Engineering and Commercial Infrastructure - Water Services

19 March 2016 to 15 April 2016
OVERVIEW

This report is for Water Services activities for March and April 2016. Please note that references to the March/April reporting period covers the period 19 March 2016 to 15 April 2016. Significant items in this period include:

- Works to install sub meters at Laguna Quays has commenced. This will allow Council to bill the individual property assessments in the resort.
- Works to replace over 900 metres of water main along Smalleys Beach Road commenced week commencing 4 April 2016.
- A presentation on "innovations in data management to realise value in water businesses" was presented by Ian Mcardle at the Water Connections 2016, SEQ Regional Conference in Hervey Bay on 12 April 2016.
- An audit of the Mirani Sewerage Treatment Plant was undertaken by Department of Environment and Heritage Protection: positive feedback was received
- myh20 registrations have been on the increase with 7,224 residents registered. The goal is 10,000 registrations by 30 June 2016.

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.

4 incidents being 4 no lost time injuries including:
- 2 x being hit by moving objects
- being hit by falling objects
- fall from same level

Data at 31 March 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 March, 7 Hazard Inspections were scheduled and 5 completed. MAP's completed in March is at 99%

Data is at 31 March 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.

\[ \text{Water Fund is } \$3.2M \text{ surplus. Income is up by } \$1.33M \text{ with an underspend of } \$1.18M \text{ in Goods & Services and underspend of } \$792K \text{ in Employee Costs} \]

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.

\[ \text{On accrual basis, water actuals YTD are in surplus of budget by } \$930K. \text{ The annual surplus is projected to be } \$2.51M \]
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.

Sewerage Fund is $2.64M surplus. Income is up by $1.05M with an underspend of $1.36M in Goods & Services and Employee costs $342K.

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.

On an accrual basis, sewer actuals YTD are surplus of budget by $1.25M and annual surplus is projected to be $2.16M.
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.

2.5.1. Capital expenditure actuals resulted in a 61% spend of Budget. Including commitments 84% of the total budget is spent. Financial data is up to March 2016.

CLIENT SERVICES

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.

95.4% of Client Requests completed in March 2016

Data available to end March 2016
3.2. Request Types

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

![Request Types Chart]

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]

Data is for March 2016.

Increase in sewer overflow caused by wet weather.
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>721</td>
<td>41</td>
<td>18</td>
</tr>
<tr>
<td>Mackay North</td>
<td>65</td>
<td>4</td>
<td>2</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>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>872</strong></td>
<td><strong>45</strong></td>
<td><strong>21</strong></td>
</tr>
</tbody>
</table>

21 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.

250 combined Approvals and Audits is the target for FY 2015/2016.

Data is for the period from 19 March 2016 to 15 April 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.

![Bar chart showing BOAS applications](image)

There were no BOAS referrals received for the period however there are still a number of enquiries fielded and information provided on infrastructure locations.

Data is for the period from 19 March 2016 to 15 April 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.

![Line chart showing tests performed and samples analysed](image)

The number of tests performed have decreased slightly and the number of samples analysed have increased slightly.

Data is available to end of March 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.

There were no media releases or updates in the March/April 2016 reporting period.

Data is for the period from 19 March 2016 to 15 April 2016.

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.

There were no updates on Facebook for the reporting period.

Data is for the period from 19 March 2016 to 15 April 2016.
The following chart shows the cumulative number of myh2o registrations for the reporting period.

There were 112 myh2o registrations during the March-April reporting period.

Data is at 15 April 2016.

### ASSET MANAGEMENT

#### 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.

Marian and Dumbleton Weirs are full. Middle Creek Dam is at full capacity.

Data is as at 4 April 2016.
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.

<table>
<thead>
<tr>
<th>Water Source</th>
<th>Water Volume (ML)</th>
<th>YTD Water Consumed</th>
<th>Allocation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marian Weir</td>
<td>437</td>
<td>25</td>
<td>60</td>
</tr>
<tr>
<td>Gargett Bores</td>
<td>24</td>
<td>59</td>
<td>230</td>
</tr>
<tr>
<td>Finch Hatton Bore</td>
<td>18</td>
<td>62</td>
<td>150</td>
</tr>
<tr>
<td>Armstrong Beach Bore</td>
<td>36</td>
<td>181</td>
<td>2700</td>
</tr>
<tr>
<td>Koumalala Bore</td>
<td>7</td>
<td>42</td>
<td>595</td>
</tr>
<tr>
<td>Bally Keel Bore</td>
<td>8</td>
<td>27</td>
<td>95</td>
</tr>
<tr>
<td>Eton Bore</td>
<td>31</td>
<td>97</td>
<td>300</td>
</tr>
<tr>
<td>Proserpine River</td>
<td>202</td>
<td>8</td>
<td>100</td>
</tr>
<tr>
<td>Bloomsbury Bore</td>
<td>2700</td>
<td>8</td>
<td>390</td>
</tr>
<tr>
<td>Marwood Bore</td>
<td>236</td>
<td>8</td>
<td>3200</td>
</tr>
<tr>
<td>Mirani Bore</td>
<td>16000</td>
<td>8</td>
<td>15000</td>
</tr>
<tr>
<td>Sarina Bores</td>
<td>42</td>
<td>27</td>
<td>95</td>
</tr>
<tr>
<td>Plane Creek</td>
<td>7</td>
<td>42</td>
<td>595</td>
</tr>
<tr>
<td>Nebo Rd Bores</td>
<td>181</td>
<td>42</td>
<td>595</td>
</tr>
<tr>
<td>Dumbleton</td>
<td>8,348</td>
<td>202</td>
<td>2700</td>
</tr>
</tbody>
</table>

Data is as at 31 March 2016

Water consumption at Marian weir is at 95% of the annual allocation. Water consumption for Etons Bore is close to 60% of the annual allocation. Water consumption (YTD) for all other assets is at less than 52% 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.

Data is as at end March 2016

Water consumption for Mackay, Mirani and Sarina in March 2016 is reduced compared to the same time in 2015.
### 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 15 April 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>
</thead>
<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>85%</td>
<td></td>
<td></td>
<td>The bore under Harbour Rd has been completed. Pipe-laying has continued and is all but laid up to the bore connection. Testing and disinfection of pipework has been completed for the section laid. A number of services have been swapped over to the new main already. Final connections still to be completed.</td>
</tr>
<tr>
<td>Mirani PTA</td>
<td>Con</td>
<td>80%</td>
<td></td>
<td></td>
<td>The four incoming rising mains have been completed and pressure tested up to the point where they will be connected to the existing rising mains - the remaining connections will be undertaken by MWS Maintenance Crews once all pre-commissioning testing has been completed. Works have commenced on the fire pump installation. Service water pipework has been installed. Power has been connected to the main switchboard. Electrical testing of PTA equipment and instruments has commenced. Lighting has been installed. Lightning protection system has been installed. Odour extraction ductwork has been completed. Roadworks and fencing has commenced. Draft Operation and Maintenance Documents have been received, reviewed and comments returned to Contractor.</td>
</tr>
<tr>
<td>Water and Sewerage Network Telemetry Upgrades</td>
<td>Con</td>
<td>70%</td>
<td></td>
<td></td>
<td>Clear SCADA programming is continuing, with installation and commissioning programmed for late May. The Contractor upgrading the network telemetry has completed 7 out of 13 packages, with the remaining 6 packages of work more than 50% complete.</td>
</tr>
<tr>
<td>Sewerage Network Refurbishments (Relining and Manholes)</td>
<td>Con</td>
<td>80%</td>
<td></td>
<td></td>
<td>Manhole Inspection works for access restricted properties and buried Manholes with CCTV in progress. Contract documentation for Manhole Relining completed and awaiting Contractors signature.</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>Domestic &amp; Commercial Water Meter Replacements &amp; AMR retrofitting completed. Water Services Replacements are in advanced stages of completion.</td>
</tr>
<tr>
<td>Project</td>
<td>Phase</td>
<td>Phase % Completion</td>
<td>Budget</td>
<td>Time</td>
<td>Comments</td>
</tr>
<tr>
<td>----------------------------------------------</td>
<td>-------</td>
<td>--------------------</td>
<td>--------</td>
<td>------</td>
<td>--------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Sewage Pump Station Resilience Upgrades</td>
<td>Des</td>
<td>95%</td>
<td></td>
<td></td>
<td>Design Plans and tender document review complete, amendments in progress. Tender to be issued 2nd week in May.</td>
</tr>
<tr>
<td>Sewer Gravity Main - McCready Creek SPS to Symons Farm SPS</td>
<td>Con</td>
<td>10%</td>
<td></td>
<td></td>
<td>Construction works in progress. Wet days have impacted progress, but still expected to complete in July 2016</td>
</tr>
<tr>
<td>Cape Hillsborough Water Main Replacement</td>
<td>Con</td>
<td>7%</td>
<td></td>
<td></td>
<td>Construction of Smalleys Beach section is in progress</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>Contract 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 Water Supply Safety and Reliability Act and are measured against the 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.

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

Eton and Koumala exceeded the recommended hardness of 200 mg/L CaCO\textsubscript{3} and Sarna/Grasstree Beach had a pH above the recommended level of 8.5

Aesthetic Parameter Test Results

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.

All Wastewater tests over this period were compliant.

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

No new devices were registered this month.

Data is for 19 March 2016 to 15 April 2016.