muswellbrook shire council

Muswellbrook Shire Council

INFRASTRUCTURE COMMITTEE MEETING

BUSINESS PAPER

28 MARCH 2018

MUSWELLBROOK SHIRE COUNCIL

P.O Box 122

MUSWELLBROOK

22 March, 2018

Councillors,

You are hereby requested to attend the Infrastructure Committee Meeting to be held in the COUNCILLORS ROOM, Administration Centre, Muswellbrook on **28 March, 2018** commencing at 4.30pm.

Derek Finnigan
INTERIM DIRECTOR - COMMUNITY INFRASTRUCTURE

Order of Business

MUSWELLBROOK SHIRE COUNCIL
INFRASTRUCTURE COMMITTEE MEETING

AGENDA

WEDNESDAY 28 MARCH 2018

1 APOLOGIES AND LEAVE OF ABSENCE

Moved: _____ **Seconded:** _____

2 CONFIRMATION OF MINUTES OF PREVIOUS MEETING

RECOMMENDATION

That the Minutes of the Infrastructure Committee held on **28 February 2018**, a copy of which has been distributed to all members, be taken as read and confirmed as a true record.

Moved: _____ **Seconded:** _____

MINUTES OF THE INFRASTRUCTURE COMMITTEE MEETING OF THE MUSWELLBROOK SHIRE COUNCIL HELD IN THE COUNCILLORS ROOM, ADMINISTRATION CENTRE, MUSWELLBROOK ON WEDNESDAY 28 FEBRUARY, 2018 COMMENCING AT 4.30PM.

PRESENT: Cr R. Scholes (Chair), Cr M. Rush, Cr J.F. Eades, Cr J. Foy, Cr M. Green, Cr J. Ledlin, Cr G. McNeill, and Cr S. Ward.

IN ATTENDANCE: Ms G. Bobsien (Acting General Manager), Mr D. Finnigan (Interim Director, Community Infrastructure), Mrs C. O'Brien (Acting Director, Planning, Community & Corporate Services), Mr E. Ediriwickrama (Manager, Roads & Drainage), Ms N. Cowley (Manager, Corporate Services), Mrs M. Sandell-Hay (PA to General Manager).

1 APOLOGIES AND LEAVE OF ABSENCE

RECOMMENDED on the motion of Crs McNeill and Eades that:

The apologies for inability to attend the meeting submitted by Cr S. Bailey, Cr M. Bowditch, Cr. S. Reynolds and Cr B.N. Woodruff be ACCEPTED and the necessary Leave of Absence be GRANTED.

2 CONFIRMATION OF MINUTES OF PREVIOUS MEETING

RECOMMENDED on the motion of Crs Rush and Ledlin that:

The Minutes of the Infrastructure Committee held on 31 January 2018, a copy of which has been distributed to all members, be taken as read and confirmed as a true record.

3 DISCLOSURE OF ANY PECUNIARY AND NON-PECUNIARY INTEREST

Nil

4 BUSINESS ARISING

Nil

5 BUSINESS

5.1 GRAFFITI MANAGEMENT ACTIVITY FOR FIRST TWO QUARTERS OF 2017-2018

RECOMMENDED on the motion of Crs McNeill and Green that:

The information contained in this report be noted.

5.2 PERFORMANCE REVIEW OF COUNCIL'S STREET SWEEPING CONTRACT FOR THE SECOND QUARTER OF 2017-2018

RECOMMENDED on the motion of Crs Rush and Ledlin that:

The information contained in this report be noted.

5.3 IMPLEMENTATION OF COMMUNITY INFRASTRUCTURE CONSTRUCTION WASTE MANAGEMENT STRATEGY 2017/18 - 2020/21

RECOMMENDED on the motion of Crs Rush and Green that:

The information contained in this report be noted.

6 DATE OF NEXT MEETING

28 March 2018

7 CLOSURE

The meeting was declared closed at 4.36pm.

.....	.....
Gerry Bobsien	Cr R. Scholes
Acting General Manager	**Chairperson**

3 DISCLOSURE OF ANY PECUNIARY AND NON-PECUNIARY INTEREST

Section 451 of the Local Government Act requires that if a councillor or member of a council or committee has a pecuniary interest in any matter before the council or committee, he/she must disclose the nature of the interest to the meeting as soon as practicable and must not be present at, or in sight of, the meeting, when the matter is being discussed, considered or voted on.

A pecuniary interest is an interest that a person has in a matter because of a reasonable likelihood or expectation of financial gain or loss (see sections 442 and 443 of the Local Government Act).

A non-pecuniary interest can arise as a result of a private or personal interest which does not involve a financial gain or loss to the councillor or staff member (eg friendship, membership of an association, or involvement or interest in an activity). A councillor must disclose the nature of the interest to the meeting as soon as practicable.

Council's Model Code of Conduct now recognises two forms of non-pecuniary conflict of interests:

- Significant
- Less than significant

A Councillor must make an assessment of the circumstances and determine if the conflict is significant.

If a Councillor determines that a non-pecuniary conflict of interests is less than significant and does not require further action, they must provide an explanation of why it is considered that the conflict does not require further action in the circumstances.

If the Councillor has disclosed the existence of a significant non-pecuniary conflict of interests at a meeting they must not be present at, or in sight of, the meeting, when the matter is being discussed, considered or voted on.

4 BUSINESS ARISING

5 BUSINESS

5.1 JUL - DEC 2017 INFRASTRUCTURE REPORT FOR WATER AND WASTEWATER SERVICES

Attachments:	**A. 2017 July-Sept Water, Wastewater Report** **B. Oct-Dec 2017 Qtrly WW Report**
Responsible Officer:	**Fiona Plesman - Acting General Manager**
Author:	**Irene Chetty - Operations & Process Engineer - Water & Waste**
Community Plan Issue:	***A safe, secure and reliable water supply and sewerage services are provided to all residents that will ensure public health***
Community Plan Goal:	***Provide safe, secure, efficient and effective water, sewerage and waste services in compliance with regulatory requirements.***
Community Plan Strategy:	***Ensure substantial achievement of Best Practice Water Supply and Sewerage Guidelines.***

PURPOSE

The report summarises the performance of water and wastewater services, including drinking water quality and re-use quality supplied to Council's customers for the period 1 July to 31 December 2017.

OFFICER'S RECOMMENDATION

Council note the content of this report.

Moved: _____ **Seconded:** _____

BACKGROUND

This report discusses testing and monitoring of water supply and sewerage systems, including re-use systems in relation to health guidelines and licence parameters, for the period 1 July to 31 December 2017.

CONSULTATION

Data is extracted from plant performance monitoring database and service requests as well as contribution from Water & Waste staff, laboratory technician, operators and Council's Rates Department.

CONSULTATION WITH COUNCILLOR SPOKESPERSON

This report will be discussed before the Committee meeting.

REPORT

Attachment A provides a tabulated summary for period July to September 2017 and Attachment B provides a tabulated summary for period October to December 2017 on:

- Levels of service (LOS) for performance indicators for water services
- LOS performance indicators for wastewater services
- Potable water and wastewater quality statistics
- Water consumption graphs for Muswellbrook, Denman and Sandy Hollow highlighting:

- Accumulated monthly consumptions
- 5 year accumulated averages
- Accumulated monthly allocations

Discussions

The majority of existing LOS performance for both water supply and wastewater services are compliant for health criteria and service responsiveness. However there were some exceptions as detailed below.

1 July to 30 September 2017

- Drinking water quantity supplied to Sandy Hollow has exceeded the target of 3,000litres/assessment per day for the reporting period, as result of the drier climatic conditions.
- Denman's drinking water hardness levels remains higher than the target, this is will return to acceptable levels when the de-alkaliser (i.e. water softening equipment) is reinstated in November 2017.
- Sandy Hollow's drinking water hardness (aesthetic parameter) is high due to inherent raw water quality. The hardness can only remedied by an upgrade; such as nano-filtration or reverse osmosis incorporated into current treatment process or an alternate water source with high quality ground water supply.
- Dirty water complaints resulted from main breaks, water service breaks and repairs on old mains;
- Muswellbrook sewer treatment plant re-use maturation pond overflowed due to reduced demand from Mt Arthur Coal (MAC). This overflow was reported to the EPA and samples taken to monitor compliance, as required by the license. Test results reported to EPA were compliant.
- Odour complaints from the Muswellbrook sewer treatment plant were higher than normal due to damages to inlet works balance tank roof. The damaged roof was repaired early November 2017.
- Denman Golf Course exceeded for this quarter, compared to previous re-use consumptions during the same quarters.
- Re-use quality was satisfactory; except for the high total suspended solids (TSS). High re-use pond levels, high temperatures and accumulation of phosphates & nitrates contributes to the excessive algal growth in re-use ponds. This contributes to the high TSS levels in the re-use.
- Response time to water supply failures (i.e. less than 1 hour; less than 4 hours) for this quarter is just below target due to the high number of main breaks and repairs at Muswellbrook.
- Response time to unplanned system failures in the wastewater services was 100% compliant for this quarter as category three type failures were few (three failures due to blockages).

1 October to 31 December 2017

- Drinking water quantity supplied to Sandy Hollow has exceeded the target of 3,000litres/assessment per day for the reporting period, as result of the drier climatic conditions.
- Drinking water quality was 100% compliant in health targets across all three water treatment plants. Denman's dealkaliser was reinstated at end of November 2017 and an immediate improvement in drinking water hardness, was achieved.
- Sandy Hollow's drinking hardness remains higher than the aesthetic target; this is an inherent issue and will require an upgrade in the treatment process.
- Water main breaks and repairs remain high due to aging pipework. Response time to water supply failures in the water were below target due to limited resources and operator training with regards to electrical safety when working with metallic piping. Training on electrical awareness and safety was completed by December 2017. Council is in the process of employing more network operators.
- The dirty water complaints, although 50% less than the previous quarter, were due main breaks and service repairs on aging pipework.

- Water supply failure response time (less than an hour) was 75% compliant but remained at 94% compliant for response time of less than four hours.
- The number of Category 3 sewer system failures (failures due to blockages) was reduced to just one blockage in Muswellbrook. The sewer re-lining program has significantly contributed to this improvement.
- Re-use water quality struggled to meet performance targets. High temperatures, algal growth and high pH contributed to high TSS, BOD and poor chlorine disinfection. There were no overflows or discharge of re-use into the environment for this quarter. Consumption of re-use (customers are Muswellbrook & Denman Golf Courses and Mt Arthur Coal) exceeded 100% due to the dry, hot summer season.

OPTIONS

Not applicable

CONCLUSION

Drinking water quality at Muswellbrook, Denman and Sandy Hollow was satisfactory. The wastewater performance and compliance were relatively satisfactory however poor re-use quality inhibited performance. This problem will be alleviated when the new RWTW is commissioned as it will produce re-use water of high quality.

SOCIAL IMPLICATIONS

This report signals Council's compliance with stipulated levels of service and statutory requirements such as the Australian Drinking Water Guidelines of 2011, EPA licenses, Department of Industries (DOI) Water benchmarking and the contract licensing agreements with MAC and Muswellbrook & Denman golf courses.

FINANCIAL IMPLICATIONS

Not applicable

POLICY IMPLICATIONS

Not applicable

STATUTORY IMPLICATIONS

Specific statutory regulations, including the Local Government Act, apply.

LEGAL IMPLICATIONS

Council must make every effort to ensure compliance

OPERATIONAL PLAN IMPLICATIONS

The submission of this report complies with the Council's Operational Plan 2017/2018 for the reporting of water and wastewater levels of service, performance indicators and compliance with health guidelines and licence parameters – 20.1.4, 20.1.5 and 20.1.6

RISK MANAGEMENT IMPLICATIONS

The reporting of July to September 2017 and October to December 2017 water and wastewater LOS performance indicators, are used as a tool to manage the risk of non-compliance to statutory bodies.

LEVEL OF SERVICE PERFORMANCE INDICATORS - WATER SERVICES

Period: 1 July - 30 September 2017

Indicator	Description	Report Period	Year to Date	Performance Target
Availability of Supply	Reported Events Outside Standard			
Muswellbrook & Denman	Minimum Pressure kPa (when conveying 0.15 L/s/tenement)			200 kPa
	Maximum Static Pressure			850 kPa
Water Restrictions (2007 Drough Management Plan)				Restrictions result in no more than 20% reduction in consumption, are not required for more than 10% of the time and that the average frequency of restrictions is less than 5 in every 100 years (the level of service)
Muswellbrook				
Denman				
Sandy Hollow				
Peak Daily Demand (litres/assessment including commercial)				(= peak day consumption/no assessmentsts)
Muswellbrook		2024.90		3000 litres/assessment
Denman		3081.66		3000 litres/assessment
Sandy Hollow		3278.69		3000 litres/assessment
Supply Interruptions				
Planned Interruptions to Supply	Number of Interruptions	3.0	3.0	<1/1000 customers/year
(5 days notice to domestic, commercial	Average time to repair	2.8	2.8	Hours
& industrial customers)	Average length of Interruptions			< 2 hours
	Maximum length of interruption			< 4 hours
Average length of interruption is not supplied as current systems do not allow accurate recording -				
Unplanned Interruptions to Supply	Number of Interruptions	1	1.0	Mbk - 50, Denman - 10, SH - 2 per year
(due to main replacement - excluding service lines)	Average time to repair	5	4.5	Hours
	Average length of Interruptions			< 4 hours
	Number of Residences affected	30	30.0	1/connection/year
Water Quality		*Averages*		
Muswellbrook	Turbidity	0.60	0.42	1 NTU maximum
	pH	7.65	7.82	6.5 - 8.5
	Total Hardness	191.56	154.85	<200 mg/L
	E-Coli	100%	100%	100% Compliance
	Free Available Chlorine	0.95	0.92	0.1 - 1.0mg/l
Denman	Turbidity	0.52	0.52	1 NTU maximum
	pH	7.98	7.89	6.5 - 8.5
	Total Hardness	250.17	211.17	<200 mg/L
	E-Coli	100%	100%	100% Compliance
	Free Available Chlorine	1.10	1.04	0.1 - 1.0mg/l
Sandy Hollow	Turbidity	0.92	0.74	1 NTU maximum
	pH	7.73	7.75	6.5 - 8.5
	Total Hardness	548.83	597.22	<200 mg/L
	E-Coli	100%	100%	100% Compliance
	Free Available Chlorine	0.92	0.89	0.1 - 1.0mg/l
Service Requests				Leaks 80/year
Muswellbrook	Main Break	7	7	
	Fitting Repair	10	10	
	Service Repair	32	32	
	Service Replacement	6	6	
Meter replacements do not include those replaced during the bill read process	Meter replacement	37	37	
Denman	Main Break	0	0	
	Fitting Repair	2	2	
	Service Repair	5	5	
	Service Replacement	0	0	
Meter replacements do not include those replaced during the bill read process	Meter replacement	6	6	Meter replacements don't include those completed as a result of the water meter reading process
Sandy Hollow	Main Break	0	0	
	Fitting Repair	0	0	
	Service Repair	0	0	
	Service Replacement	0	0	
Meter replacements do not include those replaced during the bill read process	Meter replacement	1	1	Meter replacements don't include those completed as a result of the water meter reading process
Total Service Requests		**106**	**106**	
Supply Failure Response Times (unplanned)				
Muswellbrook, Denman & Sandy Hollow	Number where response time <1 hour	93.0	93.0	>95%
(expressed as percentage)	Number where completion time <4 hours	93.0	93.0	>95%
General Complaints (Management)				
Water Quality (Dirty water, taste & odour)				
Muswellbrook		15	15	<1/1000 customers per year
Denman		1	1	
Sandy Hollow		0	0	
Pressure (not related to a main break)				
Muswellbrook		7	7	<10
Denman		1	1	<2
Sandy Hollow		0	0	<2
Other				
Service Provided				
Time to provide an individual connection to water	New Services	2	2	Number
supply in serviced area (90% of time)		100%	100%	Percentage installed within 5 Working Days

- This Report has been prepared using information available at the time of collation and may not include a complete data set for the report period.
- Performance Targets are those identified in the current 2005/2006 Strategic Business Plan.
- Report Period and Year to Date in some cases will be the same due to the commencement of new report year

LEVEL OF SERVICE PERFORMANCE INDICATORS - WASTEWATER SERVICES

Period: 1 July - 30 September 2017

Indicator	Description	Report Period	Year to Date	Performance Target
Availability of Service				
Muswellbrook	Average Dry Weather Flow (ADWF)	2.22	2.22	3.6 Ml per day
	Peak Wet Weather Flow (PWWF)	2.85	2.85	18.7 Ml per day
	Rainfall	25.0	85.00	mm
Denman	Average Dry Weather Flow (ADWF)	0.30	0.30	0.3 Ml per day
	Rainfall	24.50	24.50	mm
System Failures (causing overflow)				
Category 1	*Failures due to rainfall and deficient design capacity*			
Muswellbrook		0	0	2 per year
Denman		0	0	1 per year
Category 2	*Failures due to pump or other breakdown*			
Muswellbrook		0	0	1 per year
Denman		0	0	1 per year
Category 3	*Failures due to blockages*			Muswellbrook - 100/year
Muswellbrook	Roots Blocking Sewer	0	0	
	Foreign Objects in Sewer	1	1	
	Broken Sewer Pipe	0	0	
	Blocked Junction	0	0	
	Blocked Boundary	2	2	
	TOTAL	**3**	**3**	
Denman	Roots Blocking Sewer	0	0	Denman - 20/year
	Foreign Objects in Sewer	0	0	
	Broken Sewer Pipe	0	0	
	Blocked Junction	0	0	
	Blocked Boundary	0	0	
	TOTAL	**0**	**0**	
Response Times (unplanned - to system failures)				
Muswellbrook & Denman	Occasions where response time < 1hr (%)	100.0%	100.0%	> 95%
	Occasions where completion time < 4 hrs (%)	100.0%	100.0%	> 95%
General Complaints (Non Urgent)				
Muswellbrook	Odour complaints(Sewer Treatment Works) for period	0	0	1 per year
	Odour complaints (other) for period	6	6	1 per year
Denman	Odour complaints(Sewer Treatment Works) for period	0	0	1 per year
	Odour complaints (other) for period	1	1	1 per year
Effluent Quality		*Report Period*		
		Min	**Max**	
Muswellbrook Wastewater	BOD	9.00	14.00	<20 mg/l
Treatment Plant (Golf Course)	SS	14.00	66.00	<30 mg/l
Muswellbrook Wastewater	BOD	9	13	<20 mg/l
Treatment Plant (HVEC)	SS	8	64	<30 mg/l
Denman Wastewater	BOD	<2	8	20 mg/l
Treatment Plant (Golf Course)	SS	8	34	30 mg/l
Muswellbrook Effluent Reuse (HVEC)	E-Coli	0	32	< 150/100mls (Contract)
Muswellbrook Effluent Reuse (Golf Course)	E-Coli	2	4.1	< 150/100mls
Denman Effluent Reuse (Golf Course)	E-Coli (Reuse Reservoir Outlet)	0	4	

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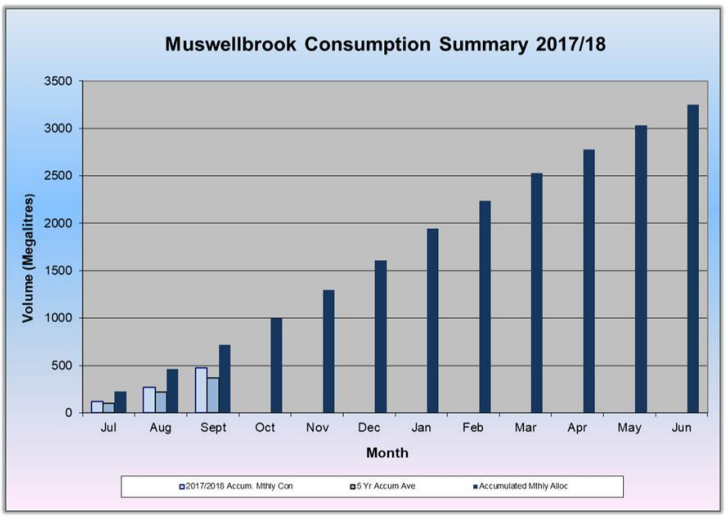
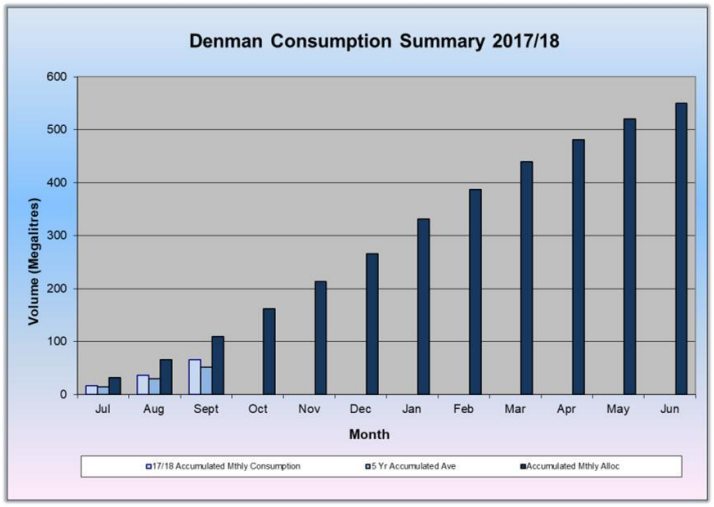
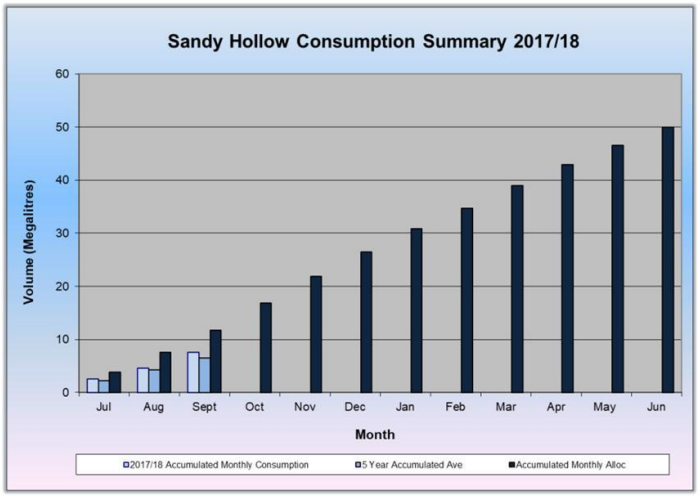
POTABLE WATER AND WASTEWATER STATISTICS

Period: 1 July to 30 September 2017

WATER	Report Period	5 Year Period Average	5 Year Peak for Period	5 Year Min. for Period	Description
Muswellbrook					
Consumption for Period	474.44	367.64			ML
Annual Consumption to Period End	474.44	367.64			ML
Maximum Daily Consumption	10.41		10.41		ML
Minimum Daily Consumption	2.92			1.00	ML
Average Daily Consumption	3.95	4.01			ML
Rainfall for Period	25.00	100.95			mm
Yearly Rainfall to Period End	25.00	100.95			mm
Denman					
Consumption for Period	66.07	51.90			ML
Annual Consumption to Period End	66.07	51.90			ML
Maximum Daily Consumption	2.00		1.80		ML
Minimum Daily Consumption	0.06			0.03	ML
Average Daily Consumption	0.73	0.57			ML
Sandy Hollow					
Consumption for Period	7.53	6.44			ML
Annual Consumption to Period End	7.53	6.44			ML
Maximum Daily Consumption	0.20		0.21		ML
Minimum Daily Consumption	0.002			0.002	ML
Average Daily Consumption	0.08	0.07			ML
WASTEWATER					
Muswellbrook					
Raw Sewage (ML)	204.33	206.86	2.85	1.58	Inflows to Wastewater Treatment Plant (ML)
Potable Water to Sewer (%)	43.07	56.27			Potable water consumption to WWTP (%)
Denman					
Raw Sewage (ML)	28.06	30.20	0.43	0.15	Inflows to Wastewater Treatment Plant
Potable Water to Sewer (%)	42.46	58.19			Potable water consumption to WWTP (%)
TREATED EFFLUENT					
Muswellbrook					
Quantity Reused (ML)	150.14	217.11			ML
Percent Effluent Reused	73.48	104.95			Total WWTP inflow for period reused (%)
Effluent discharged to the environment	45.96				ML
Denman					
Quantity Reused (ML)	30.18	40.18			ML
Percent of Effluent Reused	107.58	133.06			Total WWTP inflow for period reused (%)
Effluent discharged to the environment					ML


Muswellbrook Consumption Summary 2017/18
Volume (Megalitres)
3500
3000
2500
2000
1500
1000
500
0
Jul
Aug
Sept
Oct
Nov
Dec
Jan
Feb
Mar
Apr
May
Jun
Month
2017/2018 Accum. Mthly Con
5 Yr Accum Ave
Accumulated Mthly Alloc


Denman Consumption Summary 2017/18
Volume (Megalitres)
600
500
400
300
200
100
0
Jul
Aug
Sept
Oct
Nov
Dec
Jan
Feb
Mar
Apr
May
Jun
Month
17/18 Accumulated Mthly Consumption
5 Yr Accumulated Ave
Accumulated Mthly Alloc


Sandy Hollow Consumption Summary 2017/18
Volume (Megalitres)
60
50
40
30
20
10
0
Jul
Aug
Sept
Oct
Nov
Dec
Jan
Feb
Mar
Apr
May
Jun
Month
2017/18 Accumulated Monthly Consumption
5 Year Accumulated Ave
Accumulated Monthly Alloc

LEVEL OF SERVICE PERFORMANCE INDICATORS - WATER SERVICES

Period: 1 October 2017 - 31 December 2017

Indicator	Description	Report Period	Year to Date	Performance Target
Availability of Supply	Reported Events Outside Standard			
Muswellbrook & Denman	Minimum Pressure kPa (when conveying 0.15 L/s/tenement)			200 kPa
	Maximum Static Pressure			850 kPa
Water Restrictions (2007 Drough Management Plan)				
Muswellbrook				Restrictions result in no more than 20% reduction in consumption, are not required for more than 10% of the time and that the average frequency of restrictions is less than 5 in every 100 years (the level of service)
Denman				
Sandy Hollow				
Peak Daily Demand (litres/assessment including commercial)				(= peak day consumption/no assessmentsts)
Muswellbrook		2359.46		3000 litres/assessment
Denman		2881.36		3000 litres/assessment
Sandy Hollow		3278.69		3000 litres/assessment
Supply Interruptions				
Planned Interruptions to Supply	Number of Interruptions	3.0	5.0	<1/1000 customers/year
(5 days notice to domestic, commercial	Average time to repair	4.2	3.8	Hours
& industrial customers)	Average length of Interruptions			< 2 hours
	Maximum length of interruption			< 4 hours
Average length of interruption is not supplied as current systems do not allow accurate recording -				
Unplanned Interruptions to Supply	Number of Interruptions	4.0	5.0	Mbk - 50, Denman - 10, SH - 2 per year
(due to main replacement - excluding service lines)	Average time to repair	4.7	4.6	Hours
	Average length of Interruptions			< 4 hours
	Number of Residences affected	51	91.0	1/connection/year
Water Quality		*Averages*		
Muswellbrook	Turbidity	0.35	0.41	1 NTU maximum
	pH	7.71	7.79	6.5 - 8.5
	Total Hardness	132.81	152.07	<200 mg/L
	E-Coli	100%	100%	100% Compliance
	Free Available Chlorine	0.86	0.93	0.1 - 1.0mg/l
Denman	Turbidity	0.57	0.52	1 NTU maximum
	pH	7.84	7.90	6.5 - 8.5
	Total Hardness	196.46	205.28	<200 mg/L
	E-Coli	100%	100%	100% Compliance
	Free Available Chlorine	0.94	1.04	0.1 - 1.0mg/l
Sandy Hollow	Turbidity	0.67	0.71	1 NTU maximum
	pH	7.77	7.75	6.5 - 8.5
	Total Hardness	639.28	590.73	<200 mg/L
	E-Coli	100%	100%	100% Compliance
	Free Available Chlorine	0.82	0.90	0.1 - 1.0mg/l
Service Requests				Leaks 80/year
Muswellbrook	Main Break	12	19	
	Fitting Repair	11	21	
	Service Repair	25	57	
	Service Replacement	2	8	
Meter replacements do not include those replaced during the bill read process	Meter replacement	54	91	
Denman	Main Break	1	1	
	Fitting Repair	2	4	
	Service Repair	12	17	
	Service Replacement	0	0	
Meter replacements do not include those replaced during the bill read process	Meter replacement	5	11	Meter replacements don't include those completed as a result of the water meter reading process
Sandy Hollow	Main Break	0	0	
	Fitting Repair	1	1	
	Service Repair	3	5	
	Service Replacement	0	0	
Meter replacements do not include those replaced during the bill read process	Meter replacement	1	2	Meter replacements don't include those completed as a result of the water meter reading process
Total Service Requests		**129**	**237**	
Supply Failure Response Times (unplanned)				
Muswellbrook, Denman & Sandy Hollow	Number where response time <1 hour	75.0	83.0	>95%
(expressed as percentage)	Number where completion time <4 hours	94.0	93.5	>95%
General Complaints (Management)				
Water Quality (Dirty water, taste & odour)				
Muswellbrook		4	19	<1/1000 customers per year
Denman		0	1	
Sandy Hollow		2	2	
Pressure (not related to a main break)				
Muswellbrook		8	15	<10
Denman		1	2	<2
Sandy Hollow		5	5	<2
Other				
Service Provided				
Time to provide an individual connection to water	New Services	2	4	Number
supply in serviced area (90% of time)		100%	100%	Percentage installed within 5 Working Days

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LEVEL OF SERVICE PERFORMANCE INDICATORS - WASTEWATER SERVICES

Period: 1 October - 31 December 2017

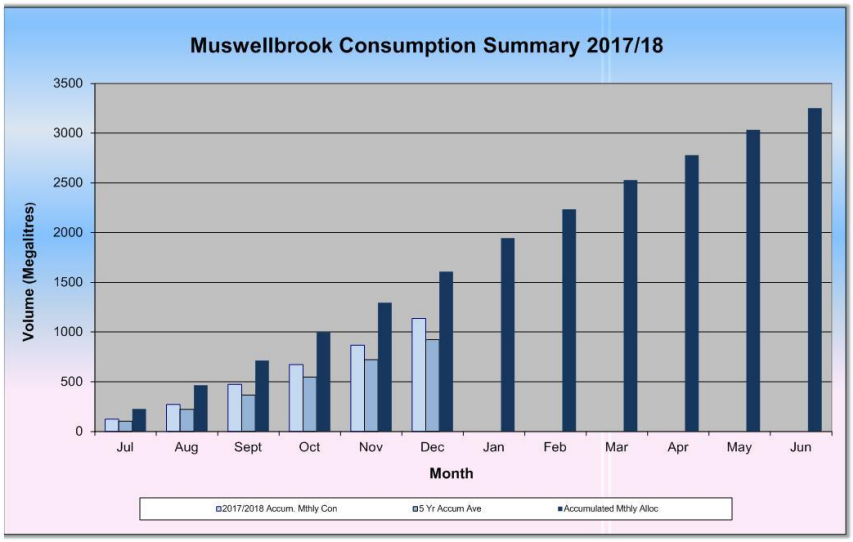
Indicator	Description	Report Period	Year to Date	Performance Target
Availability of Service				
Muswellbrook	Average Dry Weather Flow (ADWF)	2.17	2.19	3.6 Ml per day
	Peak Wet Weather Flow (PWWF)	3.13	3.13	18.7 Ml per day
	Rainfall	91.5	116.50	mm
Denman	Average Dry Weather Flow (ADWF)	0.33	0.32	0.3 Ml per day
	Rainfall	95.50	120.00	mm
System Failures (causing overflow)				
Category 1	*Failures due to rainfall and deficient design capacity*			
Muswellbrook		0	2	2 per year
Denman		0	0	1 per year
Category 2	*Failures due to pump or other breakdown*			
Muswellbrook		0	0	1 per year
Denman		0	0	1 per year
Category 3	*Failures due to blockages*			Muswellbrook - 100/year
Muswellbrook	Roots Blocking Sewer	1	1	
	Foreign Objects in Sewer	0	1	
	Broken Sewer Pipe	0	0	
	Blocked Junction	0	0	
	Blocked Boundary	0	2	
	TOTAL	**1**	**4**	
Denman	Roots Blocking Sewer	0	0	Denman - 20/year
	Foreign Objects in Sewer	0	0	
	Broken Sewer Pipe	0	0	
	Blocked Junction	0	0	
	Blocked Boundary	0	0	
	TOTAL	**0**	**0**	
Response Times (unplanned - to system failures)				
Muswellbrook & Denman	Occasions where response time < 1hr (%)	100.0%	100.0%	> 95%
	Occasions where completion time < 4 hrs (%)	100.0%	100.0%	> 95%
General Complaints (Non Urgent)				
Muswellbrook	Odour complaints(Sewer Treatment Works) for period	0	0	1 per year
	Odour complaints (other) for period	2	8	1 per year
Denman	Odour complaints(Sewer Treatment Works) for period	0	0	1 per year
	Odour complaints (other) for period	1	2	1 per year
Effluent Quality		*Report Period*		
		Min	**Max**	
Muswellbrook Wastewater	BOD	10.00	26.00	<20 mg/l
Treatment Plant (Golf Course)	SS	27.00	80.00	<30 mg/l
Muswellbrook Wastewater	BOD	5	19	<20 mg/l
Treatment Plant (HVEC)	SS	32	72	<30 mg/l
Denman Wastewater	BOD	7	9	20 mg/l
Treatment Plant (Golf Course)	SS	34	58	30 mg/l
Muswellbrook Effluent Reuse (HVEC)	E-Coli	0	1643	< 150/100mls (Contract)
Muswellbrook Effluent Reuse (Golf Course)	E-Coli	0	>2419.6	< 150/100mls
Denman Effluent Reuse (Golf Course)	E-Coli (Reuse Reservoir Outlet)	0	648.7	

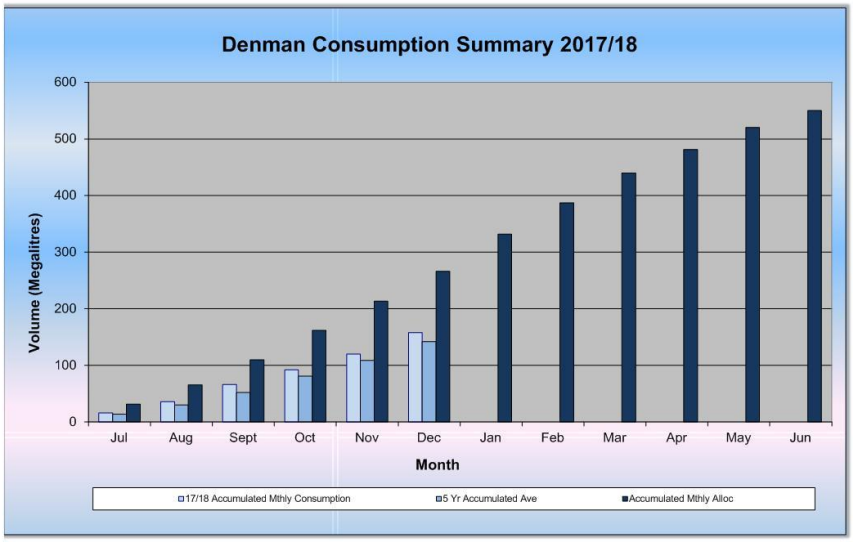
- This Report has been prepared using information available at the time of collation and may not include a complete data set for the report period.
- Performance Targets are those identified in the current 2005/2006 Strategic Business Plan.
- Report Period and Year to Date in some cases will be the same due to the commencement of new report year

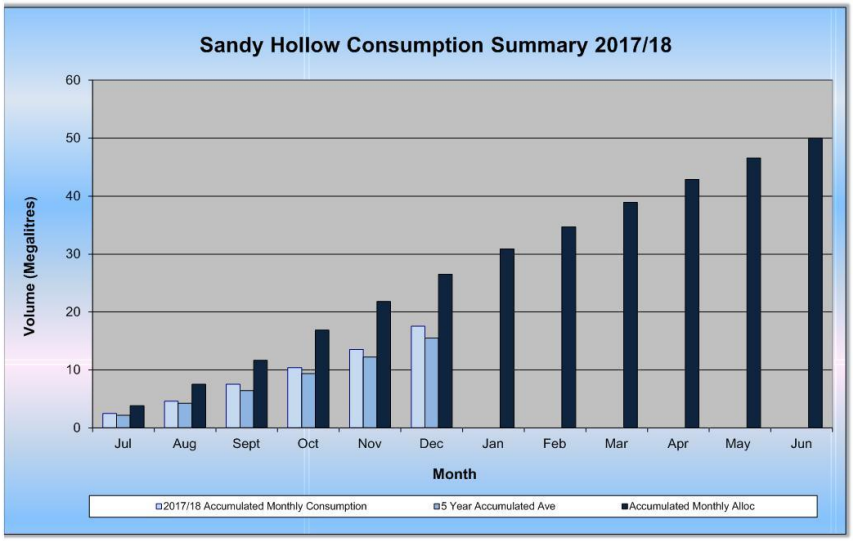
POTABLE WATER AND WASTEWATER STATISTICS

Period: 1 October to 31 December 2017

WATER	Report Period	5 Year Period Average	5 Year Peak for Period	5 Year Min. for Period	Description
Muswellbrook					
Consumption for Period	662.58	556.37			ML
Annual Consumption to Period End	1137.01	924.01			ML
Maximum Daily Consumption	12.13		12.13		ML
Minimum Daily Consumption	3.63			1.97	ML
Average Daily Consumption	7.19	6.05			ML
Rainfall for Period	91.50	192.60			mm
Yearly Rainfall to Period End	116.50	293.55			mm
Denman					
Consumption for Period	91.86	90.02			ML
Annual Consumption to Period End	157.92	141.92			ML
Maximum Daily Consumption	1.87		2.89		ML
Minimum Daily Consumption	0.30			0.30	ML
Average Daily Consumption	1.00	0.98			ML
Sandy Hollow					
Consumption for Period	10.01	9.08			ML
Annual Consumption to Period End	17.55	15.51			ML
Maximum Daily Consumption	0.20		0.24		ML
Minimum Daily Consumption	0.033			0.017	ML
Average Daily Consumption	0.11	0.10			ML
Muswellbrook					
Raw Sewage (ML)	199.48	204.48	3.13	1.48	Inflows to Wastewater Treatment Plant (ML)
Potable Water to Sewer (%)	30.11	36.75			Potable water consumption to WWTP (%)
Denman					
Raw Sewage (ML)	30.16	31.23	0.72	0.18	Inflows to Wastewater Treatment Plant
Potable Water to Sewer (%)	32.83	34.70			Potable water consumption to WWTP (%)
TREATED EFFLUENT					
Muswellbrook					
Quantity Reused (ML)	213.61	281.10			ML
Percent Effluent Reused	107.09	137.47			Total WWTP inflow for period reused (%)
Effluent discharged to the environment	0.00				ML
Denman					
Quantity Reused (ML)	31.42	37.62			ML
Percent of Effluent Reused	104.18	120.43			Total WWTP inflow for period reused (%)
Effluent discharged to the environment	0.00				ML


Muswellbrook Consumption Summary 2017/18
Volume (Megalitres)
3500
3000
2500
2000
1500
1000
500
0
Jul
Aug
Sept
Oct
Nov
Dec
Jan
Feb
Mar
Apr
May
Jun
Month
2017/2018 Accum. Mthly Con
5 Yr Accum Ave
Accumulated Mthly Alloc


Denman Consumption Summary 2017/18
Volume (Megalitres)
600
500
400
300
200
100
0
Jul
Aug
Sept
Oct
Nov
Dec
Jan
Feb
Mar
Apr
May
Jun
Month
17/18 Accumulated Mthly Consumption
5 Yr Accumulated Ave
Accumulated Mthly Alloc


Sandy Hollow Consumption Summary 2017/18
Volume (Megalitres)
60
50
40
30
20
10
0
Jul
Aug
Sept
Oct
Nov
Dec
Jan
Feb
Mar
Apr
May
Jun
Month
2017/18 Accumulated Monthly Consumption
5 Year Accumulated Ave
Accumulated Monthly Alloc

6 ADJOURNMENT INTO CLOSED COMMITTEE

In accordance with the Local Government Act 1993, and the Local Government (General) Regulation 2005, business of a kind referred to in Section 10A(2) of the Act should be dealt with in a Confidential Session of the Committee meeting closed to the press and public.

RECOMMENDATION

That the Committee adjourn into Closed Session and members of the press and public be excluded from the meeting of the Closed Session, and access to the correspondence and reports relating to the items considered during the course of the Closed Session be withheld unless declassified by separate resolution. This action is taken in accordance with Section 10A(2) of the Local Government Act, 1993 as the items listed come within the following provisions:

7.1 Domestic Waste Program - Skip Bin located at 182 Scrumlo Road, Hebden

Item 7.1 is classified CONFIDENTIAL under the provisions of Section10A(2)(a) of the local government act 1993, as it deals with personnel matters concerning particular individuals (other than councillors), and the Committee considers that discussion of the matter in an open meeting would be, on balance, contrary to the public interest.

7.2 POTENTIAL DISPUTE

Item 7.2 is classified CONFIDENTIAL under the provisions of Section10A(2)(c) of the local government act 1993, as it deals with information that would, if disclosed, confer a commercial advantage on a person with whom the council is conducting (or proposes to conduct) business, and the Committee considers that discussion of the matter in an open meeting would be, on balance, contrary to the public interest.

7.3 MARCH QUARTERLY REPORT - PROGRESS ON THE RECYCLE WATER TREATMENT WORKS PROJECT

Item 7.3 is classified CONFIDENTIAL under the provisions of Section10A(2)(d)(I) of the local government act 1993, as it deals with commercial information of a confidential nature that would, if disclosed prejudice the commercial position of the person who supplied it, and the Committee considers that discussion of the matter in an open meeting would be, on balance, contrary to the public interest.

Moved: _____ **Seconded:** _____

7 CLOSED COMMITTEE

8 RESUMPTION OF OPEN COMMITTEE

9 DATE OF NEXT MEETING

18 April 2018

10 CLOSURE