CITY OF GOLDCOAST.

Local Government Infrastructure Plan

Extrinsic Material Report
Water Supply Network

Date: June 2018

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1 Background

Council of the City of Gold Coast (Council) has prepared a Local Government Infrastructure Plan (LGIP) in accordance with the *Planning Act 2016* and associated guidelines. The LGIP identifies the type, scale, location and timing of development within the local government area for the period 2016-2031 as well as the realistic extent of development anticipated to be achieved when the area is fully developed. It also identifies trunk infrastructure to service that growth at the desired standard of service.

The following trunk infrastructure networks are included in the LGIP:

(a) Water supply network

(b) Sewerage network

(c) Transport network

(d) Parks and land for community facilities network.

Council's LGIP is Part 4 and Schedule 3 of the City of Gold Coast Planning Scheme (City Plan, which commenced 2 February 2016).

1.1 Purpose of report

This extrinsic material report has been prepared to assist in the interpretation of Council's LGIP. This report summarises the methodology used to prepare the water supply network component of the LGIP and references all background studies and reports relevant to its preparation.

2 Network planning

2.1 Planning assumptions

Network planning for the water supply network was undertaken having regard to the number of existing and future dwellings and the amount of existing and future GFA stated for each planning catchment. These were converted into an amount of water demand.

Projections of population and employment for the Gold Coast local government area were undertaken in January 2010 and are documented in the report titled *PIP Population and Employment General Report, RPS GeoQik Pty Ltd; January 2008.* The projections were subsequently updated by Council in 2013. The update is described in more detail in the report titled *2013 Infrastructure Demand Model: Water and Sewerage Demands. Gold Coast Water, June 2014*.

Demands in the water supply network are expressed in Equivalent Persons (EP) which represents an average daily water consumption (litres per day). For residential uses, demand (EP) is derived from the number of persons residing in a dwelling. A person represents one EP regardless of the type of dwelling they are located in. Ultimate EP for mixed use, tourist residential and non-residential uses, used the conversion rates summarised in Table 2.1-1.

Table 2.1-1 Conversion rates

Column 1 Zone	Column 2 LGIP development type		Residential density (dwellings/ dev ha)	Water supply network (EP/dev ha)
Low density residential	Detached dwellings		20	54.6
Low density residential – large lot precinct	Detached dwellings		16	43.7
Medium density residential	Attached dwellings, Detached dwellings	RD2	33	56.8
		RD3	40	68.8
		RD4	50	86.0
		RD4A	66	113.5
		RD5	100	150.2
		RD6	150	225.2
		RD7	200	300.3
		RD8	385	578.1
High density residential	Attached dwellings, Tourist residential	RD2	33	56.8
		RD3	40	68.8
		RD4	50	86.0
		RD4A	66	113.5
		RD5	100	163.8
		RD6	150	245.7
		RD7	200	327.6
		RD8	385	630.6
		RDX	694	1073.0
Emerging Communities	Attached dwellings		20	54.6
	Non residential		-	54.6
Rural Residential	Dwelling houses		2.5	6.8
Township	Dwelling houses		16	43.7
Centre	Attached dwellings		as above for MDR	as above for MDR
	Non residential		-	54.6
Neighbourhood Centre	Non residential		-	43.7
Mixed Use	Attached dwellings		as above for MDR	as above for MDR
	Non residential		-	43.7
Sport and Recreation	Non residential		-	54.6
Open Space	Non residential		-	0.8
Conservation	Non residential		-	0
Rural	Rural		0	0
Low Impact Industry	Non residential		-	43.7

Column 1 Zone	Column 2 LGIP development type	Residential density (dwellings/ dev ha)	Water supply network (EP/dev ha)
Medium Impact Industry	Non residential	-	43.7
High Impact Industry	Non residential	-	43.7
Extractive industry	Non residential	-	0
Waterfront and Marine Industry	Non residential	-	27.3
Community Facilities	Non residential	-	41.0
Special Purpose	Non residential	Various depending on location and land use	
Major Tourism	Other	Site specific	
Innovation	Attached dwellings	as above for MDR	as above for MDR
	Non residential		54.6
Limited Development (constrained land)	Non residential	-	0.8

The water supply service area consists of the following six water supply service catchments:

- Coolangatta
- Gaven
- Molendinar
- Mudgeeraba
- Pimpama
- Stapylton

Table 2.1-2 provides a summary of existing and projected demand for both residential and non-residential uses by water supply service catchment.

Table 2.1-2 Existing and projected demand (EP) for planning catchment (combined residential and non-residential demand)

Column 1 Service Catchment	Column 2 Existing and projected demand (EP)				
	2016 (base date)	2021	2026	2031	Ultimate development[#]
Coolangatta	70,231	80,011	85,605	88,362	103,125
Gaven	83,368	90,527	99,059	109,205	169,710
Molendinar	349,337	388,984	426,043	453,842	630,911
Mudgeeraba	121,959	131,206	137,827	148,388	206,090
Pimpama	58,424	85,187	102,731	104,170	170,670
Stapylton	36,100	41,935	45,134	48,078	95,089
Total	**719,419**	**817,851**	**896,399**	**952,045**	**1,375,594**

Nominally year 2066

2.2 Desired standards of service (DSS)

2.2.1 Background

Planning for the water supply network was generally undertaken using the Desired Standards of Service (DSS) stated in the *SEQ Water Supply and Sewerage Design and Construction Code* (*SEQ WS&S D&C Code*).

A specific point of departure from the SEQ WS&S D&C Code was in the application of the peaking factor for peak hour water demand. The SEQ WS&S D&C Code contains a peaking factor of 6.03 for detached dwellings in the Gold Coast Water service area. More recent analysis undertaken by Gold Coast Water identified that this peaking factor was excessive. A peaking factor of 4.5, which aligns with the upper range of the peaking factor for peak hour water demand recommended by the Department of Energy and Water Supply's *Planning Guidelines for Water Supply and Sewerage*, was adopted for use in the LGIP.

The key desired standards of service for the water supply network are listed in **Table 2.2-1**.

Table 2.2-1: Summary of key DSS for the water supply network

Parameter	Standard for LGIP					
Average Day Demand (ADD)	220 L/EP/day					
Non-Revenue Water (NRW)	20 L/EP/day (peaking factors are not applied to NRW)					
Peaking Factors:	**Detached Dwelling**	**Attached Dwelling**	**Commerce/ Community**	**Industry**	**Tourist**	**Open Space**
Mean Day Maximum Month/ ADD (MDMM/ADD)	1.75	1.27	1.06	1.06	1.76	1.15
Peak Day/ ADD (PD/ADD)	2.12	1.45	1.12	1.12	2.51	1.37
Peak Hour/ ADD (PH/ADD)	4.5	2.97	2.32	1.54	6.03	2.40
DSS for mains:						
Minimum service pressure with reservoirs at min. operating level	22m in the main adjoining property boundary					
Maximum service pressure	80m					
Maximum allowable velocity in mains	2.5m/s					
DSS for reservoirs						
Ground level reservoir storage capacity	Operational Storage Capacity: 3 x (PD – MDMM) + Emergency storage Emergency Storage Capacity: Greater of 4 hours at MDMM, or 0.5ML (and for less than 1000EP: 150kL) Note: PD and MDMM is in kL/d, and reservoir storage is in kL					
Elevated Reservoir Storage Capacity	Minimum Capacity: 6 x (PH – 1/12 MDMM) + 150kL fire flow storage Where 8 x PH is less than or equal to MDMM, then capacity: 2 x PH + 150kL fire flow storage Note: PH and MDMM is in kL/d and reservoir storage is in kL					

Parameter	Standard for LGIP
Reservoir duty pump requirements	Ground level reservoir, where pump included: MDMM for 20 hours Elevated reservoir: Pump capacity = PH in L/s
Fire Fighting Requirements*:	
Urban area flows	Residential: 15L/s for 2 hours Commercial/Industrial: 30L/s for 4 hours
Rural and small community flows	Rural Residential only: 7.5L/s for 2 hours Rural Commercial/Industrial: 15L/s for 2 hours.
Minimum residual mains pressure during fire fighting conditions	12m in the main, at the hydrant 9m minimum for existing infrastructure in small isolated or high elevation areas.
Background demand	Residential: 2/3 Peak Hour (and not less than ADD) Non-residential: Peak Hour for localised Industrial/Commercial or 2/3 PH for whole water supply zone.

Council is not required to provide a potable water supply in those areas not planned to be serviced. In the event that Council agrees to provide a potable water supply to a development in an area not planned to be serviced, infrastructure charges will be levied and the cost of any additional infrastructure required will be paid by the developer.

Table 2.2-2: Areas not planned to be serviced – Water Supply

City Plan 2015 Zones
Conservation
Emerging Communities (outside water supply service catchment)
Extractive Industry
Extractive Industry – Indicative Buffer
Major Tourism - Island Resorts
Open Space
Rural
Rural – Landscape & Environment Precinct
Township (outside water supply service catchment)
Township – Large Lot Precinct (outside water supply service catchment)
Unzoned

Table 2.2-3: Average day demand per planning horizon, per water supply service catchment

Water Supply Service Catchment	Average Day Demand (ML/d), per planning horizon						
	2011	2016	2021	2026	2031	2036	2066
Coolangatta	16	17	19	21	21	22	25

Water Supply Service Catchment	Average Day Demand (ML/d), per planning horizon						
	2011	2016	2021	2026	2031	2036	2066
Gaven	15	20	22	23	26	27	40
Molendinar	77	84	94	102	109	121	152
Mudgeeraba	27	29	32	33	36	40	50
Pimpama	6	12	18	22	23	26	38
Stapylton	7	9	10	11	11	12	23
TOTAL	**149**	**170**	**194**	**213**	**227**	**250**	**328**

2.3 Infrastructure Planning

The types of water supply infrastructure listed in **Table 2.3-1** may be considered to be trunk water supply infrastructure for the purpose of LGIP planning.

Table 2.3-1 Water supply infrastructure types included within LGIP planning

Water Supply infrastructure type	Qualification
Trunk water mains	Potable water distribution mains, that serve a trunk function and have a size equal to or greater than DN200mm, or have a size less than DN200mm, but which provide connectivity between other trunk water mains
Valves and hydrants	Valves and firefighting hydrants located on trunk water mains
Reservoirs	Ground level reservoirs owned by Council Elevated reservoirs owned by Council
Pump stations	Pump stations owned by Council
Control valves	Pressure reducing valve, flow control valve and metering installations owned by Council
Rechlorination facilities	Rechlorination facilities owned by Council
Telemetry, monitoring, instrumentation and control systems	Telemetry, monitoring, instrumentation and control systems owned by Council

Note: The City of Gold Coast does not own or operate potable water sources, treatment plants or bulk supply mains, with bulk potable water being supplied by SeqWater (state government entity).

Planning for the water supply network was undertaken by Gold Coast Water in 2014. Planning for the water supply network is documented in the planning reports listed in **Table 2.3-2**.

Table 2.3-2 Water Supply Planning Reports

Report Title	Date	Author	Document No.
Stapylton Water Supply Catchment – Hydraulic Modelling Report 2014	July 2014	Council – Gold Coast Water	#43497200
Pimpama Water Supply Catchment Hydraulic Modelling Report 2014	July 2014	Council – Gold Coast Water	#43559277
Gaven Water Supply Catchment Hydraulic Modelling Report 2014	July 2014	Council – Gold Coast Water	#43532264

Report Title	Date	Author	Document No.
Molendinar Water Supply Catchment Hydraulic Modelling Report 2014	July 2014	Council – Gold Coast Water	#43999522
Mudgeeraba Water Supply Catchment Hydraulic Modelling Report 2014	July 2014	Council – Gold Coast Water	#43999457
Coolangatta Water Supply Catchment Hydraulic Modelling Report 2014	July 2014	Council – Gold Coast Water	#43999337

Some adjustment to the timing of infrastructure identified in these planning reports was undertaken to align with the changed LGIP base year. The changes are summarised in **Table 2.3-3**, **Table 2.3-4** and **Table 2.3-5** below.

The Alignment ID is used to cluster pipe segments which are/were likely to be constructed together into a single pipe alignment. The general assumption used to cluster pipes into a single Alignment ID are described as follows:

- Consecutive pipe segments
- Equal planning horizon among pipe segments.

This information was used to calculate the total length of pipe alignments.

Table 2.3-3 Water main updates to Hydraulic Modelling reports

Alignment ID	Water Supply Catchment	Notes	Action
C_PI_18985	Pimpama	Not built - growth dependent	Deferred to 2021 planning horizon
C_PI_18991	Pimpama	Not built - growth dependent	Deferred to 2021 planning horizon
C_PI_18997	Pimpama	Not built - growth dependent	Deferred to 2021 planning horizon
C_SY_19002	Stapylton	Due to be built 2017/18.	Deferred to 2021 planning horizon
C_SY_19007	Stapylton	Due to be built 2017/18.	Deferred to 2021 planning horizon
C_SY_19003	Stapylton	Due to be built 2017/18.	Deferred to 2021 planning horizon

Table 2.3-4 Water reservoir updates to Hydraulic Modelling reports

Model ID	Water Supply Catchment	Notes	Action
FNE_20001_TANK_LGIP	Molendinar	Not built - growth dependent	Deferred to 2021 planning horizon
FBU_20004_TANK_LGIP	Mudgeeraba	Not built - growth dependent	Deferred to 2021 planning horizon
FMU_20005_TANK_LGIP	Mudgeeraba	Not built - growth dependent	Deferred to 2021 planning horizon
FMU_20006_TANK_LGIP	Mudgeeraba	Not built - growth dependent	Deferred to 2021 planning horizon
FMU_20007_TANK_LGIP	Mudgeeraba	Not built - growth dependent	Deferred to 2021 planning horizon
FMU_20008_TANK_LGIP	Mudgeeraba	Not built - growth dependent	Deferred to 2021 planning horizon
FMU_20009_TANK_LGIP	Mudgeeraba	Not built - growth dependent	Deferred to 2021 planning horizon
FRC_20010_TANK_LGIP	Mudgeeraba	Not built - growth dependent	Deferred to 2021 planning horizon
FCW_20001_TANK_LGIP	Coolangatta	Not built - growth dependent	Deferred to 2021 planning horizon
FCW_20002_TANK_LGIP	Coolangatta	Not built - growth dependent	Deferred to 2021 planning horizon
FCW_20003_TANK_LGIP	Coolangatta	Not built - growth dependent	Deferred to 2021 planning horizon

Table 2.3-5 Water pump station updates to Hydraulic Modelling reports

Model ID	Water Supply Catchment	Notes	Action
FPI_21001_PUMP_LGIP	Pimpama	Location shown within high value vegetation.	Moved to a cleared area.

3 Water Supply Schedule of Works

The following tables provide a list of projects planned for the water supply network and identified in the LGIP. Note that these tables are consistent with, but provide additional information in relation to, the schedule of works included in the LGIP.

Table 3-1: Water mains

Column 1 Water Supply Service Catchment	Column 2 LGIP ID	Column 3 Description	Column 4 Length (m)	Column 5 Diameter (mm)	Column 6 Estimated timing	Column 7 Establishment cost[1]
Coolangatta	C_CO_14122	138.5 m of 300mm - MILES STREET, COOLANGATTA	138.5	300	2021	$213,598
Coolangatta	C_CU_14123	182.3 m of 250mm - CREST DRIVE, CURRUMBIN	182.3	250	2026	$165,006
Coolangatta	C_CU_14126	399.3 m of 250mm - CREST DRIVE, CURRUMBIN	399.3	250	2031	$348,194
Coolangatta	C_CU_14128	25.8 m of 250mm - CARLYLE DRIVE, CURRUMBIN	25.8	250	2036	$62,941
Coolangatta	C_CO_14134	311.2 m of 300mm - STAPYLTON STREET, COOLANGATTA	311.2	300	2066	$291,532
Coolangatta	C_CU_14135	290 m of 250mm - CARLYLE DRIVE, CURRUMBIN	290	250	2066	$308,240
Coolangatta	C_EL_14136	1402.4 m of 150mm - PHILIPPINE PARADE, PALM BEACH	1402.4	150	2066	$624,661
Gaven	C_HE_18901	184 m of 200mm - LYSTERFIELD RISE, UPPER COOMERA	184	200	2021	$149,963
Gaven	C_HE_18955	553.3 m of 250mm - TORRINGTON STREET, UPPER COOMERA	553.3	250	2021	$439,263
Gaven	C_HE_18956	383.1 m of 250mm - FINKE LANE, UPPER COOMERA	383.1	250	2021	$330,555
Gaven	C_HE_19019	904.7 m of 300mm - GOLD COAST HIGHWAY, HELENSVALE	904.7	300	2031	$858,543

1. The establishment cost is expressed in current cost terms as at June 2016.

Column 1 Water Supply Service Catchment	Column 2 LGIP ID	Column 3 Description	Column 4 Length (m)	Column 5 Diameter (mm)	Column 6 Estimated timing	Column 7 Establishment cost[1]
Gaven	C_GC_19023	67.9 m of 300mm - BLACKHEATH TERRACE, PACIFIC PINES	67.9	300	2036	$99,477
Gaven	C_HE_18903	125.7 m of 300mm - DISCOVERY DRIVE, HELENSVALE	125.7	300	2036	$151,646
Molendinar	C_NS_14100	101.2 m of 100mm - MICHELMORE ROAD, CARRARA	101.2	100	2021	$54,550
Molendinar	C_NS_14101	68.6 m of 100mm - MICHELMORE ROAD, CARRARA	68.6	100	2021	$47,958
Molendinar	C_WO_14102	6.2 m of 300mm - GOLD COAST HIGHWAY, BROADBEACH	6.2	300	2021	$23,128
Molendinar	C_GI_14124	297.5 m of 100mm - KOOKABURRA DRIVE, GILSTON	297.5	100	2026	$119,192
Molendinar	C_MO_18908*	11.3 m of 150mm - SCARBOROUGH STREET, SOUTHPORT	11.3	150	2026	$25,506
Molendinar	C_MO_18936	15.8 m of 100mm - STAGHORN AVENUE, SURFERS PARADISE	15.8	100	2031	$25,633
Molendinar	C_MO_18938*	12.6 m of 150mm - DAVENPORT STREET, SOUTHPORT	12.6	150	2031	$28,421
Molendinar	C_NS_14103	17.8 m of 150mm - EXPLORERS WAY, WORONGARY	17.8	150	2031	$25,626
Molendinar	C_MO_18940	41.3 m of 150mm - FERNY AVENUE, SURFERS PARADISE	41.3	150	2036	$91,947
Molendinar	C_MO_18941*	18.9 m of 150mm - HIGH STREET, SOUTHPORT	18.9	150	2036	$42,704
Molendinar	C_NE_19024	2865.2 m of 200mm - BEAUDESERT NERANG ROAD, NERANG	2865.2	200	2036	$2,115,579
Molendinar	C_SW_19026	317.7 m of 200mm - NAPPER ROAD, PARKWOOD	317.7	200	2036	$243,690

Column 1 Water Supply Service Catchment	Column 2 LGIP ID	Column 3 Description	Column 4 Length (m)	Column 5 Diameter (mm)	Column 6 Estimated timing	Column 7 Establishment cost[1]
Molendinar	C_MO_18904	107.7 m of 150mm - MAXWELL BROWN DRIVE, SOUTHPORT	107.7	150	2066	$74,158
Molendinar	C_MO_18947	7.9 m of 150mm - MAIN BEACH PARADE, MAIN BEACH	7.9	150	2066	$16,844
Molendinar	C_MO_18948*	2.4 m of 150mm - SCARBOROUGH STREET, SOUTHPORT	2.4	150	2066	$4,990
Molendinar	C_MO_18949*	2 m of 150mm - NERANG STREET, SOUTHPORT	2	150	2066	$4,613
Molendinar	C_MO_18950	4.6 m of 100mm - CAVILL AVENUE, SURFERS PARADISE	4.6	100	2066	$7,488
Molendinar	C_MO_18951	35.8 m of 150mm - ASHMORE ROAD, ASHMORE	35.8	150	2066	$51,667
Molendinar	C_MO_18952	15.3 m of 200mm - CAVILL AVENUE, SURFERS PARADISE	15.3	200	2066	$37,550
Molendinar	C_MO_19028	4700.5 m of 600mm - CURRUMBURRA ROAD, ASHMORE	4700.5	600	2066	$13,226,752
Molendinar	C_MO_19029	337.4 m of 150mm - DANDAR DRIVE, SOUTHPORT	337.4	150	2066	$203,293
Molendinar	C_MO_19030	285 m of 200mm - ANNE STREET, SOUTHPORT	285	200	2066	$183,224
Molendinar	C_MO_19031*	241.8 m of 150mm - SCARBOROUGH STREET, SOUTHPORT	241.8	150	2066	$199,989
Molendinar	C_MO_19032	105 m of 150mm - OCEAN AVENUE, SURFERS PARADISE	105	150	2066	$103,790
Molendinar	C_MO_19033	101.3 m of 200mm - COTLEW STREET, SOUTHPORT	101.3	200	2066	$78,246
Molendinar	C_MO_19034	23.4 m of 150mm - SURFERS PARADISE BOULEVARD, SURFERS PARADISE	23.4	150	2066	$48,351

Column 1 Water Supply Service Catchment	Column 2 LGIP ID	Column 3 Description	Column 4 Length (m)	Column 5 Diameter (mm)	Column 6 Estimated timing	Column 7 Establishment cost[1]
Molendinar	C_MO_19035	20.7 m of 300mm - GOLD COAST HIGHWAY, MAIN BEACH	20.7	300	2066	$61,468
Molendinar	C_NS_14139	1276 m of 150mm - MUREV WAY, CARRARA	1276	150	2066	$653,613
Molendinar	C_NS_14140	223.2 m of 150mm - SPENCER ROAD, NERANG	223.2	150	2066	$114,249
Molendinar	C_SW_19047	1591.2 m of 300mm - OXLEY DRIVE, BIGGERA WATERS	1591.2	300	2066	$1,909,786
Molendinar	C_WO_14104	16.1 m of 250mm - SURF PARADE, SURFERS PARADISE	16.1	250	2066	$50,695
Molendinar	C_WO_14105	15.1 m of 200mm - OLD BURLEIGH ROAD, SURFERS PARADISE	15.1	200	2066	$39,626
Molendinar	C_WO_14106	4.4 m of 100mm - GOLD COAST HIGHWAY, MERMAID BEACH	4.4	100	2066	$4,503
Molendinar	C_WO_14107	20.5 m of 100mm - OLD BURLEIGH ROAD, BROADBEACH	20.5	100	2066	$34,181
Molendinar	C_WO_14108	1.9 m of 100mm - OLD BURLEIGH ROAD, BROADBEACH	1.9	100	2066	$3,220
Molendinar	C_WO_14143	53.9 m of 250mm - GOLD COAST HIGHWAY, BROADBEACH	53.9	250	2066	$173,882
Molendinar	C_WO_14144	147.6 m of 150mm - HOOKER BOULEVARD, BROADBEACH WATERS	147.6	150	2066	$112,029
Molendinar	C_WO_14145	388.4 m of 300mm - GOLD COAST HIGHWAY, BROADBEACH	388.4	300	2066	$576,045
Molendinar	C_WO_14146	204.8 m of 300mm - FIRST AVENUE, BROADBEACH	204.8	300	2066	$268,065
Molendinar	C_WO_14147	264.5 m of 150mm - OLD BURLEIGH ROAD, SURFERS PARADISE	264.5	150	2066	$210,441

Column 1 Water Supply Service Catchment	Column 2 LGIP ID	Column 3 Description	Column 4 Length (m)	Column 5 Diameter (mm)	Column 6 Estimated timing	Column 7 Establishment cost[1]
Molendinar	C_WO_14148	25 m of 100mm - QUEENSLAND AVENUE, BROADBEACH	25	100	2066	$41,781
Molendinar	C_WO_14149	424.3 m of 250mm - FIRST AVENUE, BROADBEACH	424.3	250	2066	$546,907
Mudgeeraba	C_BU_14127	670.7 m of 225mm - CHRISTINE AVENUE, BURLEIGH WATERS	670.7	225	2036	$592,468
Mudgeeraba	C_MU_14129	642.6 m of 300mm - BONOGIN ROAD, MUDGEERABA	642.6	300	2036	$531,432
Mudgeeraba	C_RO_14130*	2471.5 m of 300mm - ROBINA PARKWAY, ROBINA	2471.5	300	2036	$2,487,090
Mudgeeraba	C_RO_14131	72.1 m of 150mm - RON PENHALIGON WAY, ROBINA	72.1	150	2036	$60,289
Mudgeeraba	C_RO_14132	88.5 m of 150mm - BALLYLIFFEN COURT, ROBINA	88.5	150	2036	$73,983
Mudgeeraba	C_BU_14133	637.1 m of 225mm - DUNLIN DRIVE, BURLEIGH WATERS	637.1	225	2066	$558,341
Mudgeeraba	C_MU_14137	753.6 m of 225mm - TALLAI ROAD, TALLAI	753.6	225	2066	$493,165
Mudgeeraba	C_MU_14138	328.7 m of 300mm - BONOGIN ROAD, MUDGEERABA	328.7	300	2066	$295,495
Mudgeeraba	C_RO_14141*	425.8 m of 300mm - ROBINA TOWN CENTRE DRIVE, ROBINA	425.8	300	2066	$887,624
Mudgeeraba	C_RO_14142*	69.8 m of 300mm - CHRISTINE AVENUE, ROBINA	69.8	300	2066	$166,126
Pimpama	C_PI_18985	969.1 m of 200mm - BAILEYS MOUNTAIN ROAD, UPPER COOMERA	969.1	200	2021	$597,165
Pimpama	C_PI_18991	1488.9 m of 600mm - PACIFIC HIGHWAY,	1488.9	600	2021	$1,721,746

Column 1 Water Supply Service Catchment	Column 2 LGIP ID	Column 3 Description	Column 4 Length (m)	Column 5 Diameter (mm)	Column 6 Estimated timing	Column 7 Establishment cost[1]
		COOMERA				
Pimpama	C_PI_18997	504.8 m of 150mm - GEORGE ALEXANDER WAY, COOMERA	504.8	150	2021	$237,778
Pimpama	C_PI_19012	1004.7 m of 450mm - DIXON DRIVE, PIMPAMA	1004.7	450	2021	$1,696,085
Pimpama	C_PI_19013	697.8 m of 600mm - PACIFIC HIGHWAY, COOMERA	697.8	600	2021	$1,751,127
Pimpama	C_PI_19014	194 m of 200mm - GEORGE ALEXANDER WAY, COOMERA	194	200	2021	$135,133
Pimpama	C_PI_18935	0.8 m of 200mm - JONATHAN STREET, UPPER COOMERA	0.8	200	2031	$1,347
Pimpama	C_PI_19020	828.3 m of 375mm - FOXWELL ROAD, COOMERA	828.3	375	2031	$1,568,871
Pimpama	C_PI_19021	1399.4 m of 250mm - PACIFIC HIGHWAY, COOMERA	1399.4	250	2031	$879,379
Pimpama	C_PI_19022	436.6 m of 300mm - SHIPPER DRIVE, COOMERA	436.6	300	2031	$332,846
Pimpama	C_PI_18898	13.2 m of 600mm - DREAMWORLD PARKWAY, COOMERA	13.2	600	2036	$74,792
Pimpama	C_PI_18939	21.5 m of 200mm - FOXWELL ROAD, COOMERA	21.5	200	2036	$31,859
Pimpama	C_PI_18899	38.7 m of 375mm - KRISTINS LANE, UPPER COOMERA	38.7	375	2066	$162,521
Pimpama	C_PI_18943	12.3 m of 300mm - PACIFIC HIGHWAY, PIMPAMA	12.3	300	2066	$44,468
Pimpama	C_PI_18945	1.6 m of 200mm - BLUETAIL CRESCENT, UPPER COOMERA	1.6	200	2066	$2,675
Pimpama	C_PI_18983	650.2 m of 250mm - CABBAGE TREE POINT	650.2	250	2066	$530,588

Column 1 Water Supply Service Catchment	Column 2 LGIP ID	Column 3 Description	Column 4 Length (m)	Column 5 Diameter (mm)	Column 6 Estimated timing	Column 7 Establishment cost[1]
		ROAD, STEIGLITZ				
Pimpama	C_PI_18983_2	4714.2 m of 250mm - STAPYLTON JACOBS WELL ROAD, NORWELL	4714.2	250	2066	$3,630,159
Pimpama	C_PI_19036	772.8 m of 250mm - RESERVE ROAD, UPPER COOMERA	772.8	250	2066	$870,872
Pimpama	C_PI_19040	270.9 m of 500mm - PACIFIC HIGHWAY, COOMERA	270.9	500	2066	$634,045
Pimpama	C_PI_19041	9.8 m of 500mm - PACIFIC HIGHWAY, COOMERA	9.8	500	2066	$65,174
Pimpama	C_PI_19042	747 m of 375mm - FOXWELL ROAD, COOMERA	747	375	2066	$1,002,177
Pimpama	C_PI_19043	834.9 m of 300mm - DIXON DRIVE, PIMPAMA	834.9	300	2066	$583,969
Pimpama	C_PI_19044	54 m of 200mm - PACIFIC HIGHWAY, COOMERA	54	200	2066	$53,369
Pimpama	C_PI_19045	18.2 m of 300mm - HUTH ROAD, JACOBS WELL	18.2	300	2066	$56,010
Stapylton	C_SY_19002	840.5 m of 200mm - STAPYLTON JACOBS WELL ROAD, STAPYLTON	840.5	200	2021	$468,396
Stapylton	C_SY_19003	680.6 m of 200mm - STAPYLTON JACOBS WELL ROAD, ALBERTON	680.6	200	2021	$337,801
Stapylton	C_SY_19007	365 m of 200mm - STAPYLTON JACOBS WELL ROAD, ALBERTON	365	200	2021	$221,090
Stapylton	C_SY_19048	230.6 m of 250mm - STAPYLTON JACOBS WELL ROAD, STAPYLTON	230.6	250	2066	$200,660
Total						**$49,967,117**

* **Please note**: This item is partially or wholly located within land affected by other development legislation as identified in Part 10 of the City Plan.

Table 3-2: Water reservoirs

Column 1 Water Supply Service Catchment	Column 2 LGIP ID	Column 3 Description	Column 4 Estimated timing	Column 5 Capacity (ML)	Column 6 Telemetry (Y or N)	Column 7 Establishment cost[2]
Coolangatta	FCW_20001_TANK_LGIP	0.15 ML Elevated Reservoir - GOLINE COURT, TALLEBUDGERA	2021	0.15	Yes	$758,505
Coolangatta	FCW_20002_TANK_LGIP	0.37 ML Ground Level Reservoir -CARAPOOK CRESCENT, TALLEBUDGERA	2021	0.37	Yes	$435,888
Coolangatta	FCW_20003_TANK_LGIP	0.14 ML Elevated Reservoir - WATTLEBIRD COURT, CURRUMBIN VALLEY	2021	0.14	Yes	$710,388
Molendinar	FNE_20001_TANK_LGIP	0.07 ML Ground Level Reservoir -CHOPIN COURT, NERANG	2021	0.07	Yes	$228,047
Molendinar	FNE_20000_TANK_LGIP	0.02 ML Elevated Reservoir - BLUE HILL COURT, NERANG	2026	0.02	Yes	$132,976
Mudgeeraba	FBU_20004_TANK_LGIP	0.08 ML Elevated Reservoir - GABRIELLE GROVE, BURLEIGH HEADS	2021	0.08	Yes	$421,682
Mudgeeraba	FMU_20005_TANK_LGIP	0.4 ML Ground Level Reservoir -WALLABY DRIVE, MUDGEERABA	2021	0.4	Yes	$468,252
Mudgeeraba	FMU_20006_TANK_LGIP	0.22 ML Ground Level Reservoir -DUKE COURT, TALLAI	2021	0.22	Yes	$274,072
Mudgeeraba	FMU_20007_TANK_LGIP	0.28 ML Ground Level Reservoir -GRANDVIEW TERRACE, TALLAI	2021	0.28	Yes	$338,799
Mudgeeraba	FMU_20008_TANK_LGIP	0.06 ML Ground Level Reservoir -RANGE ROAD, TALLAI	2021	0.06	Yes	$200,718
Mudgeeraba	FMU_20009_TANK_LGIP	0.07 ML Ground Level Reservoir -PEBBLE CREEK ROAD, BONOGIN	2021	0.07	Yes	$228,047
Mudgeeraba	FRC_20010_TANK_LGIP	0.06 ML Elevated Reservoir - THURSDAY DRIVE, TALLEBUDGERA VALLEY	2021	0.06	Yes	$325,447
Pimpama	FPI_21001_TANK_LGIP	0.85 ML Ground Level Reservoir -STAPYLTON JACOBS WELL ROAD,	2031	0.85	Yes	$953,701

2. The establishment cost is expressed in current cost terms as at June 2016.

Column 1 Water Supply Service Catchment	Column 2 LGIP ID	Column 3 Description	Column 4 Estimated timing	Column 5 Capacity (ML)	Column 6 Telemetry (Y or N)	Column 7 Establishment cost[2]
		STEIGLITZ				
Pimpama	FPI_21000_TANK_LGIP	1.75 ML Ground Level Reservoir -HUTH ROAD, JACOBS WELL	2066	1.75	Yes	$1,022,556
Total						**$6,499,078**

Table 3-3: Water valves

Column 1 Water Supply Service Catchment	Column 2 LGIP ID	Column 3 Description	Column 4 Estimated timing	Column 6 Telemetry (Y or N)	Column 7 Establishment cost[3]
Gaven	FGC_20000_PRV_LGIP	PRV on 250 mm Main - DISCOVERY DRIVE, HELENSVALE	2031	Yes	$50,854
Molendinar	FMO_20000_PRV_LGIP	PRV on 200 mm Main - ANCHUSIA STREET, ASHMORE	2031	Yes	$50,854
Molendinar	FMO_20003_PRV_LGIP	PRV on 250 mm Main - WILSON STREET, LABRADOR	2036	Yes	$50,854
Molendinar	FSW_20002_PRV_LGIP	PRV on 150 mm Main - ALLIED DRIVE, ARUNDEL	2066	Yes	$50,854
Pimpama	FPI_21000_FCV_LGIP	FCV on 150 mm Main - HUTH ROAD, JACOBS WELL	2066	No	$59,331
Pimpama	FPI_21000_PRV_LGIP	PRV on 600 mm Main - PACIFIC HIGHWAY, COOMERA	2066	Yes	$50,854
Pimpama	FPI_21002_FCV_LGIP	FCV on 150 mm Main - STAPYLTON JACOBS WELL ROAD, STEIGLITZ	2066	No	$59,331
Stapylton	FSY_20000_PRV_LGIP	PRV on 300 mm Main - PASCOE ROAD, ORMEAU	2066	Yes	$50,854
				Total	**$423,784**

Table 3-4: Water pump stations

Column 1 Water Supply Service Catchment	Column 2 LGIP ID	Column 3 Description	Column 4 Estimated timing	Column 5 Total Installed Power (kW)	Column 6 Telemetry (Y or N)	Column 7 Total Establishment cost[4]
Gaven	FGC_20000_PUMP_LGIP	3 kW Pump Station - MAUDSLAND ROAD, MAUDSLAND	2066	3	Yes	$126,621
Molendinar	FMO_20000_PUMP_LGIP	5 kW Pump Station - PARASOL STREET, ASHMORE	2031	5	Yes	$186,542
Mudgeeraba	P1144	5.3 kW Pump Station - TALLAI ROAD, TALLAI	2021	5.3	Yes	$140,126
Pimpama	FPI_20005_PUMP_LGIP	5 kW Pump Station - PACIFIC HIGHWAY, COOMERA	2021	5	Yes	$186,542
Pimpama	FPI_20002_PUMP_LGIP	4 kW Pump Station - JONATHAN STREET, UPPER COOMERA	2031	4	Yes	$156,582

3. The establishment cost is expressed in current cost terms as at June 2016.
4. The establishment cost is expressed in current cost terms as at June 2016.

Column 1 Water Supply Service Catchment	Column 2 LGIP ID	Column 3 Description	Column 4 Estimated timing	Column 5 Total Installed Power (kW)	Column 6 Telemetry (Y or N)	Column 7 Total Establishment cost[4]
Pimpama	FPI_20001_PUMP_LGIP	2 kW Pump Station - WENDY COURT, UPPER COOMERA	2066	2	Yes	$96,661
Pimpama	FPI_20003_PUMP_LGIP	5 kW Pump Station - RESERVE ROAD, UPPER COOMERA	2066	5	Yes	$186,542
Pimpama	FPI_20004_PUMP_LGIP	4 kW Pump Station - BLUETAIL CRESCENT, UPPER COOMERA	2066	4	Yes	$156,582
Pimpama	FPI_21001_PUMP_LGIP	34 kW Pump Station - HUTH ROAD, JACOBS WELL	2066	34	Yes	$375,101
Pimpama	FPI_21002_PUMP_LGIP	11 kW Pump Station - STAPYLTON JACOBS WELL ROAD, STEIGLITZ	2066	11	Yes	$185,492
					Total	**$1,796,789**

CITY OF GOLDCOAST.

For more information

P 1300 GOLDCOAST (1300 465 326)
W cityofgoldcoast.com.au