To All Councillors

You are hereby notified that the next meeting of the Infrastructure Services Committee will be held on 11 December 2018 in the Barry Rose Room at 1:00pm, for the purpose of transacting the undermentioned business.

The Infrastructure Services Committee consists of

  Cr Lorna Driscoll, Cr Ron Campbell, Cr James Burns and Cr Maurice Collison.

STEVE MCDONALD
GENERAL MANAGER

1. APOLOGIES

2. DISCLOSURE OF INTEREST

3. PUBLIC PARTICIPATION

4. BUSINESS ITEMS

5. AGENDA ITEMS

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6. COUNCILLOR QUESTIONS
INFRASTRUCTURE SERVICES REPORTS

ISC.12.1 WORKS PROGRAM - INFRASTRUCTURE SERVICES - WATER AND SEWER

RESPONSIBLE OFFICER: Nicholas Havyatt - Director Infrastructure Services

AUTHOR: Phillip Hood - Manager Water & Sewer

PURPOSE

The purpose of the report is to provide an update on all works undertaken by the Water and Sewer teams over the previous month and those planned for the upcoming month.

RECOMMENDATION

That the Committee receive the report and note the information.

BACKGROUND

The report provides information to assist in addressing ratepayer enquiries regarding construction, maintenance and other activities in the area of Water and Sewer.

REPORT/PROPOSAL

Progress of major projects is listed in Attachment 1 along with upcoming planned works. All works relating to Murrurundi water supply are covered in a separate report.

Project highlights from this month include (but are not limited to):

- Upper Hunter Water Supply and Water Treatment Scoping Study
  - Funding approval received from Infrastructure NSW.
  - Quotations received from HH2O, GHD and Cardno – assessing now.
  - Waiting on signed Funding Deed to be returned to award the work.

- Merriwa STP
  - Developed Scope of Works for Merriwa STP Options Report (inclusive of reuse options).
  - Quotations received from GHD, Cardno HH2O and MJM. Project costs around the $40,000 mark.
  - EPA Inspection of Merriwa STP on 21 November. Licence will be updated to include E.coli limits on final effluent and implementation of a Pollution Reduction Plan – the Options Study will fulfill the first requirement of the PRP.
  - Immediate works to be undertaken at the STP to reduce the surface runoff from neighbouring paddocks which would add to the fecal loading in the ponds. Also fence improvement to prevent cattle accessing the STP site.
Scone Sewage Treatment Plant (STP) Augmentation
- Concept Design process ongoing – Detailed Application for funding must be submitted by 1 April due to be considered under the old Safe and Secure program. This application will be undertaken by Cardno as a variation to the Concept Design contract.

St Aubins Street main replacement (internal works)
- Works completed
- Water and Sewer team did a phenomenal job getting this done within a short time period, in order to fit in with Bypass project schedule.

Water/sewer main capital works tenders
- Tender 1
  - St Aubins St water main replacement, Scone
  - Kelly St sewer main replacement, Scone
  - Saleyards sewer main connection, Scone
  - Bernard St water main extension, Murrurundi
  - Gooch Street water main renewal, Merriwa
- Tender period Tuesday 4 Dec – Friday 11 January
- Site visit Tuesday 18 December
- Works complete 30 April

- Tender 2
  - McAdam St underbore, Aberdeen
  - Birrell/Waverly St sewer main works, Scone
- Tender period Monday 10 Dec – Friday 18 January
- Site visit Tuesday 18 December
- Works complete 31 May

White Park SPS and Sewer
- Received concept design – small package SPS plus 80,000 storage vessel. Design to accommodate wildly varying flows.
- In discussion with NCP to do sewer gravity main construction, rising main construction and SPS civil works – aim for completion before end of January
- Power supply to new SPS will be an easier task than first thought, as the package SPS has a small power demand. Will be implemented in December.

Well 6 Reinstatement
- Approval from NRAR to undertake work and use existing Town Water Supply Water Access Licence (WAL) to access the water – this was due to the water being used for ‘cultural and recreational services’, i.e. irrigation of sports fields, golf club, race club, etc.
- Race Club will be able to use their own licence at Well 6, proposing an access fee to cover supply and maintenance costs only (TDB).
- Engaged AquaWest to implement a ‘2-pump and tank’ supply system at Well 6, at a cost of $54,000. This is designed to access to the very bottom of the well with a high flow, low head pump to a 60,000L storage tank, and then supply with a separate pump that can operate efficiently with variable speed and pressure.
Benefits are reduction in total power cost (more efficient pumping) and also physical air-gap backflow prevention with the tank to avoid recycled water entering the well.

Council staff undertaking water main construction between the well and the existing recycled water main – approx. 150m of DN150 PVC.

Works to be completed at Well 6 by the end of December.

Water Consumption and Water Wise Rules

- In the 2017/18 year Scone used 23% more water than the year before, and Merriwa used 29% more.
- Scone/Aberdeen total consumption for 2017/18 was 2158ML from a total High Security allocation of 2198ML (2000ML Hunter River, 198ML Dart Brook)
- This year, consumption is trending even higher, an average increase of 6.3% YTD. However since the introduction of Water Wise Rules this increase has dropped to around 2%.
- We are able to use our General Security Hunter Regulated River Water allocation to get us through any High Security shortfall – which has an additional 661.3ML available via Glenbawn Dam pumping station.
- This also means our 198ML Dartbrook source is freed up for use with Well 6 and the demands at Bill Rose Sports Complex, Golf Course, Race Club and White Park which are exceeding recycled water availability.
- Council will continue to push the ‘Water Wise’ message over summer, and this month will become members of Smart Water Mark (see attachment) to help promote water saving.
- Long term demand analysis, restriction levels and license requirements will be reviewed as part of the ongoing IWCM process. Note that currently Water Restrictions are not applicable as per our Drought Management Plan.
- In the February ISC Meeting we will provide a more detailed assessment of water use across the shire, and more information on our ‘Water Wise’ promotional materials.
- The Upper Hunter Water Utilities Alliance have requested advice from DPI Water as to how we can amend our respective Drought Management Plans and our Restriction Level trigger points ahead of the IWCM process.

**OPTIONS**

To note the report

**CONSULTATION**

- Director Infrastructure Services
- Manager Water and Sewer
- Engineer Water and Sewer Distribution
- Engineer Water and Sewer Treatment
STRATEGIC LINKS

a. Community Strategic Plan 2027
This report links to the Community Strategic Plan 2027 as follows:

BUILT & NATURAL ENVIRONMENT
Goal 4  Plan for a sustainable future
  CS15  Plan, facilitate and provide for a changing population for current and future generations.
Goal 6  Increase, enhance and maintain civil infrastructure, Community assets and open spaces to meet the needs of current and future generations.
  CS24  Provide for replacement, improvement and additional Community and open space infrastructure through investment, best practice and risk management.
  CS26  Provide safe and reliable water and sewerage services to meet the demands of current and future generations.

We are working to achieve the following Community Priorities:

- Reliable and safe water supply.
- Protect the natural environment.

b. Delivery Program

The report addresses the following objectives for works up to 30 June 2019 as described in the 2018/19 DPOP:

Water Supplies
To provide an adequate and secure potable water supply to recognised standards in defined areas on a cost effective basis.

Sewage Services
To maintain a sewage system for the transportation and treatment of sewage to licence requirements and encourage appropriate further expansion of services.

c. Other Plans

Various Asset Management Plans.
IMPLICATIONS

a. Policy and Procedural Implications

Maintenance guidelines as identified within Service Levels, Asset Management Plans and Strategic Plans.

b. Financial Implications

Identified within individual items in the 2018/19 budget.

c. Legislative Implications

- Protection of the Environment Operations Act 1997
- Water Management Act 2000
- Public Health Regulation 2012

d. Risk Implications

Maintenance and Capital activities play a vital role to mitigate and minimise Council’s risk in these areas.

e. Other Implications

Nil

CONCLUSION

The updated report is provided as Attachment 1 and details work undertaken over the previous month and works planned for the upcoming month.

ATTACHMENTS

1. Water and Sewer Works Program Update - November 2018
2. Smart Water Advice Implementation handbook 2018-06-08 NSW
## Water and Sewer Works Monthly Update – November 2018

<table>
<thead>
<tr>
<th>Location</th>
<th>Details</th>
<th>Work</th>
<th>Budget Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scone Water</td>
<td>Scone to Murrurundi Pipeline</td>
<td>Tender finalised.</td>
<td>Scone Water Supply</td>
</tr>
<tr>
<td>Scone Water</td>
<td>St Aubins Street</td>
<td>Work on DN200 &gt; DN300 main replacement on St Aubin Street completed.</td>
<td>Scone Water Supply</td>
</tr>
<tr>
<td>Scone (Bypass)</td>
<td>Scone Water and Sewer</td>
<td>Ongoing regular liaison with Daracon to determine service replacement details, additional strategic works, and other supporting works for the bypass construction (such as water access points)</td>
<td>Scone Water/Sewer, Private Works</td>
</tr>
<tr>
<td>Scone Water</td>
<td>Reinstall Well 5 and 6 for irrigation</td>
<td>NRAAR approval of works, pumps and electrical contractor engaged, UHSC started work on connecting pipework.</td>
<td>Scone Water Supply</td>
</tr>
<tr>
<td>Scone/Murrurundi Water</td>
<td>Reservoir Cleaning</td>
<td>All reservoirs in Merriwa and Cassilis cleaned this month.</td>
<td>Scone/Murrurundi Water Supply</td>
</tr>
<tr>
<td>Scone – Sewage Treatment Plant (STP)</td>
<td>STP Augmentation Work</td>
<td>Concept design for STP Augmentation work (ongoing). Detailed Application (Safe &amp; Secure Water Program) for funding for design and construction needs to be submitted by 1 April due to Safe and Secure Funding changes.</td>
<td>Scone Sewer Services</td>
</tr>
<tr>
<td>Scone Sewer</td>
<td>Saleyards Sewer Extension</td>
<td>Underbore designed and approved by ARTC, to be constructed in January.</td>
<td>Scone Sewer Services</td>
</tr>
<tr>
<td>Scone Sewer</td>
<td>White Park Sewer</td>
<td>Concept design for SPS completed, civil works to begin in December for completion prior to first events in January.</td>
<td>Scone Sewer Services</td>
</tr>
<tr>
<td>Cassilis</td>
<td>Cassilis Sewage System</td>
<td>Concept Design for Cassilis Sewage System (Ongoing).</td>
<td>Cassilis Sewer Services</td>
</tr>
<tr>
<td>Murrurundi</td>
<td>Murrurundi Water Supply Bore</td>
<td>Works completed. Bore still producing good water but flow is not quite enough to much demand.</td>
<td>Murrurundi Water Supply</td>
</tr>
<tr>
<td>Merriwa</td>
<td>Metered water filling station</td>
<td>New water filling station purchased for Merriwa. Working through the installation process and looking to offset total costs with Drought Relief</td>
<td>Merriwa Water Supply</td>
</tr>
<tr>
<td>Location</td>
<td>Description</td>
<td>Details</td>
<td></td>
</tr>
<tr>
<td>-----------</td>
<td>--------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>Aberdeen</td>
<td>Aberdeen Reservoirs</td>
<td>Engaged Brooks Brothers to supply the design for Hightower Platform Replacement, as original quote for D&amp;C exceeded $150,000 limit.</td>
<td></td>
</tr>
<tr>
<td>Scone/Aberdeen Water Supply</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UHSC</td>
<td>Integrated Water Cycle Management Plan (IWCM)</td>
<td>Received draft IWCM Revision 2 from consultant. (on going)</td>
<td></td>
</tr>
<tr>
<td>Scone, Aberdeen, Merriwa, Cassilis &amp; Murrurundi Water Supply, Scone, Aberdeen, Merriwa &amp; Murrurundi Sewer Services</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Water and Sewer Works Monthly Update – November 2018

### Works Planned to start during December 2018

<table>
<thead>
<tr>
<th>Location</th>
<th>Chainage/Details</th>
<th>Work</th>
<th>Budget Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scone Water</td>
<td>St Aubin Street</td>
<td>Work continuing, both internal and related works to be undertaken by Daracon as part of Bypass Project.</td>
<td>Scone Water Supply</td>
</tr>
<tr>
<td>Scone Water</td>
<td>Middlebrook Road</td>
<td>Start community consultation process on proposed Middlebrook supply schemes.</td>
<td>Scone Water Supply</td>
</tr>
<tr>
<td>Scone Water</td>
<td>Upper Hunter Scoping Study</td>
<td>Engage consultant to begin this work.</td>
<td>Scone Water Supply</td>
</tr>
<tr>
<td>Scone Water</td>
<td>White Park Water</td>
<td>UHSC to undertake additional water mains supply works in December.</td>
<td>Scone Water Supply</td>
</tr>
<tr>
<td>Scone Sewer</td>
<td>White Park Sewer</td>
<td>Implement new SPS ASAP based on concept design, likely finished in January.</td>
<td>Scone Sewer Services</td>
</tr>
<tr>
<td>Scone Water</td>
<td>Reinstate Well 5 and 6 for irrigation</td>
<td>Works begin on Well 6 (new pump, elec and pipework), aim to finish by the end of December.</td>
<td>Scone Water Supply</td>
</tr>
<tr>
<td>Scone Sewer</td>
<td>Aberdeen St Sewer Pump Station</td>
<td>Pump refurbishment, FITT resources in progress.</td>
<td>Scone Sewer Services</td>
</tr>
<tr>
<td>Scone Sewer</td>
<td>Jefferson Park Sewer Pump Station</td>
<td>Pump refurbishment. FITT Resources in progress.</td>
<td>Scone Sewer Services</td>
</tr>
<tr>
<td>Aberdeen Sewer</td>
<td>Effluent Pond Aerators</td>
<td>Installation of aeration units at Aberdeen STP to reduce instances of algae.</td>
<td>Scone Sewer Services</td>
</tr>
<tr>
<td>All areas</td>
<td>All areas</td>
<td>Complete tender for major main replacement/renewal works (7 identified jobs).</td>
<td>All water/sewer areas</td>
</tr>
<tr>
<td>Merriwa</td>
<td>Merriwa STP</td>
<td>Engage consultant to develop Options Report.</td>
<td>Merriwa Sewer Services</td>
</tr>
<tr>
<td>Merriwa</td>
<td>Metered water filling station</td>
<td>Implement the new water filling station in Merriwa.</td>
<td>Merriwa Water Supply</td>
</tr>
<tr>
<td>Murrurundi</td>
<td>Murrurundi Water</td>
<td>Review need to lower the Glenalvon supply bore and undertake lowering as required.</td>
<td>Murrurundi Water Supply</td>
</tr>
</tbody>
</table>
Smart Water Advice
The Water Efficiency Resource
For Councils & Water Utilities
IMPLEMENTATION HANDBOOK
Getting Started

In the pages that follow you will see details about how you can access the online content and materials. You will see where there are opportunities for customisation and where you can go to download images, banners and buttons, video, associated embedding codes, text and positioning copy about the Smart Water Advice program. Ultimately we are providing you with a ‘licence to plagiarise’ and access to all our content for you to share with your customers.

Implementing water efficiency content on ‘your’ site for ‘your’ customers from ‘you’
There are a variety of ways you can provide Smart Water Advice content to your customers:

1. Use the banners or descriptive text provided so you can direct your customers to your landing page or to specific pages of content within the site.
2. Copy/paste relevant information from the Smart Water Advice pages into your own website.
3. Use an embed code to pull content directly from a page into your site. This works best for video content, in the way you would use an embed code from YouTube.

Design Assets and Links
Banners promoting the different advice sections have been developed for you to use on your site. Please see the selection of banners and relevant hyperlinks we have on offer. We’ve developed vertical, horizontal and square banners all which can be scaled up or scaled down in size. You should find designs that work for your site. If you would like a banner designed to different dimensions please let us know and we’ll put some artwork together for you.

Images and text
You are also allowed to use any or all of the Smart Water Advice images shown on the site. Just let us know which you require and we can forward them to you.

Water Efficiency Materials
All of the hard copy materials like factsheets etc. can also have interchangeable images flexible to your needs and can be branded as yours.

Once again, many thanks for your support and we hope that this is a long and worthwhile collaboration. If you have any questions in how to use or link to Smart Water Advice please don’t hesitate to contact us.
## Resource Summary

The table below summarises the assets available to you.

<table>
<thead>
<tr>
<th>Asset</th>
<th>Detail</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tips and advice for all the home, garden and business.</td>
<td>Garden</td>
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<tr>
<td></td>
<td>Guide to water efficient gardening</td>
</tr>
<tr>
<td></td>
<td>• Mulch and composting</td>
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<td></td>
<td>• How much to water?</td>
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<td></td>
<td>• Using rainwater</td>
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<td>• Using greywater</td>
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<td></td>
<td>• Grass types</td>
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<tr>
<td></td>
<td>• When to make garden changes</td>
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<td></td>
<td>• Irrigation techniques</td>
</tr>
<tr>
<td></td>
<td>Garden type lists</td>
</tr>
<tr>
<td></td>
<td>• Backyard garden</td>
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<td></td>
<td>• Cottage garden</td>
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<td></td>
<td>• Formal garden</td>
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<td></td>
<td>• Mediterranean garden</td>
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<td></td>
<td>• Subtropical garden</td>
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<tr>
<td></td>
<td>Designing a Waterwise garden</td>
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<tr>
<td></td>
<td>• Designing to suit your needs</td>
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<td></td>
<td>• Using existing features</td>
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<td></td>
<td>• Microclimates</td>
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<td></td>
<td>• Design principals</td>
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<td></td>
<td>• Designing a new garden</td>
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<td></td>
<td>• Revamping your garden</td>
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<tr>
<td></td>
<td>• Irrigation systems</td>
</tr>
<tr>
<td>Section</td>
<td>Tips and advice on saving water in the</td>
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<td>---------------------</td>
<td>----------------------------------------</td>
</tr>
<tr>
<td>Kitchen</td>
<td>Kitchen</td>
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<tr>
<td></td>
<td>Shower, bath, toilets, taps</td>
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<td></td>
<td>Laundry</td>
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<td></td>
<td>Pools</td>
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<tr>
<td></td>
<td>Washing cars</td>
</tr>
<tr>
<td></td>
<td>Greywater</td>
</tr>
</tbody>
</table>

**Home**

**Kitchen**
- Tips and advice on saving water in the kitchen
- Choosing appliances – WELS

**Bathroom**
- Showers, bath, toilets, taps
- Choosing appliances – WELS

**Laundry**
- Tips and advice on saving water in the laundry
- Choosing a washing machine
- WELS and washing machines

**Pools**
- Tips and advice on saving water in your pool
- Smart WaterMark pool covers
- Behavioral changes
- Maintenance

**Washing cars**
- Tips and advice on washing your car
- Commercial car washes
- Smart WaterMark and car washing

**Greywater**
- Uses for greywater
- Using greywater safely
- Technologies
- Gardening with greywater
<table>
<thead>
<tr>
<th>Rainwater</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Uses for rainwater</td>
</tr>
<tr>
<td>• Choosing the right tank</td>
</tr>
<tr>
<td>• Installing your rainwater tank</td>
</tr>
<tr>
<td>• Case studies</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Leaks</th>
</tr>
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<tbody>
<tr>
<td>• How to fix a dripping tap</td>
</tr>
<tr>
<td>• How to check if your toilet is leaking</td>
</tr>
<tr>
<td>• How to read your water meter</td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th>Business</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial laundries</td>
</tr>
<tr>
<td>• Breakdown of water use</td>
</tr>
<tr>
<td>• Best practice guidelines</td>
</tr>
<tr>
<td>• Using chemicals</td>
</tr>
<tr>
<td>• Ozone laundry</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Hospitality</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Breakdown of water use in hospitality</td>
</tr>
<tr>
<td>• Tips and advice</td>
</tr>
<tr>
<td>• Case studies</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Construction</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Tips and advice</td>
</tr>
<tr>
<td>• Standards and rating schemes</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Textiles</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Water use in the textile industry</td>
</tr>
<tr>
<td>• Water saving tips</td>
</tr>
<tr>
<td>• Case studies</td>
</tr>
</tbody>
</table>
| Nurseries       | ● Water use in the nursery industry  
|                | ● Water saving tips                 |
|                | Food processing                     | ● Water use in the food industry  
|                | ● How to save water                 | ● Benefits of saving water          |
|                | ● Case studies                      | ● Case studies                      |
|                | Manufacturing                       | ● Water use in manufacturing        |
|                | ● How to save water                 | ● Case studies                      |
|                | ● Primary industries                |                                   |
|                | ● Agriculture                       | ● Horticulture                      |
|                | ● Horticulture                       | ● Wine industry                     |
| A4 Factsheets  | Professionally designed, co-branded pdf factsheets covering each area of the home for your customers to download from your site or from your Smart Water Advice URL.  |
|                | 2 design styles to choose from covering the following topics;  |
|                | 1. Saving Water At Work             |
|                | 2. How to fit a Water Efficient Showerhead |
|                | 3. How to Maintain Your Rainwater Tank |
|                | 4. Connecting Your Rainwater Tank to the Home |
|                | 5. Water Efficient Car Washing      |
|                | 6. Water Efficient Pool Covers      |
|                | 7. Saving Water with Mulch          |
|                | 8. Saving Water In the Laundry       |
|                | 9. Early Leak Detection             |
|                | 10. Problem with Your Rainwater Tank Pump |
| **A4 Posters** | 2 design styles to choose from covering the following topics;  
1. Dishwashers at work  
2. Toilet Leaks at work  
3. Dripping Taps at work |
| **Pull Up Banners** | Covers ‘At Home’ and ‘In the Garden’ topics |
| **Bill Inserts** | 2pp DL covering ‘In the Garden’ and 6pp DL covering ‘At home’ and ‘In the Garden’ topics |
| **A5 Postcards** | Covers ‘At Home’ and ‘In the Garden’ topics |
| **Plant Finder Tool available at** | [https://www.smartwatermark.org/plant-finder/](https://www.smartwatermark.org/plant-finder/)  
A tool to assist people in choosing water efficiency plants when designing a new garden. |
| **Video Library available at:** | [https://www.youtube.com/watch?v=5_wFKGdtwqE&list=PL7UINzq0plq1msQHv7CY00R|Qf-Qu](https://www.youtube.com/watch?v=5_wFKGdtwqE&list=PL7UINzq0plq1msQHv7CY00R|Qf-Qu)  
‘How to guides’ and action based educational water saving videos. These are hosted on You Tube, are part of the Smart water Advice Playlist and are also embedded within the Smart Water Advice site. You can use the embed code provided to place them on your site also. |
| **TVC** | 30 Second TVC covering ‘In the Garden’ |
| **Smart Approved WaterMark product and service banners and links at:** | [https://www.smartwatermark.org/products/](https://www.smartwatermark.org/products/)  
[https://www.smartwatermark.org/services](https://www.smartwatermark.org/services)  
Over 300 water efficient products and services have been approved by Smart WaterMark’s Independent Expert Panel. The scheme operates to certify water efficient/water saving products and services from all over Australia and Europe. |
| **Member Acknowledgement** | Smart Water Advice lists its members on the dedicated Supporters Page at [smartwatermark.org/NSW](http://smartwatermark.org/NSW) |
Asset Library & Download Links

Full resolution banners in horizontal, vertical and square formats, can be downloaded from this Dropbox link: https://www.dropbox.com/sh/6085rgs8l8a73w/AACxl9EvHAl6M80FfQkza?dl=0 and the Smart Water Advice (SWA) logo can be downloaded here https://www.dropbox.com/sh/e2lnnx8aq16f5i/wAA1MVVUggAYFoV0rBsiHeA6na?dl=0

Note: You are not required to mention Smart Water Advice by name or to use assets with the SWA logo on it. However should you chose to, all design assets have been provided both with and without SWA branding.

<table>
<thead>
<tr>
<th>Content page</th>
<th>Descriptive text</th>
<th>URL</th>
<th>Banner</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unique member council homepage.</td>
<td>Click here for great water saving tips for the home, garden and at work.</td>
<td>Specific to your organisation this URL has been confirmed in your welcome letter.</td>
<td><img src="image" alt="Water saving tips brought to you by Smart Approved WaterMark" /></td>
</tr>
<tr>
<td>Smart Water Advice Intro for member website (only if required)</td>
<td>[Your name] is a proud member of Smart Water Advice. In collaboration with Smart Approved WaterMark and water utilities and councils from across Australia, we are providing you with a range of tips and resources to help you save water in your home, garden and at work.</td>
<td>Specific to your organisation this URL has been confirmed in your welcome letter.</td>
<td><img src="image" alt="Smart Approved WaterMark" /> Advice</td>
</tr>
<tr>
<td>Garden/When to water</td>
<td>Ever wondered when is the best time of day to water your vegetable garden? Or your pot plants? Or ornamental trees? Find out when to water and how to best maintain your irrigation equipment.</td>
<td><a href="https://www.smartwatermark.org/NSW-saving-water-garden/when-water/">https://www.smartwatermark.org/NSW-saving-water-garden/when-water/</a></td>
<td></td>
</tr>
<tr>
<td>Garden/How much to water</td>
<td>Find out how much water your plants really need and how to test if your soil is drying out too much.</td>
<td><a href="https://www.smartwatermark.org/NSW-saving-water-garden/how-much-water/">https://www.smartwatermark.org/NSW-saving-water-garden/how-much-water/</a></td>
<td></td>
</tr>
<tr>
<td>Garden/Irrigation</td>
<td>Many parts of your garden have differing watering needs and require different approaches to irrigation. Discover the many different types of irrigation technologies and which is most appropriate for you.</td>
<td><a href="https://www.smartwatermark.org/NSW-saving-water-garden/Irrigation/">https://www.smartwatermark.org/NSW-saving-water-garden/Irrigation/</a></td>
<td></td>
</tr>
<tr>
<td>Garden/Rainwater</td>
<td>Rainwater tanks are popular for storing water. Discover the benefits of using rainwater, how to choose a tank suitable for you and how to install it.</td>
<td><a href="https://www.smartwatermark.org/NSW-saving-water-garden/rainwater/">https://www.smartwatermark.org/NSW-saving-water-garden/rainwater/</a></td>
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</tr>
<tr>
<td>Garden/Greywater</td>
<td>All the water that comes out of the tap is top quality drinking water, but not all of the activities that we use water for around the house need drinkable water. Greywater is the used water from the bathroom, laundry and kitchen. Find out how to use it safely.</td>
<td><a href="https://www.smartwatermark.org/NSW-saving-water-garden/greywater/">https://www.smartwatermark.org/NSW-saving-water-garden/greywater/</a></td>
<td></td>
</tr>
<tr>
<td>Garden/Mulch and Compost</td>
<td>Mulching and composting ensures your garden is water efficient all the time and green even during times of drought. Find out more.</td>
<td><a href="https://www.smartwatermark.org/NSW-saving-water-garden/mulch-and-compost/">https://www.smartwatermark.org/NSW-saving-water-garden/mulch-and-compost/</a></td>
<td></td>
</tr>
<tr>
<td>Garden/Choosing plants</td>
<td>By choosing the right plants it is possible to maintain an attractive garden that requires only a small amount of water. Discover which plants suit your climate, soil and environment.</td>
<td><a href="https://www.smartwatermark.org/NSW-saving-water-garden/choosing-plants/">https://www.smartwatermark.org/NSW-saving-water-garden/choosing-plants/</a></td>
<td></td>
</tr>
<tr>
<td><strong>Garden/Approved Garden products</strong></td>
<td>Smart Approved WaterMark certifies a range of water efficient products for use in your garden. Browse products now.</td>
<td><a href="https://www.smartwatermark.org/NSW-saving-water-garden/approved-garden-products/">https://www.smartwatermark.org/NSW-saving-water-garden/approved-garden-products/</a></td>
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<td>-------------------------------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td><strong>Garden/Garden design</strong></td>
<td>Thinking of designing a waterwise garden? Discover how to design a beautiful garden that uses only a small amount of water.</td>
<td><a href="https://www.smartwatermark.org/NSW-saving-water-garden/garden-design/">https://www.smartwatermark.org/NSW-saving-water-garden/garden-design/</a></td>
<td></td>
</tr>
<tr>
<td><strong>Home homepage</strong></td>
<td>Explore ways of reducing your water wastage in your kitchen, bathroom, and laundry. Discover the most water efficient method of washing your car and caring for your swimming pool.</td>
<td><a href="https://www.smartwatermark.org/NSW-saving-water-home/">https://www.smartwatermark.org/NSW-saving-water-home/</a></td>
<td></td>
</tr>
<tr>
<td><strong>Home/Personal washing</strong></td>
<td>Three quarters of the water used in the bathroom is used for washing ourselves. These days, thanks to high quality water efficient technology it is possible to have a great washing experience without using excessive amounts of water. Find out more.</td>
<td><a href="https://www.smartwatermark.org/NSW-saving-water-home/bathroom/">https://www.smartwatermark.org/NSW-saving-water-home/bathroom/</a></td>
<td></td>
</tr>
<tr>
<td><strong>Home/Toilets</strong></td>
<td>A quarter of all the water we use in the bathroom is flushed down the toilet! It is crazy that we use high quality, treated drinking water to flush toilets. Its easy to cut down water wastage in this area. Find out how.</td>
<td><a href="https://www.smartwatermark.org/NSW-saving-water-home/toilets/">https://www.smartwatermark.org/NSW-saving-water-home/toilets/</a></td>
<td></td>
</tr>
<tr>
<td><strong>Home/Taps</strong></td>
<td>A running tap wastes over 6 litres a minute. Remember to turn off those taps and fix leaks. Find out more.</td>
<td><a href="https://www.smartwatermark.org/NSW-saving-water-home/taps/">https://www.smartwatermark.org/NSW-saving-water-home/taps/</a></td>
<td></td>
</tr>
<tr>
<td><strong>Home/Kitchen</strong></td>
<td>Cooking, cleaning and washing dishes uses a huge amount of water. Find out how to save water in the kitchen.</td>
<td><a href="https://www.smartwatermark.org/NSW-saving-water-home/kitchen/">https://www.smartwatermark.org/NSW-saving-water-home/kitchen/</a></td>
<td></td>
</tr>
<tr>
<td><strong>Home/Laundry</strong></td>
<td>15-20% of all water consumed in the home is used in the laundry, making this room a high consumer of not only water but also energy and detergents. There are many inexpensive ways to save water in the laundry. Find out how.</td>
<td><a href="https://www.smartwatermark.org/NSW-saving-water-home/laundry/">https://www.smartwatermark.org/NSW-saving-water-home/laundry/</a></td>
<td></td>
</tr>
<tr>
<td><strong>Home/Pool and Spa</strong></td>
<td>Swimming pools use a huge amount of water, but if they are designed well to use rainwater and protected with a Smart WaterMark pool cover they don't have to be wasteful. And remember, it is possible to enjoy water whilst not wasting it at the same time.</td>
<td><a href="https://www.smartwatermark.org/NSW-saving-water-home/pool-and-spa/">https://www.smartwatermark.org/NSW-saving-water-home/pool-and-spa/</a></td>
<td></td>
</tr>
<tr>
<td>Home/Car</td>
<td>There are many ways to clean cars without using too much water. Waterless car washes through to high pressure low-flow cleaners, can help you clean and be efficient with your water use. Find out more.</td>
<td><a href="https://www.smartwatermark.org/NSW-saving-water-home/car-washing/">https://www.smartwatermark.org/NSW-saving-water-home/car-washing/</a></td>
<td></td>
</tr>
<tr>
<td>Home/Leaks</td>
<td>A continuously running toilet can waste up to 60,000 litres of water per year. Find out how to check if you have a leak and how to fix it.</td>
<td><a href="https://www.smartwatermark.org/NSW-saving-water-home/leaks/">https://www.smartwatermark.org/NSW-saving-water-home/leaks/</a></td>
<td></td>
</tr>
<tr>
<td>Business homepage</td>
<td>Discover how to save water across different parts of the business sector including nurseries, food processing, manufacturing, commercial laundries, the building industry, hospitality, textiles, horticulture and viticulture.</td>
<td><a href="https://www.smartwatermark.org/NSW-saving-water-business/">https://www.smartwatermark.org/NSW-saving-water-business/</a></td>
<td></td>
</tr>
<tr>
<td>Business/Building Industry</td>
<td>There are benefits to saving water in construction and demolition - from houses to roadways and land development.</td>
<td><a href="https://www.smartwatermark.org/NSW-saving-water-business/building-industry/">https://www.smartwatermark.org/NSW-saving-water-business/building-industry/</a></td>
<td></td>
</tr>
<tr>
<td>Business/Hospitality</td>
<td>Experience in the hospitality sector is showing that conserving water will not only save money, it will also provide an important marketing edge in a very competitive industry.</td>
<td><a href="https://www.smartwatermark.org/NSW-saving-water-business/hospitality/">https://www.smartwatermark.org/NSW-saving-water-business/hospitality/</a></td>
<td></td>
</tr>
<tr>
<td>Business/Textiles</td>
<td>The Australian textile, clothing, footwear and leather industry has an annual turnover of $9.3 million and employs about 65,000 people. The industry uses about 50 Gigalitres of water per year, or 7% of the total water used in the manufacturing sector.</td>
<td><a href="https://www.smartwatermark.org/NSW-saving-water-business/textiles/">https://www.smartwatermark.org/NSW-saving-water-business/textiles/</a></td>
<td></td>
</tr>
<tr>
<td>Business/Nurseries</td>
<td>Whether you run a production, wholesale, or retail site, an adequate supply of water is always important. However, you may not be aware of the large amount of water wastage.</td>
<td><a href="https://www.smartwatermark.org/NSW-saving-water-business/nurseries/">https://www.smartwatermark.org/NSW-saving-water-business/nurseries/</a></td>
<td></td>
</tr>
<tr>
<td>Business/Food Processing</td>
<td>The Australian food processing sector is the largest in the manufacturing industry, employing over 192,000 people. Saving water in food processing will result in cost savings and environmental benefits.</td>
<td><a href="https://www.smartwatermark.org/NSW-saving-water-business/food-processing/">https://www.smartwatermark.org/NSW-saving-water-business/food-processing/</a></td>
<td></td>
</tr>
<tr>
<td>Business/Manufacturing</td>
<td>With a little inspiration and innovation, there are many opportunities to reduce water consumption in heavy manufacturing operations, without reducing production.</td>
<td><a href="https://www.smartwatermark.org/NSW-saving-water-business/manufacturing/">https://www.smartwatermark.org/NSW-saving-water-business/manufacturing/</a></td>
<td></td>
</tr>
<tr>
<td><strong>Business/Horticulture</strong></td>
<td>Continued development of the horticulture industry is dependent upon growers implementing sustainable practices such as using water efficiently. Find out how to use water wisely in greenhouses, vegetable growing and orchards.</td>
<td><a href="https://www.smartwatermark.org/NSW-saving-water-business/horticulture/">https://www.smartwatermark.org/NSW-saving-water-business/horticulture/</a></td>
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</tr>
<tr>
<td><strong>Business/Viticulture</strong></td>
<td>There are many benefits of saving water in the wine industry. Find out how to save water.</td>
<td><a href="https://www.smartwatermark.org/NSW-saving-water-business/viticulture/">https://www.smartwatermark.org/NSW-saving-water-business/viticulture/</a></td>
<td></td>
</tr>
<tr>
<td><strong>Smart Approved WaterMark product and service banners and links at:</strong></td>
<td></td>
<td><a href="https://www.smartwatermark.org/products/">https://www.smartwatermark.org/products/</a> <a href="https://www.smartwatermark.org/services">https://www.smartwatermark.org/services</a></td>
<td></td>
</tr>
<tr>
<td><strong>A4 Factsheets</strong></td>
<td></td>
<td><a href="https://www.dropbox.com/sh/6085rgs88aa73w/AACxl9EvHA16M80IfqWQkza?dl=0">https://www.dropbox.com/sh/6085rgs88aa73w/AACxl9EvHA16M80IfqWQkza?dl=0</a></td>
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<tr>
<td><strong>A4 Posters</strong></td>
<td></td>
<td><a href="https://www.dropbox.com/sh/6085rgs88aa73w/AACxl9EvHA16M80IfqWQkza?dl=0">https://www.dropbox.com/sh/6085rgs88aa73w/AACxl9EvHA16M80IfqWQkza?dl=0</a></td>
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<tr>
<td>Pull Up Banners</td>
<td><a href="https://www.dropbox.com/sh/6085rgs8B8aa73w/AACxI9EvHAl6M8OfEqWQkza?dl=0">Link</a></td>
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<tr>
<td>Bill Inserts – 2pp &amp; 6pp</td>
<td><a href="https://www.dropbox.com/sh/6085rgs8B8aa73w/AACxI9EvHAl6M8OfEqWQkza?dl=0">Link</a></td>
<td></td>
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</tr>
</tbody>
</table>
## A5 Postcards

[Online Link]

https://www.dropbox.com/sh/6085rgs8l8aa73w/AACxI9EvHAI6M8O/fEfqWkza?dl=0

## Plant Finder

[Online Link]

https://www.smartwatermark.org/plant-finder/
<table>
<thead>
<tr>
<th>Video Library</th>
<th>TVC</th>
<th>Link</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Saving water in the garden</td>
<td><a href="https://www.youtube.com/watch?v=10NyJ19UqtQ">https://www.youtube.com/watch?v=10NyJ19UqtQ</a></td>
</tr>
</tbody>
</table>

[Image of Design Assets]
Usage Examples
Any Questions or Issues - don’t hesitate to contact us:

Smart Approved WaterMark
cris.philpot@smartwatermark.info
Level 9, 420 George Street, Sydney, NSW, 2000
Phone: 02 9223 3322 Mobile: 0422 289 599
ISC.12.2 WORKS PROGRAM - INFRASTRUCTURE SERVICES

RESPONSIBLE OFFICER: Nicholas Havyatt - Director Infrastructure Services

AUTHOR: Andrew Griffith - Manager Works Delivery

PURPOSE

The purpose of the report is to provide an update on the Works Delivery Program undertaken over the previous month and that planned for the upcoming month.

RECOMMENDATION

That the Committee receive the report and note the information.

BACKGROUND

The report includes information on Infrastructure Services work including roads, bridges, and parks. The report provides information to assist in addressing enquiries regarding construction and maintenance works.

REPORT/PROPOSAL

Some of the major projects currently under construction or planned are:

- Willow Tree Road pavement works stage 1 and earthworks on stage 2.
- Heavy Patch works on Regional and Local road prior to reseal works.
- Saleyards.
- Golden Highway Segment 221.
- Golden Highway Reseals.
- Main Street Scone Footpath works.

MR358 Coulson Creek Road (Willow Tree Road) initial seal and widening

This project is a joint project between Upper Hunter Shire Council (UHSC) and Liverpool Plains Shire Council (LPSC)

<table>
<thead>
<tr>
<th>Approved Grant</th>
<th>$12,161,750</th>
<th>UHSC 79% LPSC 21%</th>
</tr>
</thead>
<tbody>
<tr>
<td>UHSC budget</td>
<td>$ 9,607,782</td>
<td></td>
</tr>
<tr>
<td>Expenditure to date</td>
<td>$ 1,673,049</td>
<td>(2018/19)</td>
</tr>
<tr>
<td></td>
<td>$ 3,006,339</td>
<td>(2017/18)</td>
</tr>
<tr>
<td></td>
<td>$  201,741</td>
<td>(2016/17)</td>
</tr>
<tr>
<td>Available budget</td>
<td>$ 4,726,653</td>
<td></td>
</tr>
</tbody>
</table>

Key activities undertaken last month:

- Stage 1 Initial seal 7.6km
  - Works have been delayed as the crew has been moved to the Golden Highway Segment 221 project.
- Stage 2 widening of Liverpool Range,
  - Clearing and bulk earthworks continuing approximately 2.0km of earthworks completed.
  - Material won from stage 2 is been used in stage 1 batters and subgrade.
The team has now moved over 100,000 tonnes from the cutting.

The earthworks are taking longer due to the additional material required to be removed, it is now expected these works will be completed in February 2019.

Key activities in next three months:
- Progress construction of gravel pavements and initial seal for Stage 1.
- Progress earthworks and clearing on stage 2.

Emerging issues:
- Reviewing and finalising Stage 2 design to minimize earthworks, drainage and control costs.
- There is a risk that we may find rock in the stormwater pipe lines during installation.
- Additional time required to complete earthworks will put the project at risk of not being completed by June 2019.

**OPTIONS**

Nil.

**CONSULTATION**

- General Manager
- Director Infrastructure Services
- Infrastructure Services Managers
- Supervisors and Team Leaders

**STRATEGIC LINKS**

a. **Community Strategic Plan 2027**

This report links to the Community Strategic Plan 2027 as follows:

**ECONOMY AND INFRASTRUCTURE**

Goal 6  Increase, enhance and maintain civil infrastructure, Community assets and open spaces to meet the needs of current and future generations.

CS24  Provide for replacement, improvement and additional Community and open space infrastructure through investment, best practice and risk management.

CS25  Provide inviting public spaces that are clean, green, properly maintained, well designed, encourage active participation, family friendly and accessible to all.

CS27  Maintain and upgrade the road network and bridges.

We are working to achieve the following Community Priorities:
b. Delivery Program

The report addresses the following objectives up to June 2019 as described in the 2018/19 DPOP:

Parks, Gardens and Sporting Fields
By providing quality open spaces, parks sporting grounds and reserves that are suitable and accessible for the community.

Roads and Bridges – Local & Regional
By undertaking roads, stormwater, footpaths and bridge maintenance and construction works to Council’s standards and specifications so as to improve road safety and minimise future expenses.

Parks & Gardens
- A parks and open space maintenance program across Council.
- Upgrade or replace parks and playground equipment.

Roads - Local & Regional
- A well maintained urban, rural sealed and unsealed road network.
- Increase effectiveness of preventative maintenance work as part of maintenance management works practices.
- Construction and quality specifications for road construction.

c. Other Plans

Asset Management Plans.

IMPLICATIONS

a. Policy and Procedural Implications

Parks, Sporting Fields, Footpath, Road and Bridge maintenance guidelines as identified within Asset Management Plans and Strategic Plans.

b. Financial Implications

Identified within individual items in the 2017/18 and 2018/19 budgets.

c. Legislative Implications

Not applicable.
d. Risk Implications

Road and asset inspections are undertaken to mitigate and minimise Council’s risk exposure in these areas.

e. Other Implications

Nil.

CONCLUSION

The updated report is provided as Attachment 1 and details work undertaken over the previous month and works planned for the upcoming month.

ATTACHMENTS

1 Works Delivery Works In Progress for Scone, Murrurundi & Merriwa - December 2018
### Programmed Construction Works

<table>
<thead>
<tr>
<th>Location</th>
<th>Work</th>
<th>Area (Crew)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main St Footpath</td>
<td>Footpath Construction</td>
<td>Concrete Crew</td>
</tr>
<tr>
<td>Saleyards</td>
<td>Pavement/Drainage</td>
<td>Scone Crew</td>
</tr>
<tr>
<td>William St (Merriwa), Cassilis Rd</td>
<td>Heavy Patching</td>
<td>Merriwa Grader</td>
</tr>
<tr>
<td>Willow Tree Rd Stage 1</td>
<td>Ongoing: 30 – 33km from Scone Rd final 200mm to be placed once Golden Hwy works are complete</td>
<td>Merriwa Construction</td>
</tr>
<tr>
<td>Willow Tree Rd Stage 2</td>
<td>Ongoing: 36 – 39km from Scone Rd Earthworks continuing.</td>
<td>Merriwa Construction</td>
</tr>
<tr>
<td>Golden Highway Segment 221</td>
<td>820m Premill Rehabilitation near Idaville Rd. Due for completion early December.</td>
<td>Merriwa Construction</td>
</tr>
</tbody>
</table>

### Programmed Grading works

<table>
<thead>
<tr>
<th>Location</th>
<th>Work</th>
<th>Area (Crew)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tomalla Rd, Waverley Rd</td>
<td>Maintenance Grading</td>
<td>Murrurundi Grader</td>
</tr>
<tr>
<td>Thompsons Creek, Sparkes Creek, Yarrandi Rd, Rossgole Rd, Cliftlands Rd, Ridgeslands Rd</td>
<td>Maintenance Grading</td>
<td>Scone Grader</td>
</tr>
<tr>
<td>Cullingral Rd, T.B.D. on water availability &amp; road condition.</td>
<td>Maintenance Grading</td>
<td>Merriwa Grader</td>
</tr>
</tbody>
</table>
## Capital Works – Complete

<table>
<thead>
<tr>
<th>Location</th>
<th>Work</th>
<th>Area (Crew)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blandford Town Street</td>
<td>Heavy Patching Program</td>
<td>Scone Construction Crew</td>
</tr>
<tr>
<td>Aberdeen Town Street</td>
<td>Heavy Patching Program</td>
<td>Scone Construction Crew</td>
</tr>
<tr>
<td>Owens Gap</td>
<td>Realignment</td>
<td>Scone Construction Crew</td>
</tr>
<tr>
<td>MR105 (Hunter Road)</td>
<td>Heavy Patching Program</td>
<td>Scone Grader</td>
</tr>
<tr>
<td>Waverley Road</td>
<td>Heavy Patching Program</td>
<td>Scone Grader</td>
</tr>
<tr>
<td>William St (Mwa), Cassillis Rd</td>
<td>Heavy Patching</td>
<td>Merriwa Grader</td>
</tr>
</tbody>
</table>

## Maintenance Grading – Complete

<table>
<thead>
<tr>
<th>Location</th>
<th>Work</th>
<th>Area (Crew)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kars Springs Road, Turanville Road and Upper Dartbrook</td>
<td>Maintenance grading</td>
<td>Scone Grader</td>
</tr>
<tr>
<td>Poly Fogal Rd, Tomalla Rd</td>
<td>Maintenance grading</td>
<td>Murrurundi Grader</td>
</tr>
<tr>
<td>Coolah Road</td>
<td></td>
<td>Merriwa Grader</td>
</tr>
</tbody>
</table>
ISC.12.3  SPECIAL PROJECTS UPDATE

RESPONSIBLE OFFICER: Nicholas Havyatt - Director Infrastructure Services

AUTHOR: Alan Fletcher - Special Projects Manager

PURPOSE

The purpose of this report is to provide an update on the projects being managed by the Special Projects Team.

RECOMMENDATION

That the Committee receive the report and note the information.

BACKGROUND

The report provides information to assist the Committee to understand the current status of each of the projects, what work has recently been completed, and the work that is planned for the next three months.

REPORT/PROPOSAL

Scone to Murrurundi Pipeline

Approved total budget $14,199,000 (Original project budget by Public Works Advisory. Original scope with pipeline and village reticulation.)

Amount spent each previous year
- $40,401 (2014/15)
- $169,466 (2015/16)
- $241,590 (2016/17)
- $312,965 (2017/18)

Budget for current year $7,700,000 (2018/19)

Amount spent current year $276,925 (2018/19)

Available funds/current year $7,423,075

Key activities since last month:

- Tender documents finalized with GHD.
- Tender documents reviewed by probity consultant and Local Government Legal.
- Land purchase for the Wingen pump station site completed.
- Property acquisition notices (PAN) prepared for the compulsory acquisition of easements over the eight Crown Land lots.
- Tender for design development and construction of pipeline advertised 3 December 2018.

Key activities in the next three months:

- Tenders close 14 February 2019.
Infrastructure Services

- Execution of Deeds of Agreement for Easements.
- Issuing Proposed Property Acquisition Notice for easements on Crown lands.
- Completion of negotiations with Native Title Claimants.

Emerging issues:
- Nil

White Park Indoor Arena – Stage 1

<table>
<thead>
<tr>
<th>Approved total budget</th>
<th>$2,839,010</th>
<th>($1,969,010 plus $870,000)</th>
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<tr>
<td>$ 31,498</td>
<td>(2015/16)</td>
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<td>$ 17,866</td>
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<tr>
<td>$1,461,227</td>
<td>(2017/18)</td>
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<td>Budget for current year</td>
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<td>(2018/19)</td>
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<tr>
<td>Amount spent current year</td>
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<td>Available funds/current year</td>
<td>$971,525</td>
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</table>

Key activities undertaken last month:
- Concrete contractor work is progressing. Now due for completion 12 December 2018.
- Electrical work has commenced.
- Plumbing work has commenced.
- Arena fencing fabrication has commenced.
- Retaining wall handrail contractor engaged, due for completion January 2019.
- Toilets construction has commenced.

Key activities in the next three months:
- Concrete paving due for completion 12 December 2018.
- Commence fit out, e.g. arena fencing, arena surface, electrical, roof water tank and pipework, concrete paving and seating.
- Nine different arena sand/loam material samples sourced. Arena sand/loam will be selected at Committee meeting on the 12 December 2018.
- Sewer pump station and sewer lines programmed to commence before Christmas.

Emerging issues:
- Proposed sewer pump station may not be completed prior to completion of the undercover arena. Council's Water & Sewer Team working to expedite construction.

Scone Golf Course Detailed Design and Reconstruction

<table>
<thead>
<tr>
<th>Approved total budget</th>
<th>$4,021,094</th>
<th>(Revised)</th>
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<td>Amount spent each previous year</td>
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<tr>
<td>$ 36,314</td>
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<td>$2,983,844</td>
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<td>Budget for current year</td>
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<td>Amount spent current year</td>
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<td>Available funds/current year</td>
<td>$542,555</td>
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</table>
Infrastructure Services

Key activities undertaken last month:
- Finalise outstanding construction items e.g. water proofing dams.
- Growing in and weed control. Weed control in the southern fairways requires more work.
- Bentonite waterproofing of the water and recycled effluent dams. One dam completed.

Key activities in the next three months:
- Bentonite waterproofing of the second dam to started.
- Growing in of the golf course.
- Eliminate weed problems on the southern fairways.

Emerging issues:
- The contractor McMahon Pty Ltd are required to have the course grown in and ready for play by July. McMahon Pty Ltd have advised that the course grow in will be completed in early March 2019. Play is expected to commence in March 2019. Weed problem on the southern fairways has not been resolved.

Scone Sewerage Treatment Plant Augmentation

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<thead>
<tr>
<th>Approved total budget</th>
<th>$1,000,000 (Council funded seeking grant)</th>
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</thead>
<tbody>
<tr>
<td>Amount spent each previous year</td>
<td>$14,981 (2016/17)</td>
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<td>$57,309 (2017/18)</td>
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<td>Budget for current year</td>
<td>$95,000</td>
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<td>Amount spent current year</td>
<td>$5,896 (2018/19)</td>
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<td>Available funds/current year</td>
<td>$89,104</td>
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</table>

Key activities undertaken last month:
- Design Consultant is progressing the concept design.

Key activities in the next three months:
- Provide 70% of the design and estimates.

Emerging issues:
- Need to review 2006 Effluent Reuse Management Plan for Scone STP and sites including Golf Course, Bill Rose Sports Complex, Race Course and Bhima Stud.

Cassilis Sewerage Scheme

<table>
<thead>
<tr>
<th>Approved total budget</th>
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<tbody>
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<td>Amount spent each previous year</td>
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<td>$2,392 (2016/17)</td>
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<td>$52,778 (2017/18)</td>
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<td>Budget for current year</td>
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<td>Amount spent current year</td>
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<tr>
<td>Available funds/current year</td>
<td>$1,943,067</td>
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</table>
Infrastructure Services

Key activities undertaken last month:
- Cardno progressing the concept design.
- Sewer treatment site land purchase contract issued. Problem with clause about approval of future house DA on residual lot. Solicitors resolving issue.

Key activities in next three months:
- Finalise concept design and tender documentation.
- Finalise Sewerage Treatment Plant site acquisition.
- Arrange Section 60 of Local Government Act 1993 approval.
- Arrange Review of Environmental Factors.

Emerging issues:
- Estimates provided with 30% design report are higher than previous estimates and require review. This has been discussed with the consultant and will need careful work to accurately estimate the costs.

Scone Regional Selling Centre – Saleyards Redevelopment

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<tbody>
<tr>
<td>Approved total budget</td>
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<td>Budget for current year</td>
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<td>Amount spent current year</td>
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<td>(2018/19)</td>
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<tr>
<td>Available funds</td>
<td>$ 8,544,607</td>
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</tbody>
</table>

Key activities undertaken last month:
- The construction of the new selling pens and roofs contract has commenced. Working with contractor and consultants to develop the design.
- Canteen and Administration Centre is now open and operational. Working with contractor to resolve outstanding defects and items to complete e.g. screen door.
- Truck wash effluent dump concrete works.

Key activities in next three months:
- Detailed design and approvals e.g. NSW Fire Brigade to allow final stage construction certificate for the roofs, footings, pens and walkways.
- Construction of manure dewatering facilities.
- Installation of acoustic barrier construction.
- Carpark and road works.

Old Court Theatre – Design and Consents

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<td>Budget for current year</td>
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<td>Amount spent current year</td>
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<td>(2018/19)</td>
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<tr>
<td>Available funds</td>
<td>$ 208,831</td>
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</table>

Key activities undertaken last month:
- Tender report went to November Council meeting. Resolved to not accept any tender and enter into negotiations. Negotiations have commenced.
Infrastructure Services

Key activities in next three months:
- Building work commences to the limit of budget.
- Have further discussions with Liquor and Gaming regarding existing grant funding.
- Call quotes for theatre seating subject to adequate funding.

Emerging issues:
- Nil

**Scone CBD Revitalisation – Detail Design**

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<tbody>
<tr>
<td>Approved total budget</td>
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<td>Amount spent each previous year</td>
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<td>Budget for current year</td>
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<td>Amount spent current year</td>
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<td>Available funds</td>
<td>$ 21,235</td>
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</table>

Key activities undertaken last month:
- Detailed landscape design progressing.
- Quotations for civil design have closed. Quotations assessment is finalized with a preferred contractor selected.
- Scone CBD Revitalisation Committee and Equine Hall of Fame Taskforce meetings held.
- Plant Selection/Horticulture Taskforce discussions held with the RMS regarding the Scone Bypass landscaping. Discussions also held with RMS and Council Works Delivery regarding design and long term maintenance.

Key activities in next three months:
- Completion of detailed landscape design and associated civil design work.
- Consultation with major stakeholders.

Emerging issues:
- Current budget insufficient to cover the full cost of civil design consultant. The budget requires to be reviewed.

**OPTIONS**

Note the report

**CONSULTATION**

- Director Infrastructure Services
- Manager Special Projects
- Manager Strategic Assets
- Manager Water & Sewer
- Manager Works Delivery
STRATEGIC LINKS

a. Community Strategic Plan 2027

This report links to the Community Strategic Plan 2027 as follows:

Goal 4 Plan for a sustainable future
   CS15 Plan, facilitate and provide for a changing population for current and future generations.

Goal 6 Increase, enhance and maintain civil infrastructure, Community assets and open spaces to meet the needs of current and future generations.
   CS26 Provide safe and reliable water and sewerage services to meet the demands of current and future generations.

Goal 7 Enhance and improve the road network and bridges to meet the needs of current and future generations and communicate priorities and progress to the Community.
   CS27 Maintain and upgrade the road network and bridges.
   CS28 Increased Community engagement and updates on infrastructure planning, road priorities, works and improvements.
   CS29 Advocate, facilitate and/or provide traffic management and public transport facilities to meet the needs of the Community.

We are working to achieve the following Community Priorities:

1. Rural lifestyle and Country feel are valued and protected and the Upper Hunter Shire remains quiet, safe, healthy and welcoming.

2. Well maintained, safe, reliable and additional infrastructure, including sporting fields, parks, family and cultural facilities.

3. Upper Hunter Shire has improved and well maintained roads and bridges.

4. Protect the natural environment.

5. Reliable and safe water supply.
b. Delivery Program

The report addresses the following objectives for works to 30 June 2019 as described in the 2018/19 DPOP.

- **Bridges**
  By undertaking bridge maintenance and construction works to Council standards and specifications so as to improve safety and minimise future expenses.

- **Local Roads**
  Undertake road maintenance and construction works to Council. Standards and specifications so as to improve road safety and minimise future expenses.

- **Regional Roads**
  To undertake roads and bridge maintenance and construction works to Council’s standards and specifications so as to improve road safety and minimise future expenses.

- **Stormwater**
  To provide stormwater drainage systems to manage flows.

- **Water Supplies**
  To provide an adequate and secure potable water supply to recognised standards in defined areas on a cost effective basis.

- **Sewage Services**
  To maintain a sewage system for the transportation and treatment of sewage to licence requirements and encourage appropriate further expansion of services.

c. Other Plans

Council’s Asset Management Plan list projects for the development of the Capital Works Program.

**IMPLICATIONS**

a. Policy and Procedural Implications

Nil.

b. Financial Implications

All works have been budgeted for in accordance with the Delivery Program and Operational Plan (DPOP) 2018/19.

c. Legislative Implications

Due to the value of the projects being over $150,000 the tendering provisions of the Local Government Act 1993 and the Local Government (General) Regulation 2005 apply.

The two sewerage scheme projects, the Scone Sewerage Treatment Plant Augmentation and Cassilis Sewerage Scheme require state government approval under Section 60 of the Local Government Act 1993.
d. Risk Implications

Implementation of a project management framework will assist with project management completion of capital projects. Completion of these capital works projects assists Council to mitigate their risk exposure.

e. Other Implications

Nil.

CONCLUSION

The Special Projects update report provides Councillors with a review of progress of the projects and emerging issues.

ATTACHMENTS

Nil.
ISC.12.4  CAPITAL WORKS UPDATE

RESPONSIBLE OFFICER: Nicholas Havyatt - Director Infrastructure Services

AUTHOR: Nicholas Havyatt - Director Infrastructure Services

PURPOSE

The purpose of this report is to provide an update on capital works projects within the 2018/2019 budgetary period.

RECOMMENDATION

That the Committee receive the report and note the information.

BACKGROUND

In association with the 2018/19 Delivery Program and Operational Plan, a schedule of the planned capital works has been prepared. Budget holders have been asked to identify when the project is planned to be delivered.

REPORT/PROPOSAL

The spreadsheet provided under separate cover shows the expenditure up to the end of November 2018, which to date is running at 82% of the year to date budget.

Key projects currently include:

- Willow Tree Road Construction
- Golf Course Reconstruction
- White Park Arena
- Saleyards
- Murrurundi Water Pipeline

OPTIONS

1. By receiving and noting the capital works update, Council is advised of works progress and associated works scheduling.
2. Councillors may seek adjustments to works timing and priorities where identified.

CONSULTATION

- Director Infrastructure Services
- Manager Works Delivery
- Manager Strategic Assets
- Manager Water & Sewer
- Manager Special Projects
STRATEGIC LINKS

a. Community Strategic Plan 2027
This report links to the Community Strategic Plan 2027 as follows:

ECONOMY AND INFRASTRUCTURE
Goal 6 Increase, enhance and maintain civil infrastructure, Community assets and open spaces to meet the needs of current and future generations.
CS24 Provide for replacement, improvement and additional Community and open space infrastructure through investment, best practice and risk management.
CS25 Provide inviting public spaces that are clean, green, properly maintained, well designed, encourage active participation, family friendly and accessible to all.

CS27 Maintain and upgrade the road network and bridges.

Well maintained, safe, reliable and additional infrastructure, including sporting fields, parks, family and cultural facilities.

Upper Hunter Shire has improved and well maintained roads and bridges.

Reliable and safe water supply.

b. Delivery Program
The report addresses the following objectives as described in the 2018/19 DPOP.

Bridges
By undertaking bridge maintenance and construction works to Council standards and specifications so as to improve safety and minimise future expenses.

Footpaths
Providing and maintaining a cycleway/footpath network that will contribute to the accessibility, safety and amenity of streets in Council's towns and villages.

RMS State Roads
- Remain a core service provider to RMS
- Provide value for money service to RMS

Local Roads
Undertake road maintenance and construction works to Council. Standards and specifications so as to improve road safety and minimise future expenses.
Regional Roads
To undertake roads and bridge maintenance and construction works to Council’s standards and specifications so as to improve road safety and minimise future expenses.

Stormwater
To provide stormwater drainage systems to manage flows.

c. Other Plans
Many projects are identified within Community Plans, Emergency Plans or Specific Operational Plans.

Council’s Asset Management Plans are also reference documents for the development of the capital works program.

IMPLICATIONS
a. Policy and Procedural Implications
Some projects involve grant funds, community donations or use other funding sources such as R2R funds and section 94 contributions.

Expenditure of these funds is in accordance with relevant policies and legislative requirements.

b. Financial Implications
All works have been budgeted for in accordance with the Delivery Program and Operational Plan (DPOP) 2018/19.

c. Legislative Implications
Not applicable.

d. Risk Implications
The correct planning and completion of capital projects assists Council to mitigate their risk exposure.

e. Other Implications
Not applicable.

CONCLUSION
The capital works update report provides Councillors with a review of the progress of capital works for the 2018/19 financial year.

ATTACHMENTS
Nil.
ISC.12.5  MURRURUNDI WATER UPDATE

RESPONSIBLE OFFICER: Nicholas Havyatt - Director Infrastructure Services
AUTHOR: Phillip Hood - Manager Water & Sewer

PURPOSE

The purpose of this report is to provide the Committee with an update of what works have been undertaken this month specifically in relation to the Murrurundi Water Supply.

RECOMMENDATION

That the Committee receive the report and note the information.

BACKGROUND

The Upper Hunter Region, and most of regional NSW, is currently experiencing severe drought conditions. Murrurundi is currently on Level 6 water restrictions and the current outlook is that water may run out completely before the end of the year if alternative arrangements are not made.

REPORT/PROPOSAL

Works/progress this month includes:

- Running bore constantly with set points between 3m and 40m above the pump. This is to balance maximum yield while also keeping the pump on its curve. (See SCADA graphic below).
- With the pump at this level (150m deep) steady flow rate is 1.5 L/s (130 kL/d). This is below the target value of 200 kL/d. Shortfall in supply will need to be made up by water carting.
- The transformer that supplies the bore with power also failed earlier in the month – this was replaced with a new transformer from Essential Energy.
- Water quality in both dam and the bore remain acceptable.
- UHSC have purchased a new water trailer, replacing the ‘Silver Bullet’, so that we have the internal ability to transport up to 35,000 L per load as required.
- Total water delivered for the Murrurundi town pool was 884 kL.
- Created an ‘Emergency Response Summary’ (see attached).

Works to be undertaken next month:

- Seek advice from hydrologist as to whether lowering the pump will enable us to supply more water (still another 50m of water available in the bore). There is some concern that the pressure difference if pumping from a lower depth may create other issues – such as bore collapsing. For example, pumping to the very bottom of the well with current standing water levels would mean over 110m pressure on the outside of the bore casing.
- The cost to lower further is minimal – around $4,000.
Infrastructure Services

- Revised letter to the Minister for funding to be composed with assistance from DPI Water, consisting of:
  - Request with updated bore construction costs ($230,000).
  - Request for funding for water carting – both ongoing and/or full carting operation if the bore fails as per Water Carting Plan.
  - Request for funding for additional tank storage – specifically infrastructure that will enable us to receive carted water directly into the reticulation if required.

Current status (29/11/2018) is:

- Dam Level 3.93 m (22.3%)
- Boyd Street Pump Station supply 39.4 kL/d
- Glenalvon Bore Pump Station supply 133.9 kL/d
- Average town consumption 187 kL/d
- Target town consumption 166 kL/d
- Estimated days remaining until dead storage level 46 days
- Supply shortfall if carting required 32.4 kL/d

OPTIONS

1. Receive the report
2. Amend the recommendation

CONSULTATION

- General Manager
- Director Infrastructure Services
- DPI Water
STRATEGIC LINKS

a. Community Strategic Plan 2027
This report links to the Community Strategic Plan 2027 as follows:

BUILT & NATURAL ENVIRONMENTAL
Goal 4 Plan for a sustainable future
   CS15 Plan, facilitate and provide for a changing population for current and future
   generations.
Goal 6 Increase, enhance and maintain civil infrastructure, Community assets and open
   spaces to meet the needs of current and future generations.
   CS24 Provide for replacement, improvement and additional Community and open
   space infrastructure through investment, best practice and risk management.
   CS26 Provide safe and reliable water and sewerage services to meet the demands of current
   and future generations.

We are working to achieve the following Community Priorities:

![Reliable and safe water supply.]

b. Delivery Program
The report addresses the following objectives for works up to 30 June 2019 as described in
the 2018/19 DPOP:

Water Supplies
To provide an adequate and secure potable water supply to recognised standards in defined
areas on a cost effective basis.

c. Other Plans
Drought Management Plan.

IMPLICATIONS

a. Policy and Procedural Implications
Nil.

b. Financial Implications
These works are reactive, unplanned and subsequently not budgeted for. Funding assistance
from the NSW Government has been sought to reduce the impacts on Council. Should we not
receive funding then costs will be taken from the water reserves.
c. Legislative Implications
   Nil.

d. Risk Implications
   This is an ongoing high risk situation while ever the drought conditions persist.

e. Other Implications
   Nil.

**CONCLUSION**

The situation is not yet resolved and another update will be provided next month.

**ATTACHMENTS**

1. Murrurundi Emergency Response Summary
**Murrurundi Emergency Response Summary:**

Murrurundi is currently operating with water sourced from;

- Stored water in the Murrurundi Dam – 150 ML
- Water pumped from Boyd Street pump station – approx. 35 kL/d
- Water pumped from Glenalvon Bore pump station – approx. 130 kL/d

There is (at least) 1ML balance water storage in the Lagoon located at the Dam site, and the Lagoon receives the pumped flows from Boyd Street and Glenalvon Bore. The Lagoon overflows into the Dam, and the Dam supplies water to the Litree Water Treatment Plant (WTP), which then sends water to the reservoirs.

The Lagoon can also supply the Litree WTP directly, or the WTP can be bypassed entirely if the water quality meets drinking water guidelines.

Current daily consumption under Level 6 restrictions is 180 to 200 kL/d.

**Responses to system failures:**

1. **Litree WTP Failure**

   If the Dam has sufficient volume and water quality, supply risk is at its lowest. This water can be sent direct to the reservoirs without filtration (chlorination only) if the Litree WTP is inoperable.

   If the Dam has sufficient volume but water quality is inadequate (e.g. high algae) a failure at the Litree WTP will mean supply must come directly from the Lagoon.

   At this point, we would need to ensure supply to the Lagoon was matched to daily consumption. With both pump stations in service the supply shortfall would be less than 1 water cart trip per day. The 1ML storage in the Lagoon would provide a buffer time of 2 weeks or more.

   **Bypass the Litree WTP if water quality allows, or;**
2 weeks to organise 1 water cart per day if dam water unavailable

2. Dam unusable

The dam is currently supplying the equivalent of 1 water cart per day from its stored volume to the supply system. If (and when) the Dam runs out of usable water, we would need to make up the shortfall with water carting to the Lagoon. The stored water in the Lagoon would provide 2 weeks or more buffer to organise the carting process.

2 weeks to organise 1 water cart per day

3. Boyd Street Pump Station Failure

If Boyd Street pump station fails, we lose approximately 35kL/d to the system – equivalent to a little more than 1 water cart trip per day. With the dam still in service, impact would be minimal. With the dam not in service, there would already be a water carting process in place – and this would need to be increased to make up the difference.

No response needed if Dam in service, or;

2 weeks to double water carting from 1 to 2 trips per day

4. Glenalvon Bore Pump Station Failure

If the Glenalvon bore fails, we lose approximately 130kL/d to the system, which is 4 water cart trips per day. Levels in the dam would drop quickly, but we would be ok while ever the dam remained in service. With the dam out of service, the Lagoon storage would only last 6 days at most – i.e. there would be a 6 day window of time to arrange for a 4+ trip per day water carting process.

If Dam in service, prepare Water Carting Plan, or;

6 days to implement Water Carting Plan (at least 4 trips per day)

5. Unexpected consumption, e.g. main break or fire.

If daily consumption spikes for any reason, such as a major main break or fire event, then this would be an additional and unexpected demand on the system that would need to be recovered. If necessary, the Litee WTP could be bypassed in order to make up the depleted storage in the reservoirs very quickly.

If the Dam is still usable there would be minimal overall impact.

If the Dam is unusable then additional water would be taken from the 1ML Lagoon storage, and this would need to be recovered with additional water carting. For example, a main break with a 200kL loss would require an additional 6 water carting trips to make up the difference.

This would not need to be recovered in a single day, but could be staggered in a reasonable manner, e.g. an additional 2 carting trips per day for 3 days.

If Dam in service, minimal impact, or;

Additional water carting trips to be implemented equivalent to amount of water lost
Summary

With the current situation, risk to the Murrurundi water supply is manageable, with no immediate actions required while ever the dam remains in service. Action should be taken to ready the Water Carting Plan as the Dam gets close to being unusable, either by volume or water quality.

The Water Carting Plan should then be implemented at the moment that the Dam becomes unusable. The amount of carting required will vary depending on the supply from Glenalvon Bore pump station and the daily consumption. Failure of the Bore with no usable Dam water remaining will require full implementation of the Water Carting Plan, with a maximum 6 days response time.

In all scenarios the Lagoon should be kept full or near full in order to maximise the time we have to respond to any system failures or unexpected demands.
ISC.12.6  

**MIDDLEBROOK WATER SUPPLY CONCEPT DESIGN**

**RESPONSIBLE OFFICER:** Nicholas Havyatt - Director Infrastructure Services  

**AUTHOR:** Phillip Hood - Manager Water & Sewer

**PURPOSE**

The purpose of this report is to update the details of the final Middlebrook Water Supply Concept Design Report for the Committee’s consideration to include updated costs based on the requirement for future ‘full pressure’ supply options.

**RECOMMENDATION**

That Council:

1. continue to progress the scheme with the option to provide ‘full pressure’ water supply.
2. construct the scheme with the option for future connection to Parkville reservoir.
3. undertake community consultation.

**BACKGROUND**

A report on Middlebrook Water Supply went to the Infrastructure Committee in the October 2018 meeting.

The proposal put forward in the October meeting consisted of the following:

- That the scheme would be implemented as a low pressure ‘Rural Water Supply’ arrangement, this being:
  - Water supply may have low or variable pressure and/or variable supply.
  - Requirement for water supplied to go to a storage tank, rather than straight to the home.
  - A reduced headworks charge (such as 80%) to account for the reduced level of service.
  - Hydrants may not be available or water immediately accessible for firefighting purposes – houses must be designed as though the water supply is absent.
  - Rural Water Supply properties will have onsite sewer only.
  - Connection under the Rural Water Supply policy may be non-compulsory.

- The scheme would be supplied from Scone initially, with the option to connect from the Parkville reservoir in the future.

- The supply from Scone would utilize a booster pump station in order to service every lot with a low pressure. Supply from Parkville would be via gravity to service every lot with a low pressure.

- The scheme would also consider a future development area in Middlebrook which could add an additional 55 lots to the scheme.

- That the supply main from Scone would be sized in a DN200 pipe in order to allow for potential connection to the racecourse precinct in the future.

- The total capital cost would be $1,288,506 initially, with an additional $237,058 to connect to Parkville in the future.
This resulted in a $15,020 per residence connection cost, and a $151,000 cost to Council (initially), assuming all existing residents connected and 50% grant funding received.

**REPORT/PROPOSAL**

This report will look at the impacts on the scheme to allow for, or initially implement, a full pressure supply scheme instead of the low pressure ‘Rural Supply’ option.

**Supply from Scone**

To facilitate full pressure with the supply from Scone, the lead in main along Middlebrook Road would need to be upsized to a DN200 at an additional cost of $188,292. One of the mains in Tulong Road would also need to go up a size from DN150 to DN200 at an additional cost of $55,200. A larger booster pump station would cost another $52,000.

Total additional cost is $295,492
Total scheme cost is $1,821,056

To implement full pressure supply straight away, the proposal would change to a compulsory scheme (i.e. residents have to be connected) and the other conditions of a ‘Rural Supply Scheme’ would not be applicable. Full headworks charges would be applied.

However, the resulting increase in cost to existing residents would be minimal, as the upsized pipework is for the future requirements to develop additional lots in the area and would need to be covered by Council. Total connection costs would rise from $15,020 per lot, to $16,895 per lot.

An alternative may be to levy connection costs against existing lots and all future sub-divided lots in Development Area 14, which would reduce the connection cost to $16,164 per lot. However, in this scenario the infrastructure would eventually be paid for (in NPV terms) as the area becomes fully developed. Council would have to commit an additional $44,000 ‘upfront’ in order to save $273,000 over the longer term – and costs for existing residents go down by $731 per connection. This would be the preferred cost arrangement for a full pressure scheme.

A major drawback with a full pressure supply scheme from Scone would be, that any instances of pump or power supply failure would mean some properties would be without any water at all. The low pressure alternative ensured water would be stored in resident’s tanks and available in an emergency.

**Supply from Parkville**

To supply full pressure from Parkville reservoir in the future will be more difficult. The full extent of the impact has not yet been analysed, but some changes required would be;

- Change of the location of Parkville reservoir to allow for increased pressure or additional booster pump station at the reservoirs current proposed location.
- Increased pump and supply capacity from the Scone to Murrurundi pipeline (not modelled) and increased reservoir capacity.

These changes are unable to be costed at this time.
Mixed Supply – Full Pressure Option

A possible solution to the problems associated with the two supply options above, would be to provide a full pressure supply from Scone, and the originally proposed low pressure back feed from the future Parkville reservoir.

This would mean minimal impacts on the location of the Parkville reservoir and the Scone to Murrurundi pipeline, while at the same time ensuring that in the event of power failure or pump failure, some pressure will still be available to the area and there is some contingency to the supply.

Further investigation and modelling will need to be undertaken as part of the Parkville reticulation design process.

PROJECT COSTS

Capital Cost Breakdown:

<table>
<thead>
<tr>
<th>Middlebrook Water Supply Contribution Calculation</th>
<th>Option 1: Rural Water Supply Scheme</th>
<th>Option 2: Implement ‘Full Pressure’ Scheme</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design Option</td>
<td>Allow for future connection to Parkville reservoir all properties serviced 3.5L/min ‘Rural Supply Policy’, DN200 for racecourse precinct.</td>
<td>Future connection to Parkville reservoir to provide low pressure supply in event of pump failure. Racecourse precinct excluded.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Option 1</th>
<th>Option 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Min Infrastructure for 60 lots</td>
<td>$985,726</td>
<td>$1,037,726</td>
</tr>
<tr>
<td>Plus Infrastructure for extra 55 lots</td>
<td>$109,535</td>
<td>$546,272</td>
</tr>
<tr>
<td>Plus Infrastructure for racecourse (DN200)</td>
<td>$193,245</td>
<td>NA</td>
</tr>
<tr>
<td>Total Initial Cost (service of existing lots)</td>
<td>$1,288,506</td>
<td>$1,583,998</td>
</tr>
<tr>
<td>Total Future Cost (connection to Parkville)</td>
<td>$237,058</td>
<td>$237,058</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>$1,525,564</strong></td>
<td><strong>$1,821,056</strong></td>
</tr>
</tbody>
</table>

Contributions

<table>
<thead>
<tr>
<th></th>
<th>Option 1</th>
<th>Option 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of existing lots (est.)</td>
<td>60</td>
<td>60</td>
</tr>
<tr>
<td>Area 14 additional lots</td>
<td>55</td>
<td>55</td>
</tr>
<tr>
<td>80% Headworks (2018/19)</td>
<td>$5,761.46</td>
<td>$7201.82</td>
</tr>
<tr>
<td>Connection Fee (20mm Water meter)</td>
<td>$345.00</td>
<td>$345.00</td>
</tr>
<tr>
<td>Plus private works (est.)</td>
<td>$700.00</td>
<td>$700.00</td>
</tr>
<tr>
<td>Plus contribution amount (if divided by 60)</td>
<td>$8,214.00</td>
<td>$8,648.00</td>
</tr>
<tr>
<td>Plus contribution amount (if divided by 115)</td>
<td>$5,666.00</td>
<td>$7,918.00</td>
</tr>
</tbody>
</table>
Cost per resident to connect:

<table>
<thead>
<tr>
<th>TOTAL (Applicable to existing residents only)</th>
<th>Option 1</th>
<th>Option 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residents</td>
<td>$15,020</td>
<td>$16,895</td>
</tr>
<tr>
<td>Council Initial Net Cost (50% Grant)</td>
<td>$151,390</td>
<td>$273,136</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TOTAL (If costs levied over future Lots in Development Area 14)</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Residents</td>
<td>$12,473</td>
<td>$16,164</td>
</tr>
<tr>
<td>Council Initial Net Cost (50% Grant)</td>
<td>$304,283</td>
<td>$316,941</td>
</tr>
<tr>
<td>Council Final Net Cost (50% Grant)</td>
<td>$111,172</td>
<td>$0</td>
</tr>
</tbody>
</table>

**OPTIONS**

1. Proceed with the recommended proposal for ‘Rural Supply’ only, being;
   **TOTAL (INITIAL)** $1,288,506

2. Proceed with the recommended proposal with option for future ‘full pressure’, being;
   a. **TOTAL (INITIAL)** $1,583,998

3. To not proceed with any works and therefore not connect Middlebrook to the town supply.

**CONSULTATION**

- Director Infrastructure Services
- Manager Water and Sewer
- Manager Special Projects
- Engineer Water and Sewer Distribution
- Engineer Water and Sewer Treatment

**STRATEGIC LINKS**

a. **Community Strategic Plan 2027**

   This report links to the Community Strategic Plan 2027 as follows:

**BUILT & NATURAL ENVIRONMENT**

**Goal 4** Plan for a sustainable future
   CS15 Plan, facilitate and provide for a changing population for current and future generations.

**Goal 6** Increase, enhance and maintain civil infrastructure, Community assets and open spaces to meet the needs of current and future generations.
   CS24 Provide for replacement, improvement and additional Community and open space infrastructure through investment, best practice and risk management.
   CS26 Provide safe and reliable water and sewerage services to meet the demands of current and future generations.
We are working to achieve the following Community Priorities:

- Reliable and safe water supply.
- Protect the natural environment.

b. Delivery Program

The report addresses the following objectives for works up to 30 June 2019 as described in the 2018/19 DPOP:

- **Water Supplies**
  To provide an adequate and secure potable water supply to recognised standards in defined areas on a cost effective basis.

- **Sewage Services**
  To maintain a sewage system for the transportation and treatment of sewage to licence requirements and encourage appropriate further expansion of services.

c. Other Plans

Various Asset Management Plans
The Scone to Murrurundi Pipeline Project
The Villages Reticulation and Reservoirs Project

**IMPLICATIONS**

a. Policy and Procedural Implications

Implementation of this scheme requires the development of the ‘Rural Water Supply’ policy – which is also required in order to connect rural properties to the Scone to Murrurundi Pipeline.

b. Financial Implications

This project is currently not in the budget for this year or future years, however with grant funding and contribution amounts, the total financial impact to Council may be minimal. If connection to the scheme is optional, then Council would need to cover a greater portion of the capital cost initially, with the expectation of getting this back over time. Ongoing operating costs should be covered by the additional revenue generated by the scheme.
c. **Legislative Implications**

   - Water Management Act 2000
   - Public Health Regulation 2012

d. **Risk Implications**

   There is an ongoing risk if Council does not progress the scheme, as some residents in the area have already implemented their own ‘private’ water connections from the Scone water supply. These should not be allowed to remain in service for too long as they represent a precedent that is not in keeping with Council guidelines or other water distribution standards.

e. **Other Implications**

   This project, how it is funded and how the contribution amounts are applied to residents, will likely strongly inform how Parkville, Blandford and Wingen (and possibly even Gundy) are serviced in the future, so it is important to get it right. For example, it would not be reasonable to make connection to town water ‘optional’ in Middlebrook, but ‘compulsory’ in Blandford a few years later.

**CONCLUSION**

The options put forward in this report are the most cost effective way to get permanent water supply to Middlebrook as soon as possible, while allowing maximum flexibility for future development in the area, and connection to the Parkville reservoir.

**ATTACHMENTS**

Nil.
ISC.12.7  ANSWERS TO COUNCILLOR QUESTIONS
RESPONSIBLE OFFICER: Nicholas Havyatt - Director Infrastructure Services
AUTHOR: Megan Thew - Infrastructure Services Support Officer

PURPOSE

The purpose of the report is to provide an update to Councillors on questions asked at the previous Infrastructure Services Committee meeting.

RECOMMENDATION

That Council receive and note the report

BACKGROUND

At each Infrastructure Services Committee meeting the Councillor’s ask questions to the Infrastructure Services Director and Managers. Some questions require further investigation and actions to be made.

This report is to provide the questions being asked by the Councillor’s and to ensure we have provided answers and relevant information regarding it.

This report will show the questions raised from the last meeting and any outstanding questions. Please note that if the question is a service request the question will be moved in to the CRM system and not be shown in this report.

REPORT/PROPOSAL

November 2018

Cr Burns

1. Asked: Since the non-compulsory water restriction have been issued, has there been a reduction in water usage from rate payers?

   Response: Director Infrastructure Services has advised that staff will investigate and a report will be available at the next Infrastructure Services Committee Meeting.

Cr Campbell

1. Asked: Is there going to be a Return and Earn placed in Merriwa?

   Response: Director Infrastructure Services has followed up with Environmental Services Team and a letter from Executive Director, Container Deposit Scheme, Environment Protection Authority has advised that the Network Operator TOMRA Cleanaway is responsible for establishing the network of return points across the state and they will replace the return point in Merriwa, and will shortly have its sales team on the ground to canvass interest for alternate site operators.
OPTIONS

1. Note the report

CONSULTATION

- Director Infrastructure Services
- Manager Works Delivery
- Manager Strategic Assets
- Manager Water & Sewer
- Manager Special Projects

STRATEGIC LINKS

a. Community Strategic Plan 2027
   This report links to the Community Strategic Plan 2027 as follows:
   ECONOMY AND INFRASTRUCTURE
   Goal 6 Increase, enhance and maintain civil infrastructure, Community assets and open spaces to meet the needs of current and future generations.
   CS24 Provide for replacement, improvement and additional Community and open space infrastructure through investment, best practice and risk management.
   CS25 Provide inviting public spaces that are clean, green, properly maintained, well designed, encourage active participation, family friendly and accessible to all.
   CS27 Maintain and upgrade the road network and bridges.

We are working to achieve the following Community Priorities:

- Well maintained, safe, reliable and additional infrastructure, including sporting fields, parks, family and cultural facilities.

- Upper Hunter Shire has improved and well maintained roads and bridges.

b. Delivery Program
   The report addresses the following objectives up to June 2019 as described in the 2018/19 DPOP:

   Parks, Gardens and Sporting Fields
   By providing quality open spaces, parks sporting grounds and reserves that are suitable and accessible for the community.

   Roads and Bridges – Local & Regional
   By undertaking roads, stormwater, footpaths and bridge maintenance and construction works to Council’s standards and specifications so as to improve road safety and minimise future expenses.
Parks & Gardens
- A parks and open space maintenance program across Council.
- Upgrade or replace parks and playground equipment.

Roads - Local & Regional
- A well maintained urban, rural sealed and unsealed road network.
- Increase effectiveness of preventative maintenance work as part of maintenance management works practices.
- Construction and quality specifications for road construction.

c. Other Plans

Asset Management Plans.

**IMPLICATIONS**

a. Policy and Procedural Implications

Parks, Sporting Fields, Footpath, Road and Bridge maintenance guidelines as identified within Asset Management Plans and Strategic Plans.

b. Financial Implications

Identified within individual items in the 2017/18 and 2018/19 budgets.

c. Legislative Implications

Not applicable.

d. Risk Implications

Nil.

e. Other Implications

Nil.

**CONCLUSION**

The updated report is provided to answer previous questions addressed by Councillor’s in the November 2018 Infrastructure committee meeting.

**ATTACHMENTS**

There are no enclosures for this report.
CONFIDENTIAL REPORTS

CR.12.1  TENDER 05/2019 FULL SERVICE OF INSITU STABILISATION OF GOLDEN HIGHWAY 2018/19 REHABILITATIONS

RESPONSIBLE OFFICER: Nicholas Havyatt - Director Infrastructure Services

AUTHOR: Nicholas Havyatt - Director Infrastructure Services

This matter is considered to be confidential under Section 10A(2) (c) of the Local Government Act, 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.

PURPOSE

The purpose of this report is to outline the process that has been followed for the evaluation of the tender 05/2019 Full service of Insitu Stabilisation Of Golden Highway 2018/19 Rehabilitions.