## Appendix 1 - Service Standards

| Urban Water Service Standards | |
|---|---|
| Unplanned water supply interruptions (per 100km) | 30 |
| Average time taken to attend bursts and leaks (priority 1) (min) | 30 |
| Average time taken to attend bursts and leaks (priority 2) (min) | 40 |
| Average time taken to attend bursts and leaks (priority 3) (min) | 40 |
| Unplanned water supply interruptions restored within 5 hours (%) | 97 |
| Planned water supply interruptions restored within 5 hours (%) | 97 |
| Average unplanned customer minutes off water supply (min) | 15.93 |
| Average planned customer minutes off water supply (min) | 30 |
| Average frequency of unplanned water supply interruptions (no.) | 0.2 |
| Average frequency of planned water supply interruptions (no.) | 0.3 |
| Average duration of unplanned water supply interruptions (min) | 100 |
| Average duration of planned water supply interruptions (min) | 180 |
| Number of customers experiencing more than 5 unplanned water supply interruptions in the year (no.) | 200 |
| Unaccounted for water (%) | 10 |

| Sewerage | |
|---|---|
| Sewerage blockages (per 100km) | 35 |
| Average time to attend sewer spills and blockages (min) | 22 |
| Average time to rectify a sewer blockage (min) | 113 |
| Spills contained within 5 hours (%) | 98 |
| Customers receiving more than 3 sewer blockages in the year (no.) | 4 |

| Guaranteed Service Levels | Rebate |
|---|---|
| Notification to customer advising drinking water not suitable for drinking | $100 |
| Unplanned water interruptions not restored within five hours of notification | $50 |
| Planned interruption longer than notification | $50 |
| Sewer interruption not restored within five hours of notification | $50 |
| Sewer spill within a house caused by failure of system not contained within one hour | $1,000 |
| Restricting the water supply of, or taking legal action against, a residential customer prior to taking reasonable endeavours to contact the customer and provide information about help that is available if the customer is experiencing difficulties paying. | $300 |

**Note** Targets rounded to whole numbers where target is greater than 1.

| Rural Service Standards | |
|---|---|
| **Rural Pipeline Supply (By District/Supply System)** | |
| Unavailability of supply systems for continuous periods in excess of 72 hours (%)[3] | 2.5 |
| Number of Pipeline bursts and leaks (per 100km of pipeline) | 1 |
| Unaccounted for water (%) | 10 |
| **Bulk Water** | |
| Annual compliance with storage operator obligations (%) | 100 |
| **Licensing/Administration** | |
| New applications for groundwater & supply-by-agreement licenses determined within 60 days (%) | 100 |
| Applications for renewal of groundwater licenses determined within 40 days (%) | 100 |
| New applications for surface diversion determined within 22 days (%) | 100 |
| Application for renewal of surface diversion & supply-by-agreement licenses determined within 60 days (%) | 100 |
| Processing of permanent transfer/Surface Diversion/Groundwater licenses within 60 days (%) | 100 |
| Processing of temporary transfer of water entitlement volumes within 15 days (%) | 100 |
| Processing of permanent transfer of water entitlements volumes within 60 days (%) | 100 |
| Number of diversion licenses metered or assessed for metering at 30 June (%) | 100 |
| Volume of total surface water and groundwater entitlements metered at 30 June (%) | 90 |

| Customer Service Centre Standards (Rural and Urban) | |
|---|---|
| Complaints to the Energy and Water Ombudsman (Victoria) (per 1000 customers) | 0.9 |
| Telephone calls answered within 30 seconds (%) | 80 |
| Restricting the water supply of, or taking legal action against, a residential customer prior to taking reasonable endeavours (as defined by the Essential Services Commission) to contact the customer and provide information about help that is available if the customer is experiencing difficulties paying. | 0 |

[3] GWMWater will cart non-potable water to the homestead for interruptions that exceed 72 hours, at no cost to the customer.

# Appendix 2 - Detailed Capital Program 2018-2023

| Description | | 2018/19 ($'000) | 2019/20 ($'000) | 2020/21 ($'000) | 2021/22 ($'000) | 2022/23 ($'000) |
|---|---|---|---|---|---|---|
| **Water** | | | | | | |
| Renewal | Water Main Renewals | 1,706 | 2,723 | 1,975 | 2,068 | 2,169 |
| | Water Treatment Plant Major Infr Asset Renewals | 1,281 | 728 | 761 | 690 | 752 |
| | Domestic Water Meter Replacements | 239 | 246 | 253 | 290 | 347 |
| | Water Bore Renewals | 244 | 65 | 25 | 55 | 70 |
| | Water Pump Station Asset Renewals | 351 | 471 | 1,054 | 322 | 560 |
| | Water Storage Tank Renewals | 1,218 | 100 | 51 | 29 | 43 |
| | Urban Water Storages Renewals | 152 | 117 | 44 | 35 | 15 |
| | Plant & Equipment | 80 | 50 | 50 | 0 | 0 |
| Compliance | Water Major OH&S Upgrades | 60 | 60 | 60 | 60 | 60 |
| | Safe Drinking Water Act - Health Based Treatment Target Compliance | 1,130 | 0 | 1,310 | 0 | 0 |
| Improvement | WTP Upgrades and Modernisation | 153 | 188 | 150 | 150 | 150 |
| | Development Servicing Plan - Pressure Improvements | 0 | 0 | 830 | 1,045 | 0 |
| | Treated Water Supply - Kaniva | 0 | 110 | 4,000 | 0 | 0 |
| | Treated Water Supply - Moyston | 0 | 0 | 0 | 0 | 1,621 |
| | Treated Water Supply - Ultima | 0 | 1,535 | 0 | 0 | 0 |
| | Treated Water Supply -Elmhurst | 0 | 0 | 0 | 0 | 2,656 |
| | Water Quality Upgrade - Beulah | 498 | 0 | 0 | 0 | 0 |
| | Water Supply System Upgrades | 200 | 200 | 200 | 200 | 200 |
| | Warracknabeal Clear Water Storage | 1,255 | 0 | 0 | 0 | 0 |
| | Urban Remote Metering | 889 | 2,974 | 0 | 0 | 0 |
| Growth | Water Developer Works Planning & Supervision | 44 | 44 | 44 | 44 | 44 |
| | Water Cont to Developer Works | 35 | 35 | 35 | 35 | 35 |
| **Wastewater** | | | | | | |
| Renewal | Sewer Main Renewals | 2,628 | 1,205 | 1,205 | 1,205 | 1,250 |
| | Waster Water Treatment Plant Major Infr Asset Renewals | 2,047 | 1,593 | 796 | 781 | 1,351 |
| | Sewer Pump Station Asset Renewals | 909 | 576 | 533 | 401 | 367 |
| | Wastewater Major OH&S Upgrades | 50 | 50 | 50 | 50 | 50 |
| Compliance | Wastewater Treatment Facility Upgrades | 205 | 205 | 605 | 205 | 205 |
| | Upgrade WWTP & Reuse System - Donald | 0 | 150 | 2,425 | 0 | 0 |
| | Wastewater Treatment Facility Metering | 89 | 0 | 0 | 0 | 0 |
| | Goroke Sewerage | 1,395 | 0 | 0 | 0 | 0 |
| | WWTP Instrument - Testing Equipment | 15 | 15 | 15 | 15 | 15 |
| Improvement | Horsham WWTP Inlet Works | 200 | 0 | 0 | 0 | 0 |
| Growth | WWater Developer Works Planning & Supervision | 29 | 29 | 29 | 29 | 29 |
| | WWater Cont to Developer Works | 30 | 30 | 30 | 30 | 30 |
| **Reclaimed Water** | | | | | | |
| Improvement | St.Arnaud Reuse | 0 | 174 | 0 | 0 | 0 |
| **Domestic & Stock** | | | | | | |
| Renewal | D&S Meter Replacements | 50 | 52 | 53 | 55 | 56 |
| | Domestic and Stock Water Pump Stations Renewals | 286 | 264 | 170 | 70 | 302 |
| Improvement | Domestic and Stock Supply System Upgrades | 33 | 33 | 33 | 33 | 33 |
| **Headworks** | | | | | | |
| Renewal | Dam Safety Reviews | 76 | 67 | 40 | 41 | 88 |
| | Headworks Structure Renewals | 350 | 1,262 | 300 | 300 | 300 |
| Compliance | Dam Safety Works | 245 | 251 | 1,186 | 463 | 55 |
| | Lake Fyans Embankment Rehabilitation | 0 | 0 | 0 | 5,884 | 0 |
| | Water Monitor Station Renewals | 31 | 51 | 51 | 51 | 51 |
| **Corporate** | | | | | | |
| Renewal | Computer Software | 0 | 0 | 0 | 0 | 0 |
| | Computer Hardware | 113 | 26 | 0 | 904 | 124 |
| | Motor Vehicle Purchases | 1,724 | 1,426 | 1,663 | 1,801 | 1,740 |
| | Plant & Equipment | 1,904 | 2,005 | 1,270 | 1,197 | 1,465 |
| | Communications Equipment | 12 | 41 | 24 | 13 | 45 |
| Compliance | Capital Works Insurance | 16 | 17 | 17 | 18 | 18 |
| Improvement | SCADA Development ICT | 23 | 0 | 0 | 0 | 0 |
| | Physical Security of Critical Infrastructure | 21 | 22 | 22 | 23 | 23 |
| **Total Capital Expenditure** | | **22,022** | **19,195** | **21,365** | **18,590** | **16,319** |

## Appendix 3 – Major Capital Projects

### Project 1: Decommissioning of Redundant Assets (Rural and Urban)

**Driver/s:** Compliance

**Expected outcomes:**

Improved efficiency and risk reduction from removal or disposal of redundant infrastructure.

**Description:**

The project involves the removal or disposal of high risk redundant assets including:
a) channel structures;
b) earthen storages;
c) urban tanks;
d) pump stations and chlorinators.

In addressing these issues the following benefits are expected to be realised:
a) reduced costs controlling growth, pests and vermin, and keeping site neat and tidy;
b) OH&S and public risk issues reduced;
c) Improved aesthetics, removing potential targets for graffiti and vandalism.

The works involves the following:

| Item | Quantity |
|---|---|
| Structure removal | 50 no. |
| Earthen storages | 55 no. |
| Urban tanks | 2 no. |

**Expected Delivery Date:** July 2018 to June 2023 (ongoing)

**Projected Costs in Price Submission 4 ($'000, 1/1/18):**

| 2018/19 | 2019/20 | 2020/21 | 2021/22 | 2022/23 | Total |
|---|---|---|---|---|---|
| 1,070 | 1,010 | 860 | 1,010 | 860 | **4,810** |

**Supporting Documents**
Redundant Asset Decommissioning Plan M2016/2357

**Project 2: Dam Safety Works – Lake Fyans**

**Driver/s:** Compliance

**Expected outcomes:**

Rehabilitation of Lake Fyans dam embankment.

**Description:**

A risk assessment identified that the risk of failure of Lake Fyans plots between the Limits of Tolerability for existing and new dams on the ANCOLD F-N chart, albeit that there were no estimated fatalities, hence the cumulative FN curve plots with the potential loss of life (N) less than the lower limit of 1.

Based on the results of the risk assessment, it was judged that in terms of general risk for a headworks structure, the existing risk is unacceptable and measures should be undertaken to reduce the risk to an acceptable level. Potential upgrade measures to reduce the risk associated with the storage were identified to provide reduction in the cumulative likelihood of failure to approximately 1 x 10-4. Further risk reduction measures could be undertaken at a later date to reduce the risk associated with the failure of the storage even further.

The upgrade measures comprise:

a) Placement of filters and stabilising fill south of the outlet between RD450 and RD1030;
b) Reinstatement of displaced beaching on the upstream face;
c) Reinstatement of the desiccated clay in the crest of the embankment north of RD1480;
d) Realignment and protection of the left abutment end of the embankment to prevent erosion by flood outflows; and
e) Placement of filters and stabilising fill over the remaining untreated sections of the embankment.

**Expected Delivery Date:** June 2022

**Projected Costs in Price Submission 4 ($'000, 1/1/18):**

| 2018/19 | 2019/20 | 2020/21 | 2021/22 | 2022/23 | Total |
|---|---|---|---|---|---|
| 0 | 0 | 0 | 5,885 | 0 | **5,885** |

**Supporting Documents**

Lake Fyans Risk Assessment 2008 R2017-25072
Fyans Intermediate Dam Safety Report 2017 SMEC R2017-17559

**Project 3: Treated Water Supply – Kaniva, Ultima, Moyston and Elmhurst**

**Driver/s**: Improvement in Service

**Expected Outcomes:**

Drinking water supply to Kaniva, Ultima, Moyston and Elmhurst.

**Description:**

***Kaniva***

Kaniva currently receives a regulated water supply. Raw water is sourced from four groundwater bores spread across various locations in the town. Kaniva is the largest regulated urban town in GWMWater's region with a population of 803 (2016 Census). The town is located on the Western Highway, the major traffic route halfway between Melbourne and Adelaide.

Kaniva provides a number of services to the town, travellers and surrounding area including:

- Kaniva Hospital and Nursing Home: 6 acute beds, 10 low care hostel places and 11 high care nursing home places;
- Kaniva College: a rural and remote P to 12 school of about 240 students, the sole provider of education in the town and district;
- Accommodation: hotel, 2 motels, caravan park, camping ground
- Dining/Eating: 2 hotels, 3 cafes/takeaway, 1 roadhouse
- Public swimming pool

The current proposal is to upgrade the water supply to drinking water standard (1.5 ML/day), either by the construction of a stand-alone water treatment plant in Kaniva, or through the provision of treated water via a 38km pipeline from Nhill sourcing treated water from the Dimboola Water Treatment Plant. As at 30 June 2017 average annual consumption for Kaniva is 200ML servicing 529 water customers.

***Ultima***

Ultima was reclassified to regulated water following the 2011 floods. Raw water is sourced from the Murray River through the Swan Hill System of the NMP, via a 250 mm pipeline. The pipeline feeds into a pump station which pushes water into two 1.0 ML raw water storage tanks.

Ultima is a priority regulated urban town to be upgraded back to drinking water with a population of 174 (2016 Census). The town is located 35km south of Swan Hill.

Services in the town include:

- Primary School, P to 6;
- Accommodation/Dining/Eating: hotel, cafe

The current proposal is to upgrade the water supply to drinking water standard, either by the construction of a stand-alone water treatment plant in Ultima, or through the provision of treated water via a pipeline from Swan Hill. As at 30 June 2017 average annual consumption for Ultima is 34ML/annum servicing 99 water customers.

*Moyston*

Moyston currently receives a regulated water supply. Moyston receives raw water from weirs on Mt William Creek, Stony Creek and Mason's Creek via a 100 mm pipeline. During summer months Moyston receives raw water from groundwater bores.

Moyston is a priority regulated urban town to be upgraded to drinking water with a population of 348 (2016 Census). The town is located 17km west of Ararat.

Services in the town include:

- Primary School, P to 6;
- Accommodation (Airbnb)

The current proposal is to upgrade the water supply to drinking water standard by the construction of a 15km treated water pipeline from Ararat. As at 30 June 2017 average annual consumption for Moyston is 23.9ML/annum servicing 95 water customers.

*Elmhurst*

Elmhurst currently receives a regulated water supply. Raw water supply is from a weir on Hickman's Creek via a 100 mm pipeline.

Elmhurst is a priority regulated urban town to be upgraded to drinking water with a population of 183 (2016 Census). The town is located 35km north east of Ararat.

Services in the town include:

- Primary School, P to 6;
- Hotel

The current proposal is to upgrade the water supply to drinking water standard by the construction of a stand-alone water treatment plant in Elmhurst or through the provision of treated water via a pipeline from Ararat. As at 30 June 2017 average annual consumption for Elmhurst is 17.7ML/annum servicing 121 water customers.

**Expected Delivery Date:**

June 2020 – Ultima
June 2021 – Kaniva
June 2023 – Moyston and Elmhurst.

**Projected Costs in Price Submission 4 ($'000, 1/1/18):**

| 2018/19 | 2019/20 | 2020/21 | 2021/22 | 2022/23 | Total |
|---|---|---|---|---|---|
| 0 | 1,645 | 4,000 | 0 | 4,277 | **9,922** |

**Supporting Documents**

Water Quality Management System (WQMS) CMS/2166
Risk Matrix for prioritisation to upgrade Towns Water Supplies M2016/20730
Water Quality Upgrades - Multiple Towns Strategic Assessment report I2016/8616
Water Quality Upgrade Options R2017-6510

**Project 4: Sewerage Scheme - Goroke**

**Driver/s:** Compliance

**Expected Outcomes:**

A wastewater collection and treatment system at Goroke.

**Description:**
West Wimmera Shire Council (WWSC) has identified Goroke as a priority for receiving a reticulated sewerage system due to public health concerns relating to existing septic tanks.

WWSC engaged GHD, in 2013 to complete an investigation and provide options for Goroke sewerage. This report formed the basis for the WWSC Domestic Wastewater Management Plan, prepared by consultants Rendell McGuckian in 2014. WWSC has requested GWMWater to further investigate options for 'reticulated hydraulic relief' for the town via providing reticulated sewerage.

Goroke has 217 lots, 209 of which are smaller than 4,000 m2; the minimum area required for sustainable management of wastewater onsite; of these 139 lots require a sewer connection.

The proposal is to construct a septic tank effluent pumped (STEP) system, similar to the one successfully operated at Natimuk.

**Expected Delivery Date:** June 2019

**Projected Costs in Price Submission 4 ($'000, 1/1/18):**

| 2018/19 | 2019/20 | 2020/21 | 2021/22 | 2022/23 | Total |
|---|---|---|---|---|---|
| 1,395 | 0 | 0 | 0 | 0 | **1,395** |

**Supporting Documents**
Goroke Sewerage Option Strategic Assessment R2017-12985

**Project 5: Urban Remote Metering and Customer Portal**

**Driver/s**: Improvement in Service

**Expected Outcomes:**

Improved customer communication and efficiency using intelligent metering and the GWMWater Customer Portal.

**Description:**

The project will address the following problems currently being experienced with existing processes:

a) delays in receiving meter reading information
b) inefficient / costly meter reads for billing, it typically takes nine weeks in each quarter to collect the meter readings
c) inefficient / costly special meter reads undertaken by Service Delivery staff on an as needs basis (e.g. for tenancy movements; when a property transfers; or to confirm manual reading exceptions)
d) slow internal processes
e) insufficient data to support the operation of the network
f) excessive time and travel required to read meters.

In addressing these issues the following benefits are expected to be realised:

a) lower recurrent meter reading costs
b) improved cash flow
c) greater staff efficiency
d) trend analysis
e) leak detection
f) OH&S issues reduced
g) remote customer meter reading
h) increased level of customer service
i) improved timeliness and accuracy of meter reading information

**Expected Delivery Date:** 30 June 2020

**Projected Costs in Price Submission 4 ($'000, 1/1/18):**

| 2018/19 | 2019/20 | 2020/21 | 2021/22 | 2022/23 | Total |
|---|---|---|---|---|---|
| 868 | 2,712 | 0 | 0 | 0 | **3,580** |

**Supporting Documents**

Urban Remote Metering Business Case R2017-9858

**Project 6: Development Servicing - Pressure Improvements Commercial and Industrial - Fire Services**

**Driver/s**: Improvement in Service

**Expected Outcomes:**

Maintain adequate pressure in Horsham, Stawell and Ararat for fire services and future growth.

**Description:**

GWMWater will augment the water reticulation system to ensure water pressures to 40 metres in Horsham, Stawell and Ararat to meet firefighting requirements and facilitate further growth.

It is assumed that 40% of the recommended investment will be funded by existing customers to meet service standards with the balance funded by developers as assessed under the New Customer Contribution Negotiating Framework.

**Expected Delivery Date:** 30 June 2022

**Projected Costs in Price Submission 4 ($'000, 1/1/18):**

| 2018/19 | 2019/20 | 2020/21 | 2021/22 | 2022/23 | Total |
|---|---|---|---|---|---|
| 0 | 0 | 830 | 1,045 | 0 | **1,875** |

**Supporting Documents**
Development Servicing Plans – May 2017 R2017-18457

**Project 7: Asset Renewal Water**

**Driver/s**: Renewals

**Expected Outcomes:**

Renewal of existing water infrastructure assets.

**Description:**

GWMWater is committed to managing water supply assets by eliminating very high risks, maintaining service levels for all customers, and ensuring asset lifecycle costs are minimised. Key to this strategy is the renewal of aged assets that place at risk the delivery of a reliable supply of water that is fit for purpose to all customers.

The ongoing renewal of existing water infrastructure assets represents a significant capital expenditure item across the regulatory period.

**Expected Delivery Date:** Ongoing

**Projected Costs in Price Submission 4 ($'000, 1/1/18):**

| 2018/19 | 2019/20 | 2020/21 | 2021/22 | 2022/23 | Total |
|---|---|---|---|---|---|
| 5,191 | 4,450 | 4,162 | 3,489 | 3,956 | **21,248** |

**Supporting Documents**
Strategic Asset Management Plan CMS/3277

**Project 8: Asset Renewal Wastewater**

**Driver/s**: Renewals

**Expected Outcomes:**

Renewal of existing wastewater infrastructure assets.

**Description:**

GWMWater is committed to managing wastewater collection assets by eliminating very high risks, achieving service levels for all customers, and ensuring asset lifecycle costs are minimised. Key to this strategy is the ongoing renewal program of aged sewer main assets that currently experiences high rates of blockages due to tree root intrusion.

Under the risk management framework of asset management decisions to replace based on assessments of condition and criticality.

The ongoing renewal of existing wastewater infrastructure assets represents a significant capital expenditure item across the regulatory period.

**Expected Delivery Date:** Ongoing

**Projected Costs in Price Submission 4 ($'000, 1/1/18):**

| 2018/19 | 2019/20 | 2020/21 | 2021/22 | 2022/23 | Total |
|---|---|---|---|---|---|
| 5,634 | 3,424 | 2,585 | 2,437 | 3,018 | **17,098** |

**Supporting Documents**

Strategic Asset Management Plan CMS/3277

**Project 9: Upgrade WWTP & Reuse System - Donald**

**Driver/s:** Compliance

**Expected outcomes:**

Treated effluent meets EPA licence requirements and an effective reuse system is in place.

**Description:**

The Donald WWTP project addresses issues highlighted by previous studies and by EPA audit reports, viz.

1. The effluent is not meeting EPA licence requirements regarding $BOD_5$, *e.coli* and nutrients.
2. The reclaimed water is not suitable for sustainable reuse.
3. Excessive irrigation is causing pooling of effluent and there are odour issues in the irrigation area.

The site does not have a polishing pond or winter storage. The original design of the plant included provision for a third lagoon that would have acted as a polishing pond as well as wet weather storage.

During Water Plan 3 works were undertaken to reline sections of the sewer network in Donald to reduce levels of groundwater infiltration. Groundwater in Donald is highly saline with an EC of up to 45,000 µS/cm. Prior to the works groundwater infiltration was estimated to make up about half of the total flow to the WWTP and 80% of the salt loading.

**Expected Delivery Date:** June 2020

**Projected Costs in Price Submission 4 ($'000, 1/1/18):**

| 2018/19 | 2019/20 | 2020/21 | 2021/22 | 2022/23 | Total |
|---|---|---|---|---|---|
| 0 | 0 | 2,725 | 0 | 0 | **2,725** |

**Supporting Documents**
Strategic Assessment - Donald WWTP M2012/9127

**Project 10: Water Treatment Plant Upgrades – Health Based Treatment Targets (HBT)**

**Driver/s:** Compliance

**Expected outcomes:**

Water treatment processes meet log reduction requirements under the *Safe Drinking Water* Regulations Health Based Treatment Targets (HBT) framework.

**Description:**

Ouyen, Manangatang, and Underbool water treatment plants each treat water from the Murray River.

The Murray River is a Category 4 source water under the *Safe Drinking Water* Regulations Health Based Treatment Targets (HBT) framework. This source of water experiences periods of elevated turbidity, black water events and algal blooms.

Upgraded treatment processes are required to provide sufficient log reduction of bacteria, viruses and protozoa to comply with the Health Based Treatment Targets.

**Expected Delivery Date:** June 2020

**Projected Costs in Price Submission 4 ($'000, 1/1/18):**

| 2018/19 | 2019/20 | 2020/21 | 2021/22 | 2022/23 | Total |
|---|---|---|---|---|---|
| 1,130 | 0 | 1,310 | 0 | 0 | **2,440** |

**Supporting Documents**

GHD GWMWater WTP Upgrades Options and Costings R2017-28297
DHHS Letter to GWMWater regarding pricing submission expectations R2017-28313

## Appendix 4 - Detailed Urban Prices and Tariffs

| Real, 1/1/18<br>Tariff Category | 2017/18<br>($) | 2018/19<br>(%) | 2019/20<br>(%) | 2020/21<br>(%) | 2021/22<br>(%) | 2022/23<br>(%) | 2022/23<br>($) |
|---|---|---|---|---|---|---|---|
| Urban Water Potable | | | | | | | |
| Non-Residential | $471.68 | -5.0% | 0.0% | 0.0% | 0.0% | 0.0% | $447.92 |
| Residential | $471.68 | -1.2% | 0.0% | 0.0% | 0.0% | 0.0% | $465.92 |
| Residential - Concession | $463.68 | -1.5% | 0.0% | 0.0% | 0.0% | 0.0% | $456.92 |
| Volumetric (kL) | $1.7574 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | $1.7574 |
| Urban Water Non-potable groundwater | | | | | | | |
| Non-Residential | $415.04 | -5.5% | 0.0% | 0.0% | 0.0% | 0.0% | $392.00 |
| Residential | $415.04 | -1.2% | 0.0% | 0.0% | 0.0% | 0.0% | $410.00 |
| Residential - Concession | $407.04 | -1.5% | 0.0% | 0.0% | 0.0% | 0.0% | $401.00 |
| Volumetric (kL) | $0.9842 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | $0.9842 |
| Urban Water Eastern Grampians | | | | | | | |
| Non-Residential | $417.16 | -5.5% | 0.0% | 0.0% | 0.0% | 0.0% | $394.06 |
| Residential | $417.16 | -1.2% | 0.0% | 0.0% | 0.0% | 0.0% | $412.06 |
| Residential - Concession | $409.16 | -1.5% | 0.0% | 0.0% | 0.0% | 0.0% | $403.06 |
| Volumetric (kL) | $1.2947 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | $1.2947 |
| Urban Water Non-potable pipeline | | | | | | | |
| Non-Residential | $417.16 | -5.5% | 0.0% | 0.0% | 0.0% | 0.0% | $394.06 |
| Residential | $417.16 | -1.2% | 0.0% | 0.0% | 0.0% | 0.0% | $412.06 |
| Residential - Concession | $409.16 | -1.5% | 0.0% | 0.0% | 0.0% | 0.0% | $403.06 |
| Volumetric (kL) | $1.5993 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | $1.5993 |
| Urban Water (All towns) | | | | | | | |
| Concessional/Municipal | $301.16 | -1.2% | 0.0% | 0.0% | 0.0% | 0.0% | $297.50 |
| Vacant Land | $210.96 | -1.2% | 0.0% | 0.0% | 0.0% | 0.0% | $208.37 |
| Standpipe Potable (kL) | $2.3667 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | $2.3667 |
| Standpipe Non-potable (kL) | $1.5351 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | $1.5351 |
| Fire Service | | | | | | | |
| All | $476.28 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | $476.28 |
| Sewerage | | | | | | | |
| All | $493.08 | 0.5% | 0.0% | 0.0% | 0.0% | 0.0% | $495.44 |
| Concessional | $286.41 | -1.2% | 0.0% | 0.0% | 0.0% | 0.0% | $282.97 |
| Vacant Land | $220.24 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | $220.24 |
| Minor Trade Waste | $258.48 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | $258.48 |

## Appendix 5 Detailed Rural Prices and Tariffs

| Real, 1/1/18<br>Tariff Category | Unit | 2017/18<br>($) | 2018/19<br>(%) | 2019/20<br>(%) | 2020/21<br>(%) | 2021/22<br>(%) | 2022/23<br>(%) | 2022/23<br>($) |
|---|---|---|---|---|---|---|---|---|
| D&S Channels | | | | | | | | |
| Channel diversion | Cust | $ 123.60 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | $123.60 |
| Walpeup Bores | | | | | | | | |
| Walpeup West Bores | | | | | | | | |
| Area Charge - Division 2 | Hectares | $2.70 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | $2.70 |
| Area Charge - Division 2 Special | Hectares | $0.76 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | $0.76 |
| Area Charge - Division 3 | Hectares | $1.32 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | $1.32 |
| Area Charge - Division 3 Special | Hectares | $0.36 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | $0.36 |
| Minimum Area Charge | Cust | $513.92 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | $513.92 |
| Rural Pipeline | | | | | | | | |
| All | | | | | | | | |
| Capacity charge | kL | $0.8966 | -1.0% | 0.0% | 0.0% | 0.0% | 0.0% | $0.8875 |
| Excess | kL | $3.73 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | $3.73 |
| Minimum Charge | Cust | $89.66 | -1.0% | 0.0% | 0.0% | 0.0% | 0.0% | $88.75 |
| Usage charge | kL | $1.0306 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | $1.0306 |
| Off Season | | | | | | | | |
| Off peak commercial capacity charge | ML | $269.25 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | $269.25 |
| Usage charge | kL | $0.9563 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | $0.9561 |
| Primary Meter | Cust | $314.72 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | $314.72 |
| Standard Meter | Cust | $157.32 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | $157.32 |
| Surface Water (Diversions) | | | | | | | | |
| Domestic and Stock - Streams and lakes - 12 month licence | | | | | | | | |
| Single unit, farm use | Cust | $121.04 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | $121.04 |
| Each Additional unit | Cust | $61.08 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | $61.08 |
| Guest houses, motels, caravan parks etc | Cust | $181.52 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | $181.52 |

| **Real, 1/1/18**<br>**Tariff Category** | **Unit** | **2017/18 ($)** | **2018/19 (%)** | **2019/20 (%)** | **2020/21 (%)** | **2021/22 (%)** | **2022/23 (%)** | **2022/23 ($)** |
|---|---|---|---|---|---|---|---|---|
| Surface Water (Diversions) | | | | | | | | |
| Unregulated waterways – on-stream storages | ML | $8.96 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | $8.96 |
| Unregulated waterways – on-stream storages minimum charge | Cust | $134.40 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | $134.40 |
| Unregulated waterways – off-stream storages | ML | $4.43 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | $4.43 |
| Unregulated waterways – off-stream storages minimum charge | Cust | $66.45 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | $66.45 |
| Wimmera River weir pool & commercial | ML | $214.00 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | $214.00 |
| Groundwater | | | | | | | | |
| Licence Fee | Cust | $147.32 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | $147.32 |
| Volumetric | ML | $5.92 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | $5.92 |
| Headworks | | | | | | | | |
| Capacity charge | ML | $127.76 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | $127.76 |
| Usage charge | ML | $127.76 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | $127.76 |
| Environment | | | | | | | | |
| Allocation Charge | ML | $6.92 | 10.0% | 9.0% | 0.0% | 0.0% | 0.0% | $8.31 |
| Usage charge | ML | $13.88 | 10.0% | 9.0% | 0.0% | 0.0% | 0.0% | $16.69 |
| Recreation Lake Water | | | | | | | | |
| Usage charge | kL | $20.00 | 10.0% | 10.0% | 3.3% | 0.0% | 0.0% | $25.00 |

## Appendix 6 - Community Engagement Undertaken

**17 October 2014 – *Customer and Stakeholder Workshop***
The inaugural Stakeholder Workshop held incorporated members of the three standing Customer Committees of the Board; Grampians, Wimmera and Mallee Customer Committees, and representatives from a range of key stakeholders (122 invitations sent) .

The focus of the workshop was on the development of a new model of consultation and engagement which aligned to GWMWater's 2013-2018 Strategic Plan to maximise value of inputs from customers and stakeholders in decision making and policy development.

Feedback was specifically sought on:
- how to attract new enterprises requiring reliable water to the region,
- how realistic are the expectations of providing drinking quality water to every town, and
- how is the recreational levy making a difference in the region.

Stakeholders broke into workshop groups to brainstorm thoughts and concluded by sharing ideas with the broader group.

A final report recommending a new model of engagement was presented to the Board of Directors at its meeting held 10 December 2014.

**6 May 2015 – *Customer and Stakeholder Workshop, incorporating Public Board Meeting***
A general overview of the Corporate Plan 2015/16, Rural Pipeline Intelligence Project and Seasonal Outlook for 2015 was provided to Stakeholders, with the key theme of the workshop focussing on water sharing and scarce water resources.

A presentation on the Growth Water Marketing Strategy was provided identifying a range of development priorities in growth water sales for GWMWater. Workshop participants broke into groups and were presented with a case study and asked to respond to the question; 'given the changing conditions should we consider reallocating some of our remaining growth water to other uses?'.

**18 November 2015 – *Customer and Stakeholder Workshop***
The focus of the workshop involved discussions around the regional water supply outlook, GWMWater's business outlook including an explanation of the South West Loddon Rural Water Supply Project. A discussion on the implication of the concept of a State Water Grid on GWMWater and the region was facilitated.

**20 April 2016 – *Customer and Stakeholder Workshop***
An overview of the water resource outlook and challenges for 2016-17 was provided prior to breaking into groups to workshop two issues:
- What does value from GWMWater look like to you?
- Quality versus continuity during times of water quality issues?

The first issue generated discussion around quality of the product, its availability and its affordability, whilst the second proved that although health and safety should be a factor in

any decisions, continuity of water supply was considered a high priority.

**27 October 2016 – *Customer and Stakeholder Workshop***
Consultation commenced with a strong focus on the upcoming review of Price Submission and engaging with customers on key issues. The workshop sought feedback on the perceived benefits of recreational water discounts, the potential introduction of Guaranteed Service Levels for rural customers, and the concept of expanding remote metering for urban customers.

**January to March 2017 – *Tapping In – customer newsletter issued with accounts***
Front page article seeking input on what is important to business and the community and providing feedback on our Stakeholder workshop held in October 2016. A supplementary article on the inside of the newsletter articulated the key issues to be considered as part of the 2018-2023 Water Price Review.

**22 February 2017 – *Yarriambiack Shire Council***
The Chairman and Managing Director attended a Council briefing session to present and receive feedback on issues of mutual interest. Key discussion included an overview of proposed activities related to water and wastewater services as they specifically relate to the Yarriambiack Shire and key issues to be considered as part of the 2018-2023 Price Submission. Council also took the opportunity to reference the importance of recreation water in the Shire and discussions held with Regional Development Victoria in relation to the possible use of recycled water as part of a communal water scheme in Murtoa.

**22 February 2017 - *Environmental Water Pricing Working Group #01***
The first meeting of the working group to review environmental water pricing. Members of the working group included the Commonwealth Environmental Water Office, Victorian Environmental Water Holder, DELWP (Rural Water Programs and Economic Reform; Integrated Water and Catchments; Water Resources) and GWMWater representatives. Items covered included current environmental water pricing; Victorian Government and Commonwealth Policy; overview of GWMWater and Price Review process; and overview of Environmental Entitlements and services.

**27 February 2017 – *Horsham Rural City Council***
The Chairman and Managing Director attended a Council briefing session to present and receive feedback on issues of mutual interest. Key discussion included an overview of proposed activities related to water and wastewater services as they specifically relate to the Horsham Rural City Council and key issues to be considered as part of the 2018-2023 Price Submission. Enhancing opportunities to attract funding for recreational facilities was also raised in the context of the Water for Victoria policy framework.

**1 March 2017 – *West Wimmera Shire Council***
The Chairman and Managing Director attended a Council briefing session to present and receive feedback on issues of mutual interest. Key discussion included an overview of proposed activities related to water and wastewater services as they specifically relate to towns within the West Wimmera Shire and key issues to be considered as part of the 2018-2023 Price

Submission. An update on the status of the West Wimmera pipeline study and commitment to engage with landowners in the Langkoop groundwater resource area was also provided.

**6 March 2017 – *Northern Grampians Shire Council***
The Chairman and Managing Director attended a Council briefing session to present and receive feedback on issues of mutual interest. Key discussion included an overview of proposed activities related to water and wastewater services within the Northern Grampians Shire and key issues to be considered as part of the 2018-2023 Price Submission. The importance of recreation lakes in the community and opportunities to specifically promote Lake Fyans, Lake Lonsdale and Bellfield were highlighted. Council also took the opportunity to raise a number of operational issues specific to the provision of water and wastewater services around Stawell and Glenorchy, and access to tanks in respect to firefighting infrastructure on the rural pipeline.

**9 March 2017 – *Mildura Rural City Council***
The Chairman and Managing Director attended a Council briefing session to present and receive feedback on issues of mutual interest. Key discussion included an overview of proposed activities related to water and wastewater services as they specifically relate to towns within the Mildura Rural City Council and key issues to be considered as part of the 2018-2023 Price Submission. An update on the tender process specific to the development of the Ouyen Lake which GWMWater is undertaking in consultation with Council and Ouyen Inc. was provided. Council was also reminded of the consultative process GWMWater is running specific to the management of the Murrayville groundwater resource.

**21 March 2017 – *Pyrenees Shire Council***
The Chairman and Managing Director attended a Council briefing session to present and receive feedback on issues of mutual interest. Key discussion included an overview of proposed activities related to water and wastewater services as they specifically relate to towns with the Pyrenees Shire Council and key issues to be considered as part of the 2018-2023 Price Submission. Council was informed that the study on the East Grampians Rural Pipeline Project is progressing well with potential opportunities as raised by Council being reflected in the supply concepts of the Feasibility Study.

**30 March 2017 – *Customer and Stakeholder Workshop***
A detailed overview of the issues to be considered and timeframe for the development of the 2018-2023 Price Submission was provided to workshop attendees, together with information relating to the formation of a deliberative panel to provide advice and recommendations to the Board. An update on the status of feedback received from a series of online pop-up surveys was also provided.

A round table discussion followed providing workshop attendees the opportunity to break into groups to discuss and respond to the following key issues:

- Water and sewer service interruptions – service levels and guaranteed service levels
- Increasing water security – expanding the water grid, reliance on existing water sources
- Supplementary supply to recreation lakes – social and economic benefits, conditions

**31 March 2017 – Media release**

- Media release entitled 'Deliberative Panel – Community Consultation Committee' issued to all regional media.

**31 March 2017 – Website**

- GWMWater website updated to provide information on how to apply to become a deliberative panel member. An Expression of Information Form made available for access to all customers and stakeholders.

**7 April 2017 - *Environmental Water Pricing Working Group #02***

Meeting covered action items and included discussion on environmental water services provided by GWMWater and state-wide environmental water pricing review being undertaken by DELWP.

**April to May 2017 - *Customer Survey***

The mid-year survey was conducted with 701 customers interviewed between 27 April and 19 May 2017. Participants comprised of 450 urban customers who receive a drinking supply, 50 urban customers who receive a non-drinking supply and 200 rural customers. The three issues tested and questioned were:

- Remote Metering for urban customers
- Service Standards and Guaranteed Service Levels for Rural Customers
- Recreational Contribution Charge

**April to June 2017 – *Pop-up Surveys***

To complement the mid-year customer survey, the GWMWater website was updated to incorporate a series of short online pop-up surveys targeting the same three issues:

- Urban digital metering (released 22 March 2017 and 3 May 2017)
- Recreation water (released 5 April 2017 and 17 May 2017)
- Rural customers (released 19 April 2017)

Each survey was available for several days, then replaced by the next rotating over a three month period.

**April to June 2017 – *Tapping In – customer newsletter issued with accounts***

Front page article sought feedback on our water services and pricing through completion one or more of our online surveys. A second article featured on the front page also advised of the formation of a deliberative panel to review our pricing approach for the next five years.

**11 April 2017 – *Ararat Rural City Council***

The Chairman and Managing Director attended a Council briefing session to present and receive feedback on issues of mutual interest. Key discussion included an overview of proposed activities related to water and wastewater services as they specifically relate to the Ararat Rural City Council and key issues to be considered as part of the 2018-2023 Price Submission. Council was informed that GWMWater will be advancing to the development of a business case for the East Grampians Rural Pipeline Project. The business case will be informed by the level of landowner interest which will be gauged by a GWMWater and Council facilitated consultation process.

**24 April 2017 – *Gannawarra Shire Council***
Director Caroline Welsh and the Managing Director attended a Council briefing session to present and receive feedback on issues of mutual interest. Key discussion included an overview of proposed activities related to water and wastewater services as they specifically relate to towns within the Gannawarra Shire and key issues to be considered as part of the 2018-2023 Price Submission. GWMWater provided an assurance that it would initiate further consultation with North Central Catchment Management Authority and the GWMWater Recreation Water Users Group in relation to providing a supplementary supply of water for the Quambatook Weir. Further consultation will also be undertaken on water quality upgrades to smaller communities as part of the development of the Price Submission.

**2 May 2017 – *Swan Hill Rural City Council***
The Chairman and Managing Director attended a Council briefing session to present and receive feedback on issues of mutual interest. Key discussion included an overview of proposed activities related to water and wastewater services as they specifically relate to the Swan Hill Rural City Council and key issues to be considered as part of the 2018-2023 Price Submission. It was noted during discussion that GWMWater has been undertaking consideration consultation with the community of Ultima in relation to water quality upgrades. Positive feedback has been received and will be further considered in the development of the Price Submission. Consultation with rural customers serviced by the Northern Mallee pipeline will also occur to ascertain how they would like the risk of blue green algae and black water events better managed.

**9 May 2017 – *Loddon Shire Council***
The Chairman and Managing Director attended a Council briefing session to present and receive feedback on issues of mutual interest. Key discussion included an overview of proposed activities related to water and wastewater services as they specifically relate to the Loddon Shire Council and key issues to be considered as part of the 2018-2023 Price Submission. It was noted that GWMWater has been working closely with Council over the past two years on the South West Loddon Water Supply Project. An update on the award of tender process was provided. From a pricing perspective it was also highlighted that the most significant issue to be confirmed will be the inclusion of GWMWater pricing principles specific to recreation water. This will be the subject of further consultation with Coliban Water as to how GWMWater implement as the wholesaler.

**17 May 2017 – *Buloke Shire Council***
The Chairman and Managing Director attended a Council briefing session to present and receive feedback on issues of mutual interest. Key discussion included an overview of proposed activities related to water and wastewater services as they specifically relate to the Buloke Shire and key issues to be considered as part of the 2018-2023 Price Submission. Water quality upgrades and providing a more 'fit for purpose' water supply under the grounds of an integrated water supply consistent with the policy framework of Water for Victoria was central to discussion with Council.

**24 May 2017 – *Southern Grampians Shire Council***
The Chairman and Managing Director attended a Council briefing session to present and receive feedback on issues of mutual interest. Key discussion included an overview of proposed activities related to water and wastewater services as they specifically relate to towns within the Southern Grampians Shire and key issues to be considered as part of the 2018-2023 Price Submission. Council was also provided with an update on two major studies into possible rural pipeline extensions that interface with the northern boundaries of the Southern Grampians Shire Council.

**16 June 2017 – *Deliberative Panel Discussion #1***
The deliberative panel met for the first time, consisting of nine males and eight females ranging between 30 to 70 years of age. The panel represents a varied range of social, recreational and economic demographic. The panel was initially provided with an overview of the Water Price Review process, its operational Terms of Reference, an overview of GWMWater services and proposed process moving forward. Feedback from the customer survey and online pop-up surveys were provided to provide input into the deliberation of key issues.

**21 June 2017 – *Media release***
Media release entitled 'Deliberative Panel to consider future GWMWater price meets' issued to major regional newspapers and local radio.

**26 June 2017 – *Radio Interview***
Local radio station 3WM interviewed Barry Hall, Deliberative Panel Chair on the role and benefits of the deliberative panel formed to provide input into the 2018-2023 Price Submission.

**13 July 2017 – *Customer Survey – Water Quality Upgrade***
On Thursday 13 July 2017 GWMWater mailed an information sheet to all registered owners and tenants (excluding Local, State and Commonwealth Government customers, schools, churches, recreation reserves, corporate customers, GWMWater employees and Board members) in the towns of Elmhurst, Kaniva, Moyston and Ultima. Telephone interviews commenced on 18 July 2017 asking customers a variety of questions relating to the current use of water, satisfaction with their non-drinking water supply and interest in having better water quality in their town.

**21 July 2017 – *Deliberative Panel Discussion #2***
The panel received a presentation on the following discussion papers and were asked to respond to specific issues as outlined below:
*Recreation contribution*

- Does the deliberative panel support GWMWater's proposal to retain the current Recreation Contribution Charge to subsidise the cost of maintaining community sporting amenities and the cost of supply water to recreation lakes in the region?
- Does the deliberative panel support GWMWater's proposal to extend the current Recreation Contribution Charge to schools for an additional 50c per quarter or 25c per quarter for concessional cardholders?

*Carbon pledge*

- On the basis of the presentation, has the emission reduction pledge been appropriately pitched for GWMWater representation in the Price Submission?
- Is there a view among the deliberative panel that this should be higher or lower and if so why?

*Service standards urban*

- Should GWMWater maintain current service standards for water supply services to urban customers or should they be relaxed or improved?
- Should GWMWater maintain current service standards for wastewater services or should they be relaxed or improved?

*Service standards rural*

- Does the deliberative panel support GWMWater's plan to maintain current service standards to rural customers?
- Should GWMWater introduce GSLs for rural customers, and if so how much should the GSL rebate be?

*Rural pipeline tariff*

- Does the deliberative panel support GWMWater's retention of the current rural pipeline tariff pricing structure and proposed 'free trading' imitative?

**2 August 2017 – *Hindmarsh Shire Council***

The Chairman and Managing Director attended a Council briefing session to present and receive feedback on issues of mutual interest. Key discussion included an overview of proposed activities related to water and wastewater services as they specifically relate to towns within the Hindmarsh Shire and key issues to be considered as part of the 2018-2023 Price Submission. GWMWater acknowledged Council's significant interest in the environmental watering program given the significance of the Wimmera River to the Shire and will continue to work with various bodies in respect to the significant culture values of Ross Lake.

**11 August 2017 – *Deliberative Panel Discussion #3***

The panel received a presentation on the following discussion papers and were asked to respond to specific issues as outlined below:

*Water quality upgrades and new town sewer schemes*

- Does the deliberative panel support GWMWater's proposal to upgrade the water supply to drinking water quality in selected towns?
- Does the deliberative panel support GWMWater's proposal to provide a town sewer scheme for Goroke?

*Infrastructure program/asset management*

- Do you support GWMWater's proposed approach to asset management?

*Productivity and efficiency*

- Does the deliberative panel support GWMWater's approach, aspiring for a 2.5% productivity and efficiency improvement, but basing its pricing 2018-2023 Water Price Review, on a more conservative 1.5% improvement?

*Pricing and tariffs*

- Does the deliberative panel have a view on the current tariff pricing structure and in particular fixed versus variable tariffs?
- Does the deliberative panel have a view on the proposal to apply any price decreases to fixed urban and rural water charges?

Helen Bartley of Bartley Consulting Pty Ltd also provided the results of the Drinking Water Customer Survey in respect to the towns of Elmhurst, Kaniva, Moyston and Ultima. The deliberative panel were asked to consider:

- Does the deliberative panel support GWMWater's proposed to upgrade the water supply to drinking water quality in these selected towns?

**18 August 2017 - *Environmental Water Pricing Working Group #03***
Discussion on GWMWater's accounting methodology for headworks and retail operations that included an overview of its cost capturing and cost allocation processes.

**23 August 2017 - *Technical Regulators***
The Managing Director, Executive Manager Business Planning and Performance, and Executive Manager Infrastructure provided a briefing on key issues under consideration as part of the Price Submission. Discussion centred around; urban service standards, GWMWater management systems and plans, and stakeholder engagement and consultation. Regulators in attendance included representatives from the Environment Protection Authority and Department of Health and Human Services. A follow up phone conversation was also held with the Dam Safety division from the Department of Environment, Land, Water and Planning.

**25 August 2017 – *Deliberative Panel Discussion #4***
The panel received a presentation on the following discussion papers and were asked to respond to specific issues as outlined below:

*Security of supply*

- Are you satisfied that GWMWater does not need to make any investments to secure supply?

*Pricing and tariffs – guaranteed service levels*

- Does the deliberative panel have a view on the current tariff pricing structure and in particular fixed versus variable tariffs?
- Does the deliberative panel have a view on the proposal to apply any price decreased to fixed urban and rural water charges?
- Does the deliberative panel have a view on guaranteed service levels
  - Urban service standards?
  - Rural service standards?

The Executive Manager Business Planning and Performance concluded with an overview of the 2018-2023 Price Submission and proposed initiatives which formed the basis of discussion papers as presented to the deliberative panel.

**1 September 2017 – *Customer and Stakeholder Workshop***
The main objective of this workshop was to provide an opportunity for the Deliberative Panel to present the observations and findings of its deliberation of the essential elements of GWMWater's 2018-2023 Price Submission to a broader forum of customers and stakeholders. In each paper presented and discussed there was a fairly consistent vote of support for the position that the deliberative panel had articulated.

A storage system update and overview of the seasonal outlook was also provided.

**12-13 September 2017 – *Bulk Water Pricing Review Paper (circulated by email)***
Paper outlining the review of the allocation of headworks costs, cost recovery principles and proposed prices for the 2018-2023 Price Submission circulated to Environmental Water Pricing Working Group members.

**20 September 2017 – *Deliberative Panel Presentation to GWMWater Board***
Barry Hall, Deliberative Panel Chair and Helen Bartley, Bartley Consulting Pty Ltd presented the findings of the deliberative panel to the GWMWater Board. The panel confirmed that the information provided was presented clearly and succinctly via the discussion papers and presentations. The panel generally provided its support toward all GWMWater's proposed initiatives. The documented process and feedback received through the panel will be used to support the guiding principles of the 2018-2023 Price Submission.

**26 September 2017 – *Meeting with Department of Education and Training***
The Executive Manager Business Performance and Planning and Manager Customer Service met with the Senior Education Improvement Leader from the Department of Education and Training to discuss the status of the draft Price Submission, proposed prices and funding as they specifically apply to the education sector, particularly in relation to the watering of school grounds.

# Appendix 7 - Deliberative Panel Report

# Independent Deliberative Panel

## Working on behalf of GWMWater's customers

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## Contents

## Note

This report documenting the processes and outcomes of GWMWater's Deliberative Panel has been prepared by Helen Bartley, independent consultant to the Panel, with the assistance of Barry Hall, the Panel's Chair. The Panel's perspectives presented in this report were verified by the Deliberative Panel present at their final meeting on Friday 25 August 2017. Barry contributed to this report in his capacity as Chair of the GWMWater Deliberative Panel, in accordance with the requirements of the *Charter for the Deliberative Panel 2018-23 Pricing Review*. Helen Bartley was engaged by GWMWater, to undertake a range of tasks to support GWMWater in establishing the Panel, independently reviewing discussion papers, undertaking supplementary surveys, and was subsequently engaged at the request of the Chair to prepare this report with his input.

While clarification was sought from GWMWater in relation to background information associated with the establishment of the Panel, the content of this report has been prepared independent of GWMWater. Further, any comments in relation to the issues that were deliberated on that are presented in this report, are to be taken purely as the views of the Deliberative Panel.

**Acknowledgements**

The following individuals are acknowledged for their enthusiastic and positive participation as members of the Deliberative Panel. The numbers in brackets correspond to the number of meetings attended:

- Barry Hall, Chair (4)
- Brendan Auld (4)
- Dianna Blake (4)
- Chris Brain (3)
- Matt Crisp (4)
- Tania Down (4)
- Robyn Evans (3)
- Annie Ferguson (3)
- Leanne Grogan (4)
- Corinne Heintze (2)
- Sandi Lewis (2)
- Fran Lynch (2)
- James McKay (4)
- John Muller (4)
- Brenda O'Leary (4)
- Shane Roberts (4)
- Graeme Trickey (2)

In addition, the panel would like to thank various GWMWater staff members for their informative presentations, and their responsiveness to questions and issues raised, to assist in their deliberations. The Panel would also like to thank GWMWater for providing administrative support to the Panel, its hospitality making its board room available and providing catering for Panel meetings.

# 1 Summary

## 1.1 Purpose

This report presents an overview of establishment and findings of GWMWater's independent customer Deliberative Panel that met on four occasions from June to August 2017 to deliberate on a range of customer oriented issues associated with GWMWater's 2018-23 Pricing Review.

## 1.2 Summary of deliberations

The following table summarises the proposals that GWMWater asked the Deliberative Panel to consider, and the Panel's perspective on each of the proposals.

**Table 1-1: Topics discussed and Deliberative Panel perspectives**

| Topics | Questions posed to the Panel | Panel's perspective |
|---|---|---|
| Topic 1: Recreation contribution charge | Does the Deliberative Panel support GWMWater's proposal to retain the current Recreation Contribution Charge to subsidise the cost of maintaining community sporting amenities and the cost of supplying water to recreation lakes in the region? | The Panel supports the continuation of the current Recreation Contribution Charge |
| | Does the Deliberative Panel support GWMWater's proposal to extend the current Recreation Contribution Charge to schools for an additional 50c per quarter or 25c per quarter for concession cardholders? | The Panel supports the proposal to extend the current Recreation Contribution Charge to schools for an additional 50c per quarter or 25c per quarter for concession cardholders<br><br>However, the Panel is concerned how an agreement could be reached and whether it could be stipulated that the discount could only be used for maintaining and improving amenities |
| Topic 2: Carbon emissions / environment | On the basis of what has been presented, has the emission reduction pledge been appropriately pitched for GWMWater representation in the Water Price Submission? | The Panel believes that GWMWater's emission reduction pledge been appropriately pitched for GWMWater representation in the Water Price Submission |
| | Is there a view among the Deliberative Panel that this should be higher or lower and if so why? | The Panel expressed strong support for GWMWater's emission reduction pledge as proposed |
| Topic 3: Rural service standards | Does the Deliberative Panel support GWMWater's plan to maintain current service standards to rural customers? | The Panel supports GWMWater's plan to maintain current service standards to rural customers |
| Topic 4: Urban service standards | Should GWMWater maintain current service standards for water supply services to urban customers or should they be relaxed or improved? | The Panel believes that GWMWater should maintain current service standards for water supply services to urban customers, although the panel suggested that GWMWater's service standards need to:<br><br>• Differentiate between incidents over which GWMWater has control and incidents (such as major floods) over which it has no control |

| Topics | Questions posed to the Panel | Panel's perspective |
|---|---|---|
| | | • The service standards also need to take into account reimbursement to customers when their water quality is affected to the extent that a drinking water supply reverts to a non-drinking water supply |
| | Should GWMWater maintain current service standards for waste water services or should they be relaxed or improved? | The Panel believes that GWMWater should maintain current service standards for waste water services to urban customers |
| Topic 5: Rural pipeline tariff | Does the Deliberative Panel support GWMWater's retention of the current rural pipeline tariff pricing structure and proposed 'free trading' initiative? | The Panel supports GWMWater's retention of the current rural pipeline tariff pricing structure and proposed 'free trading' initiative |
| Topic 6: Water quality and new town sewer schemes | Does the Deliberative Panel support GWMWater's proposal to upgrade the water supply to drinking water quality in selected towns? | Ultimately, the majority of the Panel supported GWMWater's proposal to upgrade the water supply to drinking water quality in Elmhurst, Kaniva, Moyston and Ultima that for the greater good of the affected communities and their health and well-being, and suggested that:<br>• GWMWater should promote that water quality improvements are in the best interests of customers in the long term<br>• The financial benefits should be communicated to customers (e.g. less expense on bottled water, and for Kaniva customers, longer lasting appliances) |
| | Does the Deliberative Panel support GWMWater's proposal to provide a town sewer scheme for Goroke? | All Panel members supported GWMWater's proposal to provide a town sewer scheme for Goroke. |
| Topic 7: Infrastructure program/asset management | Do you support GWMWater's proposed approach to asset management? | The Panel supported GWMWater's proposed approach to asset management. |
| Topic 8: Productivity and efficiency | Does the Deliberative Panel support GWMWater's approach, aspiring for a 2.5% productivity and efficiency improvement, but basing its pricing 2018-2023 Water Price Review, on a more conservative 1.5% improvement? | The Panel supported GWMWater's approach. |
| Topic 9: Security of supply | Are you satisfied that GWMWater does not need to make any investments to secure supply? | The Panel supported GWMWater's approach but queried whether the current strategy accounted sufficiently for future growth in the region with sufficient scope, should future governments change their policies about regional growth |

| Topics | Questions posed to the Panel | Panel's perspective |
|---|---|---|
| Topic 10: Guaranteed Service Levels | Does the DP have a view on GSLs?<br>• Urban Service Standards<br>• Rural Service Standards | The Panel generally supports GWMWater's urban and rural service standards, but believes that, the focus of GSLs should be that they make GWMWater accountable, rather than compensating the customer per se.<br>The Panel also believes that GSLs need to:<br>• Differentiate between incidents over which GWMWater has control and incidents (such as major floods) over which it has no control<br>The service standards also need to take into account reimbursement to customers when their water quality is affected to the extent that a drinking water supply reverts to a non-drinking water supply |
| Topic 11: Pricing and tariffs | Does the Deliberative Panel have a view on the current tariff pricing structure and in particular fixed versus variable tariffs? | The Panel supports GWMWater's maintenance of its current pricing structure; if any changes to the pricing structure are made to increase the variable component of the tariff the Panel supports incremental changes. |
| | Does the Deliberative Panel have a view on the proposal to apply any price decreases to fixed urban and rural water charges? | |

## 1.3 Other suggestions from the Deliberative Panel

After reflecting on the four meetings, the Panel identified a number of common themes resulting from their deliberations that it wanted to bring to the attention of the GWMWater Board:

### 1. The importance of timely communication to customers

Regardless of the Board's acceptance or otherwise of the Panel's deliberations, the Panel emphasised the importance of timely and effective communication with customers, especially when issues occur that directly affect them. Equally, the Panel believes that GWMWater should inform customers about its achievements such as productivity and efficiency improvements, and the resulting benefits for customers.

The Panel believes that multiple communication channels are required to convey information to customers, noting the value of SMS for timely updates on water quality and supply issues.

### 2. GWMWater should actively encourage rural customers to use its online customer portal

The Panel recognised that the online portal provides significant benefits for rural customers helping them monitor and manage their water use, and thus better manage their bills, but questioned the extent of awareness and use of the portal. In particular, the Panel suggested that the portal would be invaluable to rural customers for detecting leakages and water losses. In would also helping them to make more informed decisions as to their overall water use and whether they are in a position to trade or not.

### 3. Language used to communicate to customers

The Panel commented on the clarity of presentations throughout, which generally used language that they understood. They stressed the importance and value of GWMWater ensuring that its communications use language that is meaningful to customers.

### 4. Ongoing value of discussion papers

The Panel found considerable value in the information contained in the discussion papers and suggest that they could be adapted to form a valuable information source for customers, either located on GWMWater's website or available in paper format.

# 2 Background

## 2.1 Context

In October 2016, the Essential Services Commission (ESC) released its *Water Pricing Framework and Approach* for the review of Victoria's water businesses and services to inform their Pricing reviews for the period 2018 to 2023. One of the key features of the framework and approach is centred on engagement with customers to establish their needs, priorities and concerns. Significantly, the ESC expects water businesses to *"work closely with its customers and show it engaged with its customers' concerns and interests"* [1].

The ESC also introduced a new incentive framework known as the Performance, Risk, Engagement, Management, Outcomes" (PREMO) model, whereby the ESC will assess each water business against each of the elements of this model. In terms of engagement with customers water businesses will be assessed on their effectiveness of engaging with customers[2]. The ESC has not prescribed any particular customer engagement approach that water businesses should adopt; rather it expects water businesses to develop approaches and strategies that are suited to their customers. However, it does suggest five principles of good customer engagement as follows[3]:

1. The form of customer engagement undertaken by a water business should be tailored to suit the content on which it is seeking to engage, and to the circumstances facing the water business and its customers.
2. A water business must provide customers with appropriate instruction and information, given the purpose, form and the content of the customer engagement.
3. A water business's customer engagement should give priority to matters that have a significant influence on the services provided and prices charged by the business.
4. A water business should start customer engagement early in its planning. The engagement should be ongoing, to keep testing proposals with customers.
5. A water business should demonstrate in its price submission how it has taken into account the views of its customers.

GWMWater, in its approach to developing its submission for the 2018-2023 Pricing Review, adopted a multifaceted approach engaging with customers and the community on matters relating to service and price, beginning the process with the first of its current series of Stakeholder Workshops October 2014. Customer engagement activities have included:

- Comprehensive telephone interview surveys of representative samples of 750 customers in February 2016 and February 2017
- Customer focus groups to examine water quality issues in September 2016
- A supplementary customer survey in October 2016 also focusing on water quality issues
- Ongoing six-monthly stakeholder workshops conducted in April and October 2016, April and September 2017
- Pop-up surveys placed on GWMWater's website early in 2017 to consider specific service delivery issues including customer contributions to GWMWater's recreation contribution, provision of drinking quality water services to small town customers, guaranteed Service Levels for rural customers and provision of remote digital meters for small town customers

A copy of GWMWater's engagement model is presented in Appendix A.

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1 Essential Services Commission 2016, *Water Pricing Framework and Approach: Implementing PREMO from 2018*, October, pg. ii

2 *ibid.*, pg. 10

3 *ibid.*, pg. 16

To supplement its engagement framework, GWMWater decided to establish an independent Deliberative Panel of customers to provide opinion, advice and recommendations on its pricing proposals for its 2018-2023 Price Submission. In February 2017, GWMWater produced a Charter for the Deliberative Panel which established its role, functions and responsibilities, which was subsequently approved by the GWMWater Board at its May 2017 meeting. In particular the Charter defined the role of the Deliberative Panel to

> *"examine and test the observations and directions that GWMWater has taken from these engagement and consultative processes to ensure that they reflect customers' needs and expectations."*[4]

The Charter also stipulated that an independent person with no current association with GWMWater, other than they may be a customer, would be appointed to Chair the Deliberative Panel[5] and that the Panel would include up to 15 individuals that collectively could be considered to be representative of GWMWater's customer base, who would be selected via an expression of interest process. The Charter also stipulated that the Panel should include customers from the following groups:

- Urban residential property owners from towns where a fully treated (drinking) water supply is available and a sewerage system operates
- Urban residential property owners from towns where only a regulated (non-drinking) water supply is available
- Urban residential tenants from towns where a fully treated (drinking) water supply is available and a sewerage system operates
- Urban residential tenants from towns where only a regulated (non-drinking) water supply is available
- Urban non-residential customers from towns where a fully treated water supply is available and a sewerage system operates
- Urban non-residential customers where a regulated water supply only is available
- Indigenous community
- Broad acre farmers (rural water customers)
- Intensive agricultural operators
- Mining or extraction businesses
- Manufacturing businesses
- Sporting clubs
- Recreational water operators (such as lake committees of management)
- Welfare or support sector agencies (to represent the views of customers who may experience financial hardship)

## 2.2 Panel establishment

### 2.2.1 Appointment of Panel Chair

The GWMWater Board and Executive Management team collectively identified a number of and suitably experienced and qualified individuals from GWMWater's region who would be suitable candidates for the role of Chair, in line with the requirements of the Charter for the Deliberative Panel. This approach was adopted rather than calling for expressions of interest for a Chair as it was felt that the Chair should some knowledge of the water sector/GWMWater.

The Board scrutinised the credentials of individuals, and provided GWMWater management with the names of preferred candidates. Subsequently, GWMWater assessed the availability and willingness the Board's

[4] A copy of the Charter is contained in Appendix B.

[5] Further, the Charter stipulated that the Chair will not have been a Director or an employee of GWMWater for at least the past three years.

preferred candidates to Chair the panel. Consequently, Barry Hall's appointment to the position was approved by the GWMWater Board.

### 2.2.2 Expressions of Interest

The intent of the *Charter* for the Deliberative Panel was that customers would be selected from an Expression of Interest (EoI) process to form the Panel[6]. From March 2017, GWMWater advertised its EoI for customers to join the Deliberative Panel. GWMWater advised that the EoI was advertised from 29 March 2017 to mid-April 2017 across a variety of media. A schedule of GWMWater's communications to advertise the EoI is contained in Appendix C.

To access the EoI, interested individuals were asked to visit GWMWater's website to download an application form or they could contact GWMWater direct. In addition to contact details, the application form asked individuals to identify their interest as a customer, in line with the list presented on the previous page of this report, as well as providing details as to how they believed they could contribute as a member of the Panel. Interested individuals were given until 13 April 2017 to submit an application to GWMWater. A copy of the EoI is contained in Appendix D.

As an incentive to join the Panel GWMWater offered each member a $100 gift card for each meeting that they attended, and reimbursed them for their travel at current Australian Taxation Office rates.

Despite significant promotion of the EoI process, only six customers submitted applications to GWMWater to join the Panel. GWMWater expressed concern over several applications as those customers previously had significant involvement with GWMWater on other matters. As a result, they were not considered to be 'typical' customers because of their enhanced knowledge and experience with GWMWater on other matters. Consequently, GWMWater appointed Helen Bartley to assist in developing and implementing alternative strategies to increase customer interest in joining the Panel. As a result, customers were approached to join the panel via the following:

- They had previously participated in isolated ad hoc focus groups which Bartley Consulting had conducted for GWMWater in 2016 related to, on water quality issues in their town, but had no other formalised or significant experience associated with GWMWater.
- They had participated in GWMWater's 2017 Customer Satisfaction Survey, and at the end of the survey they indicated an interest in joining GWMWater's customer Panel to "provide opinion, advice and recommendations on its pricing for their 2018-2023 Water Price Review Submission to the Essential Services Commission over the next few months"[7] and were willing to be recontacted.
- They were reached through direct approaches to specific organisations that could be considered to represent particular customer interests, such as welfare organisations, commercial enterprises, local progress associations, manufacturing and industrial organisations and environmental and recreation water groups.

Helen approached selected customers from the above groups, explained the role and functions of the Deliberative Panel, and established customer interest and potential suitability of individuals within each organisation. Contact details of interested customers recruited through this process were referred to GWMWater, with customers' permission. Subsequently, GWMWater contacted each customer direct and formally invited them to join the Deliberative Panel. All individuals, except one, who resided between the Yarra Valley and GWMWater's region, were recruited by being direct approached (beyond the EOI process) were accepted by GWMWater as suitable applicants to join the Panel.

Following verbal acceptance of their EoI, GWMWater wrote to all successful and unsuccessful applicants advising them of the outcome of their EOI (see Appendix E for copies of letters to successful and unsuccessful

[6] GWMWater, 2017, *Charter* [for the] *Deliberative Panel 2018-23 Pricing Review,* pg. 2

[7] As worded in the *GWMWater 2017 Customer Survey questionnaire*.

applicants). Ultimately, 18 individuals[8] (including the Chair), were invited to join the Panel and accepted the invitation.

In terms of representing GWMWater's customer base, the profile of recruited Deliberative Panel members was as follows (noting that individual customers could belong to multiple categories):

**Table 2-1: Deliberative Panel composition**

| Category | No. of representatives |
|---|---|
| Urban residential property owners from towns where a fully treated water supply is available and a sewerage system operates | 10 |
| Urban residential property owners from towns where only a regulated water supply is available | 2 |
| Urban residential tenants from towns where a fully treated water supply is available and a sewerage system operates | 9 |
| Urban non-residential customers from towns where a fully treated water supply is available and a sewerage system operates | 2 |
| Urban non-residential customers where a regulated water supply only is available | 1 |
| Broad acre farmers (rural water customers) | 5 |
| Intensive agricultural customers | 1 |
| Manufacturing customers (food production) | 1 |
| Sporting club representatives that receive a supply of water from GWMWater | 4 |
| Recreational Water operators (Lake Committees of Management) who receive a water supply from GWMWater | 1 |
| Welfare/support agencies to represent views of customers who experience financial hardship | 3 |
| Environmental interests | 1 |

The 18 Deliberative Panel members came from across GWMWater's region and include customers who live and / or work in:

- Ararat
- Brim
- Donald
- Edenhope
- Goroke
- Grass Flat
- Halls Gap
- Harrow
- Hopetoun
- Horsham
- Kaniva
- Minyip
- Murtoa
- Ouyen
- Speed
- St Arnaud
- Stawell
- Ultima
- Underbool
- Warracknabeal

In addition, the Panel was demographically diverse including:

- 9 males and 8 females
- A mix of property owners and tenants
- Age ranging from mid 30s to 70s
- Individuals, couples and families with dependent children

[8] Although the Charter stipulated that only 15 individuals were required to form the Panel. GWMWater decided to invite 18 individuals to allow for possible attrition and anticipating the likelihood that not all individuals would be able to attend all meetings.

- Carers of aged people
- People in full time and part time paid employment and retired people
- People involved in education, health and welfare, local government, business operators, farmers
- Community volunteers (Landcare, Country Fire Authority, recreation reserve and sporting group committees of management)

Notably, the following customer segments were not represented in the panel, despite various approaches to individuals and organisations by both GWMWater and Helen Bartley:

- Mining or extraction customers
- Urban residential tenants from towns where only a regulated water supply is available
- Indigenous community representative

## 2.3 Background information provided to the Deliberative Panel

In line with the ESC's PREMO requirements, GWMWater recognised that Panel members needed to be sufficiently informed to effectively deliberate on GWMWater's proposals for its pricing submission. Letters of acceptance to Panel members contained the following background information:

- Terms of reference for the Deliberative Panel as outlined in the Charter (Appendix B).
- A copy of a diagram explaining how the Panel fits into GWMWater's model of engagement with customers (see Appendix A)

At its first meeting, GWMWater also provided Panel members with a bound booklet of background information from previous customer and stakeholder workshops that GWMWater had conducted since 2014. A list of the Customer/Stakeholder Workshop Supporting Documentation provided in Meeting 1 is contained in Appendix F.

Customers were also provided with a copy of *GWMWater's Schedule of Tariffs and Other Charges* for the period 1 July 2017 to 30 June 2018.

In advance of Meetings 2 and 3, relevant GWMWater staff prepared draft discussion papers focusing on specific proposals that GWMWater considered could have a significant impact on services and/or pricing, and in line with ESC expectations for customer engagement. Helen Bartley was engaged by GWMWater to review these papers to ensure:

- They focused on aspects of GWMWater's proposals that were directly relevant to customers
- They would be readily understood by a reasonable or typical customer
- They were succinct (no more than 4 pages per paper)

The result was a series of ten papers each of no more than four pages subsequently described by the Panel as "very good summaries of the issues". GWMWater staff also indicated that the process of having their papers independently reviewed helped them clarify their proposals and the impacts on customers. The Discussion Papers covered the following topics:

- Recreation contribution charge (Topic 1)
- Carbon emissions / environment (Topic 2)
- Rural service standards (Topic 3)
- Urban service standards (Topic 4)
- Rural pipeline tariff (Topic 5)
- Water quality and new town sewer schemes (Topic 6)
- Infrastructure program/asset management (Topic 7)
- Productivity and efficiency (Topic 8)

Information on the above proposals was also included in presentations to the Panel, prepared and presented by GWMWater staff. Three additional topics were presented to the Panel but did not include Discussion Papers

- Security of Supply (Topic 9)
- Guaranteed Service Levels (Topic 10 as an expansion of Topics 4 and 5)
- Pricing and tariffs (Topic 11)

In addition, GWMWater provided customers with specific information about its guaranteed service levels, that was not directly covered in Topics 4 and 5, subsequently documented as Topic 11.

The Chair in consultation with GWMWater also prepared an agenda in advance of each meeting. Copies of the agenda for each meeting are provided in Appendix G. A full list of discussion papers and presentation document is contained in Appendix H. Collectively, these documents in Appendix H are too large to include within this report[9]. However, selected details from each paper and/or presentation are included in the relevant sections of this report as context associated with the Panel's deliberations.

To allow Panel members sufficient time to consider the issues, GWMWater express posted Panel members copies of relevant discussion papers several days in advance of each meeting and also emailed copies to Panel members. The Panel's administrative officer also phoned Panel members to ensure they received the papers, and to remind them of the upcoming meeting. Panel members were not provided with copies of presentation slides in advance, as the purpose of these was to explain and support the content in the discussion papers.

## 2.4 Meeting arrangements and attendance

The Deliberative Panel met on four occasions, by mutual agreement in GWMWater's boardroom, as a location that was central to the majority of Panel members. The choice of venue also meant that GWMWater staff were available to present background information and respond to questions from the Panel. GWMWater also provided administrative support to the Panel.

Attendance at meetings was generally very good, with ten of the 18 original members attending all four meetings. Unfortunately, due to work commitments, one member had to withdraw from the Panel after attending the first meeting. Another member, who only attended the first meeting, maintained email contact with the Chair, who shared the feedback with the Panel. These two Panel members were not replaced as a decision was made when establishing the Panel to begin with a relatively large group, with the expectation that some individuals may not be able to attend all meetings18 had been recruited at the outset.

By mutual agreement, meetings were held on Fridays to suit the majority of Panel members. Notably, the number of Panel members present was consistently high, with 14 or 15 of the original 18 members present at each meeting, in line with the Charter's expectations. Meeting details are as follows:

- Meeting 1: Friday 16 June 2017 from 10:00 am to 1:00 pm (14 present)
- Meeting 2: Friday 21 July 2017 from 10:00 am to 2:00 pm (15 present)
- Meeting 3: Friday 11 August 2017 from 10:00 am to 2:00 pm (15 present)
- Meeting 4: Friday 25 August 2017 from 10:00 am to 1:00 pm (14 present)

## 2.5 Meeting conduct

Barry Hall chaired all meetings. At the Chair's request, Helen Bartley was present as an observer and presenter at meetings 1[10], and 3 and as an observer at meeting 4.

At the first meeting the Panel agreed that the Chair would take notes, that would form a summary record of discussions, and Helen took detailed notes in Meetings 1, 3, and 4. Meetings 2 to 4 were also audio-recorded to assist in the preparation of this report.

Meeting 1 focussed on GWMWater presenting general background information to the Panel.

[9] It is understood that copies of the final versions are stored on GWMWater's intranet and are available on request

[10] Helen was not available to attend Meeting 2.

Meetings 2 to 4 focussed on GWMWater's proposals and the Panel's deliberations in relation to those proposals. The general format of meetings 2 to 4 involved:

- The Chair providing a review of the previous meeting and an overview of the topics to be covered in the current meeting
- A GWMWater staff member providing an outline of the proposal being deliberated (10 to 15 minutes), taking questions throughout their presentation
- The GWMWater staff member leaving the room to allow the Panel to discuss the issue for 10 to 20 minutes, and seeking clarification from GWMWater if required
- The Chair seeking agreement on the Panel's perspective of the issue

Between two and four topics were discussed per meeting.

The Chair reinforced at the beginning and end of each meeting that if panel members wanted more information on a topic or had other issues they were free to ask GWMWater for additional information. In a number of instances, the Panel requested additional information from GWMWater staff members, which was either provided later in the same meeting or in the subsequent meeting. The Panel acknowledged the value of the perceived collaborative approach and connection with GWMWater speakers and the Managing Director, and appreciated the efforts made by GWMWater staff to be responsive to their questions.

Time was allowed at the end of meeting 4 to gather feedback from Panel members about the process; followed up with an email from the Chair to panel members with a series of evaluation questions.

Overall the Panel agreed that:

- The meetings adhered to the agenda
- The meetings ran to time
- The Chair was effective in ensuring that all Panel members were given the opportunity to provide comment, and ask questions to seek clarification
- All panel members had an opportunity provide comment on the various topics and seek clarification on issues, both within the group and direct to GWMWater
- They were given sufficient time to discuss issues
- They felt comfortable directing question to GWMWater staff and GWMWater staff were both respectful and responsive to the Panel members questions, regardless of the simplicity or complexity of questions
    - The Panel acknowledged the efficiency of responses from GWMWater which were either immediate or occurred soon after, if the answer required further investigation
- The Panel's responses to the questions posed by GWMWater, and recommendations are considered to reflect the views of most, and generally all Panel members

The following sections of this report detail GWMWater's proposals presented to the Panel, and related questions that GWMWater asked the Panel to consider, as well as documenting the issues raised by Panel members and a summary of the Panel's perspective on each proposal.

## 2.6 Progress reporting

In accordance with the Charter, the Deliberative Panel Chairman prepared a summary report of the Panel's activities and plans, which was submitted to the Chair of the GWMWater Board (see Appendix I). It is understood that this report was tabled at the GWMWater Board meeting on Wednesday 16 August 2017.

# 3 Topic 1: Recreation contribution charge

## 3.1 GWMWater's proposal

The following is an extract from the Discussion Paper in relation to GWMWater's proposals associated with this topic[11]:

- *GWMWater is proposing to maintain this* [current Recreation] *contribution charge and extend the water discount to schools in the region.*
- *The proposal to extend the discount to schools will enable schools to maintain and improve amenities.*

The Panel was also advised of the cost implications for customers associated with an extension of water discounts to schools as follows:

| | Contribution increase | Per quarterly bill | Total contribution per annum |
|---|---|---|---|
| **Recreation Contribution Charge** | **50c per bill** | **$4.50** | **$18.00** |
| **Concession Cardholders** | **25c per bill** | **$2.25** | **$9.00** |

## 3.2 Questions to the Panel

In the context of the above information and additional background information presented by GWMWater to the Panel in Meeting 2, the Panel was asked to consider the following two questions:

- *Does the Deliberative Panel support GWMWater's proposal to retain the current Recreation Contribution Charge to subsidise the cost of maintaining community sporting amenities and the cost of supplying water to recreation lakes in the region?*
- *Does the Deliberative Panel support GWMWater's proposal to extend the current Recreation Contribution Charge to schools for an additional 50c per quarter or 25c per quarter for concession cardholders?*

## 3.3 Issues raised by the Panel

The panel had no issues with the current charge, but it had extensive discussion on the proposal to provide schools with discounted water:

- The Panel queried whether an approach had been made by schools for discounted water, and whether the benefit would be greater for some schools
    - GWMWater confirmed that it had not been approached by schools.
- The Panel discussed the definition of "amenities" in the context of schools.
- The Panel debated whether schools would be required to sign up to receive discounted water (whether they opt in).
- The Panel was also concerned that if their water was discounted they may not use the savings to improve their school ovals, and discussed the extent to which GWMWater could stipulate that the school must use the discount for maintaining and improving amenities.
- Some Panel members suggested that a meter may be required to ensure schools were watering their ovals.
- Some Panel members commented that even a nominal increase in bills was an added burden to low income earners.

The sustainability of this proposal was also queried, if the region experienced a long-term dry period again. GWMWater advised that this strategy would contribute to the wellbeing of the region and GWMWater advised that the Board supports a recreation contribution charge for the benefit of the region.

[11] GWMWater, n.d., *Discussion Paper*, 'Recreation Contribution Charge' (R2017-12607 Deliberative Panel Discussion Paper - Recreation Contribution.doc)

## 3.4 The Panel's perspective

Ultimately the Panel agreed to support the continuation of the current Recreation Contribution Charge, and supports its extension to schools for an additional 50c per quarter or 25 cents per quarter for concession cardholders.

However, the Panel wishes the GWMWater Board to note that:

- Its views were variable in relation to whether GWMWater should/could stipulate that the discount could only be used for maintaining and improving amenities.
- How an agreement could be structured to suit both GWMWater and individual participating challenging as different schools have different needs and expectations

# 4 Topic 2: Carbon emissions / environment

## 4.1 GWMWater's proposal

The following is an extract from the Discussion Paper in relation to GWMWater's proposals associated with this topic[12]:

- *In its preliminary discussions with the Department of Environment Land Water and Planning, GWMWater has adopted a carbon reduction pledge target of 19% by 2025.*
- *The 19% carbon reduction pledge that has been developed has been premised on an assumption that this can be delivered without an increase in prices. An independent review by Deloitte reaffirms this premise that the suite of renewable energy initiatives will give rise to a positive benefit cost.*
- *Given the outlook for electricity/energy prices relative to the improved viability of renewable energy technologies it is highly probable that GWMWater will be able to better the 19% reduction in the pledge.*

The Panel was also advised that:

- *As GWMWater's 19% pledge is deemed to be cost neutral it does not present any price implications.*

## 4.2 Questions to the Panel

In the context of the above information and additional background information presented by GWMWater to the Panel in Meeting 2, the Panel was asked to consider the following two questions:

- *On the basis of what has been presented, has the emission reduction pledge been appropriately pitched for GWMWater representation in the Water Price Submission?*
- *Is there a view among the Deliberative Panel that this should be higher or lower and if so why?*

## 4.3 Issues raised by the Panel

The Panel was particularly interested in the fact that Southern Rural Water (SRW) appeared to have a very low carbon footprint, and discussed the disparity. Although various suggestions were offered to explain SRW's position, this observation did not impact on the Panel's deliberations.

The Panel also queried whether GWMWater collaborates with other water businesses on innovation to reduce its carbon emissions. GWMWater advised that it does collaborate as appropriate.

## 4.4 The Panel's perspective

The Panel expressed strong support for GWMWater's emission reduction pledge as proposed.

[12] GWMWater, n.d., *Discussion Paper*, 'Carbon Emissions / Environment' (R2017-12600 Deliberative Panel Discussion Paper - Carbon Emissions Environment.doc)

# 5 Topic 3: Rural service standards

## 5.1 GWMWater's proposal

The following is an extract from the Discussion Paper in relation to GWMWater's proposals associated with this topic[13]:

- *GWMWater is proposing to maintain current service standards for rural customers with operation, maintenance, and replacement of assets when required*
- *GWMWater will continue to strive to improve efficiency of services by further developing remote metering, being responsive in addressing any service issues raised by customers and ongoing analysis of its water supply network's performance.*
- *Extension of rural pipelines will expand customer access to better quality water available from the Grampians system, with current feasibility studies being undertaken to improve the rural water supply in the East Grampians and West Wimmera areas.*

The Panel was also advised that:

- *As service standards are not proposed to change this does not present any price implications.*

## 5.2 Questions to the Panel

In the context of the above information and additional background information presented by GWMWater in Meeting 2, the Panel was asked to consider the following question:

- *Does the Deliberative Panel support GWMWater's plan to maintain current service standards to rural customers?*
- *Should GWMWater introduce GSLs [Guaranteed Service Levels] for rural customers, and if so how much should the GSL rebate be?*[14]

## 5.3 Issues raised by the Panel

The Panel did not believe there is any need for GWMWater to introduce guaranteed service levels for rural customers. Rather, the Panel believes that GWMWater should focus on communication with rural customers when issues arise that may affect their water supply[15].

## 5.4 The Panel's perspective

The Panel supports GWMWater's maintenance of existing service standards for rural customers, as a result of information presented in Meeting 2.

[13] GWMWater, n.d., *Discussion Paper*, 'Rural Service Standards' (R2017-12603 Deliberative Panel Discussion Paper - Service Standards – Rural.doc)

[14] This was an additional question posed in the presentation to the Panel; it was not included in the Discussion Paper.

[15] This issue was revisited in Meeting 4 (see Section 12).

# 6 Topic 4: Urban service standards

## 6.1 GWMWater's proposal

The following is an extract from the Discussion Paper in relation to GWMWater's proposals associated with this topic[16]:

- *GWMWater is planning to maintain current service levels to keep services affordable for customers.*
- *Strategies for maintaining these service levels are as follows:*
  - *Water supply services: to maintain affordability, water main failures will continue to be repaired and mains that are causing frequent or widespread interruptions to customers will be replaced.*
  - *Sewerage services: currently GWMWater responds to blockages and spills (89% associated with tree roots), and proactively prevents blockages by inspecting mains with CCTV, removing tree roots and chemically preventing root regrowth, or sealing out roots by relining the main. To maximise value for money, investment is targeted at the highest risk and poorest performing sewers.*
- *Alternatively, GWMWater could relax or improve its service levels:*
  - *Earlier intervention to improve water supply levels service is possible, but comes at a cost.*
  - *Proactive investment could be increased to reduce sewer blockages and spills, while a decrease in proactive investment may not result in a cost saving due to a corresponding increase in blockages and associated costs.*

The Panel was also provided with two scenarios associated with changing service levels:

| Water supply service standard | Relax Service | Maintain Service | Improve Service |
|---|---|---|---|
| Number of customers experiencing 5 or more unplanned interruptions | **<300 per year** | **<200 per year** | **<150 per year** |
| Indicative cost to the average urban customer per bill | **-$10 p.a.** | | **+$40 p.a.** |

| Waste water service standard | Relax Service | Maintain Service | Improve Service |
|---|---|---|---|
| Predicted sewer spills per 100km of sewer mains. | **<30 per year** | **<20 per year** | **<10 per year** |
| Indicative cost to the average urban customer per bill | **-$5 p.a.** | | **+$20 p.a.** |

## 6.2 Questions to the Panel

In the context of the above information and additional background information presented by GWMWater in Meeting 2[17], the Panel was asked to consider the following question:

- *Should GWMWater maintain current service standards for water supply services to urban customers or should they be relaxed or improved?*
- *Should GWMWater maintain current service standards for waste water services or should they be relaxed or improved?*

## 6.3 Issues raised by the Panel

The Panel spent considerable time discussing GWMWater's approach to fixing infrastructure in the short term, rather than replacing it sooner, and sought clarification from GWMWater on the cost impacts if extra dollars were spent on replacing infrastructure sooner rather than incur ongoing repair costs.

The Panel questioned whether GWMWater had any long-term and costed plans in place for urban expansion.

[16] GWMWater, n.d., *Discussion Paper*, 'Urban Service Standards' (R2017-12604 Deliberative Panel Discussion Paper - Service Standards – Urban.doc)

[17] See Appendix I2.

As a result of questions and discussions in Meeting 2 and Meeting 3, GWMWater staff provided a more detailed explanation of their monitoring repair and replacement program. The Chair understood that the panel was satisfied with the program and future planning as a result of this additional information.

## 6.4 The Panel's perspective

Ultimately, the Panel agreed that GWMWater should maintain current service standards for water supply services and also waste water services.

# 7 Topic 5: Rural pipeline tariff

## 7.1 GWMWater's proposal

The following is an extract from the Discussion Paper in relation to GWMWater's proposals associated with this topic[18]:

*GWMWater is proposing to maintain the existing tariff structure into the next pricing period on the basis that:*

- *It is important to maintain a consistent and equitable pricing approach for all customers connected and new customers connecting to GWMWater's Rural Pipeline Systems.*
- *Water can be moved to where it provides the highest value and benefit to the region.*
- *A water trading market enables rural landowners and farming enterprises to manage their water allowance to best meet their needs and customers can choose how actively they manage their water holdings relative to their requirements.*
- *Rural pipeline customers will be encouraged to register to GWMWater's Customer Portal to monitor and actively manage their water use.*
- *The Essential Services Commission's guiding tariff assessment principles include: sustainable revenue; subsidy free pricing; tariff structures for rural based on two-part tariff, fixed and volumetric; determining fixed and volumetric charges; customer focus and equity and GWMWater's current rural pipeline tariff is consistent with these principles.*
- *A 'free trading' initiative be introduced in the first quarter of 2018/19 to promote an active water market and increase awareness of water trading amongst customers. GWMWater would waive its water trading fees and cover the cost of water broker fees.*

The Panel was also advised that:

- *There are no new implications for customers if this pricing structure is maintained.*
- *The cost of offering a 'free trading' period will be offset by benefits of moving water to higher value use.*

## 7.2 Questions to the Panel

In the context of the above information and additional background information presented by GWMWater to the Panel in Meeting 2, the Panel was asked to consider the following question:

- *Does the Deliberative Panel support GWMWater's retention of the current rural pipeline tariff pricing structure and proposed 'free trading' initiative?*

## 7.3 Issues raised by the Panel

The Panel spent considerable time discussing this issue, in particular the fees, which may be a barrier to water trading. Further, the Panel discussed GWMWater's free customer Portal that allows customers to monitor their water use, via a smart phone, tablet, laptop or home computer and reemphasised the need to publicise the portal and the advantages of it for users to help them monitor and manage their water use.

## 7.4 The Panel's perspective

The Panel supports GWMWater's retaining the current rural pipeline tariff pricing structure. The Panel also strongly supports a waiver on trading fees and GWMWater covering broker's costs to facilitate water trading.

[18] GWMWater, n.d., *Discussion Paper*, 'Rural Pipeline Tariff' (R2017-13744 Deliberative Panel Discussion Paper - Pricing and Tariffs - Rural Pipeline.doc)

# 8 Topic 6: Water quality and new town sewer schemes

## 8.1 GWMWater's proposal

The following is an extract from the Discussion Paper in relation to GWMWater's proposals associated with this topic[19]:

Water Quality Upgrades

- *Upgrade to the water supply in Kaniva, Ultima, Elmhurst and Moyston to comply with the Safe Drinking Water Regulations (SDWR) 2015 and Australian Drinking Water Guidelines 2011; whereby these towns have been identified in consultation with DHHS, taking into account various factors that affect the communities*
- *Planning and investigation of next priority towns and potential future upgrade options*

| Town | No. of customers | Customer expectation | School | Food preparation | Community Health Centre | Other | Cost estimate |
|---|---|---|---|---|---|---|---|
| Kaniva | **528** | **To be confirmed** | ✓ | ✓ | ✓ | **Transient population** | **$4.1 M** |
| Elmhurst | **120** | ✓ | ✓ | ✓ | ✓ | | **$2.3 M** |
| Moyston | **95** | **To be confirmed** | ✓ | ✓ | | **Variable water quality** | **$1.7 M** |
| Ultima | **99** | ✓ | ✓ | ✓ | | **Poor water quality** | **$1.6 M** |

Town Sewer Scheme for Goroke

- *Subject to WWSC [West Wimmera Shire Council] not securing funding for a sewer scheme for Goroke, GWMWater proposes to progress this project in three stages with the first stage to be completed over the coming pricing period.*

The Panel was also advised of the following cost implications for customers:

- *GWMWater will fund the cost of the water supply upgrades, as it currently has no external sources of funding available, through ongoing rates and charges consistent with the principle of 'like price for like service'*
- *Currently non-drinking water customers pay less than drinking water customers; a water supply upgrade will mean an increase in tariffs, in line with tariffs and charges applicable to customers who receive a drinking water supply*

| Town | Current urban water charges | | | Marginal cost | | |
|---|---|---|---|---|---|---|
| | Fixed | Volumetric ($/KL) | Average household bill (4 times a year) | Fixed | Volumetric ($/KL) | Average household bill (4 times a year) |
| Kaniva | $415.04 | $0.9842 | $167.51 | $56.64 | $0.7732 | $64.41 |
| Ultima | $417.16 | $1.5993 | $208.04 | $54.52 | $0.1581 | $23.88 |
| Elmhurst, Moyston | $417.16 | $1.2947 | $188.29 | $54.52 | $0.4627 | $43.63 |
| Drinking water towns | $471.68 | $1.7574 | $231.92 | | | |

[19] GWMWater, n.d., *Discussion Paper*, 'Water Quality Upgrades and New Town Sewer Schemes' (Discussion Paper - Water Quality Upgrades and New Town Sewer Schemes.doc)

The results of a GWMWater commissioned survey of Elmhurst, Kaniva, Moyston and Ultima customers to gauge their support for water quality improvements were also presented to the Panel in Meeting 3 to assist in their deliberations[20]. GWMWater provided further information about the proposed water quality upgrades, explaining the rationale behind the proposed upgrades and the risks associated with a non-drinking water supply in towns, such as Kaniva, with a large transient population and the financial implications for customers.

## 8.2 Questions to the Panel

In the context of the above information and additional background information presented by GWMWater to the Panel, the Panel was asked to consider the following questions:

- *Does the Deliberative Panel support GWMWater's proposal to upgrade the water supply to drinking water quality in selected towns?* [Elmhurst, Kaniva, Moyston, Ultima]
- *Does the Deliberative Panel support GWMWater's proposal to provide a town sewer scheme for Goroke?*

## 8.3 Issues raised by the Panel

Water supply upgrades

The Panel commented in relation to the survey responses from customers in Elmhurst, Kaniva, Moyston and Ultima who did not want drinking water. In particular:

- Suggesting that customers who did not support an upgrade of their water supply might not understand the longer-term benefits of having a drinking quality supply, both to themselves as individuals, and the benefits for regional growth in line with GWMWater's vision
- Querying which customers were for/against a drinking water supply, according to age – and were not surprised to hear that older customers were generally less favourable

Other comments/queries included:

- Whether these towns were growing or declining – the Panel was referred to the Discussion Paper, which outlined the rationale behind the selection of these towns
- Whether economic modelling had been undertaken to quantify the costs and benefits of water quality upgrades
- The source of the treated water – customers were advised by GWMWater that different options were being considered on a town by town basis, based on cost and the best option for each location
- Kaniva customers may be financially better off if they had a drinking quality supply as their infrastructure and domestic appliances may last longer, and secondary data should be available to assist GWMWater
- GWMWater has the expertise which customers should respect
- DHHS should also be involved in promoting the benefits of a drinking water supply
- Towns have greater potential to grow if they have a drinking water supply

Town sewer scheme for Goroke

- No issues were raised in relation to the town sewer scheme for Goroke

[20] Bartley Consulting, 2017, *Water Quality Upgrade – Customer Survey 2017 Overview*, (GWM Drinking Water Survey Overview.pdf)

## 8.4 The Panel's perspective

Water supply upgrades

Ultimately, the majority of the Panel supported GWMWater's proposal to upgrade the water supply to drinking water quality in Elmhurst, Kaniva, Moyston and Ultima for the greater good of the affected communities and their health and well-being, and suggested that:

- GWMWater should promote that water quality improvements are in the best interests of customers in the long term
- The financial benefits should be communicated to customers (e.g. less expenditure on bottled water, and longer lasting appliances)

All Panel members supported upgrading the water supply to drinking water quality for Kaniva, and potentially Moyston given its location. Some Panel members queried the value of upgrading the water supply in Elmhurst, querying both its current size and potential to grow in the future, but ultimately accepted GWMWater's expertise.

Town sewer scheme for Goroke

All Panel members supported GWMWater's proposal to provide a town sewer scheme for Goroke.

# 9 Topic 7: Infrastructure program/asset management

## 9.1 GWMWater's proposal

The following is an extract from the Discussion Paper in relation to GWMWater's proposals associated with this topic[21]:

*GWMWater proposes to continuously improve asset management by:*

- *Optimising maintenance and renewals expenditure*
- *Better understanding how [its] assets are performing*
- *Planning upgrades to meet future growth needs and reduce [its] carbon footprint*

The Panel was also advised of the following implications for customers:

- *The proposed program is informed by strategic asset planning and works management and does not present any price implications.*
- *Refer to Productivity and Efficiency, and Water Quality Upgrades and New Town Sewer Schemes papers for pricing implications associated with new initiatives.*

## 9.2 Questions to the Panel

In Meetings 2 and 3, in the context of the above information and additional background information presented by GWMWater to the Panel, the Panel was asked to consider the following question:

- *Do you support GWMWater's proposed approach to asset management?*

## 9.3 Issues raised by the Panel

The Panel made some general comments about specific issues associated with their water supply, such as water pressure, and maintenance issues. GWMWater provided general comments about its current approach to managing water supply issues.

The Panel also asked how GWMWater managed redundant assets. GWMWater explained that assets are monitored and maintained as required, and ultimately, they may be sold off.

The Panel noted that there were no cost implications to GWMWater's approach to asset management.

## 9.4 The Panel's perspective

The Panel supported GWMWater's proposed approach to asset management.

[21] GWMWater, n.d., *Discussion Paper*, 'Infrastructure Program / Asset Management' (Discussion Paper - Infrastructure Program Asset Life Cycle Management.doc)

# 10 Topic 8: Productivity and efficiency

## 10.1 GWMWater's proposal

The following is an extract from the Discussion Paper in relation to GWMWater's proposals associated with this topic[22]:

- *Although the GWMWater Board is aspiring for a 2.5% productivity improvement, GWMWater Water is proposing to base its pricing assuming a 1.5% improvement.*
- *If a productivity improvement greater than 1.5% is achieved, GWMWater proposes to further reduce its debt.*
- *GWMWater proposes to achieve these productivity improvements by extending current initiatives including works scheduling (planned and reactive maintenance works), extension of remote metering for urban customers, electronic billing, sale of surplus assets, improved utilisation of existing assets such as using the spare capacity of water treatment plants to provide water quality upgrades to nearby towns.*
- *Renewable energy (assumes GWMWater pledge commitments will be cost neutral).*
- *Improving productivity through the realisation of further Growth Water Sales.*

In Meeting 3, the Panel was also advised of the following implications for customers:

- *If GWMWater achieves a **1.5%** improvement in operating expenditure productivity, the proposed program excluding new initiatives provides:*

| | | |
|---|---|---|
| Year 1 | ↓ | Real price decrease of (0.7%) in 2018/19 |
| Year 2 to 5 | - | Real price held constant, 0.0% real price path between 2019/20 to 2022/23 |

## 10.2 Questions to the Panel

In the context of the above information and additional background information presented by GWMWater to the Panel, the Panel was asked to consider the following question:

- *Does the Deliberative Panel support GWMWater's approach, aspiring for a 2.5% productivity and efficiency improvement, but basing its pricing 2018-2023 Water Price Review, on a more conservative 1.5% improvement?*

## 10.3 Issues raised by the Panel

Some Panel members initially had difficulty understanding the context around GWMWater's proposed productivity targets, the context was clarified by GWMWater.

Importantly, the Panel suggested that customers should be kept informed of GWMWater's productivity improvements, and subsequent benefits to customers.

## 10.4 The Panel's perspective

The Panel supported GWMWater's approach, aspiring for a 2.5% productivity and efficiency improvement, but basing its pricing 2018-2023 Water Price Review, on a more conservative 1.5% improvement.

[22] GWMWater, n.d., *Discussion Paper*, 'Productivity and Efficiency' (Discussion Paper - Productivity and Efficiency.doc)

# 11 Topic 9: Security of supply

## 11.1 GWMWater's proposal

The following is an extract from the Discussion Paper in relation to GWMWater's proposals associated with this topic:

*GWMWater proposes to continue to monitor the overall water supply capability by:*

- *Undertaking a more detailed study of the bore field presently supplying Edenhope to better understand its supply capability in the short to medium term.*
- *Assessing the water supply issues in the East Grampians area in the context of the East Grampians Rural pipeline feasibility study.*
- *Assessing the longer-term water supply issues for Edenhope and Harrow in the context of the West Wimmera study that is presently being undertaken.*
- *Assessing options for augmenting water supply for Horsham in the context of the Rocklands / Taylors Lake water supply.*
- *To continue to work with DELWP to examine ways of securing the recreational water holding.*

In addition, in Meeting 4, GWMWater presented the Panel with an overview of GWMWater's water supply sources across the region, and how water is allocated and used.

## 11.2 Questions to the Panel

In the context of the information presented by GWMWater to the Panel, the Panel was asked to consider the following question:

- *Are you satisfied that GWMWater does not need to make any investments to secure supply?*

## 11.3 Issues raised by the Panel

The Panel raised a number of questions about the strategy, in particular several members of the Panel wanted reassurance that GWMWater's security of supply was sufficient to support growth in the region, particularly if State Governments pursue policies of encouraging people to move to regional Victoria.

The Panel also discussed the role of environmental water and agreed that it is important for GWMWater to maintain a supply of water in regional lakes for the well-being of local communities, and to provide a recreation facility in the summer months.

Additionally, the Panel discussed water efficiency, and suggested that customers should be encouraged to be water efficient and GWMWater should be doing more to encourage customers to save water, both for their own benefit and to contribute to the security of the region's water supply.

Overall, the Panel was satisfied that GWMWater's current strategy to secure supply was reasonable.

## 11.4 The Panel's perspective

The Panel supported GWMWater's approach but queried whether the current strategy accounted sufficiently for future growth in the region if future governments change their policies about regional growth.

# 12 Topic 10: Guaranteed Service Levels

## 12.1 GWMWater's proposal

In Meeting 4, GWMWater presented the Panel with a more detailed overview of its service levels, following an initial discussion in Meeting 2 (See Section 7). This presentation specifically focused on GWMWater's Guaranteed Service Levels (GSLs).

## 12.2 Questions to the Panel

In the context of the background information presented by GWMWater to the Panel, the Panel was asked to consider the following questions:

- *Does the Deliberative Panel have a view on GSLs?*
    - *Urban Service Standards?*
    - *Rural Service Standards?*

## 12.3 Issues raised by the Panel

The Panel raised a number of about GWMWater's GSLs, in particular:

- Whether they take into account impacts on customers when their water supply is maintained but their water quality is affected, this included situations when the drinking water supply is compromised and can GWMWater can only supply a non-drinking water supply (e.g. in the case of an algal bloom); or if Horsham had to draw on its emergency groundwater supply, which although drinkable, is not up to the quality of the regular water supply in relation to taste, odour and hardness.
    - The Panel acknowledged that differences in taste, colour and hardness are subjective, but agreed that if a customer was usually supplied with drinking water and this was no longer available, the change in water supply standards should be reflected in lower tariffs – this was confirmed by GWMWater to be the case; however, a decline in water quality that still met drinking water standards was subjective to measure.
- A need to differentiate between such as major floods (e.g. the 2011 floods), that were beyond GWMWater's control. The Panel did not necessarily believe that customers should be compensated in this circumstance; rather it was more important that GWMWater resoled any issues as soon as possible.
- The GSLs did not stipulate a time period over which compensation was payable, querying whether longer periods of interruption warranted additional compensation payments.
- Ultimately, the Panel believed that customers' priority was to have their water supply returned to normal as soon as possible after a supply interruption occurred and they believed that if customers feel that GWMWater is prioritising works to enable normal services to resume, and was learning from past issues then this was reasonable.
    - Some members of the Panel also suggested that payment of compensation to customers could be an incentive for GWMWater to be efficient in rectifying issues to resume normal services.
- Regardless, the Panel emphasised the importance of keeping customers informed when their supply had been interrupted and this as more valuable to them than $50 compensation.

Overall, the Panel was satisfied that GWMWater's current strategy was acceptable.

## 12.4 The Panel's perspective

The Panel generally supported GWMWater's current urban and rural GSLs, but believed that the focus of GSLs should be to make GWMWater accountable, rather than compensate customers per se.

The Panel also suggests that GWMWater needs to:

- Differentiate between incidents over which GWMWater has control, and incidents, such as major floods, of which it has no control, when paying compensation to customers.

- Service standards also need to take into account reimbursement to customers when their drinking water supply is interrupted, leaving them with only a regulated non-drinking water supply.

# 13 Topic 11: Pricing and tariffs

## 13.1 GWMWater's proposal

In Meeting 3, GWMWater presented the Panel with information to help them understand the impact of different pricing and tariff ratios on customers and the GWMWater's capacity to deliver outcomes at a reasonable price.

This process continued into Meeting 4, and was accompanied by a Discussion Paper. The following is an extract from the Discussion Paper in relation to GWMWater's proposals associated with this topic:

- *Although the ESC prefers water businesses to apportion a higher proportion of costs to variable charges, GWMWater is not proposing to significantly realign its tariff structure to expose more of its revenue to variable pricing*
- *However, if there are any proposed real price changes for water services under 1%, these are proposed to be applied to increase the proportion of variable charges.*

The Panel was also advised that:

- *There are no new implications for customers if this pricing structure is maintained.*
- *The fixed and variable proportions of the bill will remain approximately:*
    - *68% fixed and 32% variable for towns receiving both water and waste water services, or*
    - *50% fixed and 50% variable for towns receiving a water supply only*

## 13.2 Questions to the Panel

In the context of the above information, the Discussion Paper included the following question:

- *Does the deliberative panel support GWMWater's current ratio of fixed to variable charges for customers?*

In the additional background information presented by GWMWater to the Panel, the Panel was asked to consider the following questions:

- *Does the Deliberative Panel have a view on the current tariff pricing structure and in particular fixed versus variable tariffs?*
- *Does the Deliberative Panel have a view on the proposal to apply any price decreases to fixed urban and rural water charges?*

## 13.3 Issues raised by the Panel

The Panel spent some time discussing the following aspects of pricing and tariffs over two meetings:

- The ratio of fixed to variable charges, and sought clarification on the proportions of customers who are concession card holders.
- The proportion of tenants who default on their water bills, and the impact of increasing the proportion of revenue that comes from fixed charges.
- The value of decreasing fixed charges, if the cost of delivering water is comparable to other water authorities – the Panel was interesting in knowing the cost per kilometre to deliver water
- An increase in proportion of customers who are aged and also carers of aged people, who are on pensions, in the region is likely to increase in the future and this will impact of this on customers' the affordability of water for these low-income customers.

Consequently, GWMWater offered to present some pricing scenarios to the Panel in the following meeting (Meeting 4), to further help explain GWMWater's options in relation to the balance between fixed and variable tariffs. The panel further briefly discussed pricing and tariffs and the implications of GWMWater changing its pricing structure to decrease the share of fixed tariffs and increase the share of variable tariffs, in line with ESC expectations that water authorities should share a greater proportion of their financials risk than customers.

## 13.4 The Panel's perspective

The Panel supports GWMWater's maintenance of its current pricing structure.

If any changes to the pricing structure are made to increase the variable component of the tariff; the Panel supports incremental changes.

# 14 Communication of Panel's deliberations

The Deliberative Panel reported on three formal occasions:

### 1. Interim report to GWM Board

The Chair presented an interim report, in the form of a letter to the Board's Chair, to the GWMWater Board after Meeting 2 (see Appendix G1). The purpose of this report was to provide GWMWater's Board with details of the panel's progress to date, and planned activities.

### 2. Presentation to GWMWater's Customer and Stakeholder Workshop

The Chair, with the assistance of three panel members presented the outcomes of the Panel's deliberations to GWMWater's Customer and Stakeholder Workshop held on Friday 1 September 2017, in association with GWMWater staff. From the perspectives of GWMWater and the Panel, the purpose of this forum was as follows:

- To explain the role of the Deliberative Panel and its activities over the previous three months, with the Panel's chair also emphasising the value of the Panel from its perspective; in particular its success in terms of:
    - The Panel was widely representative of customers across the region
    - It provided customers who normally do not have a say about GWMWater's services to be involved
    - The independence of the Panel
- For GWMWater to communicate an overview of the proposals that it asked the Deliberative Panel to consider
- For the Deliberative Panel to present a summary of its deliberations and perspectives on GWMWater's proposals
- For GWMWater to obtain wider customer and stakeholder feedback on GWMWater's proposals for its pricing submission, taking into account the Deliberative Panel's perspective

The agenda, presentation and outcomes of this Forum are the subject of separate reporting by GWMWater. However, based on observations and feedback with those present the following are noted:

- Those present at the community forum generally appeared to have views that aligned with those of the Deliberative Panel
- Members of the forum provided additional input in relation to GWMWater's proposals beyond the suggestions made by the Panel

### 3. Formalised written report

The final deliverable for the Panel was the presentation of this report to GWMWater's Board on Wednesday 20 September 2017.

# 15 Evaluation and learnings

## 15.1 Recruitment

- Although an open EoI process, promoted through a range of social and traditional media, is open and transparent, it did not prove to be an effective method of establishing the Deliberative Panel because if failed to attract sufficient applicants, most of those individuals who did apply were unsuitable
    - Greater success is achieved when Panel members are recruited from a variety of sources
    - Targeted strategies maximise the chance of forming a Panel that represents the diversity of customer groups
- It is worthwhile inviting more individuals to join the panel than required, as attrition and absence from meetings are inevitable
    - Recruiting more individuals than required from the outset minimises disruption to the group that could result from top-up recruitment processes and reduces the overall administrative and recruitment costs and burden
- Engaging an independent person, with considerable knowledge of GWMWater's business, to assist in the recruitment removed any potential for bias, which may have occurred if GWMWater recruited customers direct, and also reduced the burden on GWMWater
- The Panel agreed that it was important that the Chair had some knowledge of GWMWater because
    - Panel members immediately respected the Chair
    - It improved the efficient and effectiveness in conveying the expectations of GWMWater
    - Communication between the Panel and GWMWater was efficient as the Chair knew who to approach to answer the Panel's questions

## 15.2 Meeting logistics

- It is worthwhile noting that meeting dates were set well in advance, avoiding school holidays and choosing a day of the week and dates that suited the majority of Panel members, as this maximises attendance at meetings
- It is important to start the meeting at a time of day that accommodates individuals who have to travel long distances to attend (notwithstanding that GWMWater would have met reasonable accommodation costs)
    - Hence a 10:00 am start worked well for all Panel members, especially those who were travelling up to two hours to travel on the morning of the meeting
- A central location for all Panel members is important to share the burden of travel
- Panel members agreed that there was considerable value in holding the meetings at GWMWater's head office in Horsham
    - The location was central for most members
    - The board room was suitable for meetings
    - GWM staff were readily accessible
- Panel members appreciated receiving an agenda and relevant documentation several days ahead of each meeting, allowing them time to prepare for the meeting

## 15.3 Deliberation topics and information provided to the Panel

- An independent review of discussion papers is invaluable for ensuring that the proposals are presented clearly and efficiently and are customer oriented

  - Several GWMWater staff commented that the review helped them focus on the aspects of the proposals that that would have the most impact on customers and to think about how they communicated to customers
  - Members of the Panel commented that the discussion papers were clear and easy to read
- It is important to supplemented discussion papers with presentations from relevant staff who can elaborate on proposals.
  - This improves Panel members' understanding of the issues, allows them to ask questions and be better informed in their deliberations

## 15.4 Meetings

- Panel members felt that GWMWater respected them and was supportive, providing a suitable venue and refreshments
- GWMWater staff were available to present information and respond to Panel members' questions
- Meetings ran to schedule, with sufficient time allowed for breaks
- Administrative support was invaluable
- With Panel members' permission meetings were audio recorded to provide a true and accurate record of discussions and facilitate report writing

## 15.5 Panel members' feedback

Following Meeting 4, the Chair emailed the Panel the following questions to contribute to an evaluation of the Deliberative Panel process:

- What did you know when you were approached to sit on the panel and what encouraged you to say yes?
- Has what you have done been significantly different to what you thought you would do Is there any other information you feel you could have been given to help you make your decisions?
- Do you think the process has been worthwhile for you, the Board and GWMWater?
- What did you gain from the panel process
- Would you do it again?
- Any other comments?

At the time of preparing this report, feedback had been provided from nine Panel members. Verbatim comments (de-identified) are listed in Appendix J. A summary of key points from this written feedback and other comments made by Panel members throughout the process is presented below:

- Reasons for joining the Panel
  - A desire to contribute
  - An interest in water issues (job related, in community volunteer capacity)
  - Feeling comfortable that GWMWater was seeking to appoint a panel of typical customers, rather than a panel of experts
- Expectations
  - Understood role was to review aspects of GWMWater's service
  - Panel worked as expected but pleasantly surprised by how well the Panel worked together
  - Chairman performed their role very well – respectful, establishing guidelines, allowing opportunities for people comment, and keeping to time
  - Pre-reading - right amount and clear
  - Easy to ask questions – non-threatening

- Value of the process
    - Worthwhile
    - Enjoyable
    - Conducted respectfully and professionally
- Personal gain/benefit from involvement
    - More knowledge and understanding about GWMWater
    - Meeting people
    - Having the opportunity to contribute

## 15.6 Feedback from the Chair

Barry Hall emailed Helen Bartley his feedback about the Deliberative Panel processes, the contents of which are included in Appendix K. The key points are:

- Information was presented to the Panel clearly and succinctly via the Discussion Papers and presentations
- The Panel functioned independently and was "under no pressure achieve any particular outcome"
- Holding the meetings in the GWMWater board room was strategically important both in terms of information exchange and helping Panel members to feel "as though their attendance and input was valued"
- The panel was a committed group who worked well together
- GWMWater staff were very well regarded in the way they presented information and interacted with the Panel, and Panel members felt their questions and input were valued by GWMWater staff
- As Chair, having some water industry background and an understanding of GWMWater was invaluable, and did not compromise the independence of the process; rather it facilitated efficient communication and clarification of issues for the Panel
- Overall the Chair would recommend a deliberative panel approach in the future

In summary, the Chair's observations and feedback are consistent with the feedback received from individual panel members.

# References

Bartley Consulting, 2017, *Water Quality Upgrade – Customer Survey 2017 Overview*, (GWM Drinking Water Survey Overview.pdf)

Essential Services Commission 2016, *Water Pricing Framework and Approach: Implementing PREMO from 2018*, October

GWMWater, 2017, *Charter* [for the] *Deliberative Panel 2018-23 Pricing Review,* approved 7 February

GWMWater, n.d., *Discussion Paper*, 'Carbon Emissions / Environment' (R2017-12600 Deliberative Panel Discussion Paper - Carbon Emissions Environment.doc)

GWMWater, n.d., *Discussion Paper*, 'Infrastructure Program / Asset Management' (Discussion Paper - Infrastructure Program Asset Life Cycle Management.doc)

GWMWater, n.d., *Discussion Paper*, 'Productivity and Efficiency' (Discussion Paper - Productivity and Efficiency.doc)

GWMWater, n.d., *Discussion Paper*, 'Recreation Contribution Charge' (R2017-12607 Deliberative Panel Discussion Paper - Recreation Contribution.doc)

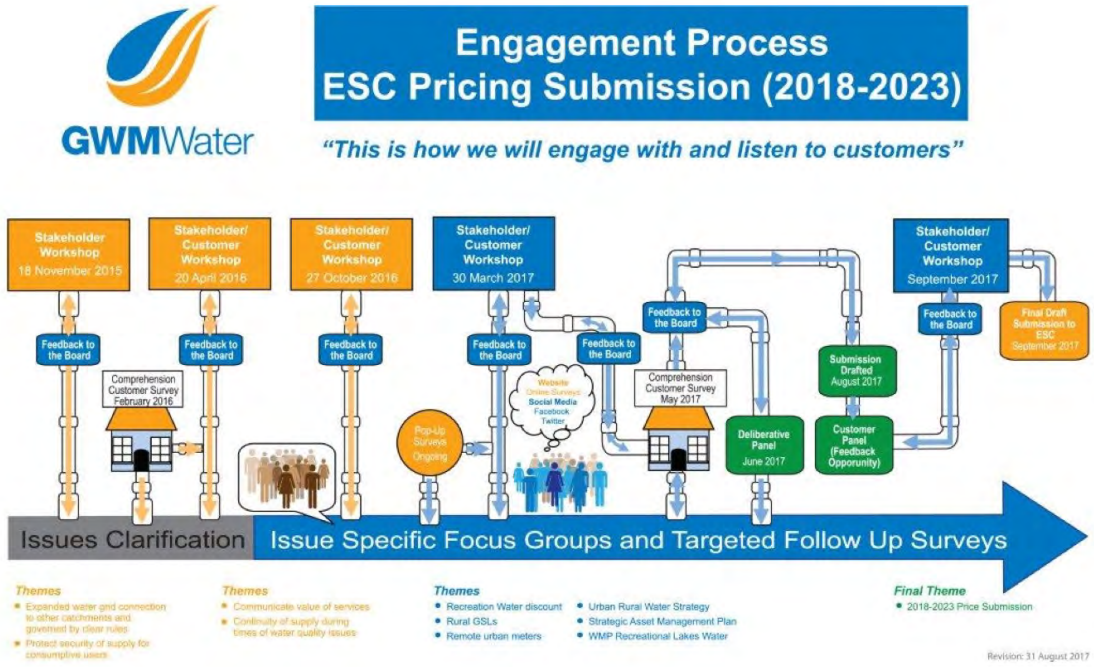
GWMWater, n.d., *Discussion Paper*, 'Rural Pipeline Tariff' (R2017-13744 Deliberative Panel Discussion Paper - Pricing and Tariffs - Rural Pipeline.doc)

GWMWater, n.d., *Discussion Paper*, 'Rural Service Standards' (R2017-12603 Deliberative Panel Discussion Paper - Service Standards – Rural.doc)

GWMWater, n.d., *Discussion Paper*, 'Urban Service Standards' (R2017-12604 Deliberative Panel Discussion Paper - Service Standards – Urban.doc)

GWMWater, n.d., *Discussion Paper*, 'Water Quality Upgrades and New Town Sewer Schemes' (Discussion Paper - Water Quality Upgrades and New Town Sewer Schemes.doc)

# Appendix A: GWMWater engagement model



# Appendix B: Deliberative Panel Charter

GWMWater Management System

## Charter
## Deliberative Panel
## 2018-23 Pricing Review

TRIM REF: CMS/
Date Approved: 07/02/17
Review Date:

***1. PURPOSE***

Like all water businesses, GWMWater's approach to developing its submission for the 2018-2023 Pricing Review is required to demonstrate, in accordance with the Essential Services Commission (ESC) "Performance, Risk, Engagement, Management, Outcomes" (PREMO) model, that it has engaged appropriately with customers and the community on matters relating to service and price.

To supplement its current engagement framework, GWMWater has appointed a deliberative panel to provide opinion, advice and recommendations on its pricing proposals for its 2018-2023 Price Submission.

The Deliberative Panel is an independent panel of customers that will report to the Board of GWMWater and as such will make recommendations to the Board within the scope of this Charter.

The activities and effectiveness of the Deliberative Panel will be assessed regularly by the Board at each of its monthly meetings to ensure that it continues to fulfill the requirements and expectations of this Charter and represent the views of a typical customer when deliberating on pricing proposals put to it by GWMWater.

Administrative support will be provided by GWMWater as required.

If and as required, the Deliberative Panel may request additional information or clarification from GWMWater to assist it in its deliberations. The Deliberative Panel can also if it feels the need seek clarification or interpretation from the ESC by requesting that GWMWater seek such clarification or interpretation on behalf of the Deliberative Panel.

The Deliberative Panel will complement the existing engagement and consultative processes which have been developed and implemented over the past two years for the purpose of reflecting Customer needs and expectations in GWMWater's 2018-2023 Price Submission.

These processes include;

- Biannual Customer and Stakeholder Workshops.
- Customer Surveys.
- Issue Specific Focus Groups.
- Interactive feedback opportunities on the GWMWater Website.
- Customer feedback forms

The Deliberative Panel will have the opportunity to examine and test the observations and directions that GWMWater has taken from these engagement and consultative processes to ensure that they reflect customers' needs and expectations.

## 2. *COMPOSITION*

The Deliberative Panel will be chaired by an independent person nominated and appointed by the Board for a 12-month period.

The independent chairperson will have no current association with GWMWater other than they may be a customer and they will not have been a Director or an employee of GWMWater for at least the past three years.

The Deliberative Panel will be comprised of up to fifteen people who represent the broad demographic segments of GWMWater's customer base and will be selected following an Expression of Interest process.

Selection of individuals to make up the Deliberative Panel will be made by the Chairperson in consultation with the Chairperson of GWMWater, with the aim of representing the following customer segments, but not limited to;

- Urban residential **property owners** from towns where a fully treated water supply is available and a sewerage system operates.
- Urban residential **property owners** from towns where only a regulated water supply is available.
- Urban residential **tenants** from towns where a fully treated water supply is available and a sewerage system operates.
- Urban residential **tenants** from towns where only a regulated water supply is available.
- Urban **non-residential customers** from towns where a fully treated water supply is available and a sewerage system operates.
- Urban **non-residential customers** where a regulated water supply only is available.
- **Indigenous** Community Representative.
- Broad Acre **Farmers** who are customers of GWMWater.
- **Intensive Agricultural** operators who are customers of GWMWater.
- **Mining** or extraction customers.
- **Manufacturing** customers.
- **Sporting Clubs** which receive a supply of water from GWMWater.
- **Recreational Water** operators (Lake Committees of Management) who receive a water supply from GWMWater.
- **Welfare** or support sector agencies to represent the views of customers who may experience financial hardship.

## 3. *ROLES AND RESPONSIBILITIES*

The Deliberative Panel will receive advice and information from GWMWater in either written reports or presentations to inform them of the elements of GWMWater's Pricing Proposal 2018-2023 so that they can challenge, question or support the elements from the perspective of the broad customer segment which they represent.

The Deliberative Panel will provide advice and recommendations to the Board of GWMWater to assist it in its deliberations when finalising GWMWater's Price Submission 2018-2023 to the ESC.

Recommendations from the Deliberative Panel to the Board of GWMWater, whilst not binding, will be considered by the Board and when not accepted either in part or in full, an explanation and justification for the Board's position will be provided to the Deliberative Panel for further consideration prior to finalisation of the Price Submission to the ESC.

Any recommendations from the Deliberative Panel not supported by the Board will be noted in the final Price Submission.

### *4. MEETINGS*

The Deliberative Panel will meet as required in the 12 month period leading up to the submission and final acceptance of GWMWater's Price Submission.

It is not anticipated that the Deliberative Panel would be required to meet on more than five occasions in this period.

The Chairperson and Panel Members will be remunerated in accordance with agreed Government Guidelines for casual Committee Appointments.

### *5. REPORTING*

The Deliberative Panel will report to the Board as required on its activities, observations, advice and recommendations, and immediately should it become aware of any major matter affecting GWMWater or the Price Submission process.

### *6. MEDIA COMMENT*

Responses to requests from the media in respect to the proceedings of the Deliberate Panel will be handled by the Chairperson in consultation with the Managing Director and/or the Chairperson of GWMWater.

# Appendix C: Schedule of communications calling for expressions of interest to join GWMWater's Deliberative Panel

- Quarter page infotorial – week commencing 10 April 2017
    - Buloke Times– Tuesday 11 April 2017
    - Dimboola Banner – Wednesday 12 April 2017
    - Hopetoun Courier– Thursday 6 April 2017
    - Nhill Free Press / Kaniva Times – Wednesday 12 April 2017
    - North Central News – Wednesday 12 April 2017
    - North West Express – Thursday 13 April 2017
    - Rainbow Argus – Thursday 6 April 2017
    - The Weekly Advertiser – 29 March 2017
    - Times Ensign – Thursday 13 April 2017
    - Warracknabeal Herald – Friday 7 April 2017
    - West Wimmera Advocate – Wednesday 12 April 2017
    - Wimmera Mail Times – 31 March 2017
- Three-column classified advertisements appeared as per below:
    - The Weekly Advertiser – Wednesday 5 April 2017
    - Wimmera Mail Times – Monday 3 April 2017
- 30 second radio advertisements – 7 to 12 April 2017[23]
    - Mixx FM - 7 during the morning program and 14 during the evening program over the seven-day period
    - Mixx Horsham – 14 during the breakfast program and 7 during the morning program over the seven-day period
- Telstra Shop Horsham, digital billboard – Wednesday 22 March 2017
- GWMWater's website – news announcement on Wednesday 29 March 2017, updated with a media release posted on 31 March 2017
- Wetnet – GWMWater staff information announcement – Thursday 6 April 2017
- Media release issued on 31 March 2017
- GWMWater's social media with links to the EoI on GWMWater's website, including:
    - Facebook posts – Tuesday 29 March and Friday 7 April 2017
    - Twitter feed advertisement – Friday 7 April 2017

[23] ACE Radio Broadcasters Pty Ltd, 2017 GWMWater Advertising "Contract Confirmation", 12 April

## Appendix D: Expression of Interest form

expression of interest

GWMWater

11 McLachlan Street
(PO Box 481)
Horsham Victoria 3402

**Tel:** 1300 659 961
**Fax:** 03 5381 9881
**Email:** info@gwmwater.org.au
**Website:** www.gwmwater.org.au

*Certified to best practice standards*
*ISO 9001 / 14001 and AS/NZS 4801*

# Deliberative Panel

## Community Consultation Committee

**GWMWater is embarking on an intense period of customer and stakeholder engagement as part of its five year pricing submission to the Essential Services Commission. This input will help influence and shape the future of the corporation.**

We're seeking expressions of interest from customers to join a Deliberative Panel to provide opinion, advice and recommendations on our pricing proposals and matters of significance for our 2018-2023 Water Price Review Submission.

The Deliberative Panel will act as an independent panel representing our broader customers and will report to GWMWater's Board.

The Panel's purpose is to help inform us of community preferences regarding service provision and a future pricing model. It will be a significant voice and fulfil an important role in driving our Water Price Review consultation and engagement program.

### How can you have a say?

We're inviting applications from community members, landholders, business owners and other interested persons to participate in our Deliberative Panel. If you would like to express your interest, please provide your details below and include any other supporting documentation if necessary.

**Name:** _____

**Address:** _____

**Telephone:** _____ **Mobile:** _____

**Email:** _____

**Preferred method of contact:** ☐ Mobile ☐ Telephone ☐ Email

**What is your interest in participating in our Deliberative Panel?**

**I am a GWMWater customer as follows:**
*(Please tick all that applies to you)*

☐ Urban **residential property owner** from towns with:
- ☐ Fully treated (drinkable) water supply
- ☐ Regulated (non-drinking) water supply
- ☐ Sewerage services available

☐ Urban **residential tenant** from towns with:
- ☐ Fully treated (drinkable) water supply
- ☐ Regulated (non-drinking) water supply
- ☐ Sewerage services available

☐ Urban **non-residential customers** (e.g. business) from towns with:
- ☐ Fully treated (drinkable) water supply
- ☐ Regulated (non-drinking) water supply
- ☐ Sewerage services available

☐ Broad Acre Farmer
☐ Intensive Agricultural operator
☐ Mining or extraction customer
☐ Manufacturing customer
☐ Indigenous Community Representative
☐ Sporting club representative (receiving a water supply from GWMWater)
☐ Recreational water operator i.e. Lake Committees of Management (receiving a water supply from GWMWater)
☐ Welfare or support sector agencies to represent the views of customers who may experience financial hardship

☐ Environment: *Please specify:*

_____

_____

☐ Other: *Please specify:*

_____

_____

**Please provide details of how you can contribute to the Deliberative Panel:**

Enquiries may be directed to Andrew Rose, Executive Manager Stakeholders and Governance during business hours on 1300 659 961.

**Please return your Expression of Interest by Thursday 13 April 2017 by:**

- **Email: info@gwmwater.org.au or**
- **Post: GWMWater, PO Box 481, Horsham 3402, Victoria, Australia.**

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# Appendix E: Letters to Deliberative Panel members

## Appendix E1: Letter to appointed Panel members

**Successful EoI**

Dear ,

**GWMWater Deliberative Panel**

Thank you very much for your interest in being part of GWMWater's Deliberative Panel to help us prepare our submission to the Essential Services Commission pricing review for 2018-2023.

I am pleased to inform you that your Expression of Interest has been successful and I would like now to formally offer you a position on GWMWater's Deliberative Panel.

As previously mentioned, the Deliberative Panel's role is to provide opinion, advice and recommendations to GWMWater's Board on our pricing proposals and other matters to be included in our 2018-2023 Water Price Review Submission to the Essential Services Commission (ESC).

We had an excellent response, enabling us to choose a broad based group reflective of our customers and importantly, are well placed to provide opinions as a fair minded person.

I have enclosed a copy of the Terms of Reference for the Deliberative Panel and a copy of a diagram which shows how the Panel fits into GWMWater's model of engagement with customers before we lodge our submission with the ESC.

I am also pleased to advise that Barry Hall from Edenhope has been appointed to Chair the Panel. We are currently arranging some tentative dates for the Panel to meet and will shortly email you these dates to plan your diary over the coming months.

We recognised that some proposed dates may not suit all 15 Panel members, but we are aiming to ensure that as many members as possible are able to attend each meeting. The first meeting will be held at our office in Horsham, thereafter the Panel can elect to continue to meet at Horsham or may nominate an alternative location that better suits members.

We do not expect you to be out of pocket and at our first meeting we will provide claim forms so we can reimburse you for any reasonable out of pocket expenses including: travel at the current Australian Taxation Office rate of 60 cents per kilometre, plus meals and accommodation if they are ever required.

Also as a further token of our appreciation, we are offering each member a $100 gift card for each session that they attend.

We will be in touch again in the near future to advise of the proposed date for the first meeting of the Deliberative Panel. Should you have any questions or require any clarification please feel free to contact either myself or Sharon Maloney on 1300 659 961.

## Appendix E2: Letter to unsuccessful applicants

**Unsuccessful EoI**

Dear ,

**GWMWater Deliberative Panel**

Thank you for your interest in joining GWMWater's Deliberative Panel to help with our submission to the Essential Services Commission (ESC) pricing review for 2018-2023.

We had an excellent response enabling us to choose a broad group which we feel is representative of our customers. In particular, we wanted to involve individuals with little or no recent history with GWMWater on other committees, or activities. We also wanted to achieve a good spread of customers across our region with a range of interests and experiences.

Unfortunately, at this stage your application has not been successful. However, if for any reason we need to call on additional customers from your area and with your interests we trust that we could call on you.

The final draft of our submission the ESC will be presented by the Deliberative Panel to a Special Customer and Stakeholder Workshop in early September, and we will invite you to attend.

Once again thank you for your interest.

Regards
Andrew

# Appendix F: Background information provided in Meeting 1

- Stakeholder Workshop 17 October 2014 supporting documentation containing:
    - GWMWater Customer Committee Workshop Friday 17 October 2014 - Overview
    - Stakeholder Workshop Consultation and Engagement presentation Friday 17 October 2014
    - GWMWater's new era for communications model (undated)
    - Recreation Levy proposal (undated)
    - How can new enterprises requiring reliable water be attracted to this region? (undated)
    - How realistic is the expectation of providing drinking water to every town? (undated)
- Stakeholder Workshop May 2015 supporting documentation
    - Public Board Meeting 6 May 2015 Agenda
    - Growth Water Marketing Strategy presentation
    - Stakeholder Workshop outcomes and feedback (Business Papers OM11:14/15 – 10 June 2015)
- Stakeholder Workshop November 2015
    - Public Workshop Agenda 18 November 2015
    - Stakeholder workshop November 2015 presentation
    - Feedback from stakeholder workshop feedback (Business Papers OM06:15/16 – 10 December 2015)
    - Stakeholder Workshop Notes – November 18, 2015
    - GWMWater's current water storage level report
- Stakeholder Workshop October 2016
    - Stakeholder Workshop Agenda, 27 October 2016
    - Stakeholder Workshop 27 October 2016 presentation
    - Outcomes of the Stakeholder Workshop (Business Papers OM5:16/17 – 16 November 2016)
    - Stakeholder Workshop, Thursday 27 October 2016, Summary of Workshop Outcomes
- Stakeholder Workshop March 2017
    - Stakeholder Workshop Agenda, 30 March 2017
    - Stakeholder Workshop 30 March 2017 presentation
    - Summary of Customer and Stakeholder Workshop – March 2017 (Business Papers OM9:16/17 – 19 April 2017)
    - Stakeholder Workshop, Thursday 20 March 2017 Summary of Workshop discussions
- Stakeholder Workshop 20 April 2017
    - Public Board Meeting and Stakeholder Workshop Agenda 20 April 2017
    - Stakeholder Workshop April 2017 presentation
    - Outcomes of the Stakeholder Workshop (Business Papers OM10:15/16 – 18 May 2017)
    - Public Board Meeting and Stakeholder Workshop 20 April 2017, Themes from Workshop Discussions

# Appendix G: Deliberative Panel meeting agenda

## Appendix G1: Deliberative Panel Agenda – 16 June 2017

agenda

GWMWater

11 McLachlan Street
(PO Box 481)
Horsham Victoria 3402

**Tel:** 1300 659 961
**Fax:** 03 5381 9881
**Email:** info@gwmwater.org.au
**Website:** www.gwmwater.org.au

*Certified to best practice standards ISO 9001 / 14001 and AS/NZS 4801*

# Deliberative Panel

**Meeting to be held on Friday, 16 June 2017**
**at the GWMWater Office, 11 McLachlan Street, Horsham**
**commencing at 10.00 am**

## AGENDA

1. **Deliberative Panel (In Camera session)**
   Meetings, Support, meeting rules.

2. **Introduction**
   - **2.1 Water Price Review Process, PREMO (Mark/Sally)**
   - **2.2 Deliberative Panel (ToR) (Andrew)**

3. **Overview of GWMWater Services (Sally)**

4. **Proposed Process (Andrew/Sally)**
   - **4.1. Discussion Papers**
   - **4.2. Feedback from Panel**
   - **4.3. GWMWater Board**

5. **Presentation from Helen Bartley**
   **Customer Survey and Pop-up Surveys**

6. **Stakeholder Workshops (Andrew/Sally)**
   **Issues and Feedback from previous workshops (hand-outs for background reading only)**

7. **Next Steps**

## Appendix G2 Deliberative Panel Agenda – 21 July 2017

agenda

# GWMWater Deliberative Panel

GWMWater

11 McLachlan Street
(PO Box 481)
Horsham Victoria 3402

**Tel:** 1300 659 961
**Fax:** 03 5381 9881
**Email:** info@gwmwater.org.au
**Website:** www.gwmwater.org.au

*Certified to best practice standards ISO 9001 / 14001 and AS/NZS 4801*

**Meeting to be held on Friday, 21 July2017**
**at the GWMWater Office, 11 McLachlan Street, Horsham**
**commencing at 10.00 am**

## AGENDA

1. **Apologies**
   - Kevin Gebert
   - Corinne Heintze
   - Fran Lynch

2. **Actions from Previous Meeting – Documents sent to members**
   - Copy of the operational area map
   - Current storage level report
   - Copy of terms of reference
   - Copy of slide show presentation
   - Information on PREMO

3. **Presentations from GWMWater**
   3.1 Recreation Contribution – Sally Marshall
   3.2 Carbon Pledge – Robert Atkin
   3.3 Service Standards Urban – Christopher Wright
   3.4 Service Standards Rural – Steve Briggs
   3.5 Rural Pipeline Tariff – Steve Briggs

4. **Discussion on Outcomes**

5. **Summary**

6. **Confirm Next Meeting Date**

7. **Close**

## Appendix G3 Deliberative Panel Agenda – 11 August 2017

# GWMWater Deliberative Panel

**Meeting to be held on Friday, 11 August 2017**
**at the GWMWater Office, 11 McLachlan Street, Horsham**
**commencing at 10.00 am**

## AGENDA

1. **Apologies**
   - Kevin Gebert
   - Corinne Heintze
   - Sandi Lewis

2. **Actions from Previous Meeting – documents sent to members**
   - Storage level report

3. **Drinking Water Customer Survey 2017 – Helen Bartley**

4. **Presentations from GWMWater**
   4.1 Water Quality and Wastewater Upgrades
   4.2 Infrastructure Program / Asset Management
   4.3 Productivity
   4.4 Pricing and Tariffs

5. **Summary**

6. **Next Meeting**
   6.1 Security of Supply
   6.2 Discussion on Outcomes – ESC PREMO Model
   6.3 Draft Deliberative Panel Report

7. **Confirm Next Meeting Date**

8. **Close**

## Appendix G4: Deliberative Panel Agenda – 25 August 2017

# GWMWater Deliberative Panel

**Meeting to be held on Friday, 25 August 2017**
**at the GWMWater Office, 11 McLachlan Street, Horsham**
**commencing at 10.00 am**

## AGENDA

1. **Apologies**
   - Graeme Trickey
   - Kevin Gebert
   - Fran Lynch

2. **Actions from Previous Meeting – documents sent to members**
   - Invitation to Customer and Stakeholder Workshop
   - 2 X Discussion Papers (Pricing & Tariffs, Security of Supply)
   - Report to Board from Barry Hall

3. **Presentations from GWMWater**
   **3.1** Security of Supply
   **3.2** Pricing and Tariffs
   **3.3** Guaranteed Service Levels
   **3.4** Price Submission Summary

4. **Progress on Draft Report of Deliberative Panel Findings (Barry Hall)**

5. **Summary**

6. **Next Meeting**

7. **Confirm dates, attendance and availability**
   **7.1 Customer/Stakeholder Workshop 1 September 2017**
   **7.2 GWMWater Board Meeting 20 September 2017**

8. **Close**

# Appendix H: Information provided to Deliberative Panel

| Meeting date | Topics discussed | Papers | Presentation |
|---|---|---|---|
| Meeting 1<br>16 June 2017 | | No discussion papers issued | • Deliberative Panel Presentation - 16 June 2017 *(Deliberative Panel Presentation – 21 July 2017.ppt)* |
| Meeting 2<br>21 July 2017 | • Topic 1: Recreation contribution charge<br>• Topic 2: Carbon emissions / environment<br>• Topic 3: Rural service standards<br>• Topic 4: Urban service standards<br>• Topic 5: Rural pipeline tariff | • Recreation contribution *(R2017-12607 Deliberative Panel Discussion Paper - Recreation Contribution.doc*<br>• Carbon emissions / environment *(R2017-12600 Deliberative Panel Discussion Paper - Carbon Emissions Environment.doc)*<br>Rural service standards *(R2017-12603 Deliberative Panel Discussion Paper - Service Standards – Rural.doc)*<br>• Urban service standards *(R2017-12604 Deliberative Panel Discussion Paper - Service Standards – Urban.doc)*<br>• Rural pipeline tariff *(R2017-13744 Deliberative Panel Discussion Paper - Pricing and Tariffs - Rural Pipeline.doc)* | • Deliberative Panel Presentation – 21 July 2017 *(Deliberative Panel Presentation – 21 July 2017.ppt)* |
| Meeting 3<br>11 August 2017 | • Topic 6: Water quality and new town sewer schemes<br>• Topic 7: Infrastructure program/asset management<br>• Topic 8: Productivity and efficiency | • Water quality and new town sewer schemes *(Discussion Paper - Water Quality Upgrades and New Town Sewer Schemes.doc)*<br>• Infrastructure program/asset management *(Discussion Paper - Infrastructure Program Asset Life Cycle Management.doc)*<br>• Productivity and efficiency *(Discussion Paper - Productivity and Efficiency.doc)*<br>• Bartley Consulting, Water Quality Upgrade – Customer Survey 2017 Overview, (*GWM Drinking Water Survey Overview.pdf*) | Deliberative Panel Presentation – 11 August *(Deliberative Panel Presentation – 11 August 2017.ppt)* |
| Meeting 4<br>25 August 2017 | Topic 9: Security of supply<br>Topic 10: Guaranteed Service Levels (expansion of Topics 4 and 5)<br>Topic 11: Pricing and tariffs | • Security of supply *(Deliberative Panel Discussion Paper – Security of Supply.doc)*<br>• Pricing and Tariffs *(Deliberative Panel Discussion Paper – Pricing and Tariffs.doc)* | Deliberative Panel Presentation – 25 August 2017 *(Deliberative Panel Presentation – 25 August 2017.ppt)* |

# Appendix I: Progress report to GWMWater Board

Undated letter to GWMWater Chairman

**Mr Peter Vogel**
**Chairman**
**GWMWater**

**Dear Peter,**

**As stipulated in the Terms of Reference for GWMWater's Deliberative Panel I am writing to give you and the GWMWater Board a brief overview of the progress of the panel.**

**The method we have adopted to overview the pricing plan is working well The Panel Members are coping with the concepts being put to them by management, and my observation is that the Papers are hitting the mark very well, and they are being well supported with presentations that are understandable and coherent.**

**At the conclusion of the Second Meeting the panel members, were rightfully happy with their contribution and were understanding their roles very well. I have continued to emphasise to them the independence of the panel and that if they feel they have other issues they are free to bring them to the meeting and that we will try and develop papers on them.**

**The panel members have been providing good feedback and have been asking insightful and probing questions of the presenters, which I believe will help to make a valuable report for the Board to consider once complete. If they have needed more information to make a decision they have indicated that clearly and I have asked staff for further information.**

**As you are probably aware, the Panel decided that it would like Helen Bartley to assist with the writing of the report and so I have invited her to sit in on our meetings and observe and take notes.**

**Below is a Schedule that the Panel has agreed to work to;**

**Meeting 1 – 21 June 2017 – Deliberative Panel Introductory meeting / background**

**Meeting 2 – 21 July 2017 – Deliberative Panel Discussion Paper Topics x 5**
1. **Recreation Contribution**
2. **Carbon Pledge**
3. **Service Standards Rural**
4. **Service Standards Urban**
5. **Rural Pipeline Tariff**

**Meeting 3 – 11 August 2017 – Deliberative Panel Discussion Paper Topics x 5**
1. **Water Quality and Waste Water Upgrades**
2. **Infrastructure Program / Asset Management**
3. **Productivity**

4. Pricing and Tariffs
5. Overall Price Submission Proposal Summary

Meeting 4 – 25 August 2017 – Final Deliberative Panel Meeting
1. Draft Deliberative Panel Report
2. Stakeholder Workshop preparation

Meeting 5 – 1 September 2017 – GWMWater Stakeholder and Customer Workshop

By the time that Board meets on 16 August the Deliberative Panel will have met on three separate occasions, and will have received presentations from GWMWater on nine or ten separate proposals which are being developed as part of GWMWater's pricing submission.

I have asked management to attach to this letter the following documents;
- the Agenda's from the first two meetings
- copies of the discussion papers presented so far
- copies of the slide show presented at each of the first two meetings.

I look forward to continuing with this process of engagement as the Deliberative Panel gets deeper into the range of issues that GWMWater is presenting to us and I am sure that you will find that the Panel's final report will be a most valuable planning tool as you move forward.

Regards

Barry Hall
Chairperson
GWMWater Deliberative Panel

# Appendix J: Evaluation feedback from Deliberative Panel

Feedback was received from nine Panel members, although some Panel members only answered some questions or provided general feedback.

| Question | Verbatim response |
|---|---|
| **Knowledge**<br>What did you know when you were approached to sit on the panel and what encouraged you to say yes? | • I am a rural customer, an urban customer and also have a property in Horsham which I rent out to tenants. The situations of water supply and wastewater vary with each enterprise. As a newly elected councillor [location deleted to protect privacy], it is in my interest to volunteer to explore ideas and partake on committees for the betterment of the community.<br>• I was approached by the [name of school] to consider applying to sit on the panel in my capacity as a school representative, Health Promotion worker and the fact that I live in the GWM service area on a rural property. I didn't know much about GWM water except that they were our local water authority and that I paid the bills. I was encouraged to say 'yes' after speaking with Helen and she assured me that they wanted the panel to consist of a variety of 'average' customers of which I am one.<br>• When I was approached to join the panel, I had no detailed knowledge of GWMWater as an organisation. I live Halls Gap and am connected to drinking water and the sewerage system. As President of the [name of Golf Club] Golf Club I had ongoing contacts through our use of recycled water. This has been extended to watering the fairways and therefore my interest in joining the panel.<br>• I knew nothing about GWMWater's inner workings! I agreed to participate because of my business and welfare experience.<br>• I was interested to find out more about the GWMWater business. I was interested to see the Deliberative Panel process in action. As a GWMWater customer in many facets of the business (urban, tenant, landlord, potable reticulated, non-potable reticulated, business, groundwater) I wanted to provide my point of view to the process.<br>• Before being nominated to the GWM panel my knowledge of GWM policy was very limited, but felt on behalf of our community, I was willing to be better informed.<br>• I actually wasn't approached – I saw an article in the Wimmera Mail Times and rang GWM to see if I could get on! I didn't know much at all about water pricing but was keen to be involved in a community deliberative process.<br>• I didn't know much at all about what it was all about never put much thought into it so I guess that was one of the main reasons I chose to go on the panel when approached.<br>• I was interested in making a useful contribution to my community and the issues around water have always been at front of house for me. |
| **Expectations**<br>Has what you have done been significantly different to what you thought you would | • The round table discussion was much as I expected it to be, although I was pleasantly surprised that nobody was there to go on all about themselves. Barry did a good job setting the guidelines and saying to people who had certain issues to GWMWater, to take those issues to |

| Question | Verbatim response |
|---|---|
| do Is there any other information you feel you could have been given to help you make your decisions? | GWMWater, which hopefully has since happened. I understood our job was to review various aspects of GWMWater's services.<br>• Given that I had no real idea what to expect from the panel meetings, it was not significantly different to my expectations. I felt sufficiently informed prior to each meeting to be able to form my own opinions as well as I felt the panel worked well together to analyse each report. As with any group of 'confident' people, there are always some people who have a bit more to say than others. However, I felt very comfortable with the way Barry respectfully kept order and allowed room for everyone to speak and when needed, to 'wind' people up. I also liked the way Barry kept things moving and we were always able to finish each meeting on time without feeling rushed. This is a great skill – and I commend Barry for this!<br>• I have found the discussion papers and the presenters to be excellent and the overall format to have worked well.<br>• The pre-reading was excellent, not too little, not too much. The speakers expanded on the pre-reading, which was enough to inform my questions and opinions. The diversity of the group was useful. There was a play at the table for every discussion point. For me, water issues were a completely new learning. Being able to ask questions to those sitting around the table was non-threatening and invaluable.<br>• I did not have a pre-conceived notion of what would be involved. I think the information provided has been first rate.<br>• The presentations by all of the GWM staff and board members, were all very professional with a high degree of common sense. Their planning process to include not only the best engineering studies, but also current and future users of water, I thought were highly commendable.<br>• I have been completely blown away with the quality of the information that was presented to the members of the deliberative panel. I think it is an absolute credit to GWM.<br>• The only thing I would have liked is the opportunity to go into more depth before each session but I'm not sure how that could be done – maybe PowerPoints available online to the panel? Particularly those that were amended between the info pack and the panel meetings. It was all pretty damn good though. The presentations by the staff were quality and very informative – this type of engagement and the level of engagement I think was perfectly pitched. Access to the PowerPoints via print prior was also good. Also, the short summary reading papers provided ahead of each session had the advantage of not being overwhelming, easily achievable to read prior, thereby enhancing the earlier broader reading provided.<br>• I think it ran as I assumed it would.<br>• Somewhat different but [not] so much that it concerned me. We were adequately kept informed and had only to ask to get information. |
| **Value of the process**<br>Do you think the process has been worthwhile for you, the Board and GWMWater? | • Very much so and I really enjoyed the meetings I managed to attend. There was a HUGE book of previous stakeholder group meetings to wade through, which took me about two hours, but it gave me a good idea of the process we would be going through, and a previous history of such |

| Question | Verbatim response |
|---|---|
| | community consultation.<br>• The process has been very worthwhile for me as I've gained a much better understanding of how GWM works for us as well as enabled me to gain greater confidence in attending meetings such as this. I would hope the Board feel the process has been worthwhile as well as GWM water as I can confidently say that it was conducted very respectfully and professionally.<br>• The process has worked well for me with Barry being a very inclusive Chair. Panel members have all, in my view, felt involved.<br>• Much to my surprise, I actually enjoyed the process. I have come away from it feeling like it was a worthwhile end. (Regardless on [sic] what the Board does with the information.). I hope a welfare voice was heard.<br>• Yes, to all of those.<br>• Being a lay person on water infrastructure, I have utmost confidence in GWM to serve the needs of our community in the most efficient manner available with today's technology. GWMs communication policy to include all, will maintain their past high standard, into the future.<br>• It was very worthwhile for me. I learnt a great deal more about the industry and appreciated every moment. I hope that the Board and GWM got some value from our feedback too. Whilst it may appear that the panel automatically endorsed every proposition, I can guarantee that each 'tick' was well earned. The panel had thoughts and questions which I trust were of value to the Board and to the staff that proffered their experience and responses to our questions. In particular the broader themes that the panel came to – increased communication to stakeholders in a timely (when needed) and through live time mechanisms. For example, SMS on status of repairs/progress for lost service and/or water quality issues. Another communication recommendation from the panel is to not under estimate the capacity of the customer to understand complex service provision issues, but at the same time to recognise that succinct and timely communication is what is wanted over and above "cheap" service. Options for communication levels – e.g. SMS, website/number for more information, deeper research/explanatory papers available for those who want more again.<br>• I believe anything is worthwhile having a go at, to see if something can be improved.<br>• I would think so and were I still in LG [Local Government] it's a process I would use in setting Council rates |
| **Personal gain**<br>What did you gain from the panel process | • I was impressed with the vast amount of common sense and intelligence at those meetings, and learned a lot more about GWM water operations.<br>• I have gained a greater understanding of how decisions such as GWM water makes, are made and a respect for the opportunity to have some input.<br>• I have gained a far greater understanding of the organisation and greater respect for its processes. The panel's discussions and recommendations have been well focussed and reflect well on the organisation. Barry and Helen have captured the panel's views well. |

| Question | Verbatim response |
|---|---|
| | • Apart from learning, meeting a diverse range of people was my big win.<br>• A clearer understanding of the governance, management and business of GWMWater. An appreciation for the work done by the staff to provide the initial briefings and additional requested information. A respect for the process and how it was carried out. Appreciation that my thoughts, and those of the others on the panel, were listened to with respect.<br>• My communication with people in my area has been very positive of GWM.<br>• A greater understanding of the water industry, particularly in my region, and a greater appreciation and respect for the calibre of GWM as an organisation and of individual staff. I also gained an appreciation of the diversity of views held by panel members with very different perspectives to my own. I was also impressed with my fellow panel members.<br>• I gained a good insight to what goes on and how planning goes into place. As I said earlier I hadn't thought about it at all beforehand, so I tried to take as much in as I could which isn't an easy thing for me.<br>• A sense of satisfaction in working with an outstanding group of individuals and in achieving a meaningful outcome. |
| Would you do it again? | • Certainly!<br>• If the opportunity arose and I was able to, I would definitely be involved in a similar process in the future.<br>• I enjoyed the experience and would I like to be involved again - but I am too old.<br>• Yes.<br>• Absolutely!<br>• YES!! I would be thrilled to be involved in a similar process.<br>• Now I have done it I believe I would do it again with a bit more knowledge behind me & maybe be able to add more input it would be good.<br>• Most definitely. |
| Any other comments? | • I appreciated the opportunity of being asked. And that everyone there could have a say and ask questions. Nobody really dominated, and neither was there opportunity for a clique group to form. Well chaired Barry! I met some really interesting people, which is what I like about such forums.<br>• In my opinion, Barry was the key to the [success?] of the group (in terms of the success and richness of participation), he managed us with humour and a gentle hand. Thanks Barry.<br>• As [NAME OF PANEL MEMBER] stated last week, the experience that Barry brought to the table as Chair was invaluable. There was no question of his impartiality, but his background knowledge and ability to explain some things in terms that "outsiders" could understand was greatly appreciated. Helen did a fantastic job to facilitate the process and editing of the briefing papers. A thoroughly enjoyable, well- |

| Question | Verbatim response |
|---|---|
| | supported process. Well done.<br>• It has been a pleasure to serve on the panel, and I admired your chairmanship Barry.<br>• In summary, I believe that the panel process was handled well and that the information gained has greatly improved my understanding of the thorough manner in which GWM Water plans for the future.<br>• I hope that the panel does not come across as sycophants – the process of deliberation was taken very seriously, and the ultimate consensus of the panel was robust and not guaranteed at any point. I think the final "ticks" are an indication of the calibre of the presentations, the willingness of the presenters to be transparent and responsive to any panel questions or requests for more information, and mutual respect on both sides. I have been involved in a number of deliberative panels and 'citizens' juries'. The GWM one is leap years ahead.<br>• Lastly, I think Barry Hall as the convenor/facilitator Chair should be commended on his work. The panel was adeptly guided through the process without any pressure points to come to any particular outcome.<br>• Thank you for inviting me along as I did enjoy it.<br>• Chair was a cracker bloke 😊 |

# Appendix K: Feedback from Chair

Verbatim feedback from Barry Hall for inclusion in this report:

- *At the start of the deliberative panel process there were two main issues.*
    - *The possibility of information overload for panel members if they were to be given sufficient information to make informed decisions as a number of them had very little knowledge of the organisation.*
    - *The decision to use an independent person to read and break the issues presented in into papers of no more than four pages was extremely effective for the panel members and provided staff with an opportunity to review the way in which they presented their issues. Panel members commented on the papers and were given sufficient time to read them before meetings. If there was more information required staff were notified and this information was provided at the meeting in progress or at subsequent meetings*
- *The independence of the panel, in its decision-making process, was vital to achieve the aims of the process*
    - *This aim was stressed repeatedly through the process understood by panel members and very successfully achieved. Staff members presented their papers on the issues and then left the meeting room to enable the panel to discuss the issue and come to a conclusion without any interference.*
    - *As chair, I felt completely free to follow any issues through, felt no pressure achieve any particular outcome and am confident independence was maintained throughout the process*
- *The meetings were held in the board room as a result of round-table discussion by the panel at the start of the process. This was a very important decision in a number of ways. It enabled support staff to be available at all times, it enabled me to talk to management if extra information was required and panel members commented that the location and support and catering made them feel as though their attendance and input was valued.*
- *The panel worked excellently as a group and they contributed to all discussion and maintained a strong commitment throughout the process. They are to be commended on their approach and it was a pleasure to work with them.*
- *The panel was extremely impressed with the way in which staff members presented their papers and interacted with the panel. Staff are to be commended on the way in which they presented and worked with the panel. Panel members felt that their questions and their input were valued and were very happy to have been involved.*
- *I feel that this has been an excellent process and has achieved its aim of gaining feedback from a different group of customers with a 'citizens jury" approach. Having a chair with some background of the industry, an understanding of GWM and its management was vital to making the process work. It enabled issues to be clarified quickly and efficiently by staff or myself if I could clarify the issue. It in no way compromised the independence of the process.*
- *A great process and I thank the panel and staff for their input and support. It made my job as chair an enjoyable one. I feel that it should become an important part of GWM's evaluation process in the future.*

# Appendix 8 Strategic Asset Management Plan


# Strategic Asset Management Plan

## July 2017

# TABLE OF CONTENTS

# Definitions and Abbreviations

| | |
|---|---|
| ANCOLD | Australian National Committee on Large Dams |
| Maintenance | Activities undertaken to ensure assets reach expected life |
| NPV | Net Present Value |
| OH&S | Occupational health and safety |
| Operations | The active process of utilising an asset which will consume resources such as manpower, energy, chemicals and materials |
| OMC | Operations Management Centre |
| Planned maintenance | Tasks undertaken as a result of results from condition assessments, condition monitoring or scheduled activities |
| RCM | Reliability-centred Maintenance |
| Reactive maintenance | Tasks undertaken as a result of asset failure |
| Renewals | Restoring service capacity through rehabilitation or replacement |
| RPIP | Rural Pipeline Intelligence Project |
| SAMP | Strategic Asset Management Plan |
| SCADA | Supervisory control and data acquisition |
| SPS | Sewer pump station |
| Upgrades & Acquisitions | Adding new or upgrading existing assets |
| UPIP | Urban Pipeline Intelligence Project |
| WPS | Water pump station |

# 1. Executive Summary

The Strategic Asset Management Plan (or SAMP) defines the investment levels required to manage the performance of assets to meet GWMWater's service obligations.

The SAMP presents the expenditure projections for GWMWater's asset categories. Long term expenditure projections have been developed using the Asset Management System as detailed in the Strategic Asset Management Framework document. The Asset Management System guides the delivery of Asset Management Objectives from GWMWater's Strategic Directions 2013-2018 and the Asset Management Policy, to the management of assets through their lifecycle.

The Strategic Asset Management Plan seeks to prioritise expenditure with the aim of optimising asset value. Value is measured in terms of asset risk; in particular, the elimination of 'very high' risks; then subsequently in terms of performance (i.e., maintaining acceptable levels of service) and minimising lifecycle costs (e.g., optimising maintenance spend and improving efficiency).

Section 5 outlines the overarching strategies adopted, while section 6 provides detail on how the expenditure projections are derived and the specific strategies used at the asset category level.

The following table summarises the outputs of the SAMP.

***Table 1: Asset Value and Expenditure Projections (2017/18 to 2022/23)***

| Value at 2016 ($'000) | Expenditure | 6 year Average Forecast Expenditure ($'000) | 6 year Total Forecast Capital Expenditure ($'000) |
|---|---|---|---|
| $1,851,505 | CAPEX | $33,591 | $201,545 |
| | OPEX | $17,986 | $107,915 |

The SAMP identifies key limitations in the methodology, the assumptions used to deliver the plan and the impacts on the confidence of the outputs presented. From these asset management improvements have been identified.

## 2. Purpose

The Strategic Asset Management Plan (SAMP) defines the required levels of investment to manage the performance of assets to meet GWMWater's service obligations.

Performance is managed through asset creation, acquisition, operation, maintenance, upgrade, renewal and disposal.

Levels of service are defined in the customer charters.

## 3. Strategic Context

The SAMP sets out the plan to achieve the medium term and long term asset lifecycle management strategy. The plan presents expenditure projections and highlights the major drivers for this expenditure.

The functional relationship between the Strategic Asset Management Plan (SAMP) and other key organisational asset management documents is shown in the following figure:

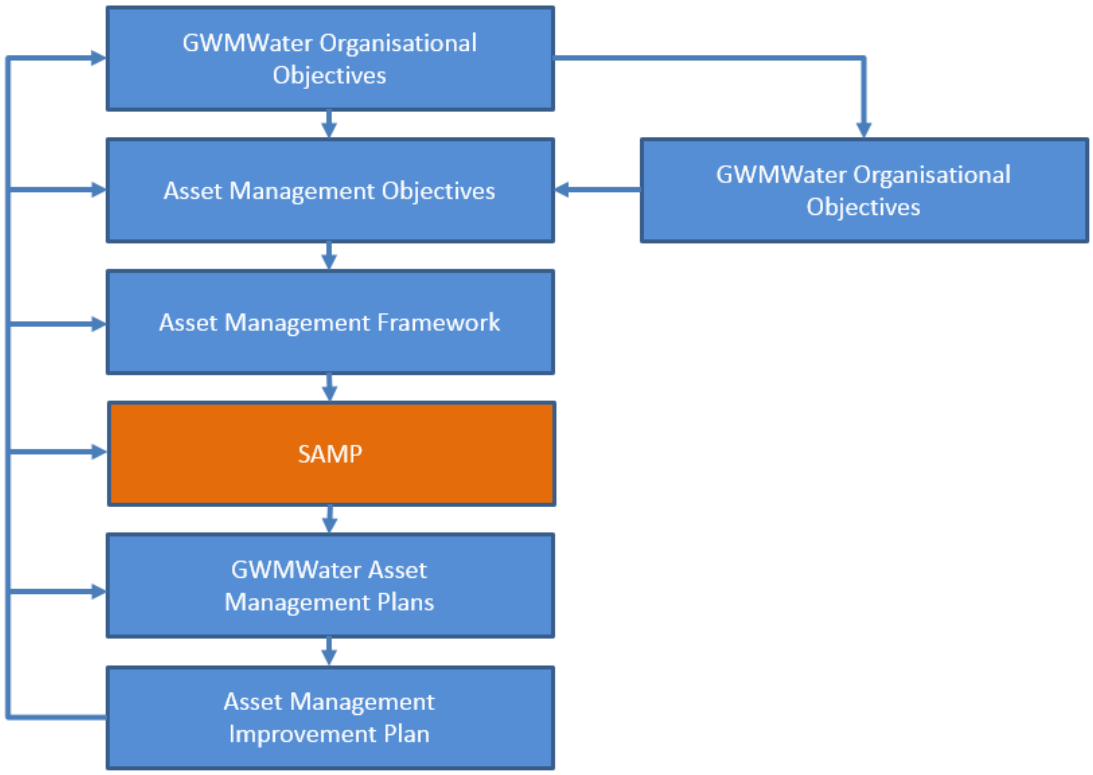



*Figure 1: Asset management document hierarchy*

Organisational objectives are developed in consultation with the customers and stakeholders to achieve agreement on the scope and level of service provided, and documented in the:

- Strategic Directions 2018-2023
- Corporate Plan (produced annually)

The Asset Management Policy is a statement that sets out the principles by which GWMWater intends to apply asset management to achieve organisational objectives.

Asset Management Objectives provide the essential link between the organisational objectives and asset management planning.

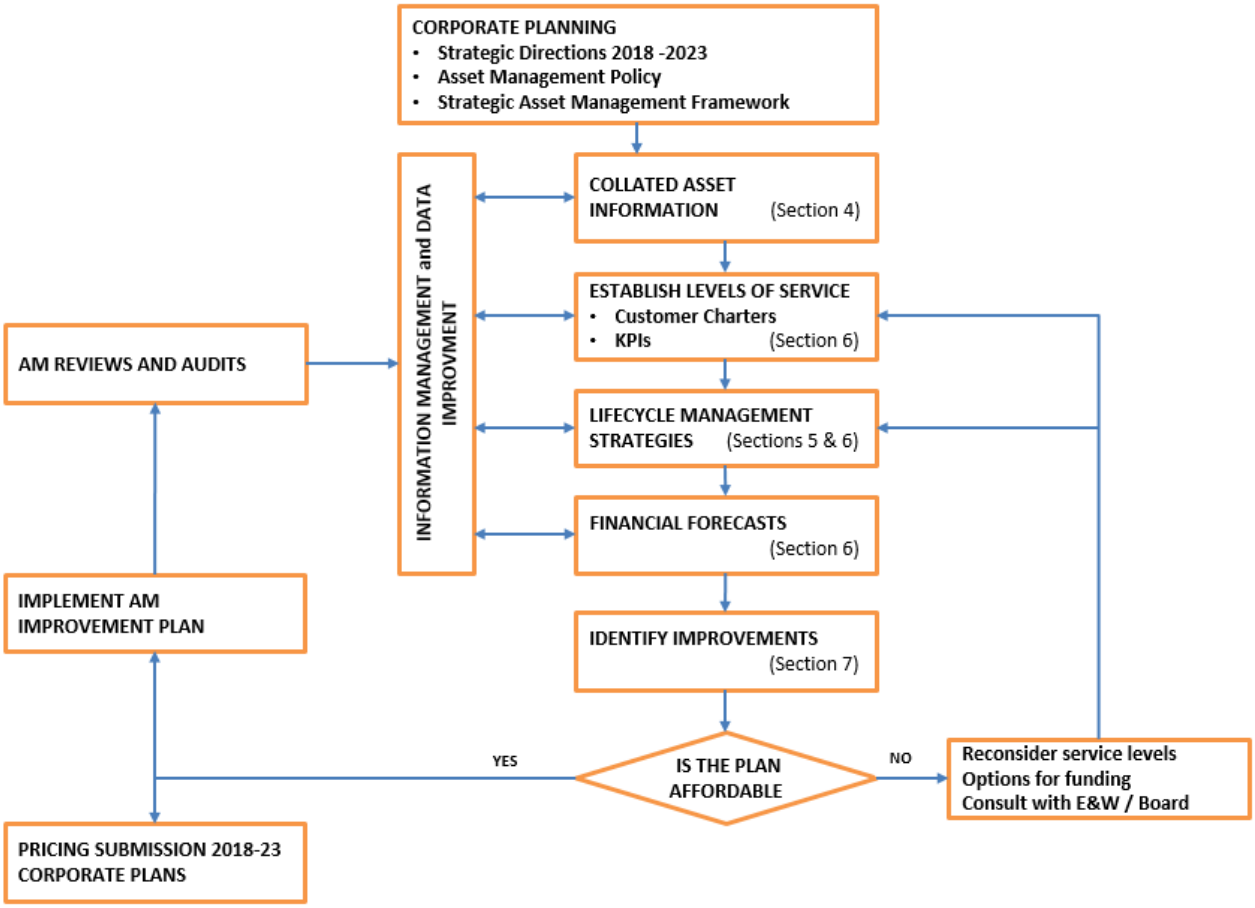



*Figure 2: Asset management planning process*

The Asset Management Framework documents the role of the Asset Management System in supporting the achievement of the Asset Management Objectives.

The individual Asset Management Plans detail what is required and when to deliver the asset outcomes, within the budgets and with the resources available, while ensuring that

appropriate levels of service are achieved. The major asset categories are listed in the next section.

The Asset Management Improvement Plan (AMIP) lists, prioritises asset management improvements and identifies required resources and responsibility.

The structure and development of the SAMP is guided by Figure 1: Asset management document hierarchy.

## 4. Asset Scope

GWMWater owns, operates, and maintains assets valued at around $2 billion. This SAMP includes all GWMWater's physical asset portfolio, which are grouped into the following major asset categories:

- Headworks
- Water Treatment
- Water Supply
- Wastewater Collection
- Wastewater Treatment
- Information Communication Technology
- Plant and Equipment
- Fleet
- Corporate Buildings

*Table 2: GWMWater's asset portfolio*

| Assets | Sub-Category | Quantity |
|---|---|---|
| **Headworks** | **Value: $531.0 million** | |
| Major dams | Dams | 11 |
| Major structures | | 10 |
| Channels | Headworks | 274 km |
| | Drainage | 13 km |
| Pipeline | | 59 km |
| **Water Treatment** | **Value: $69.0 million** | |
| Water treatment plants | Dissolved Air Floatation/Flocculation # | 13 |
| | Microfiltration # | 3 |
| | Reverse Osmosis | 1 |
| | Disinfection | 17 |
| | pH correction | 3 |
| | POE | 2 |
| | Sand Filter - Rural Water | 2 |
| **Water Supply** | **Value: $1073.1 million** | |
| Urban water mains | Reticulation / Trunk Mains | 1,446 km |

| Assets | Sub-Category | Quantity |
|---|---|---|
| Urban water pump stations | Not including WTPs | 52 |
| Urban water storages | Earthen | 34 |
| | Tanks (elevated and ground) | 87 |
| Urban water bores | | 38 |
| Urban water meters | | 34,198 |
| Rural water mains | Murray area | 4,223 km |
| | Grampians area | 8,125 km |
| Rural pump stations | | 42 |
| Rural earthen storages | | 25 |
| Rural tanks | | 4 |
| Rural water bores | | 37 |
| Rural water meters | | 14,012 |

| **Wastewater Collection** | **Value: $93.8 million** | |
|---|---|---|
| Wastewater mains | Reticulation / Rising Mains | 690 km |
| Wastewater pump stations | Wet / Dry Wells | 87 |
| | Pressure Sewer Units | 491 |
| Re-use mains | | 58 km |

| **Wastewater Treatment** | **Value: $73.8 million** | |
|---|---|---|
| Wastewater treatment plants | | 28 |
| Re-use storages | | 2 |

| **ICT Assets** | **Value: $1.3 million*** |
|---|---|
| SCADA instrumentation, servers, printers, PCs, mobile phones and tablets | |

| ***Plant and Equipment*** | **Value: $1.8 million** |
|---|---|
| Includes mobile generators, mobile pumps, trailers, compressors, trucks, major plant, major tools & mobile instruments | |

| **Fleet** | **Value: $2.9 million** |
|---|---|
| Corporate vehicles | |

| **Corporate Buildings** | **Value: $4.7 million** |
|---|---|
| McLachlan Street Office, Kalkee Road Depot and offices, regional depots and investment properties | |

*# Includes plants under the control of BOOT operator (Stawell, Ararat, Halls Gap, Great Western)*

** Value of on-site facility SCADA assets included in value of respective facilities*
*Values are written down values as at 31 January 2017*

# 5. Lifecycle Management Strategy


*Figure 3: The asset lifecycle*

Lifecycle asset management "encompasses all asset management strategies and practices associated with an asset or group of assets that results in the delivery of organisational objectives at the lowest lifecycle cost"[1].

GWMWater's key asset management objectives, developed from the organisational objectives, are:

| | |
|---|---|
| **1.** | **Elimination of 'Very High Risks'** |
| **2.** | **Maintaining acceptable levels of service** |
| **3.** | **Minimising lifecycle costs** |

Key strategies for delivering the lifecycle objectives are summarised in Table 3. To deliver the objectives, the mix of strategies employed must minimise the lifecycle cost of managing risk at acceptable levels and maintaining acceptable service levels.

[1] IIMM 2015 definition of lifecycle asset management.

*Table 3: Key strategies for the delivery of lifecycle objectives*

| | Key Strategies for Delivering Lifecycle Objectives | | |
|---|---|---|---|
| | **Elimination of Very High Risk** | **Maintaining Acceptable Service Levels** | **Minimising Lifecycle Costs** |
| **Operation & Maintenance Strategies** | Undertake predictive maintenance to understand risk of failure for high consequence assets.<br><br>Prevent failure of high consequence assets through preventative maintenance.<br><br>Reduce risk through improved failure management (contingency, continuity, emergency management plans). | Monitoring service level data (e.g. location of water main breaks, network modelling).<br><br>Optimising the mix of proactive and reactive maintenance to meet service levels.<br><br>Optimise operating strategy.<br><br>Avoid service interruptions through failure management strategies. | Understand OPEX cost drivers through implementation of fault codes and activity codes in the works management system.<br><br>Optimising the mix of proactive and reactive maintenance to minimise lifecycle costs.<br><br>Optimise operating strategy (e.g. use off-peak power). |
| **Renewals Strategies** | Understand (define, assess, review) risk.<br><br>Renew assets posing known very high risks, as validated by predictive maintenance or failure history. | Renew assets whose poor condition is contributing to missed or near missed KPIs.<br><br>Proactively renew assets whose failure would result in unacceptable interruptions to service levels. | Renew assets if cost to continue maintaining is higher.<br><br>Proactively renew assets if cost to allow failure is higher. |
| **Upgrade & Acquisition Strategies** | Upgrade the asset or acquire redundancy if more cost effective solution.<br><br>Upgrade or acquire predictive monitoring to manage failure risk through detection and prevention. | | Review configuration of assets for efficiency gains in delivery of services. |
| **Decommissioning Strategies** | Dispose of high risk assets or implement and maintain controls to minimise risk. | | Monitor ongoing costs to maintain redundant assets and dispose of asset where maintenance costs exceed disposal costs. |

The aim of the strategy is to design, operate and maintain assets in accordance with the risk assessments undertaken of infrastructure in accordance with the GWMWater's risk management plan. This is achieved by application of criticality assessments combined with consequence ratings for all assets.

The measurement of consequence, likelihood and risk tolerance thresholds are guided by the corporate risk framework, which aligns with AS/NZS ISO 31000:2009 Standard (Risk Management – Principle and Guidelines).

Maintaining levels of service at levels that continue to meet customer expectations is further achieved by identifying assets having the greatest impact on these level of service – i.e., assets having multiple failures or in poor condition and with lower consequence of failure.

Lifecycle costs are minimised through regular assessments of asset performance (cost, service and capability) relative to the assumptions made at the time of investment and the costs and capability of any new or emerging technologies.

Value is optimised by developing investment, operations and maintenance plans that provide the greatest risk benefit (i.e., reduction in risk, increased performance improvement or cost savings) at the lowest cost, while meeting the agreed service obligations. This is achieved by undertaking a structured program of reviewing assessments of condition and criticality. The combined effect of condition and criticality will give rise to a risk rating that if sufficiently high will trigger the need for a review of the asset and a reset of the controls from an operating, maintenance or renewal perspective.

Review of risk levels, service performance and the cost of managing risk and providing services allows deficiencies in the strategy to be identified and improvements sought.

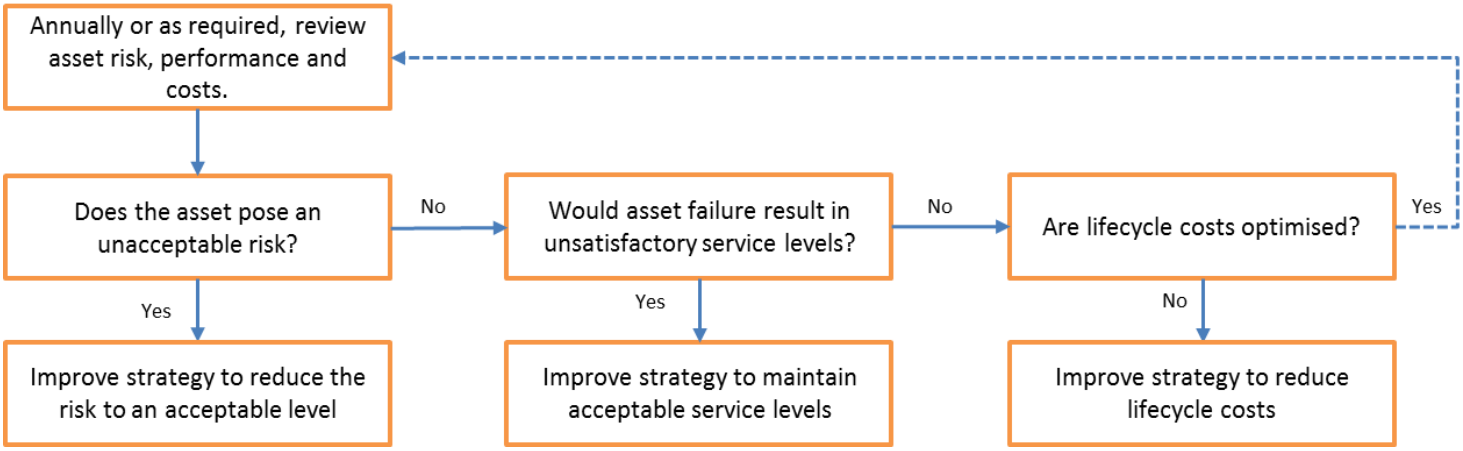



*Figure 4: Overview of lifecycle management strategy review process*

## 5.1 Key Improvement Opportunities

The ability to realise asset value is only limited by the maturity of the underlying asset data. While systems and processes to record failures and schedule maintenance have been implemented, the processes are not well advanced for non-linear (e.g., mechanical and electrical) assets and provide limited understanding of the optimum level of maintenance required.

The current performance of GWMWater's asset portfolio suggests that current maintenance practices are largely effective. However, given the size and complexity of portfolio, it is probable that the optimum levels of maintenance against some assets have yet to be achieved and that some assets are being over maintained and others under maintained.

Improving the approach to maintenance planning through the implementation of a suitable maintenance planning framework is therefore recommended. Several maintenance planning tools exist, most common are: reliability-centred maintenance (RCM), failure modes effects analysis (FMEA) and root cause analysis (RCA). Maintenance planning tools (by assessing risk, performance and cost), provide direction on whether we run an asset to failure or whether we avoid failure and apply a more proactive or preventative maintenance approach, and the frequency of planned activities.

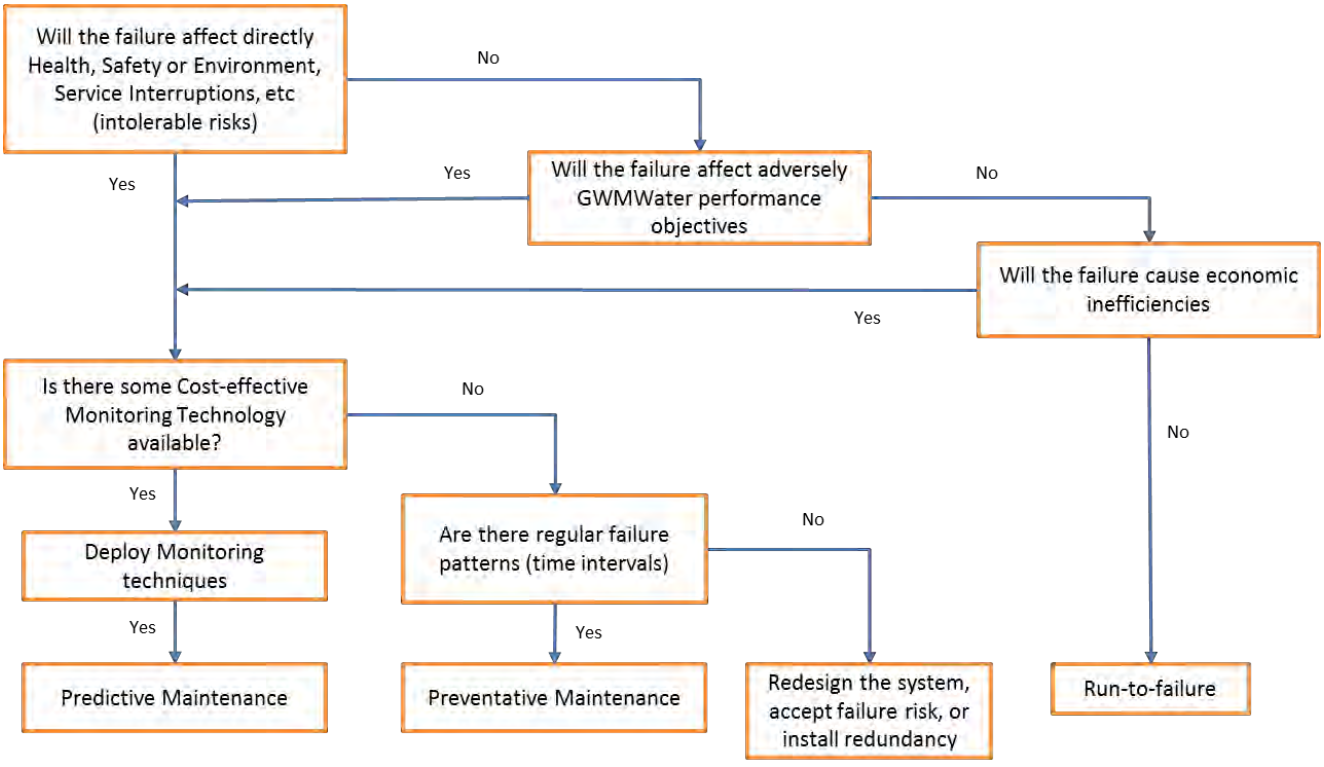



*Figure 5: Reliability-centred Maintenance tool implementation flowchart*

The results of the implementation of well-developed maintenance plans, along with monitoring and analysing asset performance are: better management of the risks of operation, understanding asset performance and optimising lifecycle costs. Optimisation of costs is achieved through finding the mix of planned maintenance, reactive maintenance and renewals expenditure that produces the lowest overall cost, whilst meeting our service obligations.

The respective asset management plans bring together the lifecycle activities into a coherent expenditure plan. The outputs of the asset management plans are summarised in section 6.

# 6. Asset Management Planning

The lifecycle management strategy (see section 5) is applied to each asset category. The following sections summarise asset management strategies in terms of the hierarchy of objectives. The cost of implementing these strategies is then presented as a forecast of operational, maintenance and capital investment for each asset category, which includes projected lifecycle costs.

## 6.1 Summary

### *6.1.1.* Strategy Development

The following table summarises the processes undertaken at the various stages of the asset lifecycle to identify and prioritise expenditure aligned with GWMWater's Strategic Directions and to meet GWMWater service obligations:

***Table 4: Lifecycle activities and alignment to Strategic Directions***

| Lifecycle Activity | Alignment to Strategic Directions |
|---|---|
| Acquisitions and Upgrades | Alignment of asset acquisition and upgrades with GWMWater's Strategic Directions is established by the relevant strategies. These strategies include the Water Quality Management System, the Wastewater Quality Management System, Dam Safety Reports, OHS reviews and the ICT Strategy.<br><br>The future creation of Development Servicing Plans will provide strategic guidance to the development and operation of water and wastewater reticulation networks. |
| Maintenance and Operation | Alignment of planned maintenance with the Strategic Directions is achieved through the maintenance framework and implementation of maintenance planning tools that link maintenance tasks with the intended function of the asset. |

| Lifecycle Activity | Alignment to Strategic Directions |
|---|---|
| | Operation of assets is undertaken in accordance with the functional design established at the project acquisition, upgrade and renewals phases. |
| Renewals | Asset risk, performance and cost are modelled to produce renewal plans using the strategic asset management module - myPredictor.<br><br>The relationship between renewals expenditure and total maintenance expenditure is also modelled by myPredictor for particular asset categories; helping guide understanding of the costs and benefits of changing renewals expenditure. |
| Disposal | The Redundant Asset Decommissioning Plan has been developed to manage legacy assets not disposed of at the asset acquisition, upgrade and renewals stage. The plan prioritises removal on the risks posed by the assets being left in place. A significant number of channel and storage assets have been left following the rural pipeline projects.<br><br>Moving forward decommissioning and disposal of assets will be considered at the asset acquisition, upgrade and renewals stages and the costs to decommission included in the respective business cases. |

### *6.1.2.* Historic & Forecast Expenditure

Expenditure over the past 10 years has focussed on acquisitions to provide growth and service upgrades (WMPP, town sewer systems, 5 Towns Drinking Water Project). Significant portions of aged urban water and sewer systems are now approaching end of expected life. Consequently, an increased focus on renewals is required to maintain service levels in the aged systems.

The compiled expenditure forecast is presented below. For expenditure forecasting methodology, see Appendix B.
In the past 10 years there has been a heavy focus on reactive maintenance. In recent years the focus has shifted, with the introduction of work orders capturing both reactive and scheduled maintenance activity.

Forecast expenditure is presented in Figure 5. Forecasts do not include inflation and assume unit rates remain unchanged.

The forecast has existing gaps:

- Upgrades and acquisitions presented are those budgeted for and potential projects currently under assessment - additional projects will arise.
- Budgets are under ongoing development ahead of the 2019-23 pricing period. Representations of budgeted expenditure within this document will be updated in due course to reflect final budgets.
- OPEX is forecast to continue near current levels. Future work will improve forecasting ability.

Steps to address these gaps are detailed in the Asset Management Improvement Plan.

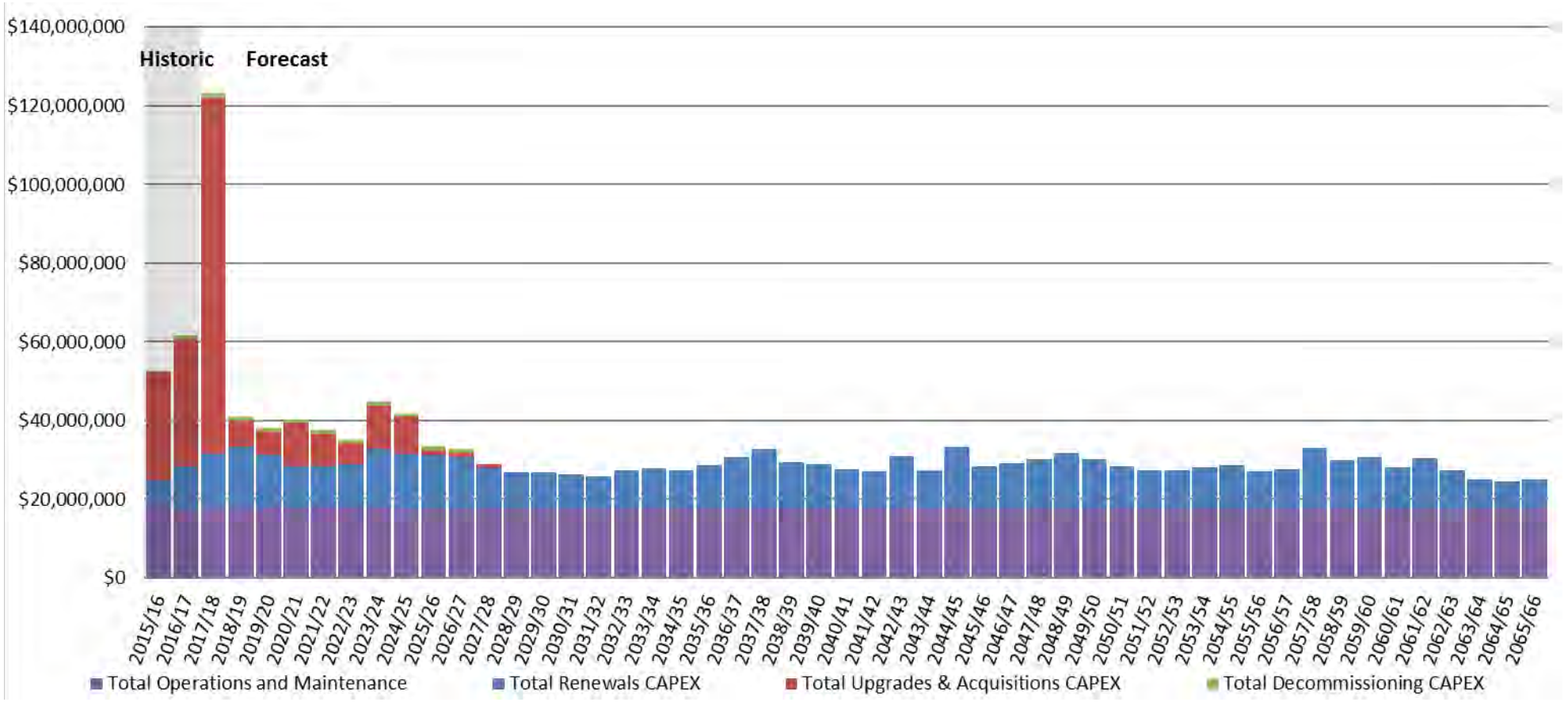



*Figure 6: Historic and forecast CAPEX and OPEX expenditure. Upgrades and acquisitions beyond 2026 have not yet been forecast.*

*Table 5: Description of CAPEX events within the above forecasts*

| Timeframe | Forecast Major CAPEX Drivers | | | Forecast Major OPEX Drivers |
|---|---|---|---|---|
| | **Renewals** | **Upgrades & Acquisitions** | **Decommissioning** | **OPEX** |
| 2016/17 & 2017/18 | • Urban water main replacements<br>• Sewer main relining & renewals<br>• Mechanical & electrical asset renewals as they fail.<br>• Fleet replacements<br>• Groundwater meter replacements | • South West Loddon peripheral development (Wedderburn).<br>• Water treatment upgrades. | • Redundant channel structures and channels | • Labour<br>• Electricity<br>• Chemicals<br>• Reactive maintenance<br>• Proactive maintenance |
| Pricing Period (2018/19 to 2022/23) | • Urban water main replacements<br>• Sewer main relining & renewals<br>• Mechanical & electrical asset renewals as they fail.<br>• Fleet replacements<br>• Water storage renewals | • Dam safety upgrades.<br>• Goroke sanitation.<br>• Sewer augmentation and flow monitoring.<br>• Wastewater treatment upgrades (various towns).<br>• Water treatment upgrades (various towns).<br>• South West Loddon Rural Pipeline<br>• Mains duplication to meet growth demands (flow & | • Redundant channel structures<br>• Redundant earthen storages | • Labour<br>• Electricity<br>• Chemicals<br>• Seeking balance between proactive and reactive maintenance to improve lifecycle costs |

| Timeframe | Forecast Major CAPEX Drivers | | | Forecast Major OPEX Drivers |
|---|---|---|---|---|
| | Renewals | Upgrades & Acquisitions | Decommissioning | OPEX |
| | | pressure) in Horsham, Ararat and Stawell.. | | |
| Outer Years (2023/24 to 2065/66) | • Urban water main replacements<br>• Rural AC and ferrous main replacements<br>• Sewer main relining & renewals<br>• Mechanical & electrical asset renewals as they fail.<br>• Fleet replacements | | • Redundant storages (earthen and concrete tanks) | • Labour<br>• Electricity<br>• Chemicals<br>• Reactive maintenance<br>• Proactive maintenance |

## 6.2 Water Supply System

### *6.2.1.* Eliminating 'Very High Risks'

Very high risks in the Water Supply System asset category are typically risks of supply interruption to large numbers of customers, risks of lengthy interruptions, risks of low flows through fire hydrants and safety risks. Assets with high risk of failure under major roads and railways should also be renewed or disposed before failure.

Major earthen storages are managed having regard to the ANCOLD guidelines. Dam Safety Reports are commissioned and the recommendations evaluated. For significant works risk assessments and, if necessary, a strategic assessment or business case is undertaken to determine the most appropriate course of action.

***Table 6: Summary of current risk profile for the water supply system assets***

| Asset Type | Risk Type | Current Risk Profile | | | |
|---|---|---|---|---|---|
| | Known / Age Based | Low | Medium | High | Very High |
| Urban Water Mains (km) | Known | 32 | 32 | 19 | 1.1 |
| | Age Based | 526 | 485 | 106 | 3.7 |
| Rural Water Mains (km) | Known | 61 | 120 | 66 | 1.6 |
| | Age Based | 9786 | 1639 | 682 | 27 |
| Urban Water Pump Stations (number of assets) | Known | - | - | - | - |
| | Age Based | 246 | 288 | 17 | - |
| Rural Water Pump Stations (number of assets) | Known | - | - | - | - |
| | Age Based | 902 | 186 | 2 | - |
| Water Storage Tanks (number of assets) | Known | 4 | 7 | 15 | 2 |
| | Age Based | 238 | 110 | 20 | 1 |
| Earthen Storages (number of assets) | Known | - | - | - | - |
| | Age Based | 171 | 215 | 2 | - |
| Water Bores (number of assets) | Known | - | - | - | - |
| | Age Based | 357 | 200 | - | - |
| Service Connections (number of assets) | Known | - | - | - | - |
| | Age Based | All non-major customers | - | - | 13 Major Customers |

The current strategies are seen as sufficient for the management and elimination of very high risks.

*Table 7: Key strategies for eliminating very high risks in the water supply system assets*

| Asset Type | Key Strategies to Eliminate Very High Risks |
|---|---|
| Urban Water Mains | Monitor customer interruptions.<br><br>Allow infrequent failure of low consequence mains, typically those servicing less than 200 customers. Avoid failure of high consequence mains, typically those servicing greater than 200 customers or under major road or rail. When major road or rail crossings are renewed, they are encased to reduce the likelihood of failure.<br><br>Identify condition of old high consequence mains and fittings.<br><br>Renew known very high risk mains and fittings, typically those where failure is imminent interrupting >50 customers and those where failure is possible that service >200 customers, and heavily corroded fittings.<br><br>Auditing of backflow prevention systems to manage risk of backflow contaminating the system. |
| Rural Water Mains | Balancing storages to contain sufficient storage to allow reactive repair of rural mains (run to failure). Assess condition of mains with two or more recent failures.<br><br>Understand condition and consequence of large mild steel trunk mains (>300mm) and mains at major road or rail crossings. Undertake proactive renewal as informed by condition assessment.<br><br>When major road or rail crossings are renewed, they are encased to reduce the likelihood of failure. |
| Valves | Exercising of high consequence valves.<br><br>Proactive maintenance of backflow prevention valves. |
| Water Pump Stations | Redundancy (duty standby arrangement)<br><br>Availability of backup generators<br><br>SCADA alarms (outflow pressure and flow) allow prompt restoration of service.<br><br>Monthly inspections of pump stations servicing.<br><br>Availability of critical spares to allow continuity of service.<br><br>The implementation of strategies such as infrared thermography of switchboards and motors, pump vibration monitoring, oil particulate analysis and ultrasonics to be considered for critical pump station assets. |

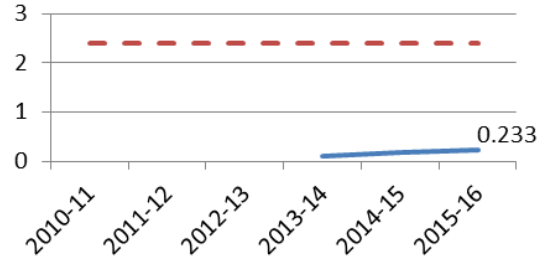
| Asset Type | Key Strategies to Eliminate Very High Risks |
|---|---|
| Storages (Non-ANCOLD) (tanks and earthen) | Storage failure would present a safety risk, threaten supply reliability and result in significant reputational damage. Failure of these assets is to be avoided.<br><br>Asset inspections to maintain knowledge of asset condition. Poor results are investigated with condition assessments and/or treated with proactive renewal.<br><br>High consequence of failure earthen storages are managed under the ANCOLD guidelines. See section 6.7. |
| Water Supply Bores | Redundancy allows run to failure.<br><br>Renew or replace failed bores or pumps to restore redundancy.<br>Site inspections. |
| Meters | Inspection and calibration of bulk meters.<br><br>Meter calibration. |
| Service Connections | Run to fail is acceptable for major customers since repair can be achieved within the allowable outage time. |

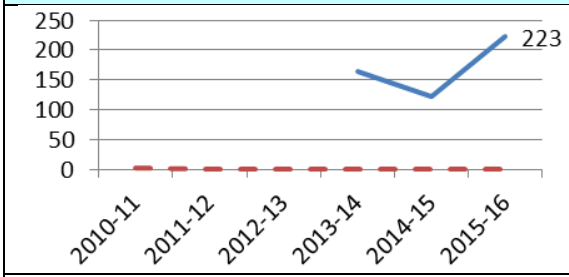
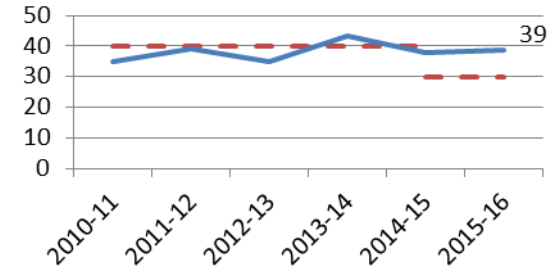
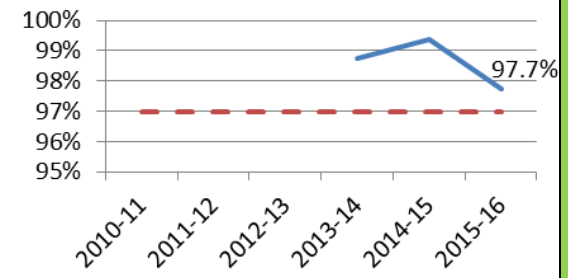
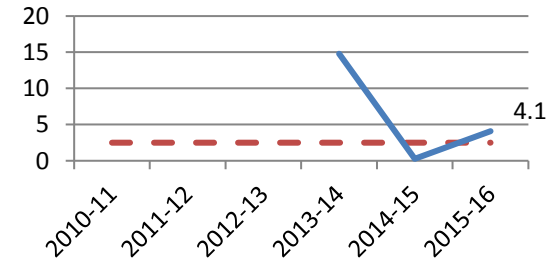
### 6.2.2. Maintaining Acceptable Levels of Service

The purpose of the water supply system is to deliver water at a reliability and quality that achieves customer satisfaction.

*Supply Reliability*

*Table 8: Summary of current and forecast performance issues*

| Historic Performance<br>— Actual - - Targeted | Current Status | Forecast |
|---|---|---|
| **KPI010 – Water reliability complaints per 1000 customers.**<br>  | Over performing | Over performance.<br><br>Historic results suggest a less reliable supply (relaxing KPI081) may still result in this KPI being met (KPI010). |
| **KPI043 – Urban water customers with 5 or more unplanned interruptions.** | Under performing | Under performance. |

| Historic Performance<br>— Actual - - Targeted | Current Status | Forecast |
|---|---|---|
|  | | 84% of unplanned water supply interruptions are caused by water main failures.<br><br>Water main failures are forecast to increase driving KPI081 up to around 43 and also increasing KPI043.<br><br>Current data suggests that preventing urban water mains from causing >2 interruptions will likely result in KPI081 being met and KPI043 being greatly improved. |
| **KPI081 - Unplanned urban water interruptions per 100km.**<br>  | Under performing. Unfavourable trend. 2nd highest in Victoria (*ESC 2015/16 Performance Report*). | |
| **KPI057 - Unplanned urban supply interruptions restored within 5hrs**<br>  | Over performing | Target met.<br><br>Operational reactivity to interruptions is not expected to change. Thus the target is expected to be met. |
| **KPI049 - Unavailability of D&S supply systems for continuous periods in excess of 48hours**<br>  | Under performing | This target generally oscillates between being met and failed.<br><br>Typically as few as two incidents can cause the KPI to be failed.<br><br>Much of the rural pipeline is near new. |

Customer satisfaction (KPI010) is linked to supply interruptions (KPI043, KPI081). Causes of customer interruption in 2015/16 are shown in Figure 7, with the key strategies to maintain reliability presented in
Table 9.

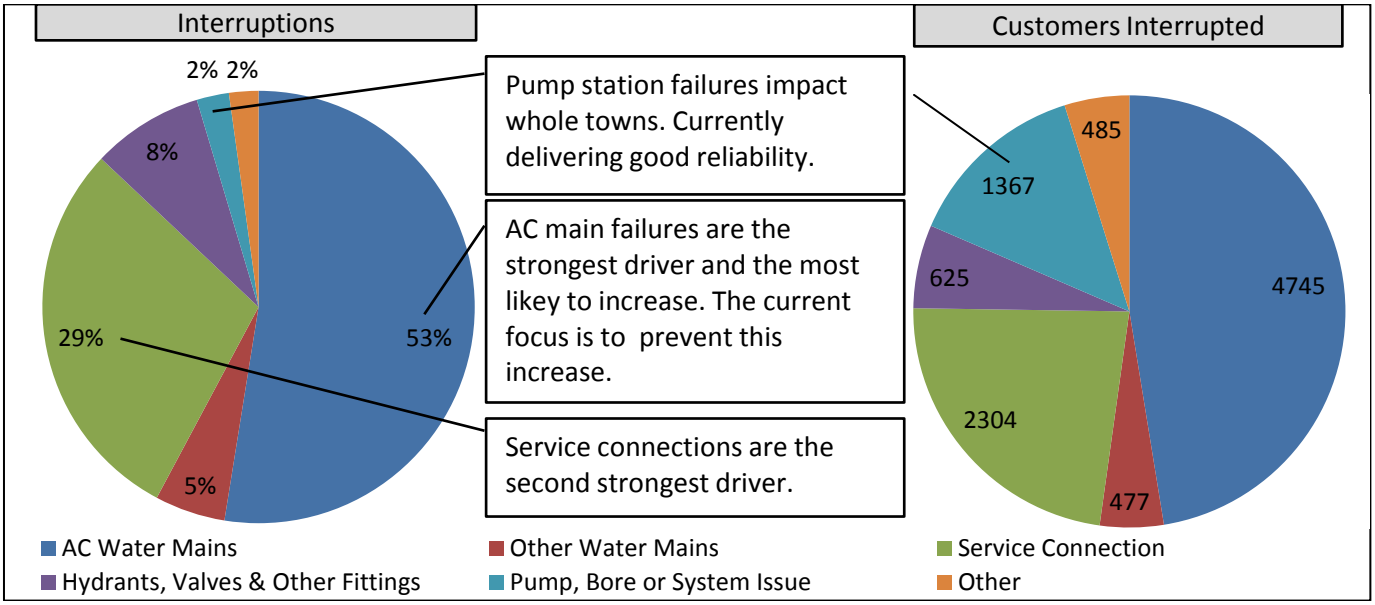



*Figure 7: Sources of water supply interruption to urban customers during 2015/16*

Forty-three percent of urban mains are AC with a total replacement value of $101M. Thirteen percent of AC mains experienced breaks during FY16, with the remaining 87% expected to also present failures over the coming decades as the assets reach the end of their expected lives. To maintain supply reliability, the rate of failure must not be allowed to increase beyond agreed levels of service despite the predicted increase in AC main failures.

Service connections are the second strongest driver of interruptions. Spatial and failure data is being collected to support development of strategies for targeted renewal.

*Table 9: Key strategies to maintain reliability of supply by asset type*

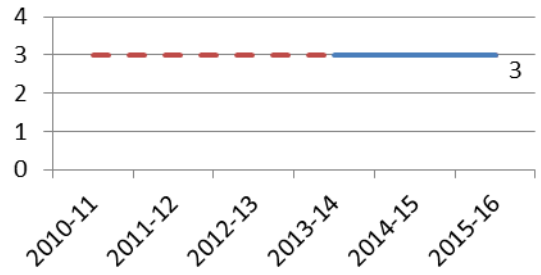
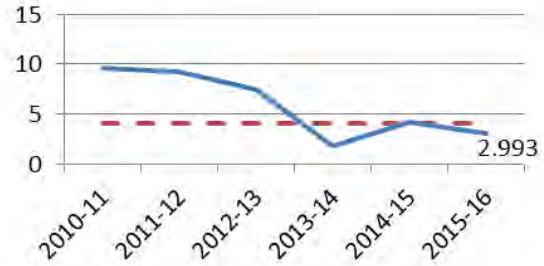
| Asset Type | Key Strategies to Maintain Reliability of Supply |
|---|---|
| Urban Water Mains | The strategy is to renew assets just before they give unacceptable performance. Reactive and proactive maintenance play a part in this strategy:<br>• Analysis of failure history identifies problem assets.<br>• Opportunistic condition inspections when mains are exposed.<br>• GIS pinning of water main failures to accurately identify failure hot spots (introduced in 2015).<br>• Combining this with AC testing at in the vicinity of hot spots, allowing proactive renewal to be targeted to deteriorated pipe (proposed to begin 2018).<br><br>Renewals are targeted at mains causing three or more supply interruptions. This is expected to maintain service at current levels.<br><br>AC testing is required to broaden understanding of deterioration curves. |

| Asset Type | Key Strategies to Maintain Reliability of Supply |
|---|---|
| | Flow and pressure testing of hydrants to identify corroded fittings.<br><br>If water main failures increase as predicted, earlier renewal intervention will be required to sustain service levels.<br><br>Expanding renewal to all AC mains experiencing two or more longitudinal breaks is likely to improve KPI081 and KPI043.<br><br>Selective pressure monitoring and system modelling to identify system issues, and inform development plans. |
| Rural Water Mains | The allowable outage for a rural customer is 2 days (KPI049). Current strategy is repair at failure.<br><br>Balancing storages to contain sufficient storage to allow rural mains to be run to failure without unacceptable operational interruptions.<br><br>Monitoring of pressure and flow to inform modelling, identify system issues (leaks, capacity, potential for fatigue from pressure cycles). |
| Water Pump Stations | Use of redundancy (extra pumps).<br><br>Availability of backup generators (for power failure).<br><br>Asset inspections to maintain knowledge of asset condition. Poor results are investigated with condition assessments and/or treated with proactive renewal. |
| Water Storages (Tanks & Earthen) | Asset inspections to maintain knowledge of asset condition. Poor results are investigated with condition assessments and/or treated with proactive renewal.<br><br>Desludging to maintain storage capacity. |
| Valves & Fittings | Valves receive limited inspection programs and are largely renewed at failure.<br><br>Consider expanding valve exercising program to ensure serviceability for shut-down events (impact less customers). |
| Service Connections | Run to fail is acceptable since repair can be achieved within the allowable outage time.<br><br>Use failure pinning data to target proactive renewal of multiple failure. |
| Water Supply Bores | Redundancy allows run to fail strategy. |

## *Water Quality*

The water supply asset category supports the quality of water delivered to the customer.

***Table 10: Summary of current and forecast performance issues***

| Historic Performance<br>— Actual – – Targeted | Current Status | Forecast |
|---|---|---|
| **KPI332, KPI333, KPI334 – Drinking Water quality compliance.**<br>  <br>**KPI008 – Drinking water quality complaints per 1000 customers.**<br>  | Targets met | Internal corrosion of cast iron and galvanised iron urban pipes and fittings causing water quality, flow & pressure issues.<br>  <br>***Figure 8: Pynsent St cast iron main replaced 2015.***<br><br>Threat of non-compliance arising from vermin and contaminant ingress at storages. |
| **Environmental – Emissions Reduction** | Target not established. | As mechanical/electrical assets deteriorate, their efficiency may decrease. |

Causes of water quality issues can arise from build-up of sediment, contaminant entry through ingress or backflow, or from asset deterioration.

***Table 11: Key strategies to maintain water quality, by asset type***

| Asset Type | Key Strategies to Maintain Water Quality |
|---|---|
| Urban Water Mains | Water quality monitoring.<br><br>Flushing in response to water quality complaints. Proactive flushing and air scouring programs.<br><br>Renewals where asset deterioration is identified as the cause of water quality complaints.<br><br>Use of sedimentation tanks (Mt William) and scheduled cleaning. |

| Asset Type | Key Strategies to Maintain Water Quality |
|---|---|
| Rural Water Mains | Allow sediment to accumulate in storages where it is collected and removed.<br><br>Sand filters at selected sites.<br><br>Chemical dosing (pH correction) at selected sites. |
| Water Pump Stations | Monitor water quality. Update operational strategy to exclude or manage poor quality water. |
| Water Storage Tanks | Inspections. Poor results investigated with condition assessments and/or treated with proactive renewal.<br><br>Upgrades and renewals to prevent contamination by deterioration or intrusion (vermin) and ingress.<br><br>Scheduled cleaning to remove sediment build-up.<br><br>Chemical dosing at selected sites to control water quality. |
| Earthen Storages | Desludging program.<br><br>Water quality monitoring. |
| Service Connections | Reactive renewal where asset deterioration is the identified cause of water quality complaints. |
| Water Supply Bores | Water quality monitoring at high consequence bores. Poor quality prompts use of alternate bore or water source. |

### *6.2.3.* Minimising Lifecycle Costs

***Table 12: Key strategies to minimise lifecycle costs in the water supply system assets***

| Asset Type | Key Strategies to Minimise Lifecycle Costs |
|---|---|
| Urban Water Mains | Renew mains where the projected NPV of cost to maintain exceeds the cost to renew.<br><br>Assess sites for cost-benefit of cathodic protection. Implement cathodic protection where it will reduce lifecycle costs.<br><br>Inspect cathodic protection systems for serviceability and condition. Poor results prompt maintenance and/or renewal.<br><br>Monitor and assess pressure fluctuations in reticulation. Remove pressure fluctuation problems if they are thought to be causing breaks. |
| Rural Water Mains | Renew mains where the projected NPV of cost to maintain exceeds the cost to renew.<br><br>Assess sites for cost-benefit of cathodic protection. Implement cathodic protection where it will reduce lifecycle costs. |

| Asset Type | Key Strategies to Minimise Lifecycle Costs |
|---|---|
| | Inspect cathodic protection systems for serviceability and condition. Poor results prompt maintenance and/or renewal.<br><br>Monitor and assess pressure fluctuations in reticulation. Remove pressure fluctuation problems if they are thought to be causing breaks. |
| Water Pump Stations | Undertake pump overhauls at 11 years for (>5kW) to maximise useful life.<br><br>Monitor efficiency of larger (>22kW) pumps and renew if benefit cost ratio > 1.<br><br>Renew pumps where the projected NPV of cost to maintain exceeds the cost to renew.<br><br>The implementation of strategies such as infrared thermography of switchboards and motors, pump vibration monitoring, oil particulate analysis and ultrasonics to be considered for critical pump station assets. |
| Storages (Non-ANCOLD) (tanks and earthen) | Avoid fail is also more cost effective than run to fail.<br>An "avoid fail" strategy is employed to manage risk, see Section 6.2.1. |
| Meters | Meter are replaced based on time in use or flow registered.<br><br>There are plans to use sample tests of accuracy to replace only groups of like meters for which samples return poor performance. |
| Service Connections & Bores | Cost of inspection means that run to fail presents the lowest lifecycle cost. |

### *6.2.4.* Investment Plan

The key investment drivers are renewal of urban reticulation and expansion of the rural network with acquisitions. It should be noted that the bulk of rural pipeline infrastructure is relatively new and as a result is expected to perform well.
The forecast expenditure profiles for renewals, upgrades & acquisition and operations & maintenance are presented below.

***Upgrades and Acquisitions***

Upgrades and acquisitions budgeted in the existing corporate plan are presented here. Also presented are potential upgrade and acquisition projects currently being assessed. In addition, further upgrade and acquisition projects will arise and be presented in future revisions of this document.

The major driver of expenditure is securing long term sustainability of supply through expansion of the rural pipeline network. Work on the Wedderburn area of the South West

Loddon Rural Pipeline Project kicked off in 2015/16, and subsequent areas to follow. Feasibility assessments are also underway for the West Wimmera and East Grampians and Rocklands to Toolondo link projects.

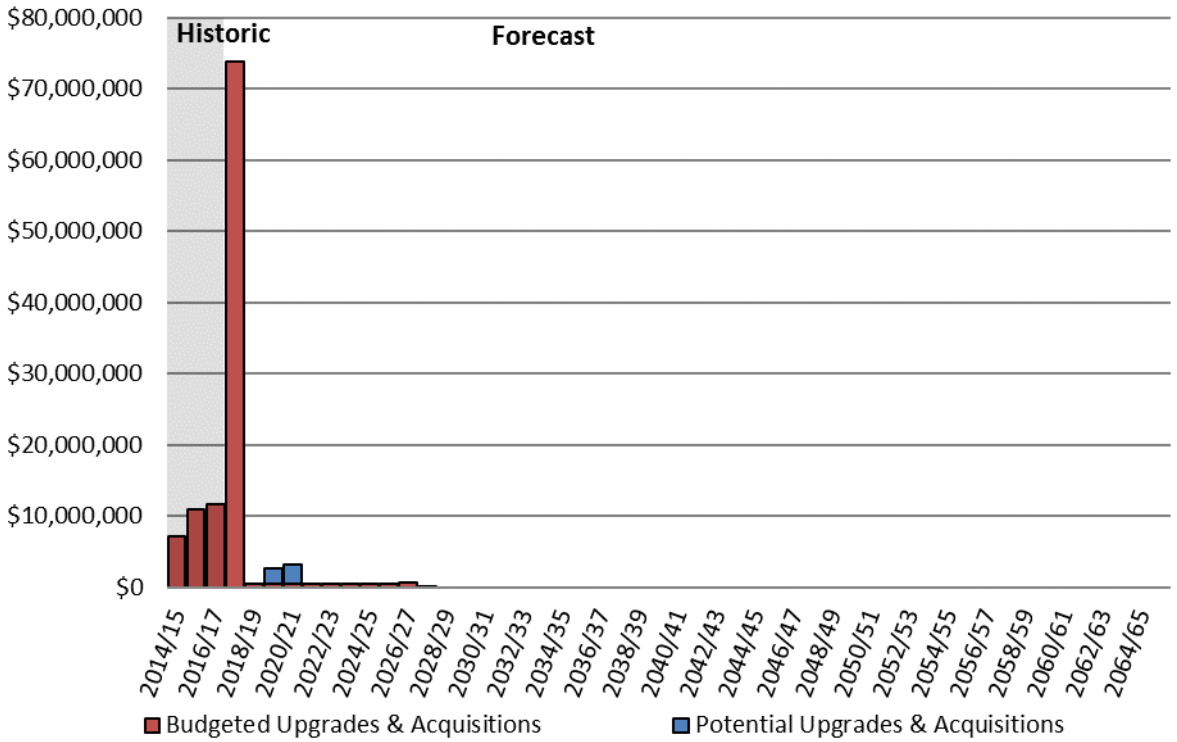



***Figure 9: Water supply system upgrades and acquisitions budgeted in the Corporate Plan and potential works being considered***

***Table 13: Summary of upgrades and acquisitions***

| Timeframe | Upgrades & Acquisitions | |
|---|---|---|
| | **Budgeted** | **Potential** |
| Historic | • Fire tanks project<br>• Peripheral development<br>• Landsborough Valley pipeline<br>• Gifted assets (subdivisions and small pipeline extensions) | |
| 2016/17 | • Wedderburn Pipeline<br>• Peripheral development Wartook<br>• Coonooer bridge water supply project<br>• Gifted assets (subdivisions and small pipeline extensions) | |
| 2017/18 | • West Loddon Pipeline | |

| Timeframe | Upgrades & Acquisitions | |
|---|---|---|
| | **Budgeted** | **Potential** |
| | • Upgrades to selected water tanks to improve water quality and reduce risks to water quality<br>• Lake Fyans PS telemetry<br>• Extend asset life with cathodic protection upgrades and possible acquisitions<br>• Gifted assets (subdivision and small pipeline extensions) | |
| Pricing Period (2018/19 to 2022/23) | • Gifted assets (subdivisions and small pipeline extensions) | • East Grampians water supply upgrade<br>• Urban intelligent metering (UPIP)<br>• Sea Lake water supply upgrade<br>• Emissions reducing upgrades |
| Outer Years (2023/24 to 2065/66) | • Gifted assets (subdivisions and small pipeline extensions) | • West Wimmera water supply upgrade |

### *Operations and Maintenance*

Operational costs are likely to remain relatively constant. Energy costs are likely to increase and be offset by emissions reduction projects. Operational activity is likely to increase as water services are extended and this may result in minor cost increases.

Knowledge of condition of aged electrical assets is incomplete. Additional proactive maintenance will identify condition over coming years.

Existing maintenance programs have been developed conservatively. Future work will use maintenance planning tools to review these programs, confirming and correcting the alignment of maintenance tasks to risks and service levels.

Cost forecasts have been developed out to the 2028 financial year.

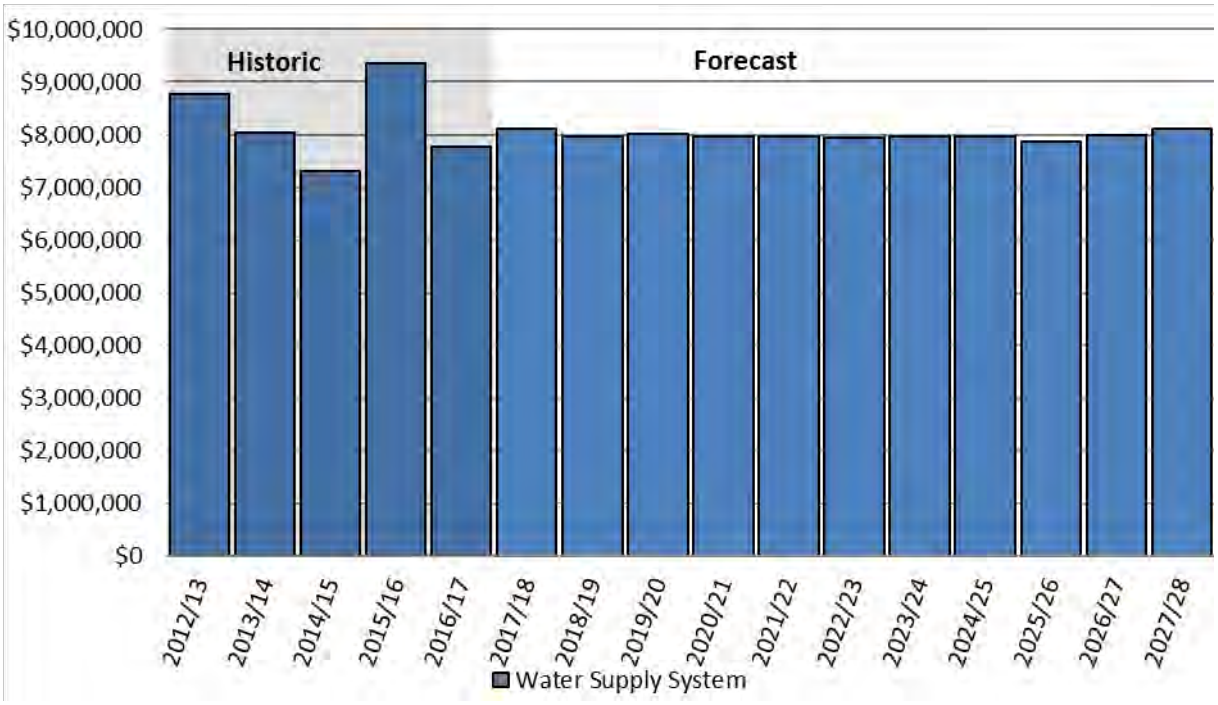



*Figure 10: Forecast operational and maintenance costs for the Water Supply System asset category*

The bulk of reactive maintenance arises from the strategy to react to water main failures.

*Table 14: Planned changes and predicted events that will impact operation and maintenance costs*

| Timeframe | Operations | Proactive Maintenance | Reactive Maintenance |
|---|---|---|---|
| Historic | • Rural network extended to Landsborough Valley<br>• Significant natural events drove increases in OPEX during 15/16. | | |
| 2016/17 | • Review electricity usage<br>• Optimise management and supervision of staff<br>• Ensure staff appropriately trained to optimise plant efficiency | • Scheduled inspection and cleaning program for tanks and storages implemented<br>• Condition assessment of aged Birchip and Horsham elevated tanks. | • Predicted to continue at current average. |

| Timeframe | Operations | Proactive Maintenance | Reactive Maintenance |
|---|---|---|---|
| 2017/18 | • Wedderburn Pipeline will add minimal OPEX<br>• SCADA project for water bores will reduce operational costs.<br>• Optimisation of operating regimes for major pumps will reduce operational costs. | • Expand valve exercising program.<br>• Expand AC testing and condition assessment to help target renewals and extend asset service life.<br>• Electrical maintenance, scheduled inspection of switchboard condition (estimated at $28,700)<br>• Expansion of tank and storage cleaning program to improve water quality<br>• Scheduled Flushing and Air Scouring Program commencing 2017/2018 financial year | • Predicted to continue at current average. |
| Pricing Period (2018/19 to 2022/23) | • Nine SW Loddon water pump stations commissioned<br>• East Grampians project, if it goes ahead, will add OPEX post commissioning. | • Inspections for nine new SW Loddon pump stations (estimated cost: $50,000 annually) | • Predicted to continue at current average. |
| Outer Years (2023/24 to 2065/66) | | | • Predicted to continue at current average. |

### *Renewals*

Recent history and long term projection (50 years) of water supply assets are presented in the following graph.

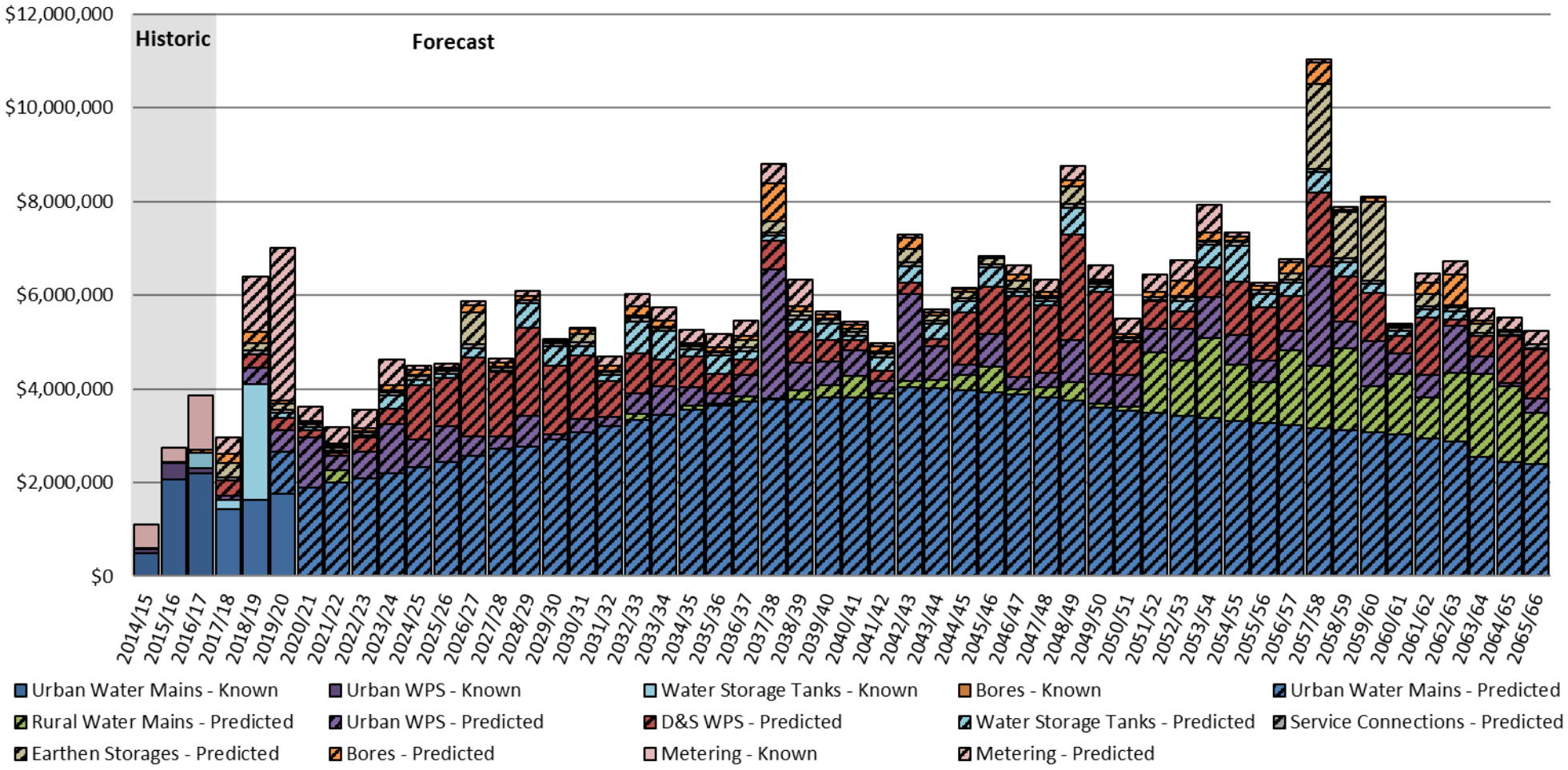



*Figure 11: Historic and forecast water supply system renewals expenditure requirements, both known and predicted*

*Table 15: Description of renewals events within the above forecasts*

| Timeframe | Renewals | |
|---|---|---|
| | **Known** | **Predicted** |
| Historic | • Renewal of aged and failing mains on a risk priority basis. | • Reactive renewal of run to fail assets. |
| 2016/17 | • Renew very high risk and worst performing urban water mains.<br>• Water storage tank renewals to maintain service.<br>• Groundwater meter renewals group 1 | • Reactive renewal of run to fail assets. |
| 2017/18 | • Renew remaining backlog of urban water mains currently each causing three or more interruptions per yr.<br>• Water storage tank renewals.<br>• Renew 1.6km failing section of Tunnel to Stawell main (very high risk).<br>• Cathodic protection renewals. | • 7% of urban water mains are currently breaking. A portion of these will develop into problems requiring renewal in 2017/18.<br>• Reactive renewal run to fail assets, in particular a significant value of water mains and WPS mechanical/electrical assets are likely to require renewal.<br>• Proactive valve renewals to support water quality. |
| Pricing Period (2018/19 to 2022/23) | • The deteriorated Mt Cole to Ararat pipeline will require renewal or alternative solution.<br>• Groundwater meter renewals group 2<br>• Planned water storage renewals. | • Additional water storage tank renewals will be identified by current condition assessment programs.<br>• Continuing renewal of failing AC mains.<br>• Reactive renewal of mechanical/electrical assets. |
| Outer Years (2023/24 to 2065/66) | | • Continuing renewal of failing AC mains.<br>• Trunk mains (older AC and then Mild Steel) reach end of expected life.<br>• Many pump station mechanical/electrical assets now at end of expected life.<br>• Some water tanks and earthen storages at end of expected life. |

## 6.3 Wastewater Collection

### *6.3.1.* Eliminating 'Very High Risks'

Very high risks in the Wastewater Collection asset category are typically:

- risks of sewer spills causing significant environmental or reputational damage;
- risk of deep sewer collapse requiring expensive repair and lengthy impacts to service.

A significant portion of sewer mains are known to pose very high risks. Additionally, a significant portion is aged and may pose very high risks, depending on condition.

*Table 16: Summary of current risk profile for the wastewater collection assets*

| Asset Type | Risk Type | Current Risk Profile | | | |
|---|---|---|---|---|---|
| | Known / Age Based | Low | Medium | High | Very High |
| Sewer Mains (km) | Known | 20 | 47 | 38 | 14 |
| | Age Based | 198 | 204 | 121 | 48 |
| Sewer Pump Stations (number of assets) | Known | 414 | 220 | 137 | 12 |
| | Age Based | | | | 1 |
| Reuse Mains (km) | Known | | | 0.3 | |
| | Age Based | 6.3 | 41 | 8.8 | |

*Table 17: Key strategies for eliminating very high risks in the wastewater collection assets*

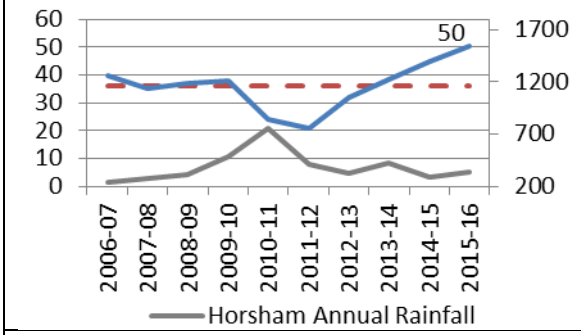
| Asset Type | Key Strategies to Eliminate Very High Risks |
|---|---|
| Sewer Mains | Allow failure of moderate consequence gravity and rising mains. Consider renewal of moderate consequence mains with multiple failures.<br><br>Avoid failure of major and catastrophic consequence of failure mains (collapse of deep mains, spills into areas of high environmental value). Run others to failure.<br><br>CCTV, root treatment and cleaning of old and high consequence of failure mains and manholes (typically these are near waterways or deep concrete pipes).<br><br>Condition assess old and high consequence of failure rising mains.<br>Renew known very high risk mains and manholes, typically those where failure is imminent interrupting >50 customers and those where failure is possible that service >200 customers.<br><br>Level monitoring at critical manholes. |
| Sewer Pump Station (SPS) | Redundancy (duty standby arrangement)<br><br>Availability of backup generators<br><br>Ensure catchment capacity allows adequate retention in the event of pump station failures. |

| Asset Type | Key Strategies to Eliminate Very High Risks |
|---|---|
| | SCADA alarms (well level, outflow pressure and flow) allow prompt restoration of service.<br><br>Regular inspections and audits of pump stations condition.<br>Scheduled pump station cleaning and inspection. Inspection data informs maintenance and renewal programs.<br><br>Availability of critical spares to allow continuity of service.<br><br>The implementation of strategies such as infrared thermography of switchboards and motors, pump vibration monitoring, oil particulate analysis and ultrasonics to be considered for critical pump station assets.<br><br>Assess technology advances in pumps to identify reliability and efficiency improvements. |
| Re-use mains | Undertake condition assessments of mains that are old or root cause analysis of mains experiencing multiple (>2) failures. |

### *6.3.2.* Maintaining Acceptable Levels of Service

Performance in the wastewater collection system is measured by system reliability KPIs for blockages and spills, and rate of customer complaints.

*Table 18: Summary of current and forecast performance issues*

| Historic Performance<br>Actual  Targeted | Current Status | Forecast |
|---|---|---|
| **KPI080 - Sewer blocks per 100km of sewer mains.**<br>  | Under performing. Unfavourable trend. 2nd highest in Victoria (*ESC 2015/16 Performance Report*). | Continuous soil wetting and drying and poor construction methods mean the VC pipes continue to crack and fracture over time. Blockage rate is correlated to rainfall. During low rainfall periods, roots seek out the water within the pipes. 86% of sewer blockages are caused by tree root intrusion. |
| **KPI044 - Customers with 3 or more sewer blockages.** | Under performing. (New KPI for 2015/16) | |

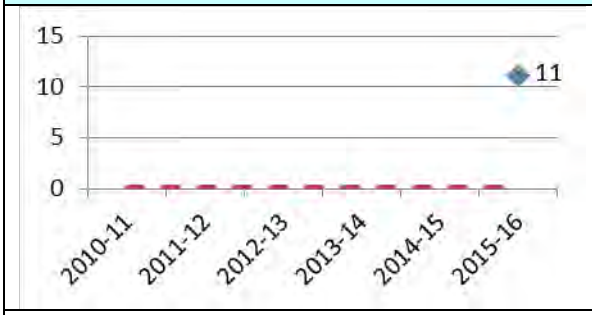
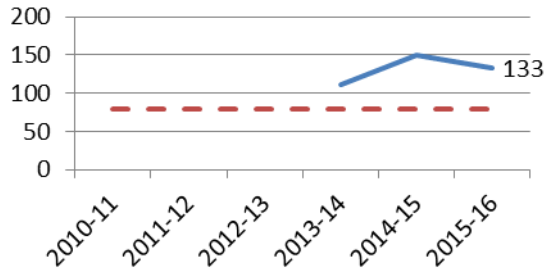
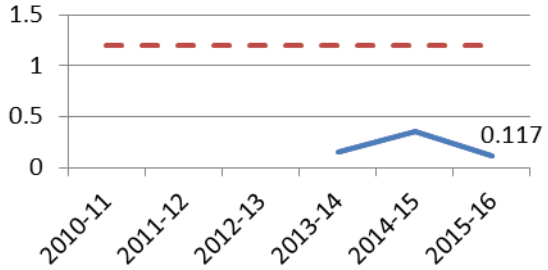
| Historic Performance<br>— Actual – – Targeted | Current Status | Forecast |
|---|---|---|
|  | | The recent increase in rainfall is expected to result in marginally lower blockage rates for 2016/17 (KPI080).<br><br>Blockages are the cause of spills. Less blockages expected, hence less spills expected (KPI086).<br><br>While rainfall variation accounts for some of the variability in KPIs, ongoing asset deterioration drives an increasing trend in blockages over the long term.<br><br>The below strategies address these issues. |
| **KPI086 - Sewer spills from reticulation and branch sewers.**<br>  | Under performing | |
| **KPI009 - Sewerage service quality and reliability complaints per 1000 customers.**<br>  | Over performing | Continued over performance is forecast. |
| **Environmental – Emissions Reduction** | Target not established | |

*Table 19: Key Strategies to maintain service levels by asset type*

| Asset Type | Key Strategies to Maintain Service Levels |
|---|---|
| Sewer Mains | Analysis of type and GPS location of failures informing location of failure hot-spots. Undertake preventative maintenance or renewal at failure hot-spots.<br><br>Focus on areas with the highest blockage rates. CCTV, cleaning and root treatment (83% of blockages are caused by root intrusion) of mains and jump-ups having 2 or more blockages. Focusing on towns with greatest number of spills (Ararat and Stawell) and blockage (Horsham) rates will see an improvement in KPI086, KPI080 and KPI044.<br>Regular inspection and cleaning of air valves on rising mains.<br>Condition assessment of old and moderate consequence of failure rising mains. |

| Asset Type | Key Strategies to Maintain Service Levels |
|---|---|
| | Renewal of sewer mains, rising mains, jump ups and manholes where failure is imminent.<br><br>Trade waste monitoring and management (to prevent blockages from excessive fat).<br><br>Reactively clear blockages. |
| Sewer Pump Station | Routine pump station asset inspections by operators and specialists. Poor results prompt maintenance and renewals to sustain service.<br><br>Built in redundancy (duty standby arrangement). Repair or renew failed assets.<br><br>Availability of backup generators. |
| Re-use mains | Repair at failure. |
| Pressure sewer units | Replace or repair at failure. |

### *6.3.3.* Minimising Lifecycle Costs

Collapse events in deep sewers are expensive to repair (historically tens and, on one occasion, over a hundred thousand to repair).

***Table 20: Key Strategies to minimise lifecycle costs in the wastewater collection assets***

| Asset Type | Key Strategies to Minimise Lifecycle Costs |
|---|---|
| Sewer Mains | Renew mains where the projected NPV of cost to maintain exceeds the cost to renew.<br><br>CCTV inspection and proactive relining presents a lower lifecycle cost than run to fail (collapse and repair). |
| Sewer Pump Station | Undertake pump overhauls at 7.5 years for (>5kW) to maximise useful life.<br><br>Renew pumps where the projected NPV of cost to maintain exceeds the cost to renew.<br><br>Currently developing process of efficiency monitoring for larger (>22kW) pumps and renew if benefit cost ratio > 1.<br><br>System analysis (flows, spills) seeking efficiency. |
| Re-use mains | Renew mains where the projected NPV of cost to maintain exceeds the cost to renew. |

### *6.3.4.* Investment Plan

The key investment drivers for the wastewater collection asset category are growth sewer projects and sewer main relining. Renewal of many aged mechanical/electrical assets if combined with OHS upgrades at SPS to form the SPS modernisation program.

*Upgrades and Acquisitions*

Budgeted expenditure is shown. Additional projects currently being prioritised are shown as potential expenditure. Further projects will arise.
The historic focus on installing sewer services at previously un-serviced towns is expected to continue. As potential projects are identified these will be included in the forecast.

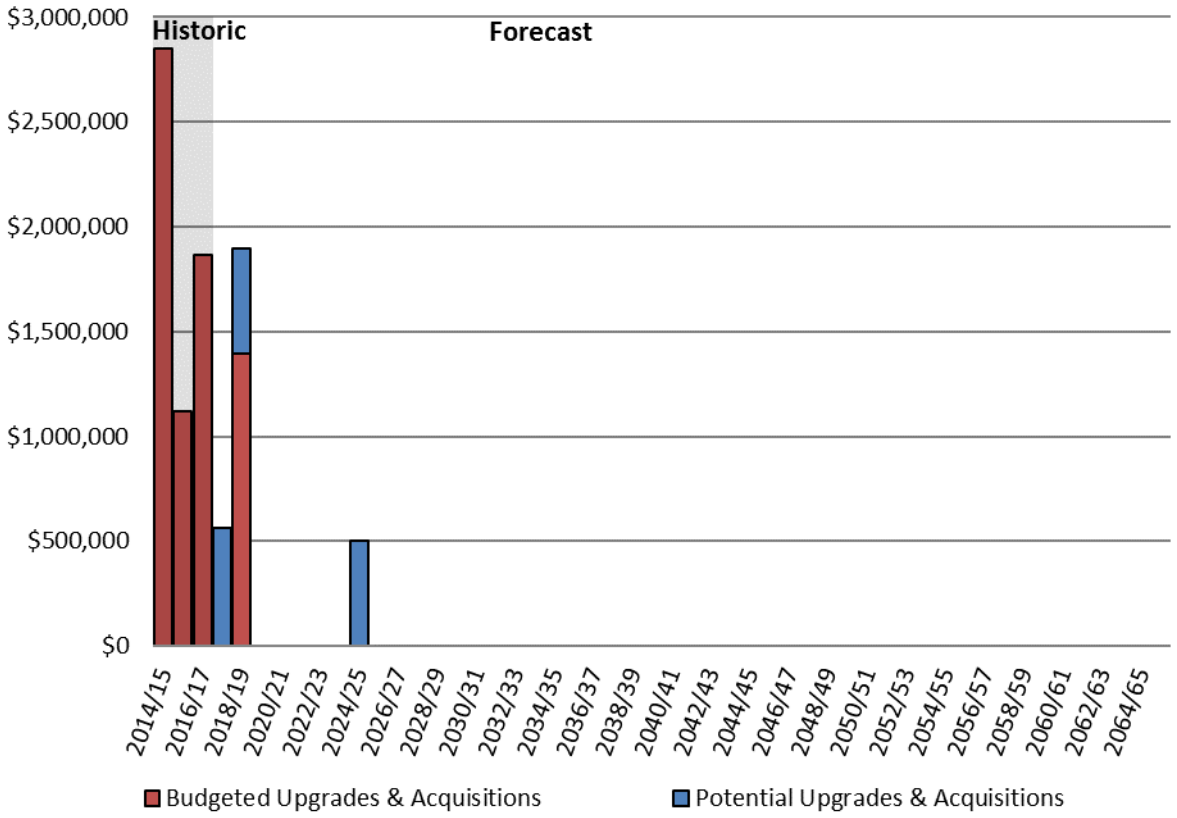



***Figure 12: Wastewater collection upgrades & acquisitions, both budgeted projects and potential projects***

***Table 21: Summary of upgrades and acquisitions***

| Timeframe | Upgrades & Acquisitions | |
|---|---|---|
| | **Budgeted** | **Potential** |
| Historic | | |
| 2016/17 | • Alfred St Sewer Augmentation | |
| 2017/18 | • SPS OHS upgrades<br>• Gifted assets | |

| Timeframe | Upgrades & Acquisitions | |
|---|---|---|
| | Budgeted | Potential |
| Pricing Period (2018/19 to 2022/23) | • SPS OHS upgrades<br>• Gifted assets | • Upgrade to Sewer Flow Meters and Telemetry |
| Outer Years (2023/24 to 2065/66) | • SPS OHS upgrades<br>• Gifted assets | |

### *Operations and Maintenance*

Operational costs are likely to remain relatively constant. Energy costs are likely to increase and be offset by emissions reduction projects. Operational activity is likely to increase as sewer services are extended, resulting in minor cost increases.

Investment in CCTV inspection and root treatment has increased in recent times, partly as a strategy to improve KPI080.

Knowledge of condition of ageing electrical assets is incomplete. Additional proactive maintenance will identify condition over the coming years. This is estimated to result in an initial maintenance cost increase followed by a reduction and stabilisation as these new programs are introduced and optimised.

Cost forecasts have been developed out to the 2028 financial year.

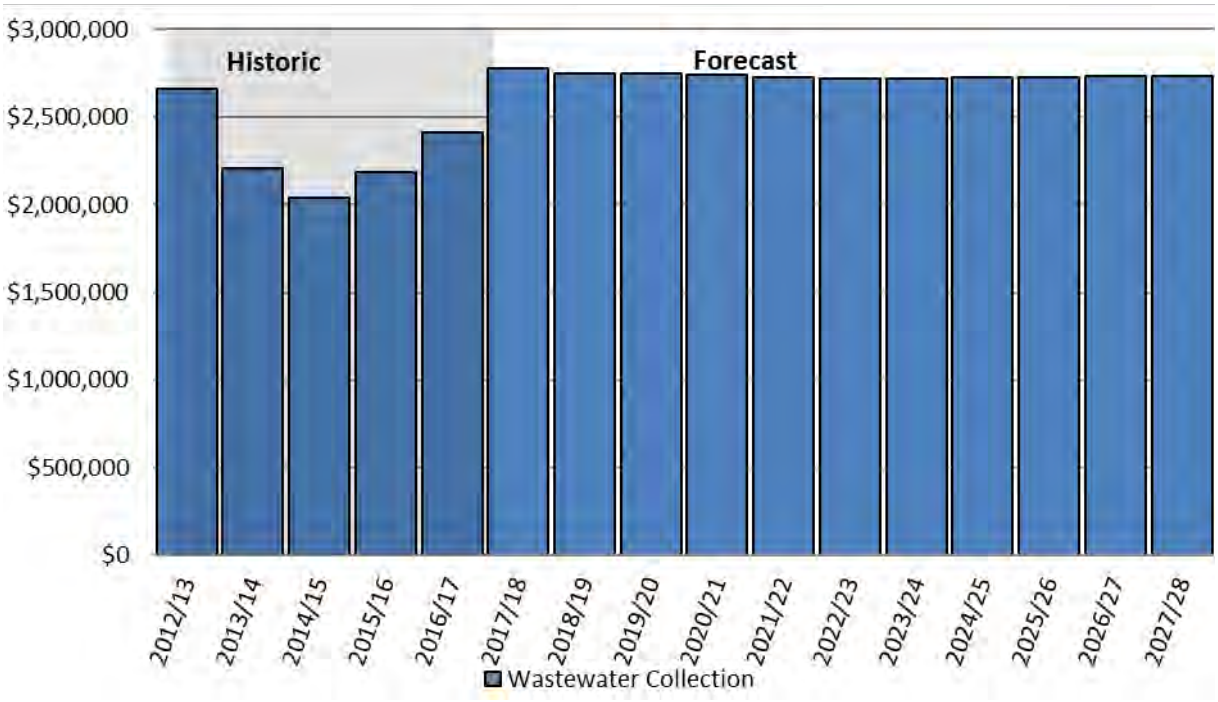



***Figure 13: Forecast operational and maintenance costs for the wastewater collection system.***

*Table 22: Planned changes and predicted events that will impact operation and maintenance costs*

| Timeframe | Operations | Proactive Maintenance | Reactive Maintenance |
|---|---|---|---|
| 2016/17 | • Review electricity usage<br>• Optimise management and supervision of staff<br>• Ensure staff appropriately trained to optimise plant efficiency | • Scheduled SPS pump servicing and SPS Wet well cleaning. | • Repair assets as they fail |
| 2017/18 | • Review electricity usage<br>• Optimise management and supervision of staff<br>• Ensure staff appropriately trained to optimise plant efficiency | • Electrical maintenance, scheduled inspection of switchboard condition (estimated to add $17,300) | |
| Pricing Period (2018/19 to 2022/23) | • Potential expansion of sewer systems into towns where none exist will add OPEX | | |
| Outer Years (2023/24 to 2065/66) | | | |

### *Renewals*

Recent history and long term projection (50 years) of wastewater collection assets are presented in the following graph.

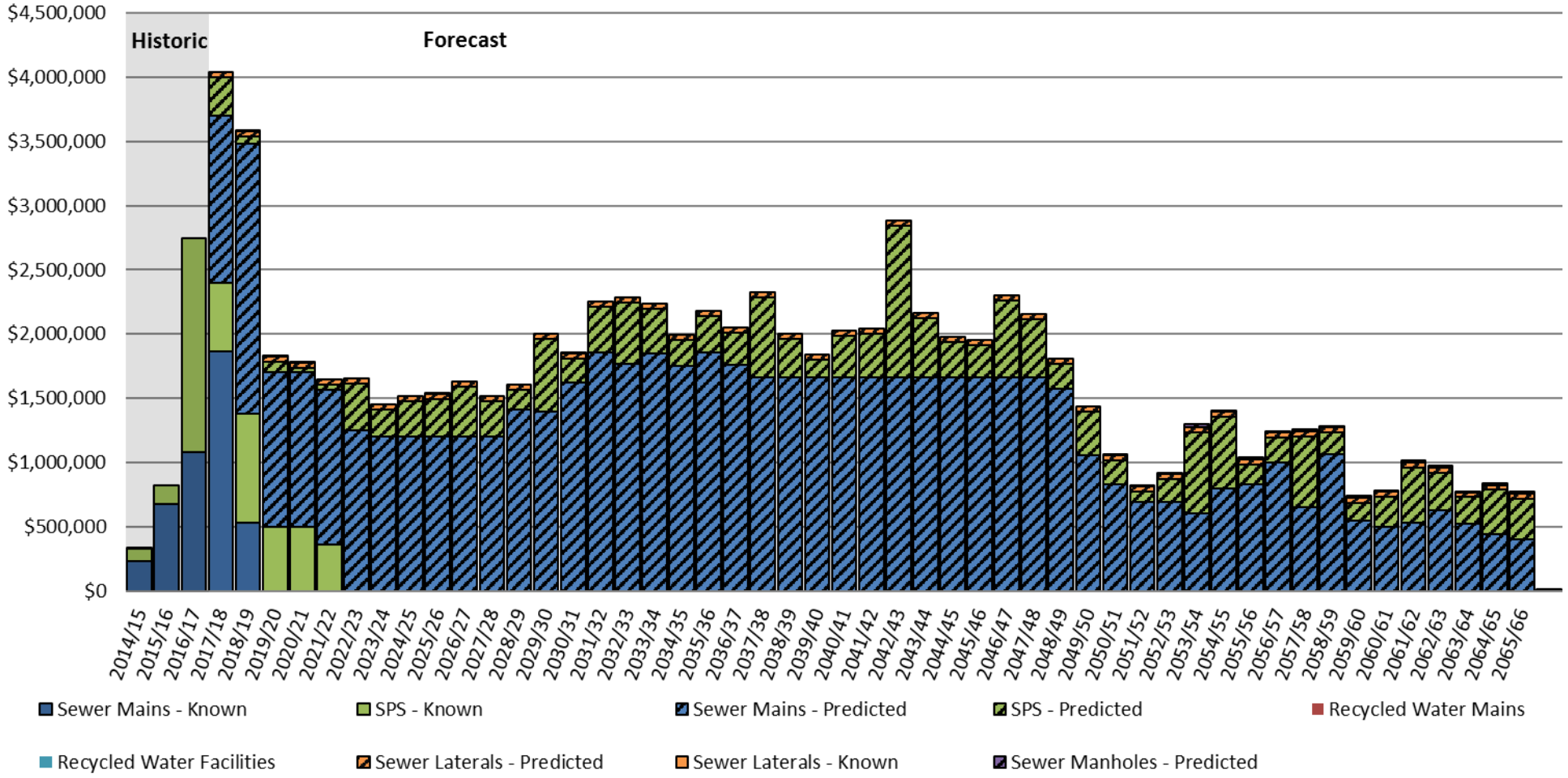



*Figure 14: Historic and forecast wastewater collection renewals expenditure requirements, both known and predicted. Forecast includes some smoothing of peaks to reflect expected spread of renewals.*

*Table 23: Description of renewals events within the above forecast*

| Timeframe | Renewal Events | |
|---|---|---|
| | **Known** | **Predicted** |
| Historic | • Intermittent sewer relining programs.<br>• Renewal of selected SPS assets.<br>• SPS modernisation program begins, replacing many poor condition mechanical & electrical assets. | |
| 2016/17 | • SPS modernisation program continues.<br>• Reline poor condition very high risk sewer mains.<br>• Additional relining of problem mains to drive KPIs towards targets. | • Reactive renewal of run to fail assets. |
| 2017/18 | • SPS modernisation program continues.<br>• Relining of problem mains will be required to drive KPIs towards targets.<br>• Relining in Donald as part of the Donald Sewer Infiltration Work. | • Normal deterioration of SPS assets will result in failures requiring renewal.<br>• The 2016/17 inspection program is assessing the condition of high consequence of failure mains and will identify additional very high risk mains requiring relining. Forecast budget assumes 40% of mains inspected will require relining. This is consistent with 2015/16 results.<br>• High consequence of failure manholes are being condition assessed. Some may require renewal.<br>• An unknown quantity of sewer laterals may require renewal. Condition assessment program commenced 2016/17. |
| Pricing Period (2018/19 to 2022/23) | • SPS modernisation program continues.<br>• Further relining of gravity mains and laterals as identified by ongoing CCTV inspection program. | • Scheduled inspection will identify sewer asset renewal/relining needs.<br>• Works on aged high consequence of failure rising mains may be required. To be |

| Timeframe | Renewal Events | |
|---|---|---|
| | Known | Predicted |
| | | informed by condition assessments. |
| Outer Years (2023/24 to 2065/66) | • SPS modernisation program continues. | • Continued relining of sewer reticulation to remove very high risks and to improve KPIs.<br>• Reactive renewal of SPS assets. |

## 6.4 Water Treatment

### *6.4.1.* Eliminating 'Very High Risks'

There are currently no very high risks posed by poor condition water treatment infrastructure.

Very high risks in the water treatment asset category typically arise from probable failure of;

- pressure vessels or buildings resulting in risk of injury and supply interruption resulting from extended downtime; or
- PLC or electrical control panels resulting in risk of supply interruption resulting from extended downtime.
- Storage tank failure resulting in reputational, operational, and cost consequences and threat to safety.

Recent regulatory changes have resulted in some treatment processes becoming insufficient. There is a risk of non-compliance if these deficient systems are not upgraded.

*Table 24: Summary of current risk profile for the water treatment assets*

| Risk Type | Current Risk Profile (number of assets) | | | |
|---|---|---|---|---|
| | Low | Medium | High | Very High |
| Known | - | 40 | 1 | - |
| Age Based | 1163 | 668 | 59 | - |

*Table 25: Key strategies for eliminating very high risks in the water treatment assets*

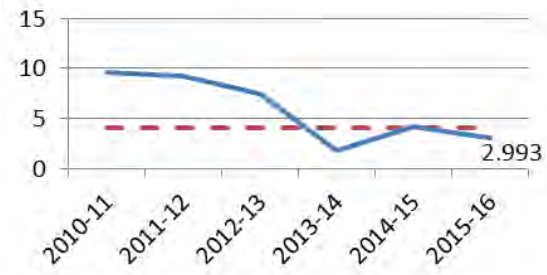
| Asset Type | Key Strategies to Eliminate Very High Risks |
|---|---|
| (Various) | Upgrades to meet compliance. |
| Pressure Vessels | Safe operating procedures in place.<br><br>Compliance inspections required every 2years (external) and 4years (internal). Proactive renewal on basis on inspection results. |
| Electrical Control Panels | Electrical inspections. Poor results prompt proactive renewal. Replace components as they fail or the technology is no longer supported.<br><br>Consider more predictive condition monitoring (such as thermography) to allow proactive renewal. |

| Asset Type | Key Strategies to Eliminate Very High Risks |
|---|---|
| Programmable Logic Controllers | Replace components as they fail and upgrade as the technology becomes obsolete. Adequate spares allow repair within the allowable outage. |
| Other Mechanical / Electrical | Asset inspections to maintain knowledge of asset condition. Poor results are investigated with condition assessments and/or treated with proactive renewal.<br><br>Undertake pump overhauls at 7.5 years for (>5kW) to maintain reliability.<br><br>Explore options to monitor condition of critical mechanical/electrical assets (for example, vibration analysis and/or thermography) allowing preventative maintenance or proactive renewal before failure. |
| Civil (such as filter tanks) | Asset deterioration reported by operators.<br><br>Inspection and/or condition assessment undertaken on aged or deteriorated assets. Poor results prompt rehabilitation. |
| Other | Site access tracks and fire breaks inspected and maintained.<br><br>Repair/replace failed assets to within allowable outage times or to restore redundancy (i.e. restore the risk control). |

### *6.4.2.* Maintaining Acceptable Levels of Service

Water treatment plants function is to produce treated water of sufficient quality that it reaches the customer at a compliant quality.

*Table 26: Summary of current and forecast performance issues*

| Historic Performance<br>— Actual – – Targeted | Status | Forecast |
|---|---|---|
| **KPI008 – Drinking water quality complaints per 1000 customers.**<br>  | • Over performing.<br>• Favourable trend.<br>• Compare well with state performance (*ESC 2015/16 Performance Report*). | Recent performance suggests the target will continue to be met. |
| **KPI332, KPI333, KPI334 – Water quality compliance.** | Target met | Recent performance suggests the target will continue to be met.<br><br>Changes to water quality regulations require some |

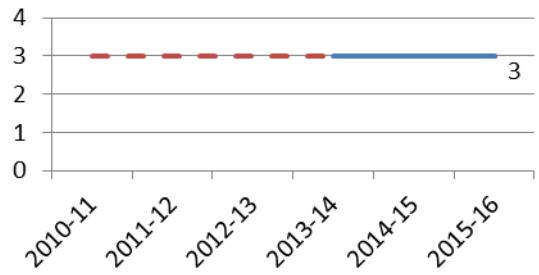
| | | |
|---|---|---|
|  | | upgrade and acquisition works to raise treatment levels and meet the stricter standards. |

*Table 27: Key strategies to maintain service levels by asset type*

| Asset Type | Key Strategies to Maintain Compliant and Satisfactory Water Quality |
|---|---|
| All | Undertake assessment of treatment upgrade options to improve water quality.<br><br>Undertake assessment of options to extend treated and regulated water services to additional towns. |
| Instrumentation | Replacement or calibration of water quality sensors at set intervals.<br><br>Volume and quality monitoring of influent and product water. Results used to calibrate the treatment process and achieve target quality and efficiency. |

### *6.4.3.* Minimising Lifecycle Costs

*Table 28: Key strategies to minimise lifecycle costs in the water treatment assets*

| Asset Type | Key Strategies to Minimise Lifecycle Costs |
|---|---|
| All | Upstream water quality monitoring, allowing preferential entry of higher quality water into WTP, thus reducing the treatment necessary to achieve compliant quality.<br><br>Monitor efficiency and effectiveness of treatment plant (monitor water quality, water usage, production, chemical usage, energy usage, labour). Investigate poor results and possible improvements. |
| Mechanical / Electrical | Pump overhauls and electrical testing.<br><br>Monitor efficiency of larger (>22kW) assets and renew if benefit cost ratio > 1.<br><br>Renew assets where the projected NPV of cost to maintain exceeds the cost to renew.<br><br>Implement non-destructive testing regime. |
| Civil | High cost of reinstatement means that avoid failure is the lower lifecycle cost strategy. Undertake condition assessments on aged assets. Poor condition prompts renewal. See Section 6.4.1 |
| Cathodic Protection | Cathodic protection systems extend the life of metallic assets.<br><br>Inspect cathodic protection systems for serviceability and condition. Poor results prompt maintenance and/or renewal. |

| Asset Type | Key Strategies to Minimise Lifecycle Costs |
|---|---|
| | Assess sites for cost-benefit of cathodic protection. Implement upgrades & acquisitions where justified, typically where the cathodic protection will reduce lifecycle costs. |

### 6.4.4. Investment Plan

*Upgrades and Acquisitions*

Budgeted expenditure is shown. Additional expenditure is currently being prioritised.

Water quality upgrades and service improvements are the focus of budgeted expenditure. Continued expansion of treated water services to current non-potable towns will be a continued focus beyond the budgeted horizon.

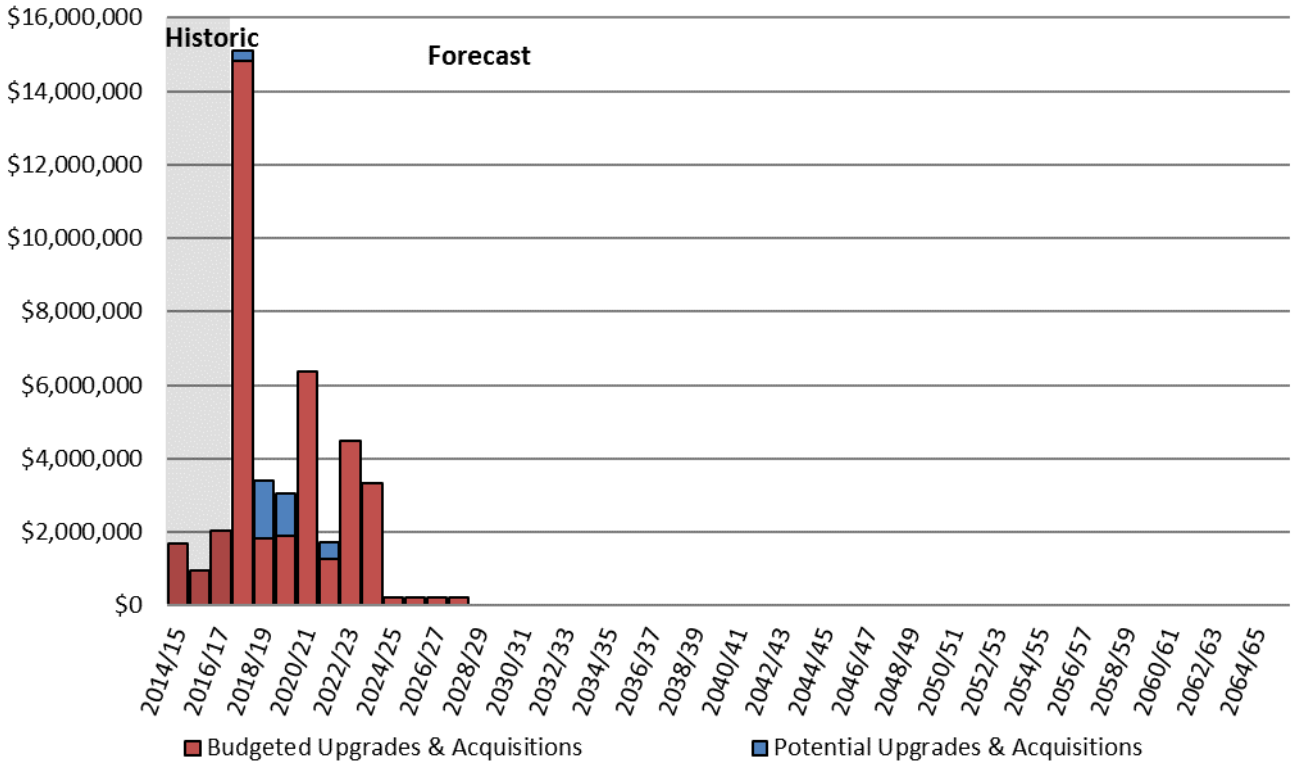



*Figure 15: Water treatment upgrades and acquisitions budgeted in the Corporate Plan and potential works being considered.*

*Table 29: Summary of upgrades and acquisitions*

| Timeframe | Upgrades & Acquisitions | |
|---|---|---|
| | Budgeted | Potential |
| Historic | | |

| Timeframe | Upgrades & Acquisitions | |
|---|---|---|
| | Budgeted | Potential |
| 2016/17 | • Mt Zero PAC dosing<br>• Water quality upgrades at Beulah & Woomelang<br>• Extend asset life with cathodic protection upgrades and possible acquisitions | |
| 2017/18 | • Water treatment at Sea Lake<br>• Water quality upgrade at Brim<br>• Extend asset life with cathodic protection upgrades and possible acquisitions | |
| Pricing Period (2018/19 to 2022/23) | | • Emissions reducing upgrades<br>• Water treatment plant upgrades Underbool, Ouyen, Manangatang, and Willaura<br>• pH correction automation and monitoring upgrades.<br>• Willaura pre-filtration<br>• Mt Zero channel diversion. |
| Outer Years (2023/24 to 2065/66) | | • Charlton pH correction |

### *Operation and Maintenance*

OPEX for the current approach is forecast below. Expansion of services to previously non-potable towns will increase future OPEX.

Additional proactive maintenance is being identified. Implementation will cause an initial increase followed by a reduction and stabilisation as new programs are introduced and optimised.

Cost forecasts have been developed out to the 2028 financial year.

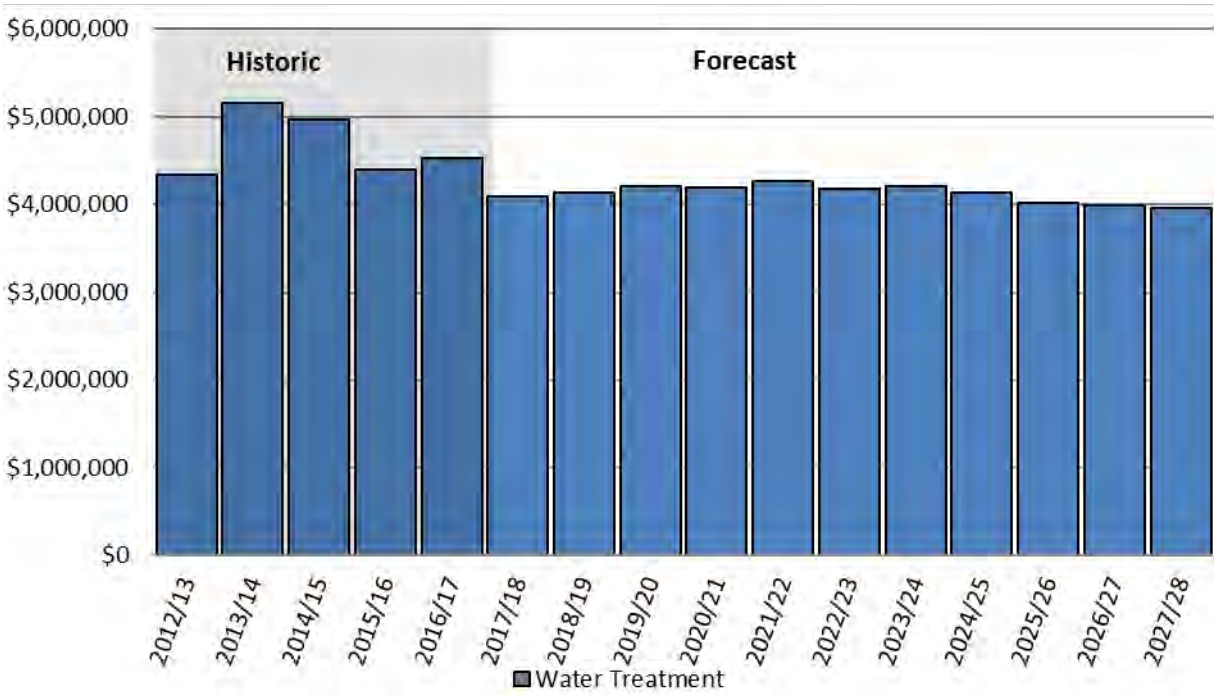



*Figure 16: Forecast operational and maintenance costs for the water treatment assets*

*Table 30: Planned changes and predicted events that will impact operation and maintenance costs*

| Timeframe | Operations | Proactive Maintenance | Reactive Maintenance |
|---|---|---|---|
| 2016/17 | | • Scheduled maintenance programs for valve actuators, flow meters, DAFF cell cleaning, air compressors, analyser equipment. | • Repair assets as they fail |
| 2017/18 | • Review chemical, electricity usage<br>• Optimise management and supervision of staff<br>• Ensure staff appropriately trained to optimise plant efficiency | • Electrical maintenance, scheduled inspection /audit of switchboard condition status (estimated to add $17,450) | |
| Pricing Period (2018/19 to 2022/23) | • Potential expansion of treated water services would add OPEX. | • Rationalisation of monitoring and proactive maintenance programs | |
| Outer Years (2023/24 to 2065/66) | | • Rationalisation of monitoring and proactive maintenance programs | |

### *Renewals*

Short term proactive renewals are identified by inspection and condition assessment. Longer-term renewals are based on condition assessments or age and are less certain.

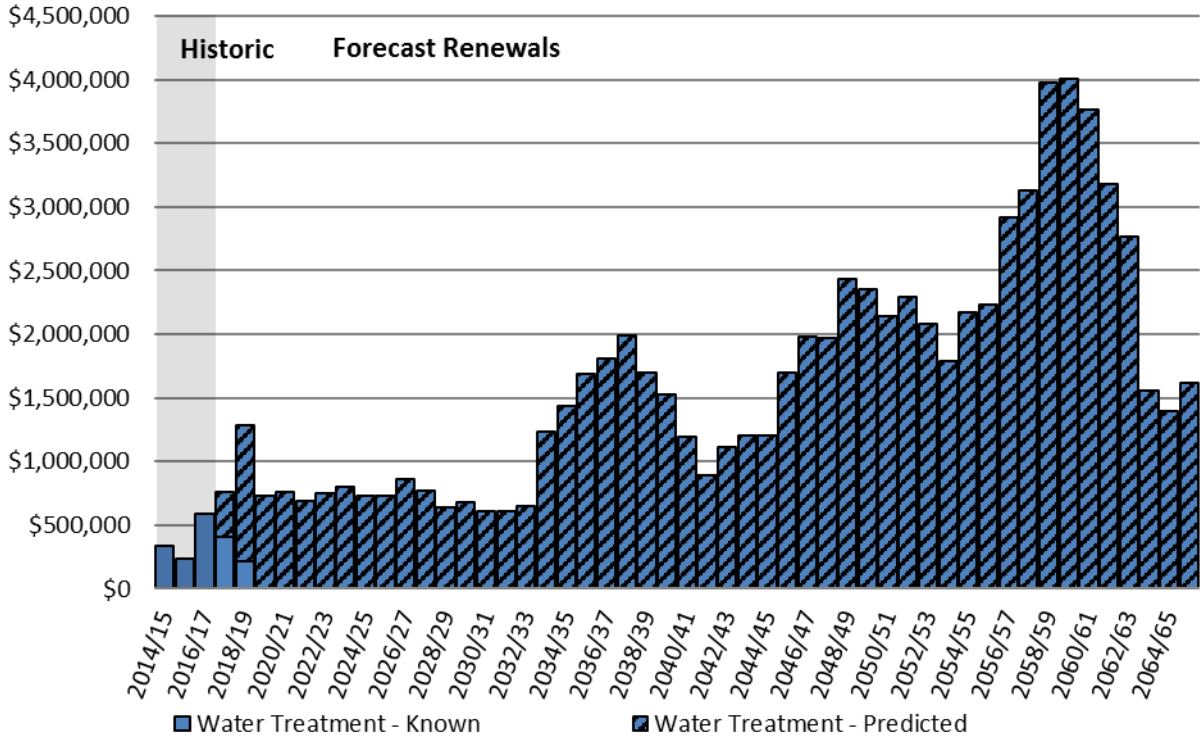



*Figure 17: Historic and forecast renewal costs for the water treatment asset category*

*Table 31: Known and predicted renewals needs in the water treatment asset category*

| Timeframe | Renewals | |
|---|---|---|
| | Known | Predicted |
| Historic | • DAFF Tank Epoxy Coating | |
| 2016/-17 | • WTP PLC Upgrades<br>• Instrumentation renewals | • Reactive renewal of failing, aged and obsolete assets (instrumentation, pumps, motors) |
| 2017/18 | • WTP PLC Upgrades<br>• Instrumentation renewals | • Reactive renewal of failing, aged and obsolete assets (instrumentation, pumps, motors) |
| Pricing Period (2018/19 to 2022/23) | • WTP PLC Upgrades | • Reactive renewal of failing, aged and obsolete assets (instrumentation, pumps, motors) |
| Outer Years (2023/24 to 2065/66) | • Relining of DAFF tanks<br>• Renewal of process tanks | • Reactive renewal of failing, aged and obsolete assets (instrumentation, pumps, motors) |

## 6.5 Wastewater Treatment

### *6.5.1.* Eliminating 'Very High Risks'

Very High Risks in the Wastewater Treatment asset category are typically risks of major EPA licence non-compliance. Lesser risks arise from lack of capacity resulting in non-compliant discharge or shortage of reuse water supply.

Large storages are managed having regard to ANCOLD guidelines and subsequently assessed. Dam Safety Reports are commissioned and the recommendations evaluated. For significant works risk assessments and, if necessary, a strategic assessment or business case is undertaken to determine most appropriate course of action.

*Table 32: Summary of current risk profile for the wastewater treatment assets*

| Risk Type | Current Risk Profile | | | |
|---|---|---|---|---|
| | Low | Medium | High | Very High |
| Known | - | - | 1 | |
| Age Based | 683 | 258 | 37 | |

*Table 33: Key strategies for eliminating very high risks in the wastewater treatment assets*

| Asset Type | Key Strategies to Eliminate Very High Risks |
|---|---|
| Earthen storages (Wet weather storages and lagoons) | High consequence of failure storages (large wet weather storages) managed in accordance with ANCOLD guidelines and lifecycle activities undertaken as per recommendations of the Dam Safety Inspections. |

| Asset Type | Key Strategies to Eliminate Very High Risks |
|---|---|
| Mechanical/Electrical (pumps, aerators, rotating arms and blowers) | Asset inspections to maintain knowledge of asset condition. Poor results are investigated with condition assessments and/or treated with proactive renewal.<br><br>Undertake pump overhauls at 7.5 years for (>5kW) to maintain reliability.<br><br>Explore options to monitor condition of large mechanical/electrical assets (for example, vibration analysis and/or thermography) allowing preventative maintenance or proactive renewal before failure. |
| Civil (process tanks and pipework) | Periodic structural assessment of high consequence of failure structures as well as routine inspections. Poor results prompt maintenance or renewal. |

### 6.5.2. Maintaining Acceptable Levels of Service

Performance in the wastewater treatment system is measured by EPA licence compliance.

*Table 34: Summary of current and forecast performance issues.*

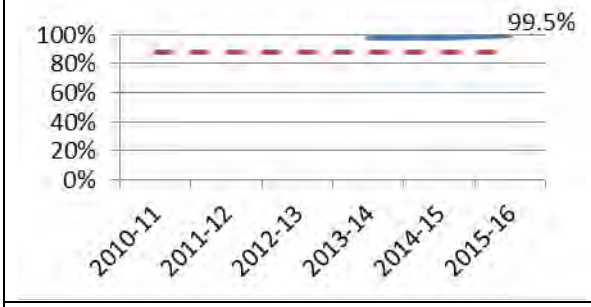
| Historic Performance<br>— Actual – – Targeted | Current Status | Forecast |
|---|---|---|
| **KPI020 – EPA licence compliance.**<br>  | Over performing | Continued over performance |
| Environmental – Emissions Reduction | Target not set | |

*Table 35: Key strategies to maintain service levels by asset type*

| Asset Type | Key Strategies to Maintain Service Levels |
|---|---|
| Earthen storages (Wet weather storages and lagoons) | Routine inspections of embankments. Renewals or upgrade of structures and liners to prevent wastewater quality issues. Preventative maintenance on embankments to avoid non-compliant releases.<br><br>Consider upgrades of wet weather storages to reduce risk of non-compliance release (impacts KPI020). |

| Asset Type | Key Strategies to Maintain Service Levels |
|---|---|
| | Desludging program to maintain treatment system capacity.<br><br>Receiving environment monitoring. |
| Mechanical/Electrical (pumps, aerators, rotating arms and blowers, switchboards) | Asset inspections to maintain knowledge of asset condition. Poor results are investigated with condition assessments and/or treated with proactive renewal. |
| Civil assets (process tanks and pipework) | Routine inspections. Periodic structural assessments of large structures. |

### *6.5.3.* Minimising Lifecycle Costs

*Table 36: Key strategies to minimise lifecycle costs by asset type*

| Asset Type | Key Strategies to Minimise Lifecycle Costs |
|---|---|
| Earthen storages (wet weather storages and lagoons) | Renew or upgrade where the projected NPV of cost to maintain exceeds the cost to renew or upgrade. |
| Mechanical/Electrical (pumps, aerators, rotating arms and blowers, switchboards) | Undertake pump overhauls at 7.5 years for (>5kW) to maximise useful life.<br><br>Monitor efficiency of larger (>22kW) pumps and renew if benefit cost ratio > 1.<br><br>Renew pumps where the projected NPV of cost to maintain exceeds the cost to renew.<br><br>Treatment process monitoring (volume and quality) to allow optimisation of process and cost minimisation. |
| Civil (process tanks and pipework) | Renew or upgrade structures where the projected NPV of cost to maintain exceeds the cost to renew. |

### 6.5.4. Investment Plan

#### *Upgrades and Acquisitions*

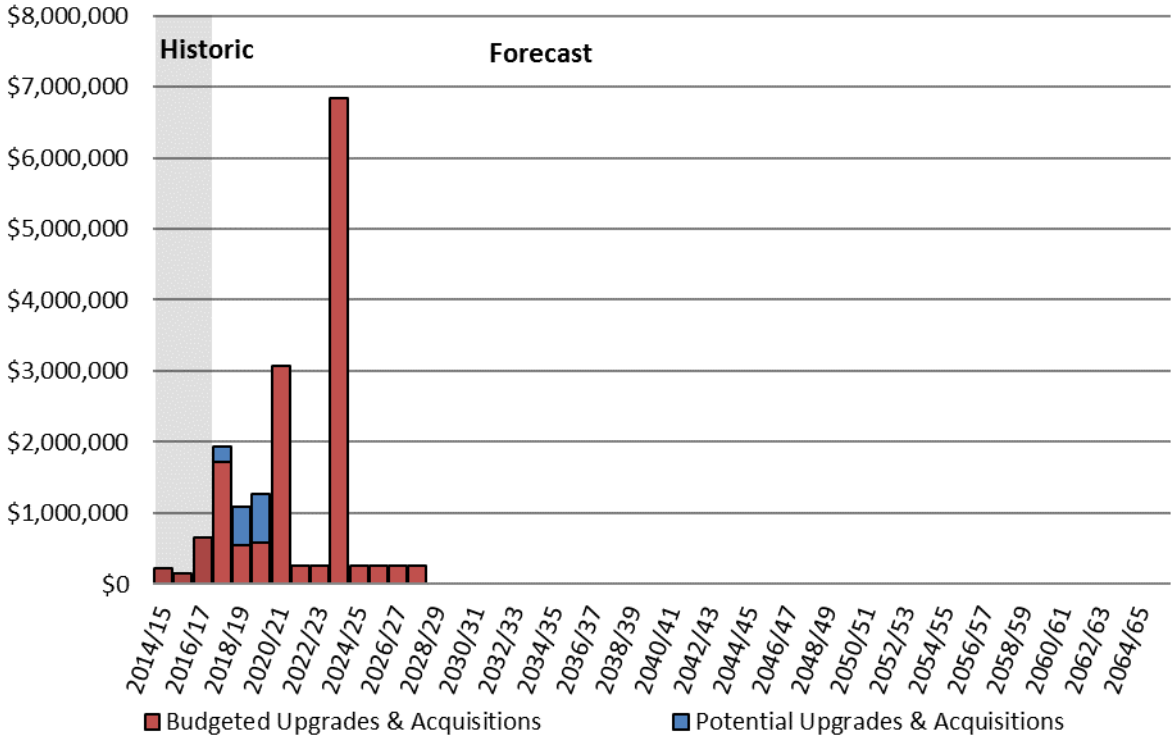



*Figure 18: Wastewater treatment upgrades and acquisitions budgeted in the Corporate Plan and potential works being considered*

*Table 37: Summary of upgrades and acquisitions.*

| Timeframe | Upgrades & Acquisitions | |
|---|---|---|
| | **Budgeted** | **Potential** |
| 2016/17 | • Dimboola WWTP upgrade<br>• Horsham WWTP inlet works upgrade | |
| 2017/18 | • Dimboola WWTP upgrade | |
| Pricing Period (2018/19 to 2022/23) | • Donald WWTP upgrade | • Emissions reducing upgrades<br>• Ararat inlet works |
| Outer Years (2023/24 to 2065/66) | • Horsham WWTP rebuild (possible relocation) | |

### *Operation and Maintenance*

Most assets undergo capital renewals. This results in low reactive maintenance costs. Additional proactive maintenance is being identified. There will be an initial increase followed by a reduction and stabilisation as these new programs are introduced and optimised.

Going forward, optimisation of maintenance strategies will leverage off the growing maturity in data provided by the works management system.

Cost forecasts have been developed out to the 2028 financial year.

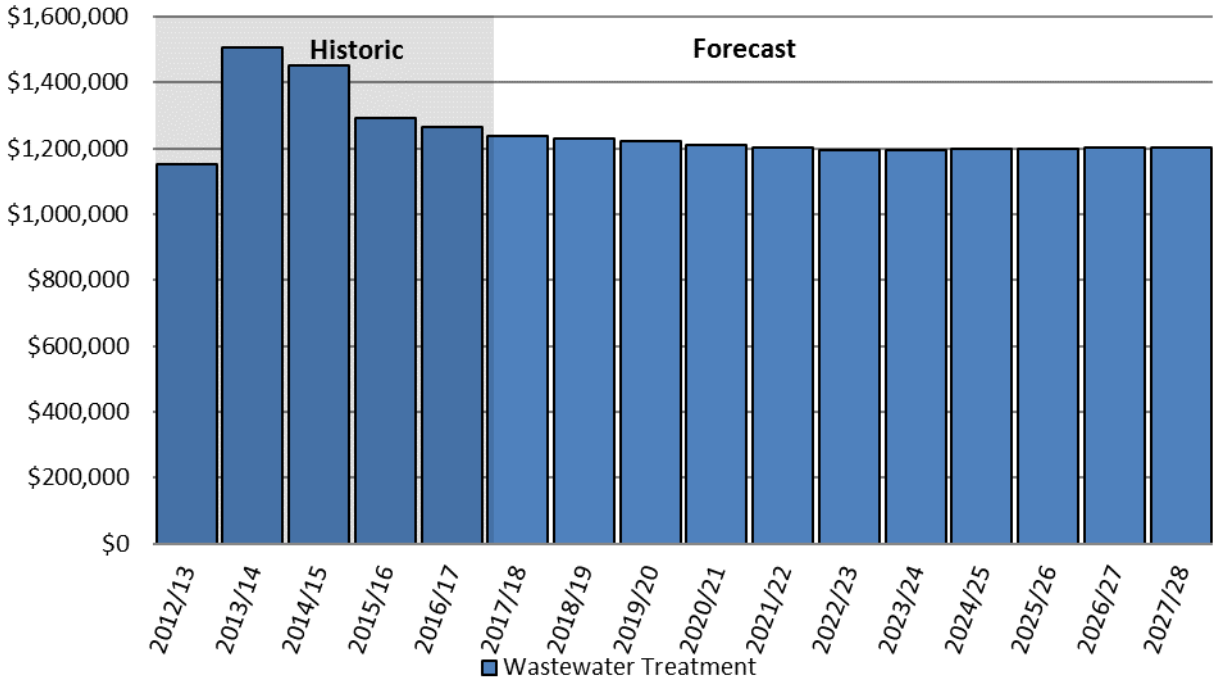



*Figure 19: Forecast operational and maintenance costs for wastewater treatment plants*

*Table 38: Planned changes and predicted events that will impact operation and maintenance costs*

| Timeframe | Operations | Proactive Maintenance | Reactive Maintenance |
|---|---|---|---|
| 2016/17 | | | |
| 2017/18 | • Review electricity usage<br>• Optimise management and supervision of staff<br>• Ensure staff appropriately trained to optimise plant efficiency | • Scheduled maintenance programs for mechanical/electrical assets<br>• Electrical maintenance, scheduled inspection /audit of | • Repair assets as they fail |

| Timeframe | Operations | Proactive Maintenance | Reactive Maintenance |
|---|---|---|---|
| | | switchboard condition status | |
| Pricing Period (2018/19 to 2022/23) | | • Rationalisation of monitoring and proactive maintenance programs | • Repair assets as they fail |
| Outer Years (2023/24 to 2065/66) | | • Review and analysis of maintenance programs | • Repair assets as they fail |

### *Renewals*

Strategy for renewals is consistent with the hierarchy of objectives (see Section 5); assets are run to failure unless their failure is expected to result in a very high risk or sub-optimal lifecycle costs, in which case a proactive renewal is planned.

Near future proactive renewals are identified by the site management plans.

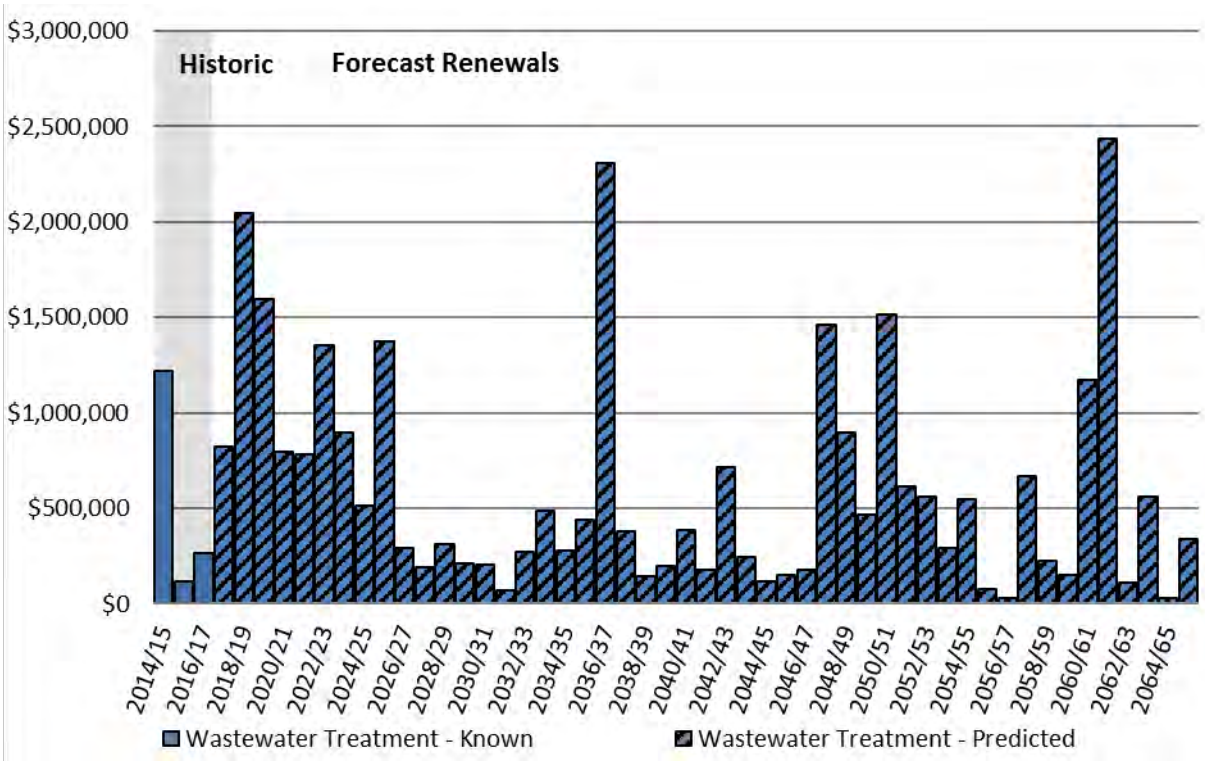



***Figure 20: Historic and forecast renewals expenditure requirements, both known and predicted***

*Table 39: Description of renewals events within the above forecast*

| Timeframe | Renewal Events | |
|---|---|---|
| | Known | Predicted |
| Historic | • Warracknabeal Wet Weather Storage rehabilitation<br>• Rehabilitation of Sea Lake and Charlton lagoon embankments | |
| 2016/17 | | • Reactive renewal of failing, aged and obsolete assets (instrumentation, pumps, motors) |
| 2017/18 | • Rehabilitation of lagoon embankments | • Reactive renewal of failing, aged and obsolete assets (instrumentation, pumps, motors) |
| Pricing Period (2018/19 to 2022/23) | | • Reactive renewal of failing, aged and obsolete assets (instrumentation, pumps, motors)<br>• Lagoon and storage embankment improvements |
| Outer Years (2023/24 to 2065/66) | | • Reactive renewal of failing, aged and obsolete assets (instrumentation, pumps, motors)<br>• Horsham WWTP upgrade or relocation |

## 6.6 Headworks Distribution System

### *6.6.1.* Eliminating 'Very High Risks'

Very high risks in the headworks distribution system are typically risk of channel structure collapse resulting in injury or major operational consequences. Failure of road crossings should be avoided due to risk of injury. All road crossings have been inspected.

*Table 40: Summary of current risk profile for the headworks distribution assets*

| Asset Type | Risk Type | Current Risk Profile | | | |
|---|---|---|---|---|---|
| | | Low | Medium | High | Very High |
| Channel Structures & Misc. | Known | 231 | 132 | 61 | 1 |
| | Age Based | 111 | 168 | 69 | 3 |

| | | | | | |
|---|---|---|---|---|---|
| Channels | Known | - | - | - | - |
| | Age Based | 287km | | - | - |

*Table 41: Key strategies for eliminating very high risks for headworks distribution assets*

| Asset Type | Key Strategies to Eliminate Very High Risks |
|---|---|
| Tunnels (Rocklands outlet channel, Bellfield embankment and Stawell diversion) | 5-year inspection of tunnels by specialist which guide the repairs and renewals. |
| Bridges and culverts (road and occupational crossings) | Review handover agreements for structures on Vic Roads managed roads over in-use channels.<br><br>Annual Level 2 (VicRoads) of high consequence assets.<br><br>As required Level 3 inspections – structural assessment of structure capacity and required renewals.<br><br>Load limit signs on agreement with road manager. |
| Regulators, subways, offtakes and drainage inlets | Annual inspection of high consequence channel structures drive maintenance and renewals. |
| Siphons | n/a |
| Flow measurement | Monitor flows and runoff characteristics upstream and downstream of storages. Optimise operational strategy. |
| Channels | n/a |

### *6.6.2.* Maintaining Acceptable Levels of Service

Headworks distribution assets are used for distributing water from and between the headworks storages. Their function is to provide flow control and flow measurement.

Well-maintained and regularly used channels have an indefinite useful life. Channels are maintained to ensure that the required flow capacities are maintained.

Occupational crossings (bridges and culverts on private land) are maintained to provide access that is appropriate for the land use.

Road bridges should meet the load carrying requirements of the respective roads or agreement reached with road manager. Most maintained roads are designated B-double routes. Consideration should be given to access for fire trucks.

*Table 42: Key strategies to maintain service levels by asset type*

| Asset Type | Key Strategies for Maintaining Acceptable Levels of Service |
|---|---|
| (Rocklands outlet channel, Bellfield embankment and Stawell diversion) | Biennial inspection by operations staff |
| Bridges and culverts (road and occupational crossings) | Annual Level 1 (Vic Roads) inspection of road structures by operators.<br><br>Biennial Level 1 inspection of occupational crossings.<br><br>Biennial Level 2 (Vic Roads) inspection of moderate to low consequence assets. |
| Regulators, subways, offtakes and drainage inlets | Biennial inspection of moderate to low consequence channel structures and associated equipment to guide maintenance and renewals. |
| Siphons | 5 – year internal inspection of siphon with CCTV to guide maintenance and renewals.<br><br>Biennial inspection of external components to guide maintenance and renewals. |
| Flow measurement | Annual inspection and calibration of equipment. |
| Channels | Monitor channel flow capacities and condition to guide routine channel spraying, de-silting and embankment management program. |

### *6.6.3.* Minimising Lifecycle Costs

*Table 43: Key strategies to minimise lifecycle costs by asset category*

| Asset Type | Key Strategies for Minimising Lifecycle Costs |
|---|---|
| Tunnels (Rocklands, Bellfield and Stawell) | |
| Bridges and culverts (road and occupational crossings) | Cost sharing arrangements with landholders for occupational crossing upgrades.<br><br>Undertake cost analysis of repair versus replacement options and select option with lowest NPV.<br><br>Investigate innovative bridge repair methods to extend useful life. |

| Asset Type | Key Strategies for Minimising Lifecycle Costs |
|---|---|
| Regulators, subways, offtakes, siphons, and drainage inlets | Undertake cost analysis of repair versus replacement options and select option with lowest NPV.<br><br>Decommission non-required structures. Review utilisation of structures considering the decommissioning of the domestic and stock, and irrigation systems. |
| Flow measurement | SCADA for more remote assets. |
| Channels | Consider lining or replace with pipe to reduce water losses. |

### *6.6.4.* Investment Plan

#### *Upgrades and Acquisitions*

Acquisition of additional regulated flow monitoring devices and associated structure upgrades are planned. These projects will provide flow monitoring that will feed into water planning (supply, environmental, demand).

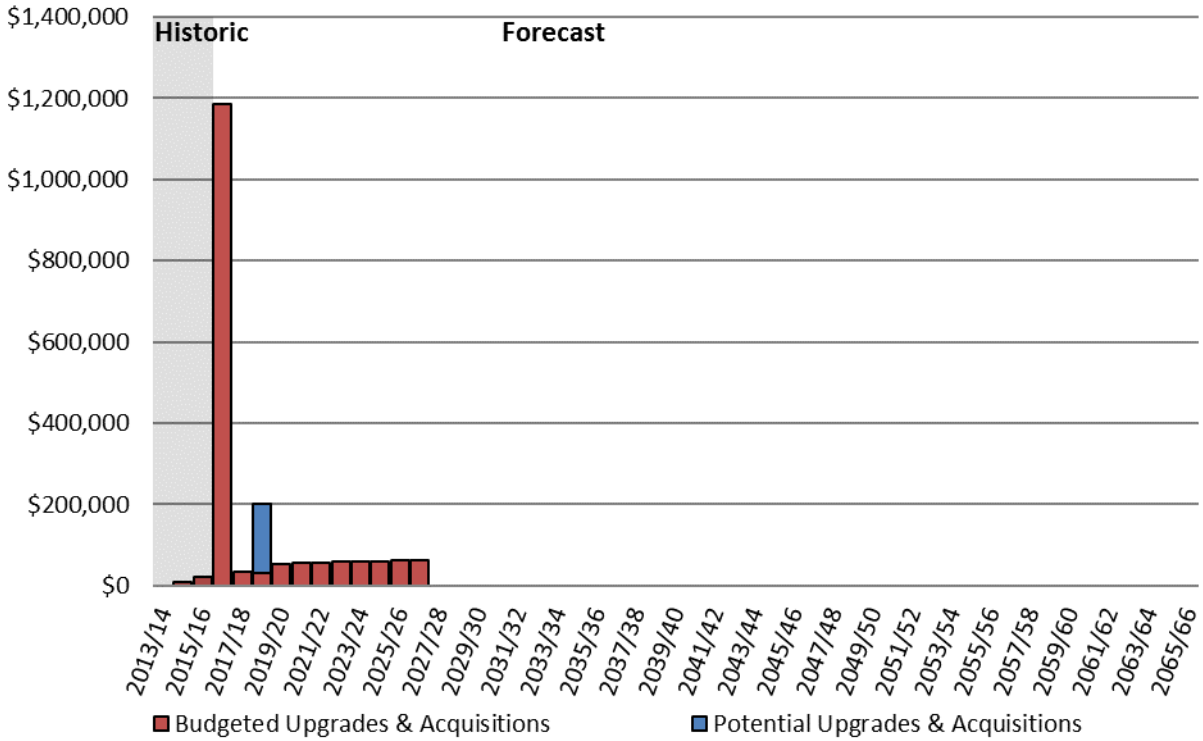



*Figure 21: Headworks distribution assets upgrades and acquisitions budgeted in the Corporate Plan.*

*Table 44: Summary of upgrades and acquisitions.*

| Timeframe | Upgrades & Acquisitions | |
|---|---|---|
| | Budgeted | Potential |
| Historic | | |
| 2016/17 | • Regulated Flow Metering and Structure Upgrades<br>• Catchment Regulating and Gauging Structures<br>• Rich Avon Weir Works | |
| 2017/18 | • Catchment Regulating and Gauging Structures | |
| Pricing Period (2018/19 to 2022/23) | • Catchment Regulating and Gauging Structures | |
| Outer Years (2023/24 to 2065/66) | • Catchment Regulating and Gauging Structures | |

### *Operation and Maintenance*

The current strategy of inspections and scheduled maintenance results in few reactive tasks. Operational costs are minor.

Planned capital works are expected to have negligible impact on OPEX.

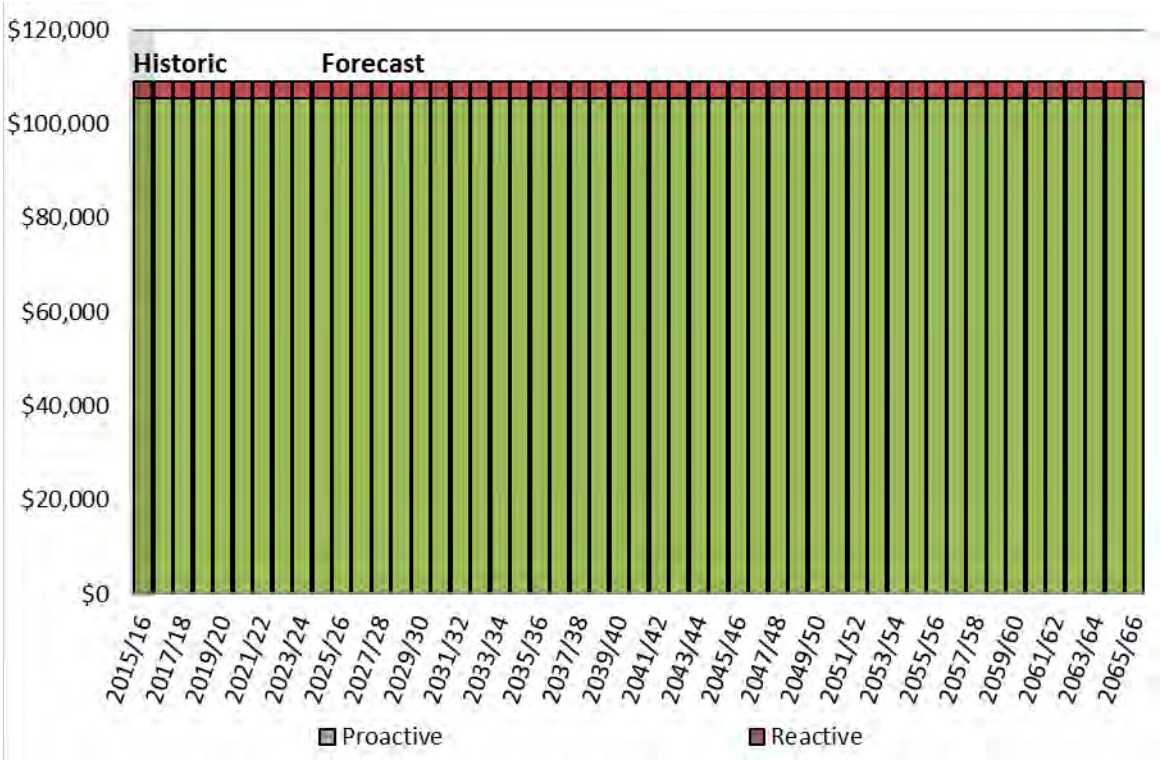



*Figure 22: Forecast operational and maintenance costs for the headworks distribution asset category*

*Table 45: Planned changes and predicted events that will impact operation and maintenance costs.*

| Timeframe | Operations | Proactive Maintenance | Reactive Maintenance |
|---|---|---|---|
| 2016/17 | | • Routine inspection of channels and channel structures | |
| 2017/18 | | • Routine inspection of channels and channel structures | • Repair assets as they fail |
| Pricing Period (2018/19 to 2022/23) | | • Routine inspection of channels and channel structures<br>• Rationalisation of monitoring and proactive maintenance programs | • Repair assets as they fail |
| Outer Years (2023/24 to 2065/66) | | • Routine inspection of channels and channel structures | • Repair assets as they fail |

## *Renewals*

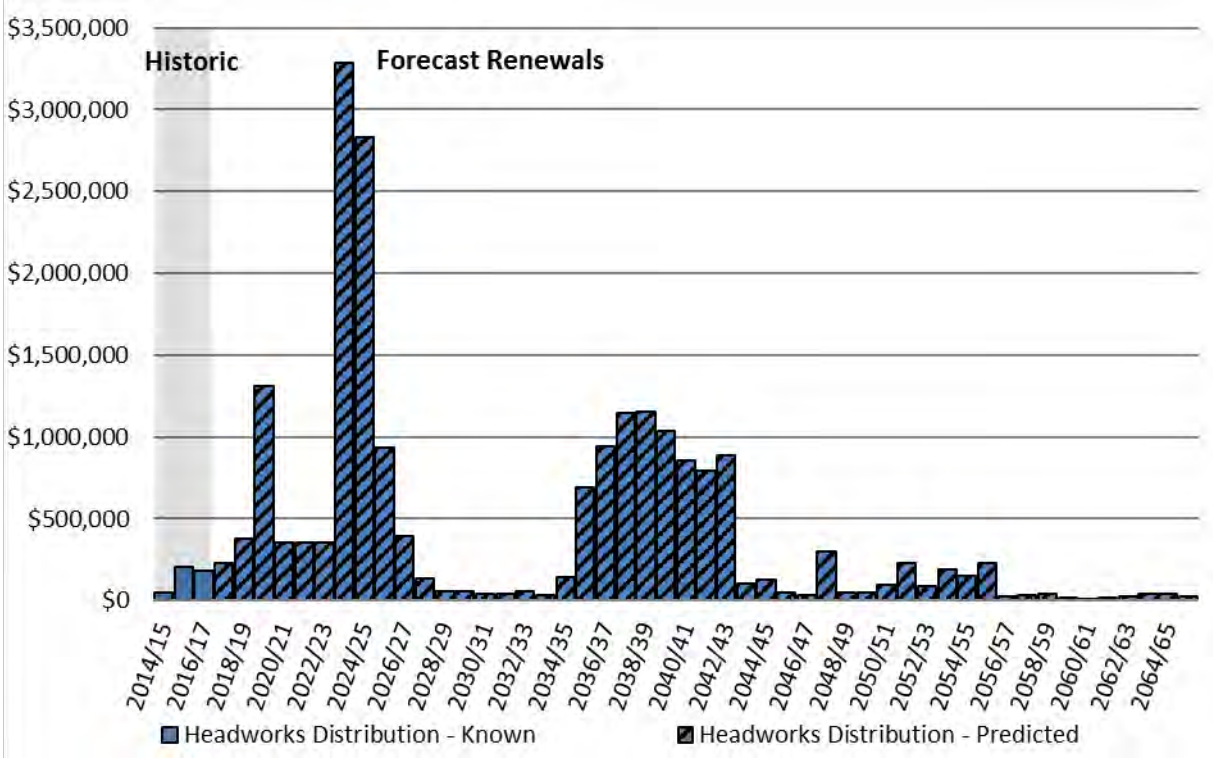



*Figure 23: Historic and forecast renewals expenditure requirements, both known and predicted.*

Forecast includes some smoothing of peaks to reflect expected spread of renewals.

*Table 46: Description of renewals events within the above forecast.*

| Timeframe | Renewal Events | |
|---|---|---|
| | Known | Predicted |
| Historic | • Removal of some redundant structures.<br>• Includes Dimboola and Jeparit Weir flood damage repairs in 2013-14. Repaired asset transferred to Hindmarsh Shire. | |
| 2016/17 | • Planned renewal and rehabilitation of channel structures in poor condition | |
| 2017/18 | • Planned renewal and rehabilitation of channel structures in poor condition | |
| Pricing Period (2018/19 to 2022/23) | • Planned renewal and rehabilitation of channel structures in poor condition<br>• Renewal Rocklands Flume | |
| Outer Years (2023/24 to 2065/66) | • Planned renewal of poor condition channel structures | • Possible renewal of aged channel structures – to be informed by condition assessment circa 2021.<br>• Further planned renewals may be identified by future inspection programs. |

## 6.7 Headworks Dam Safety Management

### *6.7.1.* Eliminating 'Very High' Risks

Risk of large dam failure is managed having regard to the ANCOLD guidelines. Dam Safety Reports are commissioned and the recommendations evaluated. For significant works risk assessments and, if necessary, a strategic assessment or business case is undertaken to determine most appropriate course of action.

From the 2016 Dam Safety Reports the following significant risks were identified:

*Table 47: Strategy to eliminate high risks identified by Dam Safety Reviews*

| Asset Type | Dam Safety High Risk | Strategy |
|---|---|---|
| Headworks Dams | Lake Fyans<br>• Existence of widespread defects on the crest of the embankment | • Embankment rehabilitation works |

| Asset Type | Dam Safety High Risk | Strategy |
|---|---|---|
| | • Lowered crest at access ramp<br>• Shallow slip downstream of access ramp | |
| | Lake Lonsdale<br>• Failure modes identified in the 2007 risk assessment includes piping through the foundation sand and liquefaction of foundation sands. | • Operational strategies to maintain water at appropriate levels.<br>• The toe area to be maintained clear of debris for detailed visual inspections. A detailed photographic record of seepage to also be maintained and any worsening conditions addressed. |
| Earthen Storages (non-headworks) | Oliver's Gully<br>• Embankment issues | • Undertake further investigation of embankment issues and implement works as necessary. |
| | Stawell No.4 & No.6<br>• Some risks exist | • Undertake upgrades as recommended by Dam Safety Report. |

*Table 48: Key strategies to manage high risks*

| Asset Type | Key Strategies to Eliminate Very High Risks |
|---|---|
| Embankments | Piezometers levels are monitored to inform hydrostatic pressures in and around the embankments. Variations may be assessed for risk of piping and undermining.<br>Level monitoring and operational strategies to maintain water at appropriate levels.<br>Specific embankment inspections on a weekly or monthly basis depending on consequence level.<br>Annual Dam Safety Reviews.<br>5-yearly comprehensive dam safety assessments. |
| Major Valves | Exercising and inspection. |
| Major Pipework | Annual inspection. Condition assessment typically on a 5 yearly basis. |
| Other | Annual internal and biennial independent Dam Safety Report to evaluate dam condition and review consequence of failure.<br>Annual site and asset inspections. |

### 6.7.2. Maintaining Service Levels

The key service of headworks dams is to manage stored water to support community and environment needs. This involves monitoring storage levels and managing storage levels according to operational strategies.

Instrumentation for monitoring storage levels can be run to failure.

Risk management of outlet works and spillways (used to manage storage levels) maintains their serviceability (see Section 6.7.1).

### *6.7.3.* Minimising Lifecycle Costs

| Asset Type | Key Strategies to Minimise Lifecycle Costs |
|---|---|
| Piezometers, SCADA, Instrumentation | Cost of inspection means that run to fail presents the lowest lifecycle cost. |
| Civil assets, large pipes | Cost of failure means that inspection, condition assessment and rehabilitation deliver the lowest lifecycle cost. |
| Large valves | Investigate options (for example, rehabilitate). |

### *6.7.4.* Investment Plan

#### *Capital Renewals, Upgrades & Acquisitions*

Dam safety works budgeted in the corporate plan are identified below. Lake Fyans embankment is the major cost driver.

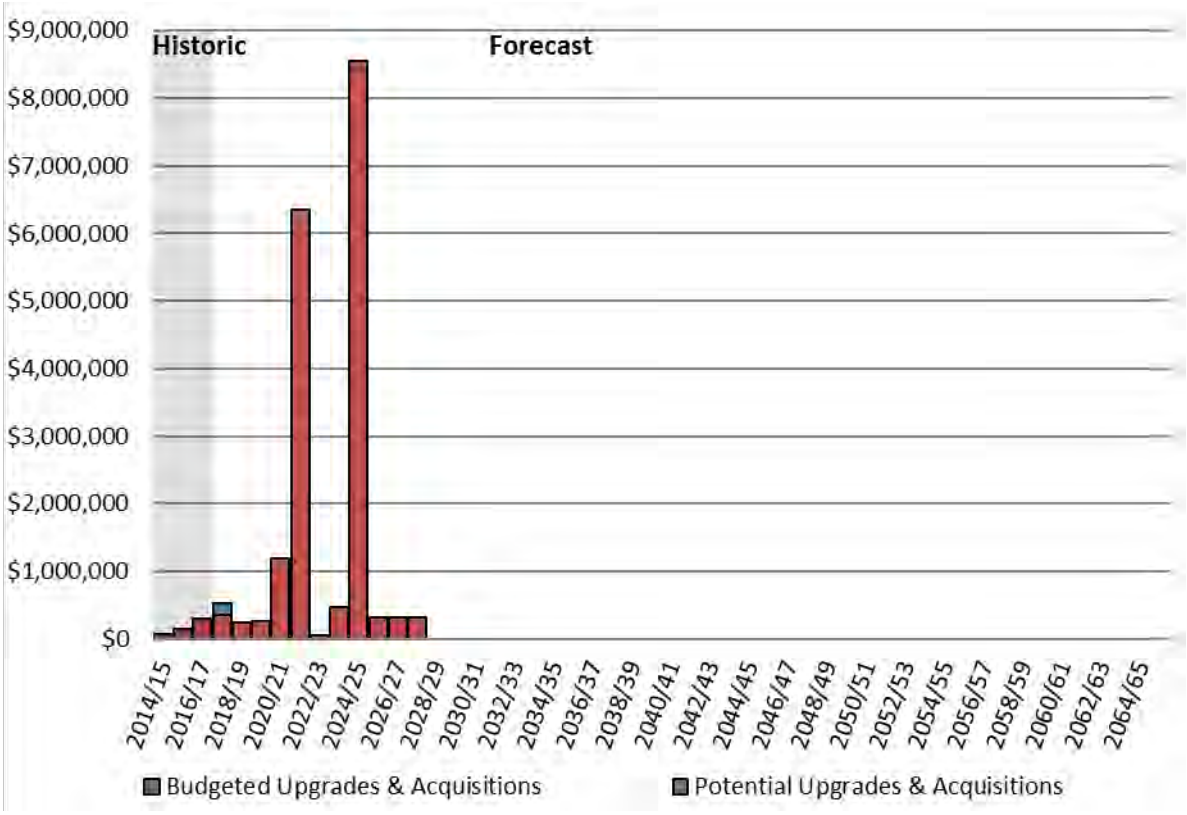



*Figure 24: Budgeted and potential capital works.*

*Table 49: Summary of upgrades and acquisitions.*

| Timeframe | Upgrades & Acquisitions | |
|---|---|---|
| | **Budgeted Works** | **Potential Works** |
| Historic | | |
| 2016/17 | | |
| 2017/18 | • Oliver's Gully embankment and outlet works | |
| Pricing Period (2018/19 to 2022/23) | • Lake Fyans embankment<br>• Stawell No. 4 & 6 upgrade works<br>• Moora Moora reservoir - remote operation of outlet<br>• Anchoring Taylors Lake Outlet tower | • Upgrade to remote monitoring of piezometers. |
| Outer Years (2023/24 to 2065/66) | • Rocklands anchoring | |

## *Operation and Maintenance*

OPEX for dams is expected to remain stable.
The Dam Safety Reports provide guidance on areas where maintenance can be improved.

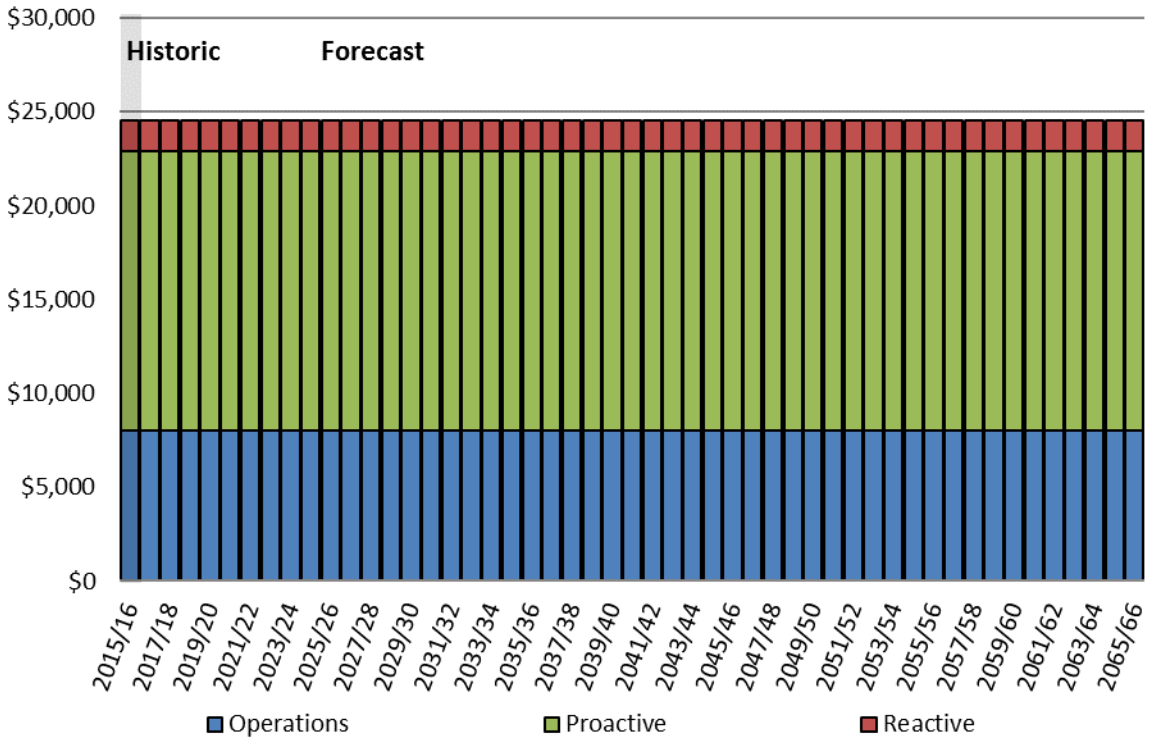



*Figure 25: Forecast operational and maintenance costs for the headworks dams asset category*

*Table 50: Planned changes and predicted events that will impact operation and maintenance costs*

| Timeframe | Operations | Proactive Maintenance | Reactive Maintenance |
|---|---|---|---|
| 2016/17 | | • Schedule maintenance works identified in the Dam Safety Report | • Schedule maintenance works identified in the Dam Safety Report |
| 2017/18 | | • Schedule maintenance works identified in the Dam Safety Report | |
| Pricing Period (2018/19 to 2022/23) | | • Potential upgrade of piezometers to remote monitoring would see a reduction in OPEX. | |
| Outer Years (2023/24 to 2065/66) | | | |

## 6.8 Infrastructure Decommissioning

### *6.8.1.* Eliminating Very High Risks

*Table 51: Summary of current risk profile of redundant assets*

| Asset Type | Low | Medium | High | Very High |
|---|---|---|---|---|
| Channel structures (on road reserves) | 876 | 152 | 25 | 73 |
| Channel structures (on private property) | | | 15 | 20 |
| Channel on private property (km) | | | 16 | |
| Earthen storages | | | 98 | |
| Elevated and ground tanks | | | 22 | |
| Pump stations and chlorinators (sites) | | | 43 | |
| Wastewater treatment plant assets (sites) | | | 3 | |
| Linear assets (water and sewer mains) (km) | 8 | | 22 | |

### *6.8.2.* Minimising Lifecycle Costs

Cost of ongoing maintenance is compared to disposal costs on a NPV basis and the lowest cost option is adopted.

### 6.8.3. Investment Plan

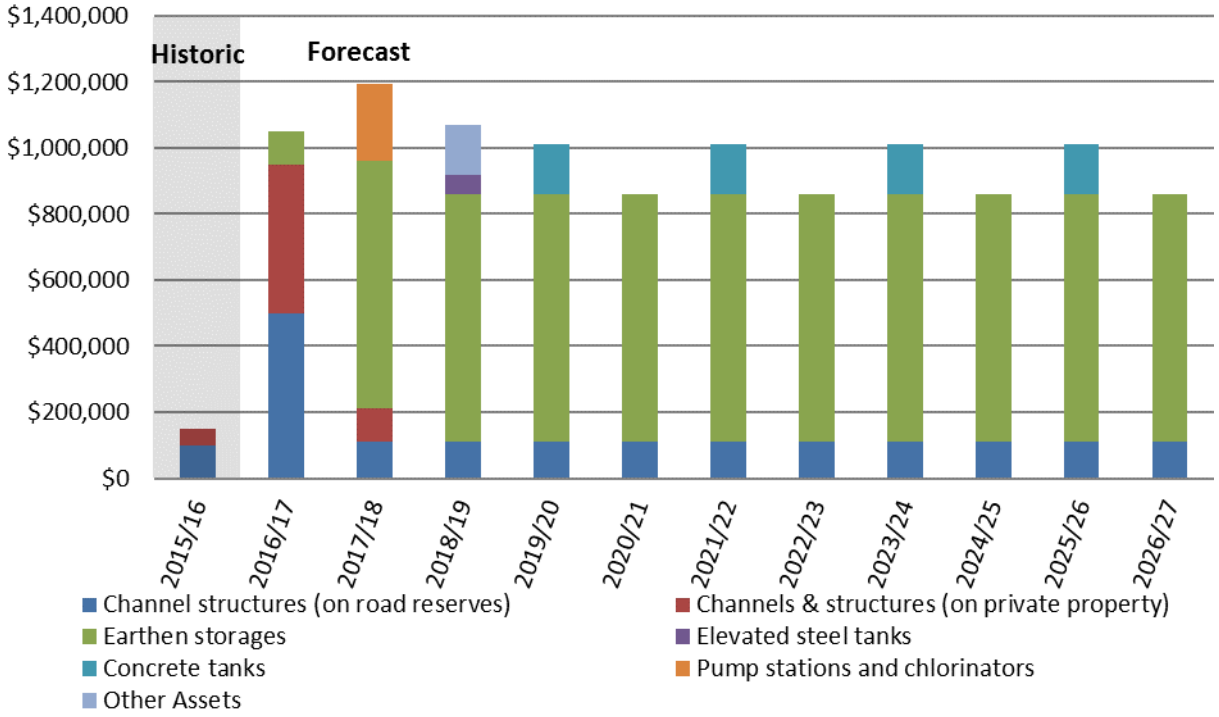



*Figure 26: Forecast and budgeted decommissioning expenditure.*

Decommissioning of the backlog or redundant assets is prioritised based on risk. For some assets, high disposal costs make ongoing maintenance the preferred option. See the Redundant Asset Decommissioning Plan.

Future backlog will be largely avoided since planned renewals and upgrades are to include decommissioning costs for assets they make redundant.

## 6.9 Corporate Buildings

Includes the corporate office & depot and regional offices & depots. Excludes treatment plant and pump station buildings.

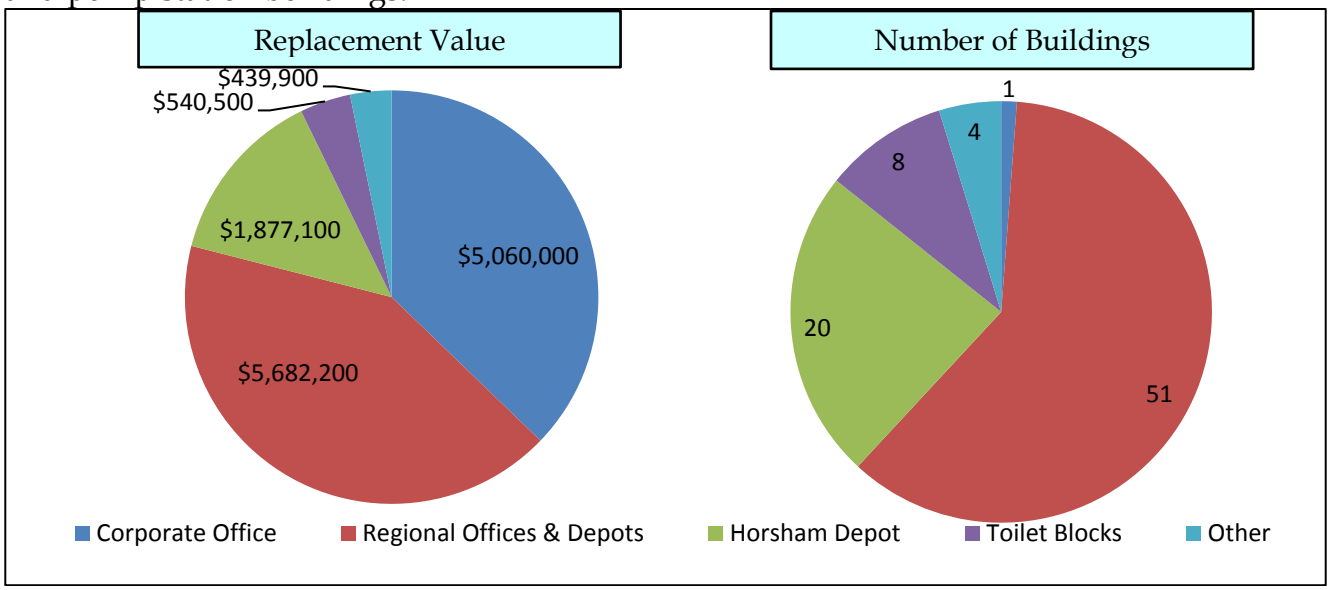



*Figure 27: Replacement value and numbers of buildings*

### 6.9.1. Eliminating 'Very High Risks'

*Table 52: Strategy to eliminate high risks for corporate building assets*

| Risk | Key Strategies to Eliminate Very High Risks |
|---|---|
| Asbestos | Maintain the asbestos register. |
| Structural collapse | Purchase/lease of buildings is contingent on building inspection report.<br>Users report deterioration, prompting inspection and action. |
| Other risks of harm | Annual OHS inspections. |
| Fire | Fire control systems installed at critical locations.<br>Fire alarms and fire extinguishers regularly tested and any defects corrected. |

### 6.9.2. Maintaining Acceptable Levels of Service

Core functionality of buildings is to effectively house operations. Other factors are around worker satisfaction.

### 6.9.3. Minimising Lifecycle Costs

Lifecycle costs of civil structural assets are typically minimised by maximising asset life through maintenance and rehabilitation. This applies to buildings owned by GWMWater. For

leased buildings, lifecycle cost (to GWMWater) is dependent almost entirely on the lease negotiation.

*Table 53: Strategy to eliminate high risks for corporate building assets*

| Key Strategies to Minimise Lifecycle Costs |
|---|
| Building inspections inform preventative maintenance.<br>Maintain preventative measures, for example termite barriers. |

### *6.9.4.* Investment Plan

*Capital Works*

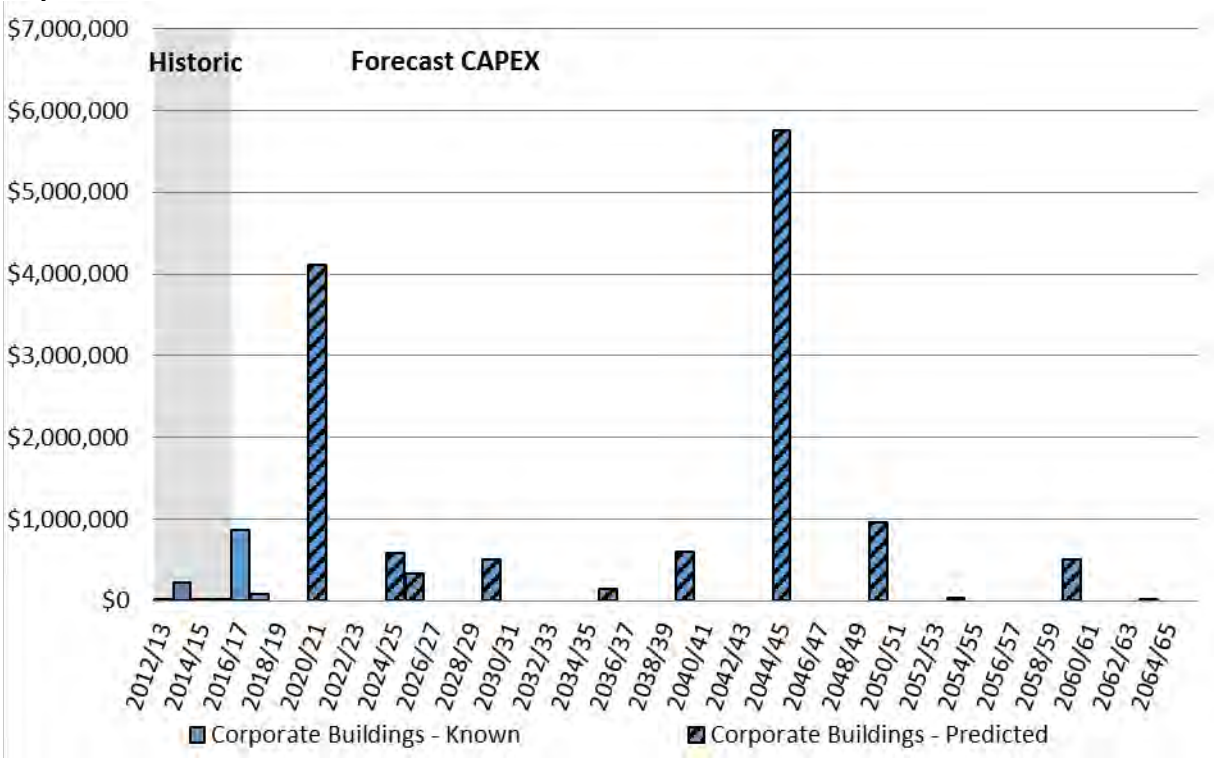



*Figure 28: Historic and forecast CAPEX for corporate buildings.*

*Table 54: CAPEX events, both known and predicted.*

| Timeframe | CAPEX Events | |
|---|---|---|
| | Known | Predicted |
| Historic | • Horsham corporate office fit out<br>• Kalkee Rd depot<br>• Taylors Lake toilets | |
| 2016/17 | • Corporate office fit-out and redevelopment<br>• Kalkee Rd office refurbishment<br>• Planned office and depot renewals | |

| Timeframe | CAPEX Events | |
|---|---|---|
| | Known | Predicted |
| 2017/18 | | |
| Pricing Period (2018/19 to 2022/23) | | • Most depots reach end of expected life.<br>• Possible relocation of Kalkee Rd depot (Horsham) |
| Outer Years (2023/24 to 2065/66) | | • Horsham corporate office at end of expected life |

### *Operation and Maintenance*

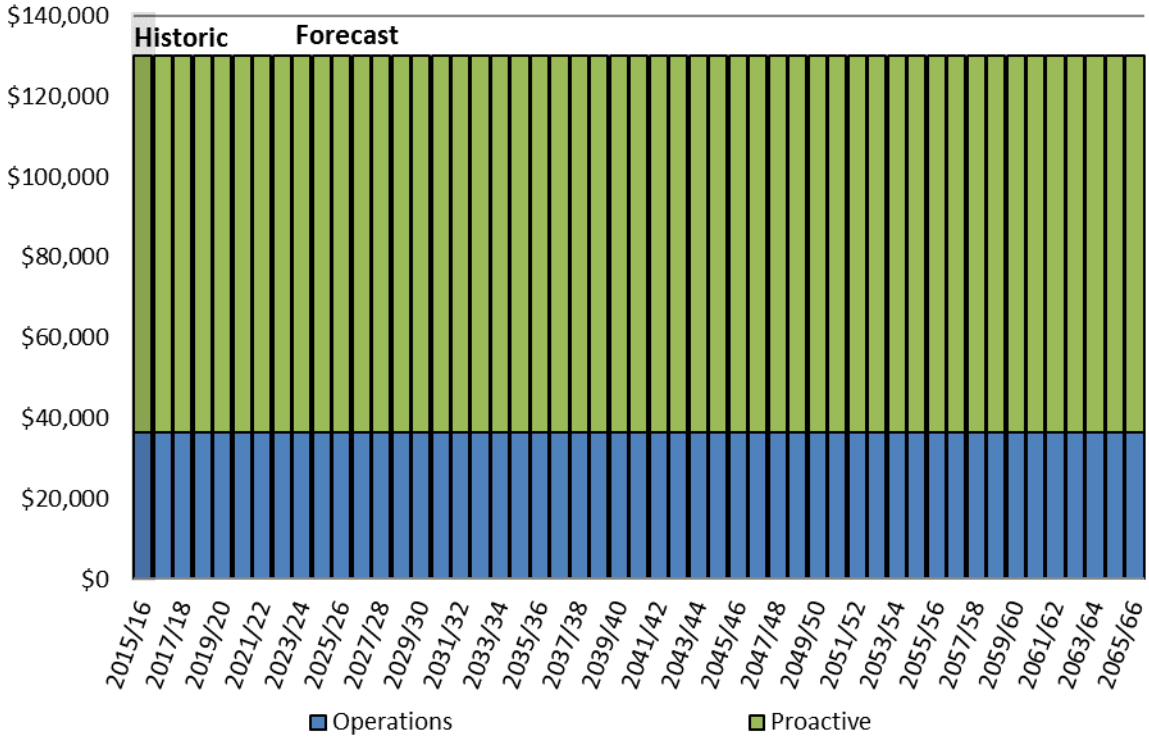



*Figure 29: Forecast operational and maintenance costs for the corporate buildings asset category*

## 6.10 Fleet

Fleet capital expenditure has been budgeted out to FY21. Expenditure beyond this has not been forecast but is estimated to continue near average levels.

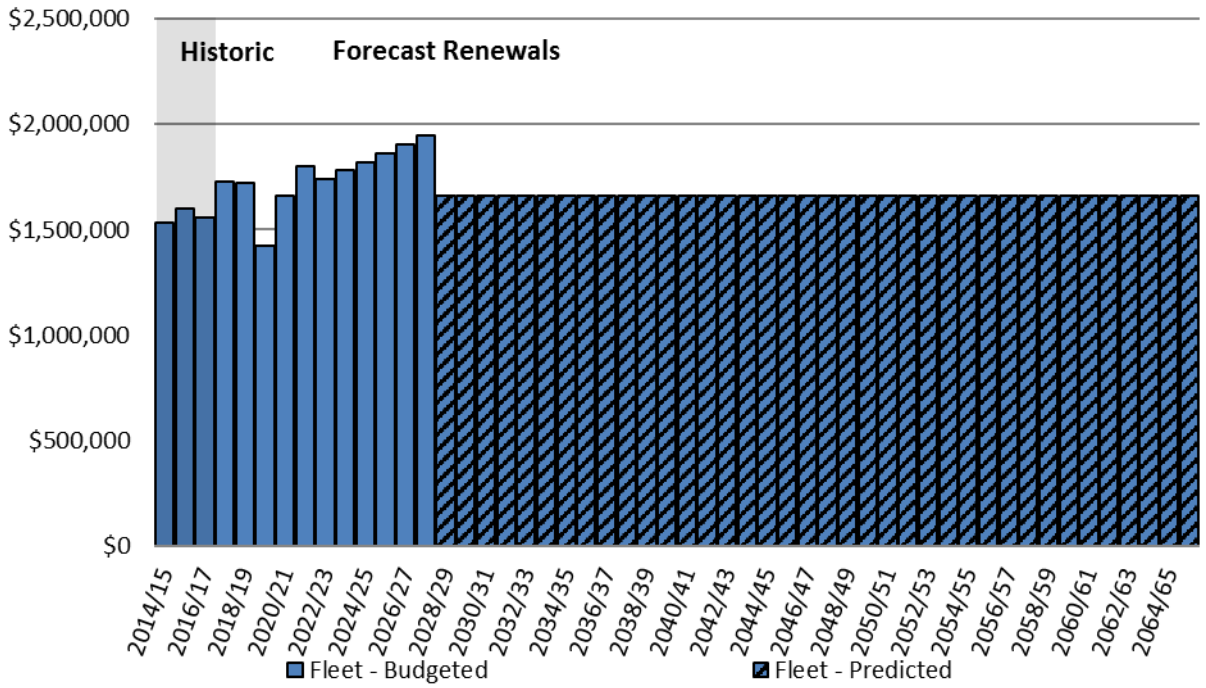



*Figure 30: Historic and forecast fleet CAPEX.*

Fleet OPEX is expected to continue at current levels. Recent reduction is due to decrease in fleet size.

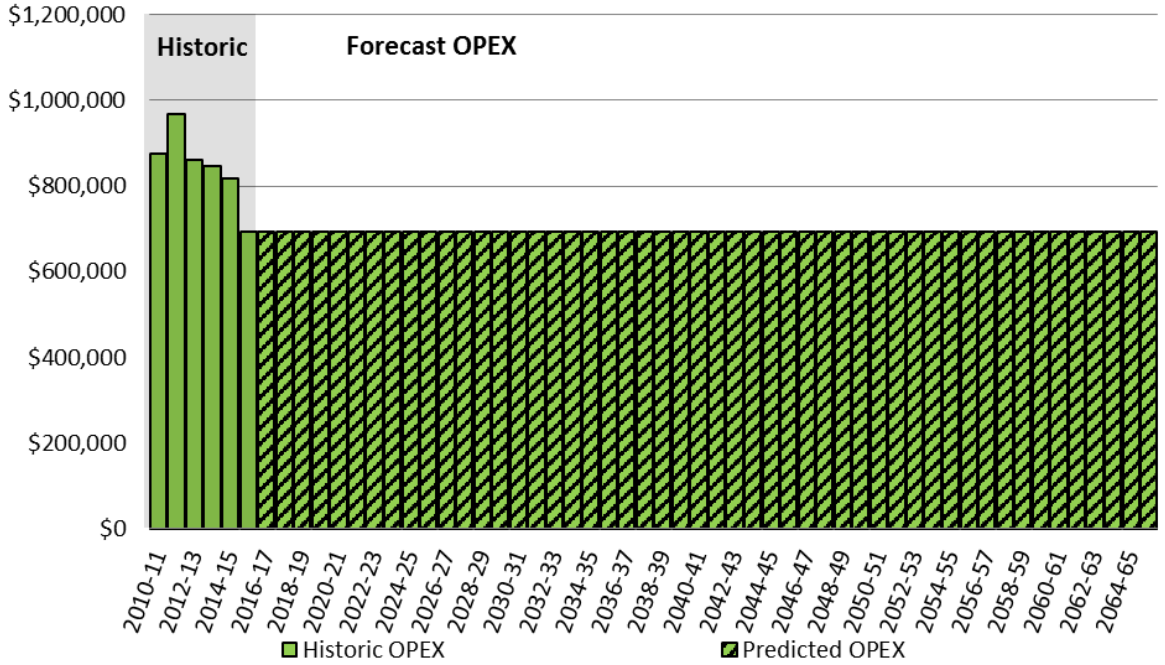


*Figure 31: Forecast operational and maintenance costs for the fleet asset category*

## 6.11 Plant and Equipment

Asset management plan under development

Capital is budgeted out to 2026-27. Beyond this expenditure is estimated at the average of past expenditure.

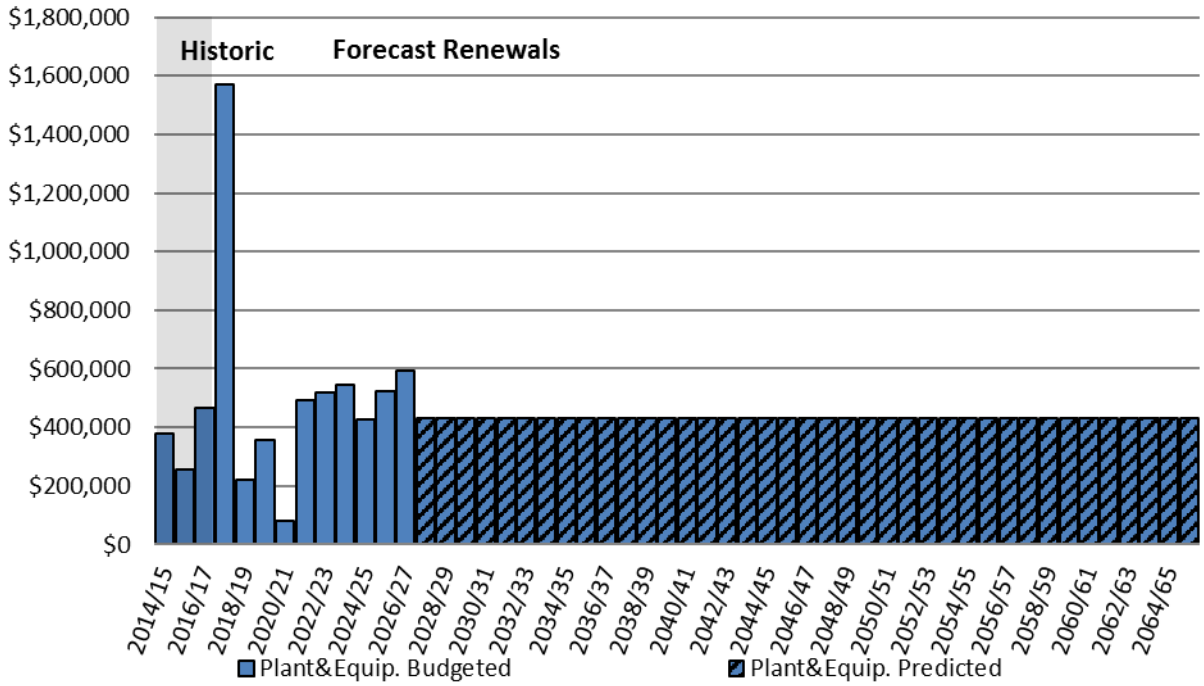



*Figure 32: Historic and forecast plant & equipment CAPEX.*

Tracking of operational costs for the asset category is under ongoing development. Current understanding and forecasts are presented in ***Figure 33***.

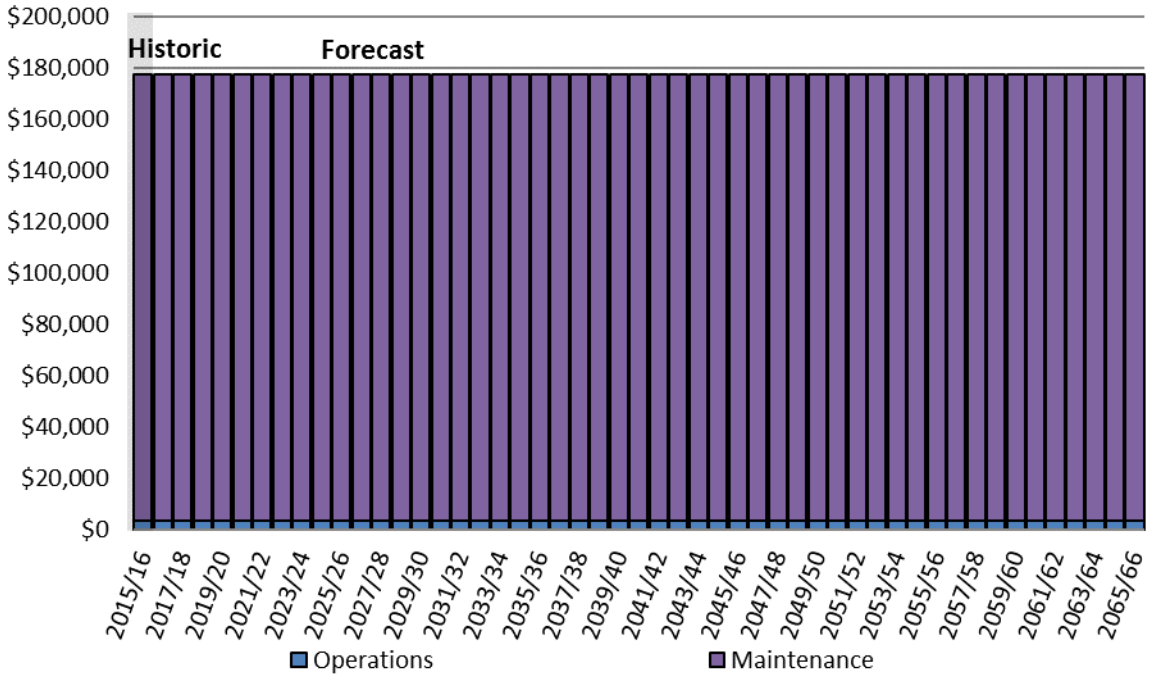



*Figure 33: Forecast operational and maintenance costs for plant and equipment.*

## 6.12 Information Communication Technology

ICT requirements change rapidly. This prevents credible long-term forecasting of costs.

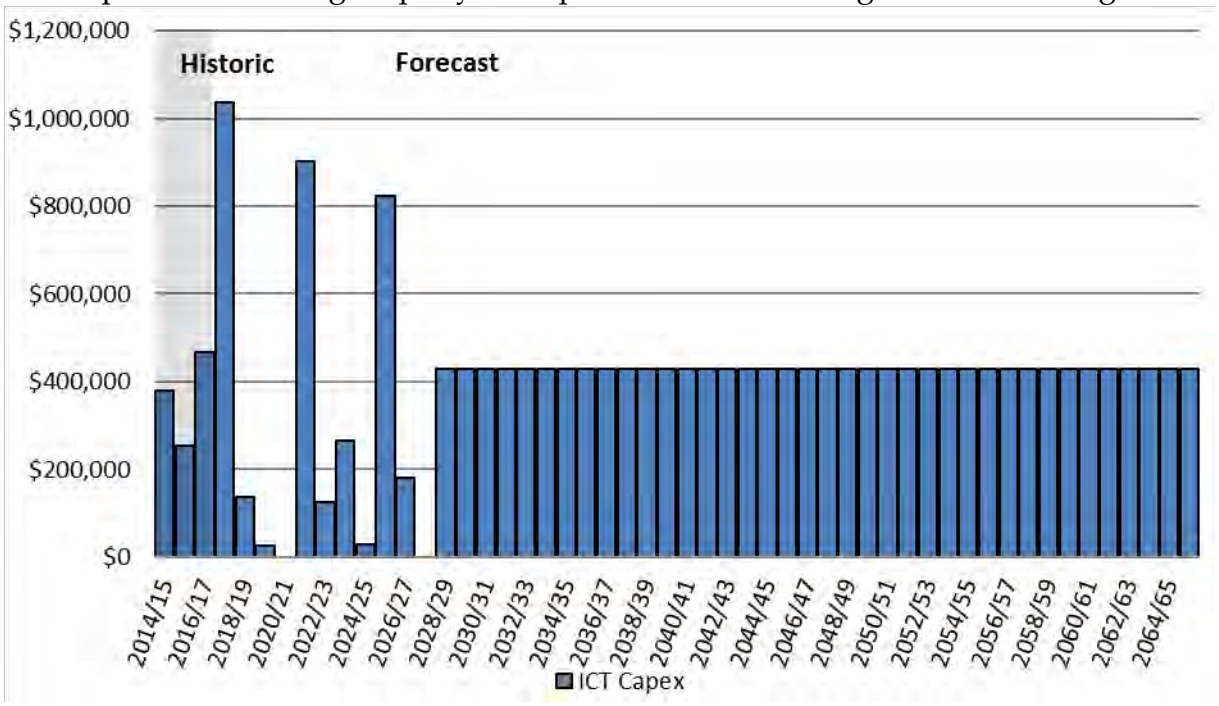



*Figure 34: Historic and forecast ICT CAPEX.*

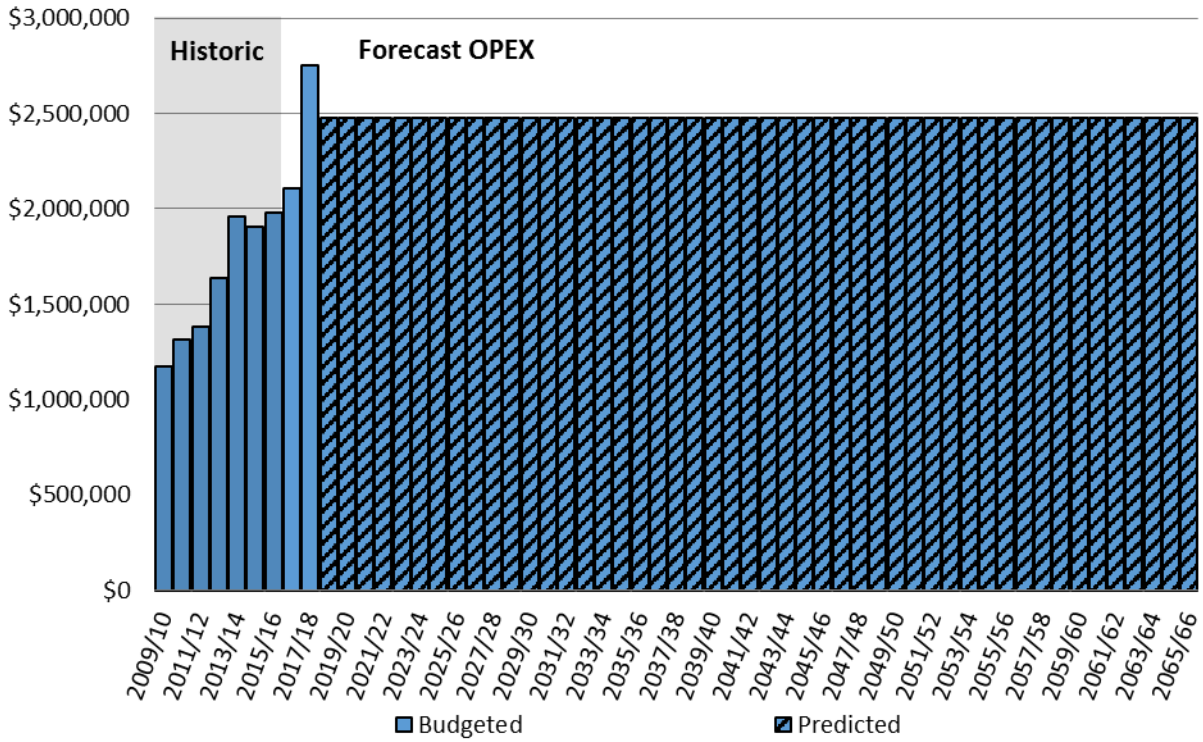



*Figure 35: Historic and forecast ICT OPEX.*

Asset management plan under development. See ICT Strategy.

## 6.13 Central Functions

There are also central functions that support OPEX and CAPEX delivery but belong to multiple asset categories. These costs include the provision of risk management, corporate meetings, OH&S, research and development, insurance and OMC manning.
Such costs are not included within the scope of this plan.

# 7. Limitations, Assumptions and Confidence

*Table 55: Identified limitations, assumptions and estimates of confidence*

| | Limitations | Assumptions | Confidence |
|---|---|---|---|
| 1. | Condition and performance information are used to understand likelihood of failure. Where this information is not available there is a varying understanding of the rate of deterioration of assets.<br><br>Most pipes are buried so deterioration is not easily assessed.<br><br>For mechanical and electrical (M&E) assets there is limited information recorded in the T1 works management system on failure modes and rates.<br><br>For structures such as tanks, dams, dry wells, bridges and culverts, and buildings condition is able to be regularly monitored. | Age is used to represent asset deterioration where there is no information on condition or performance.<br><br>The expected useful lives adopted are in line with what is used across the water industry. | Most water mains that are failing are AC and ferrous. The correlation between age and condition is considered moderate for these pipe materials. A confidence level of ±20% is estimated.<br><br>Most gravity mains that are blocking are VC. Even though the correlation between age and deterioration is weak, known condition information obtained from CCTV assessments supports the level of renewals. A confidence level of ±30% is estimated.<br><br>For M&E assets the correlation between age and condition is moderate. A confidence level of ±20% is estimated.<br><br>The condition of structures is generally well understood, however there are many factors that influence the condition of structures, so the correlation between age and condition is moderate. A confidence level of ±20% is estimated. |

| | Limitations | Assumptions | Confidence |
|---|---|---|---|
| | | | A sensitivity analysis based on ±20% expected life is presented in Appendix A |
| 2. | Limited information on mechanical and electrical (M&E) assets failure modes and rates of failure. Data has collected for less than 2 years. Also not all assets have maintenance schedules. | Scheduling of maintenance is immature, being largely based on operator experience, rather than risk and performance history. | Scheduled maintenance expenditure projections will likely be based on conservative scheduling. A confidence level of ±20% is estimated. |
| 3. | Understanding the impact of weather on pipe failure rates. Across Victorian water businesses, pipe breaks and blockages have been seen to increase with extended dry periods and then drop following wetter periods. | The relationship between age and performance has been developed using data from the predominantly dry periods of recent years. | Variation in KPIs related to pipe breaks and blockages caused by weather randomness is estimated to be ±20%. |
| 4. | Rates used are costs estimates. | Renewal rates are estimated based on recent works.<br><br>Where similar work has not been done; rates are taken from the 2016 revaluations. | Confidence in rates for renewals of linear assets, pumps and instrumentation is high. A confidence level of ±10% is estimated.<br><br>Confidence in estimating the cost of upgrades and acquisitions has been low. A confidence level of ±50% is estimated. |
| 5. | | Ability to deliver renewals program is not considered in projections | |

| | Limitations | Assumptions | Confidence |
|---|---|---|---|
| 6. | | O&M costs do not include operations costs for deferred capital works | |
| 7. | | Growth estimates have not been included in the expenditure projections | |

# 8. Asset Management Improvements

The following improvements have been identified through the development of the SAMP. These improvements are to be included in the Asset Management Improvement Plan (AMIP)

*Table 56: Identified limitations, assumptions and estimates of confidence*

| | Improvement | Description | Priority |
|---|---|---|---|
| 1 | Review the Maintenance Framework and implementation of Maintenance Plans | Even though there is a significant amount of maintenance scheduled, the maintenance planning that must underpin this is not well advanced. Therefore, there is a need to review the maintenance framework through the introduction of systematic maintenance planning, and broadening the use of tools such as reliability-centred maintenance (RCM), failure mode effects and criticality analysis (FMECA) across all asset types to establish maintenance plans to elucidate the link between an asset's function and the extent of maintenance that is required.<br><br>Predictive tools such as thermography, vibration analysis, etc., will be assessed at this stage.<br><br>Review maintenance framework and run workshops with stakeholders to develop maintenance plans. | High |
| 2 | Analysis and review of planned maintenance activities | The establishment of maintenance plans must be followed by review and analysis of the effectiveness and efficiency of the tasks undertaken.<br><br>This assessment must take into consideration of whether or not risk has been adequately managed, the impact on whole of life cycle costs, i.e., the impact on the amount of reactive maintenance and the timing of renewals. | High |

| | | | |
|---|---|---|---|
| 3 | Better understand AC pipe deterioration | AC pipe replacement makes up a large portion of the water main renewals expenditure projections. It is estimated that $105 million of AC mains are approaching the end of their expected useful lives. AC will continue to deteriorate as a result of soft and low pH water in the pipes, ground conditions and varying manufacturing standards. Understanding the rate of deterioration across GWMWater's region will help better project renewals expenditure and optimise the life of AC mains.<br><br>Implement a vigorous and proactive condition assessment program for AC pipes. | High |
| 4 | Better understand deterioration rate of VC pipe | A significant number of spills are the result of blockages in VC (clay) pipes. Poorly constructed pipes (embedment, backfilling, jointing) resulting in soil movement and cracking of VC pipes is a major cause of failure. Therefore, age of VC pipes has a weak correlation to likelihood of failure – pipes could fail within a few years of installation or last hundreds of years in stable soils free of tree roots. Also just because a pipe has significant cracking does not mean pipe collapse is imminent or service ability is affected.<br><br>Develop a method to better understand how failures of VC pipes develop. | High |
| 5 | Better understand quality of attribute data | Understanding data quality provides a better understanding of the level of confidence we have in the outputs. Significantly pipe diameters influence consequence of failure and the projected renewal costs.<br><br>Assess the importance of attribute data (why we need the data) and the level of confidence we have in that data and consequently the level of confidence in decision making. | Med |
| 6 | Expected lives based on performance history | Local conditions (soil type, water quality, temperature, operation patterns, maintenance programs, etc.) all have an impact on the expected useful lives of GWMWater's assets. For example, the condition of similarly aged pipes in Nhill are generally better than those in Dimboola.<br><br>Continue to collect asset performance data and test point data through the works management module to build up a history of deterioration and compare this to local conditions. | High |

| | | | |
|---|---|---|---|
| | | For most pumps, run hours are likely to provide stronger correlation with condition than years since installation. This data is currently recorded in SCADA and it should be linked to the asset in TechnologyOne's asset register and used to plot deterioration. | |
| 7 | OPEX to include electricity costs | Electricity costs are not well recorded in T1. In particular, only a small portion of the electricity costs for sewer pump stations can be identified.<br><br>Align electricity costs to respective assets. | High |
| 8 | Data confidence evaluation | Undertake a review of the level of confidence in all asset data | High |

# Appendix 1: Scenarios

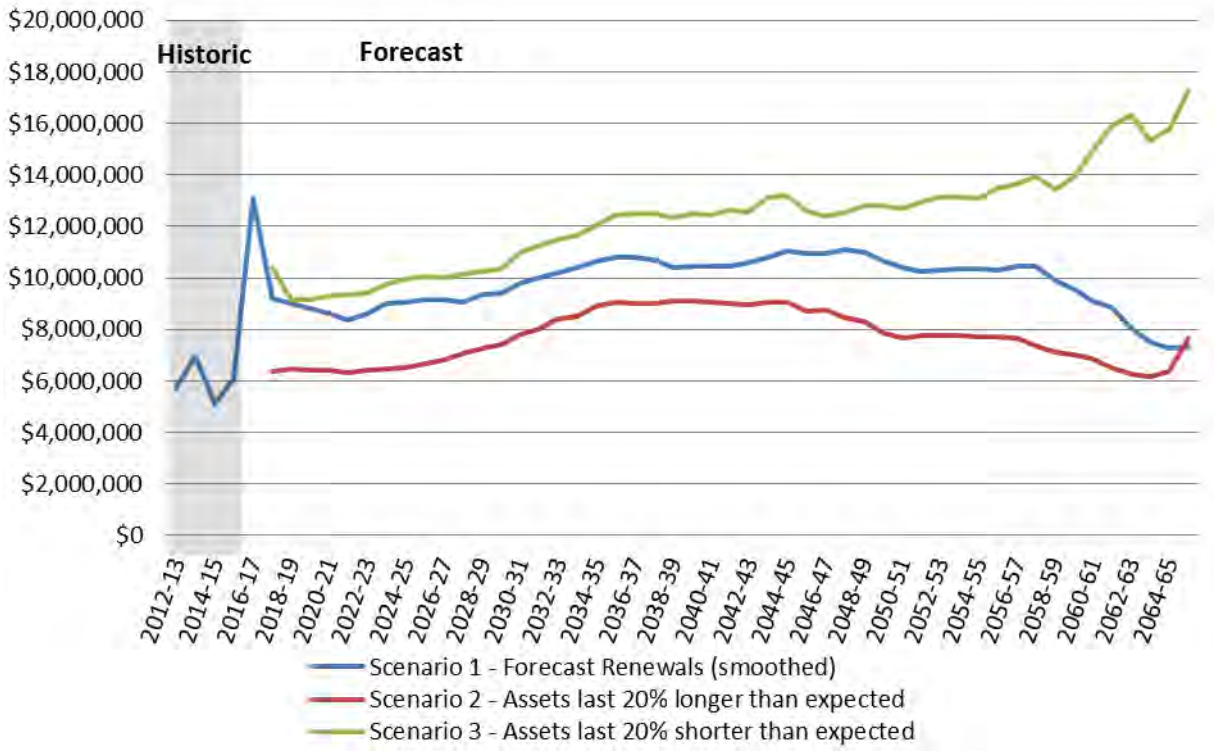



*Figure 36: Sensitivity analysis on overall infrastructure capital renewals expenditure*

A sensitivity analysis show that renewals expenditure increases under all three scenarios. Scenario 2 shows that increased renewal is largely delayed until 2024. These profiles have been smoothed. Actual renewals requirements may be higher or lower in a given year.

# Appendix 2: Expenditure Forecasting Methodology

## Renewals (CAPEX)

The forecast is presented as "known" and "predicted" expenditure. Known expenditure is the estimated cost to renew assets causing known risk, performance and lifecycle cost issues. Predicted expenditure is the estimated cost to address risk, performance and lifecycle cost issues that are predicted to arise, largely based on the age of assets. The predictions carry significant uncertainty.

The methodology that produces the renewals predictions is documented in Assetic Models Renewals Logic.

## Upgrades and Acquisitions (CAPEX)

The forecast is presented as "budgeted" and "potential" expenditure.

Upgrades and acquisitions already budgeted for in the Corporate Plan are presented as "budgeted" upgrades and acquisitions. The timing and cost estimates are better informed and more certain for these projects (typically ±20%).

"Potential" upgrades and acquisitions are also presented. Timing and cost estimates are less certain for potential projects (estimated at ±70%, some may be abandoned). Potential upgrades and acquisitions are forecast according to their priority.

Assets expected to be replaced or made redundant by upgrades or acquisitions are removed from the renewals profile and are assumed to be decommissioned as part of the upgrade.

## Operations and Maintenance (OPEX)

Assets can incur operational costs and may receive proactive and reactive maintenance. 2015/16 expenditure has been separated, for infrastructure asset categories, into operational, proactive and reactive activities. The 2015/16 costs are used as a baseline for forecasting future costs. Future work around optimisation of maintenance strategy may result in a net increase or decrease in maintenance costs as the maintenance strategy is matched to the risk and performance requirements. Operational costs are expected to rise with the increasing cost of electricity and consumables.

CAPEX strategy also affects OPEX in the following ways:

- Upgrades & acquisitions may increase or decrease OPEX.
- The timing of renewals changes the mix of proactive and reactive maintenance and may increase or decrease overall OPEX.

OPEX forecasts are based on levels required to operate and maintain existing assets and known future capital investments. Improving understanding of these relationships to better forecast OPEX will be the subject of future work.

# Appendix 9 2018-2023 Water Pricing Proposal Development Strategy


# 2018-2023 Water Pricing Proposal Development Strategy

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# 1. Acronyms and Abbreviations

| Acronym | Description | Chair |
|---|---|---|
| PSWG | Pricing Submission Working Group | Executive Manager Business Planning and Performance |
| AMWG | Asset Management Working Group | Managing Director |
| BDWG | Business Development Working Group | Executive Manager Business Planning and Performance |
| KSSC | Knowledge Systems Steering Committee | Managing Director |
| RPPRT | Rural Pipeline Project Executive Review Group | Managing Director |
| SWG | Sustainability Working Group | Executive Manager Infrastructure |
| UWSD | Urban Water Strategy Development Working Group | Manager Water Resources |
| RIWG | Research and Innovation Working Group | Executive Manager Infrastructure |

**Definitions**

**Investment Document** - Includes Business Needs Identification; Strategic Assessment or Business Case documentation subject to project stage and/or requirement for Pricing Submission.

# 2. Background

The 2018-2023 is to be developed under what is being described by the Essential Services Commission (ESC) as 'A new model for pricing services in Victoria's water sector'.

This new model for pricing is being introduced in an environment where the Victorian government has acknowledged the need to have a positive program to have adaptive and mitigating strategies that counter the impact of climate change. The new 'Water for Victoria' policy document has a chapter dedicated to climate change and the expectations of the water sector to reduce its carbon footprint through direct investment in alternative energy solutions.

The Statement of Obligations (SoO) has been modified to ensure that climate change adaptation and mitigation is a key consideration for water businesses. These have been non-specific but it is anticipated that the SoO will be further modified to reflect the expectations of individual water businesses to support pricing proposals.

The Climate Change issues will be significant in developing the 2018-2023 Water Pricing submission of GWMWater. There is however a number of other issues that will influence the Pricing Submission and these are outlined in Section 5.

# 3. A new model for pricing services in Victoria's water sector

The new model for water pricing was finalised in October 2016 with the release of the 'Water Pricing Framework and Approach: Implementing PREMO from 2018.

The new model is based on what the ESC has described as the Performance, Risk, Engagement, Management, Outcome (PREMO) model.

The key elements of the PREMO model that differ from the pre-existing models are the Risk, Engagement and Management aspects.

## 3.1 Performance

The performance expectations are specific to service outcomes or delivery of commitments.

*The Commission expects water businesses to deliver on their outcome commitments made to customers. These commitments should reflect the major service priorities that customers identified in the business's customer engagement. Through PREMO, the returns earned by a water business will depend on their performance against outcome commitments.*[1]

[1] P. 37 Essential Services Commission 2016, A new model for pricing services in Victoria's water sector, Position Paper, May

GWMWater has generally performed against its service outcomes and commitments made in this price submission (Water Plan 3) and this will be articulated in the pricing submission.

## 3.2 Risk

The dimensions of risk relate to the proposed varying approach to the application of the Weighted Average Cost of Capital (WACC) and the level of ambition in the pricing proposal.

### *3.2.1. Finance Risk - Weighted Average Cost of Capital*

The proposed changes to the WACC relate primarily to its determination and secondarily to any adjustment relative to the ambition.

The new model proposes to set the WACC in accordance with a benchmark profile using the Capital Asset Pricing Model (CAPM) and reprice debt annually. By doing this the ESC will remove any issues relating to financing risk and assumes that the expectation of equity (shareholder) return implicit in the WACC. The equity component will be understood and will be consistent with the level of ambition implicit in the pricing submission.

The level of ambition will shape the cost of equity component of the WACC. Under the model being proposed by the ESC, water businesses will need to self-assess the level of ambition (risk) in their pricing proposals. In the event that the ESC assesses a water business to have over assessed the level of ambition in their pricing submission they will moderate the proposal by reducing the cost of equity. A corresponding scoring that suggests that a water business has underscored its ambition will not give rise to a corresponding uplift in the cost of equity.

### *3.2.2. Non Finance Risk*

The articulation of risk in all its dimensions will be an important part of the 2018-2023 pricing proposal. The dimensions of risk the ESC will place significant focus on will be the issues such as demand and cost risk.

The position established by the ESC is underpinned by the premise that *'prudent water businesses will take steps to understand, manage and mitigate significant risks to their operations. Risk should be allocated to the party or parties best able to control or manage the risk, while ensuring the party has incentives to reduce the risk or manage it effectively'*[2].

The ESC also gave some insight into how they will assess a water business submission in its articulation of risk. *'We will consider whether a water business's price submission demonstrates it identified and allocated risks appropriately. This allocation may be reflected in a business's justification for tariff structures, for example'*[3].

***Demand Risk***

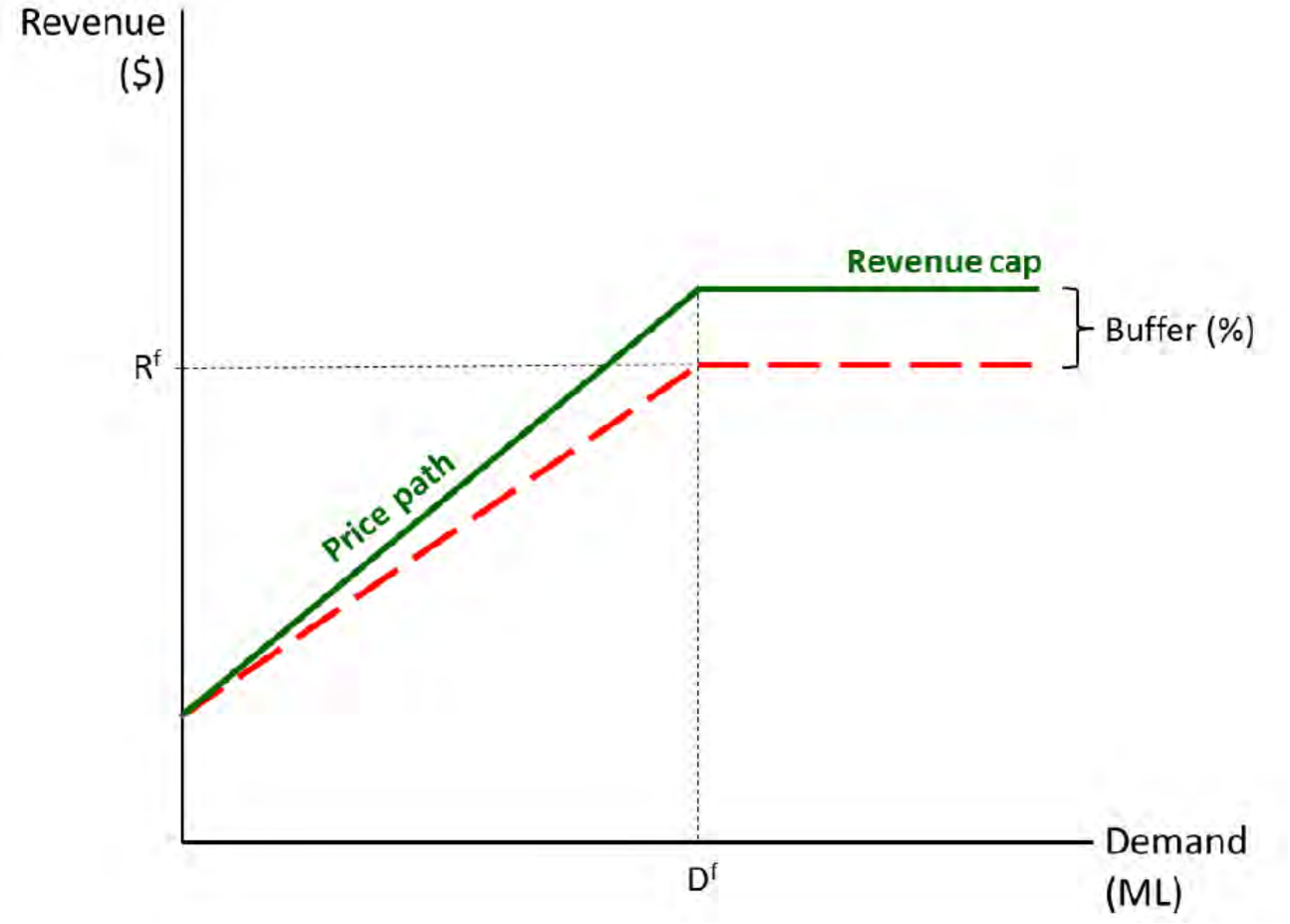
[2] Ibid p.37
[3] Ibid p.37

Demand risk will be a very important part of water business pricing proposals. This has been an area that has drawn considerable discussion from the ESC in the past. The ESC has specifically noted that '*disputes over demand forecasts have been one of the more common areas of disagreement between the water businesses and the Commission'*.[4]

'*If demand is higher than the forecast used to estimate maximum prices, then a water business can earn a windfall gain. If demand is lower than forecast, a water business may incur a windfall loss. Therefore, the current pricing approach provides an incentive for a business to err towards underestimating its forecast demand'*[5].

The ESC has expressed a desire not to commission any work to independently review water business demand forecasts and in doing so is proposing an 'autonomous demand model'. Under the autonomous demand model the ESC is proposing to apply a price cap supplemented by a revenue cap.

**Figure 1 - Hybrid form of price and revenue cap**




[4] Ibid p.83
[5] Ibid p.83

The difference between the revenue that is underpinned by the price cap based on a water business demand forecast is the red line and the revenue cap which is a 'risk adjusted' revenue requirement establishes a buffer that under the model will be exposed to competitive influences. *'Water businesses would be expected to 'bid in' their respective buffers competitively. The Commission would then rank the buffers. A water business's ranking would inform the Commission's assessment of the business's rating under the risk element of the PREMO model. In other words, businesses that seek to transfer greater levels of risk to their customers by adopting larger buffers (and therefore higher prices) are likely to be treated parsimoniously under the PREMO model'*[6].

***Cost Risk***

Cost risk has two dimensions recurrent cost and capital cost. The recurrent cost expectations of the business and the capital cost risk.

Recurrent cost risk relates very much to the level of productivity and efficiency a water business will aspire to. Little insight has been given into how the ESC may deal with productivity expectations in this price review. The only significant comment specific to recurrent costs related to a footnote in Appendix B where in the context of a reference to setting a price cap based on a water businesses demand forecasts '*Provided no other adjustments are required to the business's operating or capital expenditures'*[7]. This would suggest the ESC will continue to undertake independent expenditure assessments or some other model that would give some insight to the reasonableness of water business expenditure estimates.

In the most recent price submission the ESC set a benchmark productivity 'hurdle' of 1%. GWMWater established a productivity hurdle of 2% for pricing purposes but in the background had an aspiration of 4%. This was an area of considerable focus by the Office of Living Victoria (OLV) in the period that immediately following the most recent price review. The industry was significantly challenged by independent consultants that reviewed the expenditure profiles of all water businesses. Productivity resets established for most water businesses with an expectation that these 'resets' would be shared with customers. The GWMWater productivity aspiration generally 'reconciled' with the independent assessment with a 4.3 % productivity opportunity being identified by the independent consultants. Agreement was also reached with OLV that any such opportunity should be applied to GWMWater's debt management strategy.

The other aspect of cost is the level of rigour and therefore confidence in the cost estimates of capital projects. The ESC has also been critical of water businesses representation of risk in the estimation of individual capital projects. *'In the past, many businesses included relatively large*

[6] Ibid p.84
[7] Ibid p. 84

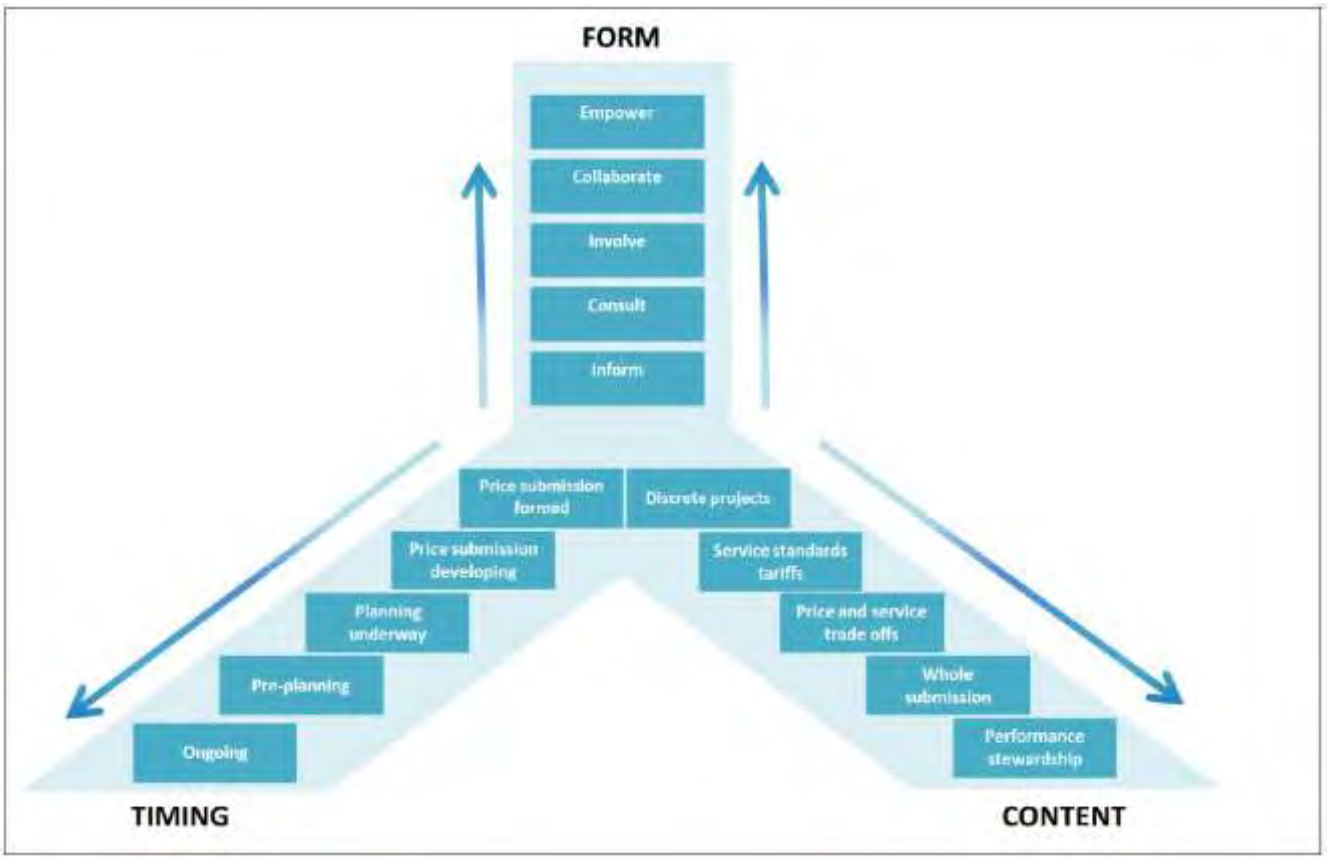
*contingencies for capital works, indicating overly risk-averse assumptions. We will also consider whether a business sought to inappropriately pass on demand risk to customers'*[8].

The ESC has previously articulated the risk based approach of Monte Carlo analysis as the basis of cost estimation for capital projects. GWMWater has generally adopted such an approach for material projects and will articulate a risk position consistent with the risk aspiration that is to underpin the GWMWater proposal.

### 3.3 Engagement

The main expectation of the ESC in relation to engagement is that it be earlier and where appropriate deeper.

**Figure 2 – ESC Model of Customer Engagement**




The model of engagement to be applied by water businesses is the International Association for Public Participation IAP 2 model. This model, where it applies to the 'form' of engagement relies on the IAP2 Public Participation Spectrum which defines the public role in any engagement process.

**Figure 3 – IAP2 Public Participation Spectrum**


The ESC is not providing any prescriptive guidance in this area but has developed a set of principles that water businesses should be able to satisfy in presenting its pricing submission.

**Principle 1**
The form of customer engagement undertaken by a water business should be tailored to suit the content of consultation, and to the circumstances facing the water business and its customers.

**Principle 2**
A water business must provide customers with appropriate instruction and information, given the purpose, form and the content of the customer consultation.

**Principle 3**
A water business's customer engagement should give priority to matters that have a significant influence on the services provided and prices charged by the business.

**Principle 4**

A water business should start customer engagement early in its planning. The engagement should be ongoing, to keep testing proposals with customers.

**Principle 5**
A water business should demonstrate in its price submission how it has taken into account the views of its customers.

GWMWater has generally been acknowledged for its robust models of customer engagement. The IAP 2 model is an integral part of GWMWater's Customer Engagement Strategy. Whilst this was only formally adopted in 2012, GWMWater has maintained models and frameworks that were consistent with IAP2 that tended to be deeper in their form of engagement.

### 3.4 Management Accountability

The ESC is advocating within the PREMO model a strengthened level of management accountability.

*A business's management should be accountable for its price submission. This accountability should cover the proposed outcomes and the quality of supporting justification, including forecasting accuracy.*

*A price submission must demonstrate proposed outcome commitments reflect the views of customers, or government or technical regulator obligations. It must also demonstrate alignment between proposed outcome commitments and expenditure.*[9]

GWMWater has adopted tools that provide robust systems and processes for the development of its plans. These plans come together into an overarching plan that articulate the service outcome along with the financial implications of such decisions. The ability to demonstrate this from a regulatory perspective has generally been acknowledged by the ESC.

The model of management accountability extends into the Board domain with the proposed introduction of a Board attestation.

*We propose to introduce a requirement that a water business's board attests that the price submission reflects all the requirements of our guidance. This includes attestation that, in the board's knowledge and belief:*

- *information and documentation provided in the price submission is complete and accurate in all material aspects, and can be relied upon by the Commission in making a price determination*
- *information based on actual data is true and correct or fairly stated*
- *information which is an estimate is, to the extent possible, derived from actual data and has been arrived at on a reasonable basis, and*

[9]Ibid p.38

- *satisfies the requirements of guidance issued by the Commission.*

*In addition, we expect all businesses to retain contemporaneous supporting documentation on file (for example, business case documents, customer engagement reports and financial models). And they must make those documents available to the Commission if required. Businesses must also provide price submissions and information to the Commission to deadline.*[10]

GWMWater has a strong model of governance around its planning framework. Plans and significant business proposals within them are all subject to Board approval with oversight through the subcommittee structures of the Board.

Perhaps the key consideration for the Board in this area is whether to support any attestation the Board seek an independent review by a regulatory expert in relation to GWMWater's pricing submission.

### 3.5 Outcomes

The outcome focus is as much aimed at ensuring that by going to less prescriptive framework water businesses can be clearer in articulating goals objectives and outcomes.

*A water business must propose outcomes that reflect customer preferences revealed through customer engagement. The outcome commitments should then align with the expenditure that a water business proposes.*[11]

The outcome expectations of the ESC under the PREMO model provide water businesses with a greater level of flexibility in defining the performance and outcome measures that are important to that particular business.

*Under our proposed approach, the number and nature of service commitments may vary by water business, depending on feedback from customers. This approach differs from the current approach, under which a relatively large number of common service standards are approved for each water business.*

*Each service commitment must be well defined and measurable, and reflect the main customer service priorities. We will issue more detailed guidance on businesses' customer engagement on service commitments.*[12]

Whilst the ESC acknowledges that there will be further work in this area, GWMWater has the opportunity to review the performance metrics and service measures to ensure those it considers more relevant are reflected in the performance measures applied.

[10] Ibid p.38
[11] Ibid p 38
[12] Ibid p 38

# 4. Strategic Context of the 2018-2023 Water Price Review

GWMWater has undertaken a review of its 2013-2018 Strategic Directions but has not formally reset these beyond 2018.

The 2016 review of the 2013-2018 Strategic Directions provided an opportunity for the new Board to start putting its 'own stamp' on the directions of the business. There were three key themes in the outcomes of the Boards review of the 2013-2018 Strategic Directions;

1. A strengthening of our commitment to improved environmental outcomes in all aspects not just climate change;
2. A recognition that rural productivity can be enhanced by extensions of rural pipeline networks demonstrated by a strengthening of our commitment in this area; and
3. A desire to be more inclusive from a diversity and cultural perspective.

The strategic directions need to be consistent with the Victorian Water Policy and whilst the industry has been involved in the development of the Victorian Water Plan it is yet to be released. On the basis of what we understand to have been included in the drafts, there will be comprehensive policy statements in all three areas that the Board has identified as a priority.

It is also understood that where necessary any specific government expectations will be codified in the Statement of Obligations.

## 4.1 Performance

The performance against outcomes and commitments can be demonstrated reasonably well.

The referential integrity of our reporting processes to the planned activities is very robust. We have generally delivered on projects that we said we would undertake. A key focus will be;

1. The wrap up of the Wimmera Mallee Pipeline unspent funds,
2. Delivery of water quality projects,
3. Delivery of wastewater projects,
4. Delivery of the renewals projects,
5. Delivery of drought initiatives,
6. Impact of the Blue Green Algae event,
7. The performance of delivery of the growth water strategy,
8. Review of demand relative to planning assumptions,
9. Review of cost efficiency, and
10. Overall performance of the business from a financial and service performance perspective

**Strategic Initiative**

1. Nothing more to be undertaken from a system perspective.
2. Narrative to be developed that will articulate our performance in these areas across the regulatory period.

## 4.2 Risk

There is significant expectation upon water business to articulate the risk context of their pricing submissions.

The risk management framework of GWMWater is based on ISO31000 . Many elements of the business are well understood in the context of risk but this does need to translate into an assessment of ambition.

A key focus of the ESC relates to demand forecasts and the apportionment of risk. GWMWater has not undertaken much work in demand forecasting of significance.

Growth assessment will remain fairly static with GWMWater generally having low growth rates. The greatest focus will be on GWMWater facilitated growth arising from the sale of growth water. Apart from that we will rely on official projections of growth across the region as reported in government growth publications.

Volumetric water growth will increase with growth assessment over the period. This growth will need to be projected in the context of any target water consumption measures that the government is strongly committed, in Melbourne there is a desire to reintroduce target 155 for Melbourne metropolitan businesses and there is an expectation that regional water businesses will develop an appropriate target that will encourage water conservation, this has been badged as *"target your water use"*. This is all in the context of a climate overlay where consumption is likely to increase to maintain basic amenity.

There is a requirement within the SoO for regional and metropolitan water businesses to develop an urban water supply demand strategy. The demand forecasts that support the urban water supply demand strategy will underpin the development of the pricing submission.

The ESC interest in demand forecasts extends to tariff design. GWMWater has a relatively high proportion of fixed charges to volumetric charges.

To the extent that risk also extends to the elements of cost risk, it is generally considered that we are sufficiently capable in articulating cost risk and greater clarity of cost risk is likely to be provided in the guidance document to be released in November 2016.

**Strategic Initiative**

1. Development of the Urban Water Supply Demand Strategy
2. Review of tariff(s) to ensure the risk allocation is understood.
3. Update the Growth Water Marketing Strategy

## 4.3 Engagement

This is perhaps the most important element of the PREMO model that has been developed by the ESC.

The ESC does not provide any guidance on the engagement model for the development of pricing proposals. It does however advocate the use of the IAP 2 Public Participation model for water businesses to apply when determining the engagement strategy.

GWMWater has a Customer Engagement Strategy that was developed in 2012 and in this model adopted IAP 2 as the public participation model for GWMWater. Since this time a training program has been delivered with most senior managers and the Public Relations group attending.

The Customer Engagement Strategy was also the catalyst of the reform of the Customer engagement model. The Customer Committees were disbanded and a biannual Customer forum established in lieu of the Customer Committees with all former customer committee members encouraged to participate in the biannual customer forums.

For the past two price reviews GWMWater has had a Pricing and Tariff Working Group with representation that was drawn from the Customer Committees and key industries. The Chair of each Customer Committee, along with a second member of the committee was represented; industry group representation was drawn from Stawell Gold Mines and Riverlea meats. The Pricing and Tariff Working Group is technically in abeyance and given the disbanding of the Customer Committees if it was to be established we would need to consider its representation. An alternative could be a 'Customer forum' that could provide a 'representative' group of the community that could express a view on the GWMWater Pricing Submission.

It is anticipated that the final model for engagement on the Pricing Submission will be presented in the Customer and Community Engagement Strategy that is presently being reviewed.

Despite this the key initiatives that will be material in the context of the Pricing Submission already have consultation strategies around them.

**Strategic Initiative**

1. Training GWMWater staff not previously trained in IAP2 Public Participation model.
2. Finalise the model of Customer and Community Engagement for the Pricing Submission in the context of the review of the Customer and Community Engagement Strategy.
3. Continue to engage on specific initiatives that will need to be specifically referenced in the Pricing Submission because of their materiality.

### 4.4 Management Accountability

The ESC has indicated that water businesses that present pricing submissions that are well articulated and can demonstrate strong engagement that their pricing proposals will be fast tracked. The ESC view on this will be further influenced by the regulatory track record of water businesses.

GWMWater has established good credibility with the ESC on regulatory matters. This has been achieved through the development of robust systems and processes to support the preparation of regulatory submissions and reports.

With a shift back to a model that is very much 'business as usual' with the exception of the South West Loddon project, there will be a significant focus on renewal expenditure and operational efficiency. The most significant body of work where there will be a focus is the outputs of the Asset Management System as represented in the Asset Management Plan.

Asset Management and Capital Work Planning has been the subject of review by internal audit and have been considered by both the Audit Governance and Risk Committee and the Environment and Works Committee. The most recent review by internal audit provided a set of audit observation recommendations. The general view of audit is that the systems and frameworks are reaching a level of maturity with the only potentially limiting factor being the quality of the asset data. On the basis of this assessment the challenge is to be able to prepare a cohesive Asset Management Plan that provides well informed projections of renewals and maintenance expenditure with a good representation of trade-offs in service standards.

The strategic asset management tool being used by GWMWater is presently being reviewed. Assetic was delivered as part of an overall commercial relationship with TechnologyOne. The commercial relationship between Assetic and TechnologyOne has since been dissolved and TechnologyOne has offered another product which it has acquired and integrated into its asset management solution as an alternative.

The ESC has also suggested that it will not be as prescriptive in the way it wants to see information. If this rhetoric is followed through then less management time will be spent organising its systems and processes to 'map' information into formats required of the ESC. With our systems in this area well established we will be able to spend more time getting the 'narrative' right.

Based on our regulatory track record if we get the narrative right and can demonstrate the appropriate level of engagement we are likely to be fast tracked under the new assessment framework of the ESC.

**Strategic Initiative**

1. Implement the recommendations arising from the recent asset management and capitals works audits
2. Finalise a decision on the strategic asset management tool to be used by GWMWater to support the development of the Asset Management Plan.
3. Develop the Strategic Asset Management Plan.

### 4.5 Outcome

The ability to link expenditure to service outcome will be critical in any pricing submission and this is an area where the ESC has foreshadowed a significant departure from the current model.

The ESC intends to issue further guidance on how this area will be developed under the PREMO framework. This will provide clarity on the extent of any departure from the current set of information and indicators.

The business disciplines already exist where business cases are required to include the benefits of projects and initiatives. This includes the impact on KPI's.

**Strategic Initiative**

1. Assess the current suite of performance measures to ascertain their relevance and identify any others that may be more meaningful for inclusion in the pricing submission.
2. Maintain a watching brief on ESC developments in providing more definitive guidance on the Outcome expectations of the pricing submission.

## 5. Initiatives

A challenge for GWMWater relates to the disparate nature of our systems. The large geographical area combined with the different customer groups means that unlike other water businesses, we do not have a homogenous group of customers. The pricing submission therefore becomes an aggregated view of many issues that feed into a model of generic service obligations and uniform prices. Specific initiatives to be included in the Pricing Submission are:

| No | Issue | Context | Consultation Forum | IAP2 Spectrum | Lead GWMWater Working Group | Documentation |
|---|---|---|---|---|---|---|
| 1 | Revisit support for the Recreation Contribution Charge. | Demonstrated customer support that was provided for Water Plan 3 that needs to be reaffirmed. | Recreation Water User Group<br><br>Wimmera Sports Assembly<br><br>Local Government | Involve | PSWG | Pricing Submission Public Consultation Paper |
| 2 | Review the efficiency of the Rural Pipeline Tariff | Tariff has been in place for ten years and we need to ensure that the objective has been met. | Victorian Farmers Federation | Involve | PSWG | Pricing Submission Paper |
| 3 | Growth Water Projections | Confirm the basis of the Growth Water opportunities that will arise | Wimmera Development Association<br><br>Local Government | Collaborate | BDWG | Growth Water Marketing Strategy |
| 4 | Urban Water Strategy | Development of an Urban Water Strategy to inform demand and investment requirements. | Entitlement Holder and Key Stakeholder Executive Committee | Involve | UWSD | Urban Water Strategy |
| 5 | Extension of Taggle (Urban RPIP) | Opportunity to identify the benefit of utilising the infrastructure installed to urban customers | Electricity and Water Ombudsman Victoria | Involve | KSSC | ICT Strategy<br><br>Business Case |

| No | Issue | Context | Consultation Forum | IAP2 Spectrum | Lead GWMWater Working Group | Documentation |
|---|---|---|---|---|---|---|
| 6 | Rural pipeline service standard (quality and level of interruption) | Ensure that the service standard inherent in the rural customer charter are consistent with current expectations | Victorian Farmers Federation | Involve | PSWG | Pricing Submission Paper |
| 7 | Service Standards in regulated Urban centres | Customers in our regulated towns scored us the lowest Net Promoter Score of all customer segments in our 2016 Customer Survey. | Customers in Regulated Towns | Involve | PSWG | Pricing Submission Paper |
| 8 | Implications of Rural Pipeline Extensions including South West Loddon | These projects were not explicitly identified in previous pricing submissions and GWMWater need to be able to demonstrate that investments met the objective of not impacting existing Customers | Essential Services Commission<br>Project Steering Committee (Loddon) | Collaborate | RPPRT | Pricing Submission Briefing Paper |
| 9 | Intelligent Water Networks | No specific projects identified at this stage unless RPIP (urban) is cons | Department of Environment Land Water and Planning<br>Essential Services Commission | Involve | KSSC | ICT Strategy<br><br>Business Case as identified |

| No | Issue | Context | Consultation Forum | IAP2 Spectrum | Lead GWMWater Working Group | Documentation |
|---|---|---|---|---|---|---|
| 10 | East Grampians, West Wimmera, Toolondo studies | These projects are likely to roll into the next regulatory period and the ESC will need to be satisfied about the efficacy of the investment | Project Steering Committees<br><br>Department of Environment Land Water and Planning<br><br>Department of Treasury and Finance | Empower | RPPRT | Pricing Submission Paper<br><br>Investment Document |
| 11 | Residual Water Quality Projects | There remain a number of towns that receive a regulated water supply where there is an expectation that water supplies be upgraded to potable. Irrespective of this the most recent customer survey suggested that these customers were the least favourably predisposed to GWMWater | Affected Communities<br><br>Department of Health and Human Services<br><br>Department of Environment Land Water and Planning Customer Forum | Collaborate / Involve | AMWG | Pricing Submission Paper<br><br>Investment Document |

| No | Issue | Context | Consultation Forum | IAP2 Spectrum | Lead GWMWater Working Group | Documentation |
|---|---|---|---|---|---|---|
| 12 | Dam Safety – Lake Lonsdale | Dam Safety upgrades at Lonsdale have been identified for some time. This risk can be managed by operational strategies. The Lake does not meet consumptive water requirements but supports the environmental watering program. | Wimmera Glenelg Bulk Entitlement Stakeholder and Executive Council.<br><br>Department of Environment Land Water and Planning | Collaborate | AMWG | Pricing Submission Paper<br><br>Investment Document |
| 12 | Environmental Pricing / Headworks cost allocation | This needs to be reviewed to reflect the costs of maintaining a regulated water product in the GWMWater system. WMPP Financial model assumed environmental water would not attract a charge. | Wimmera Glenelg Bulk Entitlement Stakeholder and Executive Council.<br><br>GWMWater Customer Forum | Collaborate | PSWG | Pricing Submission Paper |
| 13 | Horsham Wastewater Treatment Plant | Commitments made to extend short to medium term life of plant means this is deferred to next regulatory period. | NA | NA | AMWG | Investment Document |

| No | Issue | Context | Consultation Forum | IAP2 Spectrum | Lead GWMWater Working Group | Documentation |
|---|---|---|---|---|---|---|
| 14 | Goroke Sanitation | Highest order project on the West Wimmera Municipal Wastewater Plan. | West Wimmera Shire Council<br><br>Environment Protection Authority<br><br>Department of Environment Land Water and Planning<br><br>Customer Forum | Empower | AMWG / BDWG | Pricing Submission Paper<br><br>Investment Document |
| 15 | Asset Management Plan | This will become a key focus of the Pricing Submission as we shift back to more of a business as usual model. | Customer Forum<br>Local Government | Consult | AMWG | Asset Management Strategy |
| 16 | Development Servicing Plan | A specific requirement of the SoO and an area that has been underdeveloped. | Local Government<br><br>Regional Development Victoria | Collaborate | AMWG / BDWG | Development Servicing Plan/s |

| No | Issue | Context | Consultation Forum | IAP2 Spectrum | Lead GWMWater Working Group | Documentation |
|---|---|---|---|---|---|---|
| 17 | Fire Services | Responsibility for Fire Services is an area that needs to be clarified in all aspects. In an urban sense the main issues relates to fire services for industrial and commercial requirements. In a rural sense it relates to the ongoing maintenance of infrastructure installed as part of rural pipeline networks. | Local Government<br><br>Department of Environment Land Water and Planning | Involve | PSWG | Pricing Submission Paper |

| No | Issue | Context | Consultation Forum | IAP2 Spectrum | Lead GWMWater Working Group | Documentation |
|---|---|---|---|---|---|---|
| 18 | Energy Efficiency / Carbon Aspirations | DELWP have indicated that upon finalisation of the Water for Victoria document the SoO will be modified to 'codify' the expectations of the water industry. DELWP has suggested that a direct investment model is likely to be promoted and that a portfolio approach will be taken to developing opportunities. Aspirations that go beyond SoO obligations will need to be supported by customers and any price implications that are inherent in SoO obligations need to be understood by customers | Department of Environment Land Water and Planning<br><br>Sustainability Victoria<br><br>Department of Treasury and Finance<br>Customer Forum | Collaborate | SWG | Pricing Submission Paper<br><br>Investment Document |
| 19 | Reviews that articulate the implications of Climate Change | Work to be undertaken is unlikely to feed through into any expenditure unless it is part of the studies identified at Item * | Department of Environment Land Water and Planning<br><br>Murray Darling Basin Authority | Involve | SWG | As above |

| No | Issue | Context | Consultation Forum | IAP2 Spectrum | Lead GWMWater Working Group | Documentation |
|---|---|---|---|---|---|---|
| 20 | Research and Innovation | Investigate R&D projects aligned to Strategic Directions and Policy documents. | Customer Forum<br><br>Pricing and Tariff Working Group | Involve | RIWG | Pricing Submission Paper<br><br>Investment Document |
| 21 | Pricing Submission | The Pricing Submission will bring all of the issues above into one document that will articulate the service dimension and the associated price implications of these initiatives. | Customer Forum<br><br>Local Government<br><br>Pricing and Tariff Working Group | Involve | PSWG | Pricing Submission Paper/s<br><br>Pricing Submission Plan |

## 6. Customer Specific Forums for Price Oversight

GWMWater has had a Pricing and Tariff Working Group and whilst this proved to be an effective forum for reviewing price issues, they did not necessarily have 'holistic' oversight of the development of the Pricing Submission. The role of the Pricing and Tariff Working Group was more specific to tariff and tariff design issues and played an important role in promoting the Recreation Contribution Charge.

The Community and Customer Engagement Strategy is to be reviewed and any customer specific forum that may be established for the purpose of the Pricing Submission will be considered in the context of this review

**Strategic Initiative**

1. To review the Community and Customer Engagement Strategy to determine the model of customer engagement for the Pricing Submission.

# Appendix 10 GWMWater 2017/18 Corporate Plan – Statement of Corporate Intent

GWMWater

# STATEMENT OF CORPORATE INTENT 2017

**31 May 2017**

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# STATEMENT OF CORPORATE INTENT

# 1. Statement of Corporate Intent

## 1.1 Introduction

Grampians Wimmera Mallee Water Corporation (trading as GWMWater) was formed from an amalgamation of the former Grampians Region Water Authority and Wimmera Mallee Water Authority on 1 July 2004.

The amalgamation acknowledged that the two water businesses covered similar geographical areas and used common infrastructure to service most of the customer base. At the time it was acknowledged that the merger would provide 'the best possible opportunity for the proposed Wimmera Mallee Pipeline (WMP) to succeed'.

Construction of the WMP is complete and the pipeline fully operational. Funds committed to decommissioning of high risk channel structures have been fully expended.

Since completion of the main construction effort, GWMWater has been fulfilling its financial commitment to the WMP. This commenced in 2012 when agreement was reached with the Victorian and Commonwealth government, that GWMWater should use pipeline funds to decommission the Wimmera Irrigation System. This agreement was reached when the Commonwealth government agreed to purchase the collective 28 GL irrigation entitlement in the Wimmera Glenelg system. As part of this commitment 'in principle' agreement was reached that GWMWater would fulfil its commitment to spend the remaining funds up to $131 million on projects that were consistent with the benefits of pipeline conversion projects. These projects have included;

- Part funding rural pipeline extensions,
- Retrofitting the Northern Mallee Pipeline to be more consistent with the WMP,
- Building greater intelligence into the rural pipeline network, and
- Decommissioning high risk channel infrastructure that remained in situ.

These projects are now all complete with the exception of one rural pipeline extension project, South West Loddon Stage Two. The Wimmera Mallee Pipeline unspent funds have been acquitted and in the context of the finalisation of the 2016/17 annual financial statements the Wimmera Mallee Pipeline Project will be formally closed.

The 2017/18 Corporate Plan is set in the context of the reset of the Victorian water policy with the Victorian Water Plan - Water for Victoria released in October 2016. Water for Victoria builds heavily on the most recent comprehensive policy framework for Victoria in Our Water Our Future. Water for Victoria also acknowledges the commitments that have been made to the Murray Darling Basin Plan (MDBP), the work that had been undertaken in developing Sustainable Water Supply Strategies (SWSS), the outcomes of the 2013-2018 Water Price Review and the productivity targets that have been agreed with government.

Subsequent to the release of Water for Victoria, the Minister for Water has issued a Letter of Expectations. This Letter of Expectations reinforces the more specific requirements of water businesses to deliver on the policy agenda of Water for Victoria without having them 'codified' in the Statement of Obligations (SoO).

The 2017/18 Corporate Plan reflects the GWMWater targets specific to Water for Victoria in priority areas identified in the Letter of Expectations. The Corporate Plan also starts to articulate the expectations of the Statement of Obligations (SoO).

The framework for water business to develop and engage on their pricing submissions as part of the in the 2018-2023 Water Price Review has been released by the Essential Services Commission (ESC). The Performance Risk Engagement Management Outcome (PREMO) model places much greater onus on water businesses to engage with their communities and customers on issues specific to the services they provide and the pricing for these services. In doing so, water businesses are expected to be able to clearly demonstrate the value proposition of their pricing proposals and that this is understood by their customers.

Climate change adaptation and mitigation will be a central theme of the 2018-2023 Water Price Review. This 2017/18 Corporate Plan is yet to articulate the investment to be undertaken as part of the Carbon Pledge. The pledge targets have however assumed that the investments will be cost beneficial and will not give rise to any price issues.

Water quality remains one of the higher order risks for GWMWater with the vulnerability of our northern systems being exposed by the Blue Green Algae outbreak on the Murray River in March 2016. The continuation of dry conditions since the significant rainfall events of 2010/11 has however given rise to a lift in water security risk. Financial viability risk has been downgraded as the financial position of GWMWater continues to strengthen.

We approach 2017/18 with water resources being at their highest level since 2010/11. Water security for GWMWater will be met by access to an estimated carryover of 70,000 ML from the Grampians system, and a predicted opening allocation of 40%. The northern rivers systems are predicted to achieve 100% allocation under dry conditions.

In the first four years of this 2013-2018 water pricing review period GWMWater has achieved its productivity and efficiency target of 4.3%. As a result, in 2017/18 we are looking to consolidate and in some areas of the business reinvest to ensure that service obligations are maintained and more importantly we have capability moving forward.

The investment in the asset management/works management system continues to deliver value to the business by improving the organisation and planning of work. The maturity of the SCADA system is continuing to minimise the level of site visitation as well as improve the operational efficiency of the infrastructure.

The rural extensions and peripheral development program continue to be the key opportunity to be realised under the Growth Water Marketing Strategy. Over the past eighteen months, the Pella and Quambatook extensions have secured water supply to 42 rural landowners. The recently completed Wartook, Coonooer Bridge and South West Loddon Stage One further extend the number of rural landowners with a secure water supply. Stage two of the South West Loddon Project Loddon Water Supply Project is presently in the market with construction anticipated to be completed in the 2017/18 Summer, Autumn period.

Other rural communities affected by climate change have also sought support for a rural pipeline network. The Ararat Rural City Council and West Wimmera Shire have been successful in partnering with GWMWater to secure funding to undertake studies to assess the feasibility of further rural pipeline extensions in the East Grampians and West Wimmera studies. These studies are complemented by the Rocklands / Taylors Lake study that will potentially produce further water savings. These commitments reinforce the Victorian government's acknowledgement that agriculture productivity can be enhanced where there is access to a reliable water supply where a region is challenged by the implications of climate change.

The outlook projected by the 2017/18 Corporate Plan continues to project a further improvement in financial viability of GWMWater as represented in the key metrics of interest cover ratio. In 2017/18 GWMWater by virtue of a combination of past performance and projected performance will be upgraded to a credit rating of A- under the Department of Treasury and Finance desktop credit ratings assessment criteria.

## 1.2 Strategic Directions

In February 2017, the GWMWater Board undertook a review of the Strategic Directions.

This review was a much more superficial review than the review of February 2016 that was undertaken after just six months of operation with a new Board that had six new Directors. The consensus arising from the 2016 review was that the strategic context remained relevant but with a realignment in relation to;

- strengthen the environmental priorities, particularly in the context of climate change, and
- also within the context of climate change, the importance of rural water delivery networks to maintain a viable agricultural sector.

Whilst these changes were reflective of the aspiration of the Board, they were also somewhat pre-emptive of the more significant policies emerging in the development of Water for Victoria. Climate change is very much a central theme of Water for Victoria and there was a full chapter dedicated to Water for Agriculture that was very much geared to stock and domestic activities and the importance of a reliable water supply.

The 2017 strategic review was a bit more 'inward' looking and focussed more on organisational capability and to a lesser extent culture. The outcome of this acknowledged there was a need to pause the drive for savings. If anything, the Board acknowledged the need to 'reinvest' in organisational capability. This capability included the continued commitment to good asset management. This acknowledged the significance of the current suite of projects which include; the 2018-2023 Water Price Submission, South West Loddon Project, the piping studies and the water resource assessments to be undertaken to better assess the implications of climate change.

### 1.2.1. *Vision*

Sustainable water for regional growth, healthy environment and vibrant communities.

### 1.2.2. *Mission*

Providing innovative and affordable services through partnerships with stakeholders, customers and the community.

### 1.2.3. *Values*

The values had been revisited over the past twelve months and the following represents the values as development by the GWMWater management team.

***Customer***
We will promote a culture that respects the views of our customers and our people with a 'can do' approach.

***Organisation***
We will work as a team to deliver agreed organisational priorities whilst respecting the views of stakeholders.

***Accountable***
We will be accountable for the actions we take and responsible for those we influence.

***Transparent***
We will be able to promote the merit of our decision making.

***Efficient***
We will ensure that the performance of our people, assets and resources are optimised in the provision of services.

***Disciplined***
We will ensure that our policies and processes support a consistent attainment of quality and safety in all aspects of our operations.

The Strategic Directions acknowledges the position of GWMWater relative to its role in the community it serves and the environment it operates within.

### 1.2.4. *Context for the Strategic Directions*

We operate within a dynamic region in an environment that is very much weather dependant.

The possible impact of changed weather in the context of climate change and climate variability in our region is quite significant. To the extent the weather patterns of the past two decades are indicative of climate change then this would indicate that we have already been experiencing the impact of climate change.

More recently, in 2010/11 we experienced three significant rainfall events that substantially improved the water resource holding of the region. In the five-year period that intervened, we returned to a dry cycle with rainfall and inflow records that were below average and amongst the lowest rainfall and inflow years on record. 2016/17 has been a wetter season but in a historical sense, rainfall has only been marginally above average. These weather patterns are all consistent with the climate trends forecast by the scientific community under climate change and climate variability in our region.

The investments in water efficiency have mitigated the impact of climate change and ensured that we can continue to provide water and wastewater services that support regional growth and promote the liveability of our communities. Our investments reinforce our commitment to regional growth and liveability which in turn supports our future success and viability. As a consequence of climate change, we anticipate an expansion of our water delivery networks as landowners that have typically relied on local catchment become more vulnerable.

Since completing the conversion of the stock and domestic channel network to a rural pipeline system, we have made significant advances in the sale of growth water and facilitated the buyout and closure of the irrigation sector in the region. We now have reliable water supplies in sufficient quantities to facilitate growth without compromising the water needs of the environment or existing water users.

We will continue our transformation to a sophisticated digital utility focussed on achieving service excellence through the appropriate use of technology. This will be achieved in the context of an improved understanding of our customer needs and strong partnerships with stakeholders and suppliers.

Our commitment to innovation and continuous improvement will ensure that we realise the full potential of our people, technology and infrastructure to maximise the value of services provided to the communities we serve. In the short to medium term, we will look to strengthen the capability of the organisation at the senior level to meet the challenges of the projects presently being undertaken.

We will balance environmental, financial and social obligations through smart well informed decisions and demonstrated regional leadership.

Our future will be full of challenges and opportunities. We will be proactive and adaptive so that we continue to meet the needs of the communities we serve. Responding to changes in our operating environment and undertaking initiatives that address our negative impact on the environment.

The Strategic Directions has an overarching theme of supporting sustainable growth. It is acknowledged that this will only be achieved by achieving an agreed level of performance in the six areas that support this objective.

*Figure 1-1 GWMWater Strategic Themes*


The strategic themes have been a key consideration in the development of this 2017/18 Corporate Plan. The strategic model provides a balanced scorecard approach to planning and performance monitoring and is the basis of the design of management reports for Board and Executive.

### 1.2.5. *Strategic Priorities*

The priorities identified in the Strategic Directions have been classified into immediate and emerging.

The immediate priorities include:

- To reinvest in organisational capability to ensure the ongoing capability of the workforce to perform in a complex business with heavy regulatory oversight;
- Ensuring that enhancing organisational capability that we have a workforce that is culturally aligned, particularly in regard to safety;
- Selling growth water realised from water savings from the WMP to add value to GWMWater and the region;

- Extending rural pipeline networks where such networks can be economically justified;
- Promoting and demonstrating the value of services and products provided by GWMWater;
- To focus on the effectiveness and utilisation of the Integrated Information System to support improved asset management decision making and business process efficiency; and
- To improve energy use efficiency and optimise the use of our assets, infrastructure and systems.

The emerging priorities sit around some of the more aspirational elements of GWMWater's strategy and will need to be developed in the context of their organisational impact. These include:

- Working collaboratively with other water businesses to achieve better outcomes for the customers of GWMWater and Victorians as a whole;
- Strengthening relationships with other agencies across the region;
- Developing partnering opportunities;
- Fostering the development of active markets for water;
- Provision of water and wastewater products which are 'fit for purpose' and affordable;
- To reduce our carbon footprint by further improving our energy efficiency and investing in renewable; and
- By further improving our water resource efficiency.

### 1.3 The Role of the Board

The key responsibilities of a statutory corporation Board include:

- Setting broad strategy, objectives and performance targets for the Corporation;
- Risk management oversight for all key business and operational risks including public health and safety, occupational health and safety and being informed and aware of residual risk levels;
- Reviewing the Corporation's progress towards achieving its specific goals;
- Reviewing the internal financial and operational controls for the Corporation to ensure that they are effective and current (including non-compliance, anti-fraud, anti-corruption and critical incident reporting systems); and
- Overseeing the preparation and approval of strategic plans, annual reports, key policies and procedures.

The Board establishes the broad strategic direction for the entity and sets its goals. These goals relate to operational sustainability, financial performance, organisational performance, range and quality of service, compliance and risk management. Specific strategic goals outlined in the plan identify the key risks to achieving desired outcomes, and how the Corporation intends to deal with these risks.

### 1.3.1. *Constitution*

GWMWater was constituted by Ministerial Order with effect from 1 July 2004, under Section 98 and 100 of the *Water Act 1989* (the Act). Section 124 of the Act gives GWMWater the powers necessary to perform its functions, however those powers can only be exercised to perform a function given to GWMWater by an Act of Parliament.

On 1 July 2007, the *Water (Governance) Act* 2006 became effective. An integral part of this change was the Managing Director becoming a member of the Board of Directors.

### 1.3.2. *Board of Directors*

Current Board Directors are as follows.

Peter Vogel (Chairperson)
Paul Battista
David Jochinke
Desmond Powell
Mark Williams (Managing Director)
Mary Bignell (Deputy Chairperson)
Bronwen Clark
Peta Maddy
Caroline Welsh

To support the effective discharge of its governance obligations, the Board has established a number of Committees as outlined below;

- Audit Governance and Risk
- Environment and Works
- Water Resources
- Remuneration

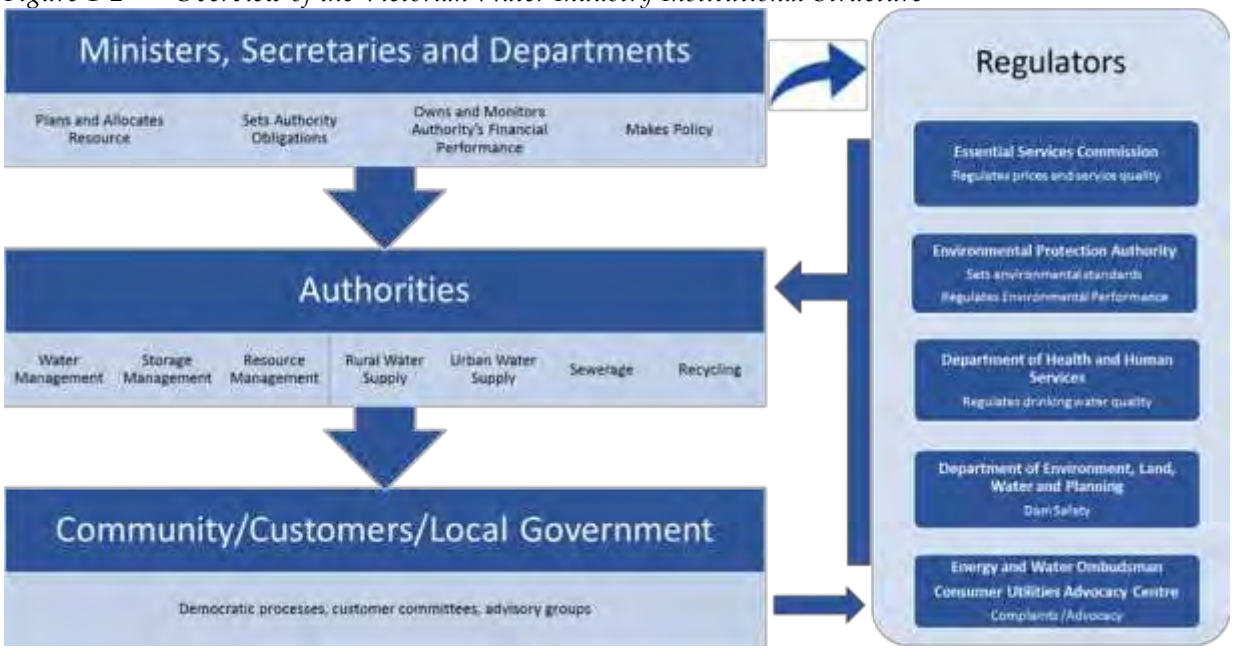
The Water Resources Committee is a newly formed Committee of the Board that is aimed at strengthening the independence and objectivity of GWMWater's Resource Manager and Storage Manager functions it undertakes for the headworks surface water and groundwater activities it is responsible for on behalf of the Minister for Water.

The Occupational Health and Safety Committee are also considered a Committee of the Board. The Board's interests are served by the Managing Director who chairs this Committee.

### 1.3.3. *Accountability Framework*

The structural overview provided by Figure 1-2 provides a visual representation of GWMWater as a Government Business Enterprise with other key stakeholders.

*Figure 1-2 Overview of the Victorian Water Industry Institutional Structure*




GWMWater is a vertically integrated water business and by virtue of this deals with all facets of water activity and the implications of this are outline in Section 1.6.

The commercial governance of GWMWater is facilitated by the development of the annual Corporate Plan.

The annual Corporate Plan is the principal mechanism for facilitating communication between GWMWater and government. The primary accountability of GWMWater for the delivery of water and wastewater services, including meeting the government's water policy, is to the Minister for Water. In price review years, this includes receipt of a water business pricing submission prior to lodgement with the ESC to ensure its consistency with government policy.

Portfolio responsibility for water is through the Department of Environment, Land, Water and Planning (DELWP). Commercial oversight of the water sector is undertaken by the Department of Treasury and Finance (DTF), with this Corporate Plan to be considered by the Treasurer as well as the Minister for Water.

The SoO issued by the Minister for Water reflects the expectations of government for both urban and rural activities undertaken by GWMWater. The SoO is a regulatory instrument that provides a framework for the ESC to assess water business price submissions where they go beyond the core requirements of the Water Act or the Customer Charter. The SoO was amended on 20 December 2015 and a final amendment will be made in July 2017 to reflect the carbon mitigation pledge.

As a rural water business that is within the area covered by the Murray Darling Basin, there is also an expectation that GWMWater 'work with the DELWP to implement relevant Murray Darling Basin obligations'.

The Corporate Plan acknowledges the role of the ESC in monitoring GWMWater performance against agreed services outcomes and standards for the water industry. The underlying service levels and the performance against these proposed by GWMWater are specifically addressed in this 2017/18 Corporate Plan.

### 1.3.4. *Customer, Community and Stakeholder Engagement*

In recent years the GWMWater Customer and Stakeholder Engagement Model has been redesigned to reflect GWMWater changed model of operation.

The traditional model of Customer Committees played an important role in the lead up to and delivery of the WMP. The advocacy of GWMWater Customer Committees in promoting the importance of the WMP was pivotal to the regions successful promotion of the pipeline project. The pipeline itself significantly changes the service dimension of water delivery with rural customers no longer involved in the logistics of water delivery under pipeline supply and in doing so having a very different relationship with GWMWater.

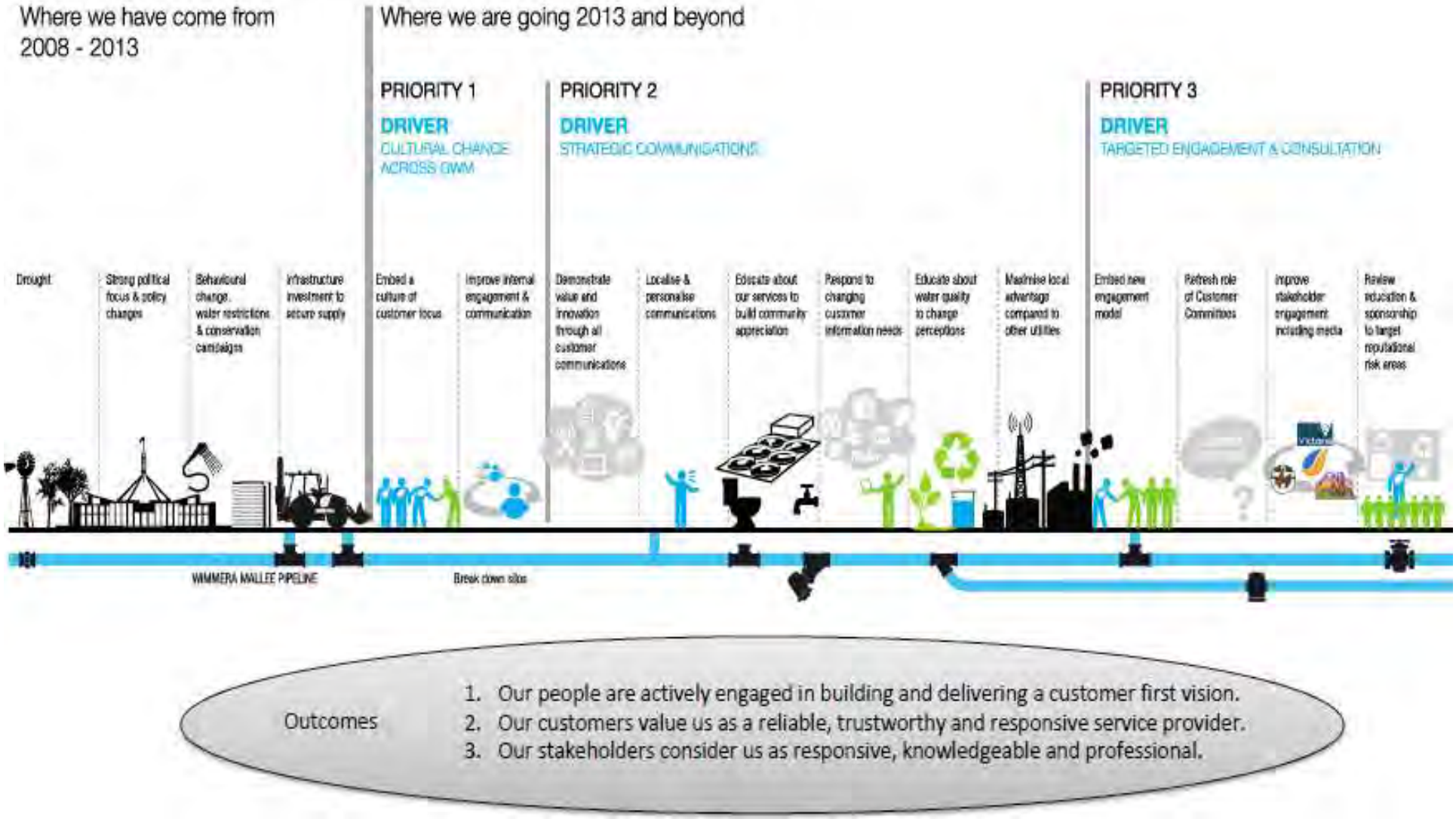
A key element of the new model of engagement was the formal adoption of the IAP2 Model of Public Sector Community Engagement. The IAP2 model outlines the whole spectrum of customer involvement with GWMWater tending to be more involved at the involve and collaborate level of the IAP2 public participation spectrum. GWMWater has a genuine commitment to engagement in a community that is actively interested in water.

*Figure 1-3 IAP2 Public Participation Spectrum*

A focus since 2011 that was formalised in 2013 has been the objective of establishing a customer centric culture. A Customer and Community Engagement Strategy formalised the adoption of the IAP2 Public Participation model which now underpins all communications strategies developed by GWMWater. The Customer and Community Engagement Strategy identified a number of other initiatives to improve its customer and community engagement. The Customer and Community Engagement Strategy was updated in February 2017 and GWMWater assessed in relation to progress as part of this process.

The emphasis of this change in direction is outlined in the Community Engagement Roadmap Figure 1-4

*Figure 1-4 Community Engagement Roadmap*

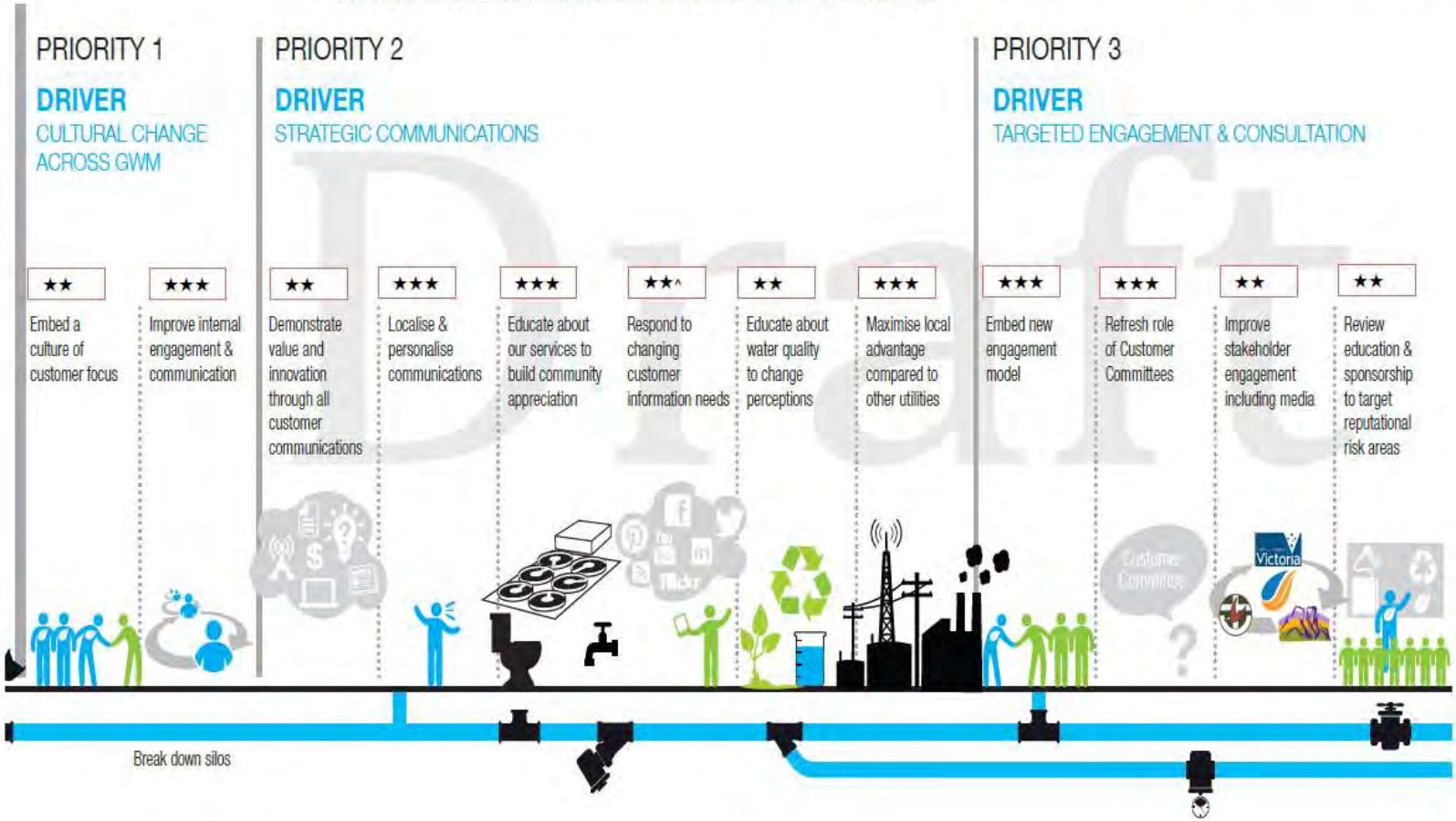


## 2.3 Overview Rating

This chart reflects GWMWater's rating performance in delivering against the strategic drivers identified in the 2013 Communications & Engagement Framework. It is based on review findings and three star rating.

★★★ - Strong evidence of performance and supported by review participants
★★ - Evidence of progress, identified as area for continual enhancement
★ - Identified as area for focus in 2017

^ rating reflects identified need to adopt contemporary approach to communications. It should be noted GWMWater's digital metering and online portal are excellent examples of responding to changing customer needs and delivering real customer value in an innovative way.



The general Customer Committees have been replaced with a biannual Customer and Stakeholder Forums. Past members of customer committees as well as key regional stakeholders are invited to participate in a facilitated process to discuss and seek feedback on a range of strategic and contemporary policy issues. Almost all issues covered have been aligned to topics that will shape the next pricing submission that the Board will need to deliberate on in the coming period. Key regional stakeholders include representatives from the Victorian Farmers Federation, local government and the financial, education, health, power and telecommunications sector, as well as relevant government departments to participate in these workshops.

Beyond the Stakeholder Forums, GWMWater retains a number of 'special purpose' Committees and Forums to assist in the development of strategy and policy and then monitor the performance of these strategies and policies. The following is the current list of Committees and Forums that GWMWater has in place to guide strategy and policy:

- Wimmera Glenelg Bulk Entitlement Executive and Council Forum
- Irrigation Diverters Consultative Committee
- West Wimmera Groundwater Management Area Implementation Committee
- Murrayville Groundwater Management Area Implementation Committee
- Regional Recreational Water Users Group
- South West Loddon Project Steering Committee
- Drought Reference Committee#

# The Drought Reference Committee has been placed into recess since 2010.

GWMWater also consult directly with specific communities of interest when considering specific water quality or waste water improvement initiatives. Committees are also formed from time to time by expressions of interest to assist with the development of recreation management plans for GWMWater reservoirs.

The GWMWater Website has been upgraded to provide a more contemporary look and feel. The website has been social media enabled to make it easier for our customers and followers to promote GWMWater messages. This compliments the significant advances that have been made with the establishment of the Storage Manager website and the Rural Metering Customer Portal.

For the Pricing Review GWMWater will be establishing a Deliberative Forum to enable a smaller group of relevant stakeholders to exercise judgement on the GWMWater Pricing Submission.

### 1.3.5. *Customer Service Benchmarking Australia*

One of the more notable achievement of GWMWater in its customer relations has been its performance as measured by Customer Service Benchmarking Australia (CSBA).

Since the water sector commenced in this process through the agency of the Essential Services Commission, GWMWater has been consistently in the top ten, and on seven occasions has been the number one water business.

*Table 1-2 GWMWater – CSBA Customer Service Rankings*

| GWMWater - CSBA Customer Service Rankings 2012-13 to Current. | | | | | |
|---|---|---|---|---|---|
| | | Q.1 | Q.2 | Q.3 | Q.4 |
| 2016-17 | Ranking - Customer Service Performer - Across all Industry Sectors | 5 | 1 | | |
| 2015-16 | Ranking - Customer Service Performer - Across all Industry Sectors | 2 | 1 | 7 | 2 |
| 2014-15 | Ranking - Customer Service Performer - Across all Industry Sectors | 6 | 1 | 4 | 4 |
| 2013-14 | Ranking - Customer Service Performer - Across all Industry Sectors | 8 | 7 | 6 | 5 |
| 2012-13 | Ranking - Customer Service Performer - Across all Industry Sectors | | 3 | N/R | 8 |
| | Top Customer Service Performer - Water Industry Sector | | | | |
| N/R | No report issued for that quarter. | | | | |
| | Ranked outside the top 10 performers overall. | | | | |

## 1.4 Main Business Undertakings

### 1.4.1. *Service Area*

The service area of GWMWater is outlined in Figure 1-5 below.

*Figure 1-5 Service Area of GWMWater*

## 1.5 Scope of Activities

Urban water supply is a significant activity of GWMWater. In a 'normal' season, this involves the delivery of around 9-10 GL of water to approximately 33,000 customers in 71 urban centres. Most of the water supplied to these urban centres is potable water that meets the specifications of the Drinking Water Regulations of the *Safe Drinking Water Act* 2003. Water supplied to a number of the smaller towns is non-potable (regulated water) and a program of consultation has been undertaken with these communities to ensure that water quality issues are understood.

Wastewater services are presently supplied to 27 of the 71 towns.

Water supply for domestic and stock (D&S) customers is the predominant rural activity. This involves raw water delivery to approximately 13,000 rural customers through pipeline networks. These networks will be further extended as a consequence of the commitment to extend the WMP into the Loddon Shire and support for studies into possible extensions in unserviced rural areas of the Ararat Rural City Council and West Wimmera Shire.

Bulk water is a significant part of GWMWater operations. Intensive agricultural activities such as poultry farms, piggeries and commercial feedlots are the largest bulk water users. Viticulture is the next largest bulk water user and this has recently expanded with the development of the Landsborough pipeline. Mining is a significant holder of water but as a result of the recent closure of the Stawell Gold mine, there are no active mines in the region.

GWMWater owns and operates a number of headworks and bulk water supply assets. Many of these reservoirs also provide access for recreational activities.

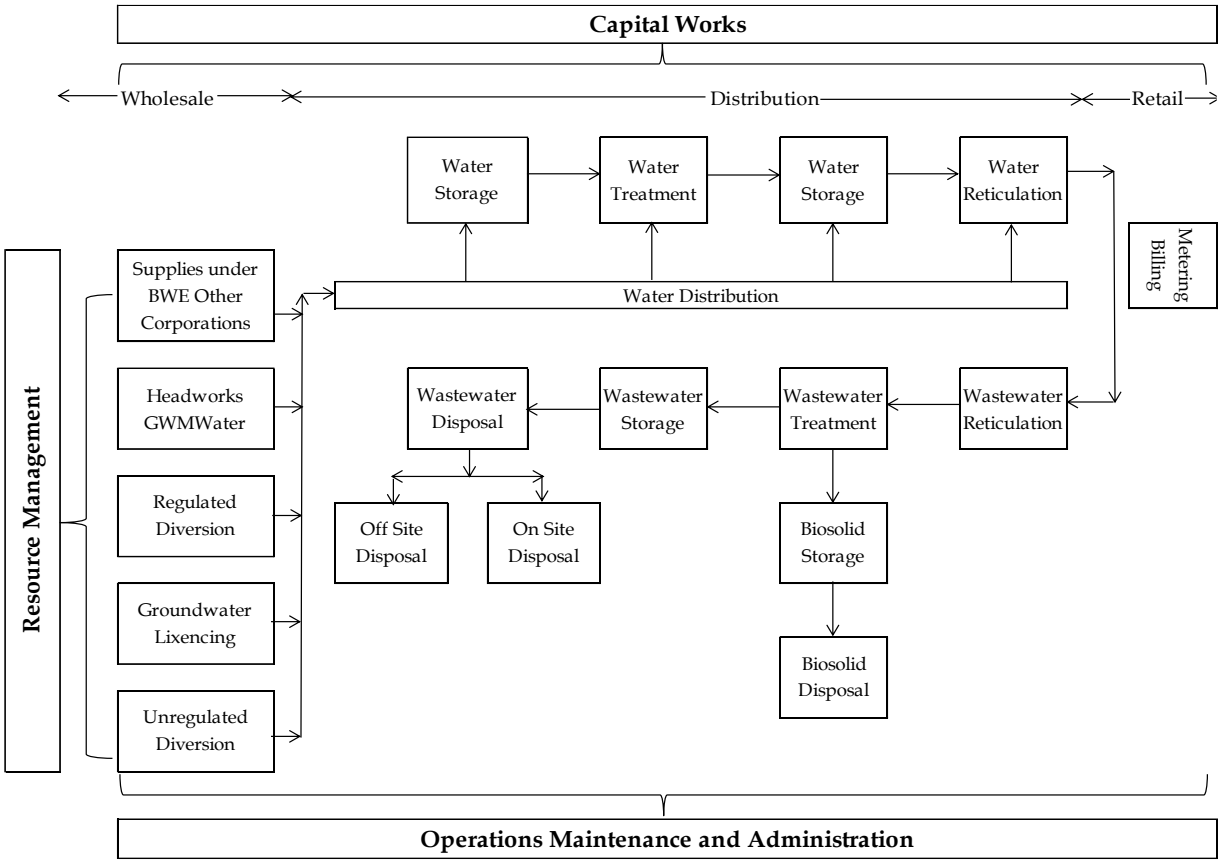
Groundwater bores supply 12 towns in the south east, south west and west of the supply area. Groundwater management, river diversions and support of key environmental management strategies are also functions of GWMWater.

A significant role that GWMWater undertakes in the region is one of Resource Manager. Under the Wimmera Glenelg Bulk Entitlement Order, GWMWater is nominated as the Resource Manager and Storage Operator on behalf of the Minister for Environment, Climate Change and Water. The role of Resource Manager extends to the management of surface water and groundwater, through the issue of diversion licences from unregulated waterways, licences for farm dams and groundwater extraction licences.

GWMWater undertakes significant water resource monitoring across the region. Whilst some of these activities are being funded, GWMWater's role and the cost of providing this service needs to be clarified. This Corporate Plan assumes that existing funding arrangements are ongoing.

As a vertically integrated water corporation, GWMWater is involved in all activities associated with the provision of water and wastewater services. The services supplied by GWMWater are best summarised by Figure 1-6 below.

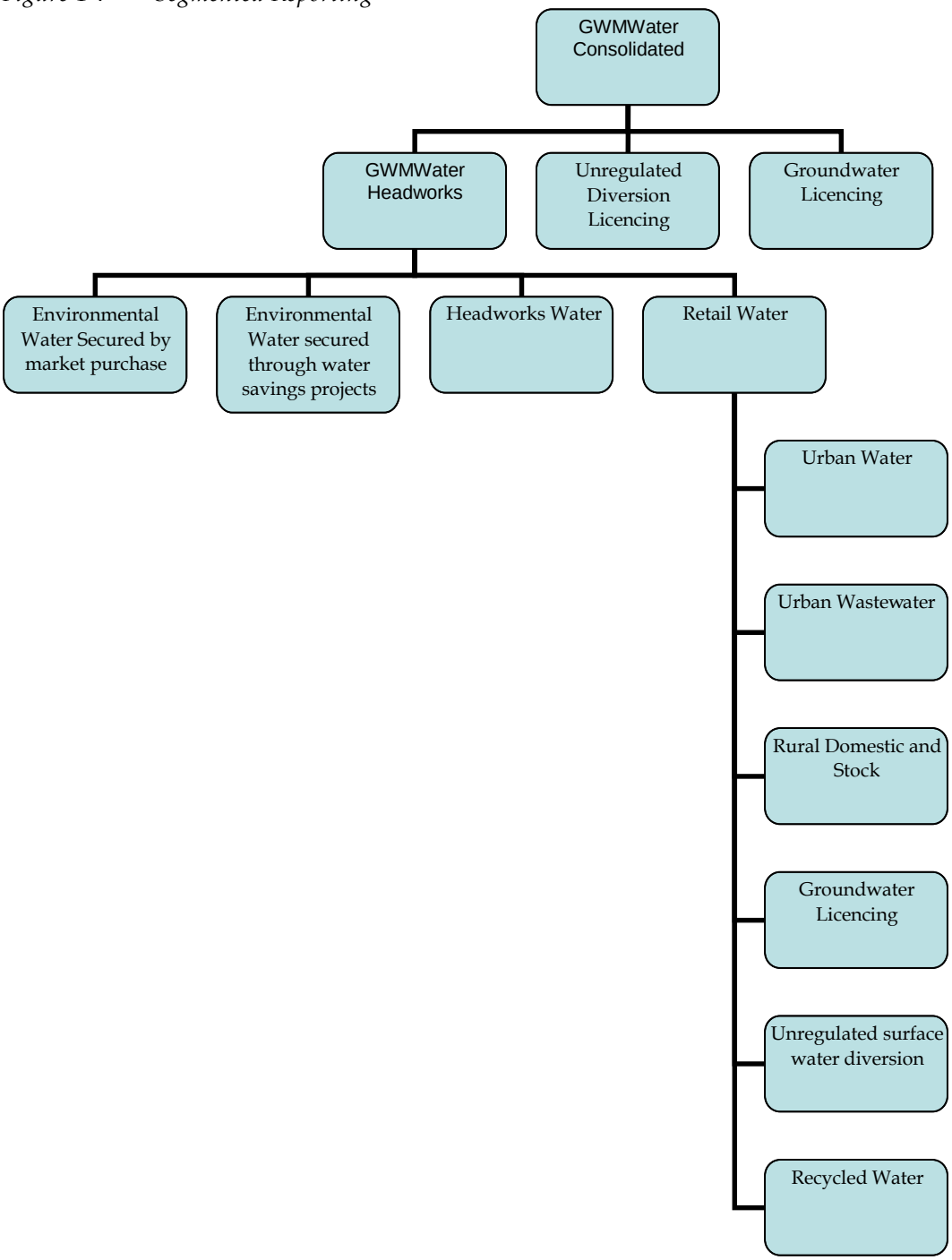
*Figure 1-6 Services supplied by GWMWater*




## 1.6 Business Segments

GWMWater has a number of segments or lines of business where revenue and expenditure are recorded separately. Those same levels of segmentation are used for pricing purposes and are outlined in Figure 1-7.

*Figure 1-7 Segmented Reporting*




The Wholesale/Headworks area supplies bulk water to GWMWater's urban storages and rural customers, two other regional urban water businesses (Coliban and Wannon Water) and major bulk water Supply by Agreement customer.

Headworks operations also include a number of water bodies presently used for recreational purposes across the region. The operation of the headworks is governed by the Bulk Entitlement Orders that also provide for environmental releases to the Wimmera and Glenelg Rivers and compensation flows to the Glenelg River.

### 1.6.1. *Service Delivery Model*

GWMWater operates from a corporate headquarters in Horsham and regional operational facilities in Horsham, Ararat, Birchip, St Arnaud, Warracknabeal, Nhill, Dimboola, Stawell, Murtoa, Charlton, Donald, Ouyen, Hopetoun, Sea Lake, Edenhope and Willaura.

The significant headworks reservoirs, varying sources of water, pipeline networks, water treatment systems and service delivery requirements are both a major challenge and an opportunity for GWMWater.

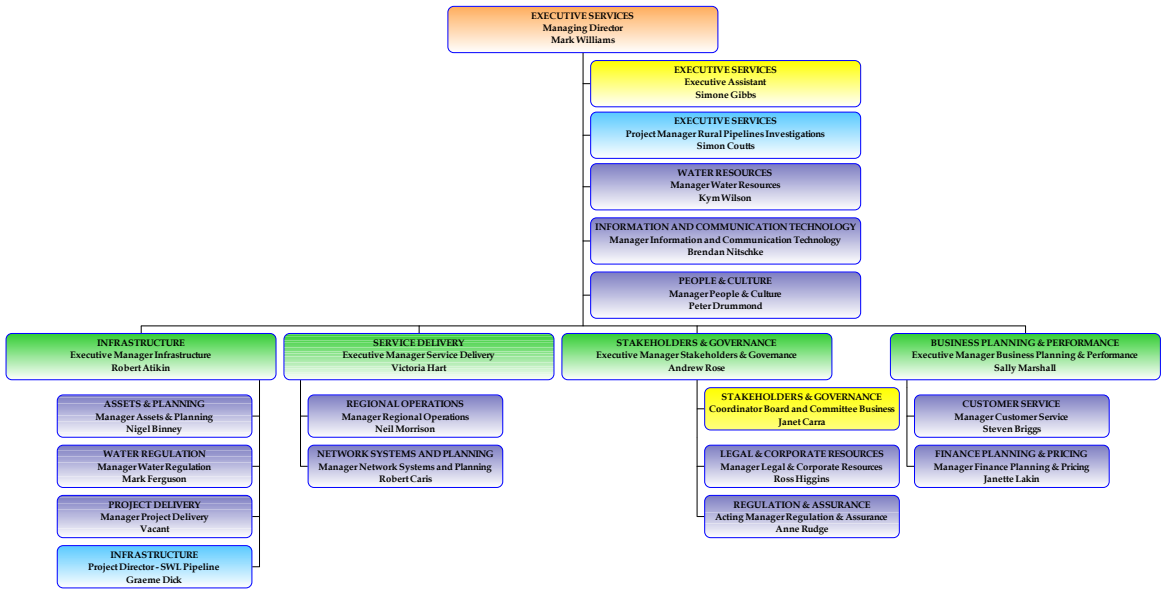
The operating model has been refined to provide a greater focus on operations and maintenance activities and water and wastewater quality with the establishment of an Operational Management Centre in Horsham.

### 1.6.2. *Organisation Structure*

The organisation structure developed ensures that GWMWater has the resources to meet substantial capital works, customer service and consultation program requirements. More recently, issues like the drinking water regulations and introduction of the economic and technical regulatory environment have had a significant impact on the water sector.

The current organisation structure for the GWMWater is shown in Figure 1-8.

*Figure 1-8 GWMWater Organisational Structure*




The Water Resources Group has been elevated in the organisation structure. The objective of this is to provide greater independence in the discharge of the Resource and Storage Manager functions GWMWater performs on behalf of the Minister for Water. This is complemented by the establishment of the Water Resources Committee with

independent representation to enhance the objectivity and transparency of decision making in the discharge of the Storage Manager and Resource Manager functions.

From an accounting perspective, the activities associated with the WMP Project that were 'ring fenced' to preserve the strong accountability framework in place for project were wound up in 2016/17 with the final acquittal of the project.

## 1.7 Scope of GWMWater Activity

### 1.7.1. *Demographics*

The area serviced by GWMWater has a total population of approximately 72,000 people. The service area covers 13 municipalities, as outlined in the table below. Seven of these municipalities have total coverage, with six having partial coverage.

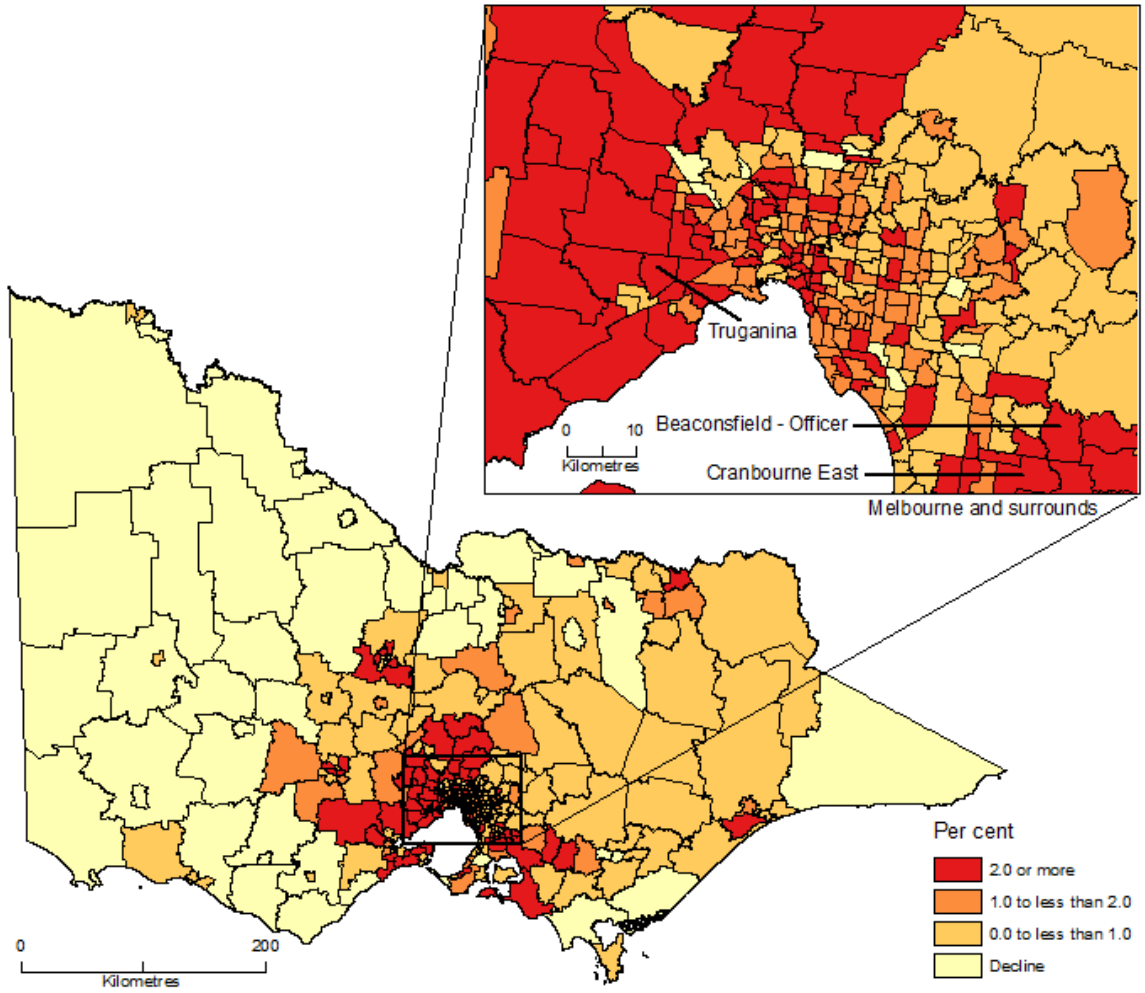
The 2011 census data reaffirmed recent population trends for the region, showing for the most part a continued decline in the permanent population. The population statistics of the municipalities were updated in 2015 from the Victorian Population Bulletin.

*Table 1-2 Population by Municipality Service Area*

| **Regional Population Growth Local Government Area** | **2003** | **2006** | **2011** | **2013** | **2015** |
|---|---|---|---|---|---|
| | **no.** | **no.** | **no.** | **no.** | **no.** |
| Ararat (RC) | 11,536 | 11,422 | 11,326 | 11,207 | 11,028 |
| Buloke (S) | 7,102 | 6,957 | 6,465 | 6,221 | 5,952 |
| Hindmarsh (S) | 6,361 | 6,119 | 5,856 | 5,695 | 5,494 |
| Horsham (RC) | 18,340 | 18,770 | 19,523 | 19,687 | 19,774 |
| Northern Grampians (S) | 12,616 | 12,095 | 12,054 | 11,799 | 11,509 |
| West Wimmera (S) | 4,707 | 4,539 | 4,287 | 4,089 | 3,879 |
| Yarriambiack (S) | 7,982 | 7,609 | 7,183 | 7,018 | 6,759 |
| Gannawarra (S) * | 11,661 | 11,413 | 10,453 | 10,326 | 10,019 |
| Loddon (S) * | 8,284 | 7,922 | 7,546 | 7,443 | 7,283 |
| Mildura (RC) * | 49,534 | 50,540 | 51,822 | 52,685 | 53,015 |
| Pyrenees (S) * | 6,551 | 6,648 | 6,759 | 6,770 | 6,822 |
| Southern Grampians (S) * | 16,880 | 16,858 | 16,571 | 16,145 | 15,751 |
| Swan Hill (RC) * | 21,064 | 20,950 | 20,865 | 20,867 | 20,409 |
| **Total Regional Local Government Areas** | **182,618** | **181,842** | **180,710** | **179,952** | **177,694** |

(*) Majority of municipality outside GWMWater boundary
Source: ABS Regional Population Growth, Australia, 2003-2013 (cat. no. 3218.0)

*Figure 1-9 Population Change by SA2, Victoria - 2015-16*




Of the municipalities where GWMWater has exclusive coverage, only Horsham City has exhibited modest population growth. This however does not translate into a decline in the number of households as the average number of persons per household has also declined.

The WMP presents a significant opportunity to enhance regional development and counter declining population trends. A secure water supply provides certainty for industries looking to establish in the region.

The water made available to recreation lakes and returned to the environment has enhanced the regional amenity and liveability.

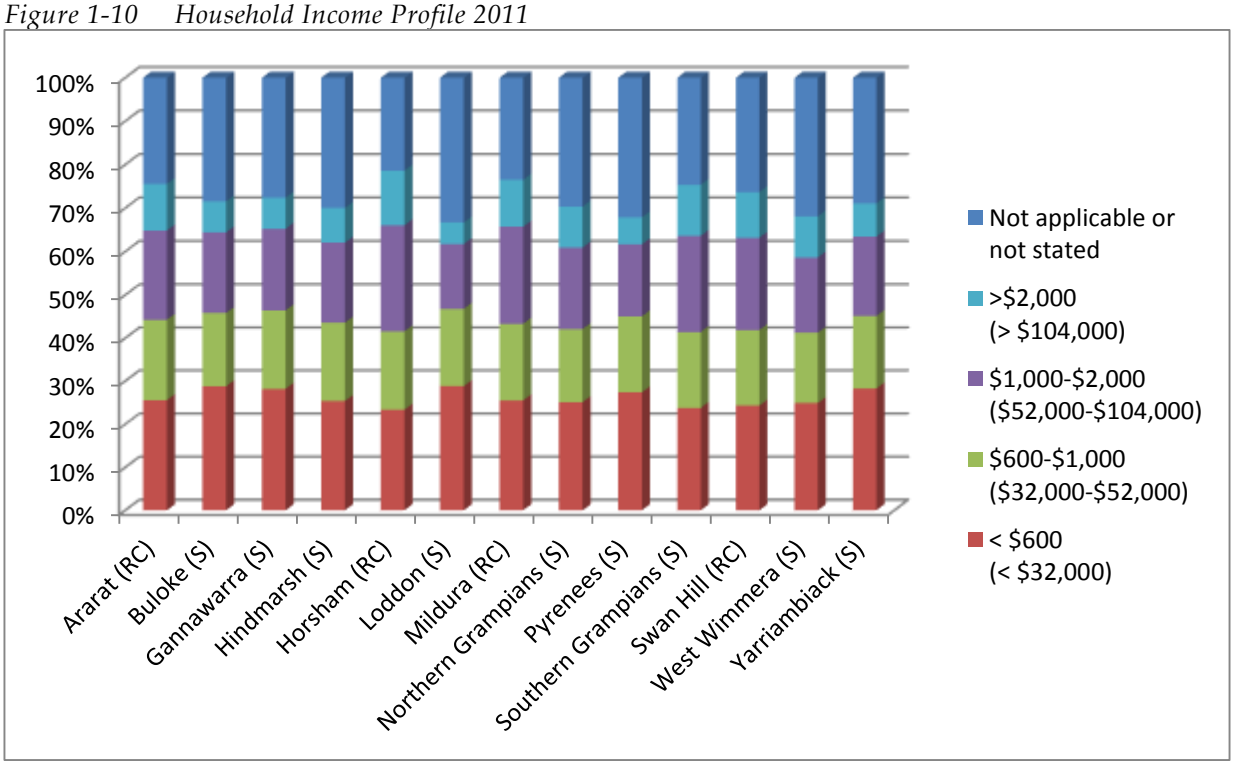
A key initiative reflected in strategic plans has been to strengthen GWMWater's relationship with regional development agencies to enhance growth prospects for the region through the provision of quality water and wastewater services.

### 1.7.2. *Socio Economic Status*

Recent changes in agricultural practice, combined with the impact of technology and sustained drought conditions, have had a substantial impact on the regional economy. Since the 1982/83 drought there has been a consolidation of agricultural activity to broad area crops. Farm sizes have been growing as properties consolidate, resulting in a general decline in the farming population.

Reduced employment opportunities for young people in an increasingly efficient rural sector have resulted in a population drift to major urban centres outside the GWMWater supply area; and produced an aging population that has a significantly lower income base than Melbourne and the remainder of regional Victoria. As a consequence, a key factor in GWMWater planning considerations has been regional affordability of water and wastewater services.

*Figure 1-10 Household Income Profile 2011*

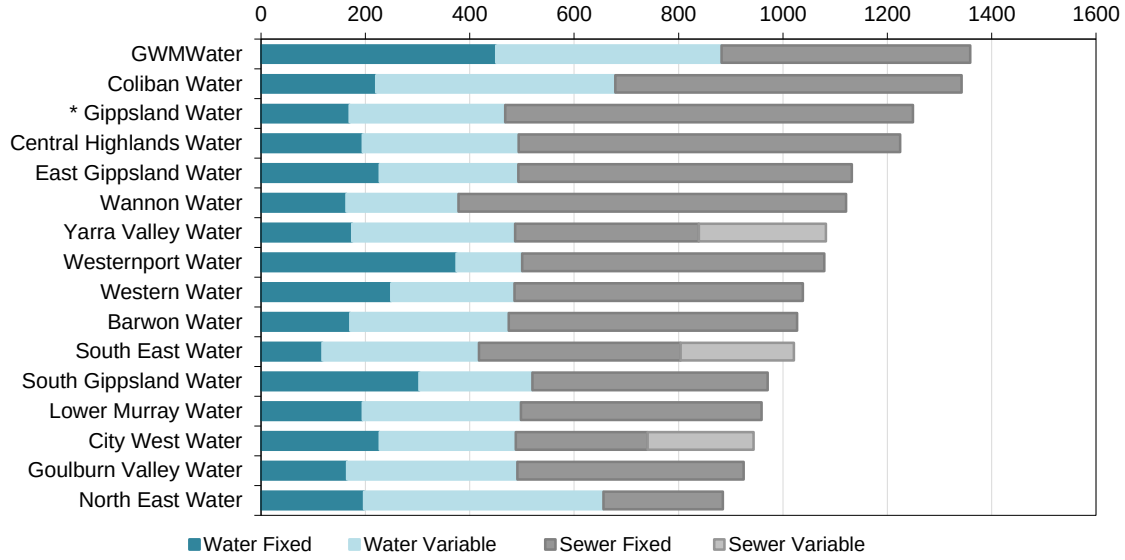



Source: ABS 2011 Census of Population and Housing

Figure 1-10 shows the weekly and annual household income profile for the various Local Government areas within the GWMWater region. Regional affordability presents a significant challenge for GWMWater where there is a smaller population base in an environment of increasing regulation and customer expectations, as represented in customer service standards.

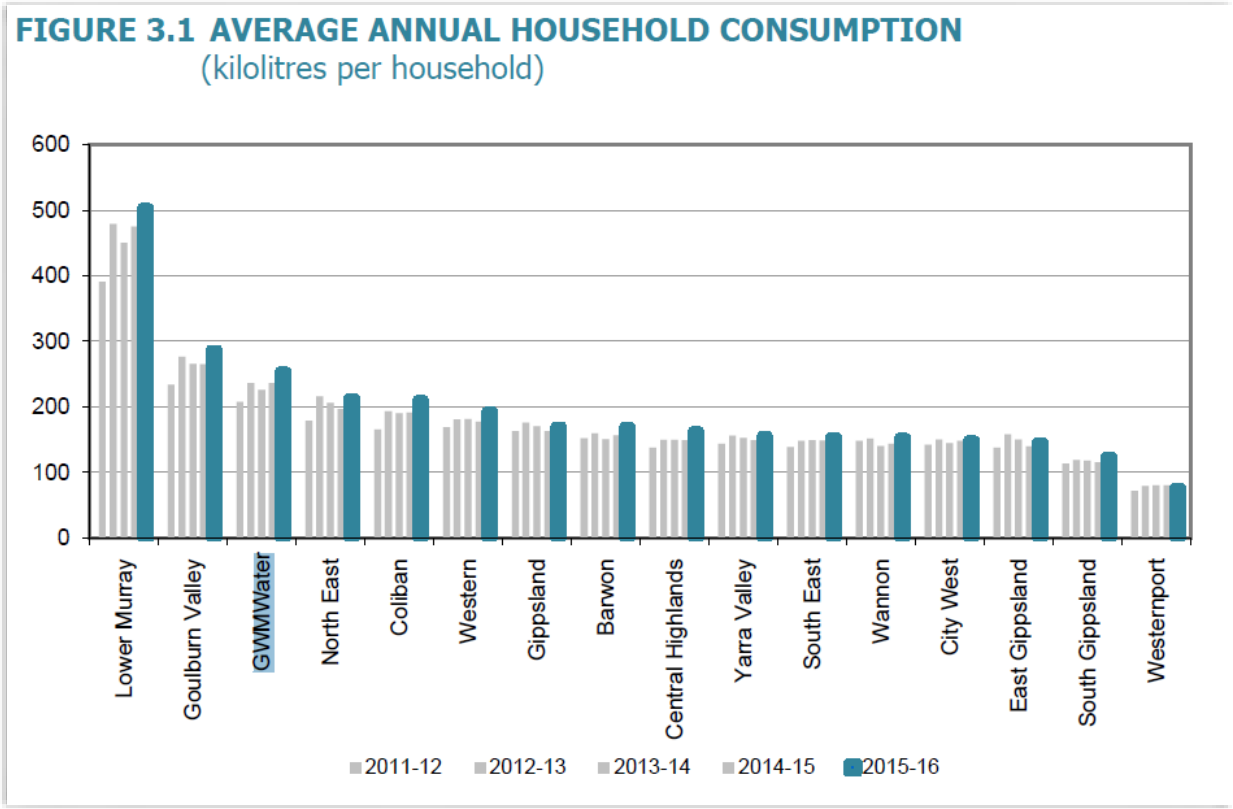
Urban customer's potential price sensitivity needs to be considered in the context of overall affordability. GWMWater urban water and wastewater service prices combined are the highest in the state when using the typical customer bill benchmark as used by the ESC in the 2015/16 Water Industry Performance Report.

*Figure 1-31 Comparative Analysis of Affordability- Average household bills, 2015/16*



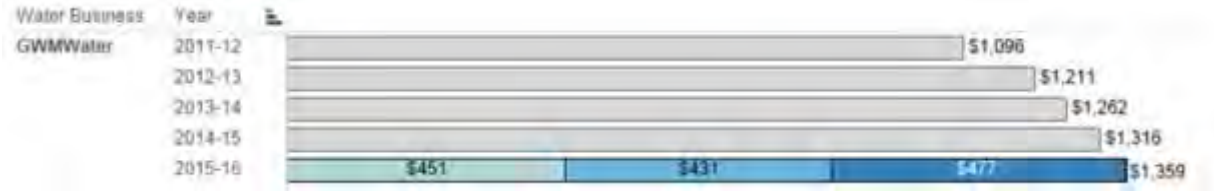

This pricing needs to be considered in the context of average water use with GWMWater customers being large water users and a very traditional housing stock with minimal medium density housing, no high density housing and a significant demand driven by evaporative air conditioning. The extent of this high consumption is outlined in Figure 1-12 below.

*Figure 1-42 Comparative Analysis of Residential Water Use*




Increased water consumption had a significant impact on the increase in the average water bill in 2015/16 and this is highlighted in Figure 1-13 below.

*Figure 1-53 Five Year Average Water and Wastewater Bill GWMWater*




These charts focus on urban bills and affordability, GWMWater is cognisant of the impact of the drought on the financial capacity of the region. Rural customers have been significantly impacted by the drought and there is significant economic interdependency of urban centres on the economic performance of the rural sector and with that the impact on all customers' capacity to pay their water bills. Whilst the region had a very good agricultural year in 2015/16 in terms of yield, the profitability has been somewhat influenced by lower commodity prices. Only a run of consecutive years of reasonable production will re-establish the strength of the agricultural sector given impact of the four years of extremely low rainfall that prevailed in the period 2011/12 through to 2014/15.

Almost all of the area serviced by GWMWater were recognised as being drought affected in 2014/15. Eleven shires in the western part of the state have been drought affected and the extent of this is highlighted in Figure 1-14 below.

*Figure 1-64 Local Government Authorities declared drought affected 2015-16*

## 1.8 Sources of Water

GWMWater obtains water from a number of sources to meet the needs of its customers.

The major source of water is the extensive Grampians Headworks system, with 12 reservoirs in the area used to harvest and store water for supply to the southern parts of the region. The reservoirs also supply environmental and compensation flows to the Glenelg and Wimmera Rivers.

Other sources of water used by GWMWater are;

- The Murray River for the Northern Mallee Pipeline system used to supply farms and towns in the north of the region.
- The Waranga Western Main Channel used to supply the township of Quambatook through the Normanville Pipeline system.
- Groundwater supplies for irrigation and D&S purposes mainly in the western part of the region. Groundwater is also used to provide a water supply to 12 towns.

- A number of regulated and unregulated diversions from waterways for irrigation and D&S purposes, and
- The Walpeup West bore area which supplies a small number of customers through licensed bores in the north of the region.

GWMWater is both an entitlement holder and Storage/Resource Manager for the Grampians Headworks system, as represented in Figure 1-15.

*Figure 1-15 Grampians Headworks Water Map*

The Wimmera Glenelg Bulk Entitlement Review that was undertaken in 2013/14 assessed the operation of the Grampians headworks system in accordance with the storage management objectives to enhance the security of supply for consumptive, environmental and recreational water. The review identified 40 recommendations that were unanimously endorsed by the Entitlement Holder and Key Stakeholder Council.

The recommendations arising from the review;

- Provided greater recognition of the need to protect water quality in harvesting and headworks transfers.
- Resolved an ambiguity arising from the WMP Interim Business Case relating to Lake Batyo Catyo by increasing the recreation water entitlement by 500 ML water for Walkers Lake and Marma Lake.
- Transferred environmental water to the Richardson River by removing the harvesting rights for Batyo Catyo from the environmental entitlement.
- Increased the Maximum Operating Level of Rocklands to 85 per cent and in doing so triggered a review of the operation of Toolondo.

To date twenty recommendations have been implemented, one is nearing completion, sixteen are in progress and three have are yet to commence. The Wimmera Glenelg Storage Manager Reference Group is overseeing the day to day implementation of the recommendations.

The headworks of the Grampians have been a valuable source of high value recreation. Recreation Water has been identified as a policy priority for the government.

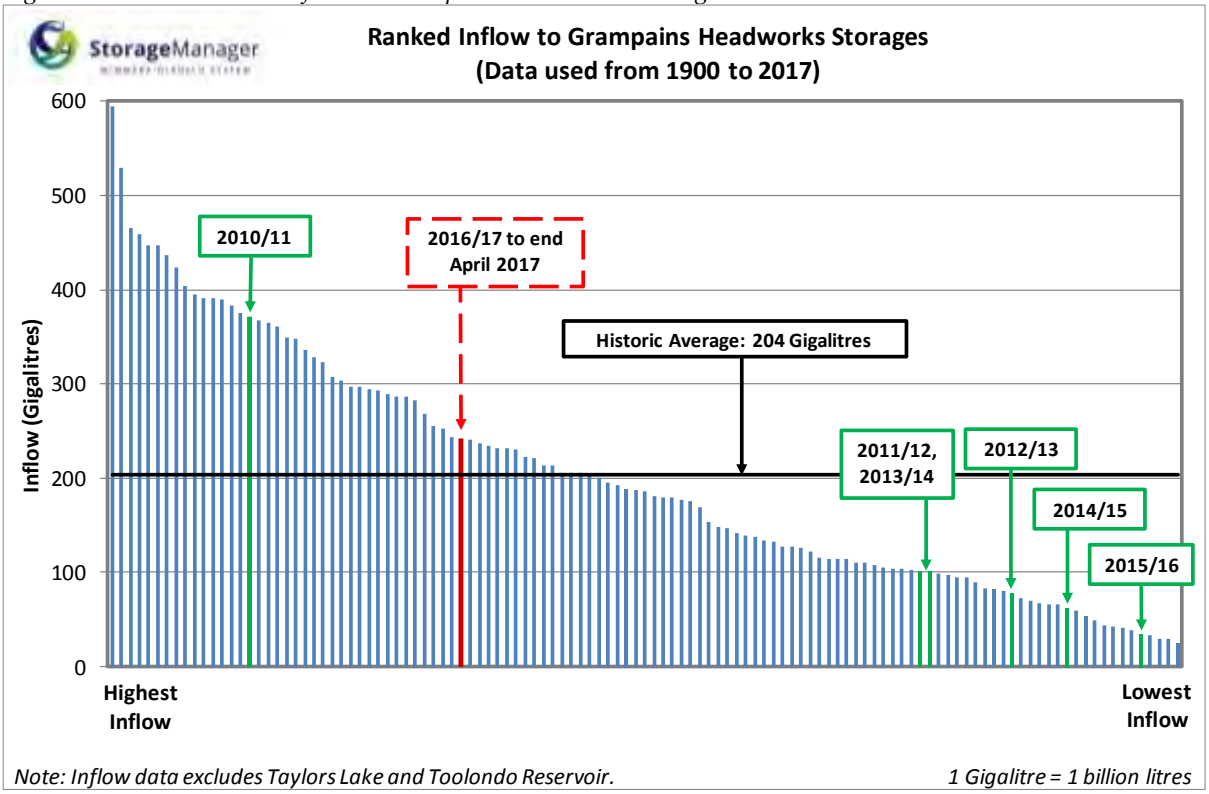
### 1.9 Resource Position

The resource position of GWMWater headworks storages as at 30 April 2017 was 53 per cent with water generally being held in the most efficient headworks storages.

Whilst 2015/16 was initially tracking to be the lowest inflow year on record, the wet season which commenced in June 2016 improved the situation sufficiently to ensure that it was only the fifth lowest inflow year on record. The continuation of the wet season into 2016/17 which caused much of the system to spill has given rise to a season to the end of April that is just above average. This highlights the significance of Rocklands in the overall system which peaked at 156 GL.

The recovery is such that GWMWater consumptive water holdings in the Wimmera system are significant. As at 30 April 2017, GWMWater held 103 GL of available water in the Wimmera Glenelg system, 4 GL on the Murray/Goulburn system and a further 3 GL available in our groundwater licence holding. With this our resource position is secure with the exception of some medium term vulnerabilities in the East Grampians system and Edenhope and these were highlighted in the recently completed Urban Rural Water Supply Demand Strategy.

*Figure 1-16 Ranked Inflow to Grampians Headworks Storages*




## 1.10 Recreation Water

The GWMWater service district covers an area that is in the driest warmest part of Victoria. Access to a reliable source of water for recreation was one of the most significant community driven objectives of the WMP.

Within the GWMWater Bulk Entitlement Order there is a 3,090 ML entitlement to water that is to be delivered using the pipeline networks that were an integral part of the water savings projects of the Wimmera Mallee Channel system conversions. In addition to the 3,090 ML recreational water holding from the Grampians system, GWMWater holds sufficient water from the northern systems to meet the anticipated demands of Green Lake (Sea Lake) and Ouyen Lake with the definitive volumes to be finalised when the renewal and construction projects are complete.

The environmental water created by the pipeline also provides a source of recreation water. The headworks themselves also provide a source of recreation water. The policies specific to the supply of recreation water through the rural pipeline delivery network have been the subject of significant community consultation. The pricing policies were an integral part of Water Plan 3 and were endorsed by the ESC. The priority of supply to recreation lakes in periods of reduced water allocation have been identified by the Recreation Water Users Group.

The role of Lake Toolondo as a recreational water body that has a premium recreation value as a trout fishery has been the subject of a review by Fisheries Victoria. This review followed a purchase by VRFish of 5,000 ML that was supported by Fisheries Victoria shortly after the 2014 Victorian state election. The water purchase from Iluka provided a window for the Toolondo review to be undertaken that was aimed at assessing ways that Toolondo Reservoir could be utilised to provide greater certainty of holding water and maximising its value as a fishery and water storage. The review by the Toolondo Reservoir Recreational Fishing Advisory Group (TRRFAG) gave rise to a better understanding by trout fisherman of the role of Toolondo in the GWMWater headworks system, the extent it could be efficiently used and the competing pressures of maintaining other water priorities.

The framework developed by GWMWater for recreation water featured prominently in the Water for Victoria policy document.

A socio economic study is presently being undertaken of the value of recreation water to the region. This study includes environmental water to the extent it also provides recreational amenity across the region.

### 1.11 Sustainability

GWMWater's vision of sustainable water for regional growth and vibrant communities reflects the importance of its role in the long-term sustainability of the region.

The importance of sustainability has been strengthened in Water for Victoria and the amendments to the Statement of Obligations. Water for Victoria acknowledges the implications of Climate Change. The amendments to the Statement of Obligations require water businesses to develop adaptation strategies and mitigation strategies. Given the shift in the cost and efficiency of renewable energy technologies there is a greater possibility that any investments in mitigation strategies will make commercial sense and not require a call on customers to pay for such initiatives.

GWMWater is a major service provider, employer and custodian of land and water resources in the region. As a consequence, GWMWater has and will continue to play a leadership role in demonstrating and promoting sustainability as an integral part of doing business. There is a strong commitment to sustainability within GWMWater and this role has been endorsed from feedback received from customers and other key regional stakeholders.

GWMWater's Sustainability Framework has established the corporations overarching sustainability goals and objectives. To effectively achieve these, sustainability must be integrated into every aspect of the business' operations, strategies and culture. The framework has also recognised that many of GWMWater's current activities already contribute to the sustainability of the business.

The WMP is an icon project recognised for its environmental outcomes and, more particularly, its role in restoring environmental health to the natural rivers and watercourses of the region.

The reliance on power for pumping is significant, with carbon management remaining a key strategic issue in the delivery of the capital program. GWMWater is presently participating in the Greener Government Building Program and the commitments that have been made to reduce the carbon footprint are reflected in this 2017/18 Corporate Plan.

GWMWater has developed its pledge as a feed into the overall water industry carbon abatement pledge. Beyond any initiatives that were to be undertaken in the 2017/18 financial year, these have only been represented at a conceptual level within this 2017/18 Corporate Plan.

### 1.12 Infrastructure Management

The large service region, combined with the relatively low rainfall and the distance from the catchment too many population centres and customers requires a considerable investment in infrastructure by GWMWater to meet its service delivery obligations.

On a gross replacement cost basis, GWMWater has approximately $2.1 billion of assets under its stewardship and hence infrastructure management is a key business driver. This criticality has been recognised in the 2013-2018 Strategic Directions that identifies the importance of asset lifecycle management by reference to 'optimising the use of our assets, infrastructure and systems'.

GWMWater presently provides potable water to approximately 93 per cent of its urban customers from 18 water treatment plants with a combined capacity of 103.7 ML/day. Four of these plants are owned and operated by a third party as part of a Private Public Partnership agreement. This is a significant improvement from 1998 when only 28 per cent of customers received potable water. A further two towns are supplied with a potable water supply using disinfection technologies without filtration.

The logistics of water distribution over an area of 3 million hectares has been simplified as a consequence of the Northern Mallee Pipeline and the Wimmera Mallee Pipeline. The Domestic and Stock channel supply network has been decommissioned. The only water delivery channels to remain will be the Grampians headworks channel network. The domestic and stock network is likely to expand further to support areas that have typically relied on local catchment that is becoming less reliable under climate change.

The following table summarises the asset inventory involved in providing water and wastewater services throughout the area managed by GWMWater.

*Table 1-3 Infrastructure Assets*

| ASSET GROUP | CATEGORY | QUANTITY |
|---|---|---|
| ***URBAN WATER SUPPLY SYSTEM*** | | |
| Water Mains | Reticulation / Trunk Mains | 1,446 km |
| Water Pump Stations | (not including WTPs) | 52 |
| Water Treatment Plants | Dissolved Air Floatation/Flocculation # | 13 |
| | Microfiltration # | 3 |
| | Desalination | 1 |
| | Disinfection/ph Correction | 20 |
| | Multimedia / Point of Entry | 4 |
| Water Storages | Earthen (Urban) | 34 |
| | Tanks | 87 |
| Water Bores | | 39 |
| Water Meters | | 34,198 |
| ***RURAL WATER SUPPLY SYSTEM*** | | |
| Channels | Headworks | 274 km |
| | Drainage | 13 km |
| Pipelines | Murray Supplied Pipeline | 4,223 km |
| | Grampians Supplied Pipeline | 8,125 km |
| | Headworks | 59 km |
| Pump Stations | | 42 |
| Water Treatment Plants | Strainer / Sedimentation / pH correction | 2 |
| Water Storages | Tanks | 4 |
| Storages | Earthen (Rural) | 25 |
| Water Bores | | 37 |
| Water Meters | | 14,012 |
| ***WASTEWATER SYSTEM*** | | |
| Wastewater Mains | Reticulation / Rising Mains | 690 km |
| Wastewater Treatment Plants | Secondary WWTP | 28 |
| Wastewater Pump Stations | Wet / Dry Wells | 87 |
| | Pressure Sewer Units | 491 |
| ***RECLAIMED SYSTEM*** | | |
| Re-Use | Mains | 58 km |
| | Storages (On-site and Off-site) | 16 |
| ***HEADWORKS*** | | |
| Major Dams | Dams | 11 |
| Major Structures | | 10 |
| Channels | Headworks | 274 km |
| | Drainage | 13 km |
| Pipeline | | 59 km |

*# includes plants under the control of BOOT operator*

## 1.13 Obligations of the Corporation

The government appoints the Board in accordance with the provisions of Division 3 of the *Water Act* 1989.

The obligations of GWMWater are primarily driven by the requirements of the Government as shareholder with the principle legislative instrument being the *Water Act* 1989. The expectations of government are further prescribed in the SoO. The SoO is generally reflective of the broader water policy framework of government. At the time of preparing the 2016/17 Corporate Plan, Water for Victoria, the water policy document was the subject of public consultation. The theme of Water for Victoria fundamentally recognises water as an integral part of the social fabric of Victoria. Water for Victoria starts to articulate the Victorian government aspirations in climate adaptation and mitigation.

The obligations of water corporations extend to the requirements of technical regulators. The Department of Health and Human Services (DHHS), Environment Protection Authority (EPA) and DELWP are responsible for technical regulation of GWMWater. DHHS is responsible for regulating water quality; EPA is responsible for regulating environmental performance, while DELWP is responsible for oversight of Dam Safety requirements. The ESC itself plays a regulatory role in setting standards and monitoring performance against these service standards.

The Energy and Water Ombudsman of Victoria (EWOV) also provides an advocacy service for customers.

GWMWater is also expected to comply with legislative obligations and these also impact on service. These include, but are not restricted to:

- *Water Act* 1989;
- Water Industry Act 1994;
- The *Environment Protection Act* 1970, associated regulations and policies;
- The *Health Act* 1958,
- *Safe Drinking Water Act* 2003,
- *Food Act* 1984,
- *Fluoride Act* 1973;
- *Occupation Health and Safety Act* 1985 and other associated legislation, regulations and codes;
- *Environmental Contribution Levy Act* 2004;
- *Roads Management Act* 2004;
- Water Industry Regulatory Order (WIRO); and
- Bulk Entitlement Orders.
- *Water (Governance) Act* 2006
- *Climate Change Act* 2010

During 2016/17 the Minister for Water issued a 'Letter of Expectations'. This outlined the governments expectations in delivering the policy initiatives of Water for Victoria that would not necessarily be 'codified' in the Statement of Obligations.

## 1.14 Corporate Governance

The Board is committed to properly and dutifully discharging its governance responsibilities.

Initiatives implemented include:

- Review of the GWMWater 2013-2018 Strategic Directions.
- Effective oversight of the development of the Corporate Plan.
- Establishment of an effective performance-monitoring regime in the Business Performance Report. This facilitates regular reporting of performance against the Corporate Plan and other regulatory and compliance obligations.
- Support for the establishment of the Risk, Regulation and Assurance function to monitor and report on the risk, compliance and assurance program.
- Compliance with the *Financial Management Act* 1994 and the associated Financial Management Compliance Framework.
- Maintaining an effective Board committee structure to assist the activities of GWMWater.
- Maintaining an effective stakeholder engagement framework particularly in relation to customer and community engagement.
- Maintaining effective communication with the Minister for Water and the Treasurer on matters of significance to the Corporation.
- Formally assessing the Boards performance at least annually to provide an effective feedback mechanism for individual Board Directors.

The governance model draws heavily from the DELWP 'Governance Guidelines for Portfolio Statutory Authority Board Members – An Introduction to Governance and Government Stakeholders for new Board Members'.

## 1.15 Performance Monitoring and Reporting

The GWMWater Board and its Executive is strongly committed to monitoring its performance against the plans it adopts.

Performance monitoring of GWMWater is reported on a monthly basis. The information included in these reports forms an integral part of the performance reports prepared for the Minister for Water and the Treasurer and submitted on a quarterly basis.

The performance targets included herein are reflective of the specific requirements established by the Corporate Planning guidelines. They also reflect the more significant suite of indicators established by regulatory agencies such as the ESC, DHHS and the EPA.