Engineering and Commercial Infrastructure - Water Services

Monthly Review

October 2019
OVERVIEW .......................................................................................................................... 3

SAFETY ........................................................................................................................................ 4
1.1. Incident Statistics....................................................................................................... 4
1.2. Lost Time Injuries ...................................................................................................... 4

FINANCE ................................................................................................................................... 5
2.1. Water and Wastewater Financial Fund Report........................................................... 5
2.2. Operating Result for Water and Sewerage Fund ....................................................... 6

CUSTOMER SERVICES ........................................................................................................ 6
3.1. Work Requests Received .......................................................................................... 6
3.2. Work Orders .............................................................................................................. 7
3.3. Plumbing Applications ............................................................................................... 8
3.4. Trade Waste Approvals ............................................................................................. 8
3.5. Annual Trade Waste Activity ..................................................................................... 9
3.6. Building Over Adjacent Sewers ................................................................................. 9
3.7. Scientific and Analytical Services ............................................................................. 10
3.8. Leak Detection Notifications .................................................................................... 10
3.9. Myh2o Registrations ................................................................................................ 11
3.10. Community Engagement - Media and Customer Survey Results ............................. 12

ASSET MANAGEMENT ........................................................................................................ 13
4.1. Surface Water Raw Water Storage Capacities ........................................................ 13
4.2. Annual Water Consumption vs Allocation by Source ............................................... 14
4.3. Water Consumption by Locality – Residential Customers Only ................................ 14

REGULATORY COMPLIANCE ............................................................................................ 15
5.1. Drinking Water Compliance ..................................................................................... 15
5.2. Wastewater Compliance .......................................................................................... 16
5.3. Backflow Testing ...................................................................................................... 16
OVERVIEW

This report is for Water Services activities for October 2019. Significant items in this period include:

- There were no Lost Time Injuries recorded for the month of October 2019
- Water from our Marian Water Treatment Plant was named Australia’s "best" at the 2019 Ixom Best Tasting Tap Water Competition held in Dunkeld, Victoria during the month
- MRC Operational, Maintenance and Planning staff attended an Operational Risk Assessment Workshop as part of the Southern Rising Main Contingency Plan on 16 October 2019 at the Paget Depot

Director Engineering & Commercial Infrastructure
SAFETY

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.

October 2019 Summary:

<table>
<thead>
<tr>
<th>No of Incidents</th>
<th>Mechanism of injury</th>
<th>Injury Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Being Hit by a Moving Object</td>
<td>First Aid Injury</td>
</tr>
<tr>
<td>1</td>
<td>Single Exposure to Chemical or Substance</td>
<td>Medical Treatment Injury</td>
</tr>
<tr>
<td>1</td>
<td>Bite/Sting</td>
<td>Medical Treatment Injury</td>
</tr>
<tr>
<td>1</td>
<td>Single Exposure to Chemical or Substance</td>
<td>Near Miss</td>
</tr>
<tr>
<td>1</td>
<td>Being Hit by a Moving Object</td>
<td>Near Miss</td>
</tr>
</tbody>
</table>

1.2. Lost Time Injuries
Water Services aspires to achieve zero Lost Time Injuries by improving safety performance by developing a proactive safety culture and implementing best practice safety management across all business areas.

October 2019 Summary:
No Lost Time Injuries were sustained for the 2019/2020 financial year to date. The table below shows the Lost Time Injuries over previous years.
2.1. Water and Wastewater Financial Fund Report

Financial Performance Report
Period Covered: 1 July 2019 to 31 October 2019

<table>
<thead>
<tr>
<th>Department</th>
<th>Revised Budget</th>
<th>YTD Budget</th>
<th>YTD Actual</th>
<th>YTD Variance</th>
<th>YTD % Spent</th>
<th>% YTD Variance of YTD Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Water Fund</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.01 - Commercial Infrastructure Management</td>
<td>(43,639,768)</td>
<td>(21,856,124)</td>
<td>(20,902,811)</td>
<td>953,313</td>
<td>96%</td>
<td>YTD Variance favourable of budget</td>
</tr>
<tr>
<td>6.02 - Planning &amp; Sustainability</td>
<td>853,612</td>
<td>255,933</td>
<td>226,651</td>
<td>(29,283)</td>
<td>89%</td>
<td>YTD Variance unfavourable, between 0% and 5% of YTD Budget</td>
</tr>
<tr>
<td>6.04 - Water Networks</td>
<td>6,695,360</td>
<td>2,120,150</td>
<td>2,113,415</td>
<td>(6,735)</td>
<td>100%</td>
<td>YTD Variance unfavourable, more than 5% of YTD Budget</td>
</tr>
<tr>
<td>6.06 - Business Services</td>
<td>28,896,849</td>
<td>9,468,601</td>
<td>9,425,801</td>
<td>(42,800)</td>
<td>100%</td>
<td></td>
</tr>
<tr>
<td>6.07 - Water Treatment</td>
<td>4,917,538</td>
<td>1,581,329</td>
<td>1,626,310</td>
<td>44,981</td>
<td>103%</td>
<td></td>
</tr>
<tr>
<td><strong>Total Water Fund</strong></td>
<td>(2,276,410)</td>
<td>(8,430,110)</td>
<td>(7,510,634)</td>
<td>919,476</td>
<td>89%</td>
<td></td>
</tr>
<tr>
<td><strong>Sewerage Fund</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.01 - Commercial Infrastructure Management</td>
<td>(44,802,178)</td>
<td>(22,539,204)</td>
<td>(22,593,333)</td>
<td>(54,129)</td>
<td>100%</td>
<td></td>
</tr>
<tr>
<td>6.02 - Planning &amp; Sustainability</td>
<td>929,025</td>
<td>175,677</td>
<td>142,045</td>
<td>(33,632)</td>
<td>81%</td>
<td></td>
</tr>
<tr>
<td>6.04 - Water Networks</td>
<td>5,504,378</td>
<td>1,835,796</td>
<td>1,893,542</td>
<td>57,746</td>
<td>103%</td>
<td></td>
</tr>
<tr>
<td>6.06 - Business Services</td>
<td>32,692,172</td>
<td>10,637,474</td>
<td>10,590,883</td>
<td>(46,592)</td>
<td>100%</td>
<td></td>
</tr>
<tr>
<td>6.07 - Water Treatment</td>
<td>7,326,904</td>
<td>2,703,351</td>
<td>2,948,466</td>
<td>245,115</td>
<td>109%</td>
<td></td>
</tr>
<tr>
<td><strong>Total Sewerage Fund</strong></td>
<td>1,741,202</td>
<td>(7,186,905)</td>
<td>(7,018,397)</td>
<td>168,508</td>
<td>98%</td>
<td></td>
</tr>
</tbody>
</table>

**Operating (surplus) / deficit**

|                | (535,208)    | (15,617,015) | (14,529,031) | 1,087,984 | 93% |                             |
2.2. Operating Result for Water and Sewerage Fund

The following chart details the number of Customer Requests received that relate to the Water Business; i.e. both Water and Sewer requests. The associated Work Orders created from the Work Requests are also displayed.

October 2019 Summary:

A total of 386 Work Requests were received during October 2019; i.e. 338 Work Requests related to Water and 48 related to Sewer. This is 78 more requests received than last month. From those Work Requests, 334 Work Orders were generated for Water and 42 Work Orders were generated for Sewer.

---

CUSTOMER SERVICES

3.1. Work Requests Received

The following chart details the number of Customer Requests received that relate to the Water Business; i.e. both Water and Sewer requests. The associated Work Orders created from the Work Requests are also displayed.
3.2. Work Orders

The following chart displays the number of Work Orders created during the reporting period, with the percentage of Work Orders completed within the month. The target is to have 90% of all customer requests closed.

October 2019 Summary:

The number of Work Orders generated for October 2019 was 334. This is 43 more Work Orders generated than last month. 83% of these Work Orders were completed within the specified time which is below target. During this reporting period, staff were required to undertake two training tasks (i.e. Standard Operating Procedures and Water Industry Worker) which significantly reduced the number of hours staff were available to action Work Orders. This impacted the number of Work Orders completed but not the level of service. Additionally, 50 Recoverable Works jobs were undertaken during the month.

When a customer lodges a request via the Call Centre, it is sometimes not reflective of the actual problem. Therefore, the following graph shows the actual work undertaken and completed. The numbers of Customer Requests will not always match the number of actions undertaken mainly due to multiple customers reporting the one issue and the timing of completed work (i.e. a request received at the end of one month being actioned at the start of the next month).
3.3. Plumbing Applications

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

**October 2019 Summary:**

The number of Plumbing Applications approved during October 2019 increased to 77 compared to 56 for September 2019. The Approval Turnaround Time was two days which is well within the five-day target. The Program had a full complement of staff during the month.

3.4. Trade Waste Approvals

There is an ongoing program for undertaking trade waste assessment and licensing applicable businesses that discharge trade waste. As part of the trade waste assessment process a temporary Trade Waste Approval is established 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>805</td>
<td>27</td>
<td>9</td>
</tr>
<tr>
<td>Mackay North</td>
<td>74</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Sarina</td>
<td>55</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Mirani/Marian</td>
<td>32</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>966</strong></td>
<td><strong>30</strong></td>
<td><strong>10</strong></td>
</tr>
</tbody>
</table>

**October 2019 Summary:**

Ten new Trade Waste Approvals were provided to businesses during October 2019 after completion of the Trade Waste requirements. These businesses were in the following categories; one existing business completed Trade Waste requirements and nine new businesses.
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 125 each for both new licensed businesses and audits completed by June 2020. The following chart shows the actual approvals, temporary approvals and audits achieved and the number of the target remaining.

October 2019 Summary:
Nine Audits were conducted during August 2019 and ten Approvals were issued.

3.6. Building Over Adjacent Sewers
Building Over Adjacent Sewer (BOAS) applications are lodged where the construction of a structure is proposed within close proximity of a sewer main. The application is assessed against Queensland Development Code Mandatory Part 1.4 with council reviewing applications that do not comply with acceptable solutions identified in the code. Building over sewer applications are assessed within a target timeframe of 20 business days.

October 2019 Summary:
No BOAS referrals were received during October 2019. Plumbing Inspectors continue to handle enquiries and provide information on infrastructure locations and general information regarding the Queensland Development Code.
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 customers. A summary of the laboratory activities is detailed below.

### October 2019 Summary:

The number of sample batches registered, and the number of samples tested remain around 432 and 1094 respectively. The total number of tests performed was 25,603 for the month.

3.8. **Leak Detection Notifications**

Leak Detection notifications are sent to customers, when a leak on their property is identified that is greater than 10 litres per hour (L/h). Follow up notices are sent to residents monthly, for a three-month period after the initial notification.
October 2019 Summary:
The number of new leaks identified during October 2019 for residential customers was 2,277 and for non-residential customers was 469. This represents an increase for residential customers and a decrease for non-residential customers over the previous month. At the end of the reporting period, the number of leaks on the customer’s side of the meter had increased to 780 for residential customers and to 295 for non-residential customers. The number of leaks ceased during the period for residential customers has increased to 2,248 and decreased to 464 for non-residential customers.

October 2019 Summary:
The Average Leak Days (Current Leaks) identified during October 2019 has decreased for residential customers and increased for non-residential customers. The difference between non-residential customers and residential customers for current leak days is 75 days. The Average Leak Days (Ceased Leaks) show that residential customers repair leaks within 9 days on average, whereas the non-residential customer takes an average of 16 days to repair leaks. Considerable effort is taken to encourage non-residential customers to fix the identified leaks, however, some of these leaks are difficult to track down due to the size and complexity of the property.

3.9. Myh2o Registrations
The following chart shows the cumulative number of myh2o registrations for the reporting period. The target number of registrations for the 2019/2020 financial year is 15,730.

October 2019 Summary:
There were 82 new registrations during October 2019 bringing the total number of myh2o registrations to 14,764 which includes property owners, tenants and agents.
3.10. Community Engagement - Media and Customer Survey Results

Water Services engagement with the community is monitored; the following chart shows the number of Media Releases, Media Updates and the number of people reached by Media Releases on Facebook. Community engagement also includes registrations to myh2o and leak detection notifications identified.

**October 2019 Summary:**

<table>
<thead>
<tr>
<th>Media Releases</th>
<th>Media Updates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Portable water stations available for events</td>
<td>Water main inspections under bridge</td>
</tr>
<tr>
<td>Best drop in Australia</td>
<td></td>
</tr>
</tbody>
</table>

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.
October 2019 Summary:

<table>
<thead>
<tr>
<th>Facebook Likes</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>32 for Portable water stations available for events</td>
<td>Seven for Tune in tomorrow to see if we win top drop</td>
</tr>
<tr>
<td>227 for Best drop in Australia</td>
<td>288 for Mackay Pride Monday. Best drop in Australia.</td>
</tr>
<tr>
<td>97 for Video - Weekend sunrise water taste test</td>
<td>11 for Water main inspections under bridges</td>
</tr>
<tr>
<td>Five for Keep track of your water usage on myh2o</td>
<td>166 for Did you know? There are water restrictions in Mackay</td>
</tr>
</tbody>
</table>

Negative Comments

Sarina would not have won the best tasting water award

ASSET MANAGEMENT

4.1. Surface Water Raw Water Storage Capacities

Water is sourced from a combination of surface 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.

<table>
<thead>
<tr>
<th>Storage Facility</th>
<th>Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mirani Weir</td>
<td>2730 ML</td>
</tr>
<tr>
<td>Marian Weir</td>
<td>3985 ML</td>
</tr>
<tr>
<td>Dumbleton Weir</td>
<td>6108 ML</td>
</tr>
<tr>
<td>Middle Creek Dam</td>
<td>491490 ML</td>
</tr>
<tr>
<td>Peter Faust Dam</td>
<td>147556 ML</td>
</tr>
<tr>
<td>Teemburra Dam</td>
<td>1120 ML</td>
</tr>
</tbody>
</table>

October 2019 Summary:

Mirani Weir, Marian Weir, Dumbleton Weir are all at or above 100% capacity. Teemburra Dam is almost full at 97% capacity. Middle Creek Dam and Peter Faust Dam are sitting at 70% and 74% capacity respectively.
4.2. Annual Water Consumption vs Allocation by Source

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

** Calen Water Usage figures are not based on Water Allocation but show the amount of water usage for the area to date.

4.3. Water Consumption by Locality – Residential Customers Only

Water Services supplies potable water to both residential and commercial customers throughout the Mackay region. The average water consumption in each of the three major community centres is detailed below for residential customers only. The water consumption is presented as litres per equivalent population per day (L/p/d).

October 2019 Summary:

Water consumption for Mackay, Sarina and Marian/Mirani communities all indicate a decrease from September 2019 to October 2019.
5.1. Drinking Water Compliance
Potable water is provided in accordance with the requirements of the Water Supply Safety and Reliability Act, measured against the Australian Drinking Water Quality Guidelines. Drinking Water samples are taken at the outlet of Water Treatment Plants and at various locations within the reticulation network. Please note: these results are reported one month in arrears. A summary of the performance is detailed below.

**September 2019 Summary:**
All drinking water tests were compliant against the health targets of the ADWG during September 2019.

**September 2019 Summary:**
There were six aesthetic parameters samples above the recommended ADWG levels for September 2019: five for hardness (i.e. hardness level above 200 mg/L) recorded at Calen, Koumala and Eton Water Supply Schemes and one for sodium. The highest hardness levels recorded at were Calen - 236 mg/L, Eton - 316 mg/L and Koumala - 392 mg/L. Eton harness value was a single spurious sample and the average for the month was around 150 mg/L.
5.2. **Wastewater Compliance**

The discharges from wastewater treatment facilities are regulated by Development Approvals issued by the Department of Environment and Science (DES). The licence requirements differ based on the year the Development Approval was issued and the receiving environment associated with discharges.

**October 2019 Summary:**

All wastewater tests were compliant in October 2019.

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.

**October 2019 Summary:**

Ten new devices were registered while two devices were cancelled during October 2019. There were 41 tests performed on backflow devices during October 2019.