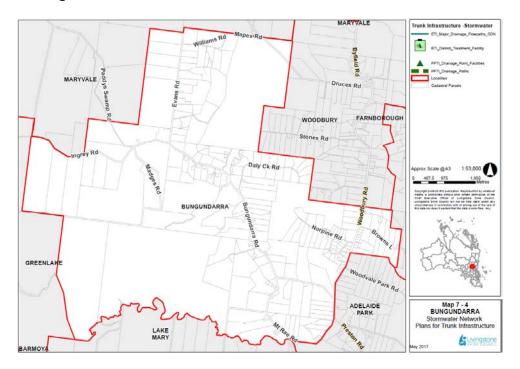
Sewerage Infrastructure Network.



There are no existing trunk sewerage infrastructure assets within the locality.

The future urban areas either within or outside the locality and within the planning horizon, will not require future trunk sewerage infrastructure to be provided within the locality.

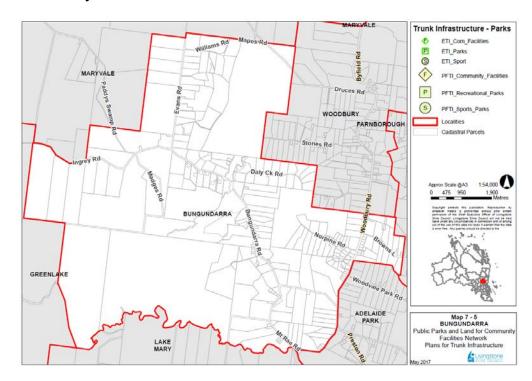
Drainage Infrastructure Network.



There are no trunk drainage systems which have been identified as relevant for development within the locality, at this time.

There is no Drainage PFTI proposed within the locality, at this time.

Community Facilities Infrastructure Network.



There are no existing trunk community facility infrastructure within the locality.

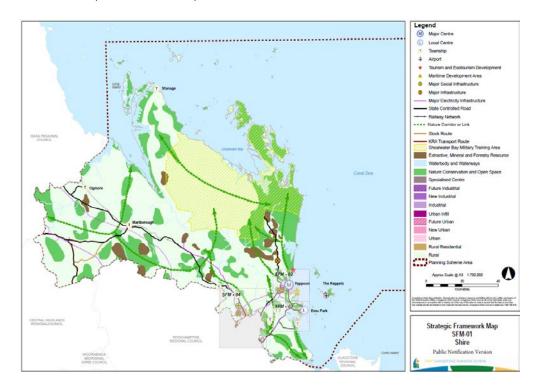
The locality relies on Community Facilities in the adjacent localities particularly Yeppoon, which is within a reasonable distance.

There are no known future catchments either within or outside the locality within the planning horizon which will require future trunk community facilities infrastructure to be provided within the locality.

2.8 Byfield.

Town Planning.

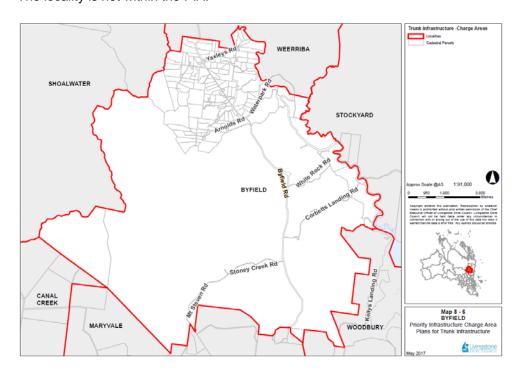
The locality has a land area of 17994.7 Ha and currently 204 parcels of land. The land uses in the locality involve: rural, rural residential, recreational and timber uses.



There are several strategic travel Destinations within the locality being: Byfield Primary School, Byfield shop, hall, timber forestry areas and facilities, national parks, water supply facilities, waste transfer station, and tourist facilities.

The strategic plan indicates: rural, forestry resources, nature conservation and open space uses.

The locality is not within the PIA.



Population Projections.

The ABS Census 2011(<u>SSC30</u>285) recorded 263 persons for Place of Usual Residence however this part of a larger census data area.

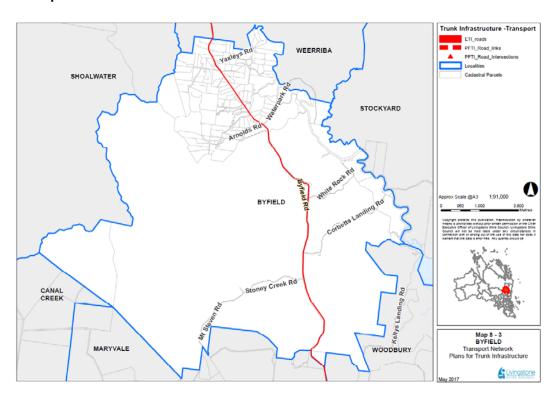
The current PAM 2016 Estimated Resident Population is 340

The PAM projections are

Year	Estimated	Est	Est Retail GFA	Est Industrial GFA
	Resident			
	Population	Commercial GFA		
2015	340	0	0	0
2016	340	0	0	0
2021	340	0	0	0
2026	340	0	0	0
2031	340	0	0	0
Ultimate	340	0	0	0

This indicates no expected urban growth within the locality.

Transport Infrastructure Network.



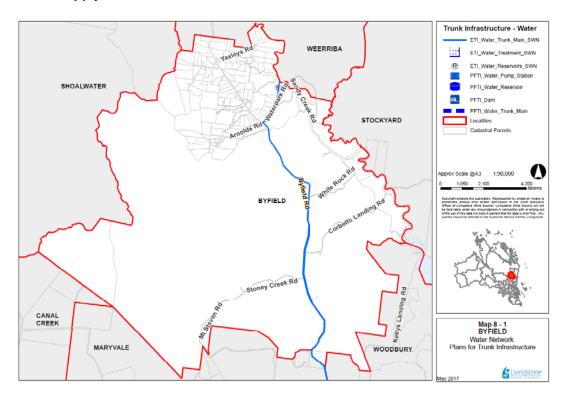
There is 1 existing trunk road transport infrastructure within the locality which is a State Road assets. Pedestrian and bicycle trunk infrastructure within the locality has not been analysed although the existing Rail Trail Ch 2385-4416 is recognised as trunk pedestrian and cycling asset.

This existing trunk road infrastructure is serving origin catchments within Byfield locality and outside for Shoalwater, Weerriba, Stockyard, and other.

The State Road of Byfield Rd Ch 27159-44950 is considered to have adequate capacity for development within the planning horizon.

There is no Transport PFTI proposed within the locality, at this time.

Water Supply Infrastructure Network.

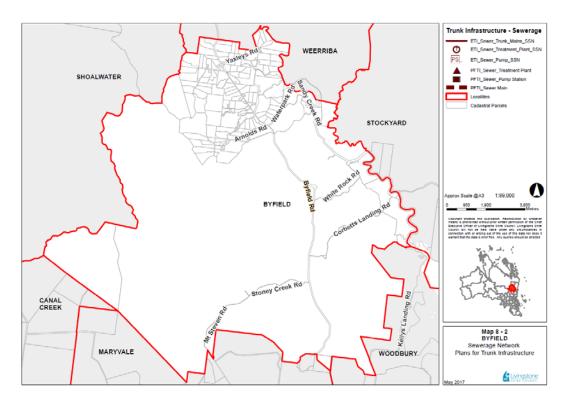


There are 4 existing trunk water infrastructure assets within the locality. This existing trunk infrastructure is serving the Capricorn Coast water service area being outside of the locality.

The capacity of the existing trunk water infrastructure within the locality is considered adequate to meet the water demands within the planning horizon.

There are no PFTI proposed within the locality during the planning horizon.

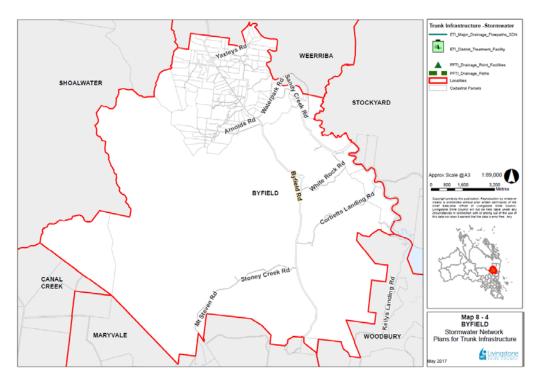
Sewerage Infrastructure Network.



There are no existing trunk sewerage infrastructure assets within the locality.

There is no Sewerage PFTI proposed within the locality, at this time.

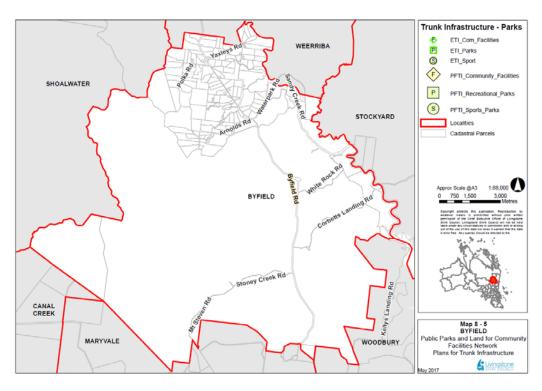
Drainage Infrastructure Network.



There are no trunk drainage systems which have been identified as relevant for development within the locality, at this time.

There is no Drainage PFTI proposed within the locality, at this time.

Community Facilities Infrastructure Network.



There are no existing trunk community facility infrastructure within the locality.

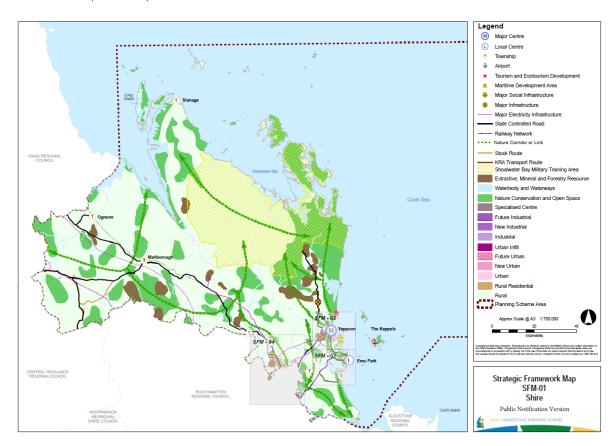
The locality relies on Community Facilities in the adjacent localities particularly Yeppoon, which is within a reasonable distance.

There are no known future catchments either within or outside the locality within the planning horizon which will require future trunk community facilities infrastructure to be provided within the locality.

2.9 Canal Creek.

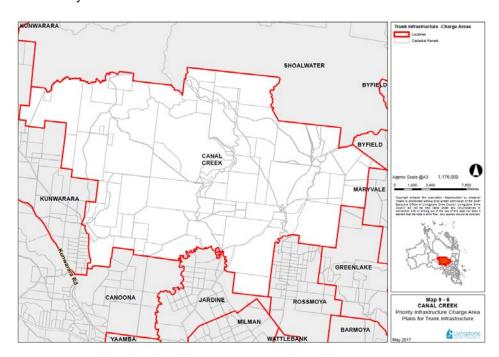
Town Planning.

The locality has a land area of 53780.6 Ha and currently 182 parcels of land. The land uses in the locality involve: rural, defence, and timber resources.



There are two strategic travel Destinations within the locality being: timber plantations and defence areas. There are no shops, schools, residential areas, commercial, industrial, and community facilities within the locality.

The locality is not within the PIA.



Population Projections.

The ABS Census 2011(<u>SSC3</u>1065) recorded 331 Place of Usual Residence however this part of a larger census data area.

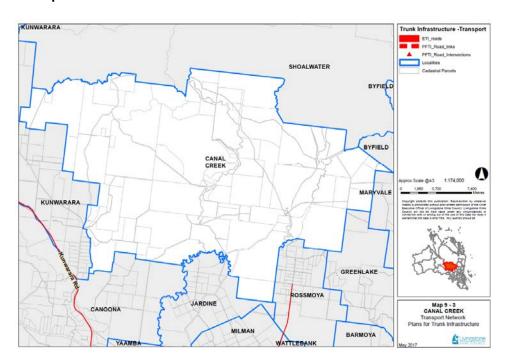
The current PAM 2016 Estimated Resident Population is 8

The PAM projections are

Year	Estimated Resident Population	Est Est Retail GFA Commercial GFA		Est Industrial GFA
2015	8	0	0	0
2016	8	0	0	0
2021	8	0	0	0
2026	8	0	0	0
2031	8	0	0	0
Ultimate	8	0	0	0

This indicates no expected urban growth within the locality.

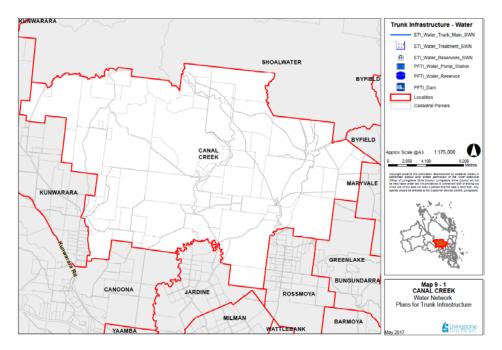
Transport Infrastructure Network.



There is no existing trunk road transport infrastructure within the locality. Pedestrian and bicycle trunk infrastructure within the locality has not been analysed.

There is no Transport PFTI proposed within the locality, at this time.

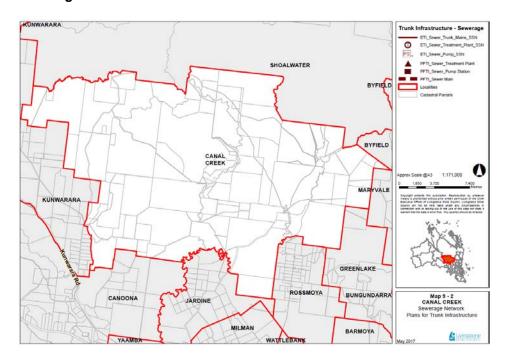
Water Supply Infrastructure Network.



There are no existing trunk water infrastructure assets within the locality.

There are no water supply PFTI proposed within the locality during the planning horizon.

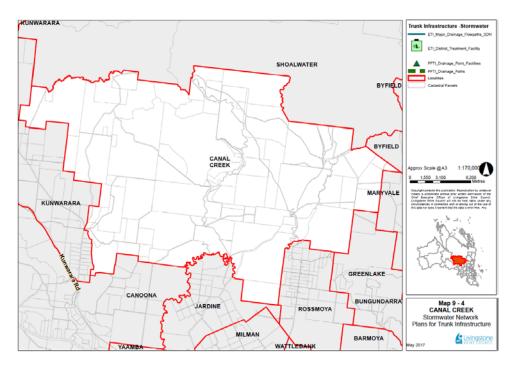
Sewerage Infrastructure Network.



There are no existing trunk sewerage infrastructure assets within the locality.

There is no Sewerage PFTI proposed within the locality, at this time.

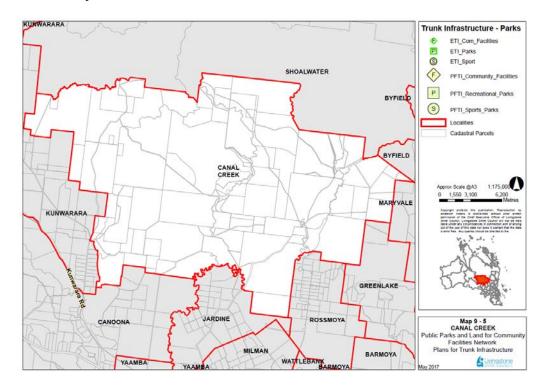
Drainage Infrastructure Network.



There are no trunk drainage systems which have been identified as relevant for development within the locality, at this time.

There is no Drainage PFTI proposed within the locality, at this time.

Community Facilities Infrastructure Network.



There are no existing trunk community facility infrastructure within the locality.

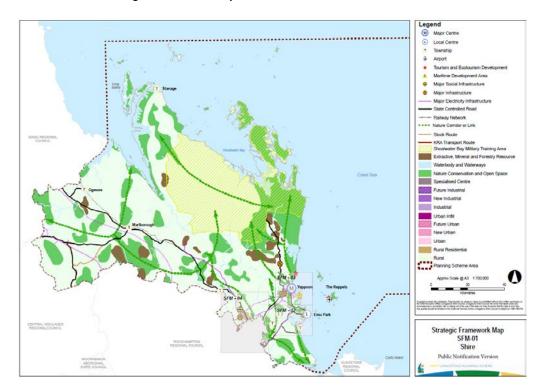
The locality relies on Community Facilities in the adjacent localities particularly Rockhampton and The Caves, which is within a reasonable distance.

There are no known future catchments either within or outside the locality within the planning horizon which will require future trunk community facilities infrastructure to be provided within the locality.

2.10 Canoona

Town Planning.

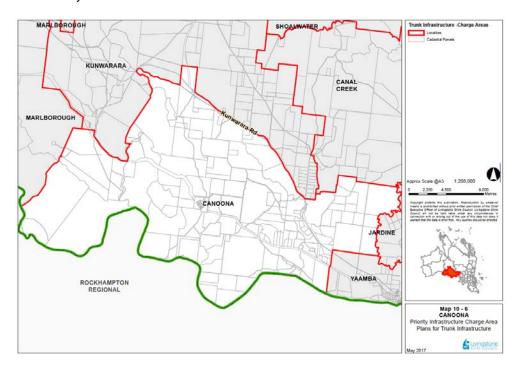
The locality has a land area of 61337.5 Ha and currently 273 parcels of land. The land uses in the locality involve: rural, mining and water utility facilities.



There are a couple of strategic travel Destinations within the locality of: Eden Bann Weir and mining resources.

The strategic plan indicates: rural, mineral resources, nature corridor, water resources, nature conservation and open space uses.

The locality is not within the PIA.



Population Projections.

The ABS Census 2011(<u>SSC3</u>1065) recorded 331 persons for Place of Usual Residence however this part of a larger census data area.

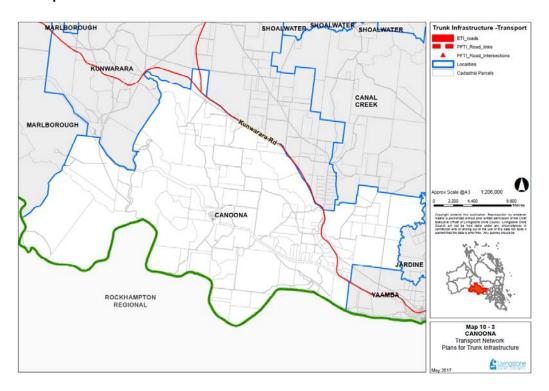
The current PAM 2016 Estimated Resident Population is 65

The PAM projections are

Year	Estimated Resident	Est	Est Retail GFA	Est Industrial GFA
	Population	Commercial GFA		
2011	65	0	0	0
2016	65	0	0	0
2021	65	0	0	0
2026	65	0	0	0
2031	65	0	0	0
Ultimate	65	0	0	0

This indicates no expected urban growth within the locality.

Transport Infrastructure Network.



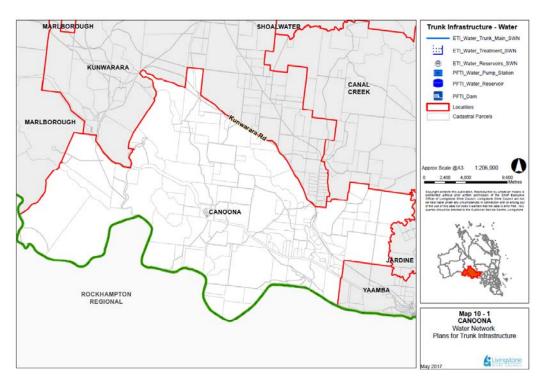
There is one existing trunk road transport infrastructure within the locality of which is a State Road asset. Pedestrian and bicycle trunk infrastructure within the locality has not been analysed.

This existing trunk road infrastructure is serving origin catchments within Canoona locality and other.

The State Roads of Bruce Hwy Ch 46100 - 77230 is considered to have adequate capacity for development within the planning horizon.

There is no Transport PFTI proposed within the locality, at this time.

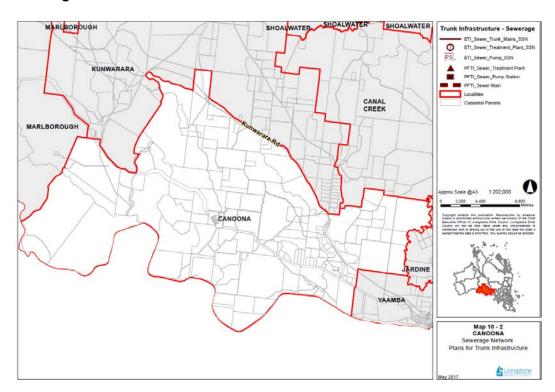
Water Supply Infrastructure Network.



There are no existing trunk water infrastructure assets within the locality.

There are no water Supply PFTI proposed within the locality during the planning horizon.

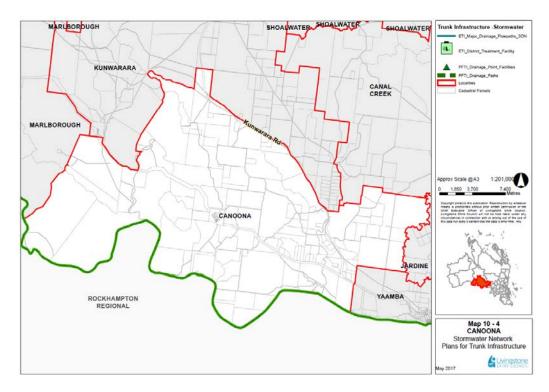
Sewerage Infrastructure Network.



There are no existing trunk sewerage infrastructure assets within the locality.

There is no Sewerage PFTI proposed within the locality, at this time.

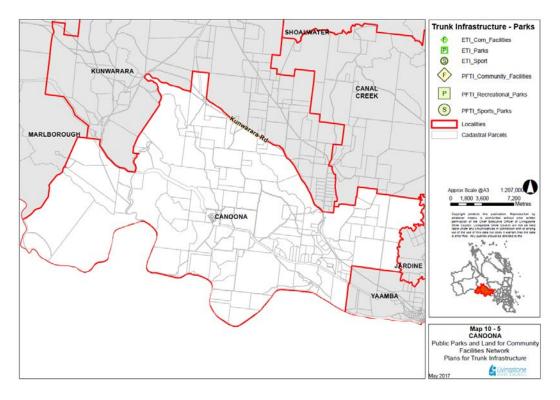
Drainage Infrastructure Network.



There are no trunk drainage systems which have been identified as relevant for development within the locality, at this time.

There is no Drainage PFTI proposed within the locality, at this time.

Community Facilities Infrastructure Network.



There are no existing trunk community facility infrastructure within the locality.

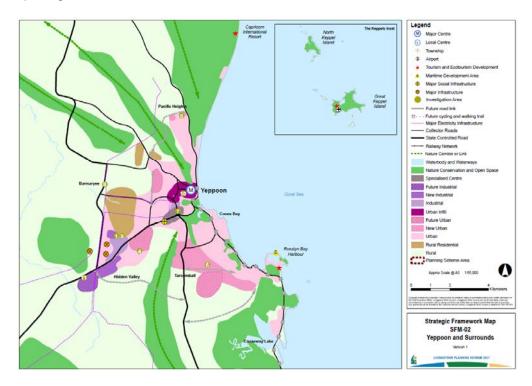
The locality relies on Community Facilities in the adjacent localities particularly Rockhampton and The Caves, which is within a reasonable distance.

There are no known future catchments either within or outside the locality within the planning horizon which will require future trunk community facilities infrastructure to be provided within the locality.

2.11 Causeway Lake.

Town Planning.

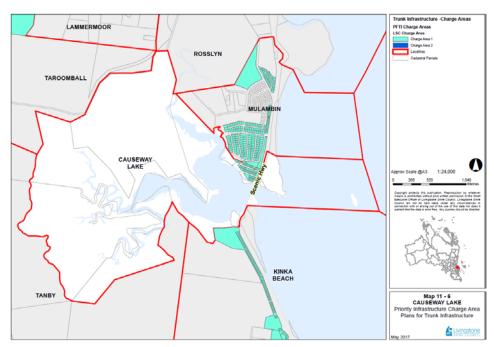
The locality has a total area of 1023.4 Ha and a land area of 53.2 Ha with the difference being ocean and tidal areas. There are currently 73 parcels of land. The land uses in the locality involve: urban residential, rural, sporting, recreation, and coastal uses.



There are several strategic travel Destinations within the locality being: shop, caravan park, recreation parks, fishing sites, national parks, and coastal access. There are no schools, and industrial destinations within the locality.

The strategic plan indicates: water related, and nature conservation and open space uses.

The locality is not within the PIA.



Population Projections.

The ABS Census 2011(<u>SSC3</u>1178) recorded 822 persons for Place of Usual Residence however this is part of a larger census data area.

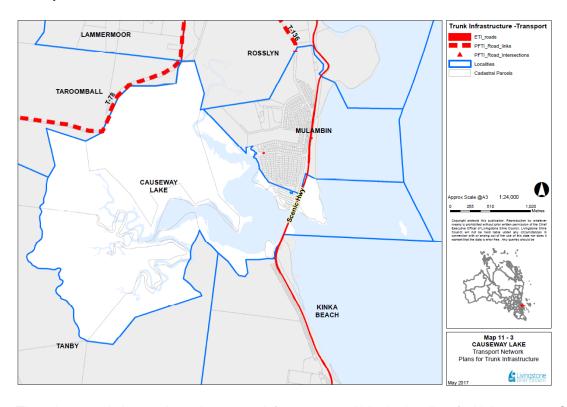
The current PAM 2016 Estimated Resident Population is 193

The PAM projections are

Year	Estimated	Est	Est Retail GFA	Est Industrial GFA
	Resident			
	Population	Commercial GFA		
2011	183	0	155	0
2016	193	0	155	0
2021	193	0	155	0
2026	193	0	155	0
2031	193	0	155	0
Ultimate	197	0	155	0

This indicates no expected urban growth within the locality.

Transport Infrastructure Network.



There is one existing trunk road transport infrastructure within the locality of which none are State Road assets. Pedestrian and bicycle trunk infrastructure within the locality has not been analysed although the PCNP is acknowledged.

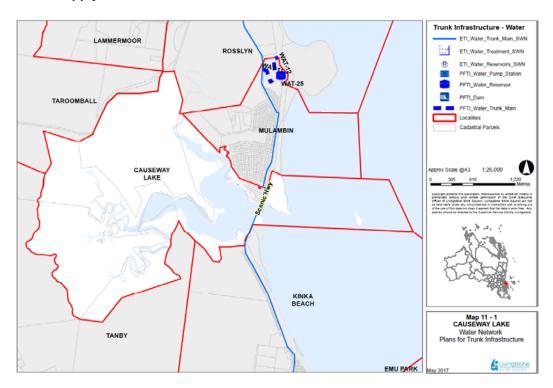
This existing trunk road infrastructure is serving origin catchments within Causeway Lake locality and outside for the Capricorn Coast, and other.

The adjacent State Road of Kinka Beach Rd is considered to have adequate capacity for development within the planning horizon.

LSC managed trunk road transport infrastructure road within the locality of Scenic Hwy Ch 4865 - 5685 capacity is considered adequate for the planning horizon.

There is no Transport PFTI proposed within the locality, at this time.

Water Supply Infrastructure Network.

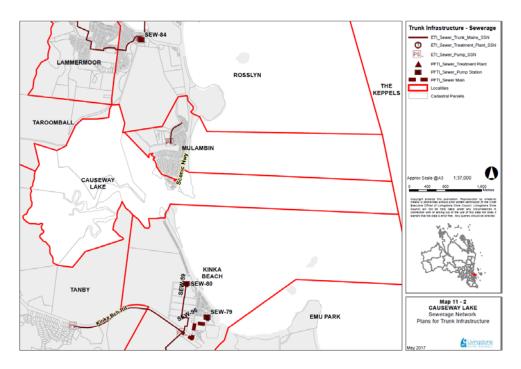


There is 1 existing trunk water infrastructure assets within the locality. This existing trunk infrastructure is serving urban areas within southern Capricorn Coast water service area being outside of the locality.

The capacity of the existing trunk water infrastructure within the locality is considered adequate to meet the water demands within the planning horizon.

There are no PFTI proposed within the locality during the planning horizon.

Sewerage Infrastructure Network.

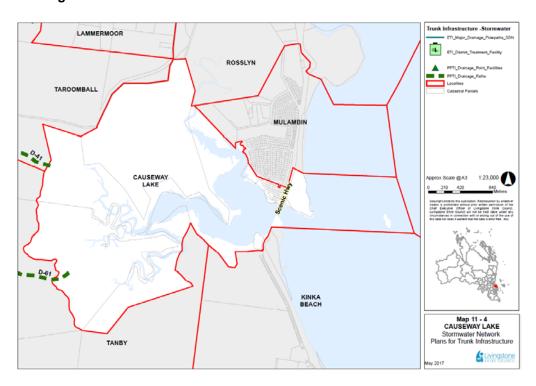


There are no existing trunk sewerage infrastructure assets within the locality however trunk sewerage infrastructure in the adjacent locality of Mulambin serves the urban areas of the locality.

The future urban areas either within or outside the locality and within the planning horizon, will not require future trunk sewerage infrastructure to be provided within the locality.

There is no Sewerage PFTI proposed within the locality, at this time.

Drainage Infrastructure Network.

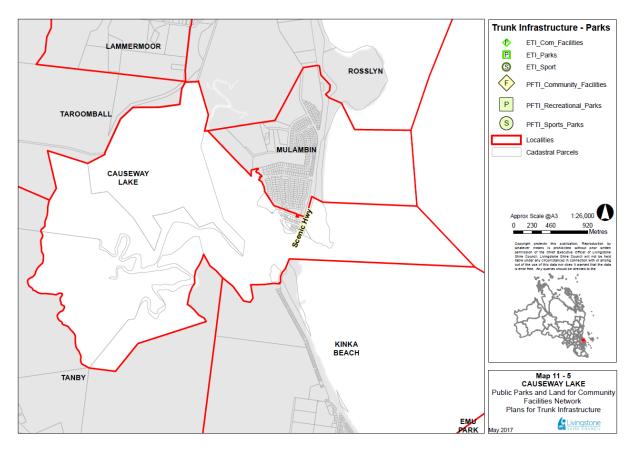


There are existing trunk drainage infrastructure assets within the locality, mainly as tidal watercourses. However there are two natural drainage paths that are identified as significant and will require ultimate term corridor protection via property tenure rights documentation.

The hydraulic capacities of the natural drainage paths are not analysed at present. No drainage capital works are envisaged during the planning horizon within the locality however ultimate planning horizon corridor protection via property tenure (normally drainage easements) for connectivity and Q100 flowpath is required.

There is no Drainage PFTI proposed within the locality, at this time.

Community Facilities Infrastructure Network.



There are no existing trunk community facility infrastructure within the locality.

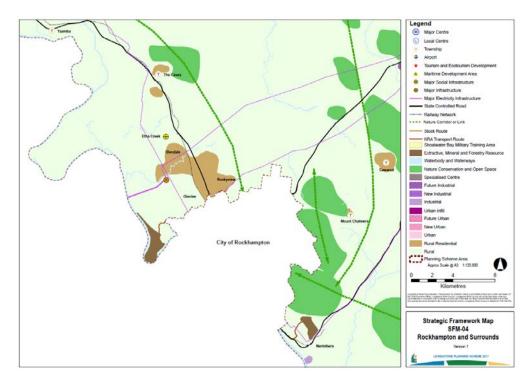
The locality relies on Community Facilities in the adjacent localities particularly Yeppoon, which is within a reasonable distance.

There are no known future catchments either within or outside the locality within the planning horizon which will require future trunk community facilities infrastructure to be provided within the locality.

2.12 Cawarral.

Town Planning.

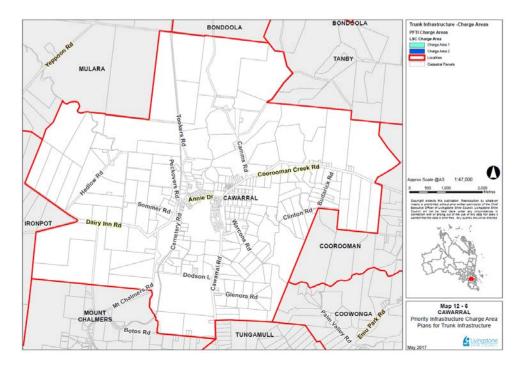
The locality has a land area of 5181.9 Ha and currently 414 parcels of land. The land uses in the locality involve: rural, rural residential, school, shop, national park, recreation and sporting uses.



There are several strategic travel Destinations within the locality being: primary school, shop, sporting clubs, national park, and recreational parks. There are industrial or community facilities within the locality.

The strategic plan indicates: township, rural residential, rural, collector road, nature conservation and open space uses.

The locality is not within the PIA.



Population Projections.

The ABS Census 2011(SSC30340) recorded 690 persons for Place of Usual Residence.

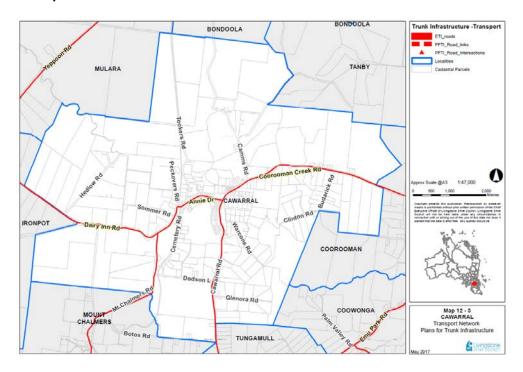
The current PAM 2016 Estimated Resident Population is 761

The PAM projections are

Year	Estimated Resident	Est Retail GFA		Est Industrial GFA	
	Population	Commercial GFA			
2015	761	0	356	0	
2016	761	0	356	0	
2021	761	0	356	0	
2026	761	0	356	0	
2031	761	0	356	0	
Ultimate	805	0	356	0	

This indicates no expected urban growth within the locality.

Transport Infrastructure Network.



There is five existing trunk road transport infrastructure within the locality of which none are State Road assets. Pedestrian and bicycle trunk infrastructure within the locality has not been analysed although a possible Rail Trail is predicted as a trunk pedestrian and cycling asset.

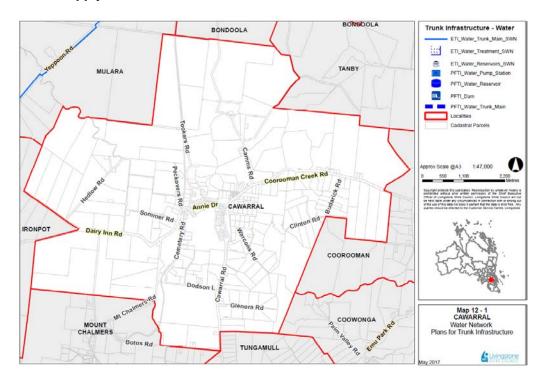
This existing trunk road infrastructure is serving origin catchments within Cawarral locality and outside for Emu Park, Tanby, Mt Chalmers, and others.

The adjacent State Roads are considered to have adequate capacity for development within the planning horizon.

LSC managed trunk road transport infrastructure roads within the locality of Dairy Inn Rd Ch 3240-6620, Annie Drive Ch 0-1300, Coorooman Creek Rd Ch 1670-6250, Mt Chalmers Rd Ch 0-1680 and Cawarral Rd Ch 3100-7070 are considered of adequate capacity within the planning horizon.

There is no Transport PFTI proposed within the locality, at this time.

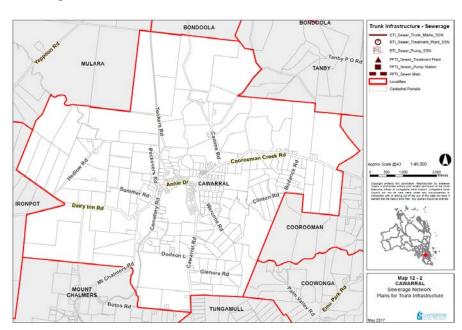
Water Supply Infrastructure Network.



There is no existing trunk water infrastructure assets within the locality.

There are no water Supply PFTI proposed within the locality during the planning horizon.

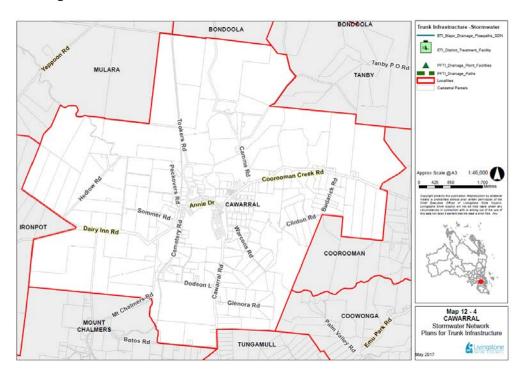
Sewerage Infrastructure Network.



There are no existing trunk sewerage infrastructure assets within the locality.

There is no Sewerage PFTI proposed within the locality, at this time.

Drainage Infrastructure Network.

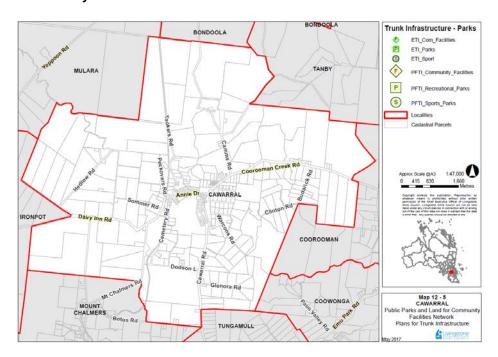


There are natural drainage paths that are identified as significant and will require ultimate term corridor protection via property tenure rights documentation.

The hydraulic capacities of the natural drainage paths are not analysed at present. No drainage capital works are envisaged during the planning horizon within the locality however ultimate planning horizon corridor protection via property tenure (normally drainage easements) for connectivity and Q100 flowpath is required.

There is no Drainage PFTI proposed within the locality, at this time.

Community Facilities Infrastructure Network.



There are no existing trunk community facility infrastructure within the locality.

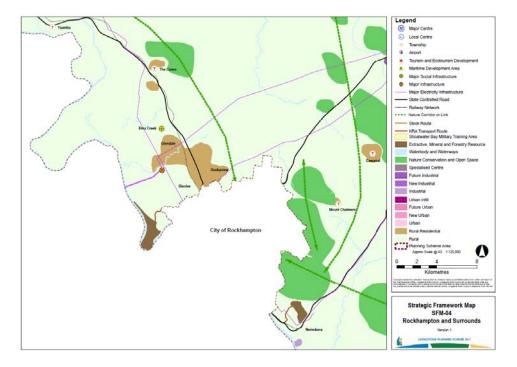
The locality relies on Community Facilities in the adjacent localities particularly Rockhampton, Yeppoon and Emu Park which is within a reasonable distance.

There are no known future catchments either within or outside the locality within the planning horizon which will require future trunk community facilities infrastructure to be provided within the locality.

2.13 Cobraball.

Town Planning.

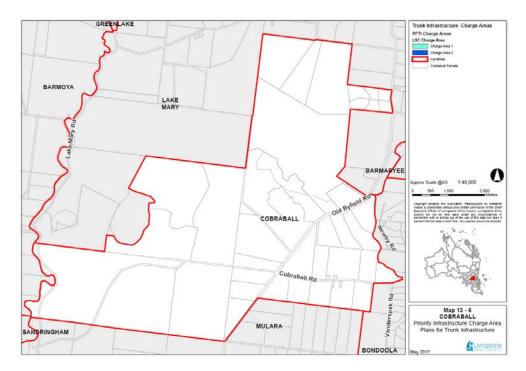
The locality has a land area of 4362.6 Ha and currently 47 parcels of land. The land uses in the rural locality involve rural.



There are no strategic travel Destinations (eg. shops, schools, industrial, mining, sporting facilities) within the locality.

The strategic plan indicates: rural, nature conservation and open space, and nature corridor link.

The locality is not within the PIA.



Population Projections.

The ABS Census 2011(<u>SSC30</u>29) recorded 229 persons for Place of Usual Residence however is part of a larger census data area.

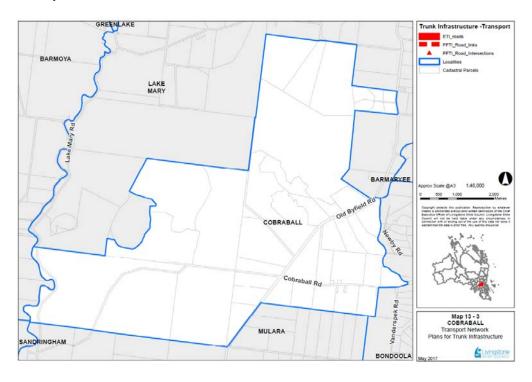
The current PAM 2016 Estimated Resident Population is 125

The PAM projections are

Year	Estimated Resident	Est	Est Retail GFA	Est Industrial GFA
	Population	Commercial GFA		
2015	73	0	0	0
2016	125	0	0	0
2021	125	0	0	0
2026	125	0	0	0
2031	125	0	0	0
Ultimate	125	0	0	0

This indicates no expected urban growth within the locality.

Transport Infrastructure Network.



There is one existing trunk road transport infrastructure within the locality of which none are State Road assets. . There are no Pedestrian and Bicycle trunk infrastructure within the locality.

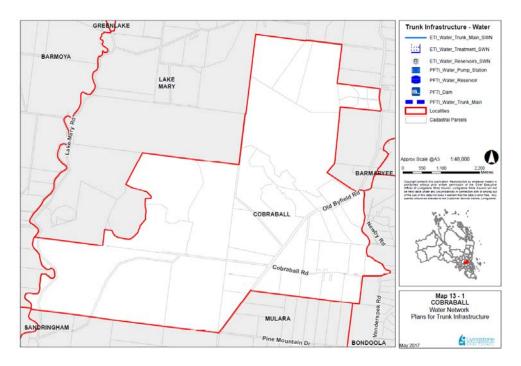
This existing trunk road infrastructure is serving origin catchments within Cobraball locality and outside for Adelaide Park, Lake Mary, Byfield, Bungundarra, and others.

The LSC managed Road of Old Byfield Rd Ch 7750-13670, is a Rural Major Collector and is considered to have adequate capacity for development within the planning horizon.

LSC managed trunk road transport infrastructure roads within the locality of Barmaryee Rd Ch 750-2700 capacity is some 3000 vpd while the loading within the planning horizon is some 6000vpd.

There are no Transport FTI's within the locality.

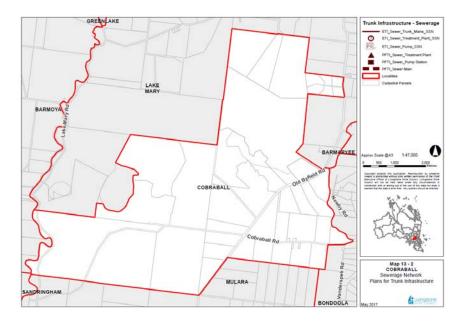
Water Supply Infrastructure Network.



There are no existing trunk water infrastructure assets within the locality.

There are no Water Supply PFTI proposed within the locality during the planning horizon.

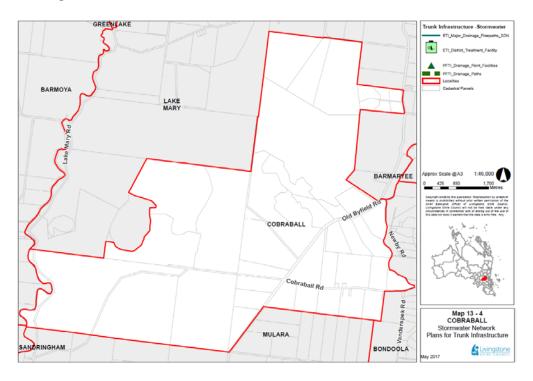
Sewerage Infrastructure Network.



There are no existing trunk sewerage infrastructure assets within the locality.

There is no Sewerage PFTI proposed within the locality during the planning horizon.

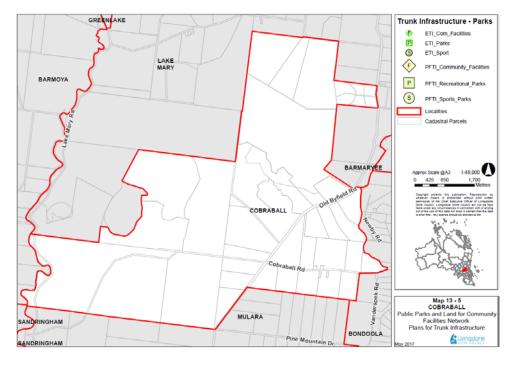
Drainage Infrastructure Network.



There are no trunk drainage systems which have been identified as relevant for development within the locality, at this time.

There is no Drainage PFTI proposed within the locality, at this time.

Community Facilities Infrastructure Network.



There are no trunk Community Facilities infrastructure which have been identified within the locality, at this time.

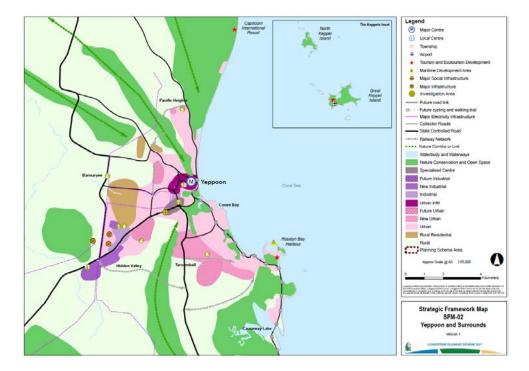
The rural locality relies on Community Facilities in the adjacent localities particularly Yeppoon and Rockhampton, which are within reasonable distances.

There are no known future catchments either within or outside the locality within the planning horizon which will require future trunk community facilities infrastructure to be provided within the locality.

2.14 Cooee Bay.

Town Planning.

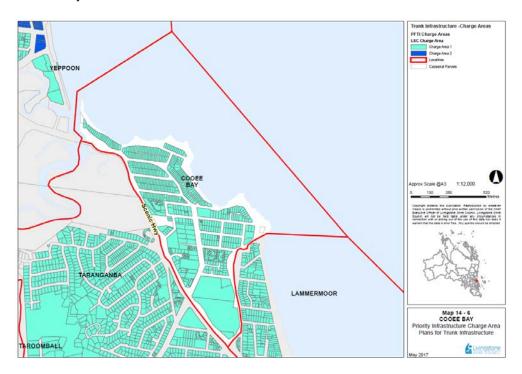
The locality has a total area of 836.5 Ha and a land area of 41.6 Ha and currently 610 parcels of land. The land uses in the urban locality involve: residential, retail, sporting, and utility facilities. There are no industrial uses.



There are several significant travel Destinations of: beaches, multi-sports, parks, scenic lookout and a caravan park within the locality.

The strategic plan indicates urban uses.

The locality is within the PIA.



Population Projections.

The ABS Census 2011(SSC30097) recorded 1322 for Place of Usual Residence.

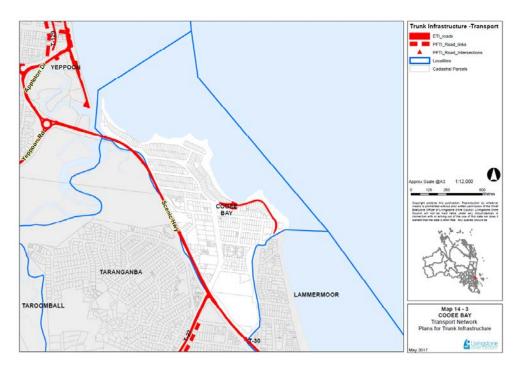
The current PAM 2015 Estimated Resident Population is some 2000 persons.

The PAM projections are

Year	Estimated	Est	Est Retail GFA	Est Industrial GFA
	Resident	Commercial GFA		
	Population	Commercial Cr74		
2015	2257	0	481	0
2016	2313	0	481	0
2021	2313	0	481	0
202.	20.0			
2026	2330	0	481	0
2031	2502	0	481	0
Ultimate	2602	0	481	0

This indicates low expected urban growth within the locality.

Transport Infrastructure Network.



There is one existing trunk road transport infrastructure within the locality of which none are State Road assets. Pedestrian and bicycle trunk infrastructure within the locality has not been analysed although the PCNP is acknowledged.

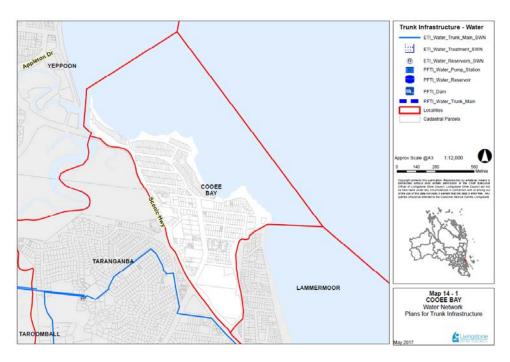
This existing trunk road infrastructure is serving origin catchments within Cooee Bay locality and outside for recreation and tourism.

The adjacent State Roads are considered to have adequate capacity for development within the planning horizon.

LSC managed trunk road transport infrastructure roads within the locality of Matthew Flinders Drive is considered of adequate capacity within the planning horizon.

There is no Transport PFTI proposed within the locality, at this time.

Water Supply Infrastructure Network.

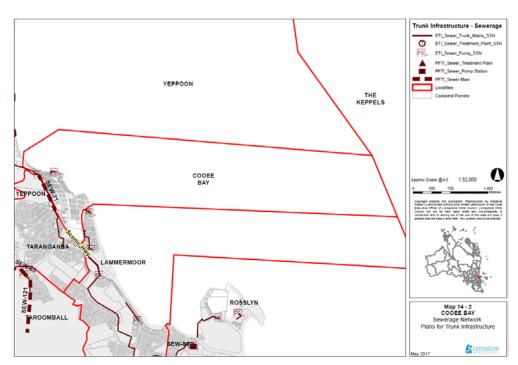


There is no existing trunk water infrastructure assets within the locality. The locality relies on trunk infrastructure in upstream localities.

The capacity of the existing non-trunk water infrastructure within the locality is considered adequate to meet the water demands within the planning horizon.

There is no Water Supply PFTI proposed within the locality during the planning horizon.

Sewerage Infrastructure Network.

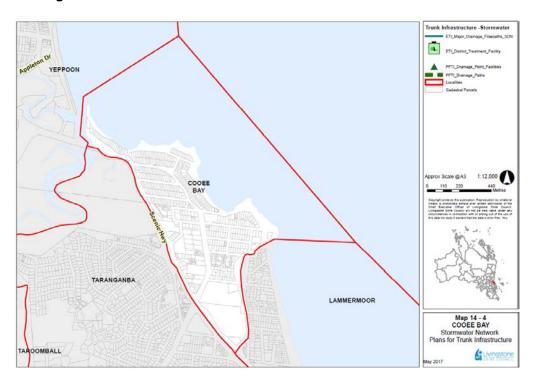


There are five existing trunk sewerage infrastructure assets involving the Wattle Grove Sewage Pump Station, trunk gravity mains and trunk sewage rising mains. The infrastructure serves within the locality however trunk sewerage infrastructure in the adjacent localities of Taranganba, Lammermoor, Rosslyn, Mulambin, and Causeway Lake.

The future urban areas either within or outside the locality and within the planning horizon, will require future trunk sewerage infrastructure to be provided within the locality being:

Map No.	Network	Item ID	Project Name	Future Infrastructure Asset Description	Infrastructure Value (2015\$)	Estimated Year of Completion
14-2	Sewerage	SEW-71	TGM 375 Scenic Hwy	Augmentation 375mm trunk gravity main, Scenic Hwy, 790m.	\$1,085,000	2021

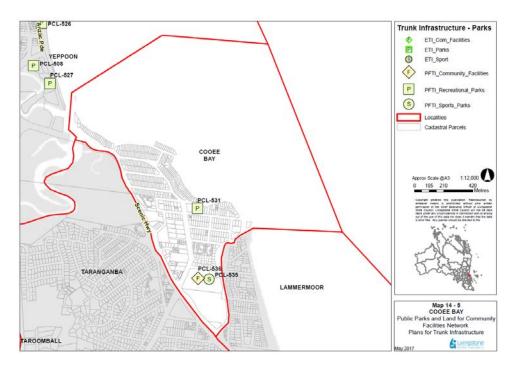
Drainage Infrastructure Network.



There are no trunk drainage systems which have been identified as relevant for development within the locality, at this time.

There is no Drainage PFTI proposed within the locality, at this time.

Community Facilities Infrastructure Network.



There are 3 existing trunk community facility infrastructure within the locality being Daniel Park, PCYC and Cooee Bay Multi-Sports Complex.

These facilities serve a number of localities and the Region.

The future urban areas either within or outside the locality and within the planning horizon, will require future trunk sewerage infrastructure to be provided within the locality.

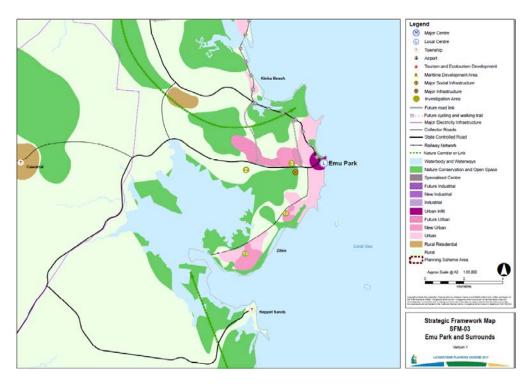
Map No.	Network	Item ID	Project Name	Future Infrastructure Asset Description	Infrastructure Value (2015\$)	Estimated Year of Completion
14-5	Community	PCL531	Daniel Park upgrade	Upgrade, Regional Park, paths, seating, shade, BBQ, play equipment.	\$6,000,000	2021
14-5	Community	PCL535	District Sporting Facility(Cooee Bay) upgrade	Cooee Bay Multi-sport upgrade, District pool, tennis	\$3,864,000	2026

14-5	Community	PCL536	District	Cooee Bay	\$179,000	2026
			Community	Multi-sport		
			Facility	facilities		
			upgrade	upgrade,		
				amenities,		
				storage,		
				meeting		
				rooms		

2.15 Coorooman.

Town Planning.

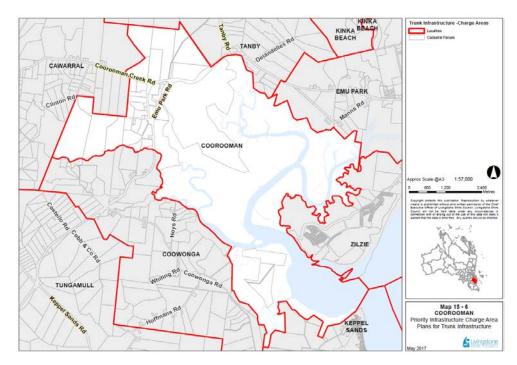
The locality has a total area (land and sea) of 4493.5 Ha and a land area of 4493.5 Ha and currently 54 parcels of land. The land uses in the rural locality involve rural.



There are some strategic travel Destinations within the locality being the crocodile farm and local boat launching sites. The Coorooman Creek estuary is a significant recreational fishing destination. There are no schools, shops, mining, or industrial Destinations.

The strategic plan indicates: rural, waterways, nature conservation and open space, and nature corridor link.

The locality is not within the PIA.



Population Projections.

The ABS Census 2011(<u>SSC3</u>1577) recorded 391 persons for Place of Usual Residence however is part of a larger census data area.

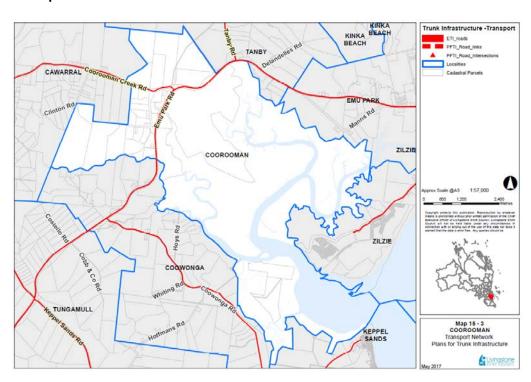
The current PAM 2015 Estimated Resident Population is 86

The PAM projections are

Year	Estimated Resident Population	Est Commercial GFA	Est Retail GFA	Est Industrial GFA
2011	86	0	0	0
2016	86	0	0	0
2021	86	0	0	0
2026	86	0	0	0
2031	86	0	0	0
Ultimate	86	0	0	0

This indicates no expected development growth within the locality.

Transport Infrastructure Network.



There is two existing trunk road transport infrastructure within the locality of which one is a State Road asset (Emu Park Road). There are no Pedestrian and Bicycle trunk infrastructure within the locality.

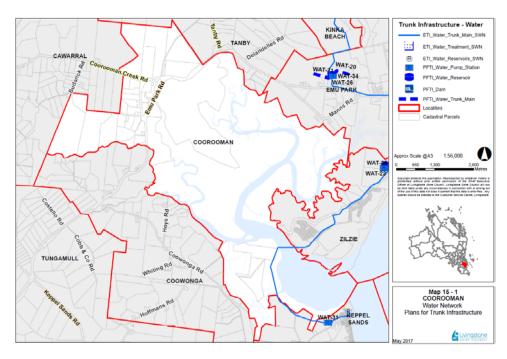
This existing trunk road infrastructure is serving origin catchments within Coorooman locality and outside for Emu Park, Tanby, Zilzie, Taroomball, and others.

The State Road of Emu Park Rd CH 31300 - 35950 are considered to have adequate capacity for development within the planning horizon.

The LSC managed Road of Coorooman Creek Rd Ch 0-1670, is a Rural Arterial and is considered to have adequate capacity for development within the planning horizon.

There are no Transport FTI's within the locality.

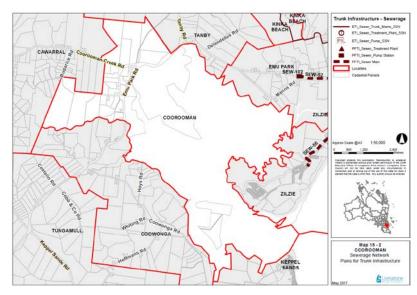
Water Supply Infrastructure Network.



There is one existing trunk water infrastructure assets within the locality being the trunk water main to Keppel Sands.

There is no Water Supply PFTI proposed within the locality during the planning horizon.

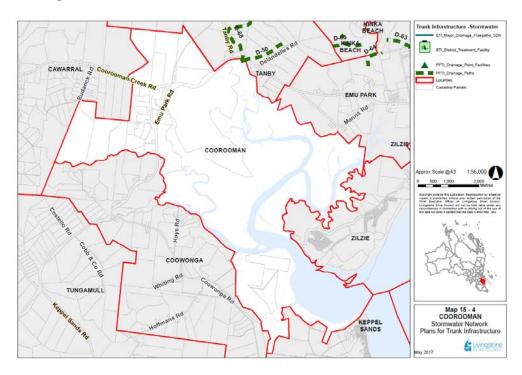
Sewerage Infrastructure Network.



There are no existing trunk sewerage infrastructure assets within the locality.

There is no Sewerage PFTI proposed within the locality during the planning horizon.

Drainage Infrastructure Network.

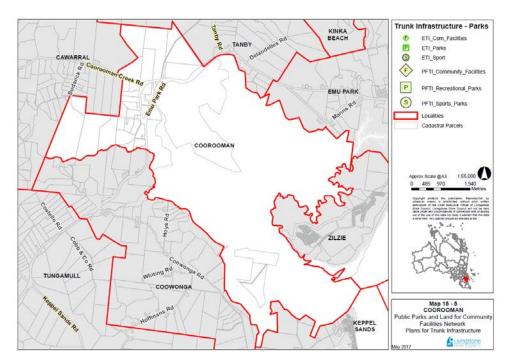


There are several trunk drainage systems as part of the Coorooman Creek estuary which have been identified as relevant for development within the locality, at this time.

There is one Drainage PFTI proposed within the locality, at this time being:

Map No.	Network	Item ID	Project Name	Future Infrastructure Asset Description	Infrastructure Value (2015\$)	Estimated Year of Completion
15-5	Drainage	D-50	Coorooman Creek Tributary A	Coorooman Creek Tributary A drainage feature system tenure for connectivity, new Q100 easement, 1400m.	\$140,000	2031

Community Facilities Infrastructure Network.



There are no trunk Community Facilities infrastructure which have been identified within the locality, at this time.

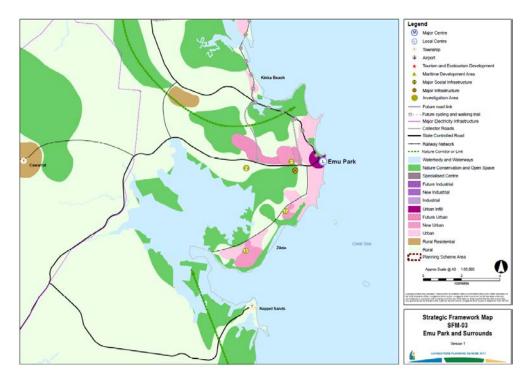
The rural locality relies on Community Facilities in the adjacent localities particularly Emu Park, Yeppoon and Rockhampton, which are within reasonable distances.

There are no known future catchments either within or outside the locality within the planning horizon which will require future trunk community facilities infrastructure to be provided within the locality.

2.16 Coowonga.

Town Planning.

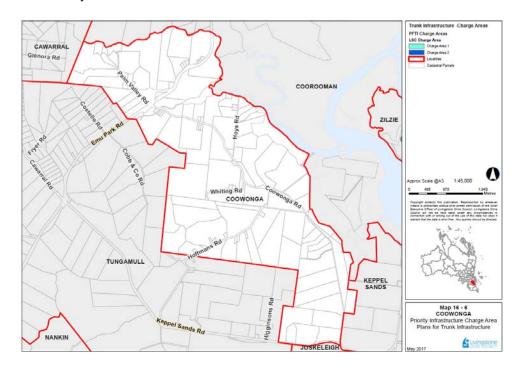
The locality has a total area (land and sea) of 2574.2 Ha and a land area of 2395.9 Ha and currently 143 parcels of land. The land uses in the rural locality involve rural.



There are some strategic travel Destinations within the locality being the Coowonga primary school and nearby crocodile farm and local boat launching sites. The Coorooman Creek estuary is a significant recreational fishing destination. There are no shops, mining, or industrial Destinations.

The strategic plan indicates: rural, waterways, nature conservation and open space, and nature corridor link.

The locality is not within the PIA.



Population Projections.

The ABS Census 2011(<u>SSC3</u>1577) recorded 249 persons for Place of Usual Residence however is part of a larger census data area.

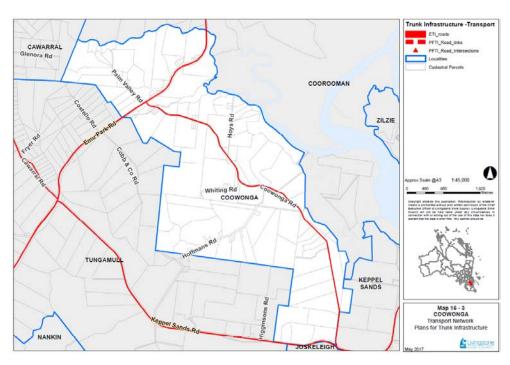
The current PAM 2016 Estimated Resident Population is 264

The PAM projections are

Year	Estimated	Est	Est Retail GFA	Est Industrial GFA
	Resident			
	Population	Commercial GFA		
2011	264	0	0	0
2016	264	0	0	0
2021	264	0	0	0
2026	264	0	0	0
2031	264	0	0	0
Ultimate	264	0	0	0

This indicates no expected development growth within the locality.

Transport Infrastructure Network.



There is two existing trunk road transport infrastructure within the locality of which one is a State Road asset (Emu Park Road). There are no Pedestrian and Bicycle trunk infrastructure within the locality.

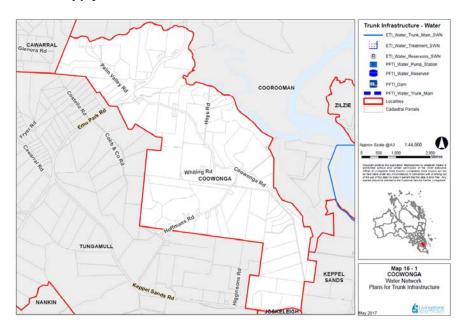
This existing trunk road infrastructure is serving origin catchments within Coowonga locality and outside for Emu Park, Tanby, Zilzie, Taroomball, Keppel Sands, Joskeleigh, and others.

The State Road of Emu Park Rd CH 27880 – 31300 is considered to have adequate capacity for development within the planning horizon.

The LSC managed Road of Coowonga Rd Ch 0 - 9250, is a Rural Major Collector and is considered to have adequate capacity for development within the planning horizon.

There are no Transport FTI's within the locality.

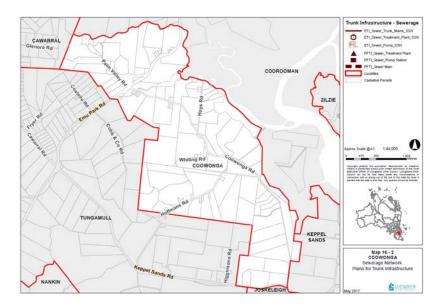
Water Supply Infrastructure Network.



There is no existing trunk water infrastructure assets within the locality.

There is no Water Supply PFTI proposed within the locality during the planning horizon.

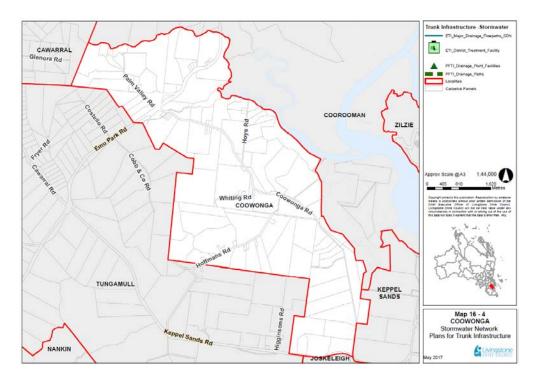
Sewerage Infrastructure Network.



There are no existing trunk sewerage infrastructure assets within the locality.

There is no Sewerage PFTI proposed within the locality during the planning horizon.

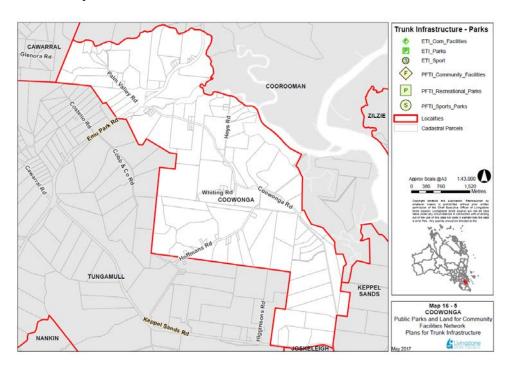
Drainage Infrastructure Network.



There are no trunk drainage systems which have been identified as relevant for development within the locality, at this time.

There is no Drainage PFTI proposed within the locality, at this time.

Community Facilities Infrastructure Network.



There are no trunk Community Facilities infrastructure which have been identified within the locality, at this time.

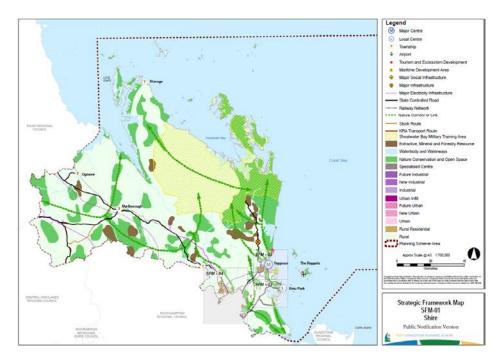
The rural locality relies on Community Facilities in the adjacent localities particularly Emu Park, Yeppoon and Rockhampton, which are within reasonable distances.

There are no known future catchments either within or outside the locality within the planning horizon which will require future trunk community facilities infrastructure to be provided within the locality.

2.17 Coral Sea.

Town Planning.

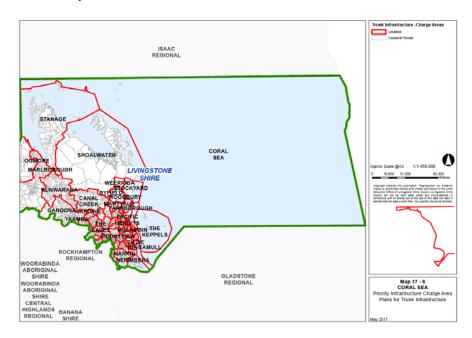
The locality has a total area (land and sea) of 2986223 Ha and a combined land area of 23793.7 Ha and currently 12 parcels of land as a series of islands. The land uses in the locality involve open space and rural.



There are no strategic travel Destinations (shops, schools, mining, industry, etc) within the locality.

The strategic plan indicates: rural, waterways, nature conservation and open space, and nature corridor link.

The locality is not within the PIA.



Population Projections.

The ABS Census 2011 did not record any 249 persons for Place of Usual Residence.

The current PAM 2016 Estimated Resident Population is nil.

The PAM projections are

Year	Estimated	Est	Est Retail GFA	Est Industrial GFA
	Resident Population	Commercial GFA		
2011	0	0	0	0
2016	0	0	0	0
2021	0	0	0	0
2026	0	0	0	0
2031	0	0	0	0
Ultimate	0	0	0	0

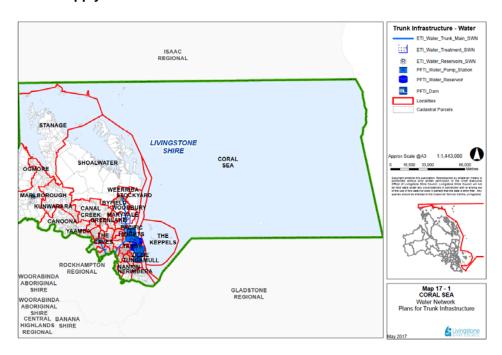
This indicates no expected development growth within the locality.

Transport Infrastructure Network.

There are no existing trunk road transport infrastructure within the locality. There are no Pedestrian and bicycle trunk infrastructure within the locality.

There are no Transport FTI's within the locality.

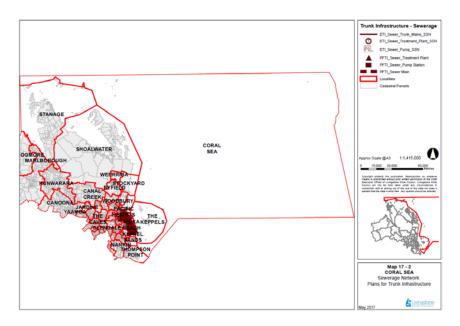
Water Supply Infrastructure Network.



There are no existing trunk water infrastructure assets within the locality.

There is no Water Supply PFTI proposed within the locality during the planning horizon.

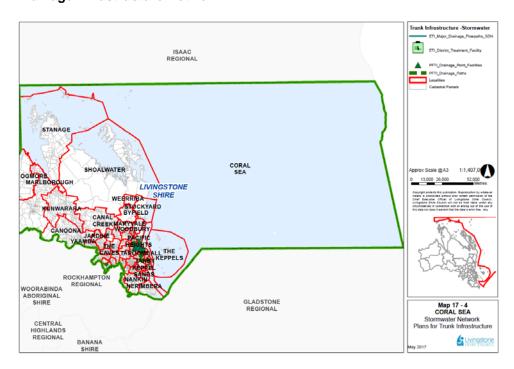
Sewerage Infrastructure Network.



There are no existing trunk sewerage infrastructure assets within the locality.

There is no Sewerage PFTI proposed within the locality during the planning horizon.

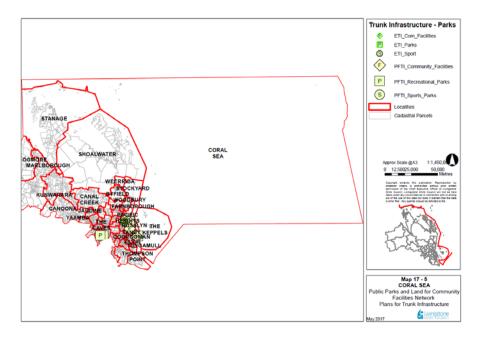
Drainage Infrastructure Network.



There are no trunk drainage systems which have been identified as relevant for development within the locality, at this time.

There is no Drainage PFTI proposed within the locality, at this time.

Community Facilities Infrastructure Network.



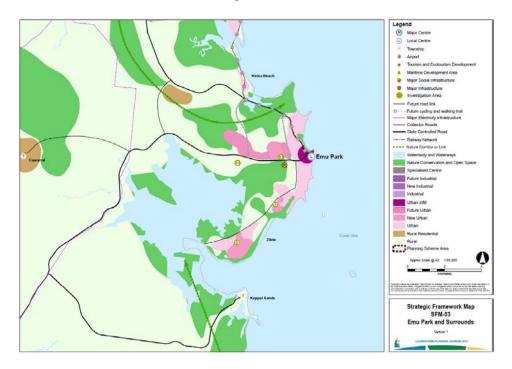
There are no trunk Community Facilities infrastructure which have been identified within the locality, at this time.

There are no known future catchments either within or outside the locality within the planning horizon which will require future trunk community facilities infrastructure to be provided within the locality.

2.18 Emu Park.

Town Planning.

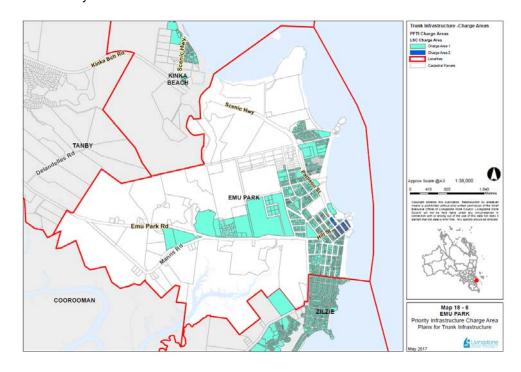
The locality has a total (land and sea) area of 3879 Ha and a land area of 1906.2 Ha and currently 1592 parcels of land. The land uses in the developing locality involve local centre, urban, commercial, retail, industrial, aged care facilities, utilities, tourism, fishing and recreation.



There are many strategic travel Destinations within the locality being: shops, school, employment, medical, religious, entertainment, beaches, sporting, recreation, etc.

The strategic plan indicates: Local Centre, urban, urban infill, future urban, commercial, retail, industrial, waterways, nature conservation and open space.

The locality is within the PIA.



Population Projections.

The ABS Census 2011(SSC30569) recorded 2151 persons for Place of Usual Residence.

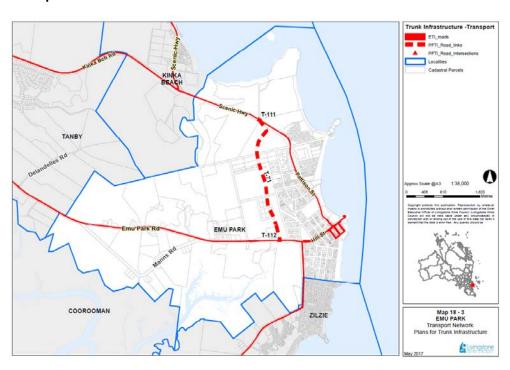
The current PAM 2016 Estimated Resident Population is 4660.

The PAMv2 projections are

Year	Estimated Resident	Est	Est Retail GFA	Est Industrial GFA
	Population	Commercial GFA		
2011	3391	1363	7584	2374
2016	4171	1363	7584	139713
2021	4660	2400	9051	139713
2026	5675	3855	14419	139713
2031	6922	5856	22364	139713
Ultimate	8364	10134	35088	139713

This indicates significant expected development growth within the locality.

Transport Infrastructure Network.



There are many existing trunk road transport infrastructure within the locality of which is either a State Road asset or a LSC managed asset. Refer to Existing Asset Spreadsheet Pedestrian and bicycle trunk infrastructure within the locality has not been analysed.

This existing trunk road infrastructure is serving origin catchments within the Emu Park locality and outside of the Capricorn Coast.

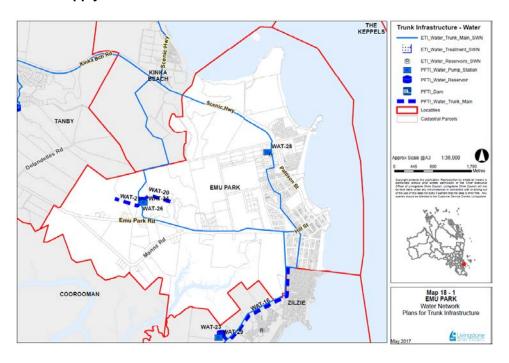
The State Roads serving the area particularly Emu Park Road is considered to have adequate capacity except the Pattison St and Hill St sections with the Emu Park CBD which requires additional capacity for local development within the planning horizon. PFTI Bypass T-71 is proposed as a substitute State Road.

LSC managed trunk road transport infrastructure roads within the locality being Hartley St Urban major Collector Ch 0 – 770 and CBD Collector Streets are considered inadequate capacity for local development within the planning horizon.

To meet Council's Desired Standards of Service will require PFTI's within the locality being:

Map No.	Network	Item ID	Project Name	Future Infrastructure Asset Description	Infrastructure Value (2015\$)	Estimated Year of Completion
18-3	Transport	T-71	Henry – Short St extended.	New, Arterial, Ch 0 - 1500	\$9,200,000	2031

Water Supply Infrastructure Network.



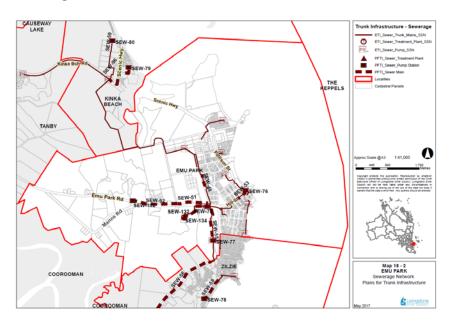
There are many existing trunk water infrastructure assets within the locality being: Emu Park Water Reservoir, several trunk water mains in Scenic Hwy, Albermarle St, Hawke St, Fountain St, Hewitt St, and others. Refer to Existing Assets Spreadsheet

The LSC trunk water infrastructure is not considered adequate to meet the Emu Park, Zilzie and Keppel Sands water demands within the planning horizon.

To meet Council's Desired Standards of Service will require PFTI within the locality being:

Мар No.	Network	Item ID	Project Name	Future Infrastructure Asset Description	Infrastructure Value (2015\$)	Estimated Year of Completion
18-1	Water Supply	WAT-28	Emu Park WS Booster Pump Station.	New building, pumps, pipes, elec, gen, MH design.	\$481,000	2021
18-1	Water Supply	WAT-20	West Emu Park WS HZ, 200mm distrib main, East	New, MH design, 750m	\$715,000	2026
18-1	Water Supply	WAT-21	West Emu Park WS HZ, 200mm distrib main, West	New, MH design, 750m	\$715,000	2026
18-1	Water Supply	WAT-26	West Emu Park WS LZ Reservoir.	New, 4 ML, MD design.	\$1,770,000	2021
18-1	Water Supply	WAT-34	West Emu park WS Booster Pump Station.	New building, pumps, pipes, elec, gen, rechlor, MH design.	\$478,000	2026

Sewerage Infrastructure Network.



There are many existing trunk sewerage infrastructure assets within the locality being treatment plant, major sewage pump stations and rising mains, and trunk gravity mains. Refer to Existing Assets Spreadsheet.

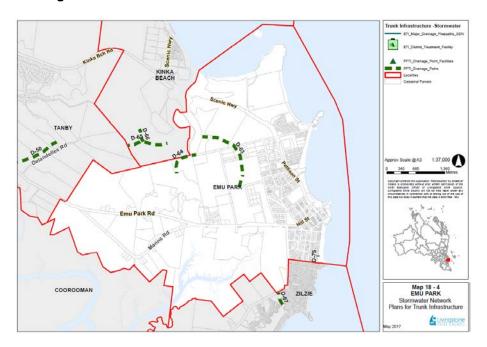
The LSC trunk sewerage infrastructure is considered inadequate to meet the Emu Park, Zilzie, Tanby and Kinka loadings within the planning horizon.

To meet Council's Desired Standards of Service will require three PFTI within the locality being:

Мар No.	Network	Item ID	Project Name	Future Infrastructure Asset Description	Infrastructure Value (2015\$)	Estimated Year of Completion
18-2	Sewerage	SEW-53	Hill St Bell Park PS2, rising main.	Upgrade, 150mm rising main, WWF design, 400m	\$227,000	2021
18-2	Sewerage	SEW-76	Hill St Bell Park, PS2.	Upgrade, civil 2 of 2, pumps, pipes, valves, elec, WWF design.	\$794,000	2021
18-2	Sewerage	SEW-49	Brown St 225mm gravity main	Upgrade, WWF design, 340m	\$184,000	2021
18-2	Sewerage	SEW-50	Emu Park Rd, 375 RM, PS1 to STP.	Upgrade, WWF design, 830m.	\$524,000	2021
18-2	Sewerage	SEW-51	Emu Park Rd 300mm gravity main	New, West Emu Park, WWF design, 860m.	\$774,000	2026
18-2	Sewerage	SEW-52	Emu Park Rd 150mm Rising main	New, West Emu Park, WWF design, 1280m	\$1,087,000	2026
18-2	Sewerage	SEW-102	Emu Park Rd, SPS, West Emu Park.	New, West Emu Park, tenure, civil 1, pumps, pipes, valves, elec, WWF design.	\$536,000	2026
18-2	Sewerage	SEW-75	Emu Park Rd SPS1, upgrade	Upgrade, civil 2 of 2, pumps, pipes, valves, elec, WWF design.	\$809,000	2021

18-2	Sewerage	SEW-132	Emu Park STP, upgrade SBR	Upgrade, 3 SBR, WWF design, 10,000 ep.	\$9,537,000	2026
18-2	Sewerage	SEW-134	Emu Park STP, upgrade inlet.	Upgrade, inlet, screens, grit WWF design.	\$2,000,000	2016
18-2	Sewerage	SEW-55	Hartley St 150mm rising main	Upgrade, mudflats, WWF design, 615m	\$268,000	2021
18-2	Sewerage	SEW-77	Hartley St SPS 7 upgrade	Upgrade, civil 1, pumps, elec, WWF design.	\$794,000	2021

Drainage Infrastructure Network.



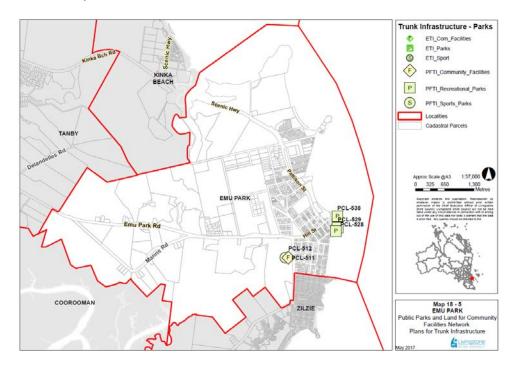
There is trunk drainage system which have been identified as relevant for development within the locality, at this time.

To meet Council's Desired Standards of Service will require one PFTI within the locality being:

Map No.	Network	Item ID	Project	Future	Infrastructure	Estimated
			Name	Infrastructure	Value (2015\$)	Year of
				Asset		Completion
				Description		-

18-4	Drainage	D-63	Kinka Cr Trib A, Albermarle St Q100 Easement	Drainage feature, new, tenure to ensure connectivity, Q100 Easement, 1820m	\$182,000	2031
18-4	Drainage	D-64	Kinka Cr Trib D, Q100 Easement	Drainage feature, new, tenure to ensure connectivity, 760m	\$76,000	2031

Community Facilities Infrastructure Network.



There are many trunk Community Facilities infrastructure which have been identified within the locality, at this time. Refer to the Existing Trunk Asset Spreadsheet.

The developing locality relies on Community Facilities to provide facilities to the locality, District, Whole Shire and Central Queensland Region.

To meet Council's Desired Standards of Service will require PFTI's within the locality being:

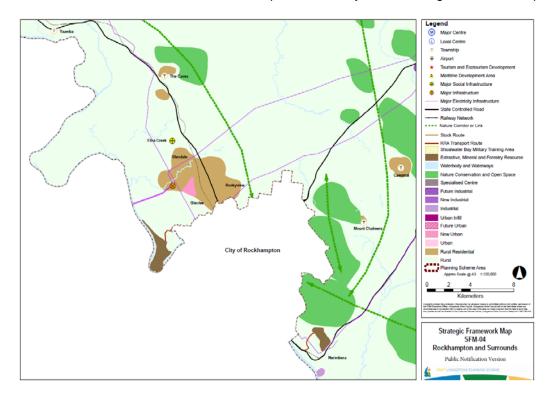
Map No.	Network	Item ID	Project Name	Future Infrastructure Asset Description	Infrastructure Value (2015\$)	Estimated Year of Completion
				-		

18-5	Community	PCL-511	Emu Park, multi-sport, sport, new.	New sporting, District, netball, rugby league, cricket	\$3,300,000	2021
18-5	Community	PCL-512	Emu Park, multi-sport, facility, new	New, facility, District, amenities, storage, meeting room.	\$156,000	2021
18-5	Community	PCL-528	Emu Park, Kerr Park, upgrade	Upgrade, park, Regional, paths, seating, shade, BBQ, play equipment	\$800,000	2016
18-5	Community	PCL-529	Centenary of Anzac, Emu Park upgrade	Upgrade, park, Regional, paths, seating, shade.	\$3,000,000	2016
18-5	Community	PCL-538	Emu Park Singing Ship, upgrade.	Upgrade, park, Regional, paths, seating, shade.	\$2,000,000	2021

2.19 Etna Creek.

Town Planning.

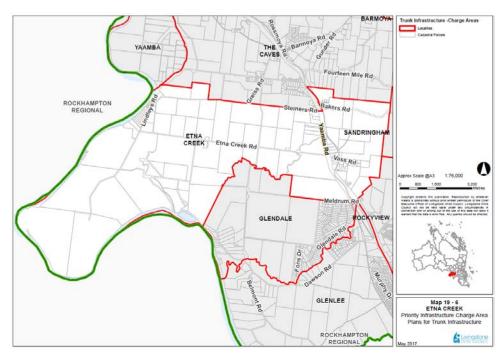
The locality has a land area of 6947.9 Ha and currently 173 parcels of land. The land uses in the rural locality involve rural, rural residential, minor sand quarries, Fitzroy River boating access, and a prison.



There are some strategic travel Destinations within the locality being the Etna Creek Prison, DPI Research Station, and minor sand quarries. There are no shops, school or industrial Destinations.

The strategic plan indicates: rural, waterways, nature conservation and open space, and nature corridor link, rural residential, major social infrastructure (prison).

The locality is not within the PIA.



Population Projections.

The ABS Census 2011(<u>SSC3</u>0578) recorded 551 persons for Place of Usual Residence however is part of a larger census data area.

The current PAM 2016 Estimated Resident Population is 213

The PAM projections are

Year	Estimated	Est	Est Retail GFA	Est Industrial GFA
	Resident			
	Population	Commercial GFA		
2011	213	0	0	0
2016	213	0	0	0
2021	213	0	0	0
2026	213	0	0	0
2031	213	0	0	0
Ultimate	213	0	0	0

This indicates no expected development growth within the locality.

Transport Infrastructure Network.

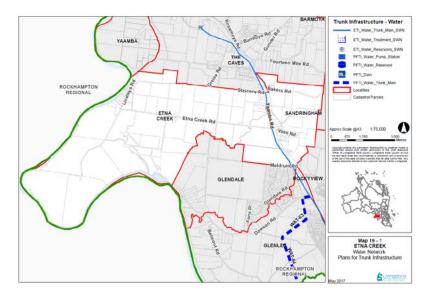
There is one existing trunk road transport infrastructure within the locality of which is a State Road asset (Bruce Hwy). Pedestrian and bicycle trunk infrastructure within the locality has not been analysed.

This existing trunk road infrastructure is serving origin catchments within Etna Creek locality and outside for the northern area of Livingstone Shire, plus State and National transport.

The State Road of Yaamba Rd CH 17730 – 22110 is considered to have adequate capacity for development within the planning horizon.

There are no Transport FTI's within the locality.

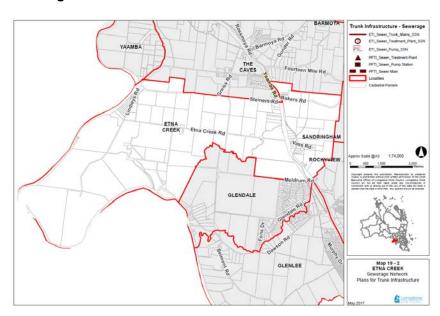
Water Supply Infrastructure Network.



There is one existing trunk water infrastructure assets within the locality being the 600mm trunk water main connecting Mt Charlton Water Supply Reservoir to Rockhampton Water Supply System. The existing trunk water main is considered to have adequate capacity for any development within the planning horizon.

There is no Water Supply PFTI proposed within the locality during the planning horizon.

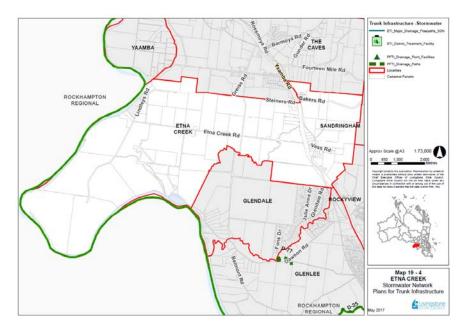
Sewerage Infrastructure Network.



There are no existing trunk sewerage infrastructure assets within the locality.

There is no Sewerage PFTI proposed within the locality during the planning horizon.

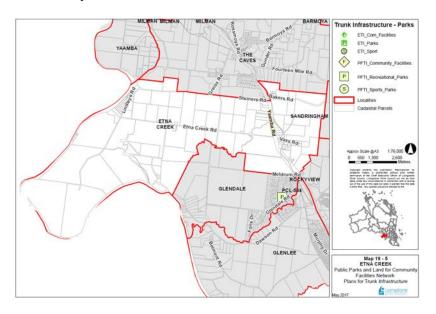
Drainage Infrastructure Network.



There are no trunk drainage systems which have been identified as relevant for development within the locality, at this time. The Fitzroy River and its tributary creeks, and floodplains are significant natural watercourse features.

There is no Drainage PFTI proposed within the locality, at this time.

Community Facilities Infrastructure Network.



There are no trunk Community Facilities infrastructure which have been identified within the locality, at this time.

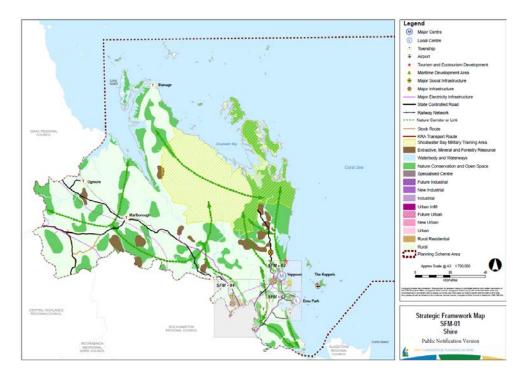
The rural locality relies on Community Facilities in the adjacent localities particularly The Caves and Rockhampton, which are within reasonable distances.

There are no known future catchments either within or outside the locality within the planning horizon which will require future trunk community facilities infrastructure to be provided within the locality.

2.20 Farnborough.

Town Planning.

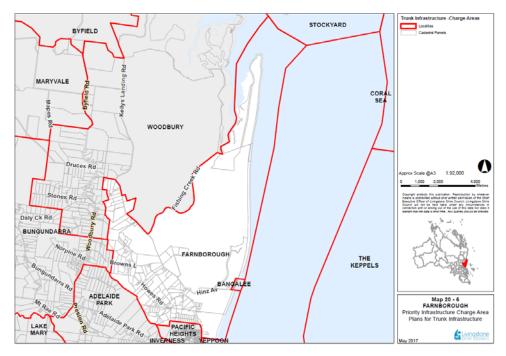
The locality has a total (land and sea) area of 14793 Ha and a land area of 5347.2 Ha and currently 255 parcels of land. The land uses in the developing locality involve rural, urban, school, retail, tourism, fishing and recreation.



There are many strategic travel Destinations within the locality being: shop, school, employment, tourism resort, entertainment, beaches, sporting, recreation, etc.

The strategic plan indicates: rural, urban, waterways, nature conservation and open space, and nature corridor link.

The locality is not within the PIA.



Population Projections.

The ABS Census 2011(<u>SSC3</u>0559) recorded 598 persons for Place of Usual Residence however is part of a larger census data area.

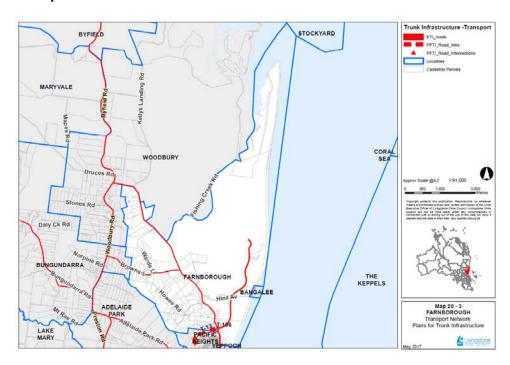
The current PAM 2016 Estimated Resident Population is 901.

The PAMv2 projections are

Year	Estimated Resident	Est	Est Retail GFA	Est Industrial GFA
	Population	Commercial GFA		
2011	901	0	9477	0
2016	901	0	9477	0
2021	901	0	9477	0
2026	901	0	9477	0
2031	901	0	9477	0
Ultimate	901	0	9477	0

This indicates no expected development growth within the locality.

Transport Infrastructure Network.



There is only 2 existing trunk road transport infrastructure within the locality of which nil is a State Road asset and 2 are LSC managed assets. Refer to Existing Asset Spreadsheet Pedestrian and bicycle trunk infrastructure within the locality has not been analysed.

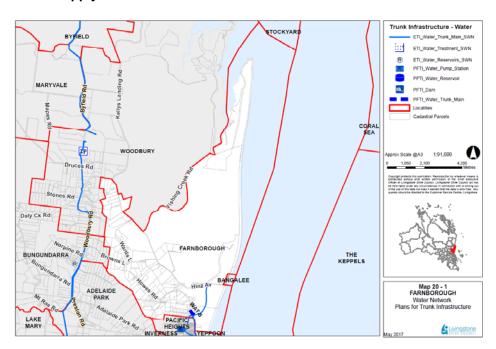
This existing trunk road infrastructure is serving origin catchments within the Farnborough locality, Bangalee, and outside of the Capricorn Coast.

The State Roads serving the area are considered to have adequate capacity for local development within the planning horizon.

LSC managed trunk road transport infrastructure roads within the locality being Farnborough Rd Rural Major Collector Ch 520 – 141450 and Browns Road Rural Major Collector Ch 0 - 2770 are considered of adequate capacity for local development within the planning horizon.

There are no transport PFTI's proposed within the locality.

Water Supply Infrastructure Network.



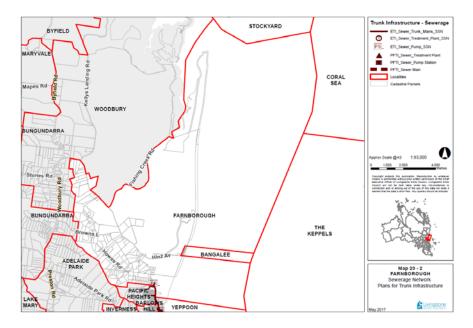
There are 2 existing trunk water infrastructure assets within the locality being: Farnborough Rd 200mm trunk main and the Iwasaki 200mm trunk water main. Refer to Existing Assets Spreadsheet

The LSC trunk water infrastructure is not considered adequate to meet the Farnborough and Bangalee water demands within the planning horizon.

To meet Council's Desired Standards of Service will require PFTI within the locality being:

Мар No.	Network	Item ID	Project Name	Future Infrastructure Asset Description	Infrastructure Value (2015\$)	Estimated Year of Completion
20-1	Water Supply	WAT-8	Farnborough Road 200m trunk water main.	New, Woodwind Valley LZ, MH design, 390m.	\$858,000	2031

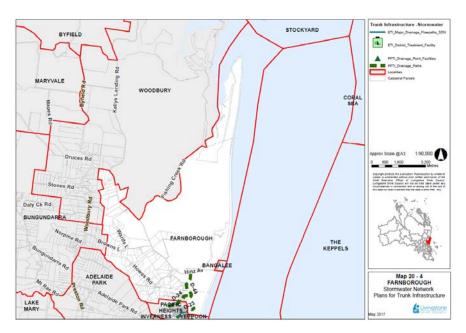
Sewerage Infrastructure Network.



There is one existing trunk sewerage infrastructure assets within the locality being the Woodwind Valley SPS. The LSC trunk sewerage infrastructure is considered adequate to meet the Farnborough sewage loadings within the planning horizon.

There are no Sewerage PFTI's proposed within the locality during the planning horizon.

Drainage Infrastructure Network.



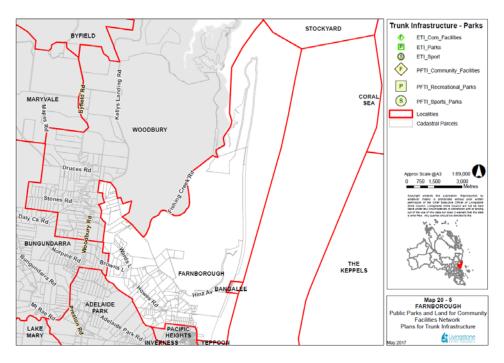
There is trunk drainage system which have been identified as relevant for development within the locality, at this

To meet Council's Desired Standards of Service will require Drainage PFTI within the locality being:

Map No.	Network	Item ID	Project Name	Future Infrastructure Asset Description	Infrastructure Value (2015\$)	Estimated Year of Completion

20-4	Drainage	D-23	Pacific Hts Gully, Farnborough Rd, Q100 Easement	Drainage feature, new, tenure to ensure connectivity, Q100 Easement, 560m	\$56,000	2026
20-4	Drainage	D-24	Pacific Hts Road, Q100 Easement	Drainage feature, new, tenure to ensure connectivity, 1900m	\$190,000	2031
20-4	Drainage	D-44	Barwells Creek Northern Tributary	Drainage feature, new, tenure to ensure connectivity, Q100 Easement, 1800m	\$180,000	2031

Community Facilities Infrastructure Network.



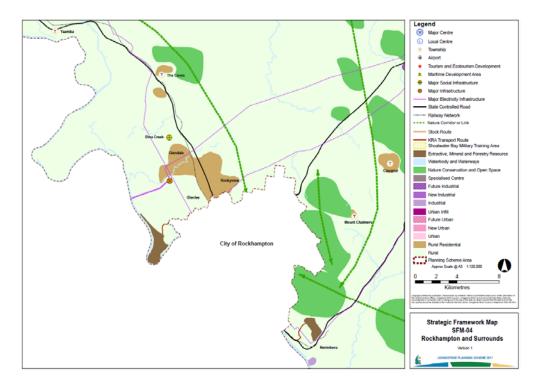
There are no trunk Community Facilities infrastructure which have been identified within the locality, at this time. Refer to the Existing Trunk Asset Spreadsheet.

The locality relies on Community Facilities at Yeppoon. There are no known future catchments either within or outside the locality within the planning horizon which will require future trunk community facilities to be provided within the locality.

2.21 Glendale.

Town Planning.

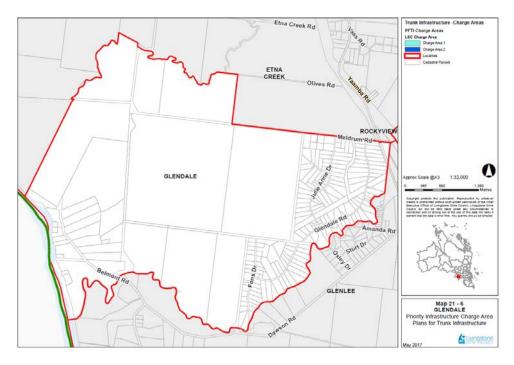
The locality has a land area of 2196.6 Ha and currently 236 parcels of land. The land uses in the rural locality involve rural, and rural residential.



There are no strategic travel Destinations (school, shops, mining, and industrial) within the locality.

The strategic plan indicates: rural, waterways, rural residential.

The locality is not within the PIA.



Population Projections.

The ABS Census 2011(<u>SSC3</u>0660) recorded 549 persons for Place of Usual Residence however is part of a larger census data area.

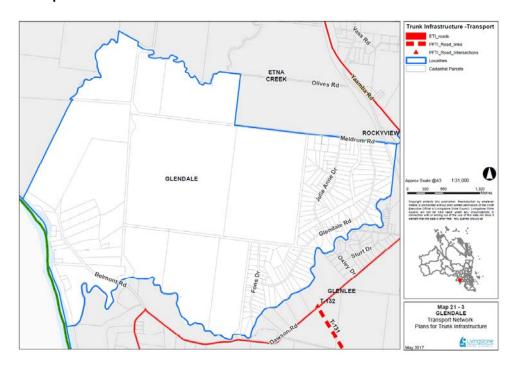
The current PAM 2015 Estimated Resident Population is 507

The PAM projections are

Year	Estimated Resident	Est Commercial GFA	Est Retail GFA	Est Industrial GFA
	Population	Commercial GFA		
2011	507	0	0	0
2016	507	0	0	0
2021	507	0	0	0
2026	507	0	0	0
2031	507	0	0	0
Ultimate	1441	0	0	0

This indicates no expected development growth within the locality.

Transport Infrastructure Network.



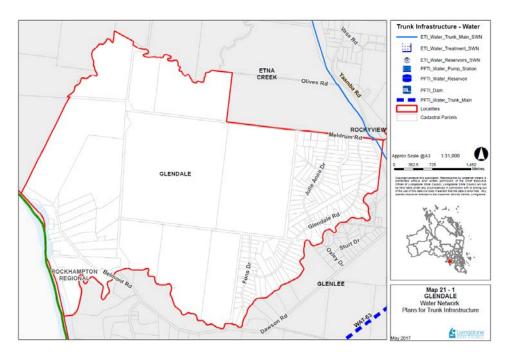
There is no existing trunk road transport infrastructure within the locality of which is either a State Road asset or a LSC managed asset. The Bruce Hwy is adjacent to the locality. Pedestrian and bicycle trunk infrastructure within the locality has not been analysed.

This existing adjacent trunk road infrastructure is serving origin catchments within Glendale locality and outside for the northern area of Livingstone Shire, plus State and National transport.

The adjacent State Road of Yaamba Rd is considered to have adequate capacity for development within the planning horizon.

There are no Transport FTI's within the locality.

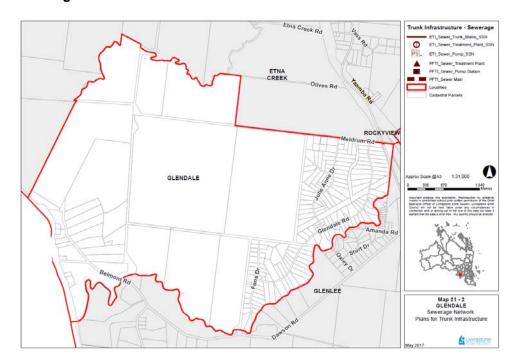
Water Supply Infrastructure Network.



There is one existing trunk water infrastructure assets within the locality being 600mm trunk water main connecting Mt Charlton Water Supply Reservoir to Rockhampton Water Supply System. The existing trunk water main is considered to have adequate capacity for any development within the planning horizon.

There is no Water Supply PFTI proposed within the locality during the planning horizon.

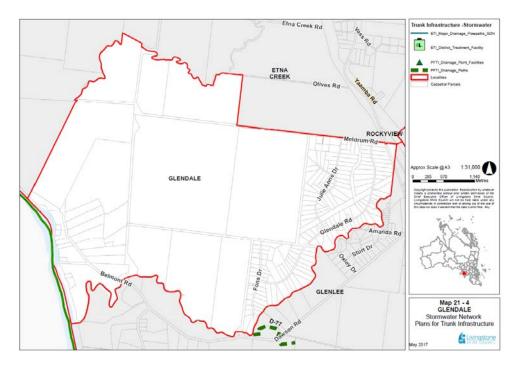
Sewerage Infrastructure Network.



There are no existing trunk sewerage infrastructure assets within the locality.

There is no Sewerage PFTI proposed within the locality during the planning horizon.

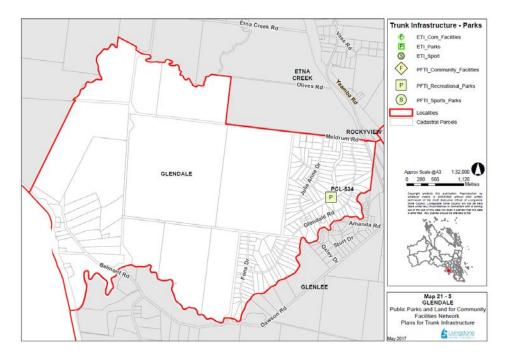
Drainage Infrastructure Network.



There are no trunk drainage systems which have been identified as relevant for development within the locality, at this time. The Fitzroy River and its tributary creeks, and floodplains are significant natural watercourse features.

There is no Drainage PFTI proposed within the locality, at this time.

Community Facilities Infrastructure Network.



There are no trunk Community Facilities infrastructure which have been identified within the locality, at this time.

The rural locality relies on Community Facilities in the adjacent localities particularly The Caves and Rockhampton, which are within reasonable distances.

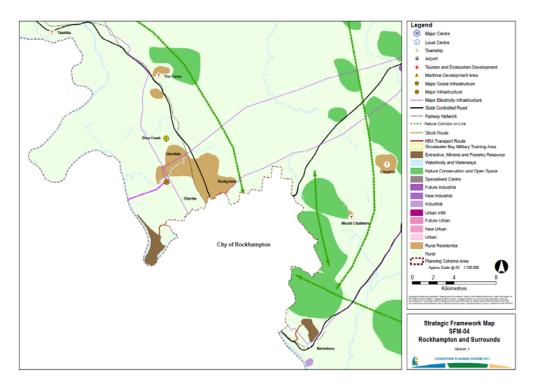
However to meet Council's Desired Standards of Service for the proposed residential development within the locality will require one Community PFTI within the locality being:

Map No.	Network	Item ID	Project Name	Future Infrastructure Asset Description	Infrastructure Value (2015\$)	Estimated Year of Completion
21-5	Community	PCL534	Glenlee Park upgrade	Glenlee Park upgrade, District, paths, seating, shade, play equipment.	\$200,000	2021

2.22 Glenlee.

Town Planning.

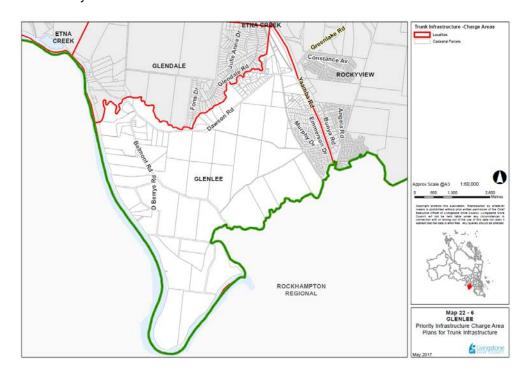
The locality has a land area of 4201 Ha and currently 473 parcels of land. The land uses in the rural locality involve rural, and rural residential.



There is one strategic travel Destinations within the locality being a school. There are no shops, no mining, and no industrial

The strategic plan indicates: rural, waterways, rural residential, new urban.

The locality is not within the PIA.



Population Projections.

The ABS Census 2011(<u>SSC3</u>0664) recorded 1190 persons for Place of Usual Residence however is part of a larger census data area.

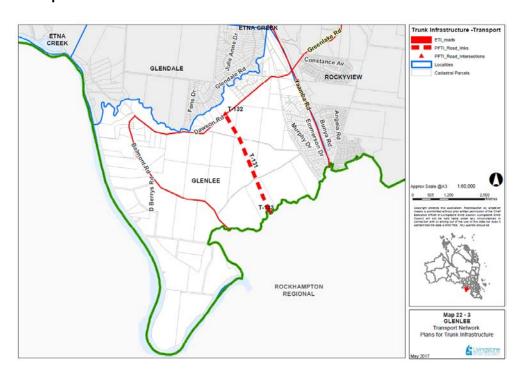
The current PAM 2016 Estimated Resident Population is 1017

The PAM projections are

Year	Estimated Resident	Est	Est Retail GFA	Est Industrial GFA
	Population	Commercial GFA		
2011	1017	0	0	0
2016	1017	0	0	0
2021	1017	0	0	0
2026	1017	0	0	0
2031	1017	0	0	0
Ultimate	1458	0	0	0

This indicates low expected development growth within the locality however a significant rural residential development is planned adjacent to Dawson Rd.

Transport Infrastructure Network.



There are three existing trunk road transport infrastructure within the locality of which is either a State Road asset or a LSC managed asset. Pedestrian and bicycle trunk infrastructure within the locality has not been analysed.

This existing trunk road infrastructure is serving origin catchments within Glenlee locality and outside for the northern area of Livingstone Shire, plus State and National transport.

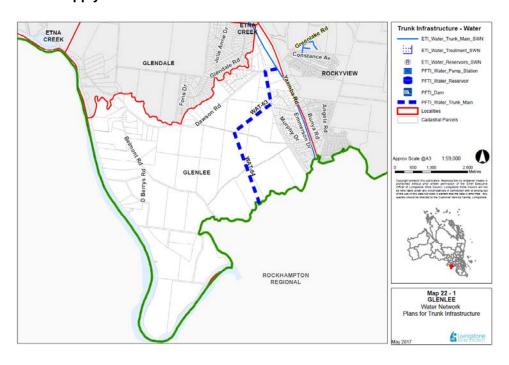
The adjacent State Road of Yaamba Rd is considered to have adequate capacity for development within the planning horizon.

LSC managed trunk road transport infrastructure roads within the locality of Belmont Rd Ch 0 - 5840 and Dawson Rd CH 0 - 6470 are considered to have adequate capacity within the planning horizon.

However to meet Council's Desired Standards of Service for the proposed residential development within the locality will require three Transport PFTI within the locality being:

Мар No.	Network	Item ID	Project Name	Future Infrastructure Asset Description	Infrastructure Value (2015\$)	Estimated Year of Completion
22-3	Transport	T-131	McLaughlin Rd	McLaughlin St, new, 3650m, Rural Major Collector	\$2,800,000	2021
22-3	Transport	T-132	Intersection Dawson Rd - McLaughlin Rd	Intersection, new, Dawson Rd – McLaughlin St, Rural major Collector	\$1,280,000	2021
22-3	Transport	T-133	Ramsay Creek Bridge	Bridge, new, part, McLaughlin St extension	\$9,000,000	2026

Water Supply Infrastructure Network.



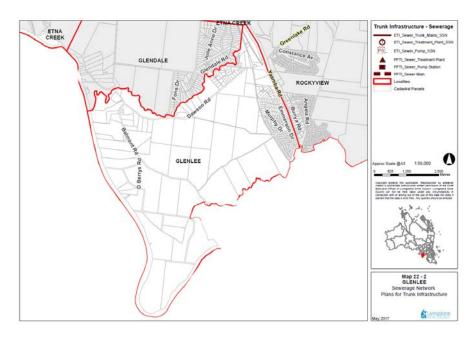
There is one existing trunk water infrastructure assets within the locality being 600mm trunk water main connecting Mt Charlton Water Supply Reservoir to Rockhampton Water Supply System and is considered to have adequate capacity for any development within the planning horizon.

and Dawson Rd CH 0 - 6470 are considered to have adequate capacity within the planning horizon.

However to meet Council's Desired Standards of Service for the proposed residential development within the locality will require two Water Supply PFTI within the locality being:

Map No.	Network	Item ID	Project Name	Future Infrastructure Asset Description	Infrastructure Value (2015\$)	Estimated Year of Completion
22-1	Water Supply	WAT-63	Dunbar Rd 300mm trunk water main	Dunbar Rd 300 trunk water main, new, Caves LZ, MH design, 3500m	\$1,800,000	2031
22-1	Water Supply	WAT-64	McLaughlin St 300 trunk water main	McLaughlin St 300 trunk water main, new, Caves LZ, MH design, 2700m	\$1,400,000	2031

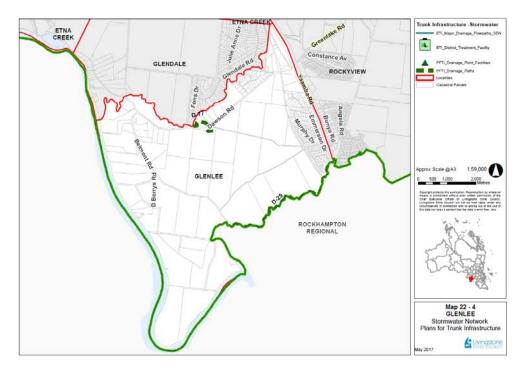
Sewerage Infrastructure Network.



There are no existing trunk sewerage infrastructure assets within the locality.

There is no Sewerage PFTI proposed within the locality during the planning horizon.

Drainage Infrastructure Network.

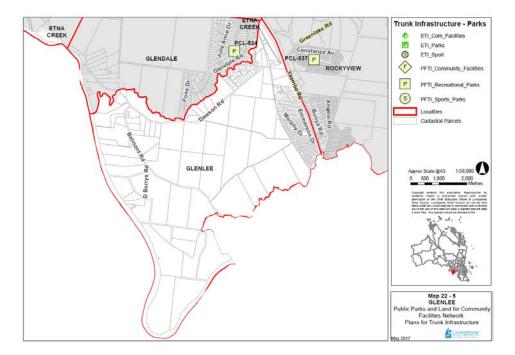


There are four trunk drainage systems which have been identified as relevant for development within the locality, at this time. The Fitzroy River and its tributary creeks of Ramsay Creek, Belmont Creek and Sutherland Creek, and floodplains are significant natural watercourses and drainage features.

However to meet Council's Desired Standards of Service for the proposed residential development within the locality will require one Drainage PFTI within the locality being:

Map No.	Network	Item ID	Project Name	Future Infrastructure Asset Description	Infrastructure Value (2015\$)	Estimated Year of Completion
22-41	Drainage	D-77	Sutherland Creek Q100 Easement	Sutherland Creek watercourse system, floodplain tenure for connectivity, new Q100 Easement, 1250m.	\$125,000	2021

Community Facilities Infrastructure Network.



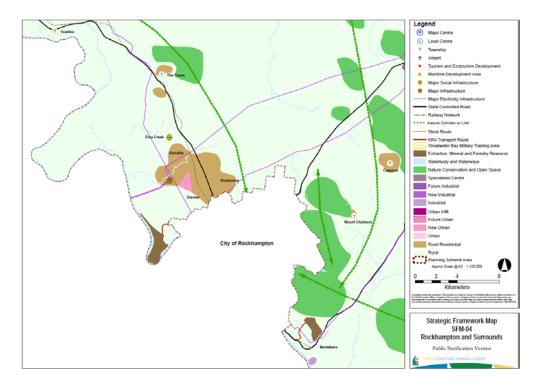
There are no trunk Community Facilities infrastructure which have been identified within the locality, at this time.

The rural locality relies on Community Facilities in the adjacent localities particularly The Caves and Rockhampton, which are within reasonable distances.

2.23 Green Lake.

Town Planning.

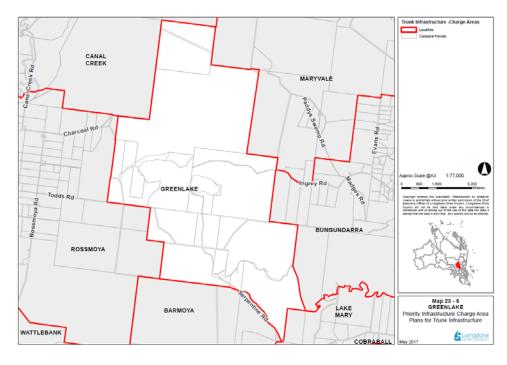
The locality has a land area of 6813.2 Ha and currently 31 parcels of land. The land uses in the rural locality involve rural.



There are no strategic travel Destinations (schools, shops, mining, industry) within the locality.

The strategic plan indicates: rural, waterways, nature conservation and open space, and nature corridor link.

The locality is not within the PIA.



Population Projections.

The ABS Census 2011(<u>SSC3</u>0109) recorded 230 persons for Place of Usual Residence however is part of a larger census data area.

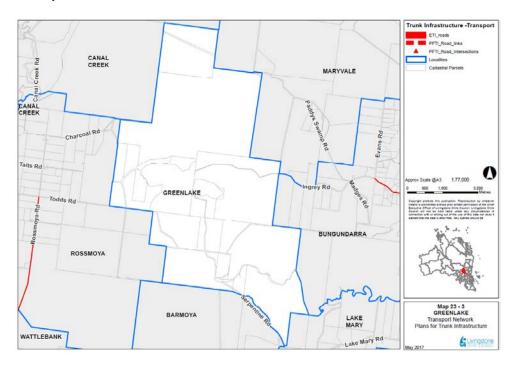
The current PAM 2016 Estimated Resident Population is nil.

The PAM projections are

Year	Estimated Resident	Est	Est Retail GFA	Est Industrial GFA
	Population	Commercial GFA		
2011	0	0	0	0
2016	0	0	0	0
2021	0	0	0	0
2026	0	0	0	0
2031	0	0	0	0
Ultimate	0	0	0	0

This indicates no expected development growth within the locality.

Transport Infrastructure Network.

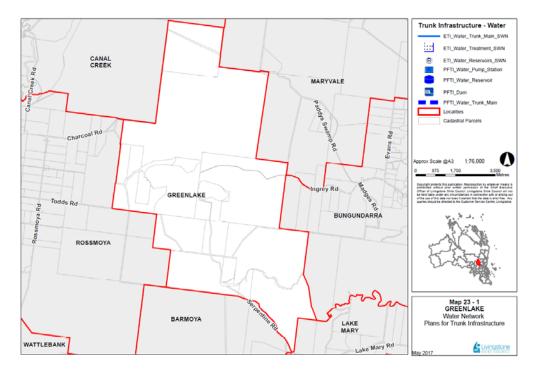


There is no existing trunk road transport infrastructure within the locality of which is either a State Road asset or a LSC managed asset. Pedestrian and bicycle trunk infrastructure within the locality has not been analysed.

This existing non-trunk road infrastructure is serving origin catchments within Greenlake locality and outside are considered to have adequate capacity for development within the planning horizon.

There are no Transport FTI's within the locality.

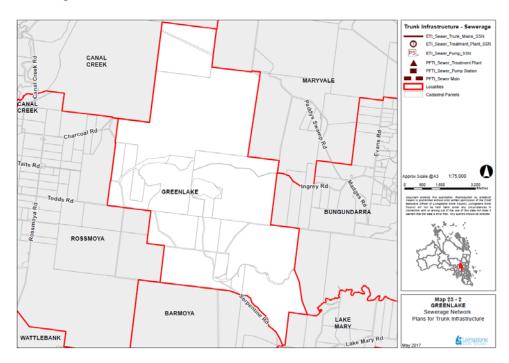
Water Supply Infrastructure Network.



There is no existing trunk water infrastructure assets within the locality.

There is no Water Supply PFTI proposed within the locality during the planning horizon.

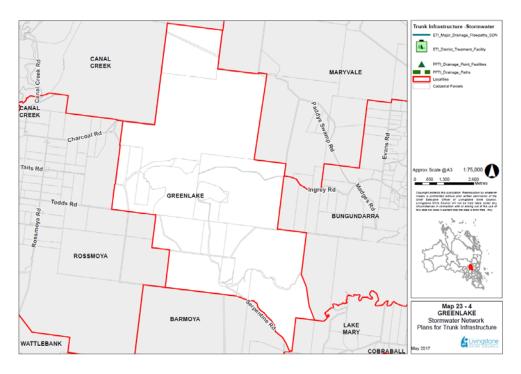
Sewerage Infrastructure Network.



There are no existing trunk sewerage infrastructure assets within the locality.

There is no Sewerage PFTI proposed within the locality during the planning horizon.

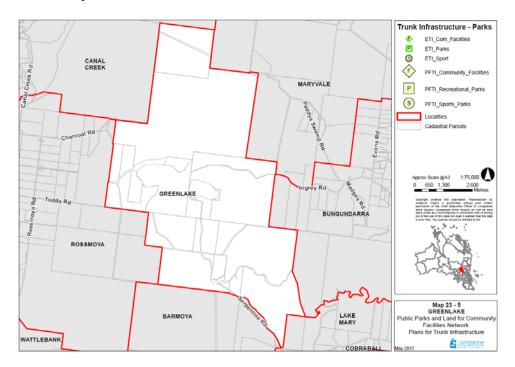
Drainage Infrastructure Network.



There are no trunk drainage systems which have been identified as relevant for development within the locality, at this time. The watercourses, drainage features and floodplains are significant natural watercourse features.

There is no Drainage PFTI proposed within the locality, at this time.

Community Facilities Infrastructure Network.



There are no trunk Community Facilities infrastructure which have been identified within the locality, at this time.

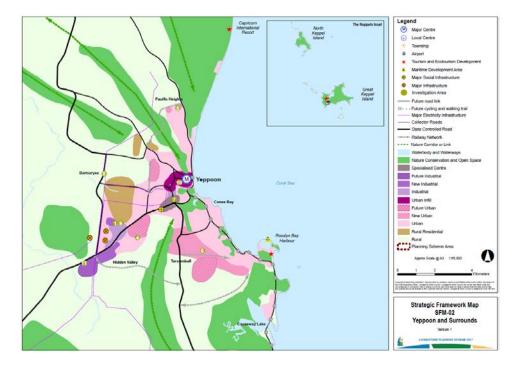
The rural locality relies on Community Facilities in the adjacent localities particularly Yeppoon and The Caves and Rockhampton, which are within reasonable distances.

There are no known future catchments either within or outside the locality within the planning horizon which will require future trunk community facilities infrastructure to be provided within the locality.

2.24 Hidden Valley.

Town Planning.

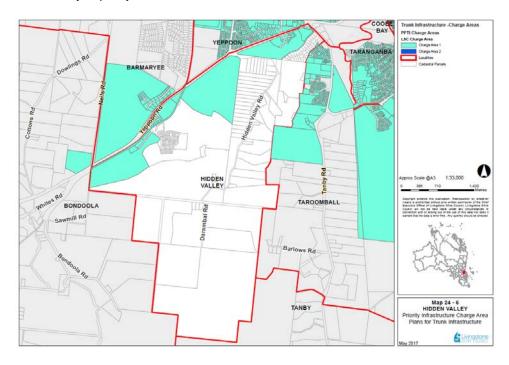
The locality has a land area of 1374.8 Ha and currently 310 parcels of land. The land uses in the developing locality involve rural, rural residential, urban, industrial, retail.



There is several strategic travel Destinations within the locality being: service station, hospital, shops, commercial area, industrial area, farms, and residential areas.

The strategic plan indicates: urban, new urban, future urban, industrial, new industrial, future industrial, rural, future road link, nature conservation and open space, and nature corridor links.

The locality is partly within the PIA.



Population Projections.

The ABS Census 2011(<u>SSC3</u>0753) recorded 594 persons for Place of Usual Residence however is part of a larger census data area

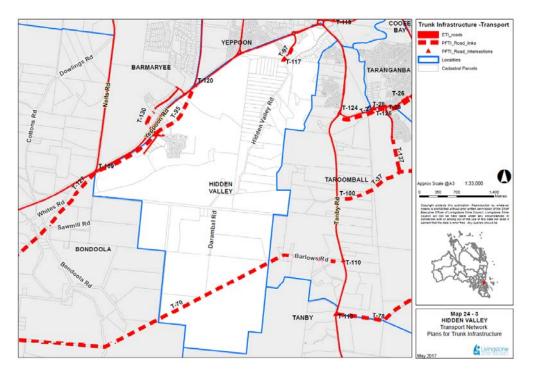
The current PAM 2016 Estimated Resident Population is 564.

The PAM projections are

Year	Estimated	Est	Est Retail GFA	Est Industrial GFA
	Resident Population	Commercial GFA		
2011	297	1223	8511	16568
2016	564	1223	8511	24099
2021	1148	1223	8511	24099
2026	1844	1223	8511	24099
2031	1844	1223	8511	24099
Ultimate	2130	3346	13385	24099

This indicates expected development growth within the locality but timing is uncertain.

Transport Infrastructure Network.



There are many existing trunk road transport infrastructure within the locality of which is either a State Road asset or a LSC managed asset. Refer to Existing Asset Spreadsheet Pedestrian and bicycle trunk infrastructure within the locality has not been analysed.

This existing trunk road infrastructure is serving origin catchments within the Yeppoon to Rosslyn area on the Capricorn Coast.

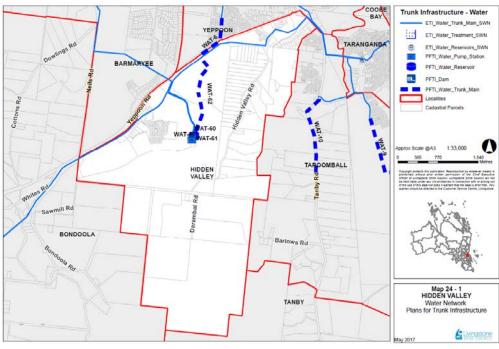
The State Roads serving the area particularly Yeppoon Road is considered to be fully loaded and requires additional capacity for local development within the planning horizon.

There is one small LSC managed trunk road transport infrastructure road within the locality being Hoskyn Drive Intersection and Extension, 300m which enabled strategic improvement to intersection safety at the Yeppoon Road – Old Rockhampton Road intersection and is considered inadequate capacity for adjacent area development within the planning horizon.

To meet Council's Desired Standards of Service will require PFTI's within the locality being:

Мар No.	Network	Item ID	Project Name	Future Infrastructure Asset Description	Infrastructure Value (2015\$)	Estimated Year of Completion
24-3	Transport	T-7(part)	Coucom Rd upgrade	New Rural Major Collector, Ch 0 – 5200, from Yeppoon Road to Tanby Road	\$5,525,000	2036
24-3	Transport	T-95	Rail Trail Stage 2	New trunk Shared Pathway, Ch 4416-6931	\$150,000	2031
24-3	Transport	T-120	Yeppoon Road – Rail Trail safe crossing	New, Highway Crossing	\$2,194,000	2031

Water Supply Infrastructure Network.



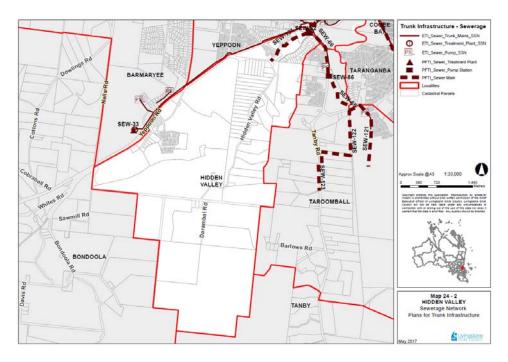
There are some existing trunk water infrastructure assets within the locality being: Yeppoon 600mm Pipeline, Yeppoon pipeline valve facility, future reservoir inlet 600mm pipe, future reservoir outlet 750mm pipe, and 750mm pipeline to Taranganba WS Reservoir, and 600mm branch pipe to St Faith's Reservoir. Refer to Existing Assets Spreadsheet

The LSC trunk water infrastructure is generally considered inadequate to meet the Yeppoon and Capricorn Coast water demands within the planning horizon.

To meet Council's Desired Standards of Service will require PFTI within the locality being:

Мар No.	Network	Item ID	Project Name	Future Infrastructure Asset Description	Infrastructure Value (2015\$)	Estimated Year of Completion
24-1	Water Supply	WAT-60	Yeppoon West WS Reservoir	New, Yep West Pines LZ, \$ML, mixing, MD design,	\$1,706,000	2026
24-1	Water Supply	WAT-61	Yeppoon West WS Booster Pump Station	New, MH design, building, pumps, pipes, elect, generator, re- chlorination	\$455,000	2031
24-1	Water Supply	WAT-62	Yeppoon West Pines LZ 300mm Distribution East	New, 300mm, MH design, 1610m	\$868,000	2031
24-1	Water Supply	WAT-69	Yeppoon West Transfer Pumps	New, Pines LZ to Taranganba LZ, building, pumps, elec, generator, pipes	\$1,500,000	2031

Sewerage Infrastructure Network.



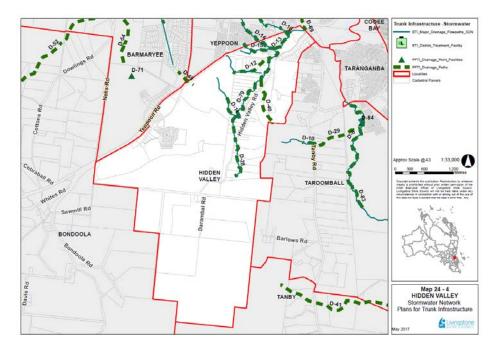
There is only one small existing trunk sewerage infrastructure assets within the locality being Hoskyn Drive 375mm trunk gravity main. Refer to Existing Assets Spreadsheet.

The LSC trunk sewerage infrastructure is considered inadequate to meet the locality sewage loadings within the planning horizon.

To meet Council's Desired Standards of Service will require three PFTI within the locality being:

Map No.	Network	Item ID	Project Name	Future Infrastructure Asset Description	Infrastructure Value (2015\$)	Estimated Year of Completion
24-2	Sewerage	SEW-82	Tanby Rd sewage pump station	New, Yeppoon Cr catchment, WWF design, civil 1 of 2, pumps, pipes, valves, elec, CCSY Hidden Valley	\$809,000	2031
24-2	Sewerage	SEW-131	Hidden Valley 375mm gravity main	New, WWF design, Hoskyn Drive to Tanby Rd SPS, 375mm gravity, 1015m	\$1,014,000	2031

Drainage Infrastructure Network.



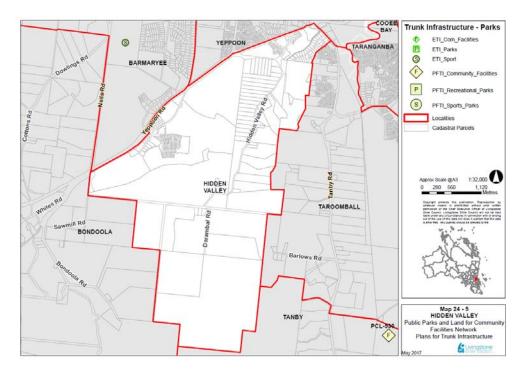
There are trunk drainage systems of the Yeppoon Creek catchment which have been identified as relevant for development within the locality within the planning horizon.

To meet Council's Desired Standards of Service will require one PFTI within the locality being:

Мар No.	Network	Item ID	Project Name	Future Infrastructure Asset Description	Infrastructure Value (2015\$)	Estimated Year of Completion
24-4	Drainage	D-11	Yeppoon Cr Trib A, Q100 Easement	Drainage feature, new, tenure to ensure connectivity, Q100 Easement, 570m	\$57,000	2036
24-4	Drainage	D-12	Yeppoon Cr Trib B, Q100 Easement	Drainage feature, new, tenure to ensure connectivity, 900m	\$90,000	2021
24-4	Drainage	D-13	Yeppoon Cr watercourse, Q100 Easements and overlay	Watercourse, new, tenure and overlay to ensure connectivity, 980m	\$98,000	2021

24-4	Drainage	D-14	Yeppoon Cr Trib C, Q100 Easement	Drainage feature, new, tenure to ensure connectivity, 1000m	\$100,000	2031
24-4	Drainage	D-15	Yeppoon Cr Trib D, Q100 Easement.	Drainage feature, new, tenure to ensure connectivity, 680m	\$68,000	2021
24-4	Drainage	D-16	Yeppoon Cr Trib E, Q100 Easement.	Drainage feature, new, tenure to ensure connectivity, 240m	\$24,000	2031
24-4	Drainage	D-28	Yeppoon Cr - Hidden Valley Rd, Q100 easement	Drainage feature, new, tenure to ensure connectivity, 850m	\$85,000	2031
24-4	Drainage	D-40	Yeppoon Cr Trib C, Q100 Easement.	Drainage feature, new, tenure to ensure connectivity, 1000m	\$100,000	2031
24-4	Drainage	D-81	School Creek watercourse, Q100 easement	Floodplain, new, tenure to ensure connectivity, 720m	\$72,000	2031

Community Facilities Infrastructure Network.



There are no trunk Community Facilities infrastructure which have been identified within the locality, at this time.

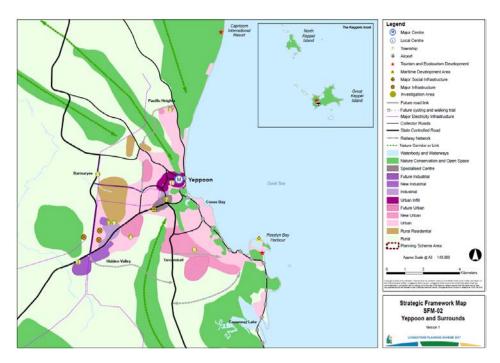
The locality relies on Community Facilities in the adjacent localities particularly Yeppoon, which is within a reasonable distance.

There are no known future catchments either within or outside the locality within the planning horizon which will require future trunk community facilities infrastructure to be provided within the locality.

2.25 Inverness.

Town Planning.

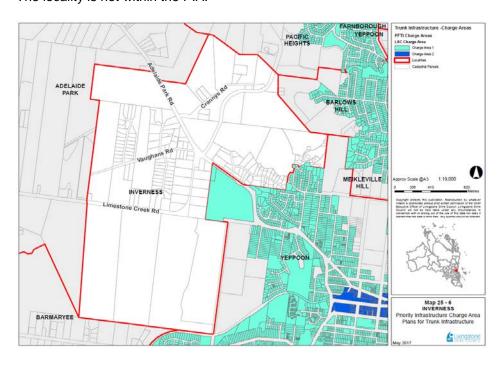
The locality has a land area of 565.7 Ha and currently 202 parcels of land. The land uses in the developing locality involve rural, and rural residential.



There is no strategic travel Destinations within the locality.

The strategic plan indicates: urban, new urban, future urban, industrial, new industrial, future industrial, rural, future road link, nature conservation and open space, and nature corridor links.

The locality is not within the PIA.



Population Projections.

The ABS Census 2011(SSC30807) recorded 253 persons for Place of Usual Residence.

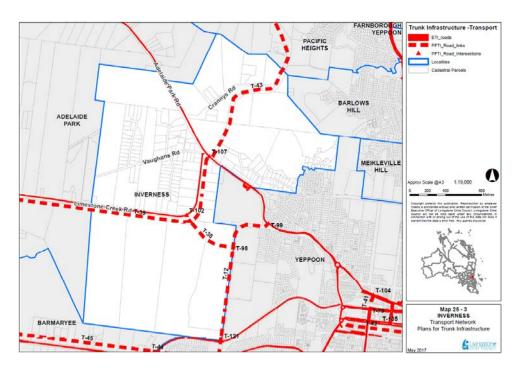
The current PAM 2016 Estimated Resident Population is 259.

The PAM projections are

Year	Estimated	Est	Est Retail GFA	Est Industrial GFA
	Resident Population	Commercial GFA		
2011	249	0	0	0
2016	259	0	0	0
2021	259	0	0	0
2026	259	0	0	0
2031	259	0	0	0
Ultimate	288	0	0	0

This indicates no expected development growth within the locality.

Transport Infrastructure Network.



There are three existing trunk road transport infrastructure within the locality of which none is a State Road asset Refer to Existing Asset Spreadsheet Pedestrian and bicycle trunk infrastructure within the locality has not been analysed.

This existing trunk road infrastructure is serving origin catchments within the Inverness and northern suburbs of Yeppoon, and other areas.

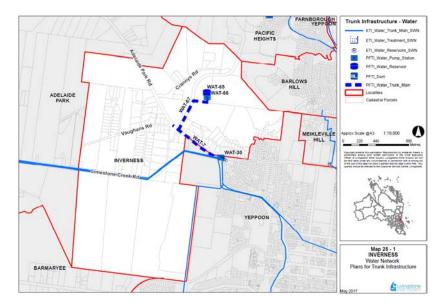
The adjacent State Roads serving the area are considered adequate within the planning horizon.

The LSC managed trunk road transport infrastructure road within the locality being Adelaide Park Rd Ch 1400-2950 and the new Panorama Drive Ch 0-1393 are considered of adequate capacity within the planning horizon however Limestone Creek Road is considered inadequate to meet the development loadings within the planning horizon.

To meet Council's Desired Standards of Service will require PFTI's within the locality being:

Мар No.	Network	Item ID	Project Name	Future Infrastructure Asset Description	Infrastructure Value (2015\$)	Estimated Year of Completion
25-3	Transport	T-39 (part)	Limestone Creek Rd upgrade	Upgrade, Rural Major Collector, Ch 0 – 1800, from Adelaide Park Road to Neils Road	\$1,869,000	2021
25-3	Transport	T-38	St Brendan's Rd, new	New, Rural Major Collector, Ch 0-645	\$5430,000	2031
25-3	Transport	T-12 (part)	Condon Drive, new	New, Rural Major Collector, Ch 1700-2100	\$438,000	2031
25-3	Transport	T-12 (part)	Condon Drive, new	New, Rural Major Collector, Ch 550-1700	\$672,000	2031
25-3	Transport	T-98	St Brendan's - Condon Drive Intersection, new	New, intersection, Rural Major Collector, non- signalised	\$1,061,000	2031
25-3	Transport	T-102	Limestone Cr Rd – St Brendan's Rd Intersection, new	New, intersection, Rural Major Collector, non- signalised	\$1,172,000	2031
25-3	Transport	T-121	Rail Trail – Condon Dr intersection, new	New, intersection, shared path	\$193,000	2031

Water Supply Infrastructure Network.



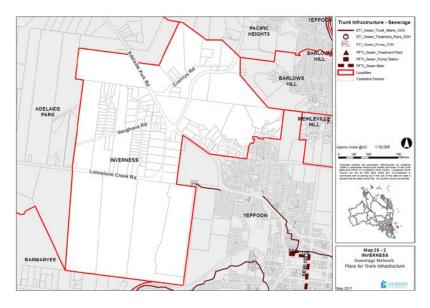
There are some existing trunk water infrastructure assets within the locality being: Waterpark 525mm Pipeline, and Waterpark 375mm pipeline to St Faith's Reservoir. Refer to Existing Assets Spreadsheet

The LSC trunk water infrastructure is generally considered inadequate to meet the Inverness water demands within the planning horizon.

To meet Council's Desired Standards of Service will require PFTI within the locality being:

Map No.	Network	Item ID	Project Name	Future Infrastructure Asset Description	Infrastructure Value (2015\$)	Estimated Year of Completion
25-1	Water Supply	WAT-65	Panorama WS HZ Reservoir	New, 1ML, mixing, MD design	\$800,000	2031
25-1	Water Supply	WAT-66	Panorama WS Booster Pump Station	New, MH design, building, pumps, pipes, elect, generator, re- chlorination	\$300,000	2031
25-1	Water Supply	WAT-67	Panorama HZ 300mm Distribution	New, 300mm, MH design, 500m	\$300,000	2031

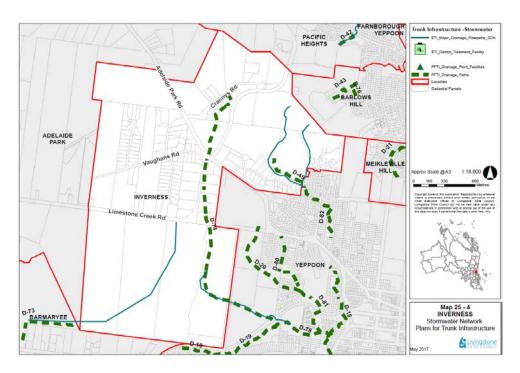
Sewerage Infrastructure Network.



There are no existing trunk sewerage infrastructure assets within the locality.

There is no Sewerage PFTI proposed within the locality during the planning horizon.

Drainage Infrastructure Network.



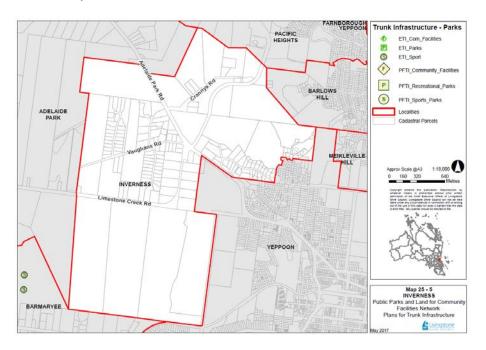
There are trunk drainage systems of the Fig Tree Creek catchment which have been identified as relevant for development within the locality within the planning horizon.

To meet Council's Desired Standards of Service will require one PFTI within the locality being:

Map No. Network It		Project Name	Future Infrastructure Asset Description	Infrastructure Value (2015\$)	Estimated Year of Completion
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25-4	Drainage	D-45	Fig Tree Cr Tributary C, Q100 Easement	Drainage feature, new, tenure to ensure connectivity, Q100 Easement, 750m	\$75,000	2036
25-4	Drainage	D-74	Capsize Gully, Q100 Easement	Drainage feature, new, tenure to ensure connectivity, 3100m	\$310,000	2036

Community Facilities Infrastructure Network.



There are no trunk Community Facilities infrastructure which have been identified within the locality, at this time.

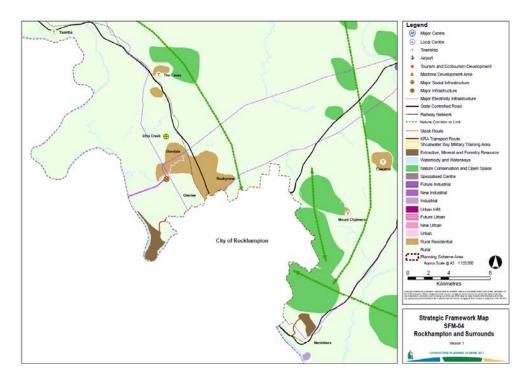
The locality relies on Community Facilities in the adjacent localities particularly Yeppoon, which is within a reasonable distance.

There are no known future catchments either within or outside the locality within the planning horizon which will require future trunk community facilities infrastructure to be provided within the locality.

2.26 Iron Pot.

Town Planning.

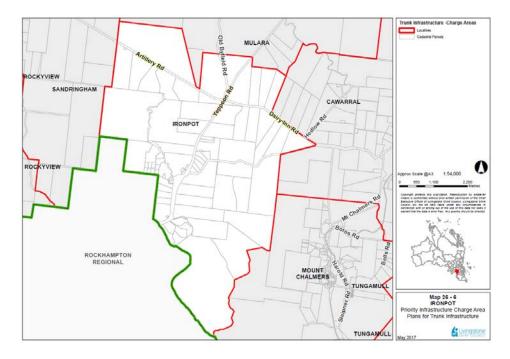
The locality has a land area of 3644.1 Ha and currently 88 parcels of land. The land uses in the rural locality involve rural and rural residential.



There are no strategic travel Destinations (schools, shops, mining, industry) within the locality.

The strategic plan indicates: rural, waterways, nature conservation and open space, and nature corridor link.

The locality is not within the PIA.



Population Projections.

The ABS Census 2011(<u>SSC3</u>0811) recorded 252 persons for Place of Usual Residence however is part of a larger census data area.

The current PAM 2015 Estimated Resident Population is nil.

The PAM projections are

Year	Estimated Resident	Est	Est Retail GFA	Est Industrial GFA
	Population	Commercial GFA		
2011	0	0	0	0
2016	0	0	0	0
2021	0	0	0	0
2026	0	0	0	0
2031	0	0	0	0
Ultimate	0	0	0	0

This indicates no expected development growth within the locality.

Transport Infrastructure Network.

There is four existing trunk road transport infrastructure within the locality of which is either a State Road asset or a LSC managed asset. Pedestrian and bicycle trunk infrastructure within the locality has not been analysed.

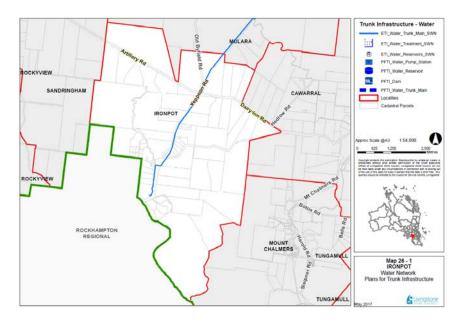
This existing trunk road infrastructure is serving origin catchments within Ironpot locality and outside of Capricorn Coast.

The State Road of Yeppoon Rd Ch 12600 – 19000 is considered to have adequate capacity for development within the planning horizon.

LSC managed trunk road transport infrastructure roads within the locality being: Artillery Rd Ch 0 - 3970 Old Byfield Rd Ch 0 - 1270, and Dairy Inn Rd Ch 0 - 3240 are considered to have adequate capacity for development within the planning horizon.

There are no Transport FTI's within the locality.

Water Supply Infrastructure Network.

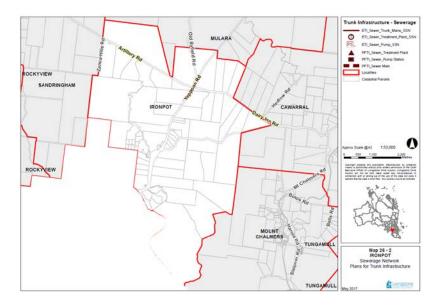


There is one existing trunk water infrastructure assets within the locality being the 600mm trunk water main connecting Boundary water Supply Reservoir with the Capricorn Coast Water Supply System.

The 600mm trunk water main Ch 0- 6100m within the locality is considered to have adequate capacity for development within the planning horizon

There is no Water Supply PFTI proposed within the locality during the planning horizon.

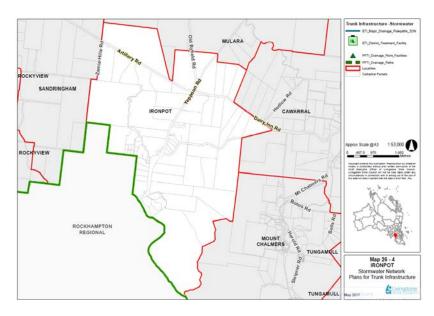
Sewerage Infrastructure Network.



There are no existing trunk sewerage infrastructure assets within the locality.

There is no Sewerage PFTI proposed within the locality during the planning horizon.

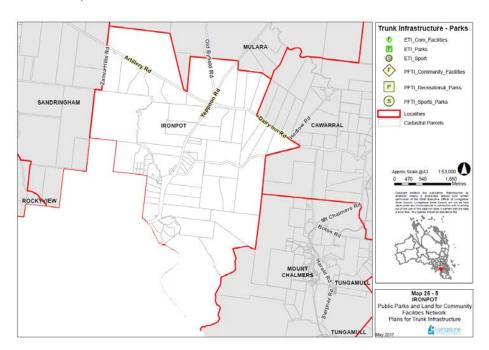
Drainage Infrastructure Network.



There are no trunk drainage systems which have been identified as relevant for development within the locality, at this time. The watercourses, drainage features and floodplains are significant natural watercourse features.

There is no Drainage PFTI proposed within the locality, at this time.

Community Facilities Infrastructure Network.



There are no trunk Community Facilities infrastructure which have been identified within the locality, at this time.

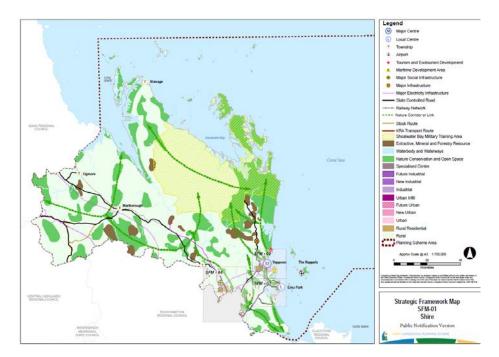
The rural locality relies on Community Facilities in the adjacent localities particularly Yeppoon and The Caves and Rockhampton, which are within reasonable distances.

There are no known future catchments either within or outside the locality within the planning horizon which will require future trunk community facilities infrastructure to be provided within the locality.

2.27 Jardine.

Town Planning.

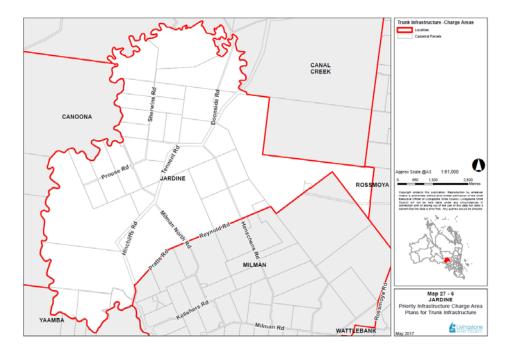
The locality has a land area of 6148.7 Ha and currently 49 parcels of land. The land uses in the rural locality involve rural.



There are no strategic travel Destinations (schools, shops, mining, industry) within the locality.

The strategic plan indicates: rural, waterways, nature conservation and open space, and nature corridor link.

The locality is not within the PIA.



Population Projections.

The ABS Census 2011(<u>SSC3</u>1065) recorded 331 persons for Place of Usual Residence however is part of a larger census data area.

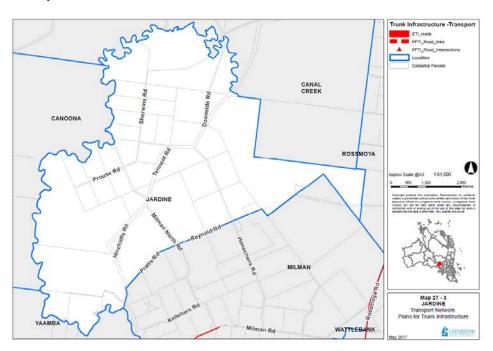
The current PAM 2016 Estimated Resident Population is 32.

The PAM projections are

Year	Estimated Resident Population	Est Commercial GFA	Est Retail GFA	Est Industrial GFA
2011	32	0	0	0
2016	32	0	0	0
2021	32	0	0	0
2026	32	0	0	0
2031	32	0	0	0
Ultimate	32	0	0	0

This indicates no expected development growth within the locality.

Transport Infrastructure Network.

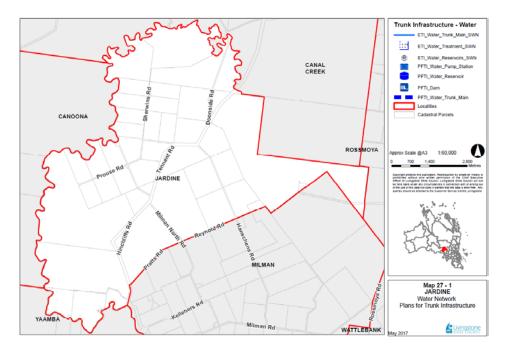


There is no existing trunk road transport infrastructure within the locality of which is either a State Road asset or a LSC managed asset. Pedestrian and bicycle trunk infrastructure within the locality has not been analysed.

This existing non-trunk road infrastructure is serving origin catchments within Jardine locality and outside are considered to have adequate capacity for development within the planning horizon.

There are no Transport FTI's within the locality.

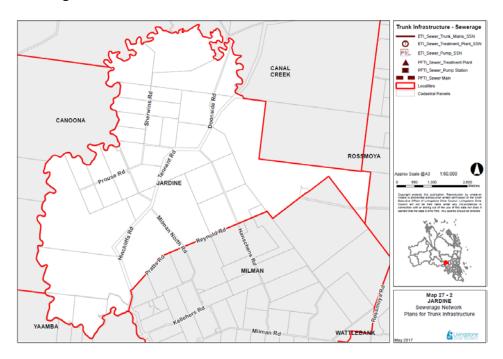
Water Supply Infrastructure Network.



There is no existing trunk water infrastructure assets within the locality.

There is no Water Supply PFTI proposed within the locality during the planning horizon.

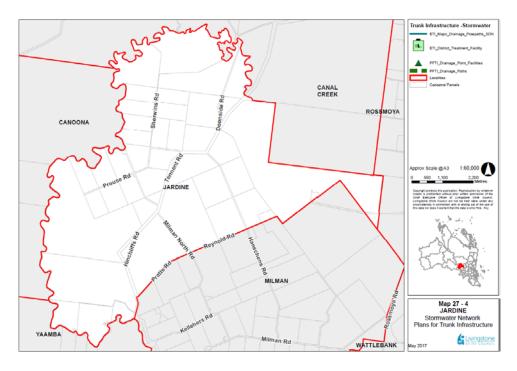
Sewerage Infrastructure Network.



There are no existing trunk sewerage infrastructure assets within the locality.

There is no Sewerage PFTI proposed within the locality during the planning horizon.

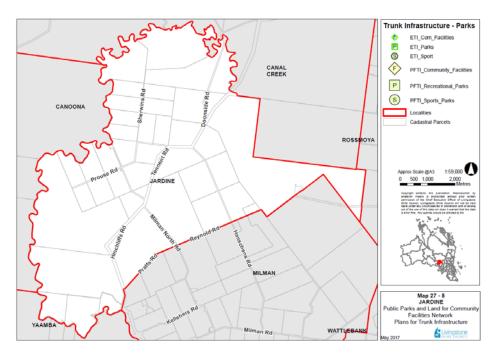
Drainage Infrastructure Network.



There are no trunk drainage systems which have been identified as relevant for development within the locality, at this time. The watercourses, drainage features and floodplains are significant natural watercourse features.

There is no Drainage PFTI proposed within the locality, at this time.

Community Facilities Infrastructure Network.



There are no trunk Community Facilities infrastructure which have been identified within the locality, at this time.

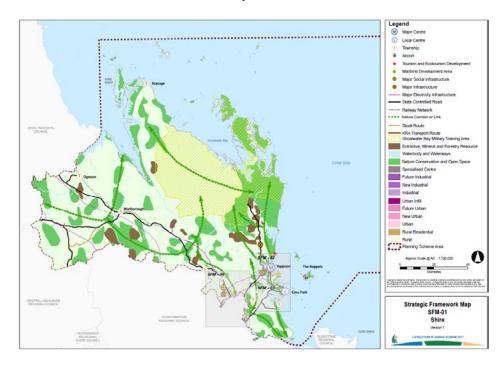
The rural locality relies on Community Facilities in the adjacent localities particularly The Caves and Rockhampton, which are within reasonable distances.

There are no known future catchments either within or outside the locality within the planning horizon which will require future trunk community facilities infrastructure to be provided within the locality.

2.28 Joskeleigh.

Town Planning.

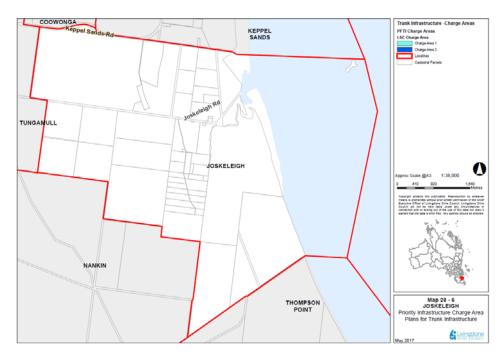
The locality has a total area (land and sea) of 5135.1 Ha and land area of 2269.8 Ha and currently 59 parcels of land. The land uses in the rural locality involve: rural, rural residential, recreational fishing.



There are no strategic travel Destinations (schools, shops, mining, industry) within the locality.

The strategic plan indicates: rural, waterways, nature conservation and open space, and nature corridor link.

The locality is not within the PIA.



Population Projections.

The ABS Census 2011(<u>SSC3</u>31203) recorded 281 persons for Place of Usual Residence however is part of a larger census data area.

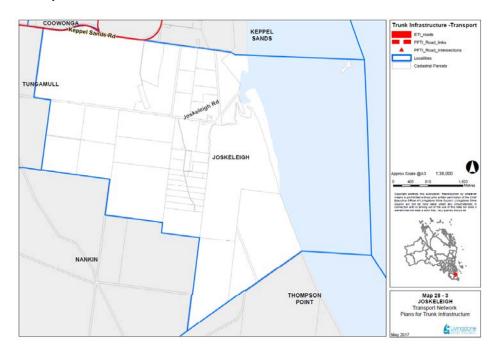
The current PAM 2016 Estimated Resident Population is 64.

The PAM projections are

Year	Estimated	Est	Est Retail GFA	Est Industrial GFA
	Resident Population	Commercial GFA		
2011	64	0	0	0
2016	64	0	0	0
2021	64	0	0	0
2026	64	0	0	0
2031	64	0	0	0
Ultimate	64	0	0	0

This indicates no expected development growth within the locality.

Transport Infrastructure Network.



There is one existing trunk road transport infrastructure within the locality of which is either a State Road asset or a LSC managed asset. Pedestrian and bicycle trunk infrastructure within the locality has not been analysed.

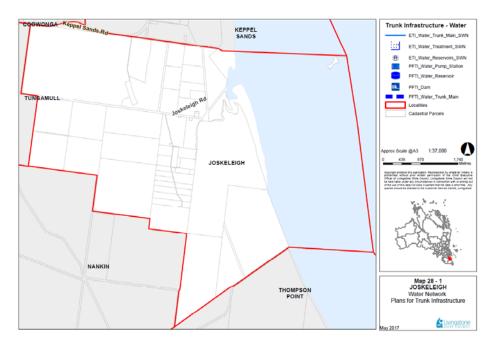
This existing trunk road infrastructure is serving origin catchments within Joskeleigh locality and outside of Keppel Sands.

The State Road of Keppel Sands Rd Ch 7690 - 10000 is considered to have adequate capacity for development within the planning horizon.

LSC managed non-trunk road transport infrastructure roads within the locality are considered to have adequate capacity for development within the planning horizon.

There are no Transport FTI's within the locality.

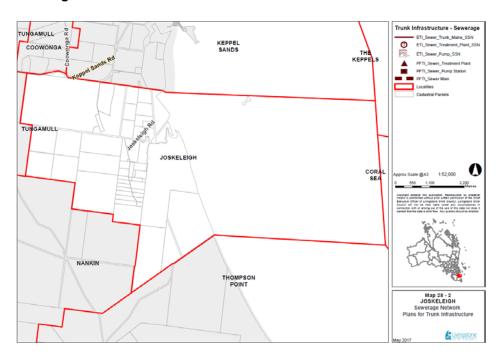
Water Supply Infrastructure Network.



There is no existing trunk water infrastructure assets within the locality.

There is no Water Supply PFTI proposed within the locality during the planning horizon.

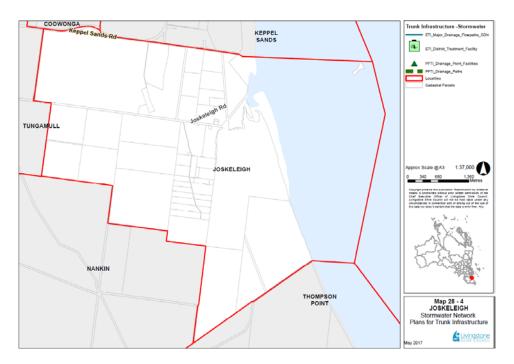
Sewerage Infrastructure Network.



There are no existing trunk sewerage infrastructure assets within the locality.

There is no Sewerage PFTI proposed within the locality during the planning horizon.

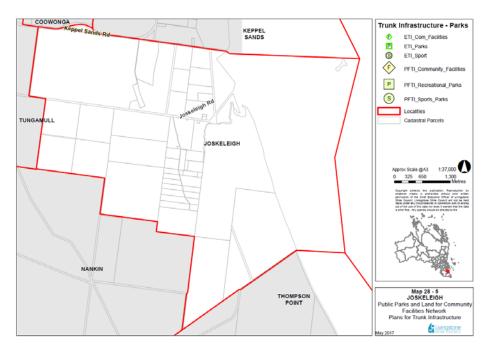
Drainage Infrastructure Network.



There are no trunk drainage systems which have been identified as relevant for development within the locality, at this time. The watercourses, drainage features and floodplains are significant natural watercourse features.

There is no Drainage PFTI proposed within the locality, at this time.

Community Facilities Infrastructure Network.



There are no trunk Community Facilities infrastructure which have been identified within the locality, at this time.

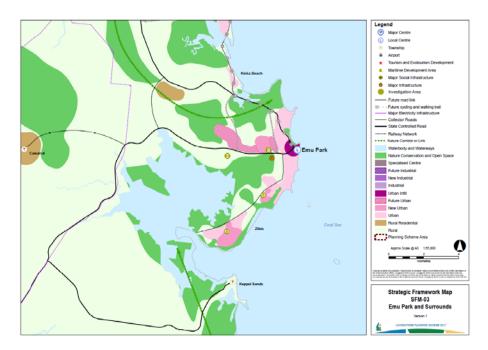
The rural locality relies on Community Facilities in the adjacent localities particularly Yeppoon, Emu Park, Keppel Sands and Rockhampton, which are within reasonable distances.

There are no known future catchments either within or outside the locality within the planning horizon which will require future trunk community facilities infrastructure to be provided within the locality.

2.29 Keppel Sands.

Town Planning.

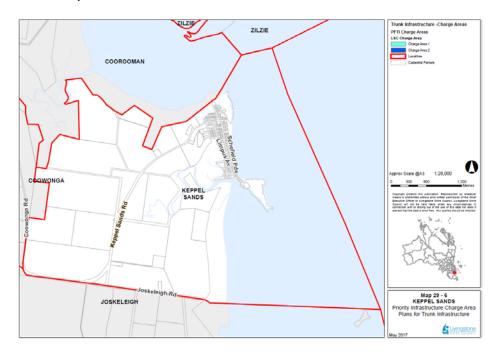
The locality has a total area (land and sea) of 3436 Ha and land area of 830 Ha and currently 305 parcels of land. The land uses in the village locality involve rural, village residential, rural residential, retail, tourism, recreation.



There are several strategic travel Destinations being: Keppel Sands primary school, shops, hotel, caravan park, boat ramps within the locality.

The strategic plan indicates: township, rural, waterways, nature conservation and open space, and nature corridor link.

The locality is not within the PIA.



Population Projections.

The ABS Census 2011(<u>SSC3</u>0869) recorded 334 persons for Place of Usual Residence however is part of a larger census data area.

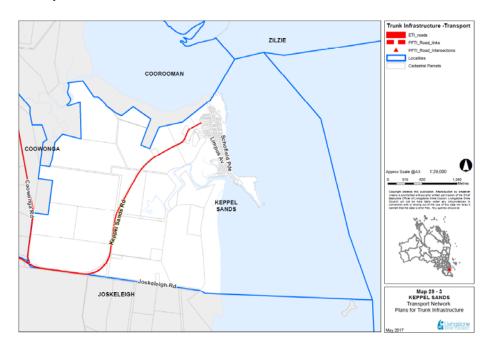
The current PAM 2015 Estimated Resident Population is 722.

The PAM projections are

Year	Estimated Resident	Est	Est Retail GFA	Est Industrial GFA
	Population	Commercial GFA		
2011	722	0	1412	0
2016	722	0	1412	0
2021	722	0	1412	0
2026	722	0	1412	0
2031	722	0	1412	0
Ultimate	776	0	2824	0

This indicates some expected development growth within the locality, but timing is uncertain.

Transport Infrastructure Network.



There is one existing trunk road transport infrastructure within the locality of which is either a State Road asset or a LSC managed asset. Pedestrian and bicycle trunk infrastructure within the locality has not been analysed.

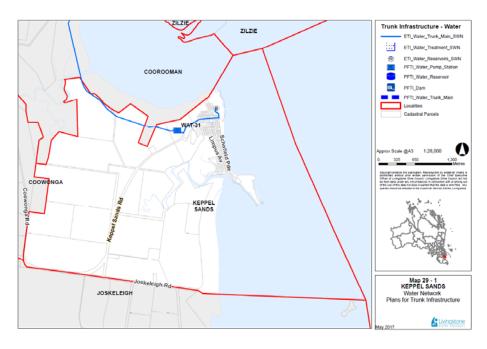
This existing trunk road infrastructure is serving origin catchments within Keppel Sands locality and outside of Keppel Sands.

The State Road of Keppel Sands Rd Ch 10000 - 14100 is considered to have adequate capacity for development within the planning horizon.

LSC managed non-trunk road transport infrastructure roads within the locality are considered to have adequate capacity for development within the planning horizon.

There are no Transport FTI's within the locality.

Water Supply Infrastructure Network.

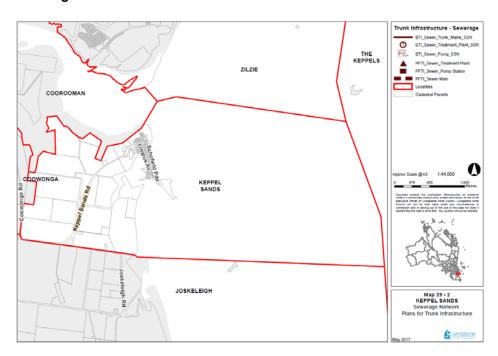


There are three existing trunk water infrastructure assets within the locality being the 150mm trunk water main connecting Zilzie to Keppel Sands Water Supply Reservoir, the Keppel Sands Water Supply Reservoir and the Keppel Sands Water Supply Booster Pump Station.

The water supply trunk infrastructure within the locality are considered to have adequate capacity for development within the planning horizon.

There is no Water Supply PFTI proposed within the locality during the planning horizon.

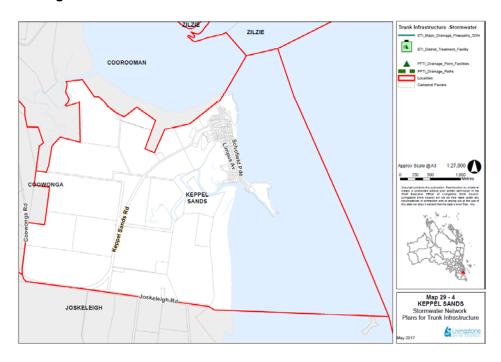
Sewerage Infrastructure Network.



There are no existing trunk sewerage infrastructure assets within the locality.

There is no Sewerage PFTI proposed within the locality during the planning horizon.

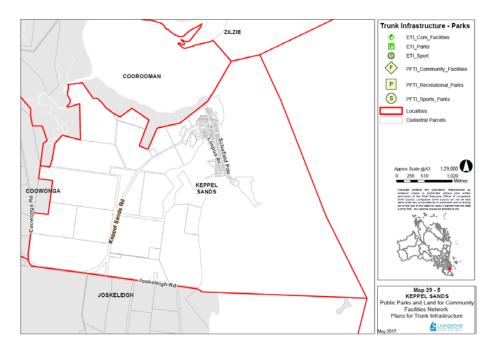
Drainage Infrastructure Network.



There are no trunk drainage systems which have been identified as relevant for development within the locality, at this time. The watercourses, drainage features and floodplains are significant natural watercourse features.

There is no Drainage PFTI proposed within the locality, at this time.

Community Facilities Infrastructure Network.



There are no trunk Community Facilities infrastructure which have been identified within the locality, at this time.

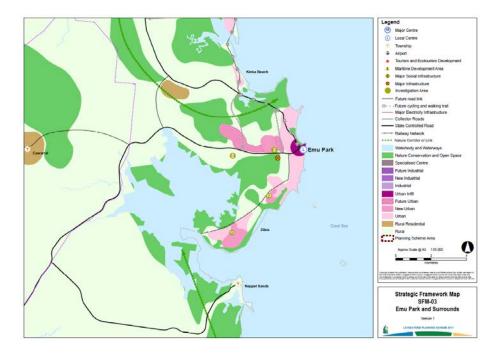
The rural locality relies on Community Facilities in the adjacent localities particularly Yeppoon, Emu Park, and Rockhampton, which are within reasonable distances.

There are no known future catchments either within or outside the locality within the planning horizon which will require future trunk community facilities infrastructure to be provided within the locality.					
- 152-					

2.30 Kinka Beach.

Town Planning.

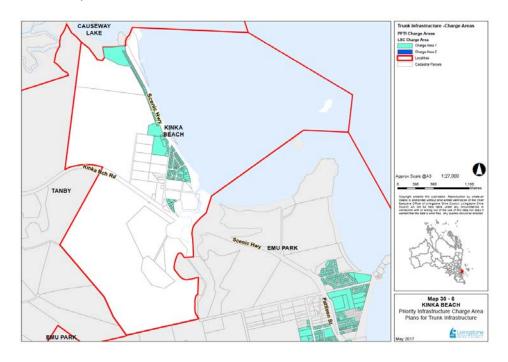
The locality has a total area (land and sea) of 1647.9 Ha and land area of 655.6 Ha and currently 289 parcels of land. The land uses in the locality involve rural, village residential, rural residential, urban, retail, tourism, recreation.



There are several strategic travel Destinations being: Kinka Beach, shops, caravan parks, wetlands, fishing within the locality.

The strategic plan indicates: urban, rural, waterways, nature conservation and open space, and nature corridor link.

The locality is within the PIA.



Population Projections.

The ABS Census 2011(<u>SSC3</u>0889) recorded 1087 persons for Place of Usual Residence however is part of a larger census data area.

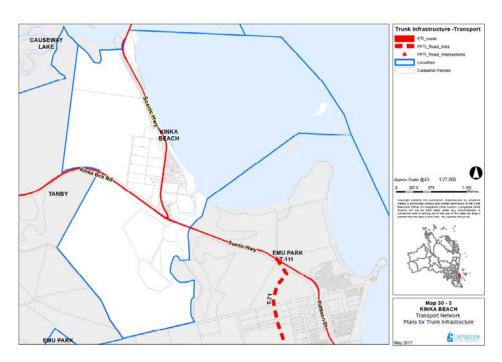
The current PAM 2016 Estimated Resident Population is 1013.

The PAM projections are

Year	Estimated	Est	Est Retail GFA	Est Industrial GFA
	Resident Population	Commercial GFA		
2011	981	1349	868	0
2016	1013	1349	868	0
2021	1013	1349	868	0
2026	1013	1349	868	0
2031	1013	1349	868	0
Ultimate	1048	1349	868	0

This indicates some expected development growth within the locality, but timing is uncertain.

Transport Infrastructure Network.



There are 2 existing trunk road transport infrastructure within the locality of which 1 a State Road asset. Pedestrian and bicycle trunk infrastructure within the locality has not been analysed however the PCNP is aknowledged.

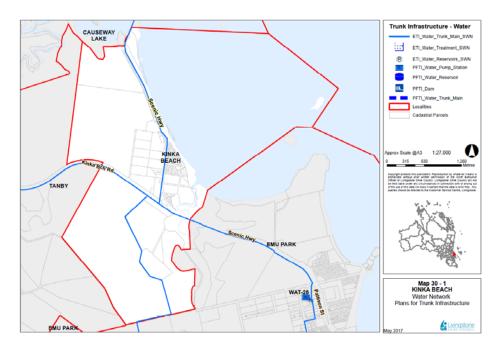
This existing trunk road infrastructure is serving origin catchments within Kinka Beach locality and outside for the Capricorn Coast.

The State Road of Kinka Beach Road and Scenic Hwy are considered to have adequate capacity for development within the planning horizon.

LSC managed trunk road transport infrastructure road within the locality of Scenic Hwy Ch 5685-8980 is considered to have adequate capacity for development within the planning horizon.

There are no Transport FTI's within the locality.

Water Supply Infrastructure Network.

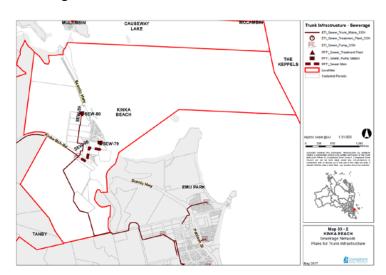


There are 4 existing trunk water infrastructure assets within the locality being the 450mm trunk water main along Scenic Hwy, 375mm trunk water main along Kinka Beach Road, 375mm trunk water main to West Emu Park WS Reservoir site and the 375mm trunk water main to Emu Park WS Reservoir.

The water supply trunk infrastructure within the locality are considered to have adequate capacity for development within the planning horizon.

There is no Water Supply PFTI proposed within the locality during the planning horizon.

Sewerage Infrastructure Network.



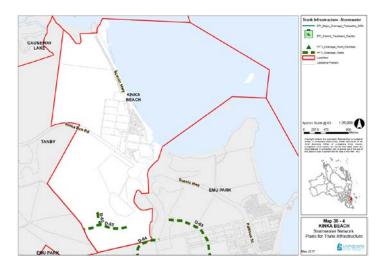
There are 4 existing trunk sewerage infrastructure assets within the locality being: 450mm trunk gravity main, 150mm rising main from Tanby Hts Estate, Kinka Beach Rd (Bristolvale) Sewage Pump Station, and the 200mm sewage rising main to Short St Sewage Pump Station.

The sewerage trunk infrastructure within the locality are considered inadequate capacity for development within the planning horizon.

To meet Council's Desired Standards of Service will require PFTI's within the locality being:

Мар No.	Network	Item ID	Project Name	Future Infrastructure Asset Description	Infrastructure Value (2015\$)	Estimated Year of Completion
30-2	Sewerage	SEW-79	Anthea St Sewage pump station, new	New, sewage pump station, civil 1, pumps, pipes, valves, elec, WWF design	\$539,000	2031
30-2	Sewerage	SEW-96	Scenic Hwy – Arthur St sewage rising main, new	New, 100mm sewage rising main, 1030m	\$250,000	2031
30-2	Sewerage	SEW-80	Island View Sewage Pump Stn, new	New, sewage pump station, civil 1, pumps, pipes, valves, elec, WWF design	\$539,000	2026
30-2	Sewerage	SEW-59	Island View Sewage Rising Main, new	New, 100mm Sewage Rising main, WWF design, 75m	\$43,000	2026

Drainage Infrastructure Network.

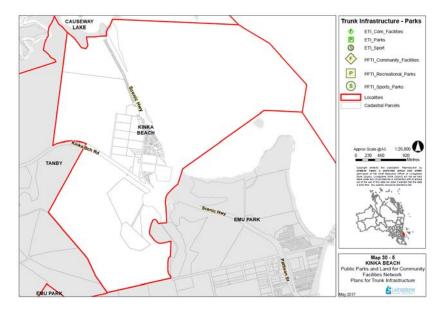


There are trunk drainage systems of the Fig Tree Creek catchment which have been identified as relevant for development within the locality within the planning horizon. The watercourses, drainage features and floodplains are significant natural watercourse features.

To meet Council's Desired Standards of Service will require one PFTI within the locality being:

Map No.	Network	Item ID	Project Name	Future Infrastructure Asset Description	Infrastructure Value (2015\$)	Estimated Year of Completion
30-4	Drainage	D-65	Kinka Creek Cr Tributary B, Q100 Easement	Drainage feature, new, tenure to ensure connectivity, Q100 Easement, 950m	\$95,000	2031
25-4	Drainage	D-66	Kinka Creek Tributary C, Q100 Easement	Drainage feature, new, tenure to ensure connectivity, 310m	\$31,000	2031

Community Facilities Infrastructure Network.



There are no trunk Community Facilities infrastructure which have been identified within the locality, at this time.

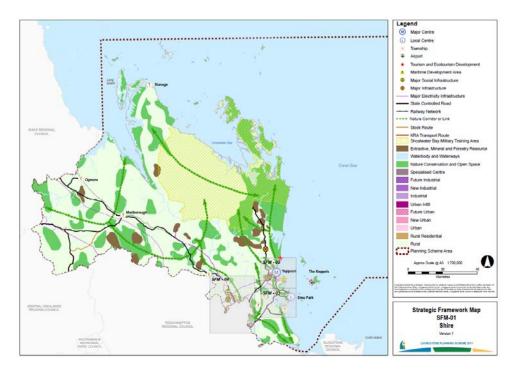
The rural locality relies on Community Facilities in the adjacent localities particularly Yeppoon, Emu Park, and Rockhampton, which are within reasonable distances.

There are no known future catchments either within or outside the locality within the planning horizon which will require future trunk community facilities infrastructure to be provided within the locality.

2.31 Kunwarara.

Town Planning.

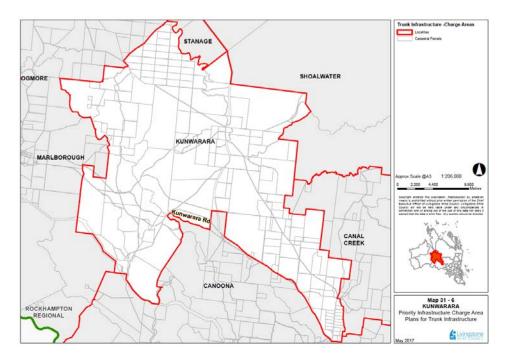
The locality has a land area of 67437.8 Ha and currently 296 parcels of land. The land uses in the rural locality involve rural, military and mining.



There are several strategic travel Destinations being: magnesite mine, Shoalwater Bay ADF area within the locality.

The strategic plan indicates: rural, extractive, mineral and forestry resources, waterways, nature conservation and open space, and nature corridor link.

The locality is not within the PIA.



Population Projections.

The ABS Census 2011(<u>SSC3</u>1533) recorded 564 persons for Place of Usual Residence however is part of a larger census data area.

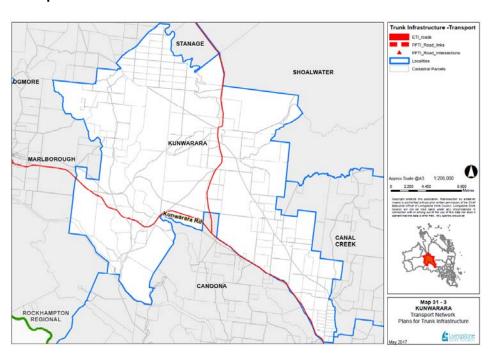
The current PAM 2016 Estimated Resident Population is 64.

The PAM projections are

Year	Estimated Resident Population	Est Commercial GFA	Est Retail GFA	Est Industrial GFA
2011	64	0	0	0
2016	64	0	0	0
2021	64	0	0	0
2026	64	0	0	0
2031	64	0	0	0
Ultimate	64	0	0	0

This indicates no expected development growth within the locality.

Transport Infrastructure Network.



There are two existing trunk road transport infrastructure within the locality of which is either a State Road asset or a LSC managed asset. Pedestrian and bicycle trunk infrastructure within the locality has not been analysed.

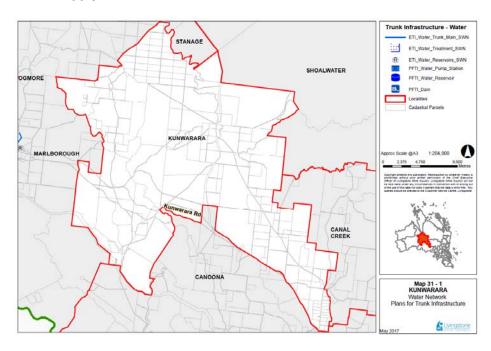
This existing trunk road infrastructure is serving origin catchments within Kunwarara locality and outside of Stanage Bay, Shoalwater, plus State and National transport.

The State Road of Kunwarara Rd Ch 55750 - 96270 is considered to have adequate capacity for development within the planning horizon.

LSC managed trunk road transport infrastructure roads within the locality being Stanage Bay Rd Ch 2600 – 23350 is considered to be overloaded by ADF use but has adequate capacity for local development within the planning horizon.

There are no Transport FTI's within the locality.

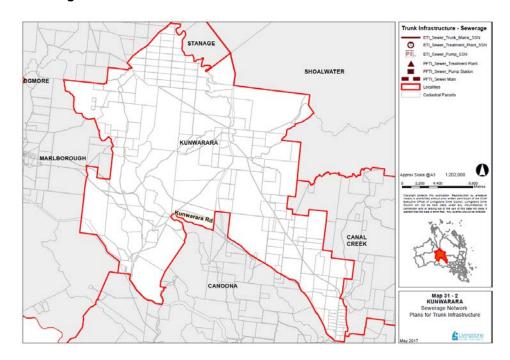
Water Supply Infrastructure Network.



There are no existing trunk water infrastructure assets within the locality.

There is no Water Supply PFTI proposed within the locality during the planning horizon.

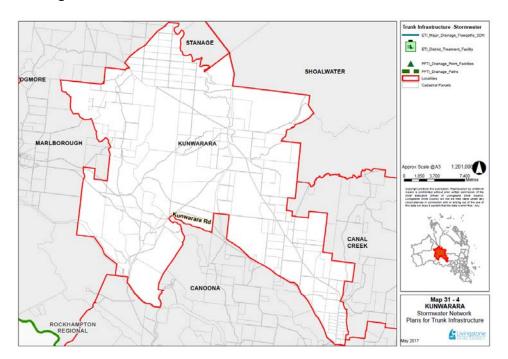
Sewerage Infrastructure Network.



There are no existing trunk sewerage infrastructure assets within the locality.

There is no Sewerage PFTI proposed within the locality during the planning horizon.

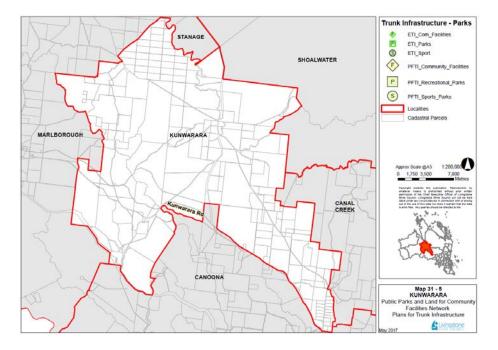
Drainage Infrastructure Network.



There are no trunk drainage systems which have been identified as relevant for development within the locality, at this time. The watercourses, drainage features and floodplains are significant natural watercourse features.

There is no Drainage PFTI proposed within the locality, at this time.

Community Facilities Infrastructure Network.



There are no trunk Community Facilities infrastructure which have been identified within the locality, at this time.

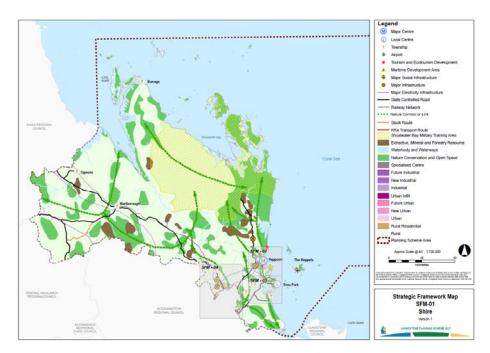
The rural locality relies on Community Facilities in the adjacent localities particularly Yeppoon, Emu Park, and Rockhampton, which are within reasonable distances.

ere are no known future catchments either within or outside the locality within the planning horizon which valuire future trunk community facilities infrastructure to be provided within the locality.	will
63-	

2.32 Lake Mary.

Town Planning.

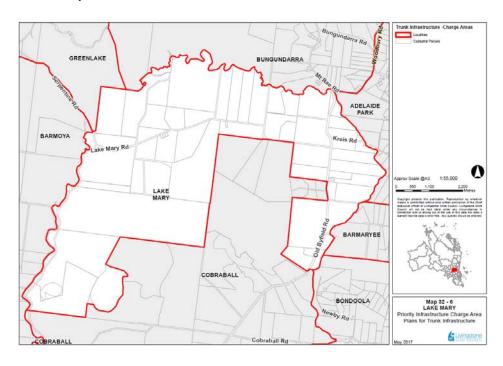
The locality has a land area of 4710.2 Ha and currently 74 parcels of land. The land uses in the rural locality involve rural, rural residential, timber.



There are no strategic travel Destinations (shops, schools, mining, industry) within the locality.

The strategic plan indicates: rural, extractive, mineral and forestry resources, waterways, nature conservation and open space, and nature corridor link.

The locality is not within the PIA.



Population Projections.

The ABS Census 2011(<u>SSC3</u>0929) recorded 229 persons for Place of Usual Residence however is part of a larger census data area.

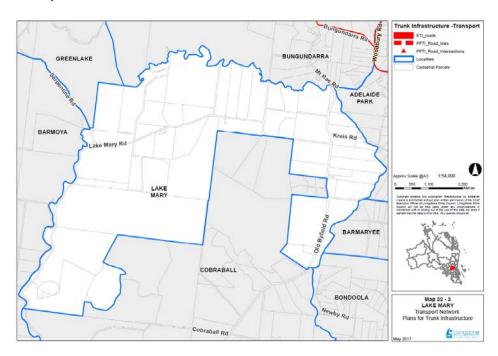
The current PAM 2015 Estimated Resident Population is 45.

The PAM projections are

Year	Estimated Resident	Est	Est Retail GFA	Est Industrial GFA
	Population	Commercial GFA		
2011	45	0	0	0
2016	45	0	0	0
2021	45	0	0	0
2026	45	0	0	0
2031	45	0	0	0
Ultimate	45	0	0	0

This indicates no expected development growth within the locality.

Transport Infrastructure Network.



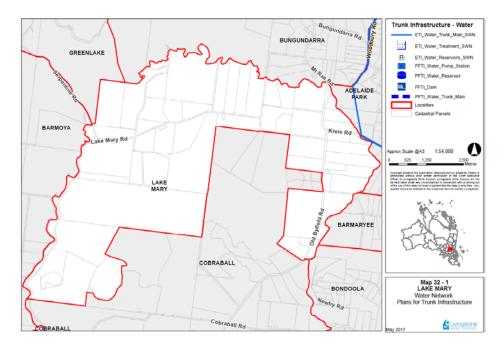
There is one existing trunk road transport infrastructure within the locality of which is either a State Road asset or a LSC managed asset. Pedestrian and bicycle trunk infrastructure within the locality has not been analysed.

This existing trunk road infrastructure is serving origin catchments within Lake Mary locality and outside of Bungundarra, Adelaide Park, and others.

LSC managed trunk road transport infrastructure roads within the locality being Old Byfield Rd Ch 13670 - 19900 is considered adequate capacity for local development within the planning horizon.

There are no Transport FTI's within the locality.

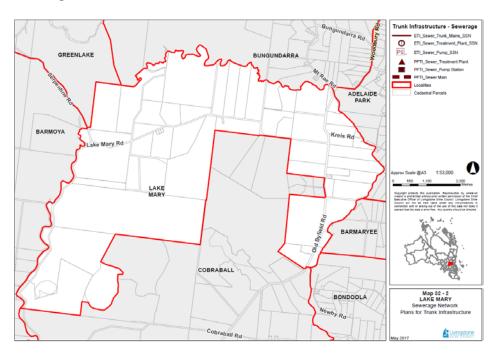
Water Supply Infrastructure Network.



There are no existing trunk water infrastructure assets within the locality.

There is no Water Supply PFTI proposed within the locality during the planning horizon.

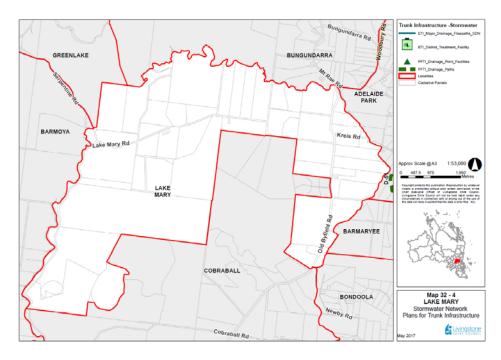
Sewerage Infrastructure Network.



There are no existing trunk sewerage infrastructure assets within the locality.

There is no Sewerage PFTI proposed within the locality during the planning horizon.

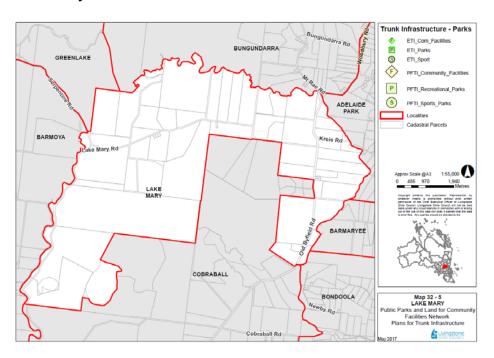
Drainage Infrastructure Network.



There are no trunk drainage systems which have been identified as relevant for development within the locality, at this time. The watercourses, drainage features and floodplains are significant natural watercourse features.

There is no Drainage PFTI proposed within the locality, at this time.

Community Facilities Infrastructure Network.



There are no trunk Community Facilities infrastructure which have been identified within the locality, at this time.

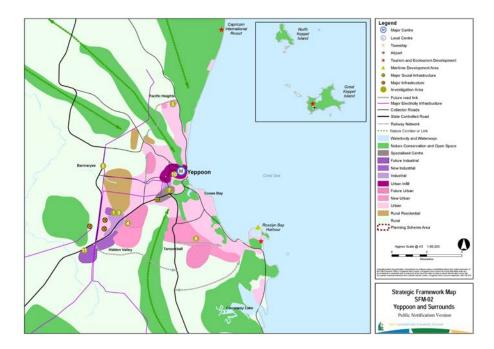
The rural locality relies on Community Facilities in the adjacent localities particularly Yeppoon which is within reasonable distance.

There are no known future catchments either within or outside the locality within the planning horizon which will require future trunk community facilities infrastructure to be provided within the locality.

2.33 Lammermoor.

Town Planning.

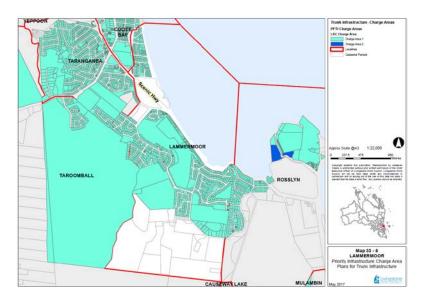
The locality has a total area (land and sea) of 1070.1 Ha and land area of 369.2 Ha and currently 1159 parcels of land. The land uses in the locality involve urban, rural, rural residential, retail, tourism, recreation, school, churches, holiday accommodation.



There are several strategic travel Destinations being: Lammermoor Beach, schools, churches, shops, holiday units, wetlands, fishing within the locality.

The strategic plan indicates: urban, rural, waterways, nature conservation and open space, and nature corridor link.

The locality is within the PIA.



Population Projections.

The ABS Census 2011(<u>SSC3</u>0935) recorded 1309 persons for Place of Usual Residence however is part of a larger census data area.

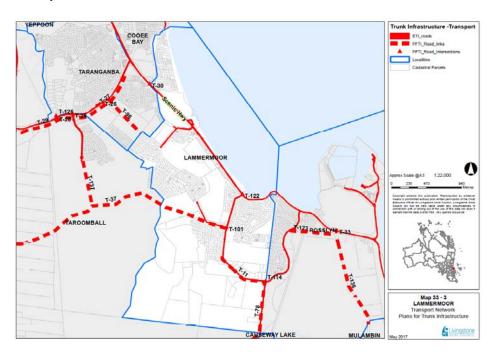
The current PAM 2016 Estimated Resident Population is 2176.

The PAM projections are

Year	Estimated Resident	Est	Est Retail GFA	Est Industrial GFA
	Population	Commercial GFA		
2011	1795	0	0	0
2016	2176	0	0	0
2021	2176	0	0	0
2026	2413	0	0	0
2031	2583	0	0	0
Ultimate	2666	0	0	0

This indicates some expected development growth within the locality.

Transport Infrastructure Network.



There are 3 existing trunk road transport infrastructure within the locality of which none are a State Road asset. Pedestrian and bicycle trunk infrastructure within the locality has not been analysed however the PCNP is aknowledged.

This existing trunk road infrastructure is serving origin catchments within Lammermoor locality and outside for the Capricorn Coast.

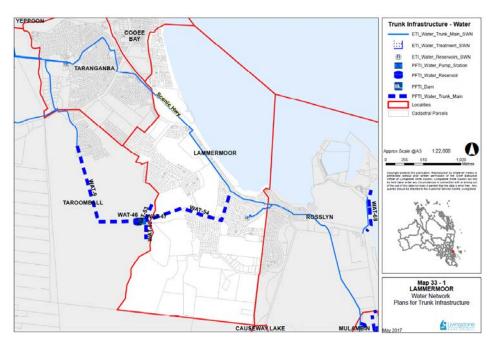
The adjacent State Roads are considered to have adequate capacity for development within the planning horizon.

LSC managed trunk road transport infrastructure road within the locality of Scenic Hwy Ch 505-2175, Chandler Road, Clayton Road is considered to have inadequate capacity for development within the planning horizon.

To meet Council's Desired Standards of Service will require one PFTI within the locality being:

Мар No.	Network	Item ID	Project Name	Future Infrastructure Asset Description	Infrastructure Value (2015\$)	Estimated Year of Completion
33-3	Transport	T-11	Clayton Rd Upgrade	Upgrade, Urban Major Collector, Ch 525-1620	\$1,127,000	2031
33-3	Transport	T-101	Chandler- Clayton Intersection, upgrade	Upgrade, Urban Major Collector, non- signalised	\$804,000	2031
33-3	Transport	T-114	Mulambin- Clayton Intersection upgrade	Upgrade, Urban Major Collector, non- signalised	\$1,061,000	2031
33-3	Transport	T-122	Scenic – Clayton intersection upgrade	Upgrade, Urban Major Collector, non- signalised	\$1,061,000	2031

Water Supply Infrastructure Network.



There are 2 existing trunk water infrastructure assets within the locality being the 375mm trunk water main along Scenic Hwy, 375mm trunk water main inlet/outlet to Lammermoor Reservoir.

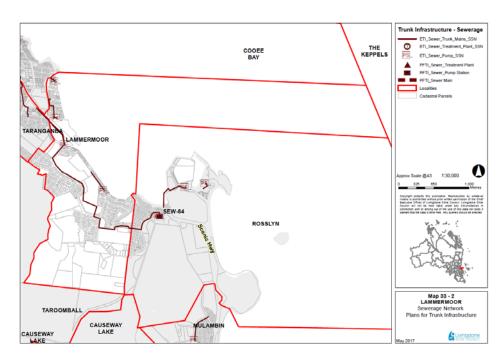
The water supply trunk infrastructure within the locality are considered to have inadequate capacity for development within the planning horizon.

Road, Clayton Road is considered to have inadequate capacity for development within the planning horizon.

To meet Council's Desired Standards of Service will require one PFTI within the locality being:

Map No.	Network	Item ID	Project Name	Future Infrastructure Asset Description	Infrastructure Value (2015\$)	Estimated Year of Completion
33-1	Water Supply	WAT-54	Chandler Rd 375 trunk water main	New, 375mm trunk water main, Taroomball LZ, MD design,1500m	\$990,000	2026

Sewerage Infrastructure Network.

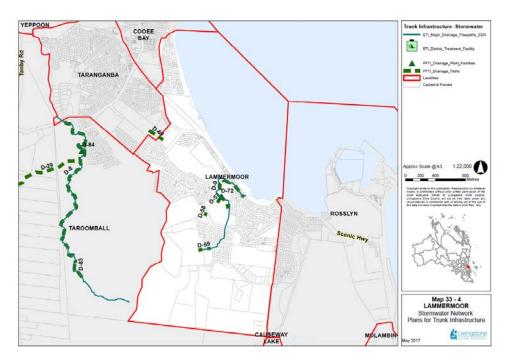


There are 5 existing trunk sewerage infrastructure assets within the locality being: Williamson Cr sewage pump station, Williamson Cr 150mm rising main, Old Scenic Hwy sewage pump station, Old Scenic Hwy 200mm rising mains, 375mm trunk gravity main.

The sewerage trunk infrastructure within the locality are considered adequate capacity for development within the planning horizon.

There is no Sewerage PFTI proposed within the locality during the planning horizon.

Drainage Infrastructure Network.



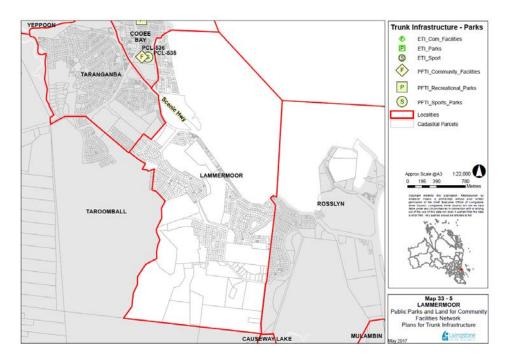
There are trunk drainage systems of the Williamson Creek catchment which have been identified as relevant for development within the locality within the planning horizon. The watercourses, drainage features and floodplains are significant natural watercourse features.

To meet Council's Desired Standards of Service will require one PFTI within the locality being:

Map No.	Network	Item ID	Project Name	Future Infrastructure Asset Description	Infrastructure Value (2015\$)	Estimated Year of Completion
33-4	Drainage	D-9	Williamson Cr tidal watercourse, Q100 Easement	Watercourse floodplain, new, tenure to ensure connectivity, Q100 Easement, 780m	\$78,000	2026
33-4	Drainage	D-57	Chandler Rd, Q100 Easement	Drainage feature, new, tenure to ensure connectivity, 120m	\$12,000	2031

33-4	Drainage	D-58	Chandler Rd Drainage Feature, Q100 easement	Drainage Feature, new, tenure to ensure connectivity, Q100 Easement, 70m	\$7,000	2031
33-4	Drainage	D-59	Chandler Rd Q100 Easement	Drainage Feature, new, tenure to ensure connectivity, Q100 Easement, 170m	\$17,000	2031
33-4	Drainage	D-72	Williamson Cr District Water Quality Treatment facility	New, bioretention and detention basin	\$250,000	2021

Community Facilities Infrastructure Network.



There are no trunk Community Facilities infrastructure which have been identified within the locality, at this time.

The rural locality relies on Community Facilities in the adjacent localities particularly Yeppoon, which are within reasonable distances.

There are no known future catchments either within or outside the locality within the planning horizon which will require future trunk community facilities infrastructure to be provided within the locality.					
174-					

2.34 Marlborough.

Town Planning.

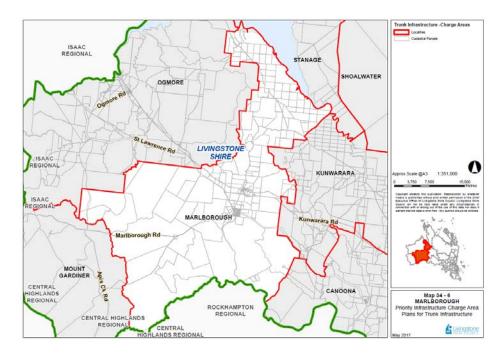
The locality has a total area (land and sea) of 139139.1 Ha and currently 675 parcels of land. The land uses in the locality involve rural, township, and mining.

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There are several strategic travel Destinations being: magnesite mine, service stations, hotel, general store within the locality.

The strategic plan indicates: rural, waterways, nature conservation and open space, and nature corridor link.

The locality is not within the PIA.



Population Projections.

The ABS Census 2011(<u>SSC3</u>1533) recorded 564 persons for Place of Usual Residence however is part of a larger census data area.

The current PAM 2016 Estimated Resident Population is 124.

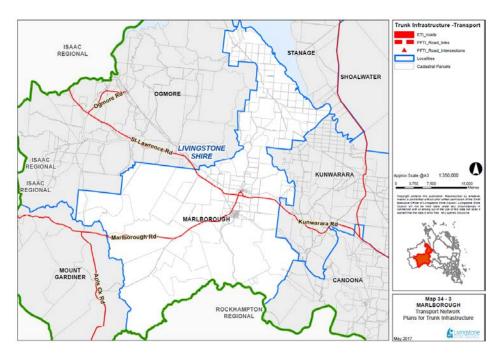
The PAM projections are

Year	Estimated Resident	Est	Est Retail GFA	Est Industrial GFA
	Population	Commercial GFA		
2011	124	0	1736	267
2016	124	0	1736	267
2021	124	0	1736	267

2026	124	0	1736	267
2031	127	0	1736	267
Ultimate	186	507	2853	267

This indicates minor expected development growth within the locality.

Transport Infrastructure Network.



There are 3 existing trunk road transport infrastructure within the locality of which 2 are a State Road asset. Pedestrian and bicycle trunk infrastructure within the locality has not been analysed.

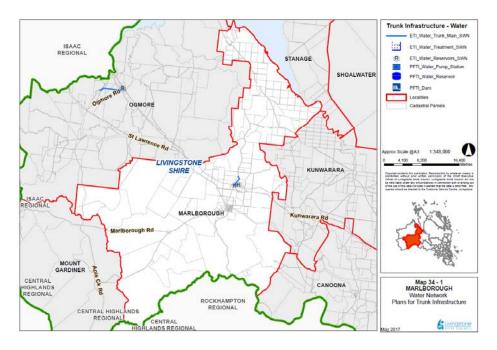
This existing trunk road infrastructure is serving origin catchments within the Malborough locality and outside for the surrounding rural.

The adjacent State Roads are considered to have adequate capacity for development within the planning horizon.

LSC managed trunk road transport infrastructure road within the locality are considered to adequate capacity for development within the planning horizon.

There is no Transport PFTI proposed within the locality, at this time.

Water Supply Infrastructure Network.

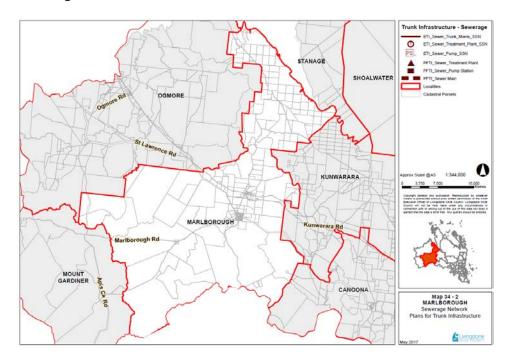


There are 3 existing trunk water infrastructure assets within the locality being the water bores, rising main from the bores to the RO plant, RO water treatment plant and HL pumps.

The water supply trunk infrastructure within the locality are considered to have adequate capacity for development within the planning horizon.

There is no Water Supply PFTI proposed within the locality, at this time.

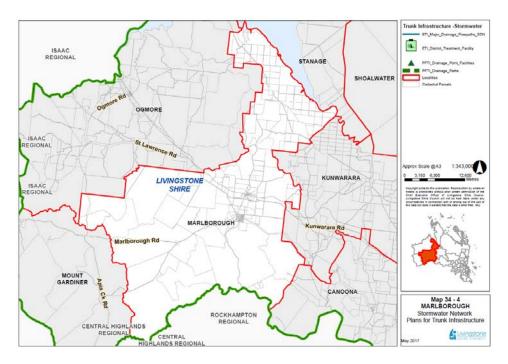
Sewerage Infrastructure Network.



There are no existing trunk sewerage infrastructure assets within the locality.

There is no Sewerage PFTI proposed within the locality during the planning horizon.

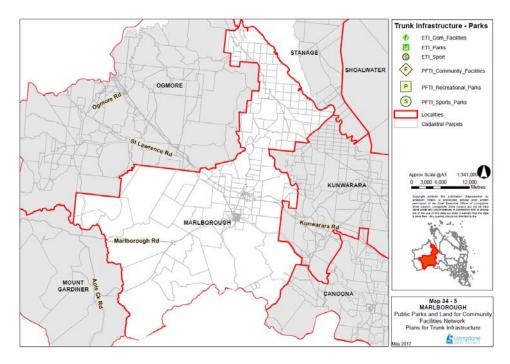
Drainage Infrastructure Network.



There are no trunk drainage systems which have been identified as relevant for development within the locality, at this time. The watercourses, drainage features and floodplains are significant natural watercourse features.

There is no Drainage PFTI proposed within the locality, at this time.

Community Facilities Infrastructure Network.



There are private trunk Community Facilities infrastructure which have been identified within the locality, at this time.

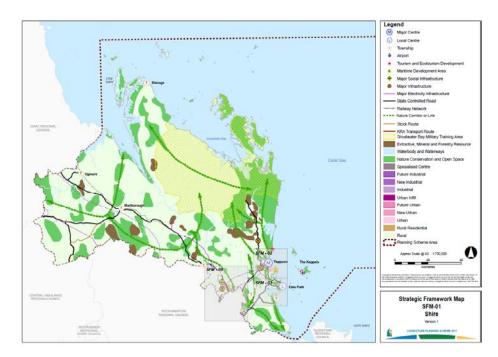
The rural locality relies on these private Community Facilities and in the adjacent localities particularly Rockhampton.

There are no known future catchments either within or outside the locality within the planning horizon which will require future trunk community facilities infrastructure to be provided within the locality.

2.35 Maryvale.

Town Planning.

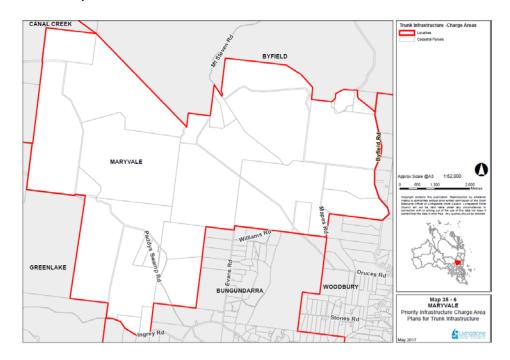
The locality has a land area of 8480.1 Ha and currently 36 parcels of land. The land uses in the rural locality involve rural, rural residential, timber.



There is one strategic travel Destinations within the locality being timber.

The strategic plan indicates: rural, extractive, mineral and forestry resources, waterways, nature conservation and open space, and nature corridor link.

The locality is not within the PIA.



Population Projections.

The ABS Census 2011(<u>SSC3</u>0599) recorded 598 persons for Place of Usual Residence however is part of a larger census data area.

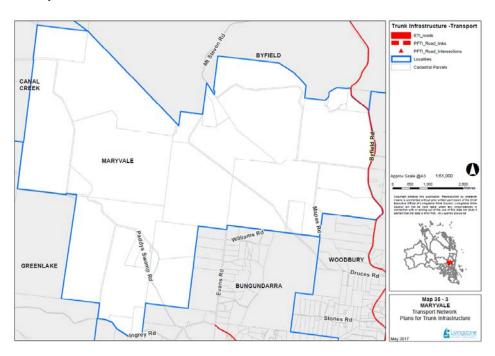
The current PAM 2015 Estimated Resident Population is 16.

The PAM projections are

Year	Estimated Resident	Est	Est Retail GFA	Est Industrial GFA
	Population	Commercial GFA		
2011	16	0	0	0
2016	16	0	0	0
2021	16	0	0	0
2026	16	0	0	0
2031	16	0	0	0
Ultimate	16	0	0	0

This indicates no expected development growth within the locality.

Transport Infrastructure Network.



There is one existing trunk road transport infrastructure within the locality of which is either a State Road asset or a LSC managed asset. Pedestrian and bicycle trunk infrastructure within the locality has not been analysed.

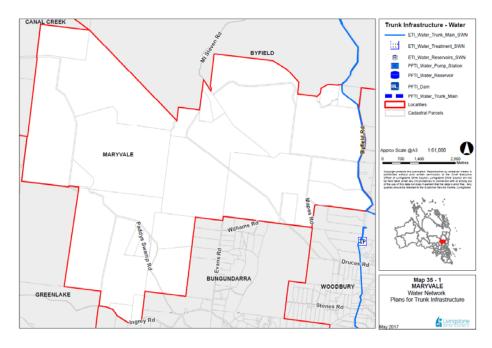
This existing trunk road infrastructure is serving origin catchments within Maryvale locality and outside of Byfield, Woodbury, Shoalwater, and others.

The State Road of Byfield Rd Ch 21750 - 260800 is considered to have adequate capacity for development within the planning horizon.

LSC managed non-trunk road transport infrastructure roads within the locality are considered adequate capacity for local development within the planning horizon.

There are no Transport FTI's within the locality.

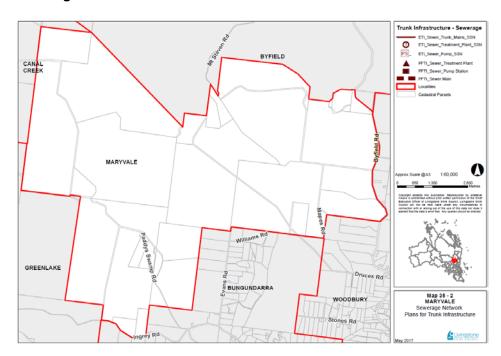
Water Supply Infrastructure Network.



There are no existing trunk water infrastructure assets within the locality.

There is no Water Supply PFTI proposed within the locality during the planning horizon.

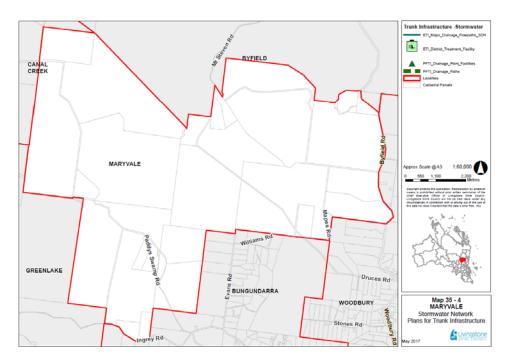
Sewerage Infrastructure Network.



There are no existing trunk sewerage infrastructure assets within the locality.

There is no Sewerage PFTI proposed within the locality during the planning horizon.

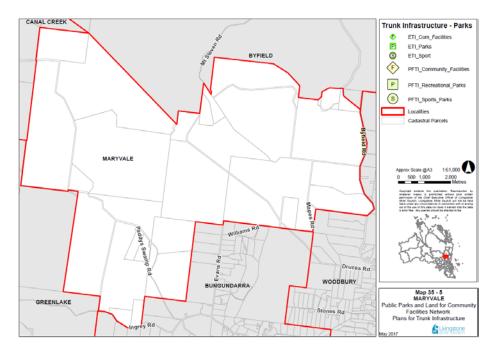
Drainage Infrastructure Network.



There are no trunk drainage systems which have been identified as relevant for development within the locality, at this time. The watercourses, drainage features and floodplains are significant natural watercourse features.

There is no Drainage PFTI proposed within the locality, at this time.

Community Facilities Infrastructure Network.



There are no trunk Community Facilities infrastructure which have been identified within the locality, at this time.

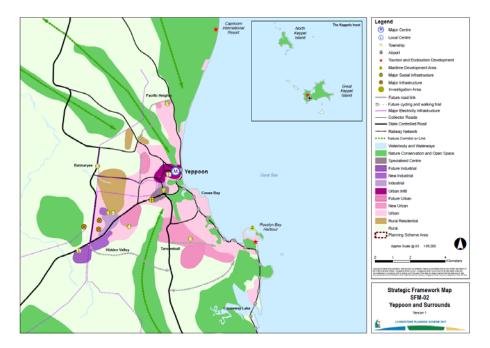
The rural locality relies on Community Facilities in the adjacent localities particularly Yeppoon which is within reasonable distance.

2.36 Meikleville Hill.

Town Planning.

Town Planning.

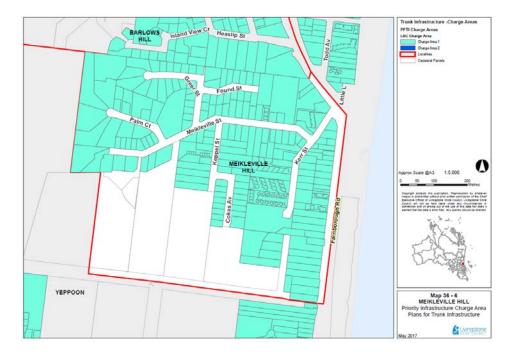
The locality has a land area of 49.7 Ha and currently 27536 parcels of land. The land uses in the locality involve urban.



There is no strategic travel Destinations within the locality.

The strategic plan indicates: urban, ature conservation and open space, and nature corridor link.

The locality is within the PIA.



Population Projections.

The ABS Census 2011(SSC31035) recorded 443 Place of Usual Residence.

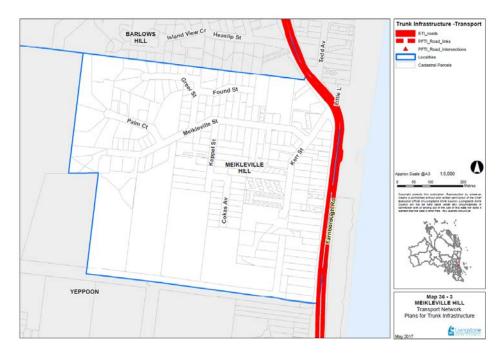
The current PAM 2016 Estimated Resident Population is 698

The PAM projections are

Year	Estimated Resident	Est	Est Retail GFA	Est Industrial GFA
	Population	Commercial GFA		
2015	660	0	443	0
2016	698	0	443	0
2021	742	0	443	0
2026	797	0	443	0
2031	985	0	443	0
Ultimate	1186	0	443	0

This indicates expected urban growth within the locality.

Transport Infrastructure Network.



There is 1 existing trunk road transport infrastructure within the locality of which none are State Road assets. Pedestrian and bicycle trunk infrastructure within the locality has not been analysed.

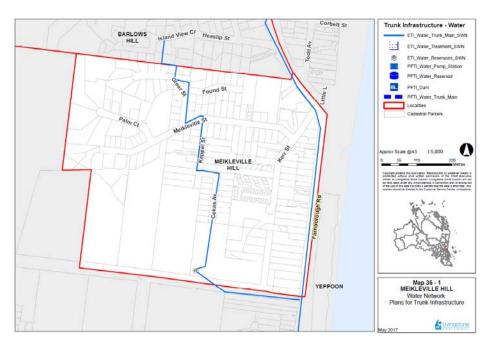
This existing trunk road infrastructure is serving origin catchments within Meikleville Hill locality and outside for Pacific Heights, Farnborough, Byfield, Bungundarra, and other.

The adjacent State Roads are considered to have adequate capacity for development within the planning horizon.

LSC managed trunk road transport infrastructure roads within the locality are considered to have adequate capacity for any infill development within the planning horizon.

There is no Transport PFTI proposed within the locality, at this time.

Water Supply Infrastructure Network.

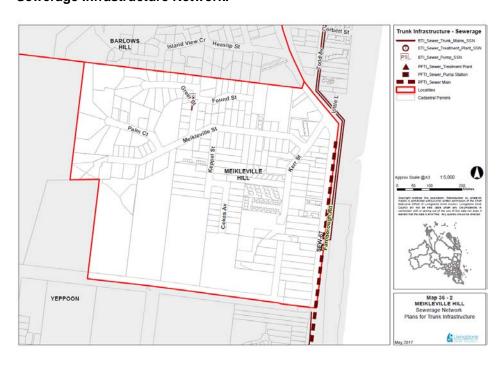


There are 2 existing trunk water infrastructure assets within the locality. This existing trunk infrastructure is serving urban areas within localities of Bangalee, Barlows Hill, Farnborough, Pacific Heights and Yeppoon which is generally the northern suburbs of the Capricorn Coast water service area being outside of the locality.

The capacity of the existing trunk water infrastructure within the locality is considered adequate to meet the water demands within the planning horizon.

There are no PFTI proposed within the locality during the planning horizon.

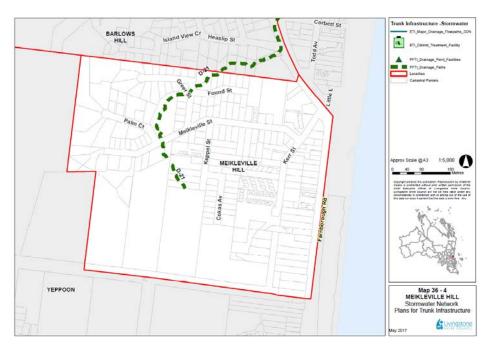
Sewerage Infrastructure Network.



There are no existing trunk sewerage infrastructure assets within the locality however trunk sewerage infrastructure in the adjacent locality of Yeppoon serves the urban areas of the locality.

The future urban areas either within or outside the locality and within the planning horizon, will not require future trunk sewerage infrastructure to be provided within the locality.

Drainage Infrastructure Network.



There are six existing trunk drainage infrastructure assets within the locality, mainly as multi-use linear parks. However there are two natural drainage paths that are identified as significant and will require ultimate term corridor protection via property tenure rights documentation.

The existing natural trunk drainage path of Barlows Hill Gully serves a sub-catchment of Barlows Hill urban area and the Meikleville Hill Gully serves the urban areas of Barlows Hill and Meikleville Hill. These localities have significant urban development effect on the sub-catchments and result in significant drainage loading downstream.

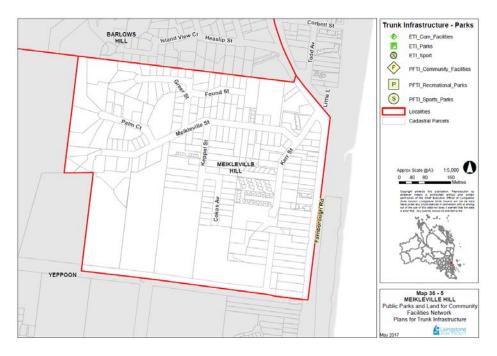
The hydraulic capacities of the natural drainage paths are not analysed at present. No drainage capital works are envisaged during the planning horizon within the locality however ultimate planning horizon corridor protection via property tenure (normally drainage easements) for connectivity and Q100 flowpath is required.

To meet Council's Desired Standards of Service will require four PFTI's within the locality at a cost of some \$39,000 being:

Map No.	Network	Item ID	Project	Future	Infrastructure	Estimated
			Name	Infrastructure	Value	Year of
				Asset	(2015\$)	Completion
				Description		
3-4	Stormwater	D-43	Barlows Hill	Establish	\$15,000	2026
			Gully –	tenure -		
			Jarman to	major		
			Farnborough	drainage		
			Rd	system		
				connectivity		

3-4	Stormwater	D-21(part)	Meikleville Hilly Gully – Meikleville St to Smith St	Establish tenure - major drainage system connectivity	\$5,600	2021
3-4	Stormwater	D-76(part)	Jarman St Gully – L2 RP602748	Establish tenure - major drainage system connectivity	\$9,000	2026
3-4	Stormwater	D-76(part)	Jarman St Gully – L100 SP174134	Establish tenure - major drainage system connectivity	\$11,000	2026

Community Facilities Infrastructure Network.



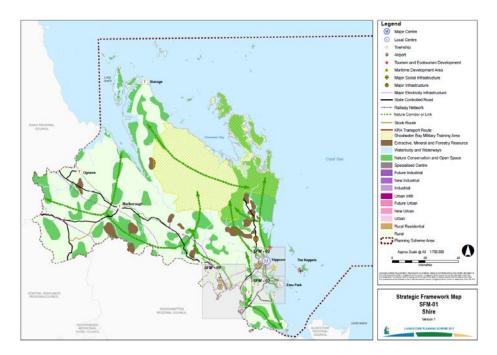
There are four existing trunk community facility infrastructure within the locality being Widdowson Park, Barnes St Park, Bradford Park and Jarman St Park. All of these parks are Linear Recreation category and have a multi-use with drainage.

The locality relies on Community Facilities in the adjacent localities particularly Yeppoon, which is within a reasonable distance.

2.37 Milman.

Town Planning.

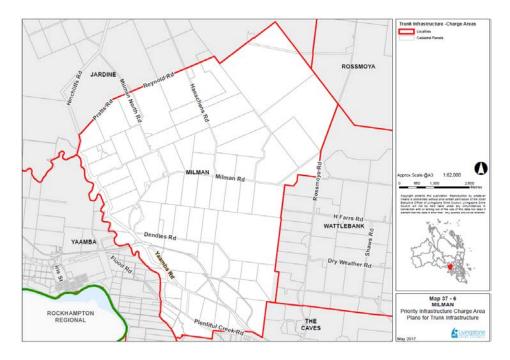
The locality has a land area of 6765.3 Ha and currently 122 parcels of land. The land uses in the rural locality involve rural, and rural residential.



There is one strategic travel Destinations within the locality being the Milman primary school.

The strategic plan indicates: rural, extractive, mineral and forestry resources, waterways, nature conservation and open space, and nature corridor link.

The locality is not within the PIA.



Population Projections.

The ABS Census 2011(<u>SSC3</u>1065) recorded 331 persons for Place of Usual Residence however is part of a larger census data area.

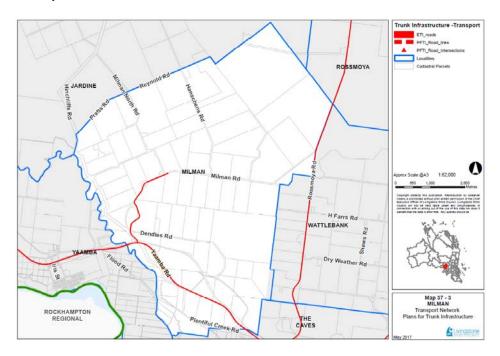
The current PAM 2015 Estimated Resident Population is 99.

The PAM projections are

Year	Estimated Resident	Est	Est Retail GFA	Est Industrial GFA
	Population	Commercial GFA		
2011	99	0	0	0
2016	99	0	0	0
2021	99	0	0	0
2026	99	0	0	0
2031	99	0	0	0
Ultimate	99	0	0	0

This indicates no expected development growth within the locality.

Transport Infrastructure Network.



There is two existing trunk road transport infrastructure within the locality of which is either a State Road asset or a LSC managed asset. Pedestrian and bicycle trunk infrastructure within the locality has not been analysed.

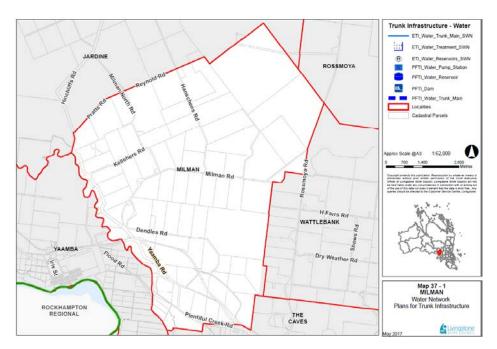
This existing trunk road infrastructure is serving origin catchments within Milman locality and outside of northern Livingstone Shire plus State and national transport.

The State Road of Yaamba Rd Ch 28150 - 33950 is considered to have adequate capacity for development within the planning horizon.

LSC managed trunk road transport infrastructure roads within the locality being Milman Rd Ch 0-3470 is considered adequate capacity for local development within the planning horizon.

There are no Transport FTI's within the locality.

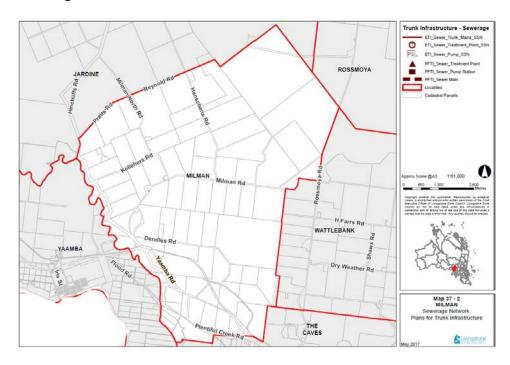
Water Supply Infrastructure Network.



There are no existing trunk water infrastructure assets within the locality.

There is no Water Supply PFTI proposed within the locality during the planning horizon.

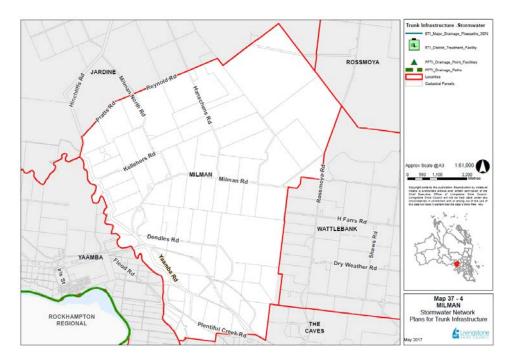
Sewerage Infrastructure Network.



There are no existing trunk sewerage infrastructure assets within the locality.

There is no Sewerage PFTI proposed within the locality during the planning horizon.

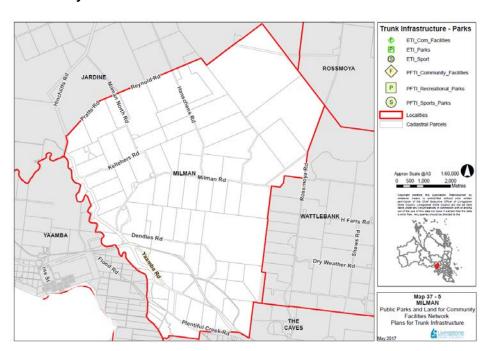
Drainage Infrastructure Network.



There are no trunk drainage systems which have been identified as relevant for development within the locality, at this time. The Fitzroy River, watercourses, drainage features and floodplains are significant natural watercourse features.

There is no Drainage PFTI proposed within the locality, at this time.

Community Facilities Infrastructure Network.



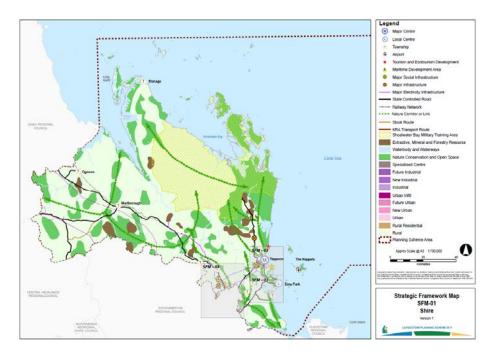
There are no trunk Community Facilities infrastructure which have been identified within the locality, at this time.

The rural locality relies on Community Facilities in the adjacent localities particularly Yaamba, The Caves, and Rockhampton which are within reasonable distance.

2.38 Mount Chalmers.

Town Planning.

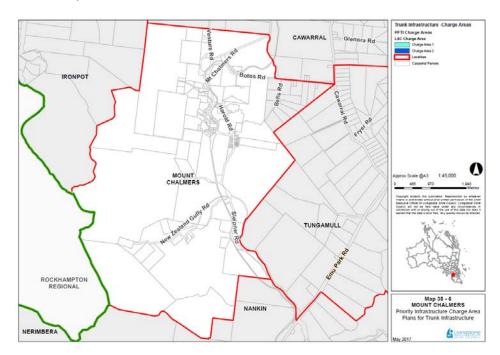
The locality has a land area of 3478.8 Ha and currently 263 parcels of land. The land uses in the rural locality involve rural, and rural residential.



There is one strategic travel Destinations within the locality being the old Mt Chalmers school community centre.

The strategic plan indicates: township, rural, extractive, mineral and forestry resources, waterways, nature conservation and open space, and nature corridor link.

The locality is not within the PIA.



Population Projections.

The ABS Census 2011(<u>SSC3</u>1119) recorded 210 persons for Place of Usual Residence.

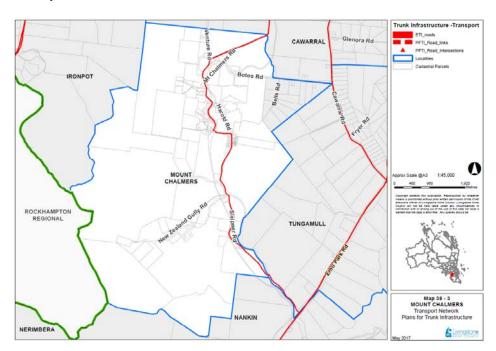
The current PAM 2015 Estimated Resident Population is 213.

The PAM projections are

Year	Estimated Resident	Est	Est Retail GFA	Est Industrial GFA
	Population	Commercial GFA		
2011	213	0	0	0
2016	213	0	0	0
2021	213	0	0	0
2026	213	0	0	0
2031	213	0	0	0
Ultimate	229	0	0	0

This indicates no expected development growth within the locality.

Transport Infrastructure Network.



There is two existing trunk road transport infrastructure within the locality of which is either a State Road asset or a LSC managed asset. Pedestrian and bicycle trunk infrastructure within the locality has not been analysed although a possible future Rail Trail is acknowledged.

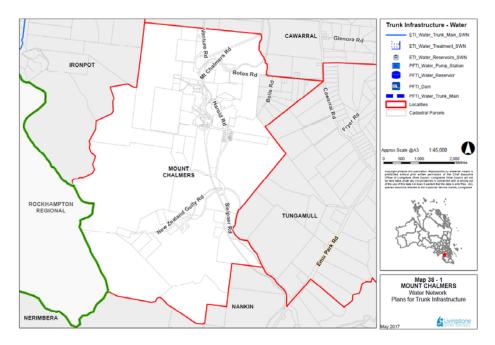
This existing trunk road infrastructure is serving origin catchments within Mount Chalmers locality and outside of Cawarral, Tungamull, and others.

The State Road adjacent is considered to have adequate capacity for development within the planning horizon.

LSC managed trunk road transport infrastructure roads within the locality being Sleipner Rd Ch 1400 – 6380, and Mt Chalmers Rd Ch 1680 – 5525 is considered adequate capacity for local development within the planning horizon.

There are no Transport FTI's within the locality.

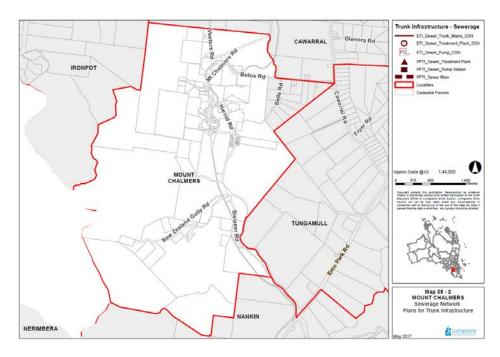
Water Supply Infrastructure Network.



There are no existing trunk water infrastructure assets within the locality.

There is no Water Supply PFTI proposed within the locality during the planning horizon.

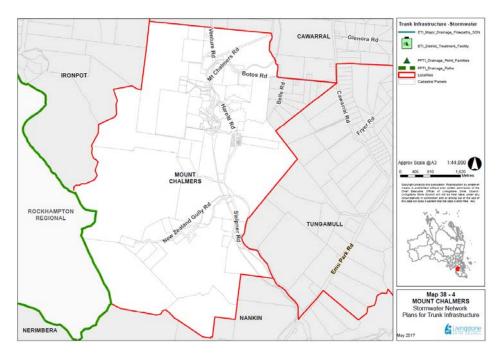
Sewerage Infrastructure Network.



There are no existing trunk sewerage infrastructure assets within the locality.

There is no Sewerage PFTI proposed within the locality during the planning horizon.

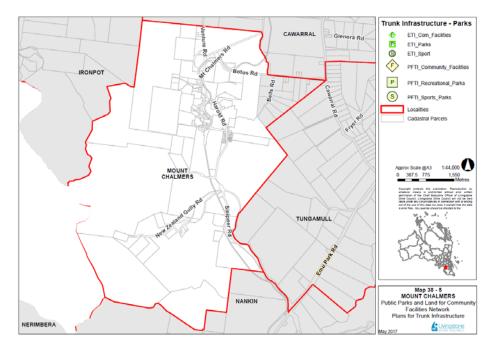
Drainage Infrastructure Network.



There are no trunk drainage systems which have been identified as relevant for development within the locality, at this time. The Fitzroy River, watercourses, drainage features and floodplains are significant natural watercourse features.

There is no Drainage PFTI proposed within the locality, at this time.

Community Facilities Infrastructure Network.



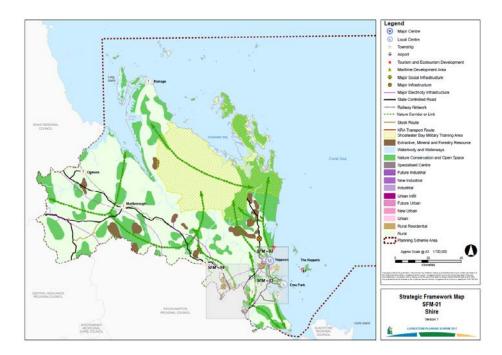
There are no trunk Community Facilities infrastructure which have been identified within the locality, at this time.

The rural locality relies on Community Facilities in the adjacent localities particularly Cawarral, Yeppoon, Emu Park, and Rockhampton which are within reasonable distance.

2.39 Mount Gardiner.

Town Planning.

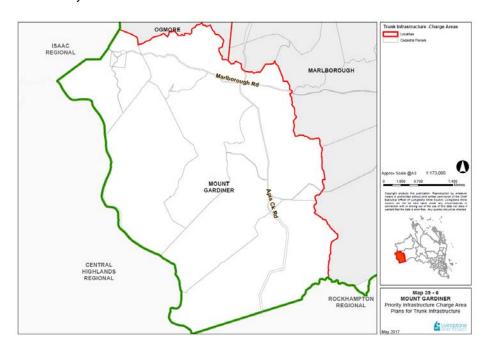
The locality has a land area of 59346.5 Ha and currently 22 parcels of land. The land uses in the rural locality involve rural.



There are no strategic travel Destinations (shops, schools, mining, industry) within the locality.

The strategic plan indicates: rural, waterways, nature conservation and open space, and nature corridor link.

The locality is not within the PIA.



Population Projections.

The ABS Census 2011(<u>SSC3</u>1533) recorded 564 persons for Place of Usual Residence however is part of a larger census data area.

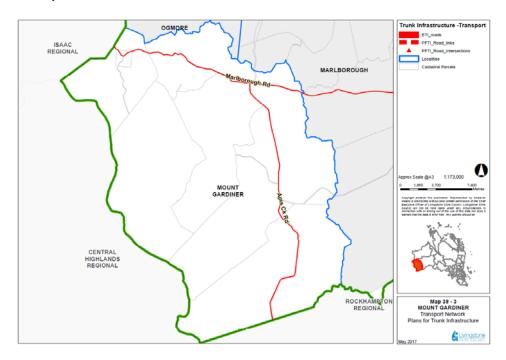
The current PAM 2015 Estimated Resident Population is nil.

The PAM projections are

Year	Estimated Resident Population	Est Commercial GFA	Est Retail GFA	Est Industrial GFA
2011	0	0	0	0
2016	0	0	0	0
2021	0	0	0	0
2026	0	0	0	0
2031	0	0	0	0
Ultimate	0	0	0	0

This indicates no expected development growth within the locality.

Transport Infrastructure Network.



There is two existing trunk road transport infrastructure within the locality of which is either a State Road asset or a LSC managed asset. Pedestrian and bicycle trunk infrastructure within the locality has not been analysed.

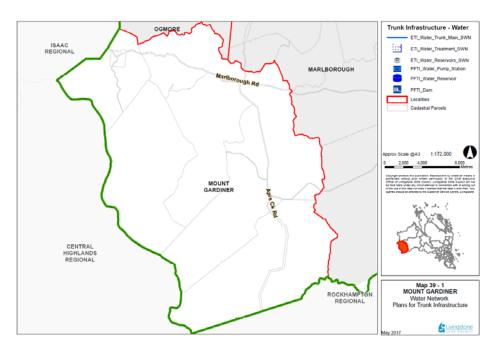
This existing trunk road infrastructure is serving origin catchments within Mount Gardiner locality and outside of adjacent Shires, and others.

The State Roads of Marlborough Rd Ch 31870 – 53400, and Apis Creek Rd Ch 76300 - 104000 are considered to have adequate capacity for local development within the planning horizon.

LSC managed non-trunk road transport infrastructure roads within the locality are considered adequate capacity for local development within the planning horizon.

There are no Transport FTI's within the locality.

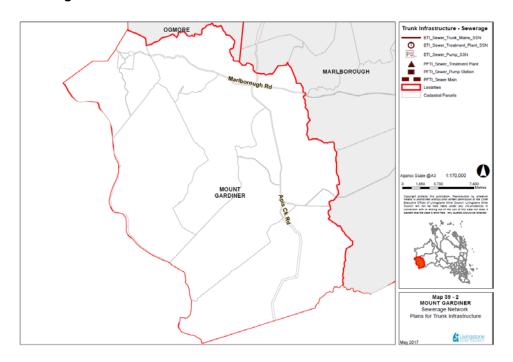
Water Supply Infrastructure Network.



There are no existing trunk water infrastructure assets within the locality.

There is no Water Supply PFTI proposed within the locality during the planning horizon.

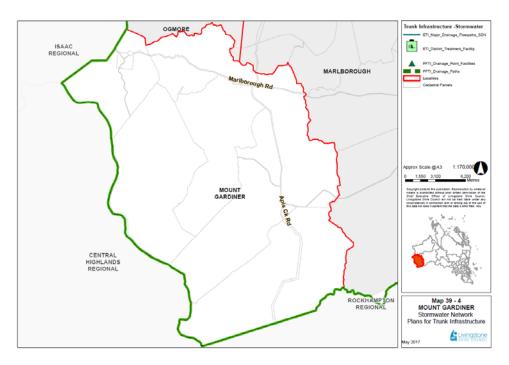
Sewerage Infrastructure Network.



There are no existing trunk sewerage infrastructure assets within the locality.

There is no Sewerage PFTI proposed within the locality during the planning horizon.

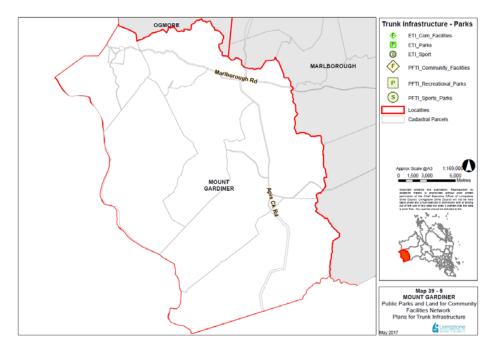
Drainage Infrastructure Network.



There are no trunk drainage systems which have been identified as relevant for development within the locality, at this time. The Fitzroy River, watercourses, drainage features and floodplains are significant natural watercourse features.

There is no Drainage PFTI proposed within the locality, at this time.

Community Facilities Infrastructure Network.



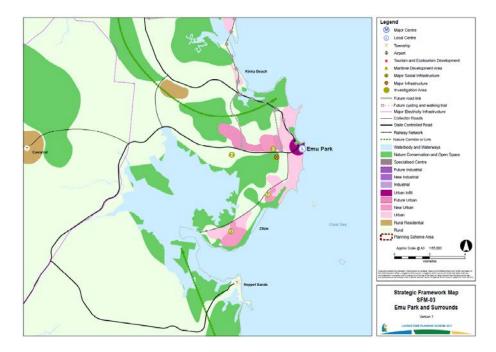
There are no trunk Community Facilities infrastructure which have been identified within the locality, at this time.

The rural locality relies on Community Facilities in the adjacent localities particularly Marlborough, The Caves, and Rockhampton which are within reasonable distance.

2.40 Mulambin.

Town Planning.

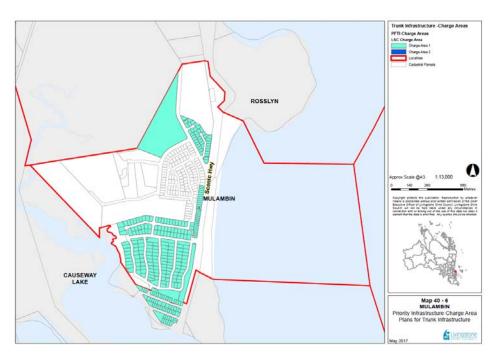
The locality has a total (land and sea) area of 5703 Ha and a land area of 113.9 Ha and currently 384 parcels of land. The land uses in the developing locality involve rural, rural residential, urban, national parks, beaches, recreation.



There is two strategic travel Destination within the locality being Mulambin Beach and Capricorn Palms Caravan Park.

The strategic plan indicates: rural, urban, waterways, nature conservation and open space, and nature corridor links.

The locality is within the PIA.



Population Projections.

The ABS Census 2011(<u>SSC3</u>1178) recorded 822 persons for Place of Usual Residence however is part of a larger census data area.

The current PAM 2015 Estimated Resident Population is 664.

The PAM projections are

Year	Estimated Resident	Est	Est Retail GFA	Est Industrial GFA
	Population	Commercial GFA		
2011	529	0	0	0
2016	664	0	0	0
2021	664	0	0	0
2026	664	0	0	0
2031	664	0	0	0
Ultimate	788	0	0	0

This indicates a low expected development growth within the locality.

Transport Infrastructure Network.

There is one existing trunk road transport infrastructure within the locality of which is either a State Road asset or a LSC managed asset. Pedestrian and bicycle trunk infrastructure within the locality has not been analysed.

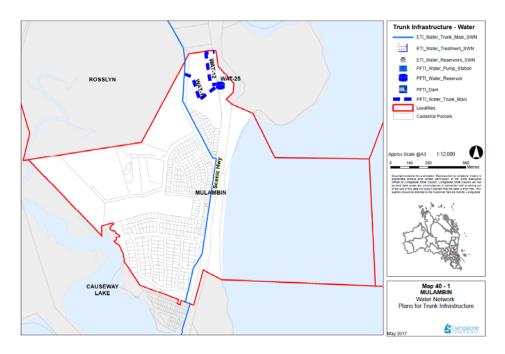
This existing trunk road infrastructure is serving origin catchments within Rosslyn locality and outside of the Capricorn Coast.

The State Roads serving the area are considered to have adequate capacity for local development within the planning horizon however further transport modelling is being undertaken to determine better planning.

LSC managed trunk road transport infrastructure roads within the locality being Scenic Hwy Rural Major Collector Ch 3590 – 4865 is considered inadequate capacity for local development and district development within the planning horizon.

There is no Transport PFTI proposed within the locality, at this time.

Water Supply Infrastructure Network.



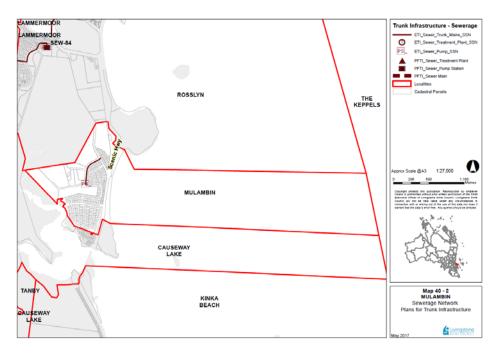
There one existing trunk water infrastructure assets within the locality being: 450mm trunk to Emu Park.

The LSC trunk water infrastructure is considered inadequate to meet the Mulambin water demands within the planning horizon.

To meet Council's Desired Standards of Service will require PFTI's within the locality being:

Map No.	Network	Item ID	Project Name	Future Infrastructure Asset Description	Infrastructure Value (2015\$)	Estimated Year of Completion
40-1	Water Supply	WAT-11	Mulambin Water Reservoir inlet pipework	New, 375mm, MD design.	\$306,000	2021
40-1	Water Supply	WAT-12	Mulambin Water Reservoir outlet pipework	New, 375mm, MH design.	\$306,000	2021
40-1	Water Supply	WAT-25	Mulambin Water Reservoir	New, ML, MD design	\$1,803,000	2021

Sewerage Infrastructure Network.

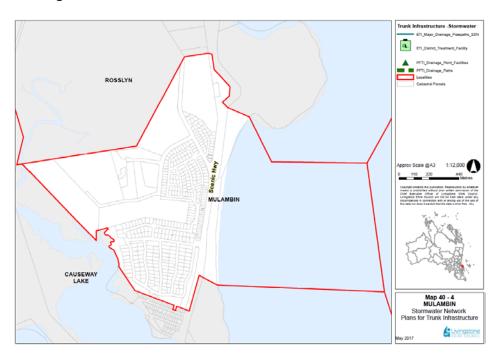


There are two existing trunk sewerage infrastructure assets within the locality being Bluff sewage pump stn and rising main.

The LSC trunk sewerage infrastructure is considered adequate to meet the Rosslyn sewage loadings within the planning horizon.

There is no Sewerage PFTI proposed within the locality, at this time.

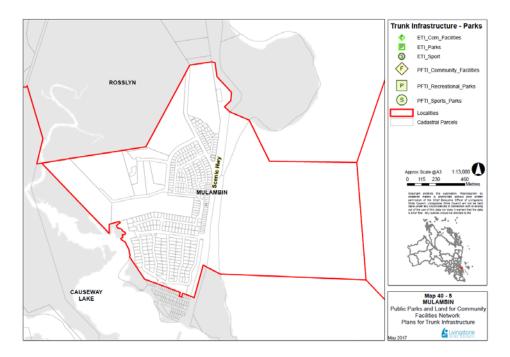
Drainage Infrastructure Network.



There are no trunk drainage systems which have been identified as relevant for development within the locality, at this time. The watercourses, drainage features and floodplains are significant natural watercourse features.

There is no Drainage PFTI proposed within the locality, at this time.

Community Facilities Infrastructure Network.



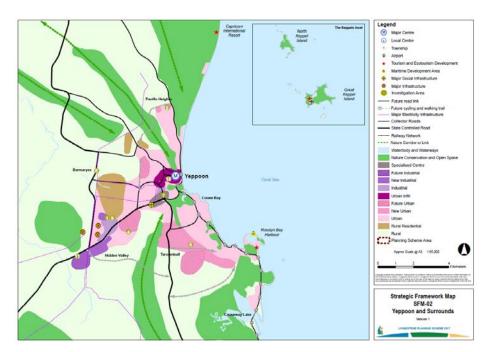
There are trunk Community Facilities infrastructure which have been identified within the locality, at this time being beaches and parks.

The developing locality relies on Community Facilities in the adjacent localities particularly Yeppoon and Emu Park which are within reasonable distance.

2.41 Mulara.

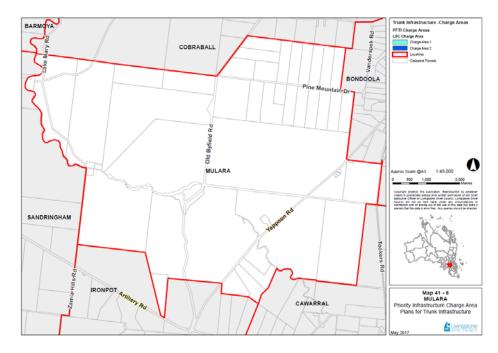
Town Planning.

The locality has a land area of 5770.4 Ha and currently 59 parcels of land. The land uses in the rural locality involve rural, rural residential, retail, recreation.



There are a couple of strategic travel Destinations within the locality being Mt Jim Crow Nation Park, Oaks Roadhouse.

The strategic plan indicates: rural, waterways, nature conservation and open space, and nature corridor link. The locality is not within the PIA.



Population Projections.

The ABS Census 2011(<u>SSC3</u>0929) recorded 229 persons for Place of Usual Residence however is part of a larger census data area.

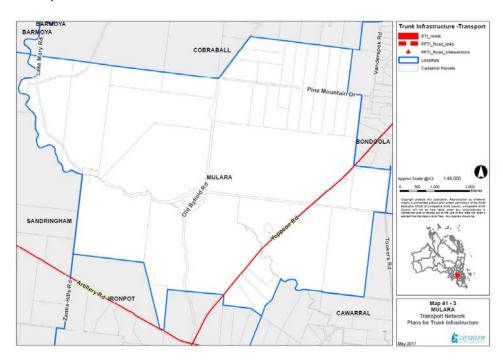
The current PAM 2015 Estimated Resident Population is 94.

The PAM projections are

Year	Estimated Resident	Est	Est Retail GFA	Est Industrial GFA
	Population	Commercial GFA		
2011	64	0	0	0
2016	94	0	0	0
2021	94	0	0	0
2026	94	0	0	0
2031	94	0	0	0
Ultimate	94	0	0	0

This indicates no expected development growth within the locality.

Transport Infrastructure Network.



There is two existing trunk road transport infrastructure within the locality of which is either a State Road asset or a LSC managed asset. Pedestrian and bicycle trunk infrastructure within the locality has not been analysed although a possible future Rail Trail is acknowledged.

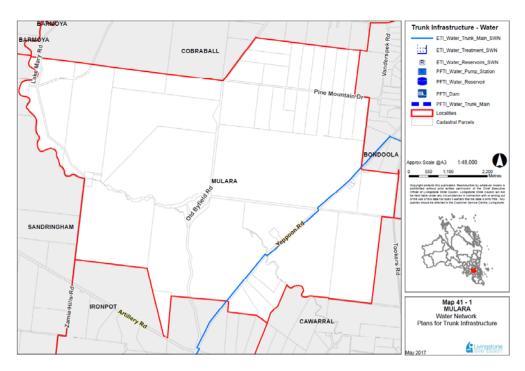
This existing trunk road infrastructure is serving origin catchments within Mulara locality and outside of Capricorn Coast, and others.

The State Roads of Yeppoon Rd Ch 19000 – 24300 is considered to have adequate capacity for local development within the planning horizon.

LSC managed trunk road transport infrastructure roads within the locality being Old Byfield Rd Ch 1270 – 7750 is considered adequate capacity for local development within the planning horizon.

There are no Transport FTI's within the locality.

Water Supply Infrastructure Network.



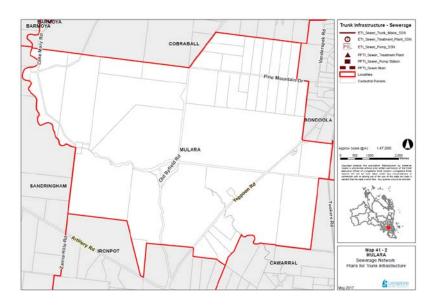
There is one existing trunk water infrastructure assets within the locality being the 600mm trunk water main connecting Boundary Water Supply Reservoir to the Capricorn Coast Water Supply System.

main connecting Boundary water Supply Reservoir with the Capricorn Coast Water Supply System.

The 600mm trunk water main Ch 6100- 11500m within the locality is considered to have adequate capacity for development within the planning horizon

There is no Water Supply PFTI proposed within the locality during the planning horizon.

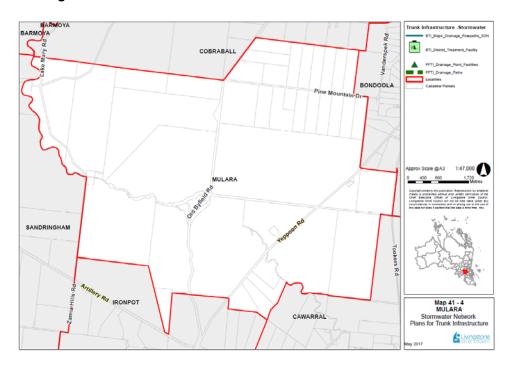
Sewerage Infrastructure Network.



There are no existing trunk sewerage infrastructure assets within the locality.

There is no Sewerage PFTI proposed within the locality during the planning horizon.

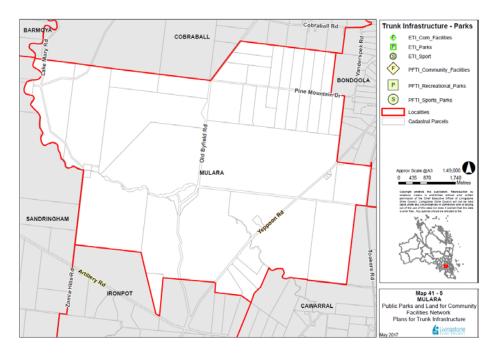
Drainage Infrastructure Network.



There are no trunk drainage systems which have been identified as relevant for development within the locality, at this time. The Fitzroy River, watercourses, drainage features and floodplains are significant natural watercourse features.

There is no Drainage PFTI proposed within the locality, at this time.

Community Facilities Infrastructure Network.



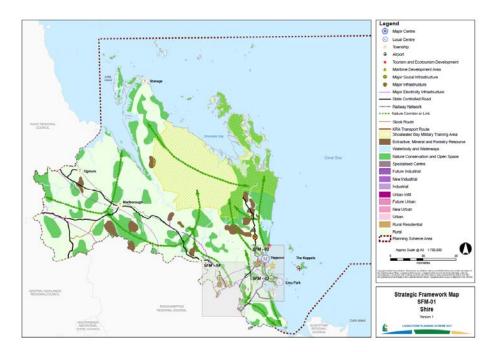
There are no trunk Community Facilities infrastructure which have been identified within the locality, at this time.

The rural locality relies on Community Facilities in the adjacent localities particularly Yeppoon, Emu Park, and Rockhampton which are within reasonable distance.

2.42 Nankin.

Town Planning.

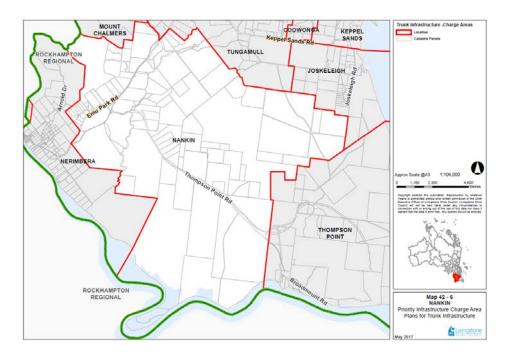
The locality has a land area of 19474.8 Ha and currently 177 parcels of land. The land uses in the rural locality involve rural, and rural residential.



There is one strategic travel Destinations within the adjacent locality being Thompson Point boat ramp.

The strategic plan indicates: rural, waterways, nature conservation and open space, and nature corridor link.

The locality is not within the PIA.



Population Projections.

The ABS Census 2011(<u>SSC3</u>1203) recorded 281 persons for Place of Usual Residence however is part of a larger census data area.

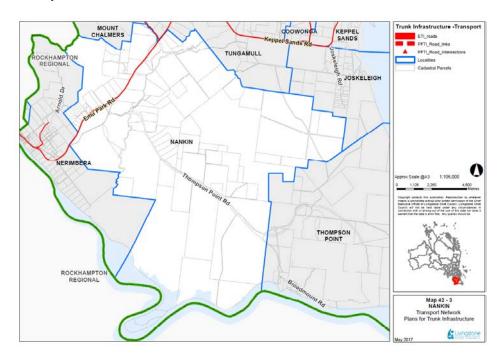
The current PAM 2015 Estimated Resident Population is 140.

The PAM projections are

Year	Estimated Resident	Est Commercial GFA	Est Retail GFA	Est Industrial GFA
	Population	Commercial Gr A		
2011	140	0	0	0
2016	140	0	0	0
2021	140	0	0	0
2026	140	0	0	0
2031	140	0	0	0
Ultimate	140	0	0	0

This indicates no expected development growth within the locality.

Transport Infrastructure Network.



There is one existing trunk road transport infrastructure within the locality of which is either a State Road asset or a LSC managed asset. Pedestrian and bicycle trunk infrastructure within the locality has not been analysed although a possible future Rail Trail is acknowledged.

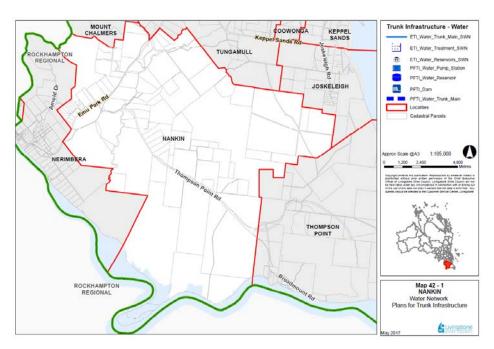
This existing trunk road infrastructure is serving origin catchments within Nankin locality and outside of Thompson Point, Nerimbera, and others.

The State Roads of Emu Park Rd Ch 11550 – 21500 is considered to have adequate capacity for local development within the planning horizon.

LSC managed non-trunk road transport infrastructure roads within the locality are considered adequate capacity for local development within the planning horizon.

There are no Transport FTI's within the locality.

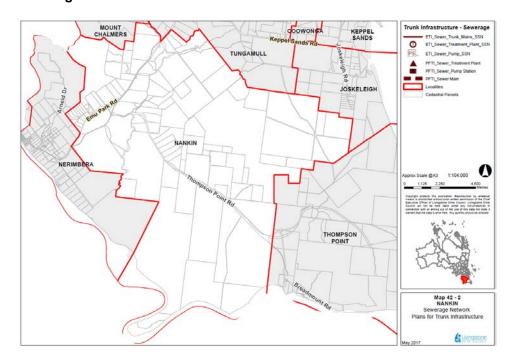
Water Supply Infrastructure Network.



There are no existing trunk water infrastructure assets within the locality.

There is no Water Supply PFTI proposed within the locality during the planning horizon.

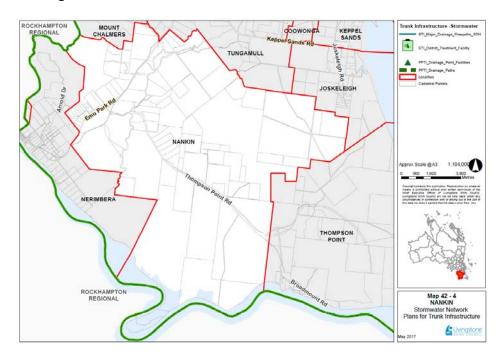
Sewerage Infrastructure Network.



There are no existing trunk sewerage infrastructure assets within the locality.

There is no Sewerage PFTI proposed within the locality during the planning horizon.

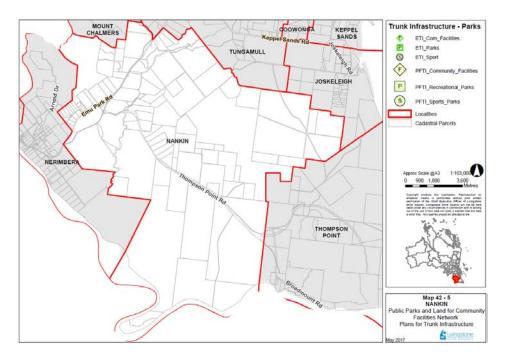
Drainage Infrastructure Network.



There are no trunk drainage systems which have been identified as relevant for development within the locality, at this time. The Fitzroy River, watercourses, drainage features and floodplains are significant natural watercourse features.

There is no Drainage PFTI proposed within the locality, at this time.

Community Facilities Infrastructure Network.



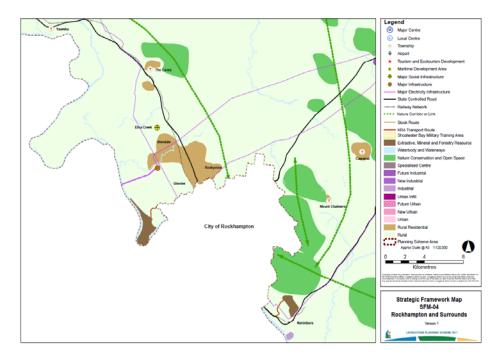
There are no trunk Community Facilities infrastructure which have been identified within the locality, at this time.

The rural locality relies on Community Facilities in the adjacent localities particularly Yeppoon, Emu Park, and Rockhampton which are within reasonable distance.

2.43 Nerimbera.

Town Planning.

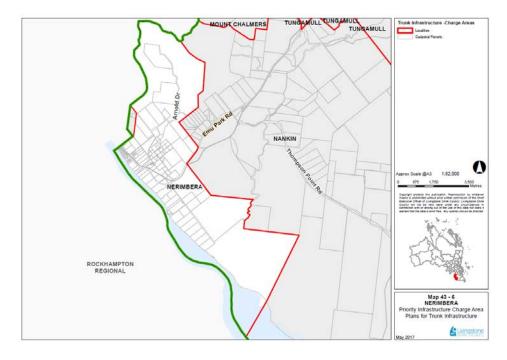
The locality has a land area of 4661.3.8 Ha and currently 200 parcels of land. The land uses in the rural locality involve rural, rural residential, quarries, meat works and industries.



There is several strategic travel Destinations within the locality being quarries, meat works, St Christopher's Chapel, boat ramp, and slipways.

The strategic plan indicates: rural, extractive industries, waterways, nature conservation and open space, and nature corridor link.

The locality is not within the PIA.



Population Projections.

The ABS Census 2011(SSC31211) recorded 259 persons for Place of Usual Residence.

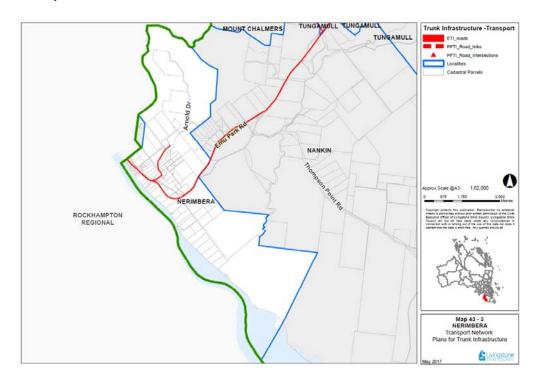
The current PAM 2015 Estimated Resident Population is 248.

The PAM projections are

Year	Estimated	Est	Est Retail GFA	Est Industrial GFA
	Resident Population	Commercial GFA		
2011	248	0	0	3595
2016	248	0	0	3595
2021	248	0	0	3595
2026	248	0	0	3595
2031	248	0	0	3595
Ultimate	248	0	0	3595

This indicates no expected development growth within the locality.

Transport Infrastructure Network.



There are three existing trunk road transport infrastructure within the locality of which is either a State Road asset or a LSC managed asset. Pedestrian and bicycle trunk infrastructure within the locality has not been analysed although a possible future Rail Trail is acknowledged.

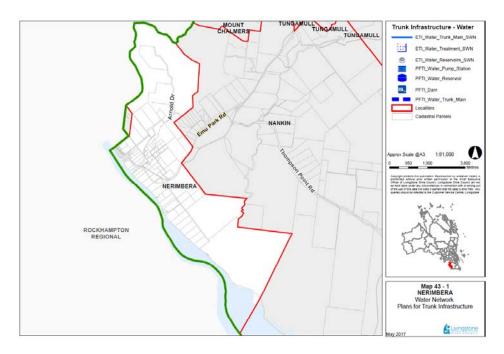
This existing trunk road infrastructure is serving origin catchments within Nerimbera locality and outside of Capricorn Coast.

The State Roads of Emu Park Rd Ch 7020 – 11550 is considered to have adequate capacity for local development within the planning horizon.

LSC managed trunk road transport infrastructure roads within the locality being Nerimbera School Rd Ch $_0$ – 2100 and St Christopher Chapel Rd Ch $_0$ – 2250 are considered adequate capacity for local development within the planning horizon.

There are no Transport FTI's within the locality.

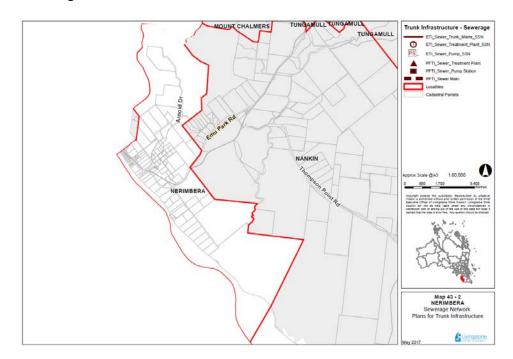
Water Supply Infrastructure Network.



There are no existing trunk water infrastructure assets within the locality.

There is no Water Supply PFTI proposed within the locality during the planning horizon.

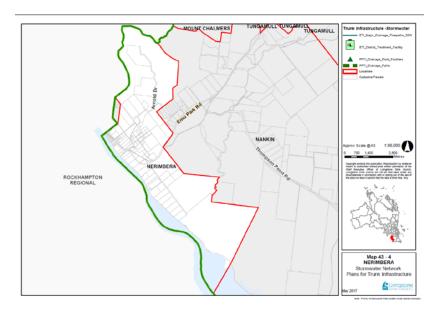
Sewerage Infrastructure Network.



There are no existing trunk sewerage infrastructure assets within the locality.

There is no Sewerage PFTI proposed within the locality during the planning horizon.

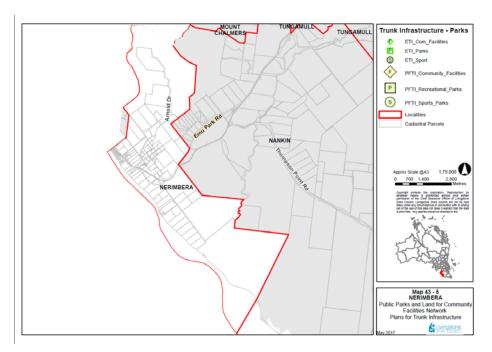
Drainage Infrastructure Network.



There are no trunk drainage systems which have been identified as relevant for development within the locality, at this time. The Fitzroy River, watercourses, drainage features and floodplains are significant natural watercourse features.

There is no Drainage PFTI proposed within the locality, at this time.

Community Facilities Infrastructure Network.



There are no trunk Community Facilities infrastructure which have been identified within the locality, at this time.

The rural locality relies on Community Facilities in the adjacent localities particularly Rockhampton which are within reasonable distance.

There are no known future catchments either within or outside the locality within the planning horizon which will require future trunk community facilities infrastructure to be provided within the locality.
- 219-

2.44 Ogmore.

Town Planning.

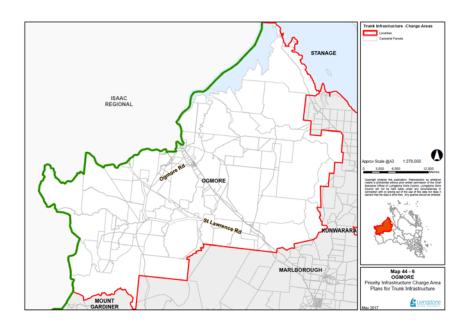
The locality has a land area of 142695.9 Ha and currently 435 parcels of land. The land uses in the rural locality involve rural, village residential, rural residential and mining.

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There is two strategic travel Destinations within the locality being Ogmore township and fishing access to adjacent Styx estuary.

The strategic plan indicates: rural, township, extractive industries, waterways, nature conservation and open space.

The locality is not within the PIA.



Population Projections.

The ABS Census 2011(<u>SSC3</u>1533) recorded 564 persons for Place of Usual Residence however is part of a larger census data area.

The current PAM 2015 Estimated Resident Population is 110.

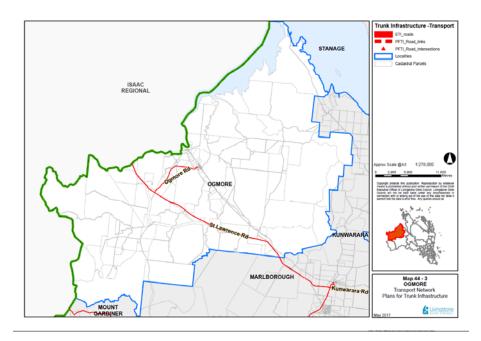
The PAM projections are

Year	Estimated	Est	Est Retail GFA	Est Industrial GFA
	Resident Population	Commercial GFA		
2011	110	0	0	0
2016	110	0	0	0
2021	110	0	0	0
2026	110	0	0	0

2031	110	0	0	0
Ultimate	110	0	0	0

This indicates no expected development growth within the locality.

Transport Infrastructure Network.



There are two existing trunk road transport infrastructure within the locality of which is either a State Road asset or a LSC managed asset. Pedestrian and bicycle trunk infrastructure within the locality has not been analysed.

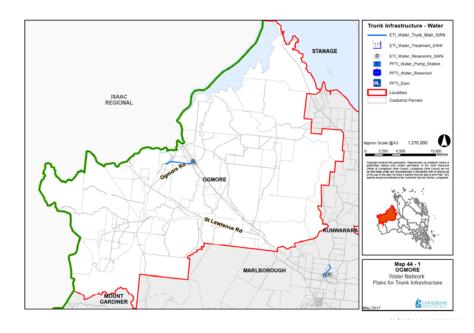
This existing trunk road infrastructure is serving origin catchments within Ogmore locality and outside of northern part of Livingstone Shire plus State and National transport.

The State Roads of St Lawrence Rd Ch 116600 – 149400 and Ogmore Rd Ch 0 - 10900 are considered to have adequate capacity for local development within the planning horizon.

LSC managed non-trunk road transport infrastructure roads within the locality are considered adequate capacity for local development within the planning horizon.

There are no Transport FTI's within the locality.

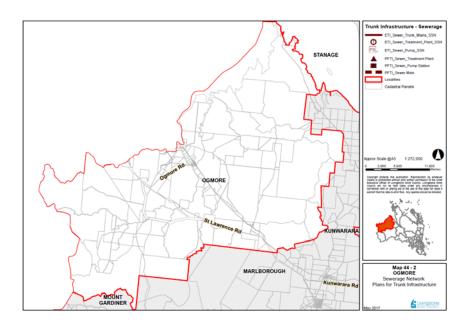
Water Supply Infrastructure Network.



There are three existing trunk water infrastructure assets within the locality being Montrose Creek pump intake, Ogmore Depot storage tanks, and Ogmore Distribution Pumps. This system provides a basic non-potable part-time water supply to Ogmore township.

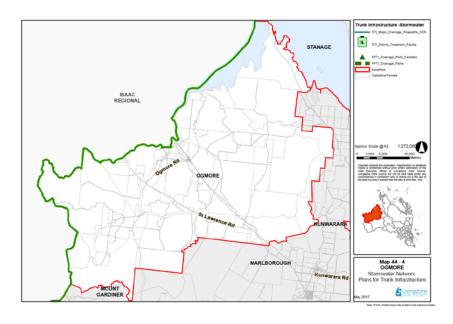
There is no Water Supply PFTI proposed within the locality during the planning horizon.

Sewerage Infrastructure Network.



There are no existing trunk sewerage infrastructure assets within the locality.

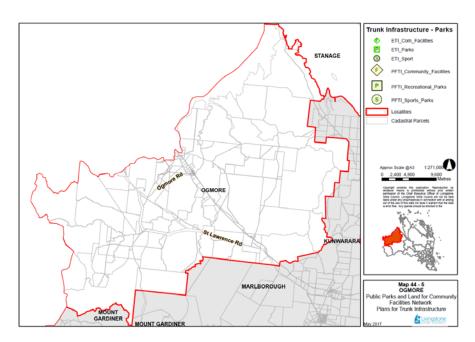
There is no Sewerage PFTI proposed within the locality during the planning horizon.



There are no trunk drainage systems which have been identified as relevant for development within the locality, at this time. The Fitzroy River, watercourses, drainage features and floodplains are significant natural watercourse features.

There is no Drainage PFTI proposed within the locality, at this time.

Community Facilities Infrastructure Network.



There are no trunk Community Facilities infrastructure which have been identified within the locality, at this time.

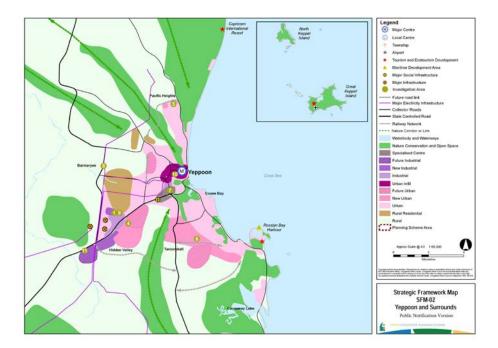
The rural locality relies on Community Facilities in the adjacent localities particularly Marlborough, Yaamba, The Caves, and Rockhampton which are within reasonable distance.

There are no known future catchments either within or outside the locality within the planning horizon which will require future trunk community facilities infrastructure to be provided within the locality.

2.45 Pacific Heights.

Town Planning.

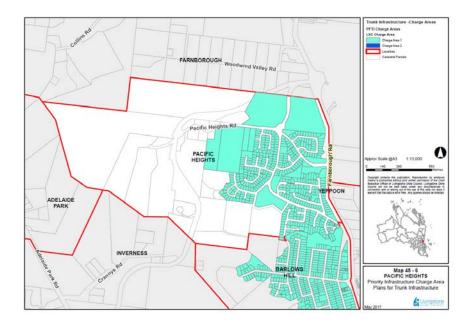
The locality has a land area of 2551.8 Ha and currently 548 parcels of land. The land uses in the developing locality involve rural, rural residential, urban, school.



There is one strategic travel Destination within the locality being: St Benedict's primary school.

The strategic plan indicates: rural, urban, new urban, waterways, nature conservation and open space, and nature corridor links.

The locality is within the PIA.



Population Projections.

The ABS Census 2011(<u>SSC3</u>1279) recorded 781 persons for Place of Usual Residence.

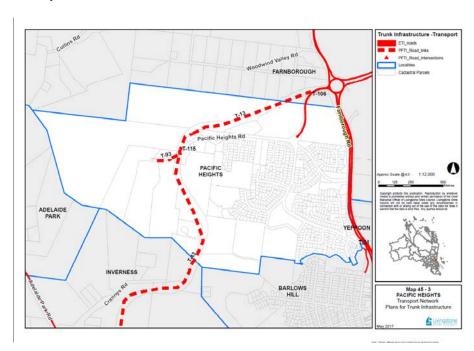
The current PAM 2015 Estimated Resident Population is 1679.

The PAM projections are

Year	Estimated Resident	Est	Est Retail GFA	Est Industrial GFA
	Population	Commercial GFA		
2011	974	0	0	0
2016	1679	0	0	0
2021	2532	0	0	0
2026	2535	0	0	0
2031	2559	0	0	0
Ultimate	2608	0	0	0

This indicates significant expected development growth within the locality.

Transport Infrastructure Network.



There is one existing trunk road transport infrastructure within the locality of which is either a State Road asset or a LSC managed asset. Pedestrian and bicycle trunk infrastructure within the locality has not been analysed.

This existing trunk road infrastructure is serving origin catchments within Pacific Heights locality and outside of the northern suburbs of the Capricorn Coast.

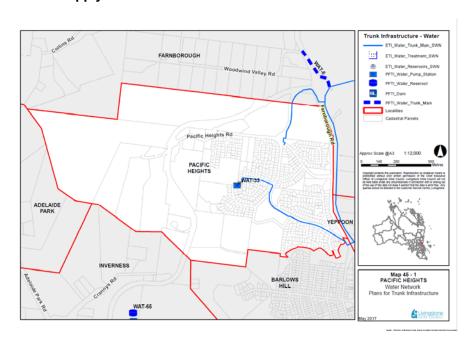
The State Roads serving the area are considered to have adequate capacity for local development within the planning horizon.

LSC managed trunk road transport infrastructure roads within the locality being Lacey Drive Urban Major Collector are not considered adequate capacity for local development within the planning horizon.

To meet Council's Desired Standards of Service will require PFTI's within the locality being:

Map No.	Network	Item ID	Project Name	Future Infrastructure Asset Description	Infrastructure Value (2015\$)	Estimated Year of Completion
45-3	Transport	T-13	Panorama Drive, new	New, Rural Major Collector, Ch 1393 - 3500	\$1,651,000	2016
45-3	Transport	T-115	Intersection Panorama Drive- Pacific Hts West	New, Rural major Collector	\$1,287,000	2016
45-3	Transport	T-93	Pacific Heights West Rd, upgrade	Upgrade Ch 0 - 200	\$160,000	2016
45-3	Transport	T106	Intersection Panorama Drive – Lacey's Drive	New, Rural major Collector, non- signalised	\$1,287,000	2016

Water Supply Infrastructure Network.



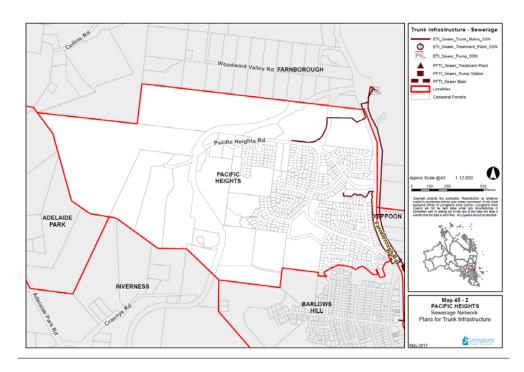
There are three existing trunk water infrastructure assets within the locality being: Pacific Heights Water Reservoir, Pacific Heights HZ Water Booster Pump station and 375mm trunk water main in pacific Heights Rd.

The LSC trunk water infrastructure is considered inadequate to meet the Pacific Heights and adjacent Farnborough water demands within the planning horizon.

To meet Council's Desired Standards of Service will require PFTI's within the locality being:

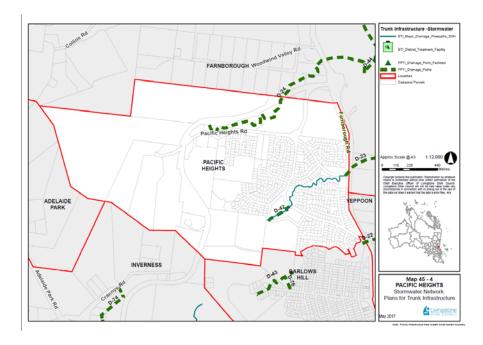
Map No.	Network	Item ID	Project Name	Future Infrastructure Asset Description	Infrastructure Value (2015\$)	Estimated Year of Completion
65-1	Water Supply	WAT-33	Pacific Heights Water Booster Pump Station upgrade	Upgrade, pumps elec, generator, MH design	\$481,000	2021

Sewerage Infrastructure Network.



There are several existing trunk sewerage infrastructure assets within the locality being Lacey Drive 225mm gravity main, McCauley Drive trunk gravity main.

The LSC trunk sewerage infrastructure is considered adequate to meet the Pacific Heights sewage loadings within the planning horizon.

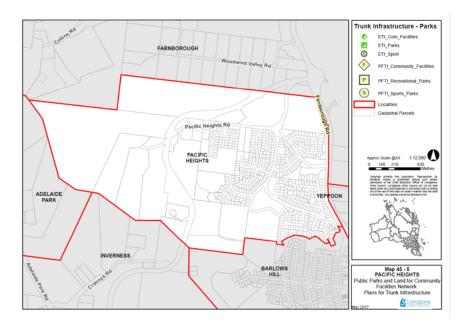


There are two trunk drainage systems which have been identified as relevant for development within the locality, at this time.

To meet Council's Desired Standards of Service will require PFTI's within the locality being:

Map No.	Network	Item ID	Project Name	Future Infrastructure Asset Description	Infrastructure Value (2015\$)	Estimated Year of Completion
45-4	Drainage	D-24	Barwells Cr Q100 Easement	Drainage feature, new, tenure to ensure connectivity, Q100 Easement, 1900m	\$190,000	2031
45-4	Drainage	D-42	Pacific Heights Gully Q100 Easement	Drainage feature, new, tenure to ensure connectivity, Q100 Easement, 240m	\$24,000	2026

Community Facilities Infrastructure Network.



There is one trunk Community Facilities infrastructure which has been identified within the locality, at this time being a park.

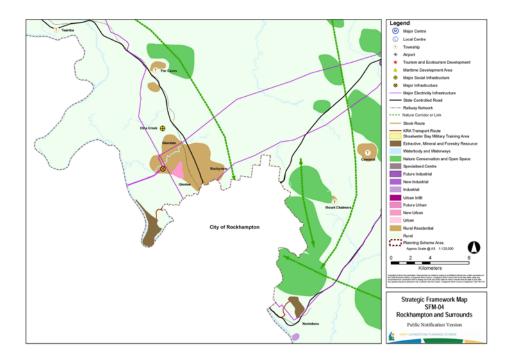
The developing locality relies on Community Facilities in the adjacent localities particularly Yeppoon which are within reasonable distance.

There are no known future catchments either within or outside the locality within the planning horizon which will require future trunk community facilities infrastructure to be provided within the locality.

2.46 Rockyview.

Town Planning.

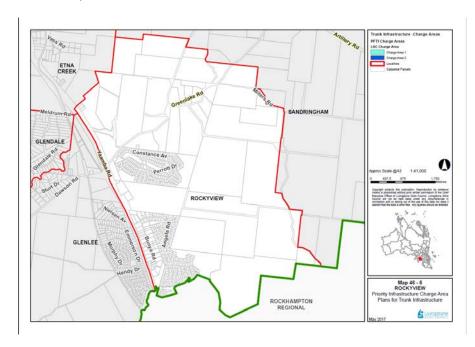
The locality has a land area of 3016.8 Ha and currently 664 parcels of land. The land uses in the rural locality involve rural and rural residential.



There are no strategic travel Destinations (shops, schools, mining, industry) within the locality.

The strategic plan indicates: rural, waterways, nature conservation and open space, nature corridor link.

The locality is not within the PIA.



Population Projections.

The ABS Census 2011(<u>SSC3</u>1421) recorded 1367 persons for Place of Usual Residence however is part of a larger census data area.

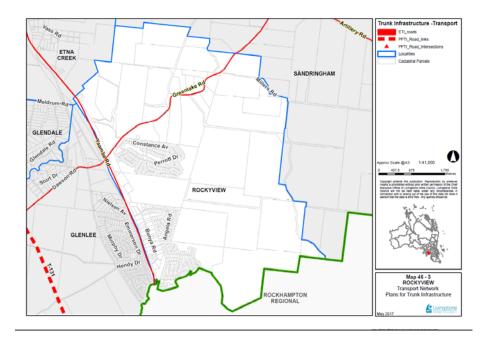
The current PAM 2015 Estimated Resident Population is 1331.

The PAM projections are

Year	Estimated Resident Population	Est Commercial GFA	Est Retail GFA	Est Industrial GFA
0044	-			
2011	1142	0	0	0
2016	1331	0	0	0
2021	1331	0	0	0
2026	1331	0	0	0
2031	1331	0	0	0
Ultimate	1539	0	0	0

This indicates low expected development growth within the locality.

Transport Infrastructure Network.



There are two existing trunk road transport infrastructure within the locality of which is either a State Road asset or a LSC managed asset. Pedestrian and bicycle trunk infrastructure within the locality has not been analysed.

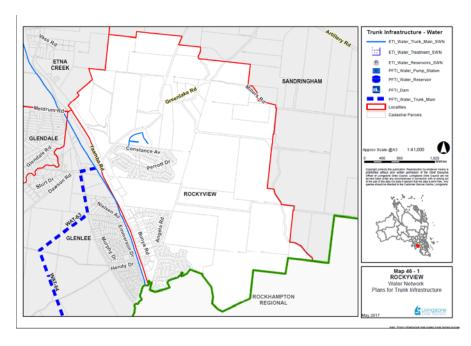
This existing trunk road infrastructure is serving origin catchments within Rockyview locality and outside of Sandringham, and others.

The State Roads being Yaamba Rd Ch 12250 – 17720 is considered to have adequate capacity for local development within the planning horizon.

LSC managed trunk road transport infrastructure roads within the locality being Greenlake Rd Ch 0-4800 is considered adequate capacity for local development within the planning horizon.

There are no Transport FTI's within the locality.

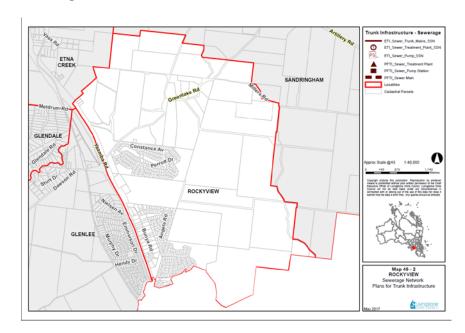
Water Supply Infrastructure Network.



There are no existing trunk water infrastructure assets within the locality.

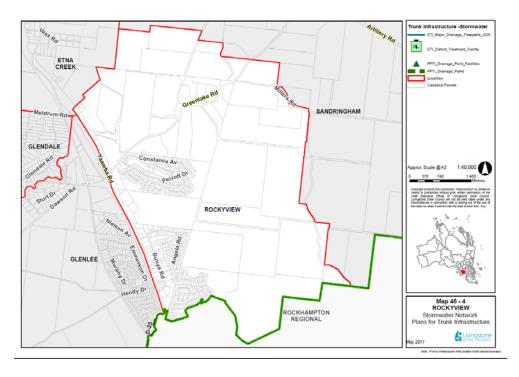
There is no Water Supply PFTI proposed within the locality during the planning horizon.

Sewerage Infrastructure Network.



There are no existing trunk sewerage infrastructure assets within the locality.

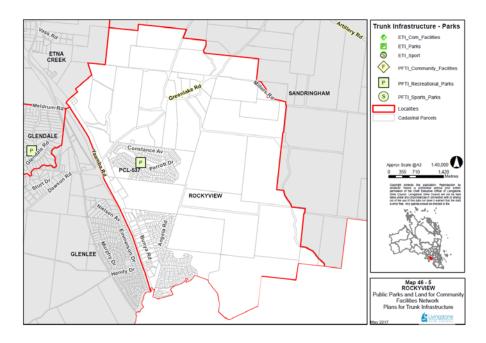
There is no Sewerage PFTI proposed within the locality during the planning horizon.



There are no trunk drainage systems which have been identified as relevant for development within the locality, at this time. The Fitzroy River, watercourses, drainage features and floodplains are significant natural watercourse features.

There is no Drainage PFTI proposed within the locality, at this time.

Community Facilities Infrastructure Network.



There are no trunk Community Facilities infrastructure which have been identified within the locality, at this time.

The rural locality relies on Community Facilities in the adjacent localities particularly The Caves, and Rockhampton which are within reasonable distance.

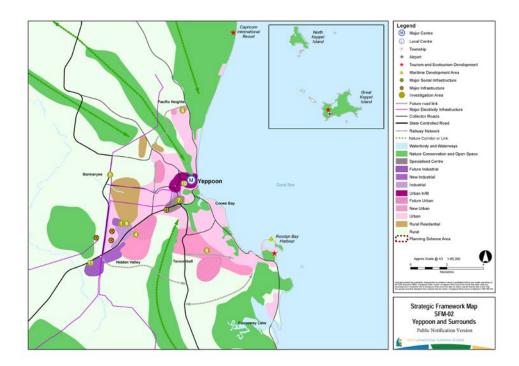
To meet Council's Desired Standards of Service will require PFTI's within the locality being:

Map No.	Network	Item ID	Project Name	Future Infrastructure Asset Description	Infrastructure Value (2015\$)	Estimated Year of Completion
46-5	Community	PCL537	Sarah's garden upgrade	Upgrade, District, paths, seating, shade, BBQ, play equipment	\$200,000	2021

2.47 Rosslyn.

Town Planning.

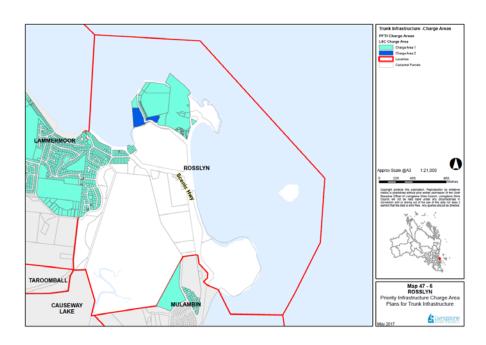
The locality has a total (land and sea) area of 1863 Ha and a land area of 396.8 Ha and currently 344 parcels of land. The land uses in the developing locality involve rural, rural residential, urban, marina, harbour, national parks, beaches, recreation.



There is several significant strategic travel Destinations within the locality being Rosslyn Harbour, Kemp Beach, Statue Bay beach, and National Parks.

The strategic plan indicates: rural, urban, waterways, nature conservation and open space, and nature corridor links, tourism and marine.

The locality is within the PIA.



Population Projections.

The ABS Census 2011(<u>SSC3</u>1434) recorded 407 persons for Place of Usual Residence however is part of a larger census data area.

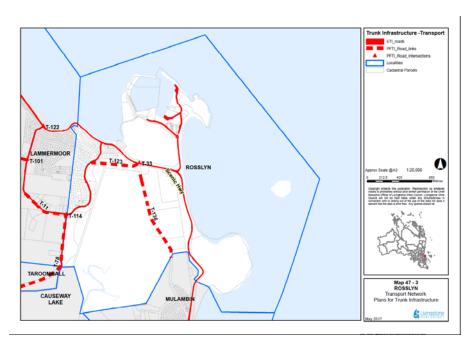
The current PAM 2015 Estimated Resident Population is 1501.

The PAM projections are

Year	Estimated Resident	Est	Est Retail GFA	Est Industrial GFA
	Population	Commercial GFA		
2011	866	0	2065	7665
2016	1501	0	2065	7665
2021	1501	0	2065	7665
2026	1501	0	2065	7665
2031	1501	0	2065	7665
Ultimate	1687	0	6250	7665

This indicates reasonable expected development growth within the locality.

Transport Infrastructure Network.



There are three existing trunk road transport infrastructure within the locality of which is either a State Road asset or a LSC managed asset. Pedestrian and bicycle trunk infrastructure within the locality has not been analysed although a PCNP is acknowledged.

This existing trunk road infrastructure is serving origin catchments within Rosslyn locality and outside of the Capricorn Coast.

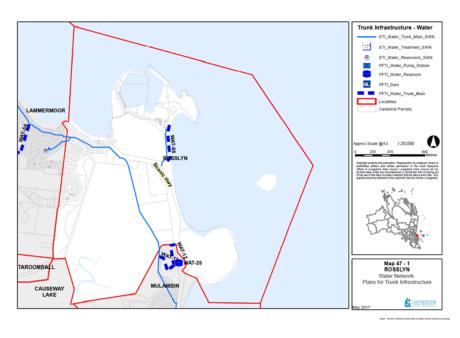
The State Roads serving the area are considered to have adequate capacity for local development within the planning horizon however further transport modelling is being undertaken to determine better planning.

LSC managed trunk road transport infrastructure roads within the locality being Scenic Hwy Rural Major Collector Ch 505 – 3590, Mulambin Rd Urban Major Collector Ch 250 – 1270 and Vin E Jones Drive Rural Major Collector Ch 0 – 470 are considered inadequate capacity for local development and district development within the planning horizon.

To meet Council's Desired Standards of Service will require eleven PFTI within the locality being:

Мар No.	Network	Item ID	Project Name	Future Infrastructure Asset Description	Infrastructure Value (2015\$)	Estimated Year of Completion
47-3	Transport	T-123	Mulambin Rd Relocation	Mulambin Rd relocation new, Rural major Collector, Ch 0 – 760.	\$596,000	2021
47-3	Transport	T-33	Intersection Mulambin – Scenic, new	New intersection, Rural Major Collector.	2021	\$1,212,000
47-3	Transport	T-136	Rosslyn Shared Pathway	New Shared pathway.	2021	\$40,000

Water Supply Infrastructure Network.

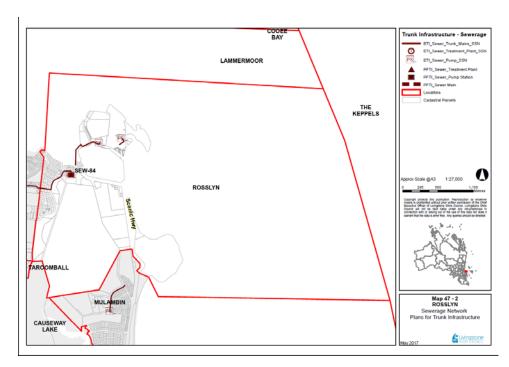


There are two existing trunk water infrastructure assets within the locality being: 375mm trunk to Emu park and Vin E Jones 150mm trunk main.

The LSC trunk water infrastructure is considered adequate to meet the Rosslyn water demands within the planning horizon.

There is no Water Supply PFTI proposed within the locality during the planning horizon.

Sewerage Infrastructure Network.

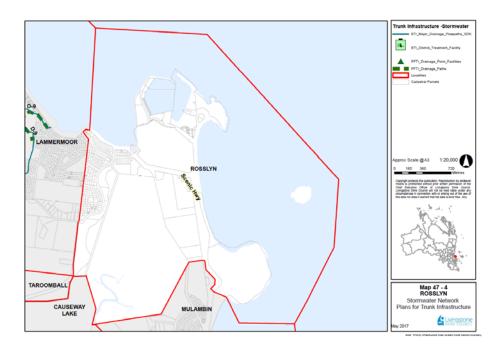


There are several existing trunk sewerage infrastructure assets within the locality being Marina sewage pump stn and rising main, Rosslyn Harbour sewage pump station and rising main, Rosslyn St sewage pump station and rising main.

The LSC trunk sewerage infrastructure is considered inadequate to meet the Rosslyn sewage loadings within the planning horizon.

To meet Council's Desired Standards of Service will require PFTI within the locality being:

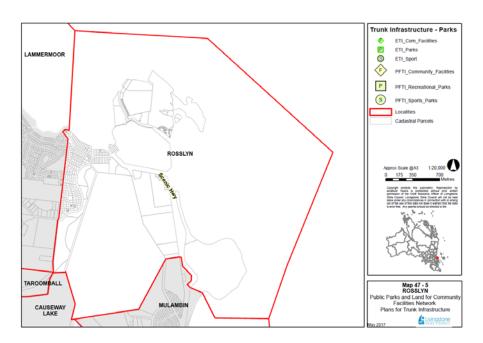
Map No.	Network	Item ID	Project Name	Future Infrastructure Asset Description	Infrastructure Value (2015\$)	Estimated Year of Completion
47-2	Sewerage	SEW-84	Rosslyn St sewage pump station upgrade	upgrade, 2 nd wet well and pumps, elec, pipes, WWF design.	\$794,000	2021



There are no trunk drainage systems which have been identified as relevant for development within the locality, at this time. The Fitzroy River, watercourses, drainage features and floodplains are significant natural watercourse features.

There is no Drainage PFTI proposed within the locality, at this time.

Community Facilities Infrastructure Network.



There are trunk Community Facilities infrastructure which have been identified within the locality, at this time being beaches.

The developing locality relies on Community Facilities in the adjacent localities particularly Yeppoon which are within reasonable distance.

There are no known future catchments either within or outside the locality within the planning horizon which will require future trunk community facilities infrastructure to be provided within the locality.

2.48 Rossmoya.

Town Planning.

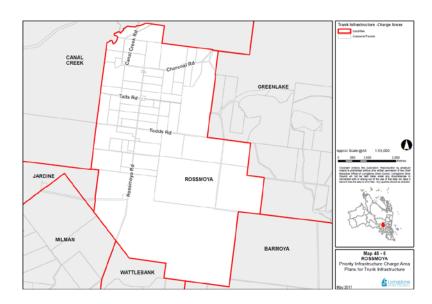
The locality has a land area of 6227.1 Ha and currently 76 parcels of land. The land uses in the rural locality involve rural and rural residential.

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There are no strategic travel Destinations within the locality however the adjacent locality of Shoalwater has significant ADF transport through the area.

The strategic plan indicates: rural, waterways, nature conservation and open space.

The locality is not within the PIA.



Population Projections.

The ABS Census 2011(<u>SSC3</u>0109) recorded 230 persons for Place of Usual Residence however is part of a larger census data area.

The current PAM 2015 Estimated Resident Population is 40.

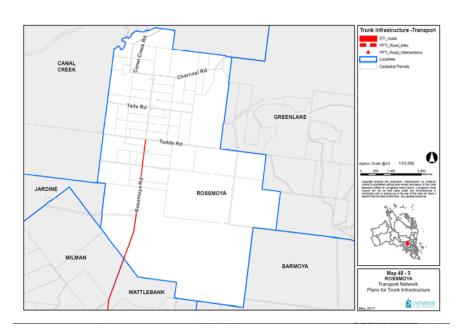
The PAM projections are

Year	Estimated Resident Population	Est Commercial GFA	Est Retail GFA	Est Industrial GFA
2011	40	0	0	0
2016	40	0	0	0
2021	40	0	0	0
2026	40	0	0	0
2031	40	0	0	0

Ultimate	40	0	0	0

This indicates no expected development growth within the locality.

Transport Infrastructure Network.



There is one existing trunk road transport infrastructure within the locality of which is either a State Road asset or a LSC managed asset. Pedestrian and bicycle trunk infrastructure within the locality has not been analysed.

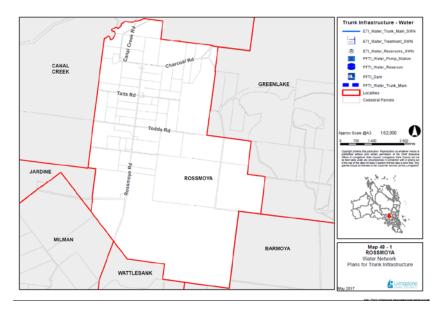
This existing trunk road infrastructure is serving origin catchments within Rossmoya locality and outside of Shoalwater, Canal Creek, and others.

The State Roads are considered to have adequate capacity for local development within the planning horizon.

LSC managed trunk road transport infrastructure roads within the locality being Rossmoya Rd Ch 11470 – 16680 is considered adequate capacity for local development within the planning horizon.

There are no Transport FTI's within the locality.

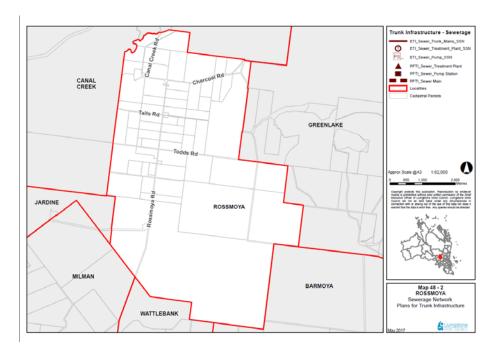
Water Supply Infrastructure Network.



There are no existing trunk water infrastructure assets within the locality.

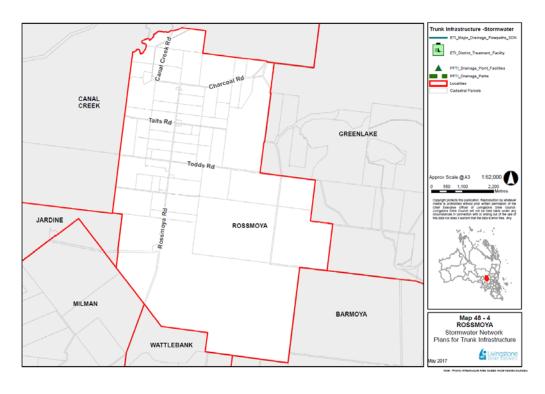
There is no Water Supply PFTI proposed within the locality during the planning horizon.

Sewerage Infrastructure Network.



There are no existing trunk sewerage infrastructure assets within the locality.

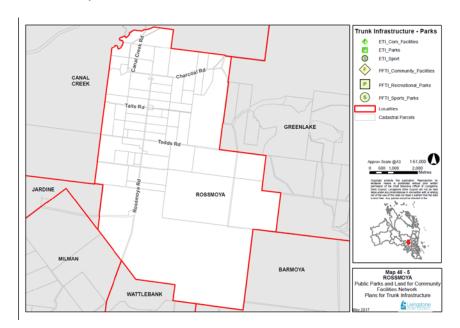
There is no Sewerage PFTI proposed within the locality during the planning horizon.



There are no trunk drainage systems which have been identified as relevant for development within the locality, at this time. The Fitzroy River, watercourses, drainage features and floodplains are significant natural watercourse features.

There is no Drainage PFTI proposed within the locality, at this time.

Community Facilities Infrastructure Network.



There are no trunk Community Facilities infrastructure which have been identified within the locality, at this time.

The rural locality relies on Community Facilities in the adjacent localities particularly Yaamba, The Caves, and Rockhampton which are within reasonable distance.

There are no known future catchments either within or outside the locality within the planning horizon which will require future trunk community facilities infrastructure to be provided within the locality.

2.49 Sandringham.

Town Planning.

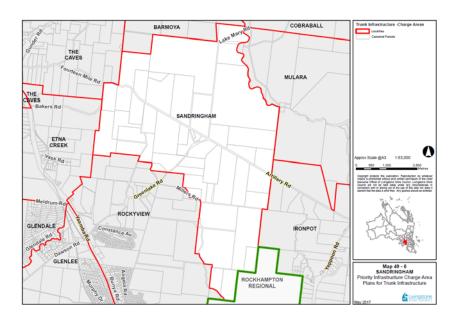
The locality has a land area of 5001.5 Ha and currently 54 parcels of land. The land uses in the rural locality involve rural and rural residential.

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There are no strategic travel Destinations (shops, schools, mining, industry) within the locality.

The strategic plan indicates: rural, waterways, nature conservation and open space, nature corridor link.

The locality is not within the PIA.



Population Projections.

The ABS Census 2011(<u>SSC3</u>0109) recorded 230 persons for Place of Usual Residence however is part of a larger census data area.

The current PAM 2015 Estimated Resident Population is 32.

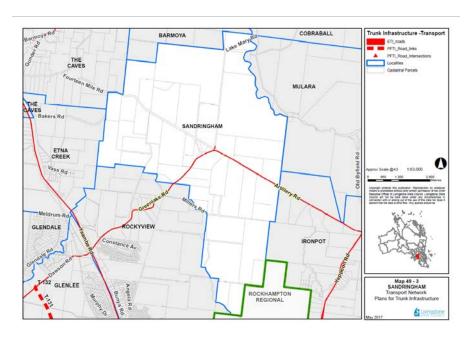
The PAM projections are

Year	Estimated	Est	Est Retail GFA	Est Industrial GFA
	Resident Population	Commercial GFA		
2011	32	0	0	0
2016	32	0	0	0
2021	32	0	0	0
2026	32	0	0	0

2031	32	0	0	0
Ultimate	32	0	0	0

This indicates no expected development growth within the locality.

Transport Infrastructure Network.



There are two existing trunk road transport infrastructure within the locality of which is either a State Road asset or a LSC managed asset. Pedestrian and bicycle trunk infrastructure within the locality has not been analysed.

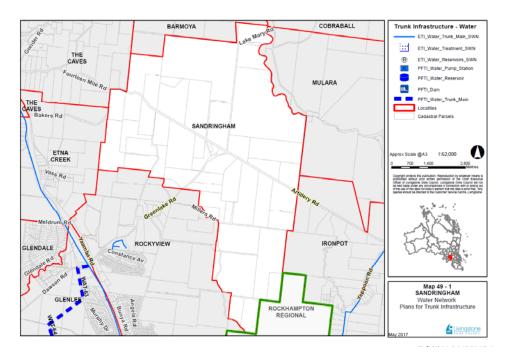
This existing trunk road infrastructure is serving origin catchments within Sandringham locality and outside of Capricorn Coast, and others.

The State Roads are considered to have adequate capacity for local development within the planning horizon.

LSC managed trunk road transport infrastructure roads within the locality being Greenlake Rd Ch 4800 – 7050 and Artillery Rd Ch 3970 – 7070 are considered adequate capacity for local development within the planning horizon.

There are no Transport FTI's within the locality.

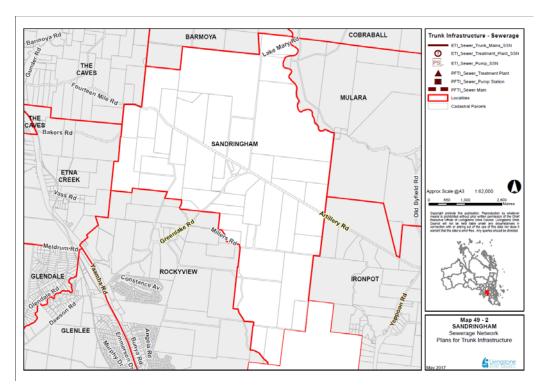
Water Supply Infrastructure Network.



There are no existing trunk water infrastructure assets within the locality.

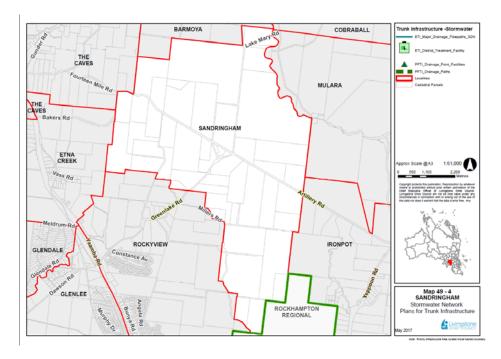
There is no Water Supply PFTI proposed within the locality during the planning horizon.

Sewerage Infrastructure Network.



There are no existing trunk sewerage infrastructure assets within the locality.

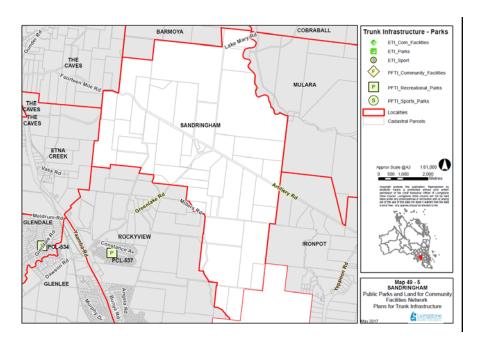
There is no Sewerage PFTI proposed within the locality during the planning horizon.



There are no trunk drainage systems which have been identified as relevant for development within the locality, at this time. The Fitzroy River, watercourses, drainage features and floodplains are significant natural watercourse features.

There is no Drainage PFTI proposed within the locality, at this time.

Community Facilities Infrastructure Network.



There are no trunk Community Facilities infrastructure which have been identified within the locality, at this time.

The rural locality relies on Community Facilities in the adjacent localities particularly Yeppoon and Rockhampton which are within reasonable distance.

There are no known future catchments either within or outside the locality within the planning horizon which will require future trunk community facilities infrastructure to be provided within the locality.

2.50 Shoalwater.

Town Planning.

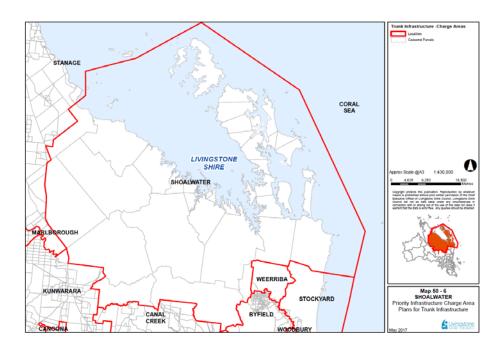
The locality has a total (land and sea) area of 453367 Ha and a land area of 270006 Ha and currently 168 parcels of land. The land uses in the rural locality involve rural, fishing and defence.

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There is one strategic travel Destinations within the locality being Shoalwater ADF Facilities.

The strategic plan indicates: rural, defence waterways, nature conservation and open space, nature corridor link.

The locality is not within the PIA.



Population Projections.

The ABS Census 2011(<u>SSC3</u>1540) recorded 11 persons for Place of Usual Residence however is part of a larger census data area.

The current PAM 2015 Estimated Resident Population is nil.

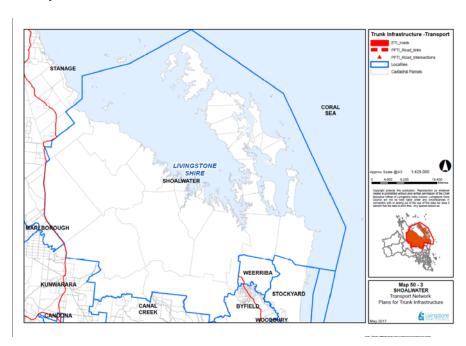
The PAM projections are

Year	Estimated Resident Population	Est Commercial GFA	Est Retail GFA	Est Industrial GFA
2011	0	0	0	0
2016	0	0	0	0
2021	0	0	0	0
2026	0	0	0	0

2031	0	0	0	0
Ultimate	0	0	0	0

This indicates no expected development growth within the locality.

Transport Infrastructure Network.



There is no existing trunk road transport infrastructure within the locality of which is either a State Road asset or a LSC managed asset. Pedestrian and bicycle trunk infrastructure within the locality has not been analysed.

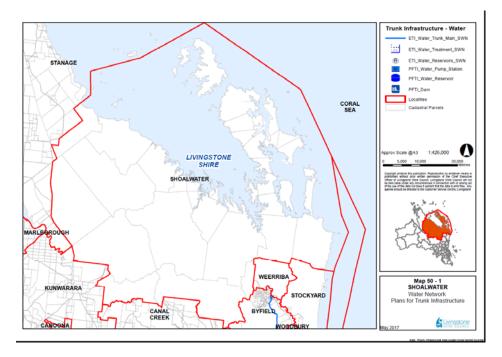
This existing non-trunk road infrastructure is serving origin catchments within Shoalwater locality and outside of ADF transport loadings.

The State Roads are considered to have adequate capacity for local development within the planning horizon.

LSC managed non-trunk road transport infrastructure roads within the locality are considered to be overloaded by ADF transport but have adequate capacity for local development within the planning horizon.

There are no Transport FTI's within the locality.

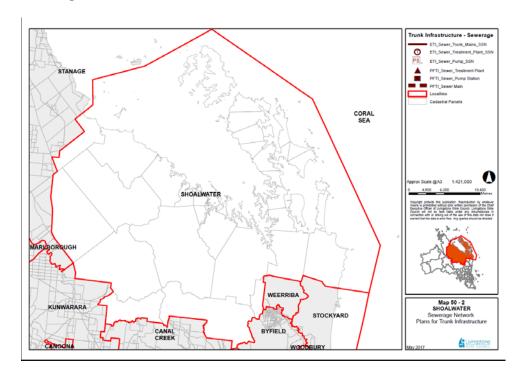
Water Supply Infrastructure Network.



There are no existing trunk water infrastructure assets within the locality.

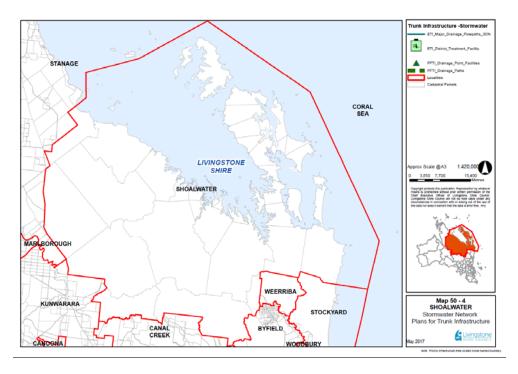
There is no Water Supply PFTI proposed within the locality during the planning horizon.

Sewerage Infrastructure Network.



There are no existing trunk sewerage infrastructure assets within the locality.

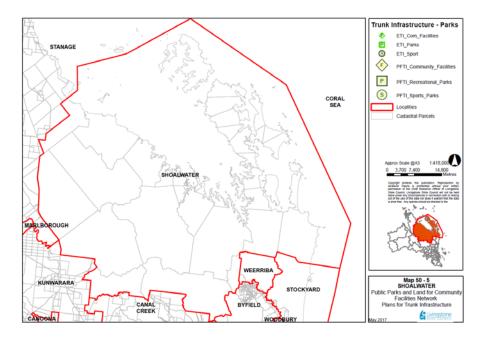
There is no Sewerage PFTI proposed within the locality during the planning horizon.



There are no trunk drainage systems which have been identified as relevant for development within the locality, at this time. The watercourses, drainage features and floodplains are significant natural watercourse features.

There is no Drainage PFTI proposed within the locality, at this time.

Community Facilities Infrastructure Network.



There are no trunk Community Facilities infrastructure which have been identified within the locality, at this time.

The rural locality relies on Community Facilities in the adjacent localities particularly Byfield, Yaamba, The Caves, and Rockhampton which are within reasonable distance.

There are no known future catchments either within or outside the locality within the planning horizon which will require future trunk community facilities infrastructure to be provided within the locality.

2.51 Stanage.

Town Planning.

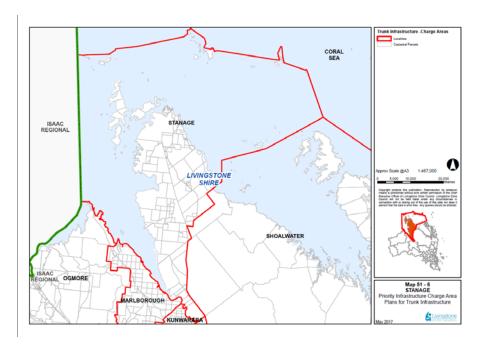
The locality has a total (land and sea) are of 334448 Ha and land area of 90708 Ha and currently 380 parcels of land. The land uses in the rural locality involve rural, village residential, rural residential fishing and recreation.

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There is two strategic travel Destinations within the locality being Stanage township and fishing access.

The strategic plan indicates: rural, township, waterways, nature conservation and open space.

The locality is not within the PIA.



Population Projections.

The ABS Census 2011(<u>SSC3</u>1533) recorded 564 persons for Place of Usual Residence however is part of a larger census data area.

The current PAM 2015 Estimated Resident Population is 213.

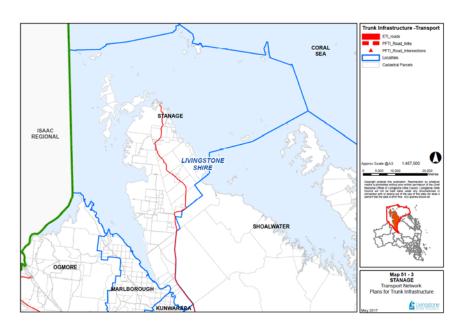
The PAM projections are

Year	Estimated Resident Population	Est Commercial GFA	Est Retail GFA	Est Industrial GFA
2011	213	0	458	0
2016	213	0	458	0
2021	213	0	458	0
2026	213	0	458	0
2031	213	0	458	0

Ultimate	307	0	458	0

This indicates no expected development growth within the locality.

Transport Infrastructure Network.



There is one existing trunk road transport infrastructure within the locality of which is either a State Road asset or a LSC managed asset. Pedestrian and bicycle trunk infrastructure within the locality has not been analysed.

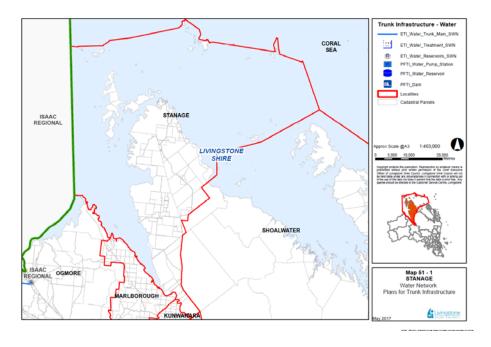
This existing trunk road infrastructure is serving origin catchments within Stanage locality and outside of Shoalwater plus ADF transport loadings.

The State Roads serving the area are considered to have adequate capacity for local development within the planning horizon.

LSC managed trunk road transport infrastructure roads within the locality being Stanage Bay Rd Ch 23350 – 96250 are considered to be overloaded by ADF transport but are of adequate capacity for local development within the planning horizon.

There are no Transport FTI's within the locality.

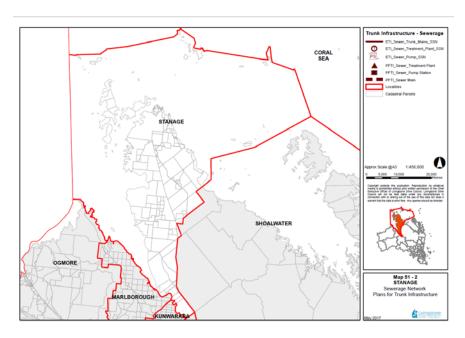
Water Supply Infrastructure Network.



There are no existing trunk water infrastructure assets within the locality.

There is no Water Supply PFTI proposed within the locality during the planning horizon.

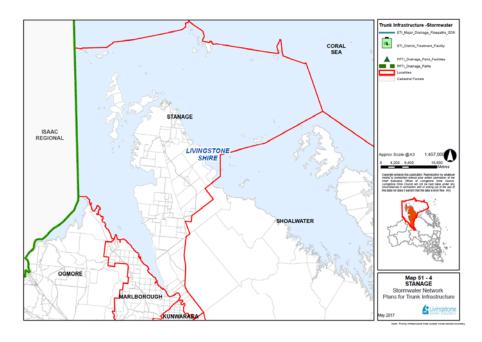
Sewerage Infrastructure Network.



There are no existing trunk sewerage infrastructure assets within the locality.

There is no Sewerage PFTI proposed within the locality during the planning horizon.

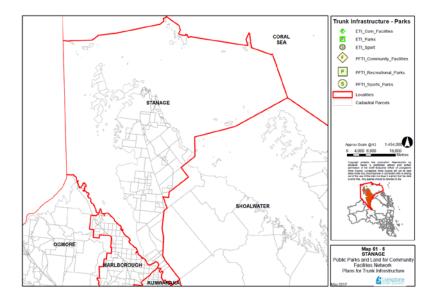
Drainage Infrastructure Network.



There are no trunk drainage systems which have been identified as relevant for development within the locality, at this time. The watercourses, drainage features and floodplains are significant natural watercourse features.

There is no Drainage PFTI proposed within the locality, at this time.

Community Facilities Infrastructure Network.



There are no trunk Community Facilities infrastructure which have been identified within the locality, at this time.

The rural locality relies on Community Facilities in the adjacent localities particularly Marlborough, Yaamba, The Caves, and Rockhampton which are within reasonable distance.

There are no known future catchments either within or outside the locality within the planning horizon which will require future trunk community facilities infrastructure to be provided within the locality.

2.52 Stockyard.

Town Planning.

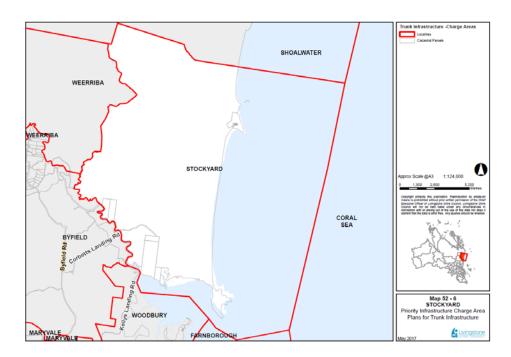
The locality has a total (land and sea) area of 30207 Ha and a land area of 15185 Ha, and currently 51 parcels of land. The land uses in the rural locality involve rural, rural residential and recreation.

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There is one strategic travel Destinations within the locality being Stockyard township and fishing access to adjacent beaches.

The strategic plan indicates: rural, defence, waterways, nature conservation and open space, nature corridor link.

The locality is not within the PIA.



Population Projections.

The ABS Census 2011(<u>SSC3</u>1540) recorded 11 persons for Place of Usual Residence however is part of a larger census data area.

The current PAM 2015 Estimated Resident Population is 81.

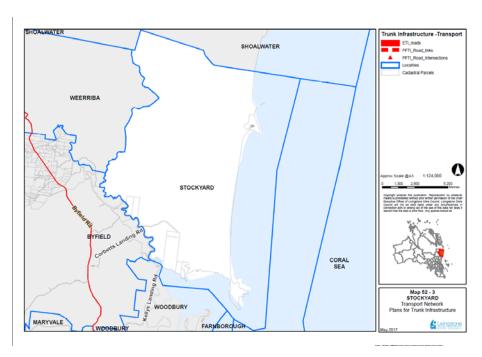
The PAM projections are

Year	Estimated Resident	Est	Est Retail GFA	Est Industrial GFA
	Population	Commercial GFA		
2011	81	0	0	0
2016	81	0	0	0
2021	81	0	0	0

2026	81	0	0	0
2031	81	0	0	0
Ultimate	81	0	0	0

This indicates no expected development growth within the locality.

Transport Infrastructure Network.



There is no existing trunk road transport infrastructure within the locality of which is either a State Road asset or a LSC managed asset. Pedestrian and bicycle trunk infrastructure within the locality has not been analysed.

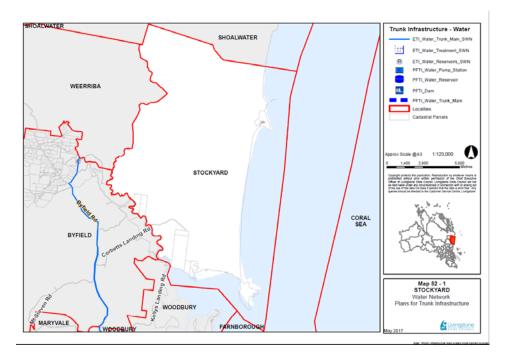
This existing non-trunk road infrastructure is serving origin catchments within Stockyard locality and outside of Shoalwater.

The State Roads serving the area are considered to have adequate capacity for local development within the planning horizon.

LSC managed non-trunk road transport infrastructure roads within the locality are considered adequate capacity for local development within the planning horizon.

There are no Transport FTI's within the locality.

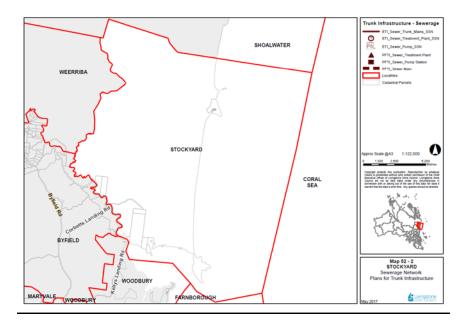
Water Supply Infrastructure Network.



There are no existing trunk water infrastructure assets within the locality.

There is no Water Supply PFTI proposed within the locality during the planning horizon.

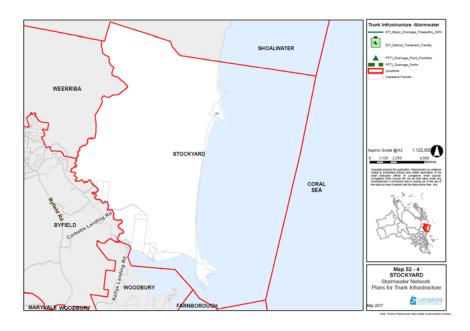
Sewerage Infrastructure Network.



There are no existing trunk sewerage infrastructure assets within the locality.

There is no Sewerage PFTI proposed within the locality during the planning horizon.

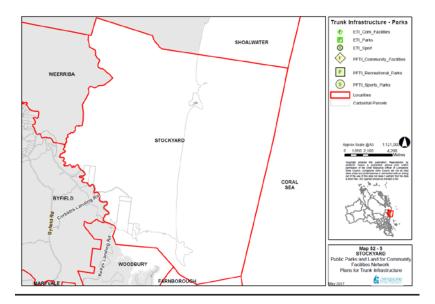
Drainage Infrastructure Network.



There are no trunk drainage systems which have been identified as relevant for development within the locality, at this time. The watercourses, drainage features and floodplains are significant natural watercourse features.

There is no Drainage PFTI proposed within the locality, at this time.

Community Facilities Infrastructure Network.



There are no trunk Community Facilities infrastructure which have been identified within the locality, at this time.

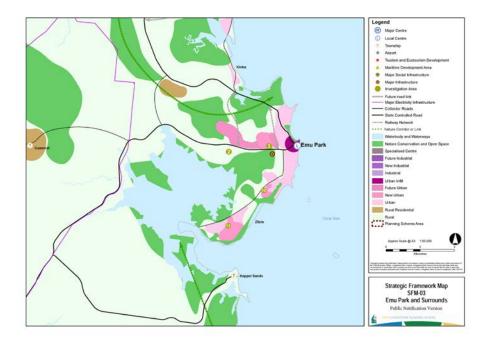
The rural locality relies on Community Facilities in the adjacent localities particularly Byfield and Yeppoon which are within reasonable distance.

There are no known future catchments either within or outside the locality within the planning horizon which will require future trunk community facilities infrastructure to be provided within the locality.

2.53 Tanby.

Town Planning.

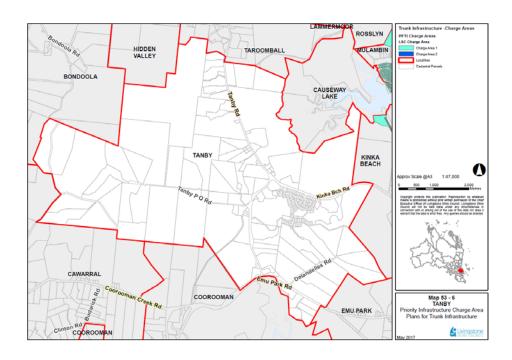
The locality has a land area of 4212.9 Ha and currently 265 parcels of land. The land uses in the developing locality involve rural, rural residential, urban, retail.



There is one strategic travel Destinations within the locality being: Tanby garden centre.

The strategic plan indicates: rural, rural residential, waterways, nature conservation and open space, and nature corridor links.

The locality is not within the PIA.



Population Projections.

The ABS Census 2011(<u>SSC3</u>1577) recorded 391 persons for Place of Usual Residence however is part of a larger census data area.

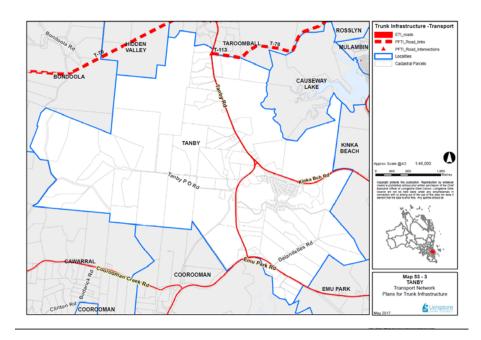
The current PAM 2015 Estimated Resident Population is 388.

The PAM projections are

Year	Estimated Resident	Est	Est Retail GFA	Est Industrial GFA
	Population	Commercial GFA		
2011	283	0	0	0
2016	388	0	0	0
2021	388	0	0	0
2026	388	0	0	0
2031	388	0	0	0
Ultimate	410	0	0	0

This indicates low expected development growth within the locality.

Transport Infrastructure Network.



There are three existing trunk road transport infrastructure within the locality of which is either a State Road asset or a LSC managed asset. Pedestrian and bicycle trunk infrastructure within the locality has not been analysed.

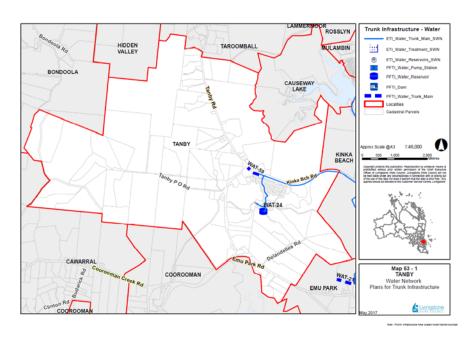
This existing trunk road infrastructure is serving origin catchments within Tanby locality and outside of the Capricorn Coast.

The State Roads of Tanby Rd Ch 5600 - 9350 and Kinka Beach Rd Ch 9350 - 11860 are considered to have adequate capacity for local development within the planning horizon.

LSC managed trunk road transport infrastructure roads within the locality being Tanby Rd Rural Major Collector Ch 0 – 3155 is considered adequate capacity for local development within the planning horizon.

There are no Transport PFTI's within the locality.

Water Supply Infrastructure Network.



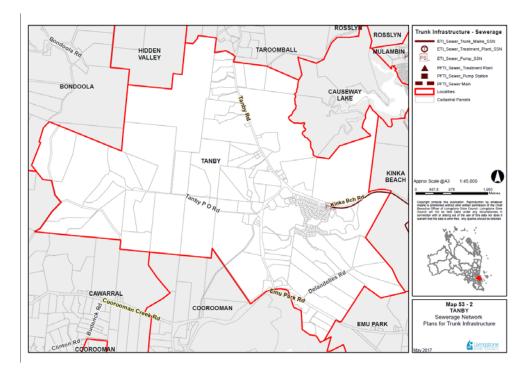
There are three existing trunk water infrastructure assets within the locality being: Kinka Beach Rd 375mm trunk, Kinka West HZ Water Booster Pump Station, and 200mm HZ trunk water main.

The LSC trunk water infrastructure is considered inadequate to meet the Tanby water demands within the planning horizon.

To meet Council's Desired Standards of Service will require three PFTI within the locality being:

Map No.	Network	Item ID	Project Name	Future Infrastructure Asset Description	Infrastructure Value (2015\$)	Estimated Year of Completion
53-1	Water Supply	WAT-24	Kinka West LZ Reservoir	Kinka West LZ water supply reservoir, 4 ML, new, MD design.	\$1,791,000	2026

Sewerage Infrastructure Network.

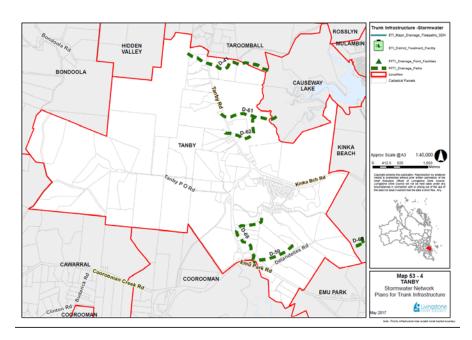


There are two existing trunk sewerage infrastructure assets within the locality being Kinka Beach Rd (west) sewage pump station and rising main.

The LSC trunk sewerage infrastructure is considered adequate to meet the Tanby sewage loadings within the planning horizon.

There is no Sewerage PFTI proposed within the locality during the planning horizon.

Drainage Infrastructure Network.



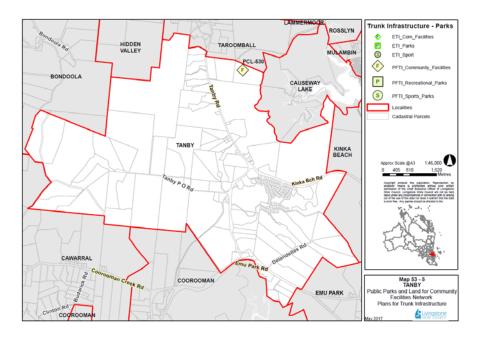
There are five trunk drainage systems which have been identified as relevant for development within the locality, at this time.

To meet Council's Desired Standards of Service will require five PFTI within the locality being:

Мар No.	Network	Item ID	Project Name	Future Infrastructure Asset Description	Infrastructure Value (2015\$)	Estimated Year of Completion
53-4	Drainage	D-41	Causeway lake tributary, Q100 Easement	Causeway lake tributary drainage feature, new, tenure to ensure connectivity, Q100 Easement, 2900m	\$290,000	2031
53-4	Drainage	D-61	Causeway lake tributary A, Q100 Easement	Causeway lake tributary A drainage feature, new, tenure to ensure connectivity, Q100 Easement, 1900m	\$190,000	2031
53-4	Drainage	D-62	Causeway lake tributary B, Q100 Easement	Causeway lake tributary B drainage feature, new, tenure to ensure connectivity, Q100 Easement, 1600m	\$160,000	2031
53-4	Drainage	D-50	Coorooman Creek tributary A, Q100 Easement	Coorooman Cr tributary A drainage feature, new, tenure to ensure connectivity, Q100 Easement, 1400m	\$140,000	2031

53-4	Drainage	D-68	Coorooman	Coorooman	\$234,000	2031
			Creek	Cr tributary B		
			tributary B,	drainage		
			Q100	feature, new,		
			Easement	tenure to		
				ensure		
				connectivity,		
				Q100		
				Easement,		
				2340m		

Community Facilities Infrastructure Network.



There are no trunk Community Facilities infrastructure which have been identified within the locality, at this time.

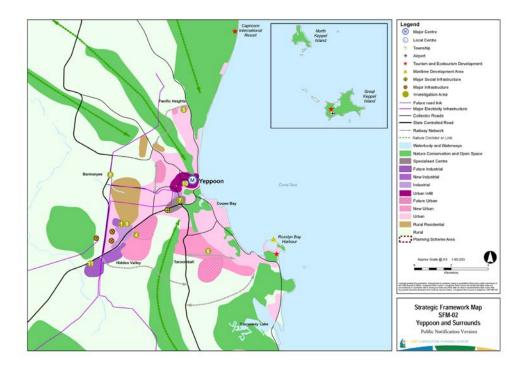
The developing locality relies on Community Facilities in the adjacent localities particularly Emu Park, and Yeppoon which are within reasonable distance.

There are no known future catchments either within or outside the locality within the planning horizon which will require future trunk community facilities infrastructure to be provided within the locality.

2.54 Taranganba.

Town Planning.

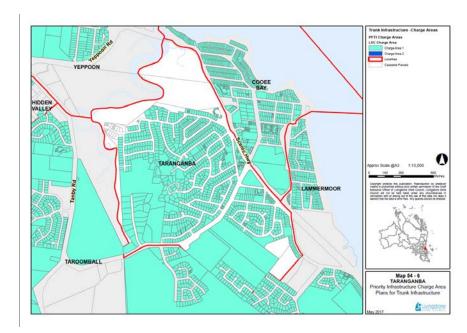
The locality has a land area of 209.7 Ha and currently 1075 parcels of land. The land uses in the developing locality involve urban, retail and utilities.



There are important strategic travel Destinations within the locality being Taranganba primary school, Cedar Park Shops, and Anglican Church which present critical loading on the transport network in Taranganba.

The strategic plan indicates: urban, waterways, nature conservation and open space, and nature corridor links.

The locality is within the PIA.



Population Projections.

The ABS Census 2011(<u>SSC3</u>1584) recorded 2355 persons for Place of Usual Residence however is part of a larger census data area.

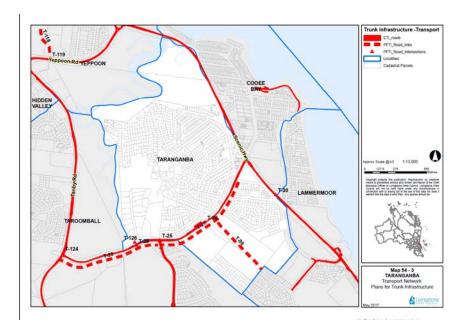
The current PAM 2015 Estimated Resident Population is 2816.

The PAM projections are

Year	Estimated Resident	Est	Est Retail GFA	Est Industrial GFA
	Population	Commercial GFA		
2011	2673	0	0	0
2016	2816	0	0	0
2021	2816	0	0	0
2026	2837	0	0	0
2031	2894	0	0	0
Ultimate	3593	0	0	0

This indicates some expected development growth within the locality.

Transport Infrastructure Network.



There is one existing trunk road transport infrastructure within the locality of which is either a State Road asset or a LSC managed asset. Pedestrian and bicycle trunk infrastructure within the locality has not been analysed although a PCNP is acknowledged.

This existing trunk road infrastructure is serving origin catchments within Taroomball locality and outside of the Capricorn Coast.

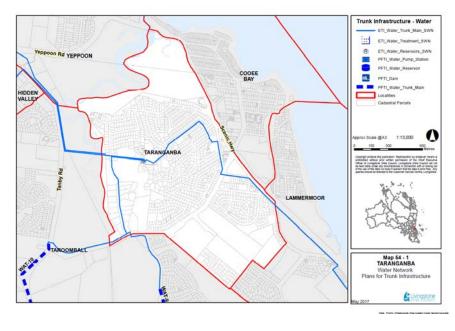
The State Roads serving the area are considered to have adequate capacity for local development within the planning horizon however further transport modelling is being undertaken to determine better planning.

LSC managed trunk road transport infrastructure roads within the locality being Taranganba Rd Urban Sub-Arterial Ch 0-1000 is considered inadequate capacity for local development within the planning horizon.

To meet Council's Desired Standards of Service will require eleven PFTI within the locality being:

Map No.	Network	Item ID	Project Name	Future Infrastructure Asset Description	Infrastructure Value (2015\$)	Estimated Year of Completion
54-3	Transport	T-27	Taranganba Rd upgrade	Upgrade, Urban Sub- Arterial, Ch 160 - 1125	\$4,382,000	2026
55-3	Transport	T-26	Intersection Taranganba – Frangipani	New, Urban Sub-Arterial, signalised.	2021	\$1,272,000
55-3	Transport	T-96	Frangipani Drive	Frangipani Drive, Urban Major Collector Ch 0 – 640.	2026	\$2,080,000

Water Supply Infrastructure Network.

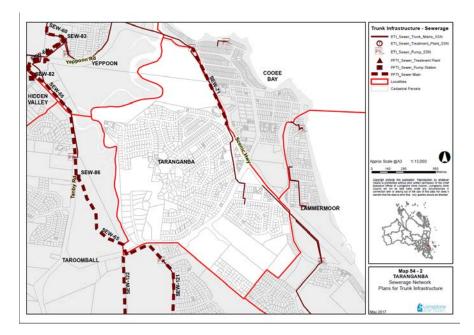


There are several existing trunk water infrastructure assets within the locality being: Taranganba Water Reservoir, Taranganba HZ Booster Pump Stn, 600mm and 450mm trunk main feeds to the Taranganba Water Reservoir, 375mm trunk water main feed to Emu Park, Carbeen Drive, Taranganba Rd and Carige Boulevard 375mm trunk water main.

The LSC trunk water infrastructure is considered adequate to meet the Taranganba and southern part of the Capricorn Coast Water Supply Scheme water demands within the planning horizon.

There is no Water Supply PFTI proposed within the locality during the planning horizon.

Sewerage Infrastructure Network.



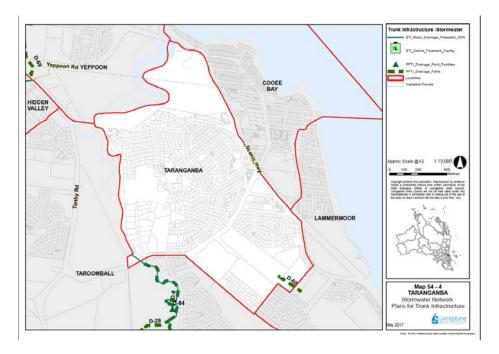
There are several existing trunk sewerage infrastructure assets within the locality being trunk gravity sewer mains generally along Scenic Hwy.

The LSC trunk sewerage infrastructure is considered adequate to meet the Taranganba sewage loadings within the planning horizon but inadequate to meet the sewage loadings from the southern localities of Lammermoor, Rosslyn, Mulambin and Causeway Lake.

To meet Council's Desired Standards of Service will require PFTI within the locality being:

Map No.	Network	Item ID	Project Name	Future Infrastructure Asset Description	Infrastructure Value (2015\$)	Estimated Year of Completion
54-3	Sewerage	SEW-71	Scenic Hwy 375mm trunk gravity upgrade	375mm trunk gravity, upgrade, WWF design, 750m	\$786,000	2021

Drainage Infrastructure Network.

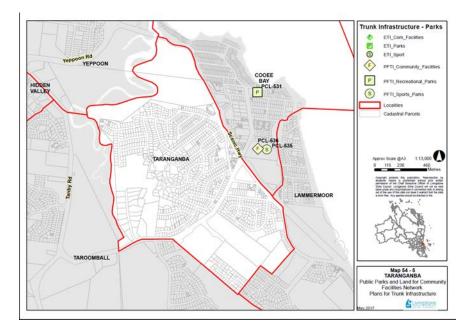


There are two trunk drainage systems which have been identified as relevant for development within the locality, at this time.

To meet Council's Desired Standards of Service will require PFTI within the locality being:

Мар No.	Network	Item ID	Project Name	Future Infrastructure Asset Description	Infrastructure Value (2015\$)	Estimated Year of Completion
54-4	Drainage	D-60	Bottlebrush Drive drainage feature Q100 Easement	new, tenure to ensure connectivity, Q100 Easement, 140m	\$14,000	2026

Community Facilities Infrastructure Network.



There are several trunk Community Facilities infrastructure which have been identified within the locality, at this time being parks and open space.

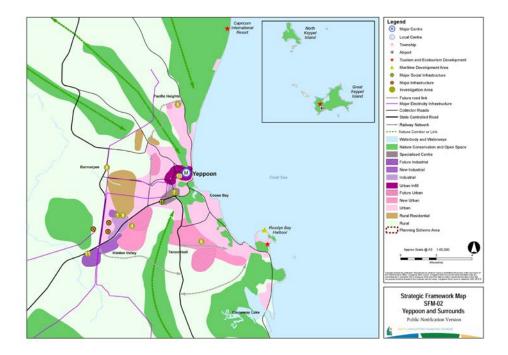
The developing locality relies on Community Facilities in the adjacent localities particularly Yeppoon which are within reasonable distance.

There are no known future catchments either within or outside the locality within the planning horizon which will require future trunk community facilities infrastructure to be provided within the locality.

2.55 Taroomball.

Town Planning.

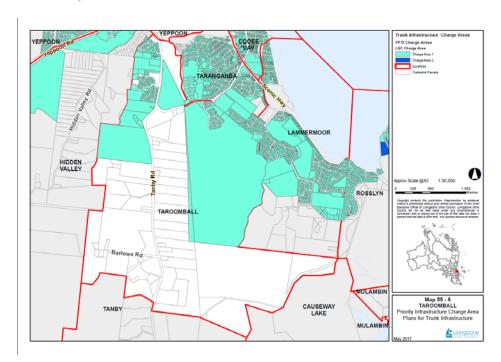
The locality has a land area of 1310.6 Ha and currently 458 parcels of land. The land uses in the developing locality involve rural, rural residential, urban.



There is no strategic travel Destinations within the locality however Taranganba primary school is directly adjacent and presents a critical loading on the transport network in Taroomball.

The strategic plan indicates: rural, rural residential, urban, new urban, future urban, waterways, nature conservation and open space, and nature corridor links.

The locality is within the PIA.



Population Projections.

The ABS Census 2011(<u>SSC3</u>1589) recorded 331 persons for Place of Usual Residence however is part of a larger census data area.

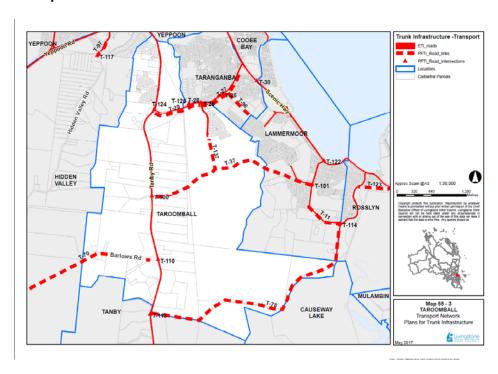
The current PAM 2015 Estimated Resident Population is 869.

The PAM projections are

Year	Estimated Resident	Est	Est Retail GFA	Est Industrial GFA
	Population	Commercial GFA		
2011	723	0	0	0
2016	869	0	0	0
2021	1107	0	0	0
2026	1854	0	0	0
2031	2462	0	0	0
Ultimate	2629	0	0	0

This indicates significant expected development growth within the locality.

Transport Infrastructure Network.



There are two existing trunk road transport infrastructure within the locality of which is either a State Road asset or a LSC managed asset. Pedestrian and bicycle trunk infrastructure within the locality has not been analysed although a PCNP is acknowledged.

This existing trunk road infrastructure is serving origin catchments within Taroomball locality and outside of the Capricorn Coast.

The State Roads of Tanby Rd Ch 440 - 6000 is considered to have adequate capacity for local development within the planning horizon however further transport modelling is being undertaken to determine better planning.

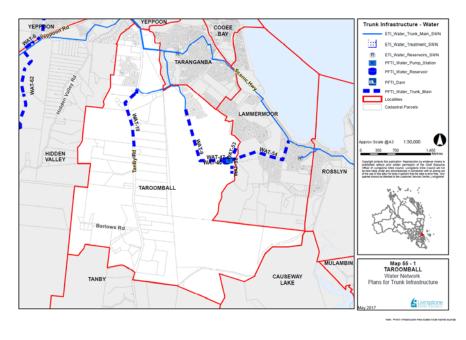
LSC managed trunk road transport infrastructure roads within the locality being Taranganba Rd Urban Sub-Arterial Ch 1000 - 2040 and Carige Boulevard Urban Major Collector Ch 0 - 800 are considered inadequate capacity for local development within the planning horizon.

To meet Council's Desired Standards of Service will require eleven PFTI within the locality being:

Map No.	Network	Item ID	Project Name	Future Infrastructure Asset Description	Infrastructure Value (2015\$)	Estimated Year of Completion
55-3	Transport	T-25	Intersection Taranganba – Carige Boulevard upgrade	Intersection Taranganba- Carige upgrade, Urban Sub- Arterial, signalised	\$1,791,000	2026
55-3	Transport	T-28	Bridge/Culvert Stage 2 Taranganba Rd – Ross Cr	Bridge/Culvert Stage 2 Taranganba – Ross Cr, 4 lanes, upgrade, Urban Sub- Arterial.	2031	\$4,541,000
55-3	Transport	T-29	Taranganba Rd upgrade	Taranganba Rd upgrade, Urban Sub- Arterial 4 lane, Ch 1125 – 2040.	2031	\$7,917,000
55-3	Transport	T-124	Intersection Taranganba – Tanby, upgrade	Intersection Taranganba- Tanby, upgrade, non- signalised	2021	\$1,280,000
55-3	Transport	T-126	Bridge/Culvert Stage 1, Taranganba Rd – Ross Creek	Bridge/Culvert Stage 1 Taranganba – Ross Cr, 2 lanes, new, Urban Sub- Arterial.	2021	\$4,789,000

55-3	Transport	T-37	Chandler Rd	Chandler Rd, new, Urban major Collector, Ch 970 - 3100	2026	\$1,572,000
55-3	Transport	T-100	Intersection Chandler – Tanby	Intersection Chandler – Tanby, new, Rural Major Collector, non- signalised	\$1,212,000	2031
55-3	Transport	T-70	Coucom Rd	Coucom Rd, new, Rural Major Collector, Ch 0 - 5200	\$3,845,000	2031
55-3	Transport	T-100	Intersection Coucom – Tanby Rd	Intersection Coucom – Tanby, new, Rural major Collector	\$1,212,000	2031
55-3	Transport	T-78	Mulambin Rd	Mulambin Rd, Rural major Collector, new, Ch 1965 – 6000	\$3,222,000	2031
55-3	Transport	T-113	Intersection Mulambin - Tanby	Intersection Mulambin – Tanby, new, Rural Major Collector, non- signal	\$1,212,000	2016

Water Supply Infrastructure Network.



There are four existing trunk water infrastructure assets within the locality being: Tanby Rd 750mm trunk, Tanby Rd 450mm trunk, Taranganba Rd 375mm trunk water main, and Carige Boulevard 375mm trunk water main.

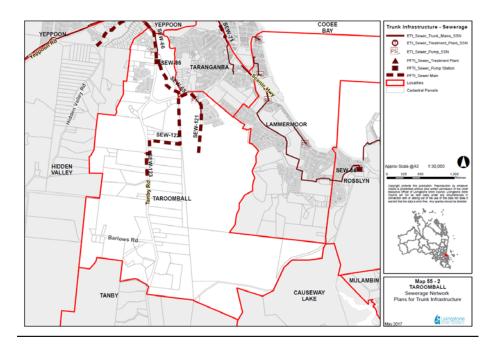
The LSC trunk water infrastructure is considered inadequate to meet the Taroomball water demands within the planning horizon.

To meet Council's Desired Standards of Service will require three PFTI within the locality being:

Map No.	Network	Item ID	Project Name	Future Infrastructure Asset Description	Infrastructure Value (2015\$)	Estimated Year of Completion
55-1	Water Supply	WAT-10	Tanby Rd 375mm trunk water main	Tanby Rd 375mm trunk water, new, Taroomball LZ, MD Design, 1620m.	\$1,365,000	2021
55-1	Water Supply	WAT-9	Carige Boulevard 375mm trunk water main	Tanby Rd 375mm trunk water, new, Taroomball LZ, MD Design, 1600m.	\$987,000	2031
55-1	Water Supply	WAT-46	Taroomball LZ Reservoir	Taroomball LZ water supply reservoir, 4 ML, new, MD design.	\$1,770,000	2031

55-1	Water Supply	WAT-47	Taroomball HZ Booster Pump station	Taroomball HZ Booster Pump station, new, tenure, building, pumps, pipes, elec, generator, rechlor, MH design.	\$470,000	2031
55-1	Water Supply	WAT-52	Taroomball HZ, 200mm trunk main, south	Taroomball HZ 200mm trunk, south, MH design, 270m nom.	\$117,000	2031
55-1	Water Supply	WAT-53	Taroomball HZ, 200mm trunk main, north	Taroomball HZ 200mm trunk, north, MH design, 270m nom.	\$117,000	2031

Sewerage Infrastructure Network.



There are three existing trunk sewerage infrastructure assets within the locality being Carige Boulevard 300mm gravity trunk and Tanby Rd sewage pump station and rising main.

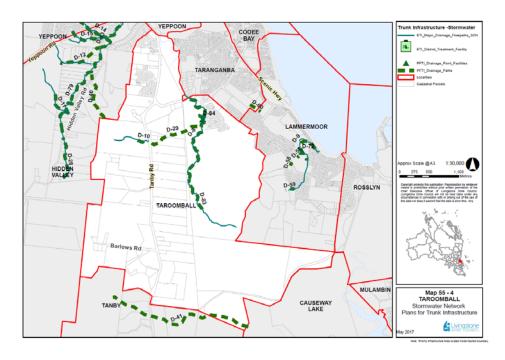
The LSC trunk sewerage infrastructure is considered inadequate to meet the Taroomball sewage loadings within the planning horizon.

To meet Council's Desired Standards of Service will require five PFTI within the locality being:

Map No.	Network	Item ID	Project Name	Future Infrastructure Asset Description	Infrastructure Value (2015\$)	Estimated Year of Completion

55-3	Sewerage	SEW-65	Ross Cr 375mm trunk gravity	375mm trunk gravity, new, WWF design, 1270m	\$996,000	2021
55-3	Sewerage	SEW-66	Tanby Rd South 200mm Rising Main	200mm trunk rising main, WWF design, 1600m	\$941,000	2021
55-3	Sewerage	SEW-86	Tanby Rd sewage pump station	New, 1 well as Stage 1, 2 well layout, WWF design.	\$794,000	2026
55-3	Sewerage	SEW-121	Carige Boulevard 300mm trunk gravity	300mm trunk gravity, WWF design, 1120m	\$569,000	2021
55-3	Sewerage	SEW-122	Taroomball 300 trunk gravity	300mm trunk gravity, WWF design, 1840m.	\$936,000	2021
55-3	Sewerage	SEW-123	Tanby Rd 225mm trunk gravity	225mm trunk gravity, WWF design, 530m.	\$241,000	2021

Drainage Infrastructure Network.

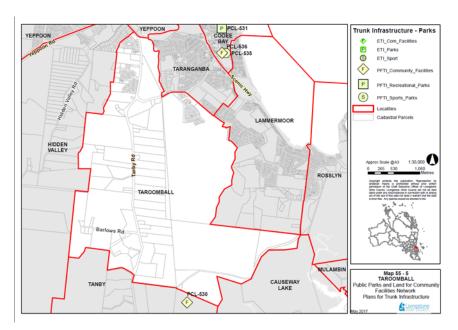


There is fur trunk drainage system which have been identified as relevant for development within the locality, at this time.

To meet Council's Desired Standards of Service will require five PFTI within the locality being:

Мар No.	Network	Item ID	Project Name	Future Infrastructure Asset Description	Infrastructure Value (2015\$)	Estimated Year of Completion
55-4	Drainage	D-8	Ross Cr watercourse floodplain	new, tenure to ensure connectivity, Q100 Easement, 2400m	\$240,000	2031
55-4	Drainage	D-10	Tanby Rd drainage feature, Q100 Easement	new, tenure to ensure connectivity, Q100 Easement, 220m	\$22,000	2026
55-4	Drainage	D-29	Ross Cr- Tanby Rd drainage feature, Q100 Easement	new, tenure to ensure connectivity, Q100 Easement, 1100m	\$110,000	2021

Community Facilities Infrastructure Network.



There are no trunk Community Facilities infrastructure which have been identified within the locality, at this time.

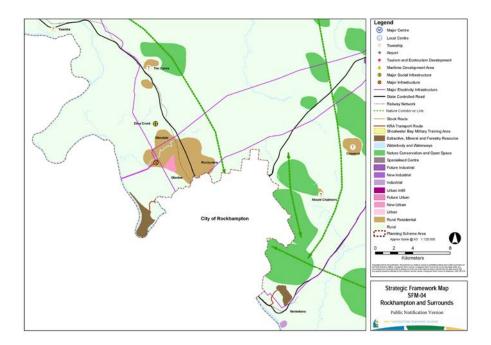
The developing locality relies on Community Facilities in the adjacent localities particularly Emu Park, and Yeppoon which are within reasonable distance.

There are no known future catchments either within or outside the locality within the planning horizon which will require future trunk community facilities infrastructure to be provided within the locality.
- 280-

2.56 The Caves.

Town Planning.

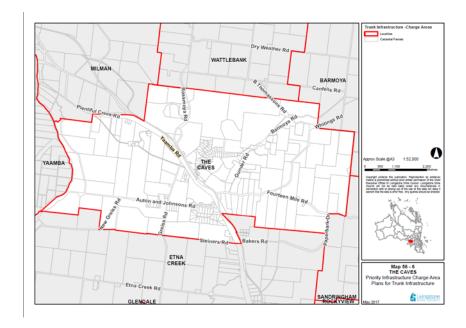
The locality has a land area of 4517.5 Ha and currently 349 parcels of land. The land uses in the rural locality involve rural, village residential, rural residential and mining.



There are several strategic travel Destinations within the locality being The Caves township, Caves primary school, churches, hotel, parks, showgrounds, pony club, Olsen Caves and quarries.

The strategic plan indicates: rural, township, extractive industries, waterways, nature conservation and open space, and nature corridor link.

The locality is not within the PIA.



Population Projections.

The ABS Census 2011(SSC31607) recorded 703 persons for Place of Usual Residence.

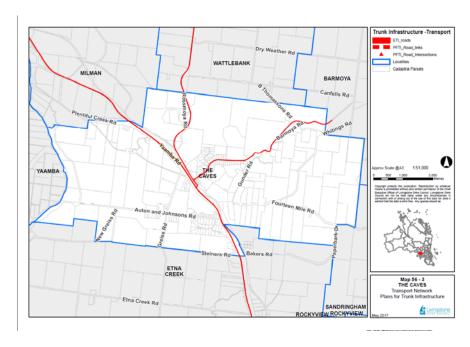
The current PAM 2015 Estimated Resident Population is 669.

The PAM projections are

Year	Estimated Resident	Est	Est Retail GFA	Est Industrial GFA
	Population	Commercial GFA		
2011	669	0	1972	2256
2016	696	0	1972	2256
2021	696	0	1972	2256
2026	696	0	1972	2256
2031	696	0	1972	2256
Ultimate	1066	0	1972	2256

This indicates some expected development growth within the locality.

Transport Infrastructure Network.



There are three existing trunk road transport infrastructure within the locality of which is either a State Road asset or a LSC managed asset. Pedestrian and bicycle trunk infrastructure within the locality has not been analysed.

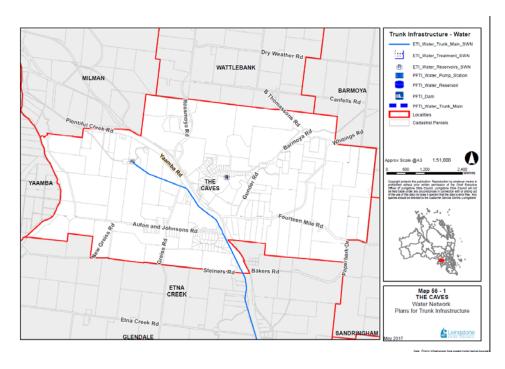
This existing trunk road infrastructure is serving origin catchments within The Caves locality and outside of Barmoya, Wattlebank, and northern part of Livingstone Shire plus State and National transport.

The State Roads of Yaamba Rd Ch 22090 - 28150 is considered to have adequate capacity for local development within the planning horizon.

LSC managed trunk road transport infrastructure roads within the locality being Rossmoya Rd Ch 0-3720 and Barmoya Rd Ch 0-5450 are considered adequate capacity for local development within the planning horizon.

There are no Transport FTI's within the locality.

Water Supply Infrastructure Network.

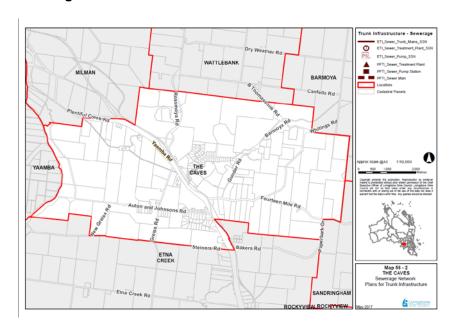


There are four existing trunk water infrastructure assets within the locality being Mt Charlton Water Supply reservoir, 600mm trunk water main connecting Mt Charlton to Rockhampton, Barmoya Rd Booster Pump Station and Caves HL Water Reservoirs.

The LSC trunk water assets are considered adequate capacity for local development within the planning horizon.

There is no Water Supply PFTI proposed within the locality during the planning horizon.

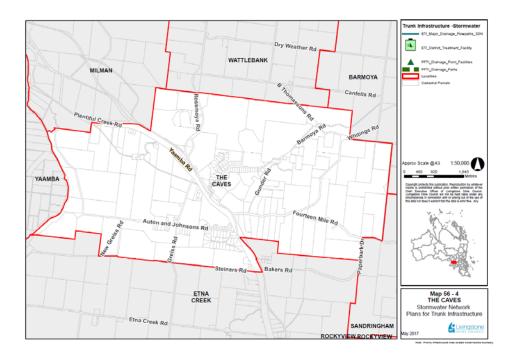
Sewerage Infrastructure Network.



There are no existing trunk sewerage infrastructure assets within the locality.

There is no Sewerage PFTI proposed within the locality during the planning horizon.

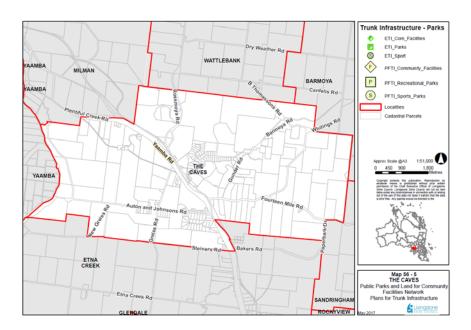
Drainage Infrastructure Network.



There are no trunk drainage systems which have been identified as relevant for development within the locality, at this time. The Fitzroy River, watercourses, drainage features and floodplains are significant natural watercourse features.

There is no Drainage PFTI proposed within the locality, at this time.

Community Facilities Infrastructure Network.



There are no trunk Community Facilities infrastructure which have been identified within the locality, at this time.

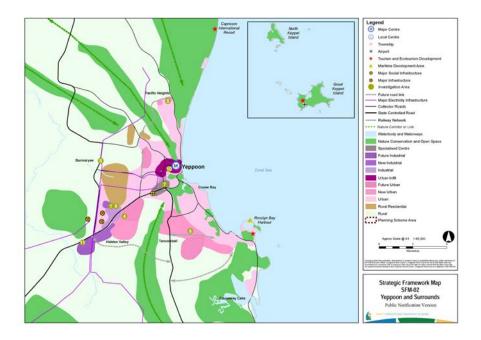
The rural locality relies on Community Facilities in the adjacent localities particularly Rockhampton which are within reasonable distance.

There are no known future catchments either within or outside the locality within the planning horizon which will require future trunk community facilities infrastructure to be provided within the locality.

2.57 The Keppels.

Town Planning.

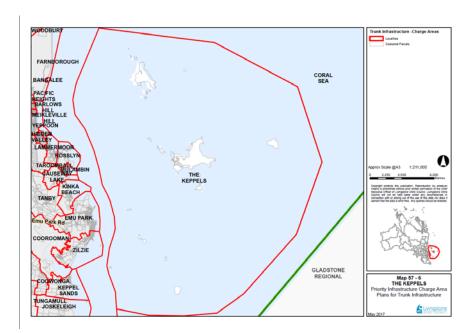
The remote islands locality has a total (land and sea) area of 102898 Ha and a land area of 2044 Ha and currently 99 parcels of land. The land uses in the remote islands locality involve rural, recreation, tourism, fishing, national parks.



There is several strategic travel Destinations within the locality being Great Keppel Island and several smaller islands.

The strategic plan indicates: tourism, ecotourism, rural, waterways, nature conservation and open space.

The locality is not within the PIA.



Population Projections.

The ABS Census 2011(<u>SSC3</u>1614) recorded 66 persons for Place of Usual Residence.

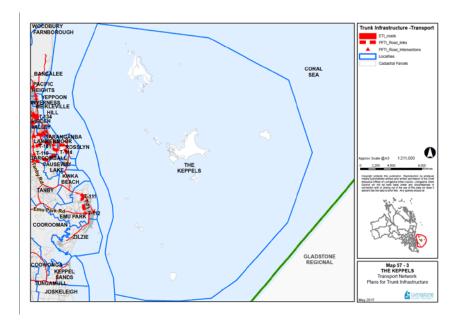
The current PAM 2015 Estimated Resident Population is 51.

The PAM projections are

Year	Estimated Resident	Est	Est Retail GFA	Est Industrial GFA
	Population	Commercial GFA		
2011	51	0	0	0
2016	51	0	0	0
2021	51	0	0	0
2026	51	0	0	0
2031	51	0	0	0
Ultimate	51	0	0	0

This PAMv2 indicates no expected development growth within the locality however significant development is proposed subject to finances.

Transport Infrastructure Network.



There is no existing trunk road transport infrastructure within the locality of which is either a State Road asset or a LSC managed asset. Pedestrian and bicycle trunk infrastructure within the locality has not been analysed.

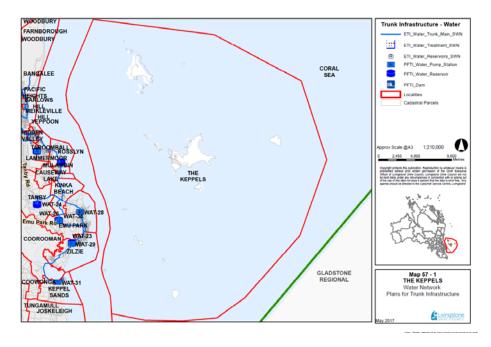
This existing non-trunk road infrastructure is serving origin catchments within the locality.

The State Roads serving the area are considered to have adequate capacity for local development within the planning horizon.

LSC managed non-trunk road transport infrastructure roads within the locality are considered adequate capacity for local development within the planning horizon.

There are no Transport FTI's within the locality.

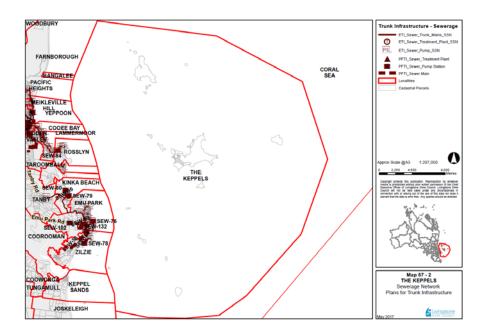
Water Supply Infrastructure Network.



There are no existing trunk water infrastructure assets within the locality.

There is no Water Supply PFTI proposed within the locality during the planning horizon.

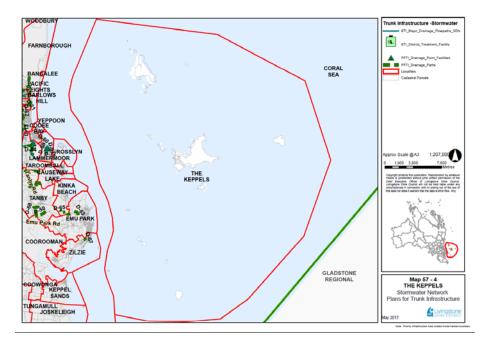
Sewerage Infrastructure Network.



There are no existing trunk sewerage infrastructure assets within the locality.

There is no Sewerage PFTI proposed within the locality during the planning horizon.

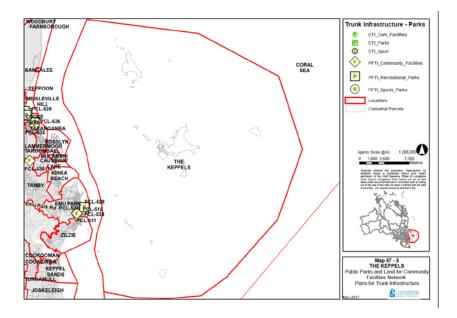
Drainage Infrastructure Network.



There are no trunk drainage systems which have been identified as relevant for development within the locality, at this time. The watercourses, drainage features and floodplains are significant natural watercourse features.

There is no Drainage PFTI proposed within the locality, at this time.

Community Facilities Infrastructure Network.



There are no trunk Community Facilities infrastructure which have been identified within the locality, at this time.

The remote islands locality relies on Community Facilities in the adjacent localities particularly Yeppoon and Emu Park which are a remote access distance.

There are no known future catchments either within or outside the locality within the planning horizon which will require future trunk community facilities infrastructure to be provided within the locality.

2.58 Thompson Point.

Town Planning.

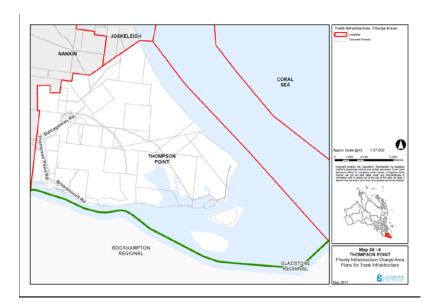
The locality has a total (land and sea) area of 25122 Ha and a land area of 11412 Ha and currently 106 parcels of land. The land uses in the rural locality involve rural, recreation and fishing access to the Fitzroy River estuary.

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There is one strategic travel Destinations within the locality being the Thompson Point boat ramp.

The strategic plan indicates: rural, waterways, nature conservation and open space, and nature corridor link.

The locality is not within the PIA.



Population Projections.

The ABS Census 2011(<u>SSC3</u>1203) recorded 281 persons for Place of Usual Residence however is part of a larger census data area.

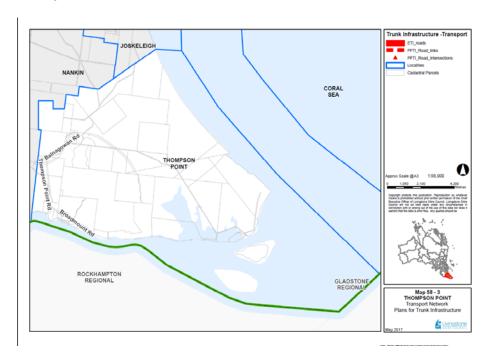
The current PAM 2015 Estimated Resident Population is 13.

The PAM projections are

Year	Estimated Resident	Est	Est Retail GFA Est Indust	
	Population	Commercial GFA		
2011	13	0	0	0
2016	13	0	0	0
2021	13	0	0	0
2026	13	0	0	0
2031	13	0	0	0
Ultimate	13	0	0	0

This indicates no expected development growth within the locality.

Transport Infrastructure Network.



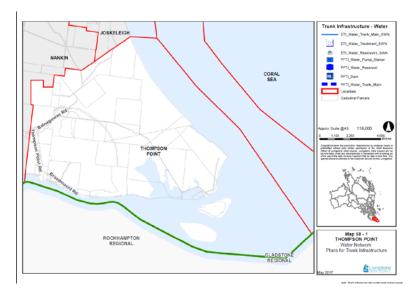
There is no existing trunk road transport infrastructure within the locality of which is either a State Road asset or a LSC managed asset. Pedestrian and bicycle trunk infrastructure within the locality has not been analysed.

This existing non-trunk road infrastructure is serving origin catchments within the locality. and outside of Rockhampton for access to the boat ramp.

The State Roads serving the area are considered to have adequate capacity for local development within the planning horizon.

LSC managed non-trunk road transport infrastructure roads within the locality are considered adequate capacity for local development within the planning horizon.

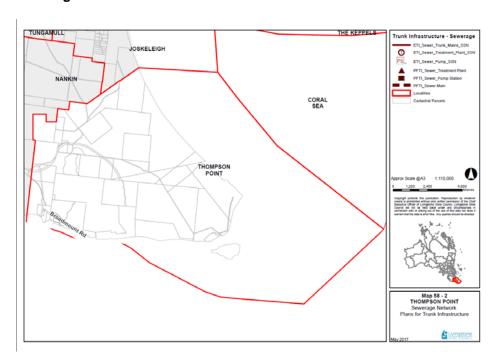
There are no Transport FTI's within the locality.



There are no existing trunk water infrastructure assets within the locality.

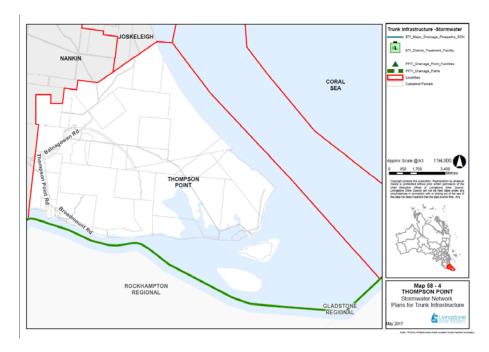
There is no Water Supply PFTI proposed within the locality during the planning horizon.

Sewerage Infrastructure Network.



There are no existing trunk sewerage infrastructure assets within the locality.

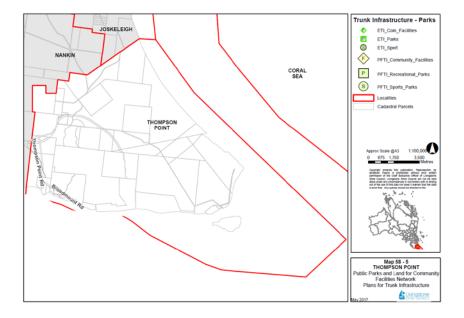
There is no Sewerage PFTI proposed within the locality during the planning horizon.



There are no trunk drainage systems which have been identified as relevant for development within the locality, at this time. The Fitzroy River, watercourses, drainage features and floodplains are significant natural watercourse features.

There is no Drainage PFTI proposed within the locality, at this time.

Community Facilities Infrastructure Network.



There are no trunk Community Facilities infrastructure which have been identified within the locality, at this time.

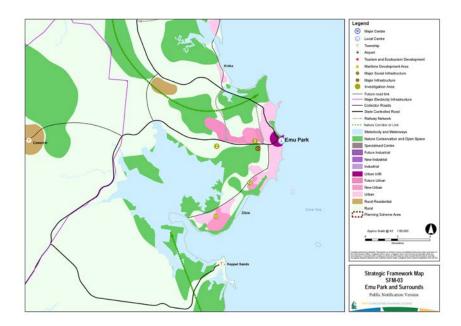
The rural locality relies on Community Facilities in the adjacent localities particularly Rockhampton which are within reasonable distance.

There are no known future catchments either within or outside the locality within the planning horizon which will require future trunk community facilities infrastructure to be provided within the locality.

2.59 Tungamull.

Town Planning.

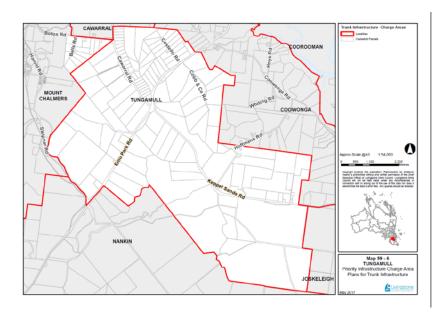
The locality has a land area of 5520.5 Ha and currently 166 parcels of land. The land uses in the rural locality involve rural, rural residential and mining.



There is no strategic travel Destinations (shops, schools, mining, industry) within the locality.

The strategic plan indicates: rural, waterways, nature conservation and open space, nature corridor link.

The locality is not within the PIA.



Population Projections.

The ABS Census 2011(<u>SSC3</u>1677) recorded 363 persons for Place of Usual Residence.

The current PAM 2015 Estimated Resident Population is 383.

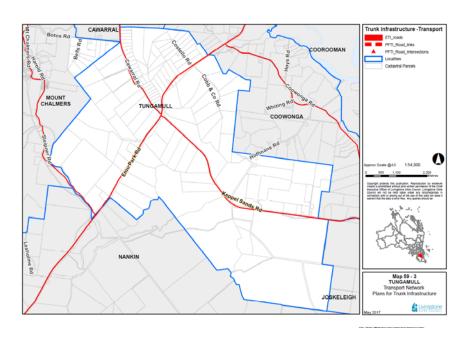
The PAM projections are

- 293-

Year	Estimated	Est	Est Retail GFA	Est Industrial GFA	
	Resident Population	Commercial GFA			
2011	383	0	0	0	
2016	383	0	0	0	
2021	383	0	0	0	
2026	383	0	0	0	
2031	383	0	0	0	
Ultimate	383	0	0	0	

This indicates no expected development growth within the locality.

Transport Infrastructure Network.



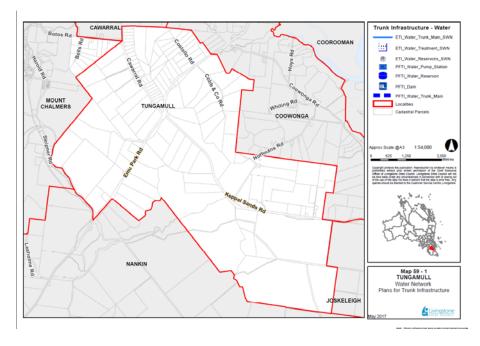
There are three existing trunk road transport infrastructure within the locality of which is either a State Road asset or a LSC managed asset. Pedestrian and bicycle trunk infrastructure within the locality has not been analysed although a possible future Rail Trail is acknowledged.

This existing trunk road infrastructure is serving origin catchments within Tungamull locality and outside of Keppel Sands, Joskeleigh, Coowonga, and others.

The State Roads of Emu Park Rd Ch 21500 - 27880 and Keppel Sands Rd Ch 0 - 7690 are considered to have adequate capacity for local development within the planning horizon.

LSC managed trunk road transport infrastructure roads within the locality being Cawarral Rd Rural Sub-Arterial Ch 0 – 3100 is considered adequate capacity for local development within the planning horizon.

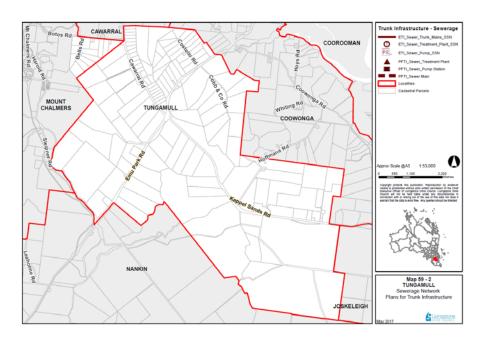
There are no Transport FTI's within the locality.



There are no existing trunk water infrastructure assets within the locality.

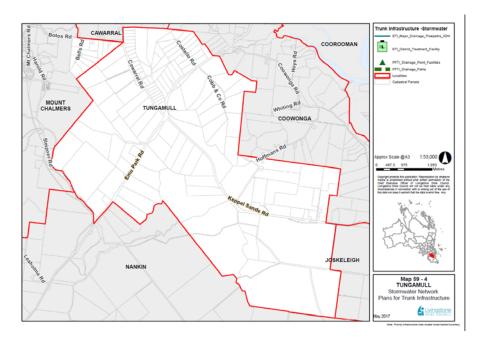
There is no Water Supply PFTI proposed within the locality during the planning horizon.

Sewerage Infrastructure Network.



There are no existing trunk sewerage infrastructure assets within the locality.

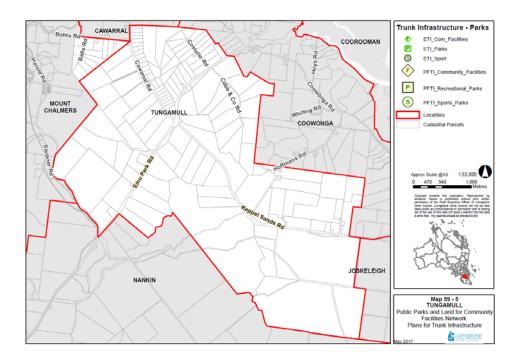
There is no Sewerage PFTI proposed within the locality during the planning horizon.



There are no trunk drainage systems which have been identified as relevant for development within the locality, at this time. The Fitzroy River, watercourses, drainage features and floodplains are significant natural watercourse features.

There is no Drainage PFTI proposed within the locality, at this time.

Community Facilities Infrastructure Network.



There are no trunk Community Facilities infrastructure which have been identified within the locality, at this time.

The rural locality relies on Community Facilities in the adjacent localities particularly Emu Park and Rockhampton which are within reasonable distance.

There are no known future catchments either within or outside the locality within the planning horizon which will require future trunk community facilities infrastructure to be provided within the locality.

2.60 Wattlebank.

Town Planning.

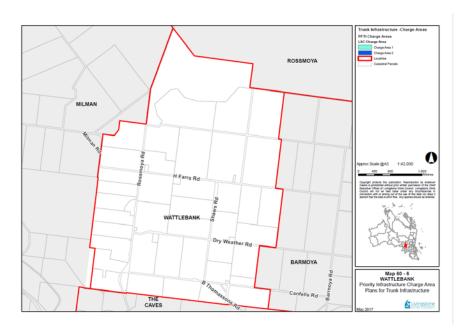
The locality has a land area of 3108 Ha and currently 52 parcels of land. The land uses in the rural locality involve rural.

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There is no strategic travel Destinations (shops, schools, mining, industry) within the locality.

The strategic plan indicates: rural, waterways, nature conservation and open space, and nature corridor link.

The locality is not within the PIA.



Population Projections.

The ABS Census 2011(<u>SSC3</u>0109) recorded 230 persons for Place of Usual Residence however is part of a larger census data area.

The current PAM 2015 Estimated Resident Population is 54.

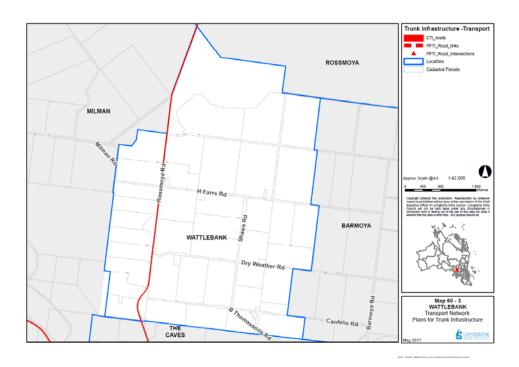
The PAM projections are

Year	Estimated Resident Population	Est Commercial GFA	Est Retail GFA	Est Industrial GFA
2011	54	0	0	0
2016	54	0	0	0
2021	54	0	0	0
2026	54	0	0	0
2031	54	0	0	0

Ultimate	54	0	0	0

This indicates no expected development growth within the locality.

Transport Infrastructure Network.



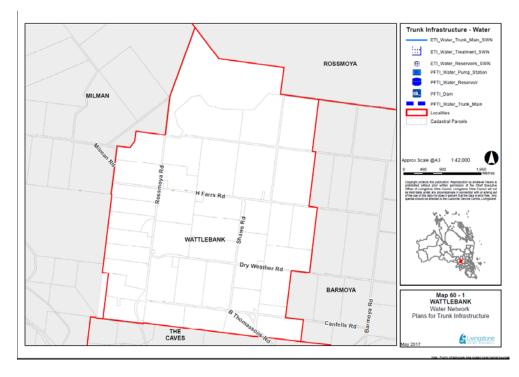
There is one existing trunk road transport infrastructure within the locality of which is either a State Road asset or a LSC managed asset. Pedestrian and bicycle trunk infrastructure within the locality has not been analysed.

This existing trunk road infrastructure is serving origin catchments within Wattlebank locality and outside of Rossmoya, and others.

The State Roads serving the area are considered to have adequate capacity for local development within the planning horizon.

LSC managed trunk road transport infrastructure roads within the locality being Rossmoya Rd Rural major Collector Ch 3720 – 8620 is considered adequate capacity for local development within the planning horizon.

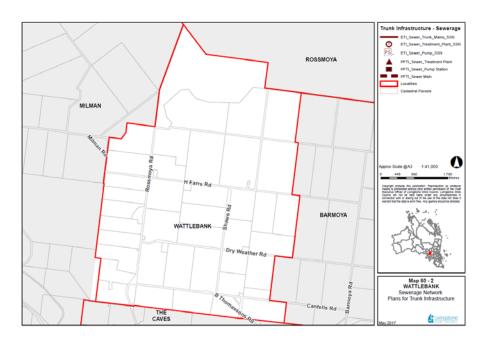
There are no Transport FTI's within the locality.



There are no existing trunk water infrastructure assets within the locality.

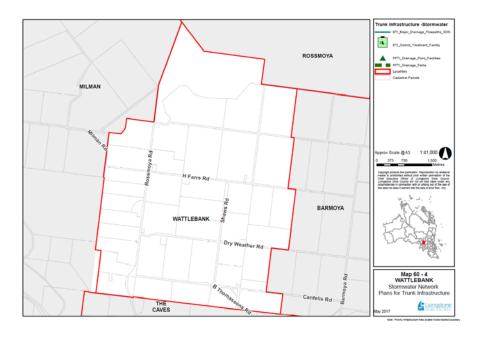
There is no Water Supply PFTI proposed within the locality during the planning horizon.

Sewerage Infrastructure Network.



There are no existing trunk sewerage infrastructure assets within the locality.

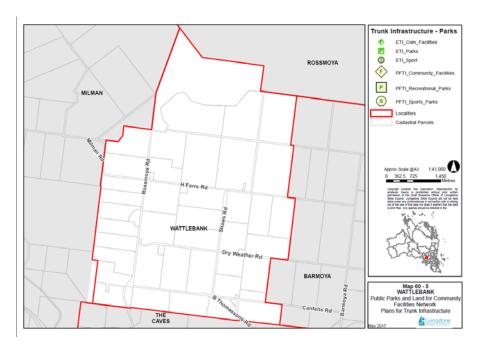
There is no Sewerage PFTI proposed within the locality during the planning horizon.



There are no trunk drainage systems which have been identified as relevant for development within the locality, at this time. The Fitzroy River, watercourses, drainage features and floodplains are significant natural watercourse features.

There is no Drainage PFTI proposed within the locality, at this time.

Community Facilities Infrastructure Network.



There are no trunk Community Facilities infrastructure which have been identified within the locality, at this time.

The rural locality relies on Community Facilities in the adjacent localities particularly Yaamba, The Caves, and Rockhampton which are within reasonable distance.

There are no known future catchments either within or outside the locality within the planning horizon which will require future trunk community facilities infrastructure to be provided within the locality.

2.61 Weerriba.

Town Planning.

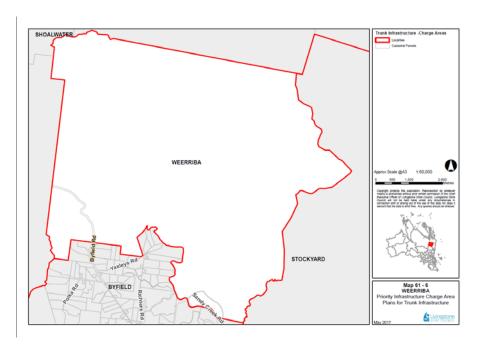
The locality has a land area of 8500.8 Ha and currently 3 parcels of land. The land uses in the rural locality involve rural, defence, timber.

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There is one strategic travel Destination within the locality being Shoalwater ADF facilities.

The strategic plan indicates: defence, timber industries, waterways, nature conservation and open space, and nature corridor links.

The locality is not within the PIA.



Population Projections.

The ABS Census 2011(<u>SSC3</u>1540) recorded 11 persons for Place of Usual Residence however is part of a larger census data area.

The current PAM 2015 Estimated Resident Population is nil.

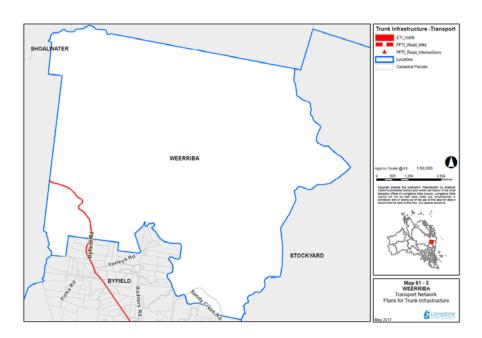
The PAM projections are

Year	Estimated Resident Population	Est Commercial GFA	Est Retail GFA	Est Industrial GFA
2011	0	0	0	0
2016	0	0	0	0
2021	0	0	0	0
2026	0	0	0	0

2031	0	0	0	0
Ultimate	0	0	0	0

This indicates no expected development growth within the locality.

Transport Infrastructure Network.



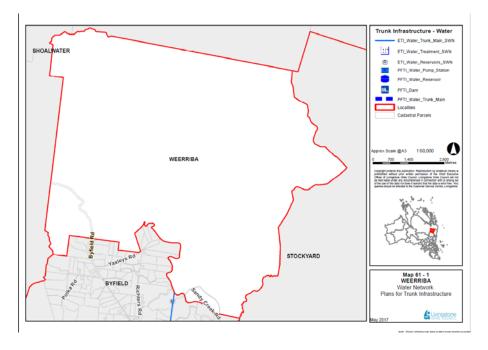
There is one existing trunk road transport infrastructure within the locality of which is either a State Road asset or a LSC managed asset. Pedestrian and bicycle trunk infrastructure within the locality has not been analysed.

This existing trunk road infrastructure is serving origin catchments within Weerriba locality and outside of Shoalwater for ADF transport.

The State Roads of Byfield Rd Ch 44950 – 48300 is considered overloaded by ADF transport but to have adequate capacity for local development within the planning horizon.

LSC managed non-trunk road transport infrastructure roads within the locality are considered adequate capacity for local development within the planning horizon.

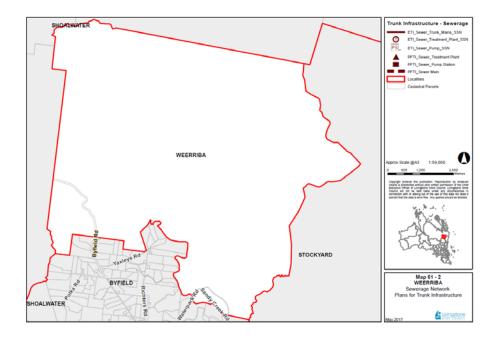
There are no Transport PFTI's within the locality.



There is no existing trunk water infrastructure assets within the locality.

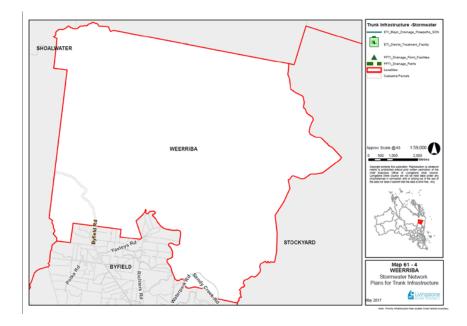
There is no Water Supply PFTI proposed within the locality during the planning horizon.

Sewerage Infrastructure Network.



There are no existing trunk sewerage infrastructure assets within the locality.

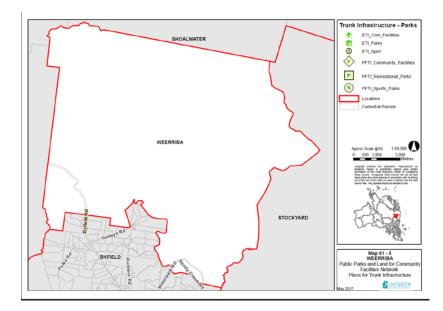
There is no Sewerage PFTI proposed within the locality during the planning horizon.



There are no trunk drainage systems which have been identified as relevant for development within the locality, at this time. The watercourses, drainage features and floodplains are significant natural watercourse features.

There is no Drainage PFTI proposed within the locality, at this time.

Community Facilities Infrastructure Network.



There are no trunk Community Facilities infrastructure which have been identified within the locality, at this time.

The rural locality relies on Community Facilities in the adjacent localities particularly Byfield and Yeppoon which are within reasonable distance.

There are no known future catchments either within or outside the locality within the planning horizon which will require future trunk community facilities infrastructure to be provided within the locality.

2.62 Woodbury.

Town Planning.

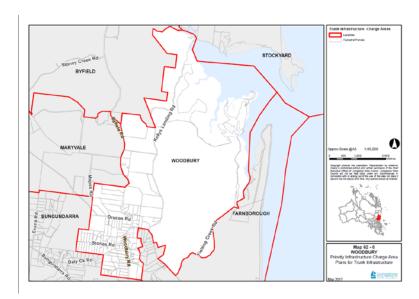
The locality has a land area of 10532.2 Ha and currently 194 parcels of land. The land uses in the developing locality involve rural, rural residential, utilities, fishing and recreation.

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There are several strategic travel Destinations within the locality being: Woodbury Water Treatment Plant, Fishing Creek and Kelly Landing.

The strategic plan indicates: rural, utilities, waterways, nature conservation and open space, and nature corridor links.

The locality is no within the PIA.



Population Projections.

The ABS Census 2011(<u>SSC3</u>1799) recorded 345 persons for Place of Usual Residence however is part of a larger census data area.

The current PAM 2015 Estimated Resident Population is 378.

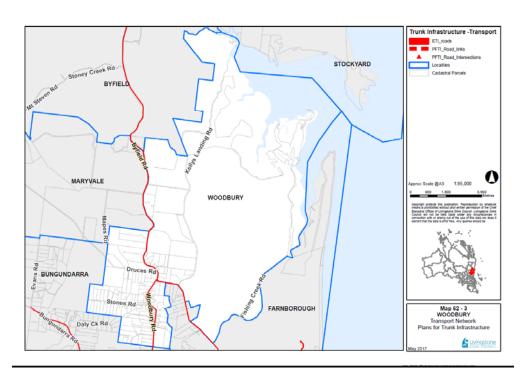
The PAM projections are

Year	Estimated Resident Population	Est Commercial GFA	Est Retail GFA	Est Industrial GFA
2011	378	0	0	0
2016	378	0	0	0
2021	378	0	0	0
2026	378	0	0	0
2031	378	0	0	0

Ultimate	378	0	0	0

This indicates no expected development growth within the locality.

Transport Infrastructure Network.



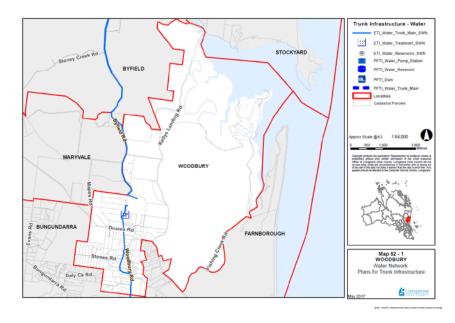
There are two existing trunk road transport infrastructure within the locality of which is either a State Road asset or a LSC managed asset. Pedestrian and bicycle trunk infrastructure within the locality has not been analysed.

This existing trunk road infrastructure is serving origin catchments within Woodbury locality and outside of Byfield, Shoalwater ADF transport, Stockyard recreation, and others.

The State Roads of Woodbury Rd Ch 15100 – 18850 and Byfield Rd Ch 14650 – 26080 are considered to have adequate capacity for local development within the planning horizon.

LSC managed trunk road transport infrastructure roads within the locality being Farnborough Rd Rural Major Collector Ch 14145 – 14650 is considered adequate capacity for local development within the planning horizon.

There are no Transport PFTI's proposed within the locality.

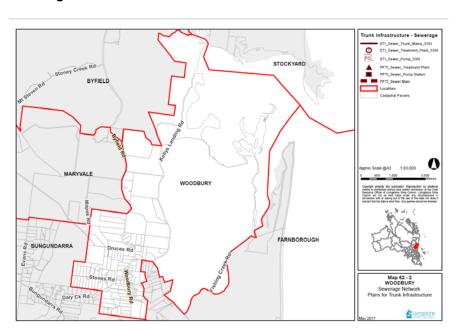


There are five existing trunk water infrastructure assets within the locality being: Woodbury Water Treatment Plant, Kelly Offstream Storage, Kelly's Water Pump Station, Woodbury HL water pumps, trunk water mains connecting Waterpark creek to Kelly's Offstream Storage, and trunk water mains connecting Woodbury HL Water pumps to St Faiths water Reservoirs.

The LSC trunk water infrastructure in conjunction with the Rockhampton pipeline is considered adequate to meet the Capricorn Coast water demands within the planning horizon.

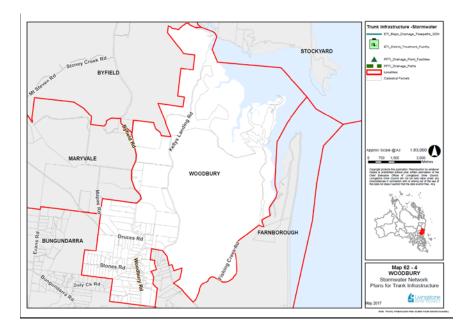
There is no Water Supply PFTI proposed within the locality during the planning horizon.

Sewerage Infrastructure Network.



There are no existing trunk sewerage infrastructure assets within the locality.

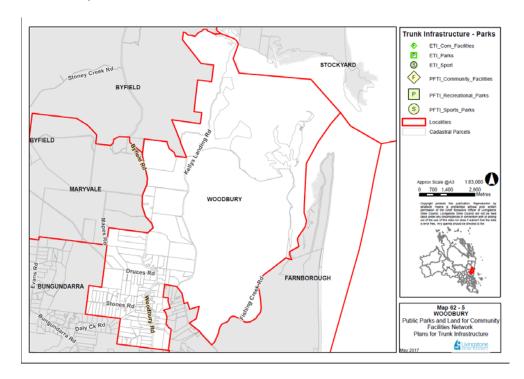
There is no Sewerage PFTI proposed within the locality during the planning horizon.



There are no trunk drainage systems which have been identified as relevant for development within the locality, at this time. The watercourses, drainage features and floodplains are significant natural watercourse features.

There is no Drainage PFTI proposed within the locality, at this time.

Community Facilities Infrastructure Network.



There are no trunk Community Facilities infrastructure which have been identified within the locality, at this time.

The developing locality relies on Community Facilities in the adjacent localities particularly Emu Park, and Yeppoon which are within reasonable distance.

There are no known future catchments either within or outside the locality within the planning horizon which will require future trunk community facilities infrastructure to be provided within the locality.

2.63 Yaamba.

Town Planning.

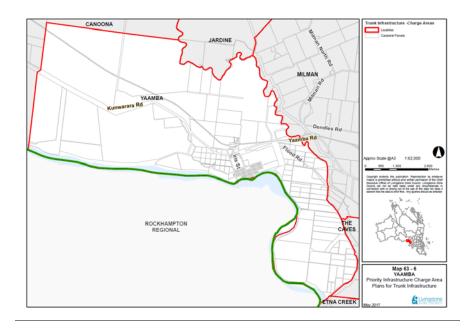
The locality has a land area of 6614.7 Ha and currently 356 parcels of land. The land uses in the rural locality involve rural, rural residential and gravel extraction.

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There is one strategic travel Destinations within the locality being Yaamba township.

The strategic plan indicates: rural, township, extractive industries, waterways, nature conservation and open space, and nature corridor links.

The locality is not within the PIA.



Population Projections.

The ABS Census 2011(<u>SSC3</u>1065) recorded 331 persons for Place of Usual Residence however is part of a larger census data area.

The current PAM 2015 Estimated Resident Population is 113.

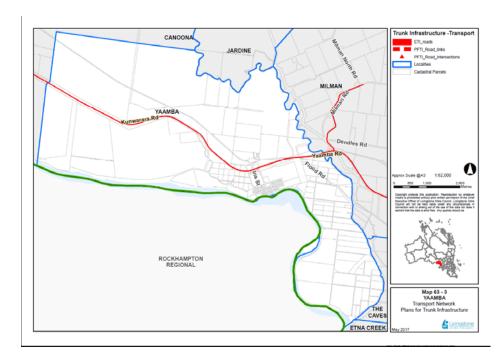
The PAM projections are

Year	Estimated	Est	Est Retail GFA	Est Industrial GFA
	Resident Population	Commercial GFA		
2011	113	0	1207	0
2016	113	0	1207	0
2021	113	0	1207	0
2026	113	0	1207	0

2031	113	0	1207	0
Ultimate	113	0	5304	0

This indicates no expected development growth within the locality.

Transport Infrastructure Network.



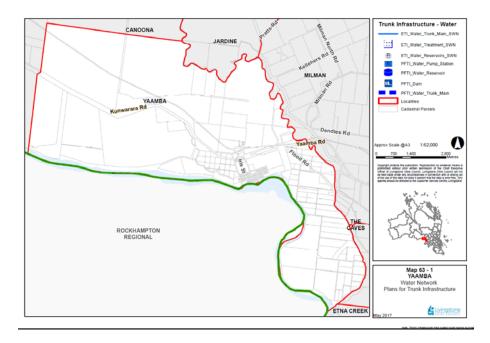
There is one existing trunk road transport infrastructure within the locality of which is either a State Road asset or a LSC managed asset. Pedestrian and bicycle trunk infrastructure within the locality has not been analysed.

This existing trunk road infrastructure is serving origin catchments within Yaamba locality and outside of northern part of Livingstone Shire plus State and National transport.

The State Roads of Kunwarara Rd Ch 36770 – 46100 and Yaamba Rd Ch 33950 - 367700 are considered to have adequate capacity for local development within the planning horizon.

LSC managed non-trunk road transport infrastructure roads within the locality are considered adequate capacity for local development within the planning horizon.

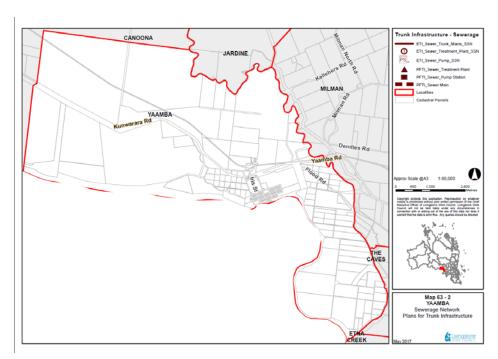
There are no Transport FTI's within the locality.



There are no existing trunk water infrastructure assets within the locality.

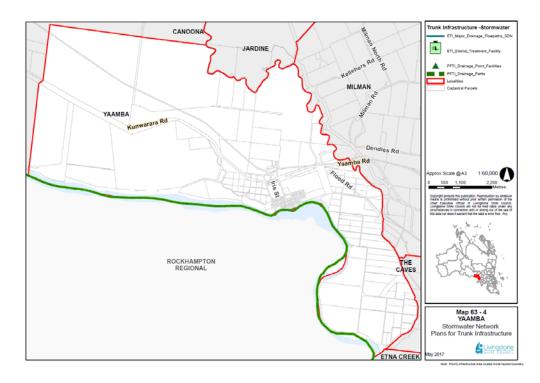
There is no Water Supply PFTI proposed within the locality during the planning horizon.

Sewerage Infrastructure Network.



There are no existing trunk sewerage infrastructure assets within the locality.

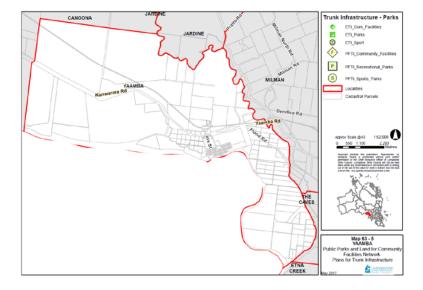
There is no Sewerage PFTI proposed within the locality during the planning horizon.



There are no trunk drainage systems which have been identified as relevant for development within the locality, at this time. The Fitzroy River, watercourses, drainage features and floodplains are significant natural watercourse features.

There is no Drainage PFTI proposed within the locality, at this time.

Community Facilities Infrastructure Network.



There are no trunk Community Facilities infrastructure which have been identified within the locality, at this time.

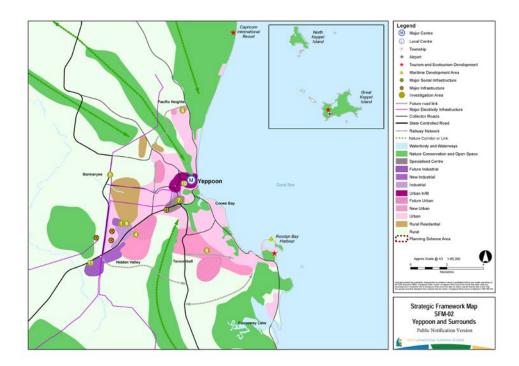
The rural locality relies on Community Facilities in the adjacent localities particularly The Caves, and Rockhampton which are within reasonable distance.

There are no known future catchments either within or outside the locality within the planning horizon which will require future trunk community facilities infrastructure to be provided within the locality.

2.64 Yeppoon.

Town Planning.

The locality has a total (land and sea) area of 2753 Ha and a land area of 735.8 Ha and currently 3436 parcels of land. The land uses in the developing locality involve major centre, urban, commercial, retail, industrial, aged care facilities, utilities, tourism, fishing and recreation.

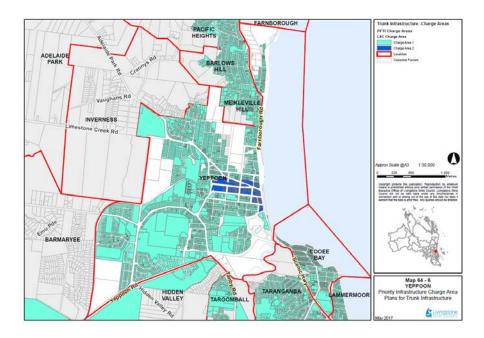


<<Zone Map>>

There are many strategic travel Destinations within the locality being: shops, schools, employment, medical, religious, entertainment, beaches, sporting, recreation, etc.

The strategic plan indicates: Major Centre, urban, urban infill, commercial, retail, industrial, waterways, nature conservation and open space.

The locality is within the PIA.



Population Projections.

The ABS Census 2011(<u>SSC3</u>1850) recorded 6342 persons for Place of Usual Residence however is part of a larger census data area.

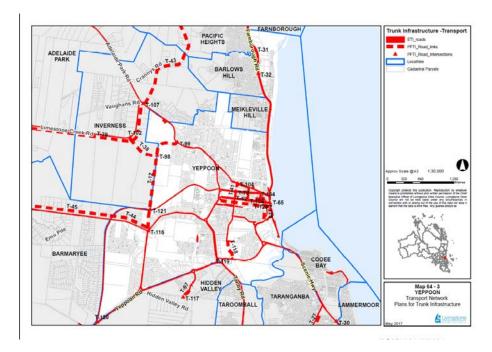
The current PAM 2015 Estimated Resident Population is 9425.

The PAMv2 projections are

Year	Estimated			Est Industrial GFA	
	Resident Population	Commercial GFA			
2011	8702	11630	59804	35630	
2016	9425	12287	59386	35630	
2021	11785	14975	70740	35630	
2026	12368	23543	87179	35105	
2031	13761	37586	119039	35105	
Ultimate	16119	66899	182912	35105	

This indicates significant expected development growth within the locality.

Transport Infrastructure Network.



There are many existing trunk road transport infrastructure within the locality of which is either a State Road asset or a LSC managed asset. Refer to Existing Asset Spreadsheet Pedestrian and bicycle trunk infrastructure within the locality has not been analysed although a PCNP and Secondary links are acknowledged.

This existing trunk road infrastructure is serving origin catchments within Yeppoon locality and outside of the Capricorn Coast.

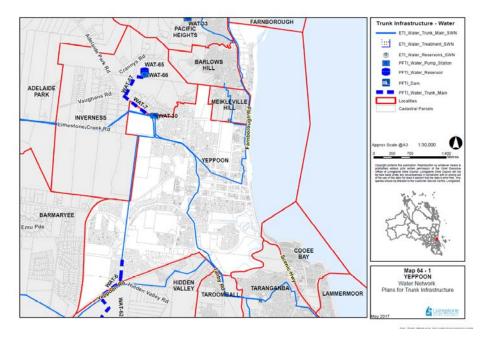
The State Roads serving the area particularly Yeppoon Road is considered to be fully loaded and requires additional capacity for local development within the planning horizon.

LSC managed trunk road transport infrastructure roads within the locality being Rockhampton Rd Urban Arterial Ch 0-2420, Yeppoon Rd Urban Arterial Ch 35660-36550, Tanby Rd Nth Urban Sub-Arterial Ch 0-790, Park St Urban Sub-Arterial Ch 0-460, Braithwaite St Urban Major Collector Ch 0-430, Appleton Drive Urban Major Collector Ch 0-740, Anzac Pde Urban Major Collector Ch 0-820, Farnborough Rd Urban Sub-Arterial Ch 0-1220, Whitman St Urban Major Collector Ch 0-650, Arthur St Urban Major Collector Ch 0-770, Rail Trail, James St CBD Collector, Normanby St CBD Collector, Queens St CBD Collector considered inadequate capacity for local development within the planning horizon.

To meet Council's Desired Standards of Service will require PFTI's within the locality being:

Мар No.	Network	Item ID	Project Name	Future Infrastructure Asset Description	Infrastructure Value (2015\$)	Estimated Year of Completion
65-3	Transport	T-44	Barmaryee Rd upgrade	Upgrade, Urban Major Collector, Ch 0 - 775	\$2,496,000	2021
65-3	Transport	T-116	Intersection Rockhampton - Condon, upgrade	Upgrade, Urban Sub- Arterial, signalised	\$2,799,000	2021

65-3	Transport	T-121	Intersection Condon Drive – Rail Trail	New, Rural Major Collector, non- signalised	\$30,000	2021
65-3	Transport	T-118	Arthur St to Yeppoon Rd	New, Urban Major Collector, Ch 650 - 1050	\$2,329,000	2021
65-3	Transport	T-119	Intersection Yeppoon Rd – Arthur St	New, Urban Arterial, signalised	\$1,799,000	2021
65-3	Transport	T-65	Intersection Queen St – Anzac Pde, upgrade	Upgrade, CBD Collector, signalised	\$1,788,000	2021
65-3	Transport	T-129	Barry St upgrade	Upgrade, widening, CBD Collector	\$719,000	2021
65-3	Transport	T-104	Intersection Normanby – Arthur, upgrade	Upgrade, CBD Collector	\$1,000,000	2021
65-3	Transport	T-105	Intersection Queen – Mary St, upgrade	Upgrade, CBD Collector	\$1,799000	2016
65-3	Transport	T-134	Hill St Multistorey carpark	New, CBD standard	\$5,500,000	2016
65-3	Transport	T-128	Intersection Queen – Barry St upgrade	Upgrade, CBD Collector, signalised	\$1,799,000	2016
65-3	Transport	T-79	Intersection James – Arthur St upgrade	Upgrade, CBD Collector, roundabout	\$1,045,000	2021
65-3	Transport	T-42	Queen St upgrade	Upgrade, CBD Collector	\$2,303,000	2021



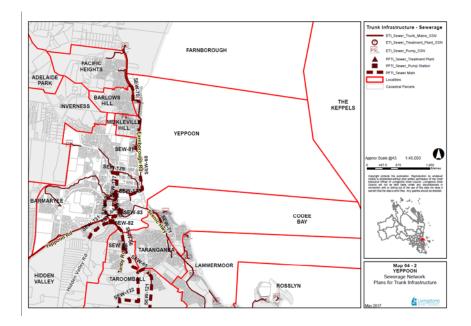
There are many existing trunk water infrastructure assets within the locality being: St Faith's Water Reservoirs, several trunk water mains in Adelaide Park Rd, 375mm trunk main in Farnborough Rd, 450mm trunk main in Tanby Rd, and others. Refer to Existing Assets Spreadsheet

The LSC trunk water infrastructure is generally considered adequate to meet the Yeppoon and Capricorn Coast water demands within the planning horizon.

To meet Council's Desired Standards of Service will require PFTI within the locality being:

Map No.	Network	Item ID	Project Name	Future Infrastructure Asset Description	Infrastructure Value (2015\$)	Estimated Year of Completion
64-1	Water Supply	WAT-6	Rockhampton Rd 300mm trunk main upgrade	Upgrade, Yep West HZ, MH design, 1000m	\$540,000	2021

Sewerage Infrastructure Network.



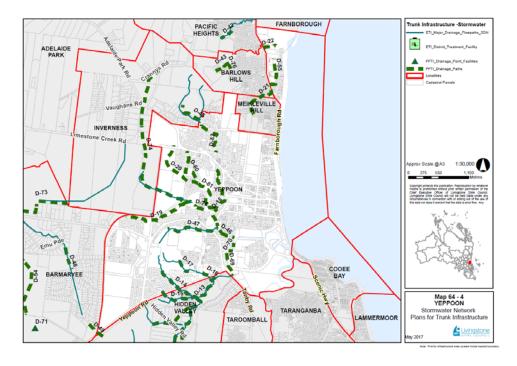
There are many existing trunk sewerage infrastructure assets within the locality being major sewage pump stations and rising mains, and trunk gravity mains. Refer to Existing Assets Spreadsheet.

The LSC trunk sewerage infrastructure is considered inadequate to meet the Yeppoon and northern sections of the Capricorn Coast sewage loadings within the planning horizon.

To meet Council's Desired Standards of Service will require three PFTI within the locality being:

Map No.	Network	Item ID	Project Name	Future Infrastructure Asset Description	Infrastructure Value (2015\$)	Estimated Year of Completion
64-2	Sewerage	SEW-64	Tanby Rd 200mm sewer rising main	New, WWF design, 580m	\$287,000	2021
64-2	Sewerage	SEW-60	Arthur St 300mm rising main	New, WWF design, Arthur St SPS to Shaw Ave SPS, 730m	\$383,000	2021
64-2	Sewerage	SEW-63	Tanby Rd Nth 225mm gravity main	Upgrade, WWF design, 670m	\$321,000	2031
64-2	Sewerage	SEW-126	Arthur St 300m gravity main	New, WWF design, 390m.	\$481,000	2021
64-2	Sewerage	SEW-128	Arthur St 600mm gravity main	New, WWF design, 440m	\$551,000	2021

64-2	Sewerage	SEW-127	Arthur St, 375mm gravity main	New, WWF, 175m	\$219,000	2021
64-2	Sewerage	SEW-129	James St 300mm gravity main	New, WWF, 415m	\$515,000	2021
64-2	Sewerage	SEW-133	Arthur St sewage pump station	New, WWF design, 1 well of 2.	\$930,000	2021
64-2	Sewerage	SEW-67	Farnborough Rd 300mm sewer gravity main	Upgrade, WWF design, 840m	\$266,000	2021
64-2	Sewerage	SEW-68	Farnborough Rd 200mm sewer rising main	Upgrade, WWF design, 1750m	\$819,000	2016
64-2	Sewerage	SEW-81	Farnborough Rd SPS 2 upgrade	Upgrade, civil 2 nd well pumps, elec, below ground, WWF design	\$941,000	2021
64-2	Sewerage	SEW-69	Smith St 225mm gravity, upgrade	Upgrade, WWF design, 235m	\$168,000	2021
64-2	Sewerage	SEW-70	Farnborough & Smith St 300mm gravity main upgrade	Upgrade, WWF design, 520m	\$437,000	2021



There is trunk drainage system which have been identified as relevant for development within the locality, at this time.

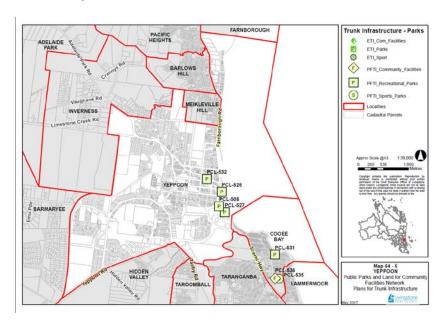
To meet Council's Desired Standards of Service will require one PFTI within the locality being:

Map No.	Network	Item ID	Project Name	Future Infrastructure Asset Description	Infrastructure Value (2015\$)	Estimated Year of Completion
64-4	Drainage	D-14	Yeppoon Cr Trib C, Q100 Easement	Drainage feature, new, tenure to ensure connectivity, Q100 Easement, 1000m	\$100,000	2021
64-4	Drainage	D-15	Yeppoon Cr Trib D, Q100 Easement	Drainage feature, new, tenure to ensure connectivity, 680m	\$68,000	2021
64-4	Drainage	D-17	Yeppoon Cr Trib F, Q100 Easement	Drainage feature, new, tenure to ensure connectivity, 370m	\$37,000	2021

64-4	Drainage	D-47	Fig Tree Trib D, Q100 Easement	Drainage feature, new, tenure to ensure connectivity, 100m	\$10,000	2026
64-4	Drainage	D-69	Yeppoon Cr Cordingley St depot drainage channel	Q100 easement and works	\$2,000,000	2016
64-4	Drainage	D-70	Fig Tree Creek Cordingley St depot channel	Q100 easement and works	\$500,000	2016
64-4	Drainage	D-19	Barmaryee Gully, Q100 easement	Drainage feature, new, tenure for connectivity, 1260m	\$126,000	2026
64-4	Drainage	D-78	Barmaryee Creek watercourse, Q100 floodplain easement	Floodplain, new, tenure for connectivity, 600m	\$60,000	2031
64-4	Drainage	D-81	School Creek watercourse, Q100 easement	Floodplain, new, tenure to ensure connectivity, 720m	\$72,000	2031
64-4	Drainage	D-80	School St Gully, Q100 Easement	Drainage feature, new, tenure to ensure connectivity, 650m	\$65,000	2021
64-4	Drainage	D-20	School Gully, Q100 easement	Drainage feature, new, tenure to ensure connectivity, 1070m	\$107,000	2031

64-4	Drainage	D-82	Fig Tree	Floodplain,	\$50,000	2031
			Creek	new, tenure		
			watercourse	for		
			Q100	connectivity,		
			floodplain	500m		
			-			

Community Facilities Infrastructure Network.



There are many trunk Community Facilities infrastructure which have been identified within the locality, at this time. Refer to the Existing Trunk Asset Spreadsheet.

The developing locality relies on Community Facilities to provide facilities to the locality, District, Whole Shire and Central Queensland Region.

To meet Council's Desired Standards of Service will require PFTI's within the locality being:

Map No.	Network	Item ID	Project Name	Future Infrastructure Asset Description	Infrastructure Value (2015\$)	Estimated Year of Completion
64-5	Community	PCL-508	Appleton Park, park upgrade	Upgrade, District, paths, seating, shade, play equipment	\$930,000	2016
64-5	Community	PCL-526	Yeppoon Beachfront, park upgrade	Upgrade, Regional, paths, seating, shade, BBQ, play equipment	\$6,000,000	2016

64-5	Community	PCL-527	Yeppoon Foreshore, New park	New, Regional, paths, seating, shade, BBQ, play equipment	\$6,000,000	2021
64-5	Community	PCL-532	Beaman Park upgrade	Upgrade, Civic park, paths, seating, shade	\$100,000	2021

2.65 **Zilzie**.

Town Planning.

The locality has a total (land and sea) area of 3388 Ha and a land area of 1103 Ha and currently 1594 parcels of land. The land uses in the developing locality involve rural, rural residential, urban, retail, aged care facilities, utilities, fishing and recreation.

Population Projections.

The ABS Census 2011(<u>SSC3</u>1859) recorded 1763 persons for Place of Usual Residence however is part of a larger census data area.

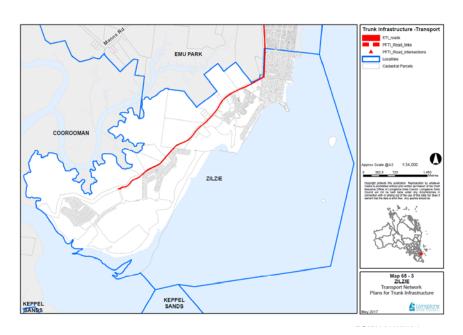
The current PAM 2015 Estimated Resident Population is 3353.

The PAM projections are

Year	Estimated	Est	Est Retail GFA	Est Industrial GFA
	Resident			
	Population	Commercial GFA		
2011	2481	1201	508	774
2016	3353	1201	508	774
2021	392	1201	508	774
2026	4149	1201	508	774
2031	4217	1201	508	774
Ultimate	4806	1515	1515	774

This indicates significant expected development growth within the locality.

Transport Infrastructure Network.



There is one existing trunk road transport infrastructure within the locality of which is either a State Road asset or a LSC managed asset. Pedestrian and bicycle trunk infrastructure within the locality has not been analysed although a PCNP and Secondary links are acknowledged.

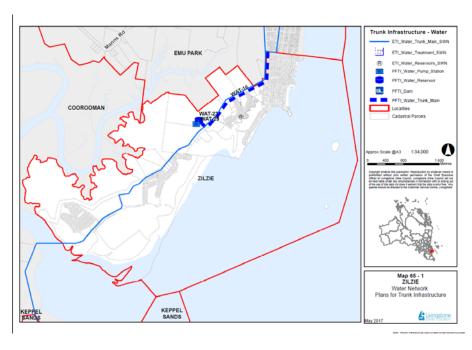
This existing trunk road infrastructure is serving origin catchments within Zilzie locality and outside of the Capricorn Coast.

The State Roads serving the area are considered to have adequate capacity for local development within the planning horizon.

LSC managed trunk road transport infrastructure roads within the locality being Hartley St Urban Major Collector Ch 770 - 1460 and Svendsen Rd Rural Major Collector Ch 0 - 4300 are considered adequate capacity for local development within the planning horizon.

There are no Transport FTI's within the locality.

Water Supply Infrastructure Network.



There are four existing trunk water infrastructure assets within the locality being: Seaspray Water Reservoir, 375mm trunk water main in Hartley St, 300mm trunk water main in Svendsen Rd, and 150mm trunk water main connecting to the Keppel Sands Water Supply Reservoir.

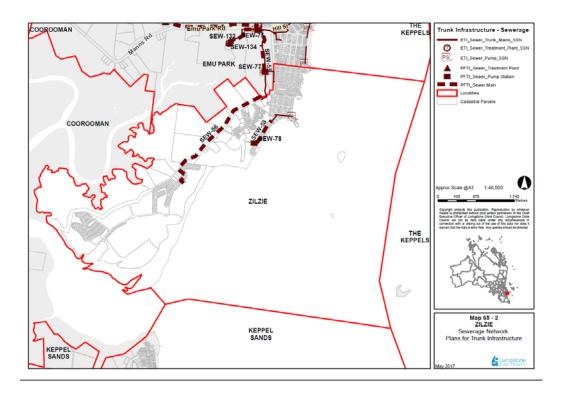
The LSC trunk water infrastructure is considered inadequate to meet the Zilzie water demands within the planning horizon.

To meet Council's Desired Standards of Service will require three PFTI within the locality being:

Map No.	Network	Item ID	Project Name	Future Infrastructure Asset Description	Infrastructure Value (2015\$)	Estimated Year of Completion
65-1	Water Supply	WAT-16	Hartley & Svendsen Rd 375mm trunk water main	Hartley & Svendsen Rd 375mm trunk water main, upgrade, Zilzie LZ, MD design, 2560m	\$1,809,000	2021

65-1	Water Supply	WAT-23	GBRR LZ Reservoir	GBRR LZ water supply reservoir, 4 ML, new, MD design.	\$1,706,000	2031
65-1	Water Supply	WAT-29	GBRR HZ Booster Pump Stn	GBRR HZ Booster Pump Station, new, building, pumps, pipes, elec, generator, rechlorination, MH design.	\$455,000	2031

Sewerage Infrastructure Network.



There are three existing trunk sewerage infrastructure assets within the locality being Kennedy St sewage pump station and rising main, and trunk gravity main in Hartley St.

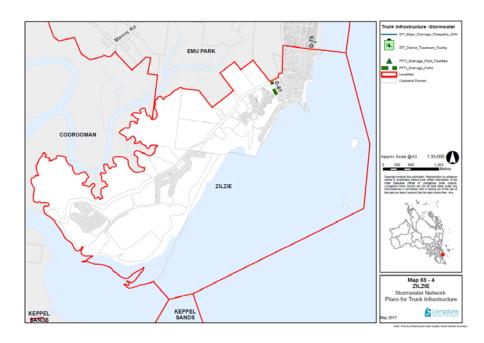
There are four existing trunk water infrastructure assets within the locality being: Seaspray Water Reservoir, 375mm trunk water main in Hartley St, 300mm trunk water main in Svendsen Rd, and 150mm trunk water main connecting to the Keppel Sands Water Supply Reservoir.

The LSC trunk sewerage infrastructure is considered inadequate to meet the Zilzie sewage loadings within the planning horizon.

To meet Council's Desired Standards of Service will require three PFTI within the locality being:

Мар No.	Network	Item ID	Project Name	Future Infrastructure Asset Description	Infrastructure Value (2015\$)	Estimated Year of Completion
65-2	Sewerage	SEW-56	Svendsen & Hartley 200mm trunk rising main	Svendsen & Hartley 200mm trunk rising main, upgrade, GBRR Nth zone, WWF design, 3025m	\$1,435,000	2026
65-2	Sewerage	SEW-58	Reef St 100mm rising main	Reef St 100mm rising main, new, CCSEP Reef St zone, WWF design, 675m.	\$395,000	2021
65-2	Sewerage	SEW-78	Reef St sewage pump Stn	Reef St SPS13, new, tenure, access 1 well, pumps, pipes, valves, elec, WWF design.	\$539,000	2021

Drainage Infrastructure Network.

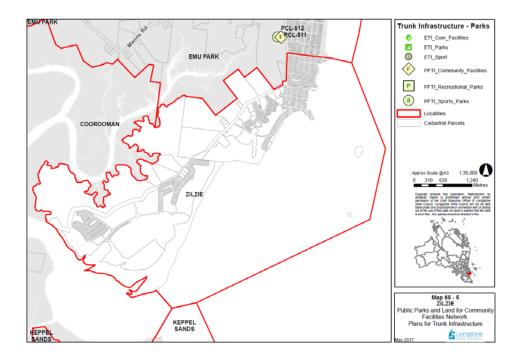


There is trunk drainage system which have been identified as relevant for development within the locality, at this time.

To meet Council's Desired Standards of Service will require one PFTI within the locality being:

Map No.	Network	Item ID	Project Name	Future Infrastructure Asset Description	Infrastructure Value (2015\$)	Estimated Year of Completion
65-4	Drainage	D-67	Svendsen Rd Q100 Easement	Svendsen Rd drainage feature, new, tenure to ensure connectivity, Q100 Easement, 300m	\$30,000	2021

Community Facilities Infrastructure Network.



There are no trunk Community Facilities infrastructure which have been identified within the locality, at this time.

The developing locality relies on Community Facilities in the adjacent localities particularly Emu Park, and Yeppoon which are within reasonable distance.

There are no known future catchments either within or outside the locality within the planning horizon which will require future trunk community facilities infrastructure to be provided within the locality.

APPENDIX A Desired Standards of Service

- (1) This section states the key standards of performance for a trunk infrastructure network.
- (2) Details of the standard of service for a trunk infrastructure networks are identified in the extrinsic material.

A.1 Water Supply Network

- (1) The desired standards of service for the water supply system are detailed in Tables 4.4 and 4.5.
- (2) Livingstone Shire Council aims to provide reticulated potable water supply to the consumer to meet the demands imposed upon it by both the consumers and the fire fighting requirements.
- (3) It is acknowledged that in some cases, due to local circumstances, the desired standards of service may not be met. In these situations, water supply trunk infrastructure aims to meet the standards to the greatest degree practicable.

Table 4.4 - Water Supply Network Design Criteria

Table 4.4 - Water Supply Network Design Criteria			
Design criteria	Measure		
Average Day (AD) Demand	500 litres per equivalent person per day (L/EP/Day)		
Maximum Day (MD) Demand	1.9 x average day (AD)		
Maximum Hour (MH) Demand	1/12 x maximum day (MD)		
One (1) equivalent tenement (ET)	2.7 equivalent persons (EP)		
Minimum Service Pressure	22 metres head at the centroid of the residential lot during normal diurnal flow in the reticulation non-trunk network		
	for trunk network to be a minimum 1 meter head at all times.		
Desirable Upper Service Pressure	50 metres head at the centroid of the residential lot during normal diurnal flow in the reticulation non-trunk network		
Maximum Service Pressure	80 meters head at the centroid of the residential lot in the reticulation non-trunk network;		
	90 meters for the trunk network.		
Fire Fighting Pressure	12 metres minimum in the reticulation non-trunk water supply network		
Fire Flow for residential area in the reticulation non-trunk network	15 litres per second for a duration of two (2) hours at minimum pressure of 120 kilopascals (kPa)		
Fire Flow for industrial/commercial area in the reticulation non-trunk network	30 litres per second for a duration of four (4) hours at minimum pressure of 120 kilopascals (kPa)		
Pipeline design maximum velocity	two (2) metres per second (1.5m/sec desirable for optimum energy usage)		
Reservoir Capacity	one (1) Maximum Day for the supply zone		
Trunk Water Main sizing	Average Day (AD) supply to Trunk Dams		
	Maximum Day (MD) supply to Reservoirs		
	Maximum Hour (MH) supply to reticulation		

Table 4.5 – Water Supply Network Desired Standards of Service

Measure	Planning criteria (qualitative standards)	Design criteria (quantitative standards)
Reliability / continuity of supply	The water supply system has been designed to provide water twenty-four (24) hours a day seven (7) days a week, but under certain circumstances, Livingstone Shire	Schedule 4 of the Livingstone Shire Planning Scheme 2005. Section 3 and table 3.1 FRW Strategic Asset Management Plan 22/11/2012.

Measure	Planning criteria (qualitative standards)	Design criteria (quantitative standards)
	Council may need to interrupt or limit this service so that essential repair and maintenance work can be carried out.	Compliance with the requirements of the System Leakage Management Plan for the Rockhampton Region. Capricorn Municipal Development Guidelines.
Adequacy of supply	The objective of the water supply system is to provide to the consumer a reticulated potable water supply to meet the demands imposed upon it by both the consumer and fire fighting requirements.	Schedule 4 of the Livingstone Shire Planning Scheme 2005. Water Development Code and Planning Scheme Policy – Livingstone Shire Planning Scheme. Capricorn Municipal Development Guidelines
		Compliance with the requirements of the System Leakage Management Plan for the Rockhampton Region.
Quality of supply	Livingstone Shire Council will ensure that the water quality is generally in accordance with recognised standards that safeguards community health.	Australian Drinking Water Quality Guidelines issued by the National Health and Medical Research Council. Section 3 table 3.2 FRW Strategic Asset Management Plan 22/11/2012.
Environmental impacts	The environmental impacts of the water supply network are minimised in accordance with community expectations.	Schedule 4 of the Livingstone Shire Planning Scheme 2005. Compliance with the requirements of the
Pressure and leakage management	The water supply network is monitored and managed to maintain the reliability and adequacy of supply and to minimise environmental impacts.	Schedule 4 of the Livingstone Shire Planning Scheme 2005. Compliance with the requirements of the System Leakage Management Plan for the Rockhampton Region.
Infrastructure design/plannin g standards	Design of the water supply network will comply with established guidelines, codes and standards.	Capricorn Municipal Development Guidelines – Design Specifications and Standard Drawings. Water Reticulation Code of Australia WSA 03-1999. Department of Natural Resources and Mines Planning Guidelines for Water Supply and Sewerage March 2005.

A.2 Sewerage Network

- (1) The desired standards of service for the sewerage system are detailed in Tables 4.6, 4.7 and 4.8.
- (2) Livingstone Shire Council aims to provide reticulated sewerage to the consumer to meet the demands imposed upon it by the consumers and the Environmental Protection Agency.
- (3) The objective of the sewerage system is to transport sewage from domestic, commercial and industrial properties using gravity flow pipes and where this is uneconomical, by pumping to the treatment plant.
- (4) It is acknowledged that in some cases, due to local circumstances, the desired standards of service may not be met. In these situations, sewerage trunk infrastructure aims to meet the standards to the greatest degree practicable.

Table 4.6 – Sewerage Network Design Criteria

Design criteria	Measure
One (1) equivalent person (EP)	200 litres per equivalent person per day (L/EP/day)
One (1) equivalent tenement (ET)	2.7 equivalent person (EP)
Average Dry Weather Flow (ADWF)	540 litres per equivalent tenement per day (L/ET/day)
Peak Dry Weather Flow (PDWF)	2.5 x Average Dry Weather Flow (ADWF)
Wet Weather Flow (WWF)	Five (5) x Average Dry Weather Flow (ADWF)
Sewage pump station emergency storage	Four (4) hours minimum
Total sewage pump station capacity	Wet Weather Flow or Five (5) x Average Dry Weather Flow (ADWF) minimum
Gravity Main Flow Capacity	75% of full depth at Wet Weather Flow (WWF) capacity.
Gravity Main Minimum velocity at Peak Dry Weather Flow (PDWF)	0.7 m/sec at Peak Dry Weather Flow (PDWF) capacity.
Gravity Main Maximum velocity at wet weather flow (WWF)	2 m/sec at Wet Weather Flow (WWF) capacity.
Rising main minimum scouring velocity	0.7 m/sec at Peak Dry Weather Flow (PDWF) capacity.
Rising main maximum velocity	1.5m/sec for new trunk sewer rising mains at Wet Weather Flow (WWF) capacity;
	2 m/sec for augmentation of existing trunk sewer rising mains at Wet Weather Flow (WWF) capacity.
Planning Horizon	Ultimate for reticulation (non-trunk) network
	20 yrs for trunk gravity mains, trunk sewage pump stations, trunk sewer rising mains, trunk effluent pressure mains.
Odour Protection	Required for new trunk sewage pump stations where initial loadings cause long detention times;
	Not required for augmented sewage pump stations
Air Release and Air Scour	Air Venting in all gravity sewer mains at locations of excessive turbulence – particularly where a steep (super-critical flow) meets a flat section (sub-critical flow), and discharge chambers;
	Air scours on rising mains where air lock is a risk.

Table 4.7 – Treated water quality

Criteria	Measure
Biological Oxygen Demand (BOD)	Less than 20 milligrams per litre
Dissolved Oxygen (DO)	Greater than 6 milligrams per litre
Suspended Solids (SS)	Less than 30 milligrams per litre
рН	6.5 – 7.5
Free chlorine residual	Less than 0.7 milligrams per litre

Table 4.8 – Sewerage Network Desired Standards of Service

	Planning criteria	Design criteria
Measure	(qualitative standards)	(quantitative standards)
Reliability	Livingstone Shire Council is to provide prompt, courteous and effective sewerage services to its customers. Staff make every effort to ensure the sewerage system operates adequately and with minimal disruption.	Schedule 4 of the Livingstone Shire Planning Scheme 2005. Section 3.2 and tables 3.3 to 3.5 Fitzroy River Water Strategic Asset Management Plan 22/11/2012.
Quality of treatment	Livingstone Shire Council uses every effort to continue to operate the sewerage system efficiently and effectively, ensuring the highest value for effluent is received for all sewerage treatment plants. The quality of treatment ensures the health of the community, the safe and appropriate level of treatment and proper disposal of treated effluent.	Compliance with the requirements of the . Tables 2.15 to 2.18 Fitzroy River Water Strategic Asset Management Plan 22/11/2012.
Environmental impacts	Livingstone Shire Council uses every effort to continue to operate the sewerage system efficiently and effectively and minimise sewage overflows and interruptions. The environmental impacts of the sewerage network are minimised in accordance with community expectations.	Schedule 4 of the Livingstone Shire Planning Scheme 2005. Compliance with the requirements of the
Effluent reuse	Livingstone Shire Council reuses effluent wherever possible.	Compliance with the requirements of the . Queensland Water Recycling Guidelines – December 2005.
Infrastructure design/planning standards	Design of the sewerage network will comply with the established guidelines, codes and standards.	Capricorn Municipal Development Guidelines – Design Specifications and Standard Drawings. Sewerage Reticulation Code of Australia WSA 03- 1999. Department of Natural Resources and Mines Planning Guidelines for Water Supply and Sewerage March 2005.

A.3 Stormwater Network

- (1) The function of Council's stormwater drainage systems is to collect and convey stormwater through respective catchment areas via connected flowpaths with minimal nuisance, danger or damage, at a cost that is acceptable to the community.
- (2) It is acknowledged that in some cases, due to local circumstances, the desired standards of service may not be met. In these situations, stormwater trunk infrastructure aims to meet the standards to the greatest degree practicable.
- (3) The Defined Flood Event (DFE) and Defined Flood Level (DFL) are defined in the Planning Scheme and Policies.
- (4) Table 4.9 outlines the planning and design criteria for the stormwater network within the Livingstone Shire Council area. Some significant design parameters are as follows:
 - a) Major and Minor System Criteria are required.

- b) Q100 (AEP 1% or ARI 100) for all Major Systems, Q5 for residential and Q10 for industrial Minor Systems.
- c) Building level freeboard not less than 300 millimetres above DFE level.
- d) Natural flowpaths will be connected and protected.

Table 4.9 – Stormwater Network Desired Standards of Service

Measure	Planning criteria (qualitative standards)	Design criteria (quantitative standards)
Connectivity	Ensure trunk drainage flowpaths are connected to ensure lawful access for development	Water Act defined Watercourses are assumed to be protected under State authority, but is desirable in urban areas to have drainage Easement for the natural bed and banks;
		Water Act defined Watercourses are to have Q100 flood drainage easements;
		Water Act defined Drainage Features are to have Q100 drainage easements for the natural flowpath;
		Water Act defined Overland Flow does not require drainage easements over the natural flowpaths.
		Combined use for parks and sporting facilities according to the risks.
Quantity	Collect and convey stormwater in natural and engineered channels, a piped, drainage network and system of overland flow paths to a lawful point of discharge, in a safe manner	Local government standards in planning scheme, planning scheme policies and Capricorn Municipal Development Guidelines; and
	that minimises the inundation of habitable rooms and protects life.	Queensland Urban Drainage Manual.
Quality	The water quality of urban catchments and waterways is managed to protect and enhance environmental values and pose no	Local water quality guidelines prepared in accordance with the National Water Quality Management Strategy; and
	health risk to the community.	Queensland Water Quality Guidelines 2009 — Environmental Protection Agency (EPA); and
		National Water Quality Guidelines — National Water Quality Management Strategy.
Environmental impacts	Where appropriate, adopt water-sensitive urban design principles and on-site water quality management to achieve Environmental Protection Agency water	Local government standards/codes in the planning scheme, planning scheme policies and Capricorn Municipal Development Guidelines; and
	quality objectives.	Environmental Protection [Water] Policy 1997.
Infrastructure design / planning standards	Design of the stormwater network will comply with established codes and standards.	Local government standards in the planning scheme, planning scheme policies and Capricorn Municipal Development Guidelines; and
		Queensland Urban Drainage Manual; and
		Natural Channel Design Guidelines.

A.4 Transport Network

(1) The transport network contains three integrated systems being roads, public transport, and the pedestrian and cycle network. The desired standards are below.

a) Roads:

- The desired standards of service for trunk roads are largely dependent on the road hierarchy classification, lanes, traffic loading, traffic pattern, and level of service (LOS) (shown in Tables 4.11 and 4.12);
- ii. The desired standards of service apply to all trunk infrastructure roads within the Livingstone Shire Council area in accordance with Table 4.10.

b) Public transport:

i. Bus facilities are to include bus stopping treatments and shelters in accordance with Table 4.10.

c) Pedestrian and cycle network:

- Desired standards of service for cycleways and pedestrian pathways concern geometric design considerations required for the construction of trunk infrastructure as defined by on-road and off-road facilities identified in the Capricorn Municipal Development Guidelines, and summarised in Table 4.10 below.
- (2) It is acknowledged that in some cases, due to local circumstances, the desired standards of service may not be met. In these situations, transport trunk infrastructure aims to meet the standards to the greatest degree practicable.

Table 4.10 – Transport Network Desired Standards of Service

Measure	Planning criteria (qualitative standards)	Design criteria (quantitative standards)
Road network design/planning standards	The road network provides a functional urban and rural hierarchy that supports settlement patterns, commercial and economic activities and freight movement. Design of the road system aims to meet minimum Level of Service (LOS) D at the Planning Horizon Peak Hour Pattern for the particular site.	Local government road design and development manual/standards/codes in the planning scheme, planning scheme policies and Capricorn Municipal Development Guidelines; and The Queensland Department of Transport and Main Roads Road Planning and Design Manual; and Australian Standards; and AUSTROADS guides; and Maximum acceptable degree of saturation for intersections identified in Table 2.12 or minimum levels of service (LOS) D in Table 2.11; and Level of service (LOS) – Table 2.11
Public Transport design/planning standards	Ensure development accommodates the access to and integration of public transport services. Provide bus stops including bus bays, shelters, seating and bus information systems in accordance with Council's adopted standards identified in the planning scheme.	Local government road design and development manual/standards/codes in the planning scheme, planning scheme policies and Capricorn Municipal Development Guidelines; and Design accords with the performance criteria set by Department of Transport and Main Roads; and Queensland Government TRANSLINK Public transport infrastructure manual; and AUSTROADS guides for road-based public transport and high-occupancy vehicles.
Cycleway and pathway design/planning standards	Cycleways and pathways provide a safe and convenient network that encourages walking and cycling as acceptable travel alternatives. Design of the network will comply with Council's adopted standards identified	Local government road design and development manual/standards/codes in the planning scheme, planning scheme policies and Capricorn Municipal Development Guidelines; and Australian Standards; and AUSTROADS Guides; and

Measure	Planning criteria (qualitative standards)	Design criteria (quantitative standards)
	in the planning scheme.	Complete Streets.

Table 4.11 - Level of service (LOS) for trunk roads, intersections, pedestrian and cycle networks *

Level of Service	Short Description	Loading
A	Free flow	< 33 %
В	Reasonably free flow	< 50 %
С	Stable flow	< 65 %
D	Approaching unstable flow	< 80 %
E	Unstable flow	100 %
F	Forced or breakdown flow	

^{*} Refer to Department of Main Road Planning and Design Manual

Table 4.12 – Maximum Degree of Saturation for Road Intersections

Road Network Item	Maximum degree of saturation
Traffic Signals	0.9
Roundabout	0.85
Priority controlled	0.8
Traffic signals (State-controlled)	0.9

A.5 Public Parks and Land for Community Facilities Network

- (1) The desired standards of service for the public parks and land for community facilities trunk infrastructure are shown in Tables 4.13 to 4.14 – desired standards of service – public parks and land for community facilities, and they should be read in conjunction with Councils adopted technical standards – Capricorn Municipal Development Guidelines and the Economic Development Queensland Guidelines 12 and 15.
- (2) It is acknowledged that in some cases, due to local circumstances, the desired standards of service may not be met. In these situations, public parks and land for community facilities trunk infrastructure aims to meet the standards to the greatest degree practicable.

Table 4.13 – Public Parks and Land for Community Facilities Network Desired Standards of Service

Measure	Planning criteria (qualitative standards)	Design criteria (quantitative standards)
Functional network	A network of parks and community land is established to provide for the full range of recreational and sporting activities and pursuits.	Parks and community land are provided at a local, district and local government area wide level. Parks and community land address the needs of both recreation and sport.
Accessibility	Public parks and land for community facilities will be located to ensure adequate pedestrian, cycle and vehicle access.	2,000 square metres of land for community facilities is to be provided when such land is co-located with a district and regional park. Accessibility standards are identified in Table 2.15.

Measure	Planning criteria (qualitative standards)	Design criteria (quantitative standards)
	Co-locate land for multi-purpose community facilities with parks and recreation land and commercial/retail centres.	
Land quality/suitability Area/1,000 persons Minimum size Shape of land Minimum desired flood immunity Maximum desired grade Road frontage and visibility	Public parks and land for community facilities will be provided to a standard that supports a diverse range of recreational, sporting, community and health–promoting activities to meet community expectations. This includes ensuring land is of an appropriate size, configuration and slope, and has an acceptable level of flood immunity.	The rate of land provision is identified in Table 2.14. The minimum size, shape of land, minimum desired flood immunity, maximum desired grade and road frontage and visibility for land is identified in Table 2.16.
Facilities / embellishments	Public parks and land for community facilities contain a range of embellishments to complement the type and purpose of the park.	Indicative embellishments for each type of park, land for community facilities and sports grounds are identified in Table 2.17 and Table 2.18.
Infrastructure design / performance standards	Maximise opportunities to collocate recreational parks and land for community facilities in proximity to other community infrastructure, transport hubs and valued environmental and cultural assets.	Local government standards in the planning scheme and planning scheme policies Australian Standards.

Table 4.14 – Rate of Land Provision

Infrastructure	Rate of provision (Hectare per 1000 people)		
type	District	Local government-wide	
Recreation park	0.8	0.5	
Sports Ground	2.5	2.5	
Land for Community Facilities	Rate of provision to be determined by minimum land sizes and at least one (1) district facility per the following planning sectors: Yeppoon Emu Park	Rate of provision to be determined by minimum land sizes and at least one (1) regional facility per the following planning sectors: Yeppoon	

Table 4.15 – Accessibility Standard

Infrastructure type	Accessibility standard (km)		
	District Local government-wide		
Recreation park	2.5 kilometres in urban areas and within 500 metres of a public transport pick up/drop off point.	Local government area and within 500 metres of a public transport pick up/drop off point.	
Sports ground	2.5 kilometres in urban areas and within 500 metres of a public transport pick up/drop off point.	Local government area and within 500 metres of a public transport pick up/drop off point.	
Land for	Within 800 metres of a public transport pick	Within 500 metres of a public transport pick	

community	up/drop off point.	up/drop off point.
facilities		

Table 4.16 – Public Parks and Land for Community Facilities Characteristics

Characteristic	Recreation Parks and Land for Community Facilities		= 000		Sports	Grounds
	District	Regional	District	Regional		
Minimum size of open space (hectares)	Two (2) hectares of usable space for parkland	Six (6) hectares of usable space for parkland	A minimum of three (3) hectares, sufficient to boast two (2) fields per one (1) oval collocating and	A minimum of four (4) hectares, sufficient to boast three (3) fields per two (2) ovals collocating and room for ancillary facilities		
	One (1) hectare of usable space for land for community facilities	1.5 hectares of usable space for land for community facilities	room for ancillary facilities (club house, toilets, car parking)	(club house, toilets, car parking)		
Shape of land	The preferred shape for a pa facilities is square to rectang greater than 2:1		To maximise the area fields, a square or reconsidered most effic	tangular shape is		
Minimum desired flood immunity for parks	At least twenty-five (25) per cent of total area above Q50 with main activity area/s above Q100	At least fifty (50) per cent of total area above Q50 with main activity area/s above Q100 and free of hazards		ty per cent of land above ove Q50. Built facilities		
Maximum desired grade	Recreation parks — average grade of 1:14 for eighty (80) per cent of the area of the park to facilitate wheelchair access to parks. Variable topography is satisfactory for the remaining area No area of the park will have a grade greater than 1:6 Community facilities — a maximum grade of no more than six (6) per cent for the entirety of the site or ten (10) per cent for the footprint of the community facility	Recreation parks — average grade of 1:20 for main use areas, 1:50 for kick about area, and variable topography for remainder No area of the park will have a grade greater than 1:6 Community facilities — a maximum grade of no more than six (6) per cent for the entirety of the site or ten (10) per cent for the footprint of the community facility	Laser levelling to a mplaying surface 1:100			
Road frontage and visibility	Twenty-five (25) per cent of park perimeter to have direct road frontage, preferably on a collector road.	Fifty (50) per cent of park perimeter to have direct road frontage, preferably on a collector road.	Twenty-five (25) per of perimeter to have dire			

Table 4.17 – Indicative Embellishments for the Hierarchy of Recreation Parks and Land for Community Facilities

Recreation parks Embellishment		eation parks	
Embellishment	District	Local government-wide	
Internal roads	None.	As required to service car parking and access requirements.	
Car parking	Forty (40) sealed car parks.	Minimum of 120 sealed car parks.	
Fencing/bollards, lock rail	Fencing/bollards along road frontages and including a lock rail.	Fencing/bollards along road frontages and including a lock rail.	
Lighting	Lighting to all roadways, parking, picnic nodes and primary pedestrian paths.	Lighting to all roadways, parking, picnic nodes and primary pedestrian paths.	
Toilets/public amenities	One (1) toilet (location to be determined in consultation with Council).	Two (2) toilets (location to be determined in consultation with Council).	
Pedestrian pathway access network	2.2 metre wide concrete shared pedestrian and cycle path through and around park connecting to adjacent pathways.	Entrance and access paths. Concrete shared pedestrian and cycle path (minimum 2.2 metre wide generally and minimum 3.5 metre wide in key, high use areas) connecting to adjacent pathways.	
Bench seating	Minimum of four (4), located for supervision of any play area (if not	As determined in consultation with Council. Located for:	
	otherwise serviced by sheltered tables), and/or along recreation corridors/pedestrian pathways to provide	supervision of any play area (if not otherwise serviced by sheltered tables); and	
	rest stops.	along recreation corridors/pedestrian pathways to provide rest stops; and/or	
	enjoyment of views/ameni		
Shade structures or trees (over playgrounds)	Yes.	Yes.	
Shelters/gazebo with tables and seating and bins	Minimum of six (6) shaded tables, seating and bins.	Minimum of fifteen (15) shaded tables, seating and bins (further provision to be determined in consultation with Council).	
Tap/bubbler	Three (3) drinking fountain/bubbler and taps.	Ten (10) drinking fountain/bubbler and taps.	
Barbeques	Three (3) barbeques.	Ten (10) barbeques (to be determined in consultation with Council – provision may consist of multiple double barbecues located to service picnic nodes for individuals, families and large groups).	
Rubbish bins	As required to service activity areas, picnic nodes, key access/egress areas and pathway systems.		
Landscaping and turfing	Shade trees, landscaping and turfing to enhance amenity (determined in consultation with Council).	Shade trees, landscaping and turfing to enhance amenity (determined in consultation with Council).	
Signage	Park identification and way finding signage, located at key entrances.	Park identification and way finding signage, located at key entrances.	
	Optional — interpretive signage (for nature appreciation areas) or trail signage (for example distance markers on recreation corridors).	Optional — interpretive signage and/or trail signage (for example distance markers on recreation corridors). Signage theme reflecting key features of the park.	
Recreation activity areas	Mix of ten (10) recreation activity areas, clustered in two or more nodes (for example mix of toddlers, children, youth, picnic and barbecue area, dog off-leash, skate park, meeting area, older adults, pathway systems).	Mix of fifteen (15) recreation activity areas dispersed across well-defined nodes of activity focus (for example a mix of toddlers, children, youth, older adults, major picnic and barbecue area, dog off-leash, skate park, meeting areas, trail network, event area, nature appreciation area).	
Irrigation	In identified high use areas.	In identified high use areas.	

Fush alliah mant	Recreation parks		
Embellishment	District	Local government-wide	
Bike racks	Three (3) bike racks for a minimum of fifteen (15) bikes.	Bike racks for a minimum of thirty (30) bikes.	
Bus pull-through	No.	Yes (location to be determined in consultation with Council).	
Bus parking	No.	Yes (location to be determined in consultation with Council).	

Table 4.18 – Indicative Embellishments for the Hierarchy of Sport Parks

	Embellishment details			
Park element	District	Local government-wide		
Courts/fields	As a minimum, two (2) rectangular fields and capacity for additional facilities/courts (as determined in consultation with Council). Sports grounds and facilities meet accepted standards including dimensions, playing surface and subsurface drainage.	As a minimum, three (3) rectangular fields and capacity for additional facilities/courts (as determined in consultation with Council). Sports grounds and facilities meet accepted standards including dimensions, playing surface and subsurface drainage.		
Goal posts/line marking	According to accepted standards.	According to accepted standards.		
Irrigation	Main field as a minimum (to be determined in consultation with Council).	Two (2) main fields as a minimum (to be determined in consultation with Council).		
Field/court lighting	Lighting for night sports.	Lighting for night sports.		
Spectator seating	100 seats and earth mounds (determined in consultation with Council)	150 seats and earth mounds (determined in consultation with Council)		
Tap/bubbler	Four (4) drink bubblers and taps located near activity areas and canteen/clubhouse area.	Eight (8) drink bubblers and taps located near activity areas and canteen/clubhouse area.		
Sports clubhouse	Minimum of one (1) (exact provision to be determined in consultation with Council) including a toilet/change room, canteen, storage and administrative/office space.	Minimum of two (2) (exact provision to be determined in consultation with Council) including a toilet/change room, canteen, storage and administrative/office space.		
Landscaping and turfing	Trees/shade provision for spectators, landscaping of boundaries to buffer noise/light spill to any surrounding properties.	Trees/shade provision for spectators, landscaping of boundaries to buffer noise/light spill to any surrounding properties.		
Feature paving/concrete stencilling	Located at key entry areas or high use zones (to be determined in consultation with Council).	Located at key entry areas or high use zones (to be determined in consultation with Council).		
Internal roads	Yes.	Yes.		
Bus pull-through	Yes.	Yes.		
Bus parking	Yes.	Yes.		
Car parking	Minimum of sixty (60) sealed spaces for a two (2) field complex or twelve (12) per court.	Minimum of 100 sealed spaces for a three (3) field complex or twelve (12) per court.		
Bike racks	Bike racks for a minimum of thirty (30) bikes.	Bike racks for a minimum of fifty (50) bikes.		
Fencing/bollards, lock rail	Fencing/bollards along road frontages and including a lock rail.	Fencing/bollards along road frontages and including a lock rail.		
Security Lighting	Security lighting to all roadways, parking, picnic nodes and primary pedestrian paths.	Security lighting to all roadways, parking, picnic nodes and primary pedestrian paths.		
Pedestrian pathway access network	Entrance and access paths, walking/cycling network. Minimum 2.2 metre wide concrete shared pedestrian and cycle path.	Entrance and access paths, walking/cycling network. Minimum 2.2 metre wide concrete shared pedestrian and cycle path.		
Public artwork	To be determined in consultation with Council.	cil. To be determined in consultation with Council.		
Signage	Park identification and way finding signage,	Park identification and way finding signage,		

Park element	Embellishment details		
	District	Local government-wide	
	located at key entrances.	located at key entrances.	
Recreation activity areas (for example play spaces, fitness circuits, hit up walls)	Mix of three (3) recreation activity areas (for example play spaces, fitness circuits, half courts, free to use courts).	Mix of five (5) recreation activity areas (for example play spaces, fitness circuits, half courts, free to use courts).	

APPENDIX B Cost Unit Rates.

APPENDIX C Nominal Capacities.