OVERVIEW

This report is for Water Services activities for May and June 2016. Please note that references to the May/June reporting period covers the period 14 May 2016 to 17 June 2016. Significant items in this period include:

- myh20 registrations have been on the increase with 9,185 properties now registered. The goal was 10,000 registrations by 30 June 2016.
- The Water Connections Tour by Queensland Water Directorate visited Mackay on 20 May 2016 and viewed the region's water and sewerage assets and automatic metering infrastructure.
- A Plumbing Industry Session was held on 21 May 2016 where officers provided a presentation on myh20.
- The Water and Waste Advisory Board Meeting was held on 23 May 2016.
- Over 200 Year 5 and 7 students have toured the Nebo Road Water Treatment Plant as part of the Water Education Program. The Program provides students with first-hand experience of the water treatment process.
- Officers attended the Water Industry Operators Conference on 1 and 2 June 2016 in Rockhampton where one officer presented a technical paper receiving substantial positive feedback.
- The Water Business Plan for 2016 - 2021 has been finalised and adopted with the budget.
- The Cairns, Townsville and Mackay (CTM) Water Alliance held a quarterly meeting in Mackay on 10 June 2016.
- Over 20,000 tests were performed by the laboratory in May 2016. This is the first time that greater than 20,000 tests have been performed by the Laboratory.
Signing of the new Memorandum of Understanding for the Cairns, Townsville and Mackay Water Alliance on 10 June 2016

Seated (from left to right) - Cr Richie Bates (Chairman Water & Waste Committee, Cairns Regional Council), Cr Karen May (Chair Infrastructure & Services Standing Committee, Mackay Regional Council) and Cr Paul Jacob (Chairman Water & Waste Committee, Townsville City Council)

Standing (from left to right) - Keith Parsons (Director Water & Waste, Townsville City Council), Graham O’Byrne (General Manager Water & Waste, Cairns Regional Council) and Jason Devitt (Director Engineering & Commercial Infrastructure, Mackay Regional Council)

Director Engineering and Commercial Infrastructure
1.1. Incident Statistics
The incident statistic details a summary of the Water Services safety incident performance. Water Services aspires to achieve zero harm with a stretch target of zero injuries.

8 incidents comprising of:
- 1 x Bite/Sting
- 1 x Muscular Stress and 6 x Near Misses which included
  - 1 x damaged vehicle
  - 1 x non compliant PPE
  - 1 x vehicle incident
  - 1 x biological
  - 2 x inadequate signage for works being completed

Data at 31 May 2016

1.2. Preventative Actions
To achieve improved safety performance a range of improvement initiatives are undertaken on a monthly basis. The following figure tracks the improvement process through implementation of the SafePlan Monthly Action Plans (MAPs) and the hazard inspections.

For the month of April, 3 Hazard Inspections were scheduled and completed. All outstanding Hazard Inspections from prior months have been completed. MAP's completed in May is at 99%.

Data is at 31 May 2016
2.1. Water Operating Revenue Less Expenditure

The following shows the actual, budget and forecast Earnings before Interest, Taxes and Amortization (EBITA) based on cash accounting for the 2015/2016 financial year. The saw tooth nature of the graph is reflective of the timing of water revenue received. The capital revenue has been excluded from this graph.

Water Fund is $2.77M in surplus. Income is up by $570.8K with an underspend of $1.6M in Goods & Services and underspend of $717K in Employee Costs. The annual surplus is projected to be $2.47M.

Financial data is up to May 2016.

2.2. Accrued Water Operating Revenue Less Expenditure

The following shows the estimation of the accrued revenue less expenditure. The capital revenue has been excluded.

On accrual basis, water actuals YTD are in surplus of budget by $2.63M. The annual surplus is projected to be $2.47M.

Financial data is up to May 2016.
2.3. **Wastewater Operating Revenue Less Expenditure**

The following shows the actual, budget and forecast EBITA based on cash accounting for the 2015/2016 financial year. The saw tooth nature of the graph is reflective of the timing of water revenue received. The capital revenue has been excluded from this graph.

![Graph showing wastewater operating revenue less expenditure from July 2015 to June 2016.]

- **Sewage Fund** is $2.78M in surplus. Income is up by $1.2M with an underspend of $1.6M in Goods & Services and underspend of $146K in Employee Costs. The annual surplus is projected to be $2.82M.

2.4. **Accrued Wastewater Operating Revenue less Expenditure**

The following shows the estimation of the accrued revenue less expenditure. The capital revenue has been excluded.

![Graph showing accrued wastewater operating revenue less expenditure from July 2015 to June 2016.]

- On an accrual basis, sewer actuals YTD are surplus of budget by $2.92M and annual surplus is projected to be $2.82M.

Financial data is up to May 2016.
2.5. Capital Expenditure Performance

The following trend provides a high level overview of the capital expenditure to monitor forecast expenditure against actual expenditure. The forecast expenditure profile is based on the project delivery schedule within Water Services.

Capital expenditure actuals resulted in an 81% spend of budget. Including committals 87% of the total budget is spent, with savings of approximately 6% and delivery slippage making up the remainder of 7%. A full end of year review will be provided at the August meeting.

3.1. Requests

This graph details the client requests received and recorded via pathways that relate to the Water Business. The target is to have 90% of all client requests closed at any one point in time.

Data available to end May 2016.
3.2. Request Types

The following chart displays a summary of the client request types received for the month.

![Request Types Chart]

An increase in Public Amenity requests from 28 in April 2016 to 45 in May 2016 and and Water Service Leaks from 176 in April 2016 to 214 in May 2016

Data is for May 2016.

3.3. Plumbing Applications

In accordance with the *Plumbing and Drainage Act* a plumbing application is required for all new plumbing installations or modifications to existing plumbing. A plumbing application must be lodged to Local Government. Water Services has a regulatory time frame of 20 business days to assess a plumbing application. An internal target of 5 business days has been set for all residential plumbing applications.

![Plumbing Applications Chart]

Plumbing application numbers have doubled from the previous three month average. Approval turnaround times remain at 2 days despite the jump in applications.

Data is for the period from 14 May 2016 to 17 June 2016.
3.4. **Trade Waste Approvals**

The program for undertaking trade waste assessment and licensing of all applicable businesses that discharge trade waste is ongoing. As part of the Trade Waste Assessment process a temporary Trade Waste Approval is put in place while the formal approval process is undertaken. The table below summarises the number of Trade Waste Approvals for the Mackay Region.

<table>
<thead>
<tr>
<th></th>
<th>Total Approved Businesses</th>
<th>Temporary Approvals In Place</th>
<th>New Approved Businesses for the Month</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mackay South</td>
<td>723</td>
<td>33</td>
<td>13</td>
</tr>
<tr>
<td>Mackay North</td>
<td>69</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Sarina</td>
<td>57</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Mirani/Marian</td>
<td>29</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>878</strong></td>
<td><strong>33</strong></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

A reduction in the number of temporary approvals has been noted in the reporting period. 16 new businesses were identified for the month.

3.5. **Annual Trade Waste Activity**

Annual targets are set for the Trade Waste team with respect to licensing Trade Waste Businesses. The target has been set at 250 new licensed businesses and audits completed by June 2016. The following graph shows the Actual Approvals, Temporary Approvals and Audits achieved and the number of the target remaining.

16 Approvals issued and 19 Audits conducted in the reporting period. The target of 250 combined Approvals and Audits is the target for 2015/2016 has been achieved.

Data is for the period from 14 May 2016 to 17 June 2016.
3.6. Building Over Adjacent Sewers

Building over Adjacent Sewer applications are lodged where the construction of a structure is proposed within close proximity of a sewer main. The application is assessed in accordance with Councils building over and adjacent to sewer policy. In accordance with the policy, Building Over Sewer Applications are assessed within 20 business days. Future reporting will include performance against turnaround time targets.

There was only 1 BOAS referral received for the month.

Data is for the period from 14 May 2016 to 17 June 2016

3.7. Scientific and Analytical Services

Scientific and Analytical Services provides laboratory analysis in accordance with National Association of Testing Authorities (NATA) Standards to both Mackay Regional Council and external clients. A summary of the laboratory activities are detailed below.

The number of test performed by the laboratory has exceeded 20000 for the month of May 2016. This is the first time the laboratory has performed greater than 20000 tests. This is due to the ICP_MS metals analysis and the GC_MS SVOC analysis being performed in-house in order to gain NATA accreditation. In addition, the laboratory has undertaken project work (Proserpine Sewage Characterisation) for Whitsunday Regional Council.

Data is available to end of May 2016 only
3.8. Community Engagement

This section monitors Water Services engagement on the services provided. The following chart shows the number of media releases, media updates and the number of people that were reached by the Media Releases on Facebook.

The following chart shows the number of likes and positive comments, the number of neutral comments and the number of negative comments received on Facebook from Media Releases and Media updates for Water Services.

The media release was:
Sign-up to myh2o to avoid large water bills

The media update was:
Water main works in Paget

Data is for the period from 14 May 2016 to 17 June 2016.
The following chart shows the cumulative number of myh2o registrations for the reporting period.

There were 1811 myh2o registrations during the May/June reporting period. The increase in registrations is attributed to the Water Bills being sent with the period and the Department of Housing registering their properties.

Data is at 17 June 2016

3.9. Leak Detection Notifications
The following table shows the number of Leak Notifications sent and the number of Leak Notifications action during May 2016.

<table>
<thead>
<tr>
<th>Month</th>
<th>Total Notifications Sent</th>
<th>Notifications Actioned</th>
</tr>
</thead>
<tbody>
<tr>
<td>May 2016</td>
<td>878</td>
<td>427</td>
</tr>
</tbody>
</table>

More detailed information is being compiled for future reporting.
4.1. Surface Water Raw Water Storage Capacities

Water Services sources water from a combination of surface water and groundwater sources. With the exception of Middle Creek Dam the storage facilities are owned and operated by SunWater. Middle Creek Dam is under Council’s control. The water stored in each of the storages is detailed below.

4.2. Annual Water Consumption vs Allocation by Source

Water Services has a water allocation or water license for each water source. The water allocation and year to date water consumption for each of the water sources is detailed below.

Water consumption at Marian Weir has exceeded the 2015/2016 financial year allocation. An application has been lodged with SunWater to transfer 100ML from Dumbleton Weir’s allocation to Marian Weir. Water consumption for all other supplies is less than 70% of the annual allocation.
4.3. Water Consumption by Locality

Water Services supplies water to both residential and commercial water clients throughout the Mackay Region. The average water consumption in each of the three major community centres is detailed below. The water consumption is presented as litres per equivalent population per day. This graph provides a summary of water consumption including commercial water use.

![Water Consumption Graph](Image)

4.4. Significant Projects

Water Services undertakes a range of projects across the water business. Projects take the form of Capital Projects, Planning Studies and investigations. Information for the significant projects in Water Services is provided in the table below and was current as at 17 June 2016. Significant Projects are assessed on the following criteria: Dollar Amount, Risk and/or Community Interest

<table>
<thead>
<tr>
<th>Council Project Management Phases</th>
<th>Indicators</th>
</tr>
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<tbody>
<tr>
<td>1. Planning (Plan)</td>
<td>On Track</td>
</tr>
<tr>
<td>2. Design (Des)</td>
<td>Potential Issue</td>
</tr>
<tr>
<td>3. Procurement (Proc)</td>
<td>Definite Issue</td>
</tr>
<tr>
<td>4. Construction (Con)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Project</th>
<th>Phase</th>
<th>Phase % Completion</th>
<th>Budget</th>
<th>Time</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mt Bassett Cemetery Rd WMR</td>
<td>Con</td>
<td>97%</td>
<td>⚠</td>
<td>┐</td>
<td>The new main has been commissioned with all services operational. The final disconnection of the decommissioned main has been delayed as, in addition to a number of other businesses, it will interrupt the water supply to the Indoor Sports Centre and Caravan Park on Harbour Road: as such, there are limited opportunities to complete it without seriously impacting these customers. It was originally delayed while the Sports Centre hosted a Championship Carnival. The re-scheduled date has been delayed due to inclement weather. The project is expected to run marginally over budget</td>
</tr>
<tr>
<td>Project</td>
<td>Phase</td>
<td>Phase % Completion</td>
<td>Budget</td>
<td>Time</td>
<td>Comments</td>
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</tr>
<tr>
<td>Water and Sewerage Network Telemetry Upgrades</td>
<td>Con</td>
<td>90%</td>
<td></td>
<td></td>
<td>Clear SCADA installation and commissioning for the Nebo Road WTP is well progressed and due to be complete by the end of the month. The Contractor upgrading the network telemetry has completed 8 out of 13 packages, with the remaining 5 packages of work more than 80% complete. Ergon works at Alligator Creek will delay this component of the works until August.</td>
</tr>
<tr>
<td>Mirani PTA</td>
<td>Con</td>
<td>93%</td>
<td></td>
<td></td>
<td>Raw sewage cutover was undertaken in 2 stages - the flow from Marian was cutover 1st June, while the Mirani rising main was cutover 3rd June, both slightly behind schedule. Since then, 2 existing pump stations within the Treatment Plant site were also cutover to flow into the new PTA, meaning there was no longer any flow going through the original inlet screen. The performance period for the new PTA commenced upon raw sewer cutover. There were some minor functional issues which were addressed, but generally the new screens have been operating well. The ATF system is also in operation, though its final commissioning tests will not be completed until December, when the peak hydrogen sulphide levels are expected. Operator training was completed prior to cutover. As Constructed drawings and asset registers have been provided.</td>
</tr>
<tr>
<td>Sewerage Network Refurbishments (Relining and Manholes)</td>
<td>Con</td>
<td>90%</td>
<td></td>
<td></td>
<td>Manhole inspection works for access restricted properties completed. Inspection of buried Manholes using CCTV is in progress and expected to meet end of June’16 target completion. Manhole relining works deferred to next FY following on from review of procurement process and recommendation to go to the market through open tender process.</td>
</tr>
<tr>
<td>Water Meter Replacements, AMR retrofits &amp; Water Services Replacement</td>
<td>Con</td>
<td>95%</td>
<td></td>
<td></td>
<td>The 15/16 FY domestic &amp; commercial water meter replacements works package and water service replacements have been completed slightly ahead of schedule and below budget allowing works identified for 16/17 FY together with some additional AMRs for retrofitting to commence.</td>
</tr>
<tr>
<td>Sewage Pump Station Resilience Upgrades</td>
<td>Proc</td>
<td>50%</td>
<td></td>
<td></td>
<td>In the review period detailed design and tender documents of proposed works on the 42 Sewage Pump Station sites were completed and the tender was advertised on 21 May 2016. Tender submissions due on 27 June 2016 with evaluation commencing thereafter.</td>
</tr>
<tr>
<td>Sewer Gravity Main - McCready Creek SPS to Symons Farm SPS</td>
<td>Con</td>
<td>75%</td>
<td></td>
<td></td>
<td>Contractor Doval Construction has been constructing the sewer gravity main since end of March; works are progressing well despite some days lost due to rain. Completion is still expected to be achieved in July 2016; weather permitting</td>
</tr>
<tr>
<td>Project</td>
<td>Phase</td>
<td>Phase % Completion</td>
<td>Budget</td>
<td>Time</td>
<td>Comments</td>
</tr>
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<td>----------------------------------------------</td>
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</tr>
<tr>
<td>Cape Hillsborough Water Main Replacement</td>
<td>Con</td>
<td>80%</td>
<td></td>
<td></td>
<td>The Smalley’s Beach Road section has been completed. Cape Hillsborough Road section has approximately 600 metres remaining to be completed. On target to complete all physical pipe-laying and testing by 30 June 2016 as planned; project tracking within budget.</td>
</tr>
<tr>
<td>Marian Sewerage Pump Station Upgrades</td>
<td>Con</td>
<td>100%</td>
<td></td>
<td></td>
<td>Contract Works Practical Completion was achieved on 8 December 2015. Contract is now in Defects Liability Stage until December 2016.</td>
</tr>
<tr>
<td>Middle Creek Dam Safety Upgrades</td>
<td>Con</td>
<td>100%</td>
<td></td>
<td></td>
<td>Contact Works Practical Completion was achieved on 9 February 2016. Contract is now under Defects Liability period ending February 2017.</td>
</tr>
</tbody>
</table>
5.1. Drinking Water Compliance

Safe Water supplies are provided in accordance with the requirements of the \textit{Water Supply Safety and Reliability Act} and are measured against the \textit{Australian Drinking Water Quality Guidelines}. Drinking Water samples are taken at the outlet of Water Treatment Plants and within the reticulation network. A summary of the performance is detailed below.

**Health Parameter Test Results**

No health based exceedences identified in the reporting period.

This data is reported 1 month in arrears and due to regulatory reporting requirements is reported by calendar month.

**Aesthetic Parameter Test Results**

Aspley Way, Sarina Beach and Grasstree Beach sites have recorded pH levels above recommended levels of 8.5 (range 8.51 to 8.68); Gargett has recorded pH levels below recommended levels 6.5 (actual value 6.34) and Eton & Koumala have exceeded the recommended hardness level. All results are within anticipated target range. Assetic parameters measures the taste and scaling nature of water.

This data is reported 1 month in arrears and due to regulatory reporting requirements is reported by calendar month.
5.2. Wastewater Compliance
The discharges from wastewater treatment facilities are regulated by Development Approvals issued by the Department of Environment and Resource Management. The licence requirements differ based on the time the Development Approval was issued and the receiving environment associated with any discharges.

**Wastewater Test Results**

All Wastewater tests over this period were compliant

Results are to end of May 2016 due to statutory reporting requirements.

5.3. Backflow Testing
Backflow devices are installed on water services where there is a risk that water could return from a private property back into the Water Reticulation network. The requirement for backflow devices is regulated in accordance with the Standard Plumbing and Drainage Regulation.

16 new devices were registered this month

Data is for 14 May 2016 to 17 June 2016