South Gippsland Water

2018/19 2022/23 PRICING SUBMISSION

Planning for the future:
Delivering on Reliability,
Services, Environment & Integrity

South Gippsland Water

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Contents

1. Executive Summary

South Gippsland Water's 2018 Pricing Submission has been developed with reference to the Water Industry Regulatory Order (WIRO) and utilising the Essential Service Commission's (ESC's) new water pricing framework and approach, PREMO.

The submission documents a clear alignment between South Gippsland Water customers, community and other stakeholders and the Corporation's services and pricing for the next five years.

Development of the submission has included:

- A comprehensive engagement process placing customers and community at the forefront of the pricing submission process;
- Finalising a set of key customer outcomes together with outputs, activities and measures;
- Analysis of external and internal information sources in order to ascertain demand for services;
- Linking of capital and operational expenditure needs to customer outcomes, including planning, reliability, provision of safe water and wastewater services, environmental responsibility, and customer respect and affordability;
- Setting a pricing and tariff structure that will meet customer needs, aspirations and outcomes while providing for a sustainable South Gippsland Water;
- Utilising the ESCs guidance to assess, South Gippsland Water's level of ambition under PREMO as 'Standard', while the Board has provided an attestation as to:
    - the quality and accuracy of information, and veracity of assumptions contained in this Pricing Submission;
    - adherence to the ESCs guidance material
- A robust risk identification, assessment and allocation process in order to ensure risk is managed by the party best placed to do so.

In order to deliver on customer outcomes, a revenue requirement of $165.15M will be needed over the five year regulatory period from 1 July 2018.

This results in significant tariff impacts - a stepped real increase of 8% in the first year of the regulatory period, followed by a real price increase of 3.5% for each successive year. This pricing path was tested with customers whom indicated support for a capital and operating plan which delivered on addressing infrastructure backlog issues and investing in maintenance in order to maintain levels of service and ensure a sound financial position for the Corporation.

Drivers of the revenue requirement include:

- Demand for services will increase over the fourth regulatory period with customer growth forecast at 1.52% p.a., average consumption patterns largely consistent with recent historical trends and major customer consumption increasing by 0.5% p.a. This will see customers consume around 4.9GLs of water in 2022/23, an increase of 233MLs over a 5 year period;
- A prudent and efficient capital expenditure plan of $88.2M focused toward renewal projects in order to align with customer's priorities on levels of service and the expectations of stakeholders and regulators;
- Risk for delivery of capital expenditure largely resting with the Corporation through prioritisation of projects, scoping, minimisation of contingencies and efficient project management;
- Higher operating expenditure driven by a combination of meeting regulatory requirements and maintaining service standards in line with stated customer outcomes, in particular reliability of services;
- A higher 1.5% p.a. efficiency target on controllable operating expenditure in order to offset cost pressures;

Other significant issues include:

- Key tariff changes in line with customer preference for a user pays rationale (higher volumetric fee component) and to provide a more equitable tariff structure and alignment with the wider water industry (reform of the cisterns and minor trade waste); and
- A uniform water and sewer New Customer Contribution with the customer responsible for all installation costs of onsite infrastructure;
- Increasing the Guaranteed Service Level amount from $75 to $100 for unplanned water and sewer interruptions not restored/rectified within 5 hours;
- Individual price caps form of control over the majority of services with a revenue cap to be applied to the combination of services known as cisterns and minor trade waste;

Customer assistance programs developed to support impacted customers

2. PREMO Rating and Board Attestation

2.1 PREMO Rating

The 2018 price review sees the introduction of PREMO, an incentive mechanism linking the return on equity reflected in approved prices to the level of ambition expressed in a price submission. The return on equity depends on whether a price submission is rated as 'Leading', 'Advanced', 'Standard' or 'Basic'.

The Essential Services Commission (ESC) provided guidance as to the manner in which a water business should assess its pricing submission to decide on the submission's PREMO rating, and therefore the return on equity to be reflected in its proposed prices. South Gippsland Water has utilised the ESCs PREMO assessment tool to inform its PREMO rating.

Informed by an assessment of the four elements of PREMO - Risk, Engagement, Management and Outcomes, South Gippsland Water proposes an overall PREMO rating of 'Standard' and therefore a return on equity of 4.5%. The following summarises the reasons for the assessment.

Figure 2.1: PREMO Rating Table

PREMO Rating - STANDARD (9.9)	
Risk – Rating 2.4 • Risk framework consistent with ISO 31000 and requirements of the Statement of Obligations • While South Gippsland Water has a significant price increase, it has minimised increases with appropriate consideration and allocation of risk management • Capital projects assessed for priority against the Corporation's risk profile • Well defined project scopes with realistic timelines and low contingencies and robust estimates • Demand risk shared between the Corporation and customers • Form of Price Control appropriate	**Engagement – Rating 2.7** • Engagement commenced June 2016 and aligned with IAP2 • Engaged on customer values, views and expectations with a broad range of customers utilising a number of methods and formats • Establishment of relationships for higher level future engagement • Identified priority matters for further engagement • Customer Outcomes, output and measures developed in consultation with Customers and the Pricing Submission Advisory Panel • Learnings impacted on the Pricing Submission and tested via deliberative engagement with Advisory Panel and regional forums • Close out with community and the Advisory Panel
• **Management – Rating 2.3** • While there are extra operating and capital expenditure pressures, these have been discussed and tested with customers • The Corporation has taken on a higher productivity hurdle in order to manage extra costs • Board and Senior Management Team believe the submission and financial template to be complete and accurate and internally consistent • Risk allocated to the party best placed to manage it • Board and Senior management Team have provided an attestation of ownership and commitment • Supporting information for all elements of submission are available	• **Outcomes – Rating 2.5** • Proposed expenditures are consistent with maintaining customer service levels • Customer Outcomes, output and measures developed in consultation with community and Pricing Submission Advisory Panel • Implications of maintaining service levels communicated to customer (including price impacts) and tested via deliberative engagement with Advisory Panel and regional forums • Annual reporting committed to, plan to be developed

2.2 Board Attestation

The ESC requires a water corporation board to attest to the quality and accuracy of the information included in its pricing submission, and that the submission complies with the ESCs guidance in all material respects.

At its meeting of 28 September 2017, the South Gippsland Water Board made the following resolution.

As at 28th September 2017, the directors of South Gippsland Water, having made such reasonable inquiries of management as we considered necessary (or having satisfied ourselves that we have no query), attest that, to the best of our knowledge, for the purpose of proposing prices for the Essential Services Commission's 2018 Water Price Review:

- *information and documentation provided in the pricing submission and relied upon to support South Gippsland Water's pricing submission is reasonably based, complete and accurate in all material respects;*
- *financial and demand forecasts are the business's best estimates, and supporting information is available to justify the assumptions and methodologies used; and*
- *the pricing submission satisfies the requirements of the 2018 Water Price Review Guidance paper issued by the Essential Services Commission in all material respects.*

3. Customer Engagement

Key Points

South Gippsland Water has undertaken an extensive engagement process placing customers and community at the forefront of the pricing submission process.

Engagement commenced early and customer insights and themes were developed and explored via a four-phase process based on the International Association for Public Participation (IAP2) framework.

A focus was to ensure that the engagement process and tools utilised were robust, fit-for-purpose and reflected the size and capacity of South Gippsland Water.

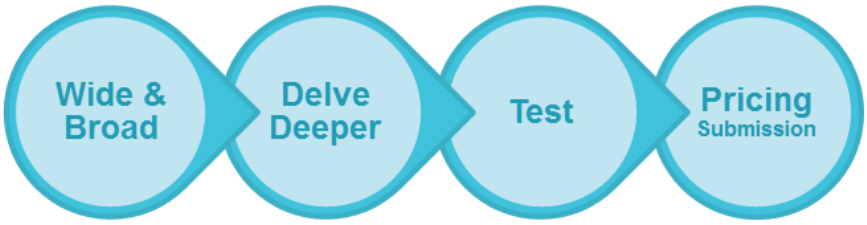
Content within the Pricing Submission, including key areas of change, have been tested via focus groups in major customer centres.

3.1. Introduction

Reliable and effective community engagement and a commitment to maintaining effective connections with customers is a priority for South Gippsland Water. Integral to the development of a Pricing Submission, a Community Engagement Strategy was developed to guide the review process; a process that placed community input at the forefront.

The Community Engagement Strategy was developed within the International Association for Public Participation (IAP2) framework which initiated a four-phase process for engagement (Fig 3.1). The approach enabled a range of customers, members of the general community and key stakeholders to have their say regarding what is important to them about water and wastewater service in their region.

Figure 3.1:The Four-phased process for engagement



The insight and information gained through the engagement process has helped the Corporation make informed decisions that reflect the interests and concerns of customers, community and stakeholders.

During the four stage process the Corporation looked to define customer expectations or what they wished to experience from South Gippsland Water services. The resultant set of outcomes and associated activities were key to developing the Pricing Submission, further detail is provided in Section 4.

The four phases of South Gippsland Water's engagement approach consisted of:

1. Wide & Broad - engagement parameters were set early in the planning process to enable broad engagement with the wider community on all aspects of the Corporation.
2. Delve Deeper - information gathered during the Wide & Broad phase was reviewed and key areas of customer interest and concern were identified; these formed the basis of more detailed and focussed consultation.
3. Test – develop a draft pricing submission utilising data and information obtained via community engagement processes and reviews, and test identified key outcomes and activities with customers, community and stakeholders.
4. Pricing Submission - finalise the written proposal based on robust and fit-for-purpose community engagement for submission to the Essential Services Commission.

Engagement Resources – support and guidance

To ensure a robust review process was developed and implemented, a number of key resources and guides were utilised as part of South Gippsland Water's community engagement approach.

- Pricing Submission Advisory Panel - an advisory panel was established to enable direct and consistent community input to the review process. In 2016 eleven community members, representing a spread of demographics, regional interests, professional skill sets and community connections from across the region, were appointed to the panel. The panel has been a significant voice in guiding the overall community engagement process for, and input to, the Pricing Submission.
- Special Interest Group - customers were invited, via newsletter, website and social media, to subscribe to a special interest group in order to be kept abreast of the review process and to have timely access to community engagement opportunities.
- InSync – third party specialist services provided by Insync Consulting were engaged by South Gippsland Water to assist the project team deliver key components of the engagement strategy. Services included project team guidance, the delivery of a broad-reaching customer survey (online and hardcopy) and targeted, in-depth interviews with key stakeholders.
- IAP2 - all Pricing Submission engagement was developed and delivered within the IAP2 framework, which was based on the implementation of core values for the practice of public participation. Project staff were supported by specialist engagement advice and services provided by an IAP2 mentor.
- Engagement Checklist/Audit – an independent third party was engaged to undertake an audit of the Corporation's community consultation approach against:
    - PREMO Standards
    - VAGO Public Sector Values and Public Participation Principles
    - Urban Water Strategy guidelines.

3.2. Four-phased Process for Engagement

The following describes South Gippsland Water's four phases of engagement and outlines the mechanisms utilised as part of the process and the customer themes that emerged.

Phase 1 - Wide & Broad

The starting point for engagement was designed to gain insight from a broad range of community members and stakeholders regarding a wide range of topics. All areas of the business were 'on the table' and open for discussion and consideration.

Consultants Insync and the Pricing Submission Advisory Panel assisted in developing a 'Have Your Say' survey for distribution via a variety of channels to the broader community. Key to the significance of the survey was the introduction of a rating scale that linked a customer's willingness to pay to the service levels desired by the customer.

The survey was:

- Distributed to all 22,000 customers via the accounts mail-out
- Promoted via local print media, social media posts and the Corporation's newsletter
- Direct emailed to stakeholders, customers and those registered on email data bases
- Made available on the South Gippsland Water website
- Utilised as part of *Your Town* visits and informal customer interviews.

Topics were rated as either important - South Gippsland Water should increase investment, or, nice to have at the current level of investment. The number of survey replies received was above the required to ensure a statistically valid sample size, there was no one area of the business where customers supported reducing investment.

Key themes identified by the community as areas for investment:

- Planning for the future - 91% of respondents support planning for future threats and pressures to water and wastewater supplies such as climate variability or population growth.
- Go 'above and beyond" to avoid leaks and interruptions - most (94%) saw this as "Important" and requiring increased levels of investment.
- Offering programs to assist customers in hardship - most (88%) of respondents were in support of this initiative to assist customers struggling to pay their bill.
- Investing in programs to protect the environment - most (88%) of respondents supported South Gippsland Water investing in programs to protect the environment.

Key messages and priorities identified for further consultation were:

Pricing and Tariffs
Customers see pricing structure as a key area of importance

Service Delivery
Customers want South Gippsland Water to go 'above and beyond' to avoid leaks and interruptions whilst also keeping customers informed about the progress of repairs

Service Standards
Customers want safe reliable water and wastewater services

Planning
Customers support South Gippsland Water planning for future pressures and threats to the region's water and wastewater supplies

Social Conscience
Customers support delivering to social obligations and contributing towards customer hardship programs

Environment
Customers value investment into protecting the environment

Phase 2 – Delve Deeper

Using the survey results from the Wide & Broad phase, South Gippsland Water's Pricing Submission Advisory Panel work-shopped the themes that were identified by customers as priorities for further investment. This provided the basis for identifying where and how to undertake deeper deliberative engagement with the community in order to obtain more detailed and focussed feedback and insight.

Eight targeted discussion sheets, reflecting the identified areas of customer interest (Fig 3.2), were developed for distribution to the community and used as the basis of deliberative forums that engaged a number of community groups across the region. These forums provided the opportunity for project staff to consult in-depth with participants focusing on one or two discussion sheet topics.

Figure 3.2: Titles of the eight discussion sheets developed for in-depth consultation

General promotion of the discussion sheets and awareness raising regarding the opportunity for the general community to provide input were undertaken via:

- South Gippsland Water's website
- Local print media and social media posts
- Direct emailed special interest groups and to those on email data bases, including approximately 1,300 customers
- Pricing Submission Advisory Panel contacts
- Invitations to the deliberative forums.

Messages and priorities identified as important to customers were:

Pricing and Tariffs

Customers see pricing structure as a key area of importance

All customers expressed a desire for South Gippsland Water to keep tariffs as low as possible. The demographic and depth of understanding of an issue resulted in different outcomes with respect to price increases

Service Standards

Delivery

Customers want South Gippsland Water to go 'above and beyond' to avoid leaks and interruptions whilst also keeping customers informed about the progress of repairs

Standards

Customers want safe reliable water and wastewater services

Planning

Customers support South Gippsland Water planning for future pressures and threats to the region's water and wastewater supplies

Environment

Customers value investment into protecting the environment

Social Conscience

Customers support delivering to social obligations and contributing towards customer hardship programs

Phase 3 – Test

This phase of the engagement process was designed to test South Gippsland Water's proposed response to customer themes. Areas of change were tested and validated with the customer base and involved the presentation of options for consideration.

Focus group sessions were promoted to the general public via traditional and social media. The sessions were conducted by project staff and designed to 'close the loop' on all topic areas explored as part of phase 1 and 2. Participants were provided with an outline of the draft Pricing Submission, proposed plans for change and the resulting impact on pricing. The sessions also provided an opportunity for the community to voice any concerns regarding the Corporation's proposed Pricing Submission and to confirm key community messages and priorities.

Messages from the community regarding the proposed Pricing Submission were:

Increased investment into aging infrastructure is accepted in order to maintain service standards

If a price increase occurs, customers would prefer a higher price uplift (less than 10%) in year 1 and then a smooth price increment/path for the remaining 4 years (less than 5%)

Customers with a greater understanding of the challenges of ageing infrastructure supported increased investment and a resulting price adjustment, due to the longer term efficiencies investment provides

Customers accept a slight move to a higher volumetric component to billing, recognising the impact this will have on high water users and vulnerable customers

A summary of the discussion, themes and conclusions resulting from phases 1-3 of South Gippsland Water's community engagement process includes:

Customer Outcomes and Measures – customers generally endorsed the Outcome Statements, however, further refinement of the statements and feedback on draft measures is required. It is recommended to include stretch targets or aim for continuous improvement when looking at which measures to use.

Infrastructure Investment and Service Standards – the Pricing Submission Advisory Panel indicated that the Corporation should be maintaining service standards by implementing the medium/maintain level of infrastructure investment.

Volumetric and Service Charge Pricing – community consultation confirmed customer desire for more control over their accounts. A slight move to a higher volumetric component of bills favoured, however, there is recognition of the impact this may have on vulnerable customers and high water users.

Pricing and Price Path - customers supported the proposed average (real) annual bill increase from $968 (currently) to $1,196 in 2022, an increase of approximately $230 over the 5 years. Customers indicated support for ensuring a strong financial position for the Corporation. Following feedback from the Advisory Panel, a price path was developed that introduced a larger increase in year one of the plan (8%), followed by a smooth price path each year after that (3.5%).

Commercial Wastewater Tariff Model - generally, feedback supported addressing issues with the current cistern and minor trade waste tariffs and a change based on the user-pays principle. Further consultation regarding the proposed new tariff model to be undertaken prior to a proposed implementation date of 1 July 2020.

Customer Support Programs - generally, feedback supported realignment of tariff model towards customer support programs.

Phase 4 – Pricing Submission

The preceding phases have been instrumental in informing the Corporation's approach to developing this Pricing Submission. Outcomes, relating to water and wastewater services and associated pricing identified by the community through this engagement process, have informed decision-making and the development of the outcomes outlined in Section 4.

Risk

- Customers support South Gippsland Water planning for future pressures and threats to the region's water and wastewater services.
- Customers recognise that the climate is changing and want South Gippsland Water to note the increased variability in wet and dry – planning for ***medium*** level of climate change is acceptable to them.
- Customers believe water restrictions are inevitable in drought years and the Corporation should not be planning to avoid these.
- Customers do not want water restrictions to impact or limit industry or regional growth.

4. Outcomes

Key Points

Customers developed a set of outcomes detailing what they expect to receive over the fourth regulatory period.

Key themes and customer feedback feature in the language utilised in the Outcome Statements.

South Gippsland Water has planned capital and operating works to deliver to customer expectations for the next five years.

Customers' have assisted in developing a set of measures for the Corporation to report on performance.

4.1. Introduction

As part of developing the Pricing Submission, South Gippsland Water set out to define a set of outcomes or experiences customers would receive during the fourth regulatory period. The process was undertaken over a period of 18 months and was designed to be driven by customers placing them at the forefront of business planning and reporting. The Outcome Statements and associated deliverables will be reported on annually by South Gippsland Water.

4.2. Process

South Gippsland Water collaborated with the Pricing Submission Advisory Panel to develop outcome statements and metrics for reporting. The process involved a number of actions and engagement sessions including;

- Key themes and words identified from pricing submission engagement feedback and materials. These were used to create word clouds and as material for the Advisory Panel to workshop.
- The Advisory Panel identified key words, themes and drafted a number of Outcome Statements
- A South Gippsland Water internal workshop was conducted, overseen by two representatives from the Advisory Panel to provide customer direction. This workshop refined seven statements following the work of the Advisory Panel.
- South Gippsland Water staff conducted further internal processes to identify potential measures for reporting and linked these with the Outcome Statements and activities.
- Outcomes statements, activities and measures were presented and finalised by the Advisory Panel and tested during customer focus groups as part of the 'Test' phase of engagement.

A set of six customer Outcome Statements, activities and associated reporting measures have been confirmed and are listed in the Outcome Matrix over the page.

Figure 4.1: South Gippsland Water Outcome Matrix

OUTCOMES	INPUTS	OUTPUTS	ACTIVITIES	MEASURES
We will partner with community, local government and business to plan for future years	A whole of organisation approach lead by the Senior Management Team. Key planning documentation includes the Urban Water Strategy, Pricing Submission, Diversity and Inclusion Strategy, Environmental Management Plan and Asset Management Plan.	• Participate in IWM Forums and Stakeholder Collaboration Programs • Implement key aspects of our long term water security strategy • Secure water supplies for Korumburra, Poowong, Loch & Nyora • Reduce system leakage to further secure water supplies • Understand and plan for key regional growth areas	We will implement key elements of our long term water security strategy • Fish creek treated water distribution mains renewal • Water Security improvements for Wonthaggi, Inverloch, Cape Paterson, Korumburra, Poowong, Loch & Nyora, completed by June 2019 Complete Hydraulic modelling and network master planning programs	We will always have a long term water security strategy in place that is regularly updated, in consultation with key stakeholders The Corporation will participate with local organisations to plan for future growth.
We will be reliable, minimise unplanned interruptions to services and commit to communicating well with our customers	A whole of organisation approach lead by the Senior Management Team. Key planning documentation include Strategic Asset plans and the Corporation's Asset Management System to assist in identifying and prioritising key programs.	• Renew pump stations, sewer and water pipes across the region • Ensure timely communication of planned and unplanned interruptions • Optimise preventative maintenance via proactive sewer cleaning and inspections to reduce blockages, spills and interruptions • Manage the most effective and economical balance between proactive and reactive maintenance • Maintain information and technology systems to monitor and identify when systems fail	Undertake a renewal program of approximately 35km of sewer and 52km of water pipes across the region Sewer Pump station renewal program for minor mechanical and electrical components that are beyond their useful life. Comprehensive Preventative maintenance investment Renewal, expansion and upgradation of aging SCADA	On average our customers will not be without water or wastewater services for longer than 120 minutes. 100% of sewer spills to be contained within 5 hours. 100% of planned & unplanned water interruptions to be restored within 5 hours. We will communicate planned interruptions via a card drop and the South Gippsland Water website www.sgwater.com.au in advance of works.
Provide safe, clean drinking water for the benefit of our customers and communities	Lead by the Water Quality Team with oversight of the Senior Management Team. Water quality is governed by the Safe Drinking Water Guidelines and Standards including Health Based Targets. Water Quality is monitored by the Department of Health.	• Improve Water Treatment Plants treatment processes during algae outbreaks and for disinfection. • Invest to renew aging water treatment plants and treated water storages • Improve water security for Lance Creek system Water pressure works for affected townships. • Continue scheduled maintenance programs to prevent discoloured water	Invest to renew aging water treatment plants Replace liners and covers for 6 treated water storages Water pressure works at Poowong Pipe flushing & tank cleaning maintenance programs Purchase of water from the Melbourne Water Supply System	100% compliance with the Australian Drinking Water Guidelines and the standards for microbiological and discolouration. Customers will choose to drink our tap water (target 73%).
Provide a safe wastewater service that contributes to the health and liveability of our communities and environment	Lead by the Environment and Wastewater Teams with oversight of the Senior Management Team. Wastewater licencing is governed by the Environment Protection Authority. Key services are documented in the Customer Charter and reported to the Essential Services Commission.	• Improve treatment plant and network capacity in Wonthaggi, Inverloch and Foster • Implement targeted preventative maintenance programs at sewer pump stations and wastewater treatment plants	Sewer system upgrades/expansion works to keep pace with regional growth at Wonthaggi, Inverloch and Foster Preventative maintenance programs at 4 sewer pump stations Wastewater treatment plant/system renewals for Wonthaggi including screens, pumps & 1.8 Km of pipe and Port Albert vacuum sewer.	We will achieve 100% Environment Protection Authority (EPA) Licence Compliance to ensure; -No adverse impact to receiving waters (rivers or oceans) -No adverse impact to land from recycled water use -No adverse odours beyond wastewater treatment plant boundaries (stretch target).
Be environmentally responsible, sustainable and adapt to a future impacted by climate variability	Lead by the Environment Team with oversight of Senior Management. South Gippsland Water Environmental obligations are underpinned by the Corporation's Sustainability Strategy and Environmental Management System. In addition, a key environmental focus is the Corporation's Carbon Reduction Pledge.	• Reduce the Corporation's greenhouse emissions • Be a champion for sustainable water use and re-use • Improve processes for storage and treatment of Bio Solids	Reduce greenhouse emissions via a range of programs including solar power Promote water efficiency and water re-use in all areas of the organisation and community Continue to have a key focus on sustainable Bio Solid management and water catchment environmental health	Our carbon emissions will reduce by 15% to 6480 t GHG by 1/7/2025 - Stretch Target: Reduce emissions by 3% year on year We will have programs in place to assist our customers to save water.
Treat all customers /community with honesty, respect and strive to balance affordability, value for money and fairness	A whole of organisation approach with oversight of the Senior Management Team. Key services are documented in the Corporation's Customer Charter and Underpinned by the Code of Conduct. The Victorian Energy and Water Ombudsman is a third party moderator of customer grievances. Prices and Services are guided via the Essential Services Commission.	• Support customers who are struggling to pay their accounts • Communicate in an open, easy to understand and honest manner. • Allow customers to have more control over their accounts Provide an tariff structure that is fair and equitable	Provide a range of programs to strengthen our support for customers Charge the minimum required to maintain service standards expected by customers. Provide open and honest communications through formal engagement processes Implement a tariff charge that will allow customers to have more control over their bill & a new wastewater tariff model for commercial customers with an emphasis on 'user pays'.	Customer satisfaction will be maintained or improved at 80% or more. 73% or more of customers will rate our services as 'value for money'. We will commit to undertaking a thorough pricing review submission process with the Essential Services Commission every 5 years.

5. Demand

Key Points

Victoria in Future 2016 information and historical data has been utilised to determine customer growth forecasts.

- Residential customer growth is expected to be moderate, it will be strongest around coastal areas.
- Water storage availability is assumed to be healthy with no restrictions.
- Average residential water use has varied little in the past 5 to 10 years following significant customer engagement, education and water use behavioural change.
- Major customer water consumption is forecast to increase by approximately 0.5% p.a., however, world economic factors can impact significantly on the two major dairy producers that the Corporation services.
- South Gippsland Water customers will consume around 4.9 GLs of water in 2022/23, an increase of 233MLs over the fourth regulatory period.
- The Corporation is reviewing (for implementation in 2020/21) cistern and minor trade waste tariffs and this may impact on demand post review.
- Major customer trade waste fees are contracted and forecast to remain relatively static during the fourth regulatory period.
- Miscellaneous service categories are less than 2% of the Corporation's revenue requirement.

Customers see merit in water sustainability and community focused demand reduction programs. In addition, customers want price and restrictions to be used to signal the value of water as a scarce resource to the community.

5.1. Introduction

This section provides an overview of demand forecasts and the assumptions adopted for the Pricing Submission. This includes:

- demand assumptions such as population or growth in dwellings and consumption trends adopted in generating the forecasts;
- an overview of the associated outputs, e.g. number of assessments and kilolitres treated and comparable historical information.

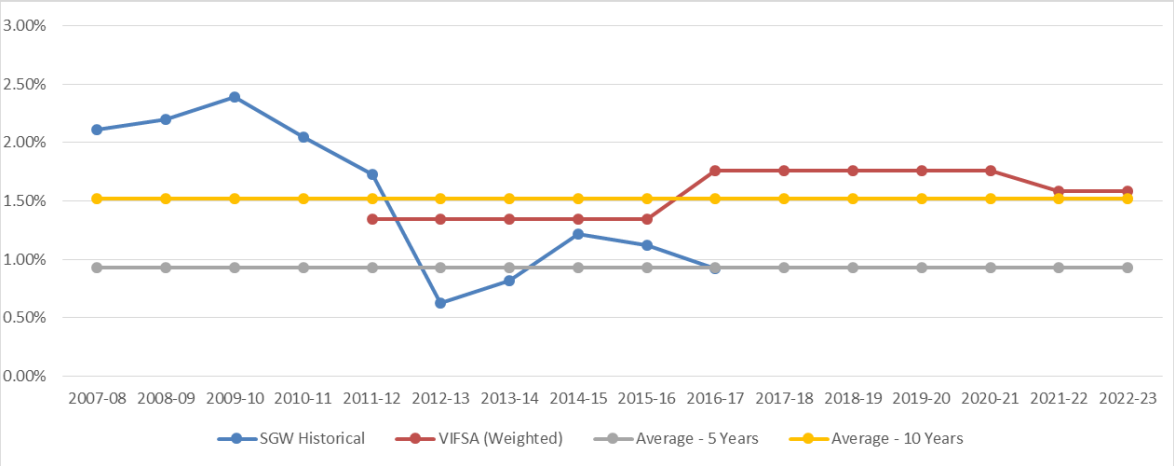
- Factors that impact on these forecasts include:
- Water storage availability, i.e. the ability to provide water is not restricted. The Corporation is best placed to manage these risks and therefore no restrictions have been built into demand forecasts (this will be aided by the commissioning of the Lance Creek Water Connection in 2018/19);
- Household growth (Victoria In Future 2016 forecasts and the Corporation's own historical data have been considered);
- The impact on customer behaviour of previous high level restrictions, permanent water saving measures and tariff changes. The Corporation has forecast little change in average consumptions, utilising either the 5 year or 10 year average, as appropriate;
- The impact of price elasticity on residential water consumption; and
- Major customer initiatives in response to prior water shortages and their future plans as they manage their businesses in the world economy.

5.2. Water Customer Growth

The Corporation has utilised the disaggregated Victoria in Future Small Areas (VIFSA) statistical information as one source of information. The relevant VIFSAs are Wonthaggi District, Korumburra District, Leongatha District, Promontory District and Yarram District. Actual historical growth varies significantly from year to year having been well above long term averages in the second regulatory period and well under in the third. The 10 year average annual rate is 1.52% p.a.

The following graph shows the historical and forecast growth for the South Gippsland Water region from a number of sources.

Figure 5.1: Summary of Actual and Forecast Household Growth – 2008/09 to 2022/23



The Corporation proposes to utilise the 10 year average growth rate (1.52% p.a.) for its Pricing Submission forecasts. This growth rate has been higher than the VIFSA rate in the period 2012 to 2016, but is lower than the VIFSA rate from 2017 to 2022. It is believed that using the 10 year average growth rate is a fair allocation of growth risk between the Corporation and customers.

5.3. Wastewater Customer Growth

The Corporation proposes to utilise the same growth rates as those for water being the 10 year average growth rate of 1.52% p.a.

5.4. Developer lots

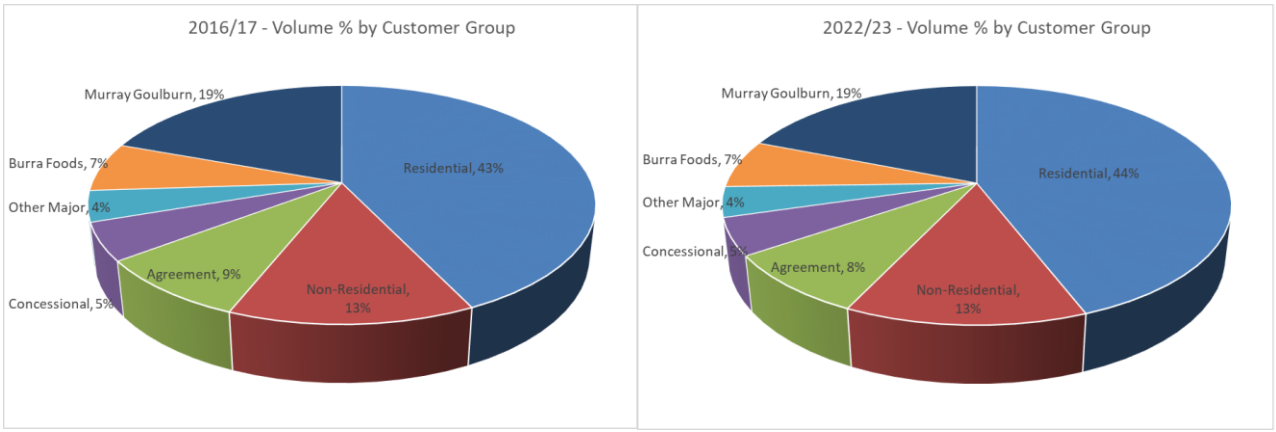
Developer lots have been forecast to move in line with water and wastewater customer growth.

5.5. Urban Water Consumption

Residential and business customer growth has been assumed to vary proportionally with the household growth forecasts. Growth in major industrial demand is considered on a case by case basis.

South Gippsland Water has utilised average annual metered water sales as the starting point for its forecasts. It has on average provided some 4.6GL/yr of potable water, of which 43% is used to supply residential and 53% is used to supply business customers. The following graphs illustrate the actual consumption in 2016/17 and comparative projection for 2022/23.

Figure 5.2: Chart of actual and forecast water consumption – 2016/17 and 2022/23



5.6. Average water consumption, including demand initiatives

South Gippsland Water, like the wider Victorian water industry, undertook measures in order to reduce per capita demand over time. This has included targeting all major aspects of water use with an emphasis on education and behavioural change. Customer rebate schemes for water conservation products have operated widely and with good impact. Outdoor water use has been targeted through the introduction of permanent water saving measures.

As a result, average water consumption patterns have steadily declined over the last 15 years. Since 2002/03 average residential and non-residential water consumption has reduced by around 30%. The residential average consumption patterns of the last 10 years are forecast to continue. Due to the significant real price increases proposed by South Gippsland Water, these have been adjusted for price elasticity.

Non-residential average consumption patterns of the last five (rather than ten) years are forecast to continue. This is due to a declining trend apparent over the 10 year period. These have not been adjusted for price elasticity. The Corporation has decided to take on the risk that average demand from non-residential customers will decline due to price increases.

Figure 5.3: Average Actual Water Consumption (kL) – Residential

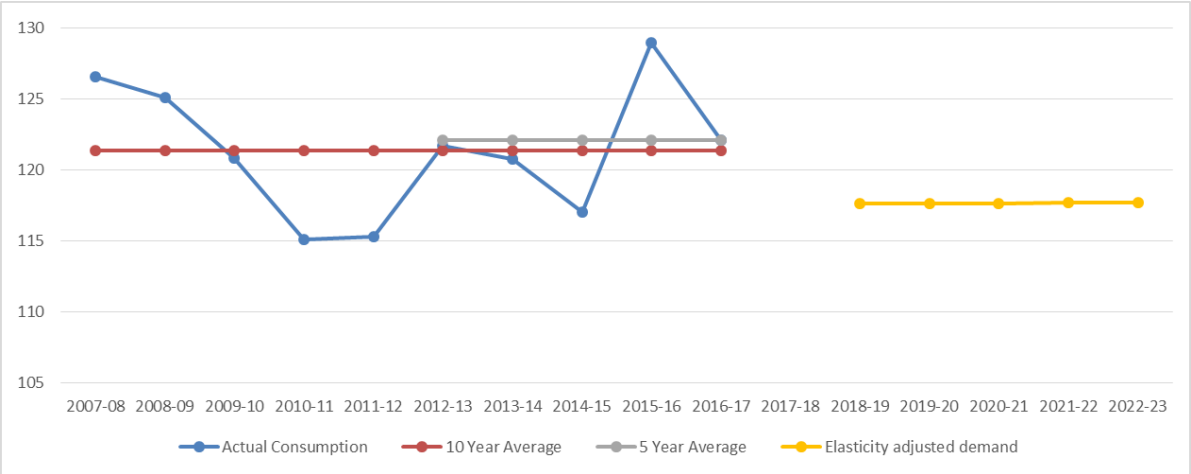
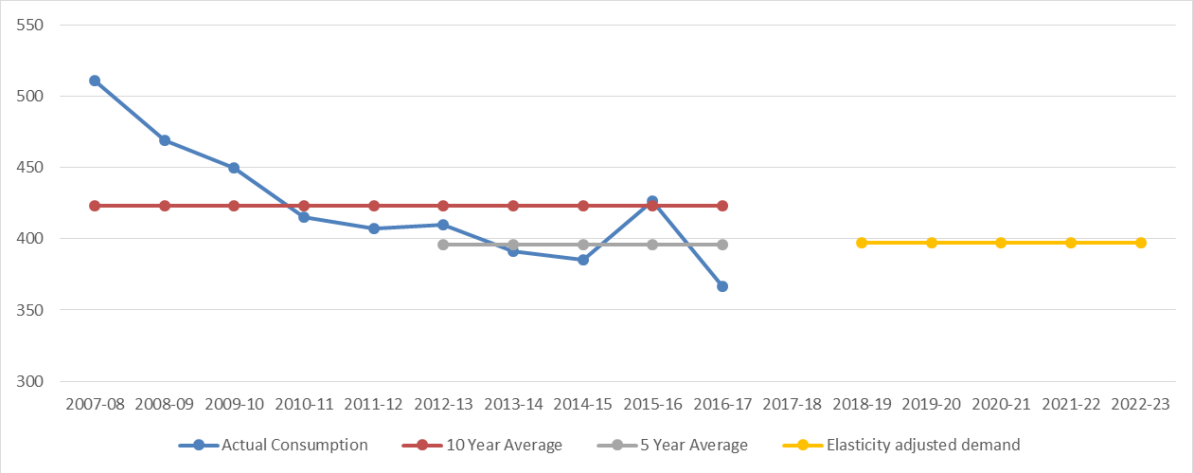


Figure 5.4: Average Actual Water Consumption (kL) – Business (excluding Majors)



5.7. Major Customer Demand

There are several major industrial demands in the South Gippsland Water supply area. Long term growth in major industrial demand is difficult to predict due to their short planning horizons, technological developments, commodity market fluctuations and their reluctance to be forthcoming due to commercial confidentiality.

Recent announcements on structural change by Murray Goulburn poses further uncertainty regarding their future water consumption. Local management has been unable to document the impact of these announcements on future water consumption with any certainty. Indeed their advice is that future demand will be reflective of historical. This is also true of Burra Foods, a dairy manufacturer based in Korumburra that services niche markets in Asia.

Major customer water consumption is forecast to increase by approximately 0.5% p.a. over the fourth regulatory period, however, it is noted that world economic factors can impact significantly on the two major dairy producers that the Corporation services.

5.8. Wastewater Volumes

Wastewater volumes are forecast to remain relatively constant, reflecting the past 10 year average of kilolitres treated, consistent with assumptions for water demand.

5.9. Cistern and Minor Trade Waste Customers

As a result of customer engagement feedback, South Gippsland Water proposes to review the basis for charging cistern and minor trade waste customers in order to provide an increased user pays focus and has established a Wastewater Tariff Community Engagement Strategy. This is explored further Section 12.3.

5.10. Major Trade Waste

Major trade waste customers are those whose discharges have the potential to create a significant impact on a wastewater collection, treatment or disposal system. South Gippsland Water has three major Trade Waste Agreements and revenue forecasts reflect these documents.

5.11. Miscellaneous Revenue

Material miscellaneous revenues comprise standpipe water sales, inspection fees, information certificates, water tapping fees, etc. No individual miscellaneous service comprises more than 1% of South Gippsland Water's prescribed revenue. In total, all miscellaneous revenue comprises less than 2%. Estimates of revenue have been based on historical analysis. They have not been significantly volatile nor are forecast to be in future.

5.12. Summary of Demand Forecasts

Figure 5.5 details the relevant demand forecasts for South Gippsland Water. It shows historical information since 2012/13 and estimates/projections to the end of the Pricing Submission i.e. 2022/23. While not shown, estimates have been forecast for 10 years.

Total demand is forecast to increase by 233ML over the fourth regulatory period, and is primarily made up of increased demand by major customers - Murray Goulburn higher by 174MLs.

Risk

- South Gippsland Water is proposing to increase the variable portion of water charges during the fourth regulatory period, giving customers more control over their bills and providing a demand management incentive. Price elasticity has been factored into residential demands (not non-residential) in order to allow for potential reduced consumption.
- The Corporation has taken a balanced view of regional growth rates. The rates forecast are higher than recent historical trends but lower than Victoria in Future 2016 estimates. The risk to the Corporation is that recent suppressed growth rates continue.
- Major customer demand can be volatile. South Gippsland Water has forecast growth in this area, therefore, risks associated with lower demand rests with the Corporation.

Figure 5.5: Summary of Actual and Forecast Demand – 2012/13 to 2022/23

Year	2013/14		2014/15		2015/16		2016/17		2017/18		2018/19	2019/20	2020/21	2021/22	2022/23
Key demand driver	**Actual**	***Water Plan***	**Actual**	***Water Plan***	**Actual**	***Water Plan***	**Actual**	***Water Plan***	**Forecast**	***Water Plan***	***Forecast***	***Forecast***	***Forecast***	***Forecast***	***Forecast***
Water Assessment Numbers															
Residential	16,070	*15,866*	16,329	*16,120*	16,477	*16,380*	16,662	*16,641*	16,916	*16,903*	*17,174*	*17,437*	*17,704*	*17,976*	*18,252*
Non-Residential	1,941	*2,124*	1,958	*2,137*	1,958	*2,150*	1,970	*2,163*	1,980	*2,176*	*1,990*	*2,000*	*2,010*	*2,020*	*2,030*
Vacant Land	1,146	*1,269*	1,098	*1,286*	1,147	*1,304*	1,196	*1,322*	1,211	*1,340*	*1,227*	*1,243*	*1,259*	*1,275*	*1,291*
Agreement	512	*520*	508	*523*	509	*526*	508	*529*	511	*532*	*513*	*516*	*518*	*521*	*523*
Concessional	665	*640*	653	*643*	656	*646*	650	*649*	653	*652*	*657*	*660*	*663*	*666*	*670*
Major Customers (Other)	4	*4*	4	*4*	4	*4*	4	*4*	4	*4*	*4*	*4*	*4*	*4*	*4*
Burra Foods	1	*1*	1	*1*	1	*1*	1	*1*	1	*1*	*1*	*1*	*1*	*1*	*1*
Murray Goulburn	1	*1*	1	*1*	1	*1*	1	*1*	1	*1*	*1*	*1*	*1*	*1*	*1*
Total	**20,340**	***20,425***	**20,552**	***20,715***	**20,753**	***21,012***	**20,992**	***21,310***	**21,277**	***21,609***	***21,567***	***21,861***	***22,160***	***22,464***	***22,773***
Wastewater Assessment Numbers															
Residential	14,793	*14,700*	15,109	*14,967*	15,320	*15,238*	15,759	*15,503*	15,885	*15,760*	*16,128*	*16,375*	*16,626*	*16,881*	*17,141*
Non-Residential	1,052	*1,167*	1,065	*1,176*	1,046	*1,185*	1,074	*1,194*	1,079	*1,203*	*1,085*	*1,090*	*1,096*	*1,101*	*1,107*
Vacant Land	929	*1,042*	923	*1,060*	965	*1,078*	1,027	*1,095*	1,041	*1,112*	*1,054*	*1,069*	*1,083*	*1,097*	*1,112*
Agreement	0	*0*	0	*0*	2	*0*	6	*0*	6	*0*	*6*	*6*	*6*	*6*	*6*
Major Customers	3	*3*	3	*3*	3	*3*	3	*3*	3	*3*	*3*	*3*	*3*	*3*	*3*
Tradewaste	192	*180*	232	*180*	270	*180*	308	*180*	308	*180*	*308*	*308*	*308*	*308*	*308*
Cistern	632	*597*	628	*600*	634	*603*	665	*606*	668	*609*	*672*	*675*	*678*	*682*	*685*
Total	**17,601**	***17,689***	**17,960**	***17,986***	**18,240**	***18,287***	**18,842**	***18,581***	**18,990**	***18,867***	***19,256***	***19,526***	***19,800***	***20,079***	***20,362***
Water Volume Consumption (Megalitre)															
Residential	1,941	*1,955*	1,911	*1,985*	2,124	*2,016*	2,034	*2,046*	1,989	*2,077*	*2,020*	*2,051*	*2,083*	*2,116*	*2,149*
Non-Residential	609	*648*	584	*653*	639	*657*	572	*662*	614	*667*	*617*	*620*	*623*	*626*	*629*
Agreement	398	*453*	404	*457*	445	*460*	340	*463*	398	*468*	*400*	*402*	*404*	*407*	*409*
Concessional	213	*216*	215	*218*	246	*220*	236	*222*	237	*224*	*238*	*239*	*240*	*241*	*242*
Subtotal	**3,162**	***3,272***	**3,113**	***3,312***	**3,455**	***3,352***	**3,182**	***3,393***	**3,238**	***3,436***	***3,275***	***3,313***	***3,351***	***3,390***	***3,429***
Major Customer	422	*179*	409	*179*	244	*179*	198	*179*	194	*179*	*195*	*196*	*197*	*198*	*199*
Burra Foods	303	*270*	272	*270*	218	*270*	297	*270*	309	*270*	*310*	*312*	*314*	*315*	*317*
Murray Goulburn	826	*830*	796	*789*	894	*749*	883	*749*	901	*749*	*905*	*910*	*914*	*919*	*923*
Subtotal	**1,552**	***1,280***	**1,478**	***1,238***	**1,356**	***1,199***	**1,379**	***1,199***	**1,404**	***1,199***	***1,411***	***1,418***	***1,425***	***1,432***	***1,439***
Total	**4,714**	***4,551***	**4,591**	***4,550***	**4,811**	***4,551***	**4,561**	***4,592***	**4,642**	***4,635***	***4,686***	***4,730***	***4,776***	***4,822***	***4,868***
Developer lots															
Water	166	*288*	235	*294*	81	*299*	144	*297*	157	*303*	*159*	*162*	*164*	*167*	*170*
Wastewater	172	*291*	231	*296*	76	*301*	146	*281*	157	*285*	*159*	*162*	*164*	*167*	*170*
Total	**338**	***579***	**466**	***590***	**157**	***600***	**290**	***578***	**313**	***588***	***319***	***324***	***329***	***334***	***340***

6. Revenue Requirement for the Fourth Regulatory Period

Key Points

South Gippsland Water has prepared its Pricing Submission on the basis of a five year regulatory period from 1st July 2018 to 30th June 2023.

Planning is a key focus for South Gippsland Water customers and the Corporation has used forecasts of an aggregate of 10 years to inform this Pricing Submission.

It is proposed to continue to utilise the Essential Services Commissions (ESCs) existing regulatory mechanisms for adjusting prices.

The cost of debt will be updated annually by South Gippsland Water in accordance with a proposed annual adjustment formula.

6.1. Regulatory Period

South Gippsland Water proposes a five year regulatory period from the 1st of July 2018 to the 30th of June 2023. Business planning has been conducted over 10 years, providing a forecast of aggregate expenditure, demand, revenue and price beyond the fourth regulatory period.

Benefits of a longer regulatory period include reduced administration costs and greater certainty for customers about outcomes and prices over a longer period. However, the Corporation believes that committing to pricing for a longer term, exposes both the Corporation and the customer to unnecessary risk of uncertain or unforeseen events that may result in material deviations from longer term forecast.

6.2. Regulatory Asset Base

South Gippsland Water's revenue requirement is premised on prudent and efficient forecast capital and operating expenditure (refer to Section 7 and 8). The revenue requirement allows for a return of and on the regulatory asset base (RAB). The intent of the RAB is to ensure that revenue required from customers is restricted to the overall investment made by the Corporation. The RAB is comprised of an acquired opening balance in 2004 which has been adjusted annually for capital additions, contributions, disposals and depreciation. The opening balance for the RAB in 2016/17 is $147.460M.

The opening balance in the fourth regulatory period requires a forecast for the final year of the third regulatory period (2017/18). This is typically set as the forecast originally envisaged by the final determination ($12.33M). In discussion with ESC, the Corporation has taken a different approach due to the material impact of capital expenditure for a major project in 2017/18 that will be completed in 2018/19 (the Lance Creek Water Connection). The forecast capital expenditure for 2017/18 is $32.84M, of which, $25.05M relates to this major project. This is offset by government contributions to be received totalling $17.40M.

A further offset of $7.10M for government contributions to be received in 2018/19 has been brought forward in the financial model, in order to negate the risk to the customer of potential capital expenditure under-runs for 2017/18 (and potential overstatement of the RAB opening balance and impact on the revenue requirement). After adjusting for forecast capital expenditure, government contributions, proceeds from sale of assets and regulatory depreciation, the opening balance for the RAB in the fourth regulatory period is $148.99M.

Gross capital expenditure proposed for the fourth regulatory period is $88.23M. The average regulatory asset remaining useful life equates to 47 years, resulting in annual depreciation on the existing RAB of $3.93M. After adjusting for forecast capital expenditure, government contributions, proceeds from sale of assets and regulatory depreciation, the closing balance for the RAB in 2022/23 is $210.88M.

6.3. Return on Regulatory Asset Base

In addition to the return of assets (depreciation) outlined above, the revenue requirement allows for a return on investment, calculated as a return on equity and the cost of debt. The Corporation proposes a return on the RAB, or equity, equivalent to 4.5%, consistent with a 'Standard' PREMO rating. The 'Standard' rating was self-assessed by South Gippsland Water with information provided by the ESC, including utilising the PREMO assessment tool (refer to Section 2).

The cost of debt proposed will reflect the 10 year trailing average approach as determined by Treasury Corporation Victoria.

Annual customer tariffs will be adjusted to allow for changes to the trailing average cost of debt, similar to adjustments for the Consumer Price Index. During the fourth regulatory period, the cost of debt will be updated annually by South Gippsland Water as a percent adjustment to all tariffs excluding trade waste contracted revenue and non-regulated income sources such as rental income.

The following formula describes the adjustment mechanism:

D=(AxB)/C

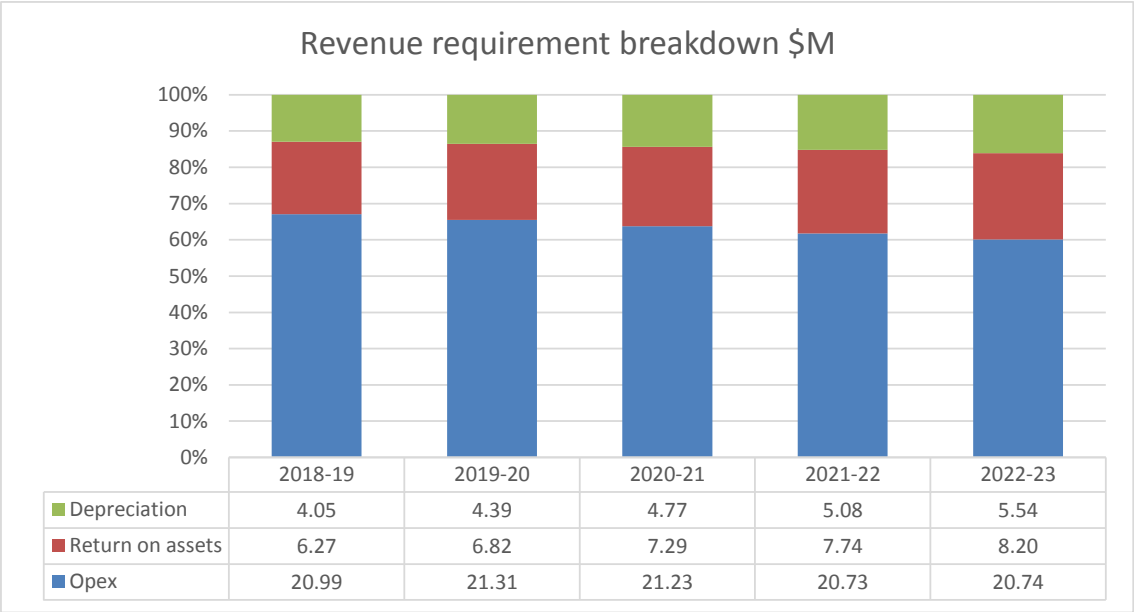
A percent adjustment to revenue (D) will be determined by the differential cost of debt (A), applied to the RAB (B) and divided by the applicable revenue base (C).

6.4. Total Revenue Requirement

The total revenue requirement for the fourth regulatory period is $165.15M and is broken down by year and component, in the following graph.

This following graph shows a decline in operating expenses over the period due to the cumulative impact of the Corporation's 1.5% efficiency target. Both the return on assets and the depreciation of assets increases over the pricing period as capital expenditure exceeds the value of disposed and written down assets overall.

Figure 6.1 Revenue Requirement Breakdown



	2018-19	2019-20	2020-21	2021-22	2022-23
Depreciation	4.05	4.39	4.77	5.08	5.54
Return on assets	6.27	6.82	7.29	7.74	8.20
Opex	20.99	21.31	21.23	20.73	20.74

South Gippsland Water's financial estimates show that the Corporation will not be required to make tax payments (or payments under the National Tax Equivalents Regime) during the fourth regulatory period. Therefore, the revenue requirement does not include any component related to tax expense.

Risk

- South Gippsland Water estimates gross capital expenditure of $32.84M for 2017/18, offset by government funding, in calculating the opening RAB. This has resulted in a lower net capital expenditure amount ($8.34M than the third regulatory period forecast ($12.33M) for 2017/18 thereby allocated pricing risk to the Corporation.

- South Gippsland Water has not sought an independent credit rating assessment and will manage its financial risks within the fourth regulatory period under the key assumptions outlined in this Pricing Submission. In July 2017 the Corporation was downgraded by the Department of Treasury and Finance in its recent Desktop Rating exercise from A+ to A- with a risk to further downgrading to BBB+ next financial year. The risk of higher/lower cost of debt will be managed via the 10 year trailing average adjustment

7. Capital Expenditure

Key Points

The South Gippsland Water capital expenditure plan has been developed with customer expectations on levels of service as a key influence.

Expectations and requirements of stakeholders and regulators have also had a significant impact on the planned expenditure.

The fourth regulatory pricing period will see the focus for capital expenditure shift toward renewal projects to align with customer's priorities.

South Gippsland Water plans to spend $88.2M for capital expenditure during the fourth regulatory pricing period.

7.1. Introduction

This Pricing Submission aims to clearly outline South Gippsland Water's forecasts of capital expenditure for each year of the regulatory period including the key drivers of expenditure and how capital expenditure is planned and delivered in a prudent and efficient manner.

7.2. Capital Expenditure during the Third Regulatory Period

South Gippsland Water has been able to deliver a significant capital spend and will exceed benchmark levels over the third regulatory period. Overall, the Corporation expects to substantially exceed the indexed capital target expenditure by $8.75M (12%).

The key variance was construction of the Northern Towns Supply Connection Works which is now called the Lance Creek Water Connection Project (more detail is below). The forecast capital expenditure for this project at the start of the third regulatory period was $20.56M (indexed to 2017/18) while the forecast expenditure to the end of 2017/18 is $29.71M and the total forecast expenditure on the project will be $36.76M when stage 1 works are completed in 2019. The business case for this project was approved in 2016 and the project was granted $30.00M state government funding, $22.90M of which will be spent by the end of 2017/18. The variance between the third regulatory period budget and the approved business case occurred because the final project scope and estimates differed from the third regulatory period. The transfer pipe size increased, pipe material changed, the pipe alignment was altered and interface works with existing systems were redesigned.

Figure 7.1 Capital Expenditure Actual Versus Benchmark

South Gippsland Water	Budget Third Pricing Regulatory Period				Projection	Total
	2013/14	2014/15	2015/16	2016/17	2017/18	
Capex ESC final decision ('M $12/13)	11.40	12.58	15.31	16.30	11.15	66.73
Indexed capex target (M $17/18)	12.61	13.91	16.93	18.03	12.33	73.81
Actual capex incurred (M $17/18)	13.01	19.85	9.27	8.09	32.34	82.56
Variance to target (over / underachieve)	**0.40**	**5.94**	**-7.67**	**-9.94**	**20.01**	**8.75**

7.3. Rationale for Capital Expenditure

Customer Expectation and Major Capital Projects

Levels of service and associated expenditure have been tested with customers who overwhelmingly supported investment to "maintain" levels of service. The process included understanding customer expectations and the development of Outcome Statements and associated measures. To do this, South Gippsland Water collaborated with the Pricing Submission Advisory Panel and undertook a number of workshops and engagement sessions, as detailed in Section 3.

This process resulted in six Outcome Statements (Customer and Integrity, Environment, Planning, Reliability, Water, Wastewater) which are linked with outputs, activities and measures for reporting. These six statements and associated activities and measures were reconfirmed by the Advisory Panel and wider stakeholder groups as part of the Test phase of engagement. Customers were also asked about key price drivers and assumptions including, the required level of service, frequency of water restrictions and climate variability.

Aging Assets and Renewal

For South Gippsland Water capital works over the first three regulatory pricing periods have been largely focussed on construction of new assets including:

- Devon North Water Treatment Plant;
- Waratah Bay sewerage scheme and treatment plant;
- Meeniyan sewerage scheme and treatment plant;
- Leongatha and Korumburra wastewater treatment plant upgrades;
- Alberton sewerage scheme;
- Poowong, Loch and Nyora sewerage scheme; and
- Recently, Lance Creek Water Connection Project.

These projects followed from 10 years of water quality improvement projects that saw the construction of water treatment plants at Lance Creek, Fish Creek, Poowong, Meeniyan and Dumbalk. Overall more than $50M in the third regulatory period has been spent on growth related projects.

South Gippsland Water is planning to shift the focus of capital investment to renewal in order to maintain service standards. Historically asset renewal expenditure has been limited because the age of the business' assets broadly dictates the level of renewal investment needed. This is now changing with water and sewage reticulation systems installed in the 1950's and 1960's now in need of significant renewal. This point is illustrated in the below table which extrapolates asset life from current renewal rates. Clearly there is a significant under investment in asset renewal.

Figure 7.2 Historical Asset Renewal Rates

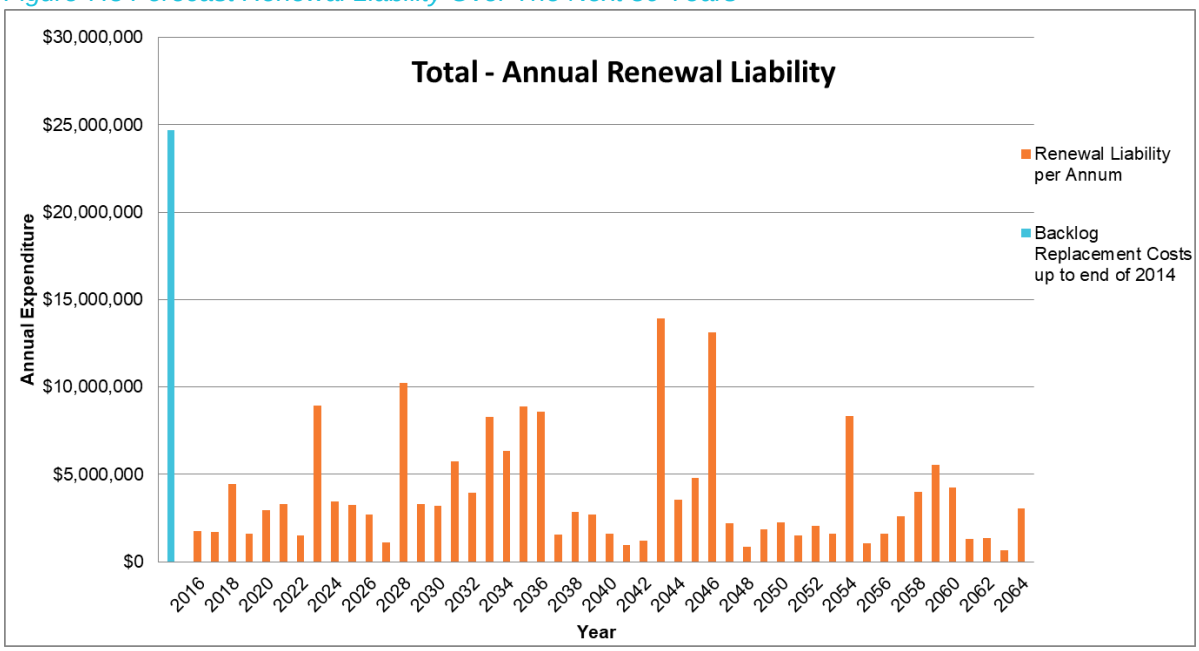
Asset class	Current annual renewal rate (% per year)	Asset life extrapolated from current annual renewal rate (years)	Typical asset life (years)
Water Reticulation	0.4	231	<100
Sewer Reticulation	0.47	211	< 100
Sewage Pump Stations	2.27	44	10 to < 100*
Water Pump Stations	0.76	132	10 to < 100*
Water Treatment Plants	0.31	326	10 to < 100*
Wastewater treatment Plants	0.61	163	10 to < 100*
Facilities	1.02	97	50

* Depending on asset type

South Gippsland Water customers support investment in infrastructure renewals in order to ensure reliable services, the Pricing Submission Advisory Panel noted “Renewals are to be based on priority and best spent funds between proactive and reactive”.

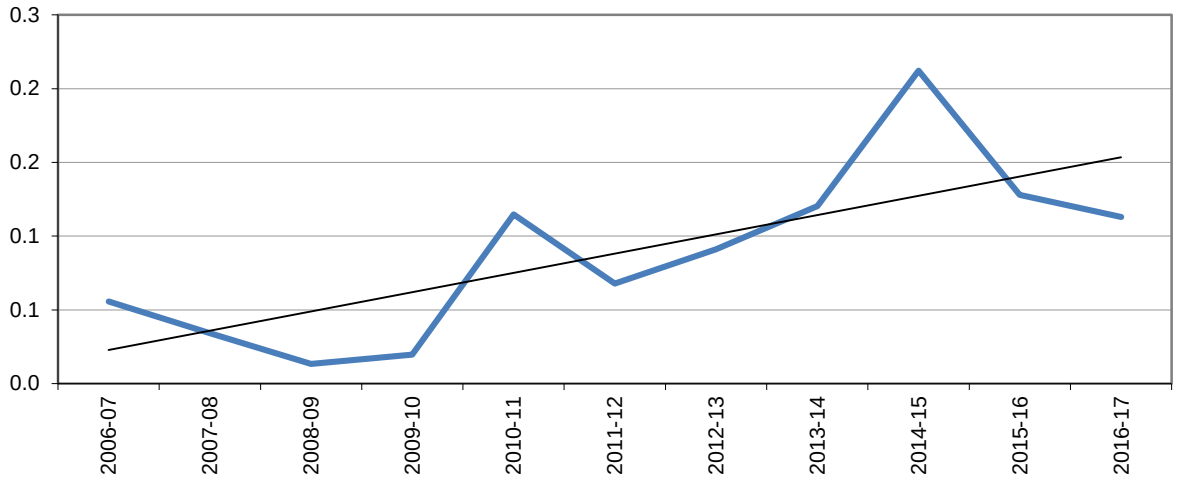
Figure 7.3 presents the estimated renewal liability for the Corporation over the next 50 years. This shows that there is already a backlog of renewals where assets have been operational beyond the optimal service life (currently estimated as $30M). The backlog has occurred as the Corporation has sought to meet government obligations to build sewerage schemes such as Poowong, Loch and Nyora and the scheme in Meeniyan. This has prioritised capital investment to support regional growth and development over renewal investment (for example, construction of the Lance Creek Water Connection). This practice has served the business and customers well and has helped minimise prices but it is not sustainable in the long term as an increasing proportion of the business’ assets are approaching or are beyond their service life.

Figure 7.3 Forecast Renewal Liability Over The Next 50 Years



Customers expressed a desire to maintain service standards, data is already beginning to show evidence that increased renewal is necessary to achieve this. Data on water supply bursts and leaks and sewer spills to customers property reported in the Essential Services Commission (ESC) annual Water Performance Reports shows that the Corporation’s service standards performance are comparable with other corporations in the sector but also show there is a downward trend with respect to reliability that must be addressed to achieve desired customer outcomes. Figure 7.4 shows a 10 year trend of sewer spills to customers’ property. The trend is upward despite the fact that the Corporation has four relatively new sewerage schemes built in the last 10 years, the last of which was only completed over the past two years.

Figure 7.4 Ten Year Trend on Sewer Spills to Customer Property (number per 100 customers)



7.4. Prudent and Efficient Capital Expenditure

South Gippsland Water has developed a capital forecast to deliver services as efficiently as possible. The key steps taken include:

- Planning to deliver growth driven projects immediately before they are needed;
- Deferring capital expenditure for projects with uncertain scope and timing;
- Undertaking broad options analysis for each project aimed at identifying the lowest whole of life cost approach to deliver outcomes;
- Prioritising investment based on customer expectations, risk management, non-cost benefits and whole of life costs;
- Minimising contingency allowances in estimates for capital programs where scope is well defined and estimates can be based on South Gippsland Water references and industry benchmarks;
- Developing and implementing procurement strategies to minimise design, project management and construction costs.

7.5. Capital Expenditure Forecast – Key Assumptions & Risks

Key assumptions including levels of service, climate variability and regional growth have been tested via the customer engagement process. Figure 7.5 lists assumptions that have a significant impact on the capital expenditure forecast.

Figure 7.5 Key assumptions used to develop the capital expenditure forecast

Assumptions & Risks	Comment
Water catchment yield will be consistent with a medium climate change impact.	The Corporation is taking a balanced view on long term catchment yield risk in consultation with customers. This means that significant supply augmentation works will be deferred until after 2022/23.
Water demand growth rates will be broadly in line with historic 2016 growth rates, Victoria in Future 2016 predictions and with major customer forecasts.	The result is that significant supply augmentation works for Leongatha will not occur until after 2022/23.
Construction works to re-purpose dams around Poowong and Korumburra can be deferred until after 2022/23. This assumes that dam safety can be maintained through on-going operational costs and operational changes throughout the fourth regulatory period.	Dam re-purposing will entail significant construction costs but these cannot be defined until consultation, planning and design is mostly complete.
Drinking water quality risks can be managed at the Corporation's three oldest water treatment plants using disinfection upgrades. Significant filter renewal works can be deferred until 2022/23.	Filter renewal works at three water treatment plants have been forecast in the regulatory period after 2022/23.
Water reticulation main renewal rates will continue to align with rates achieved by South Gippsland Water.	The Corporation has based forecast capital expenditure on rates achieved historically through an efficient combination of self-performing and local contractors. It has been assumed that these rates can be achieved into the future.
Relatively low unit rates for sewer augmentation works paid by the Corporation during the third regulatory period can be retained during the fourth regulatory period.	South Gippsland Water reference rates used for augmentation projects allocates risk of future construction price increases to the Corporation.
Pending changes in the State Environment Protection Policy (Waters of Victoria) will not drive capital expenditure in the fourth regulatory period.	The Corporation expects that the proposed risk based sewerage system containment standard will impact future plans but has not impacted expenditure plans during the fourth regulatory period.
Construction prices will not rise by more or less than the consumer price index.	It has been assumed that labour and material rates will rise at a rate aligned to CPI. This assumption has also been made for indirect costs such as design, project insurance and project management.

Capital Planning and Delivery – Risk Management

South Gippsland Water has given significant strategic consideration to the risks facing customers and the Corporation including their allocation and management. The governance arrangements, principles and processes by which South Gippsland Water manages risk are contained in an enterprise risk framework which has been based on the international risk management standard *ISO 31000:2009 Risk Management – Principles and Guidelines.* Identification of strategic risks occurs during the strategic planning process and updated on an ongoing basis. This is demonstrated by the number of strategic capital projects described in this Pricing Submission which extend beyond the fourth regulatory period. The easing of the drought conditions in the South Gippsland region, and the commencement of long term water security project (Lance Creek Water Connection) has resulted in a change of focus from water supply to managing emerging risks of asset performance and reliability. Using the risk matrix, key risk clusters identified for the Pricing Submission include: Water Quality, Asset Reliability, Wastewater Treatment, Environment, Business Systems, Financial Sustainability, and Project Management.

7.6. Forecast Capital Expenditure

The level of forecast capital expenditure has been developed in line with the outcomes of the South Gippsland Water customer engagement process. The customers supported an investment to "maintain" existing standards of service. This has resulted in expenditure of $88.2 million which is $6.5 million more than the third regulatory period (net capital expenditure is significantly higher). Capital expenditure forecasts still substantially exceed net cash flows from operations, meaning South Gippsland Water will continue to draw on debt in order to finance capital works program.

The breakdown of the capital works plan for the fourth and fifth regulatory periods is shown in the following table.

Figure 7.6 Forecast Capital Expenditure for Regulatory Periods 2018/19-2022/23 and 2023/24-2027/28 (nominal $)

	18/19	19/20	20//21	21/22	22/23	23/24	24/25	25/26	26/27	27/28
Water $M	12.95	9.37	9.32	9.55	5.95	12.71	13.00	8.60	11.00	7.31
Sewerage $M	7.01	7.72	7.10	7.36	11.90	7.48	12.57	12.54	7.87	10.36
Sub Total $M	**19.96**	**17.09**	**16.42**	**16.91**	**17.85**	**20.19**	**25.58**	**21.14**	**18.71**	**17.67**
Government contributions $M	-	-	-	-	-	-	-	-	-	-
Customer contributions $M	-	-	-	-	-	-	-	-	-	-
Gifted Assets $M	0.7	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70
Proceeds from disposals $M	0.5	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
WDV of assets disposed $M	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15

Figure 7.7 shows the capital expenditure forecast covering the third, fourth and fifth regulatory periods. The peak in 2014/15 was a result of the Poowong, Loch and Nyora Sewerage Scheme ($19M), peaks in 2017/18 and 2018/19 are the Lance Creek Water Connection Project ($36M). Forecast peaks in years 1, 2 and 3 of the fifth regulatory period are associated with construction costs for future recommissioning of dams at Korumburra and Poowong and water treatment plant filter renewals.

Figure 7.7 Capital Expenditure for Regulatory Period 3, 4, 5

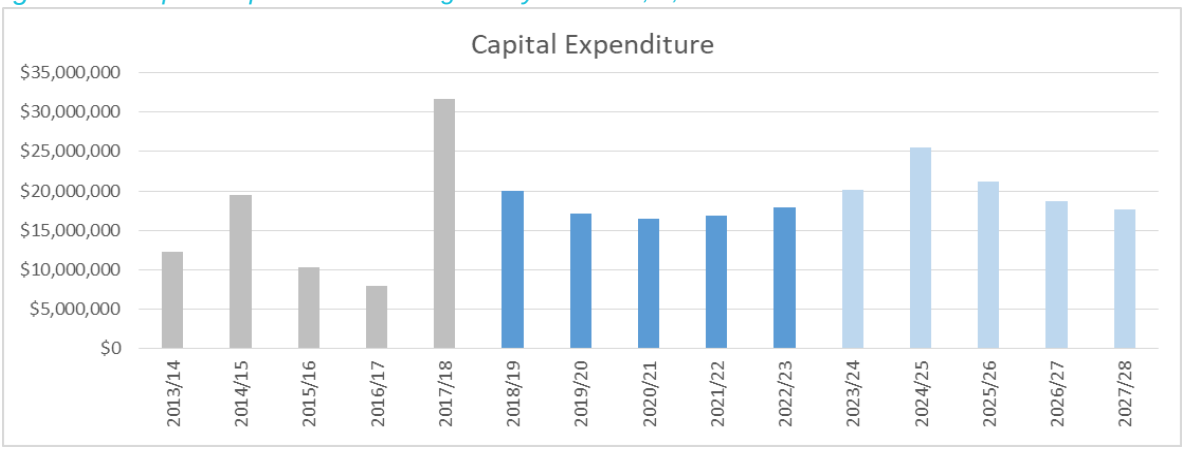


Figure 7.8 details the top 10 major capital discrete projects, capital program allocation and other capital expenditure for the fourth regulatory period.

Figure 7.8 Top 10 Major Capital Discrete Projects, Capital Program Allocation and other Capital Expenditure for Regulatory Period 2018/19 – 2022/23

	Top Ten Major Capital Discrete Projects				
	Project Name	**Project Description**	**Primary Driver**	**Customer Outcome**	**TOTAL ($M)**
1	Lance Creek Water Connection Project (LCWC)	Completion of LCWC project to secure water supplies for Korumburra, Poowong, Loch and Nyora	Growth	Planning	$7.56
2	Sewer System Expansion (Wonthaggi) Mains	Sewer Mains augmentation to support growth & ensure 1 in 5 yr storm event containment	Growth	Wastewater	$6.41
3	Leongatha Raw Water Transfer Main Renewal	Renewal of 5 km transfer main from Leongatha # 1 reservoir to the water treatment plant	Asset Renewal	Reliability	$4.99
4	Sewer System Expansion (Inverloch) SPS	SPS capacity upgrades and Emergency storage: Pier Road, Meanderri Drive, Veronica St	Growth	Wastewater	$4.19
5	Carbon Emission Reduction Upgrades	Carbon Emission Reduction Upgrade Projects	Compliance	Environment	$2.63
6	Wonthaggi WWTP Treated Effluent Rising Main	Wonthaggi rising main upgrade - 400mm 1.88km	Growth	Wastewater	$2.34
7	Fish Creek Treated Water Distribution Main Renewal	Asset Renewal to reduce loss and help secure supply for Fish Creek	Asset Renewal	Water	$2.22
8	WTP Disinfection Upgrade Projects	WTP Disinfection Upgrade Projects for Pathogen Risk Reduction	Compliance	Water	$2.11
9	Sewer System Major Renewal Item	Lawler Street Sewage Pump Station renewal	Asset Renewal	Reliability	$1.75
10	Wonthaggi WWTP Inlet Pump Station Renewal	Renewal of pump station and installation of screen	Asset Renewal	Reliability	$1.70
				Subtotal	**$35.90**

	Top Ten Capital Programs Allocation				
	Project Name	**Project Description**	**Primary Driver**	**Customer Outcome**	**TOTAL ($M)**
1	Water Reticulation Renewal Allocation	Allocation for replacement of water reticulation lines that are beyond the optimum service life	Asset Renewal	Reliability	$4.71
2	Reticulation Sewer Replacement / Rehabilitation Allocation	Sewer reticulation renewal - primarily relining	Asset Renewal	Reliability	$4.30
3	Vehicle Replacement Renewal	Renewal of SGW operational vehicle fleet	Asset Renewal	Reliability	$3.25
4	Water Treatment Plant Asset Renewal Allocation	Asset Renewal Allocation for treatment plant assets beyond optimum service life	Asset Renewal	Water	$3.07
5	SCADA Renewal (equipment and programming)	SCADA equipment renewal	Asset Renewal	Reliability	$2.83
6	WasteWater Treatment Plant Asset Renewal Allocation	Asset Renewal Allocation for treatment plant assets beyond optimum service life	Asset Renewal	Reliability	$2.68
7	IT Hardware Renewal	Computer system renewal	Asset Renewal	Reliability	$1.75

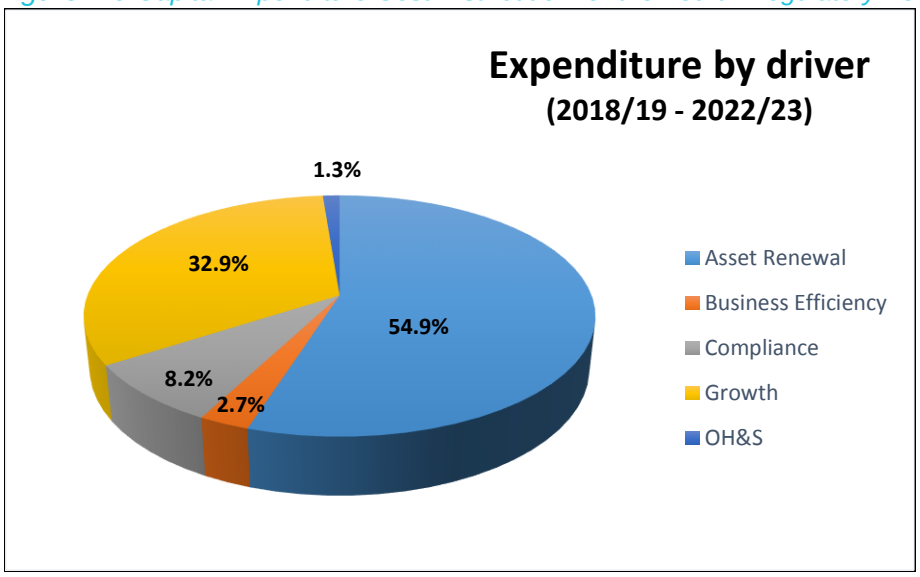
	Top Ten Capital Programs Allocation				
8	Hydraulic Modelling and Network Master Planning	Building, Update, Calibration of all SGW Water/Sewer Hydraulic Model & Network Master Planning	Business Efficiency	Planning	$1.47
9	M&E Sewer Pump Stations Renewal Allocation	Asset Renewal Allocation for pump station assets beyond optimum service life	Asset Renewal	Reliability	$1.45
10	IT Systems Renewal (software)	Software updates	Asset Renewal	Reliability	$1.30
				Subtotal	**$26.811**

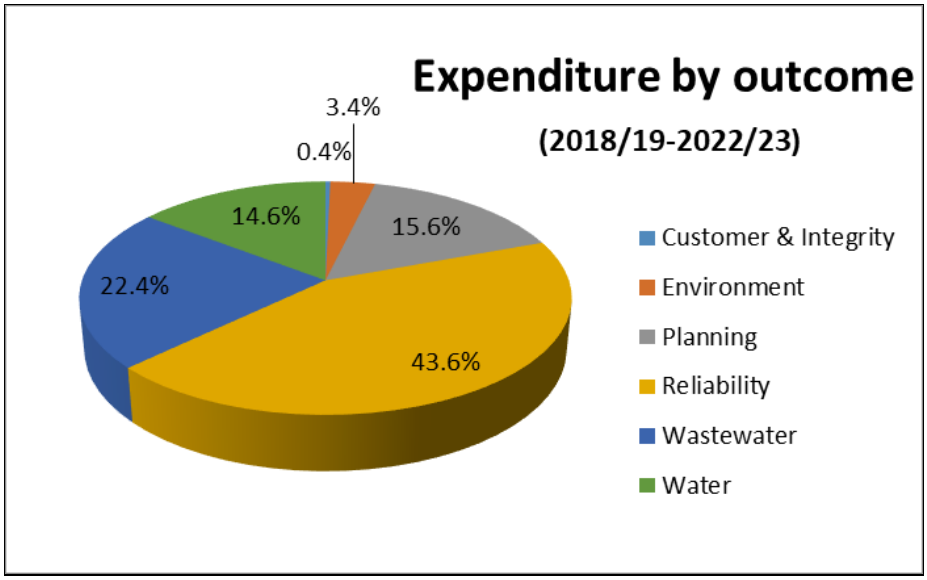
	Other Capital Expenditure				
	Project Name	**Project Description**	**Primary Driver**	**Customer Outcome**	**TOTAL ($M)**
1	SGW Facilities Renewal	Renewal, safety and functionality upgrades for depots and head office	Asset Renewal	Planning	$1.66
2	Sewer System Expansion (Foster) Mains	Sewer expansion to support growth & ensure 1 in 5 yr storm event containment: Mains augmentation	Growth	Wastewater	$1.63
3	SGW Depot Renewal - Other sites	Renewal, safety and functionality upgrades at other work centres	Asset Renewal	Planning	$1.35
4	Plant & Equip Replacement Renewal	Renewal of SGW plant and equipment fleet	Asset Renewal	Reliability	$1.25
5	Water Distribution Mains Renewal	Treated water distribution main renewal or replacement	Asset Renewal	Reliability	$1.25
6	Sewer Manholes Renewal Allocation	Allocation for replacement of sewer maintenance structures that are beyond the optimum service life	Asset Renewal	Reliability	$1.24
7	Wonthaggi Low Level Basin Liner and Cover Renewal	Clear water storage liner and cover replacement, pump optimisation and switchboard renewal.	Asset Renewal	Water	$1.16
8	Raw and Treated Water Pump Station Renewal Allocation	Asset Renewal Allocation for pump station assets beyond optimum service life	Asset Renewal	Reliability	$1.01
9	Corporate Office Renewal	Essential repair and renewal of corporate office complex	Asset Renewal	Planning	$0.99
10	Poowong Loch & Nyora Growth	Development of new pressure sewer system installations	Growth	Wastewater	$0.98
				Subtotal	**$12.52**

7.7. Capital Expenditure Cost Distribution Summary

Figure 7.9 summarises the capital expenditure cost distribution results analysis for the fourth regulatory period. The forecast capital expenditure is broken down and analysed relative to the customer outcomes and drivers. All the projects for the Pricing Submission have been categorised against multiple measures / criteria to allow analysis of the capital spend relative to customer priorities, regulator priorities and the corporate risk register.

Figure 7.9 Capital Expenditure Cost Distribution for the Fourth Regulatory Period





The planned expenditure breakdowns show how the customer reliability outcome has influenced the Corporation's plans. The largest component of the capital spend, about 44% is planned for works aimed to maintain reliability. Categorised by expenditure driver, about 55% of planned capital expenditure in the fourth regulatory period will be spent on asset renewal, while this accounted for about 25% of capital expenditure in the third regulatory period.

8. Operating Expenditure

Key Points

Customers see planning, investment into aging infrastructure and prompt response to breaks and leaks as important.

Expenditure proposed reflects the baseline operating costs of 2016/17 with adjustment for foreseeable changes to the operations of the business.

Changes to future operating costs were tested during the customer engagement process and have been linked to business and customer outcomes.

$1.4M p.a. existing efficiency savings ongoing with a further 1.5% p.a. efficiency target proposed for the fourth regulatory period.

8.1. Introduction

South Gippsland Water's customer engagement program resulted in clear customer themes with respect to the delivery of services. These are reflected in several Customer Outcomes documented in Section 3. Key customer insights include:

- Customers want safe reliable water and wastewater services;
- Planning for future pressures and threats to the region's water and wastewater services is imperative including collaboration with local partners;
- Increased investment for renewing aging infrastructure;
- Frequency of faults and the time to respond are important;
- Delivering social obligations and contributing towards customer hardship programs;
- Investment in protection of the environment (customers are divided whether the Corporation is investing enough into environmental programs);
- Wastewater and containing sewer spills is important due to the impacts on health;
- Wastewater services should have no unplanned interruptions and no impact inside the home.

In developing the Pricing Submission, the Corporation has placed an emphasis on maintaining service standards delivered to customers. The combination of meeting regulatory requirements and maintaining service standards has resulted in increased expenditure.

Expenditure proposed in the fourth regulatory period reflects baseline operating costs incurred in 2016/17 with adjustment for foreseeable changes to the operations of the business. In some cases, the 2016/17 operating costs already include additional operating expenditure which was considered necessary to meet compliance standards and customer service delivery expectations. These include:

- the maintenance of sewer sideline assets;
- increased disposal of biosolids;
- improvements to asset management practices;
- planning to support demand and capital program delivery;
- enhanced customer support programs;
- and industry related stakeholder collaboration.

South Gippsland is not seeking to recover this prior period operational expenditure from customers via higher tariffs, however, it is factored into baseline controllable operating expenditure moving forward.

8.2. Non-controllable Operating Expenditure

In planning for future water security, additional operating expenses will be incurred for the allocation of water available for use from the Melbourne Water System (Bulk Entitlement). In addition, the state government's Environmental Contribution has increased from $1.10M to $1.23 (nominal dollars) for the period 2017/18 to 2021/23. It is assumed to increase again to $1.34 from 2022/23.

8.3. Controllable Operating Expenditure

Changes to future controllable operating expenditures were tested with the Pricing Submission Advisory Panel as part of the overall customer engagement process (refer Chapter 3). The following table provides an overview of these changes, the business driver(s) and the link to the customer insight/outcome.

Figure 8.1South Gippsland Water Operational Expenditure Matrix

Change to expenditure	Customer insight and outcomes	Operational requirement	Primary Business Drivers, Activities and Outputs	Expenditure (p.a.)
Operational Maintenance **(Total $3.15M)**	Customers see frequency of faults and the time to respond as important Reliability	In order to maintain service levels, increased operational maintenance is required to maintain new assets acquired in the third regulatory period, continue to repair breakdowns and increase preventative maintenance to maximise and / or extend assets beyond their useful life.	*Driver: Maintaining Service Levels* South Gippsland Water will: - optimise proactive maintenance regimes to reduce blockages, spills and customer interruptions; - invest in information and technology systems to guide corrective maintenance and avoid breakdowns.	2018/19 - $0.587 2019/20 - $0.667 2020/21 - $0.592 2021/22 - $0.657 2022/23 - $0.646
Strategic Asset Management **(Total $0.66M)**	Planning for future pressures and threats to the region's water and wastewater services is key Planning	To assist to plan for the future effectively South Gippsland Water are building on the ability to utilise low level asset data to predict the point at which asset replacement is needed. Investment in predictive modelling ensures that capital replacement adequately allows for growth.	*Driver: Maintaining Service Levels and Business Efficiency* South Gippsland Water will: - implement key elements of our long term water security strategy; - understand and respond to key growth areas across our region	2018/19 - $0.082 2019/20 - $0.082 2020/21 - $0.332 2021/22 - $0.082 2022/23 - $0.082
Information Technology **(Total $0.29M)**	Customers see frequency of faults and the time to respond as important Customers want safe, reliable water and wastewater services Reliability, Water, Environment	Implementation of new software modules, including Human Resources, OH&S, water quality, network modelling, etc. Extending the Corporation's Wide Area Network capability for greater access use and business efficiency. Greater use of mobile devices, network support and outsourced licences.	*Maintaining Service Levels and Business Efficiency* South Gippsland Water will: - enhance information and technology systems to drive efficiency, monitor and identify when systems fail	2018/19 - $0.203 2019/20 - $0.280 2020/21 - $0.318 2021/22 - $0.358 2022/23 - $0.389
Stakeholder Collaboration and Partnerships **(Total $0.33M)**	Planning for future pressures and threats to the region's water and wastewater services is imperative including collaboration with local partners Planning	A priority for South Gippsland Water is to collaborate with industry bodies, including local councils, to take advantage of innovative solutions in areas such as renewable energy, smart metering and town planning.	*Driver: Innovation and Business Efficiency* South Gippsland Water will: - partner with local organisations to plan for future growth; - identify and plan for regional growth areas.	2018/19 - $0.110 2019/20 - $0.110 2020/21 - $0.035 2021/22 - $0.035 2022/23 - $0.035

Change to expenditure	Customer insight and outcomes	Operational requirement	Primary Business Drivers, Activities and Outputs	Expenditure (p.a.)
Customer Support Programs **(Total $0.25M)**	Customers support delivering to social obligations and contributing towards customer hardship programs Customer integrity	South Gippsland Water recognises that some customers genuinely have difficulty paying their account and proposes to increase the range of customer assistance programs. Additional expenditure is proposed to enhance existing, and add new programs, including, offering flexible payment options, debt elimination schemes, a $ for $ payback arrangement, hardship grants, water efficiency audits and a dedicated support officer.	*Driver: Business Efficiency and Corporate Responsibility* South Gippsland Water will: - provide a range of programs to strengthen our support for customers; - charge the minimum required to maintain service standards expected by customers.	2018/19 - $0.050 2019/20 - $0.050 2020/21 - $0.050 2021/22 - $0.050 2022/23 - $0.050
Catchment Management **(Total $0.25M)**	Customers want safe, reliable water and wastewater services and value investment to protect the environment Environment and Water	South Gippsland Water will utilise effective catchment management strategies to deliver safe, clean drinking water to customers. Additional expenditure is proposed to undertake catchment management improvement projects (e.g specific Landcare initiatives) and seek expertise to advise planning referrals from local Council.	*Driver: Compliance (Department of Health Gippsland [1]) and Safe, clean drinking water* South Gippsland Water will: - improved outcomes in catchment management programs - meet Australian Drinking Water Guidelines.	2018/19 - $0.050 2019/20 - $0.050 2020/21 - $0.050 2021/22 - $0.050 2022/23 - $0.050
Secure Water Supply **(Total $0.33M)**	Customers want safe, reliable water and wastewater services Planning, Water and Reliability	In order to meet future demand, additional operating costs are proposed that minimise water leakage; conduct an annual review of water security and identify future requirements for unserviced towns.	*Driver: Growth* South Gippsland Water will: - implement key elements of our long term water security strategy including, water security improvements for Wonthaggi, Inverloch, Cape Paterson, Korumburra, Poowong, Loch and Nyora; - Invest to ensure reliability of services.	2018/19 - $0.045 2019/20 - $0.095 2020/21 - $0.095 2021/22 - $0.045 2022/23 - $0.045
Lance Creek Operating Costs- Melbourne supply system Bulk Entitlement cost **Total ($0.63)**	Customers want safe, reliable water and wastewater services Water	South Gippsland Water will utilise the Melbourne water supply as a backup on the Lance Creek Water Connection. Additional operating expenses will be incurred to supplement the Poowong, Loch, Nyora and Korumburra townships (2019/20 onwards). This is offset by operational savings from the reduction of maintenance and water treatment activities at Poowong and Korumburra water treatment plants.	*Driver: Business Efficiency* South Gippsland Water will: - Purchase water from the Melbourne Supply System and redirect operational resources associated with Korumburra and Poowong water treatment plants.	2018/19 - $0.027 2019/20 - $0.152 2020/21 - $0.151 2021/22 - $0.151 2022/23 - $0.151

[1] Department of Health and Human Services Guidance for the 2018 Water Price Review, October 2016.

Change to expenditure	Customer insight and outcomes	Operational requirement	Primary Business Drivers, Activities and Outputs	Expenditure (p.a.)
Biosolids **(Total $0.80M)**	Customers value investment in protecting the environment Environment and Wastewater	South Gippsland Water's environmental commitment includes implementing a long-term management plan for biosolids with the objective of alleviating the long-standing stockpiles of biosolids. Additional expenditure is proposed to reduce stockpiles, utilising Gippsland Water's Soil and Organic Recycling Facility.	*Driver: Compliance (EPA[2]) and Environmental Management* South Gippsland Water will: - Invest towards providing services in a sustainable manner through biosolids reuse and reduction program.	2018/19 - $0.160 2019/20 - $0.160 2020/21 - $0.160 2021/22 - $0.160 2022/23 - $0.160
Ecological Risk Assessments **(Total $0.25M)**	Customers value investment into protecting the environment Environment and Wastewater	To understand the effect South Gippsland Water have on the environment and local waterways, a program to investigate and provide evidence of the impact of current, licensed discharges to waterways, will be undertaken.	*Driver: Compliance (EPA) and Environmental Management* South Gippsland Water will: - assess the impact of existing licensed discharges on the receiving environment; - complete an ecological risk assessment for wastewater treatment plant discharges.	2018/19 - $0.050 2019/20 - $0.050 2020/21 - $0.050 2021/22 - $0.050 2022/23 - $0.050
Electricity **(Total $0.23M)**	Customers value investment in protecting the environment Environment	South Gippsland Water will experience increased electricity costs based on forecast wholesale market rates. Current market rates are in excess of the existing contract which expires 30 June 2018. The Corporation will offset this to a certain extent by reduced purchase of electricity resulting from capital investment in behind the meter solar initiatives.	*Driver: Business efficiency* South Gippsland Water will: - install solar panel projects which will provide avings of more than $630K	2018/19 - $0.151 2019/20 - $0.142 2020/21 - $0.015 2021/22 - ($0.037) 2022/23 - ($0.041)
Wage Index **(Total $0.12M)**	N/A	South Gippsland Water will experience higher wage growth (3%) than CPI (estimated as 2.3%) for the next two years, in accordance with the Employee Bargaining Agreement which expires in 2019/20.	*Driver: Compliance*	2018/19 - $0.050 2019/20 - $0.067

[2] Environment Protection Authority Victoria Guidance on Water Pricing Submissions, September 2016.

Several efficiency initiatives were implemented in the third regulatory period as a result of efficiency targets driven by the organisation (and reinforced by Fairer Water Bills). The impact of these initiatives is an annual, ongoing cost avoidance (or efficiency saving) equivalent to $1.4M[3]. These initiatives are characterised as being either procurement related or represent restructured operational service delivery.

Procurement efficiency savings have been achieved by leveraging opportunities to conduct joint procurement activities with other water businesses and government departments. Operational service delivery changes have seen a revision in water and sewerage sampling and testing programs, chemical substitution and insourcing a number of services (weed control and electricity maintenance).

In addition to the sustained impact of these above mentioned efficiency initiatives, South Gippsland Water proposes a 1.5% p.a. operating expenditure efficiency target for the fourth regulatory period. The cumulative impact of this efficiency target equates to $4.60M across the period. It is anticipated that this efficiency target will be met by a number of initiatives, including restructuring operational service delivery, such as increased utilisation of operational staff in the delivery of minor capital works improvements.

Risk

- South Gippsland Water has elected to absorb additional expenditure incurred in prior periods and will only seek pricing relief for proposed operating expenditure in the fourth regularly period.
- The Corporation is taking on the risk of meeting a higher efficiency target, 1.5% p.a.
- The current market electricity prices have been forecast, which manifest in higher customer prices. The Corporation intends to vary these prices once contracts are known.
- The Corporation has factored in higher maintenance costs in order to deliver on customer requirements for maintaining service levels however there is a risk that the aged assets will continue to trend unfavourably resulting in higher operational costs.

[3] Expressed in 2017/18 dollars and assessed as a comparison of the budget proposed in 2017/18 compared with indexed baseline costs from 2012/13.

9. New Customer Contributions

Key Points

South Gippsland Water proposes to implement a uniform NCC for water and sewer, with customers responsible for the installation costs of onsite infrastructure.

9.1. Introduction

From 1 July 2013, the Essential Services Commission (ESC) introduced a principles based New Customer Contribution (NCCs) framework that aims to:

- send signals to developers about the costs of developing in different locations
- share the costs and benefits of growth between new and existing customers
- administer NCCs in a transparent way.

9.2. Proposed NCCs

As a part of the 2017/18 Pricing Determination, the ESC approved South Gippsland Water's Standard NCCs for connections to water (consistent over region) and sewer (Poowong, Loch, Nyora, Alberton and rest of region). The purpose of Standard NCCs is to reduce the administrative burdens as well as improve the timeliness and predictability of costs faced by developers.

In situations where Standard NCCs are not fair and reasonable or where a new connection is outside the areas designated as eligible for Standard NCCs, the NCC framework allows water businesses and developers to negotiate site-specific arrangements that reflect the NCC pricing principles. South Gippsland Water has not, as yet, had to negotiate such arrangements.

Poowong, Loch, Nyora and Alberton are pressurised sewer systems and have higher onsite infrastructure costs as a result. During the third regulatory period, these costs have been passed on via a higher NCC, approximately, $10,000. The current infrastructure only cost for a typical residential pressured sewer connection is in the order of $12,500.

For the fourth regulatory period, the Corporation proposes to vary the above arrangement and establish one standard NCC ($2,246 being the 2017/18 NCC for all non-pressure sewer systems) for wastewater connections across the region. To allow this, the Corporation has separated, as customer responsibility, the onsite pumps, pipes, telemetry, other materials, installation and inspection costs for connecting to pressured sewer systems. This will result in uniform water and sewer NCCs with the customer responsible for all installation costs of onsite infrastructure, refer Section 11.8 for proposed tariffs.

Risk

- The removal of the infrastructure cost component of the NCC passes the risk of potential price variation to the customer.

10. Guaranteed Service Levels

Key Points

South Gippsland Water has reviewed its current Guaranteed Service Level (GSL) Scheme, including payment amounts, in consultation with customers.

There is little change proposed, other than increasing the GSL amount from $75 to $100 for unplanned water and sewer interruptions not restored/rectified within 5 hours.

It is considered that the current GSLs are objective, easily understood by customers and able to be reported upon.

10.1. Introduction

As part of its Pricing Submission Guidance, the Essential Services Commission (ESC) requires each urban water business to propose Guaranteed Service Levels (GSLs) for the regulatory period from 1 July 2018.

10.2. Review of "Guaranteed Service Levy Scheme

South Gippsland Water has reviewed its current GSL scheme, including payment amounts, via a deliberative process with the Pricing Submission Advisory Panel. The question was asked of customers, whether it was important for South Gippsland Water to be accountable for service levels and would Guaranteed Service Levels play a role in this?

The consensus of the group was that accountability is important with respect to services and that "Guaranteed Service Level payments are nice to have, but not expected". South Gippsland Water customer integrity outcome states the Corporation will treat all customer/community with honesty, respect and strive to balance affordability value for money and fairness, and as such, proposes the following GSLs:

Figure 10.1 South Gippsland Water Guaranteed Service Levy Scheme

Service level obligation	*Details*	*Level of service*	*Rebate/payment for breach per customer ($)*
Unplanned water interruptions not restored within five hours	South Gippsland Water will rebate the customer an amount when it fails to restore water supply (within 5 hours of notification) to a customer's property	All	Rebate of $100*
Unplanned sewer interruptions not rectified within 5 hours	South Gippsland Water will rebate the customer an amount when it fails to restore sewer supply (within 5 hours of notification) to a customer's property	All	Rebate of $100*
Sewage spill within a customer's house	South Gippsland Water will pay the customer an amount If it causes a sewage spill within a customer's property. It will also clean up the property and provide alternative accommodation as required	All	Payment of $1,000**

Service level obligation	Details	Level of service	Rebate/payment for breach per customer ($)
Payment difficulty information disclosure	South Gippsland Water will rebate the customer an amount where it restricts the water supply of, or takes 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	All	Rebate of $300***

** Rebate amount increased from $75 to $100*
*** Payment unchanged at $1,000*
**** Rebate amount as currently specified by the ESC ($300)*

There is little change proposed, other than increasing the GSL amount from $75 to $100 for unplanned water and sewer interruptions not restored/rectified within 5 hours. Further, it is considered that the current GSLs are objective, easily understood by customers and able to be reported upon.

Risk

- South Gippsland Water has not budgeted for GSL payments in its operational expenditure. Therefore, the Corporation absorbs the risk of any payments/rebates made.

11. Prices and Tariff Structure

Key Points

South Gippsland Water has undertaken an extensive engagement process where our customers were a key voice in the development of pricing principles and tariffs

Key tariff changes are in line with customer preference for a user pays rationale

Proposed changes are to provide a more equitable tariff structure and alignment with the wider water industry

The proposed tariffs represent a stepped real increase of 8% in the first year of the regulatory period, followed by a real price increase of 3.5% for each successive year.

Customer assistance programs developed to support impacted customers

11.1. Tariff Assessment Pricing Principles

The Water Industry Regulatory Order (WIRO) requires prices to provide a business with a sustainable revenue stream that does not reflect monopoly rents or inefficient expenditure. Prices are set to allow businesses to recover operating and maintenance costs, renewal and replacement costs and a rate of return on existing and future assets. The following section describes how South Gippsland Water has applied specific principles in proposing the tariff structure for the fourth regulatory period. The principles considered are defined in the 2018 Water Price Review Guidance Paper issued by the Essential Services Commission (ESC).

11.2. Economically Sustainable Revenue Base

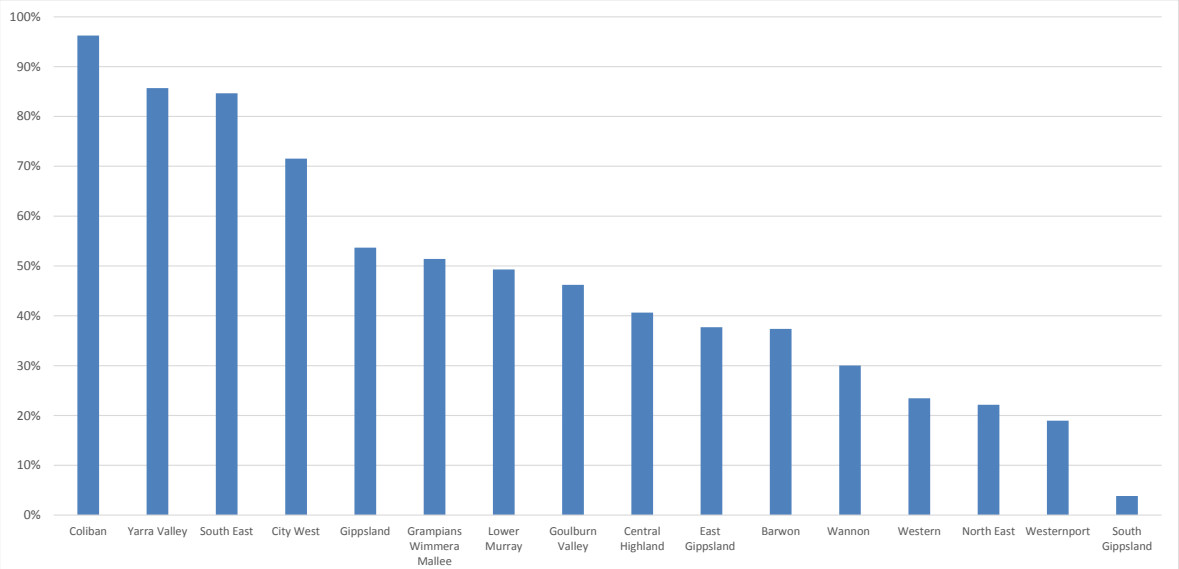
South Gippsland Water has tested service standards and associated tariff structures with customers, whom opted for a quantum of expenditure that would maintain levels of service. Customers also expressed support for ensuring a sound financial position for the Corporation. The proposed tariffs provide a sustainable revenue base for South Gippsland Water, enabling the organisation to meet its objectives in maintaining and replacing current infrastructure and meeting customer outcomes. The tariffs proposed for the fourth regulatory period are presented Section 11.8. The proposed tariffs represent a stepped real increase of 8% in the first year of the regulatory period, followed by a real price increase of 3.5% for each successive year.

The previous decade of South Gippsland Water prices show a real increase of only 4% (Figure 11.1). This is reflective of efforts to keep customer prices low and meeting the need for operational efficiencies, despite real increases in operating costs beyond 4%. Recent years have shown a worsening accounting deficit position, despite the Corporation achieving operating cost efficiencies of more than $1M p.a.

The proposed tariffs for the Pricing Submission allow for a significantly higher level of replacement of existing aged infrastructure enabling the organisation to maintain existing customer service levels. In addition, operating expenditure proposed has increased to allow for activities associated with maximising the life of existing assets. The Pricing Submission is characterised by asset replacement and enhancement initiatives as opposed to the third regulatory period which enabled several significant capital growth initiatives to be deployed, including the sewering of several towns in the region and further connections to the Melbourne water supply (to be completed in 2018/19). This rationale was tested with customers and confirmed in the third phase of the engagement process.

On average, the proposed capital program is significantly higher than the actual expenditure in the third regulatory period. Coupled with increased operating expenditure, a price correction in the first year of the regulatory period is proposed, followed by lower increases in successive years. No further real price increases are anticipated for the fifth regulatory period. The price increases proposed will provide a sustainable revenue base for South Gippsland Water that is comparable with similar sized Victorian water businesses.

Figure 11.1: Real % Increase in Average Residential Tariff - 2007/08 to 2015/16 in 2017/18 prices



Source: ESC Performance Reports

11.3. Customer Focus and Equity

The engagement process for the Pricing Submission was extensive and consulted various customer groups using different engagement methodologies and covering numerous topics. Section 3 provides a detailed overview of the process. Willingness to pay for services was introduced in the first stage of the engagement process and has been a consistent theme throughout the process. Customers confirming they would prefer an increase to tariffs in order for service levels to be maintained. South Gippsland Water's tariffs vary based on the customer needs and use of the services provided. An overview of the customer groups are as follows.

Residential customers

A residential property is defined as one that is provided for domestic purposes and includes houses, flats, units, townhouses, rural residences or any other properties that have similar usage patterns to a domestic dwelling.

Business customers

A business is defined by several sub-groups including Major Customers, Agreement, Concessional (not-for-profit) and non-residential (all other non-domestic properties). Descriptions and examples are provided as follows.

- **Major Customers** are businesses that account for a large amount of the water and wastewater services supplied.
- **Concessional** customers can be broadly defined as properties to which the public has free access and is not being operated for any private profit. This includes schools, community facilities, churches, sporting grounds and parks.
- **Agreement** customers receive water from various sources where the quality or reliability of service is not guaranteed. These customers may or may not receive wastewater services.

South Gippsland Water has agreements with these properties which specify the conditions under which the water is supplied and are currently charged at a lower water access tariff.

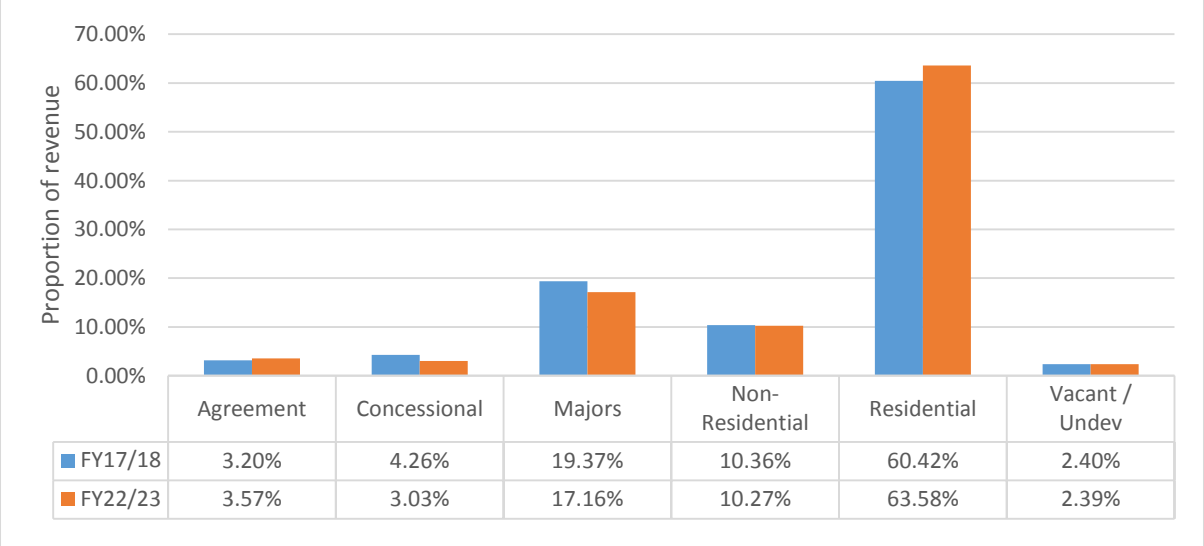
- **Non-residential** customers include all other businesses, generally established for some commercial reason.

Vacant land customers

Customers with vacant land, or undeveloped properties, are considered as a separate class due to the lower use of water and wastewater services available. In theory, this customer group place a lower burden on infrastructure due to no water usage and/or discharged waste and are therefore charged a lower tariff.

The following graph provides an overview of the revenue contributed for each customer type. Note that major customers have declined as a proportion of the revenue base due to commercial contracts that exist for significant trade waste customers (CPI increases only).

Figure 11.2 Revenue Contribution



	Agreement	Concessional	Majors	Non-Residential	Residential	Vacant / Undev
FY17/18	3.20%	4.26%	19.37%	10.36%	60.42%	2.40%
FY22/23	3.57%	3.03%	17.16%	10.27%	63.58%	2.39%

11.4. Tariff Engagement and Themes

The initial stage of the customer engagement process explored where South Gippsland Water expenditure should be focused. Customers indicated there was no one area of the organisation where reduced investment was supported. Key themes from customer engagement (and our response) regarding tariffs are described in the following table.

Figure 11.3 Customer engagement themes and pricing responses

Customer theme	Pricing response
Customers expect South Gippsland Water to maintain current service levels.	The Corporation has increased prices over the last decade, in real terms, by a total of only 4%. In order to maintain service levels with the current state of aging assets a price correction is proposed in 2018/19 of 8%, followed by 3.5% p.a. until 2022/23.
Customers favour a higher price increase in the first year of the fourth regulatory period which allows a lower end position for loans by 2022/23.	
Real price increases in any given year should be kept below 10%.	
Valuing water as a scarce commodity: The variable unit rate for water and the use of water restrictions can be used interchangeably to ensure that water is used wisely in the community.	The Corporation proposes to increase the variable proportion of a customers' bill by 4%. Currently estimated as 48% of the total water revenue (for all customers). This will result in the majority of water revenue being variable in nature which supports strategies to reduce pressure on increased demand for water. Customers see more reward for their efforts to reduce their water use. Consistent with industry accepted price elasticity of demand assumptions[4], this initiative will reduce residential water demand which has been allowed for when evaluating tariffs overall. This matter is explored further in Section 5 on Demand.
Having control over your bill: Increasing the ratio of variable prices (e.g. water volumetric) to fixed prices (e.g. water and sewer service fees) provides customers with more control over their bill.	
Changes in volumetric pricing should be tempered to ensure that vulnerable customers are not disadvantaged (e.g. large families, tenants, concession card holders, etc.).	
Customers support the principle of removing fixed cistern fees and replacing these with a user pays volumetric wastewater charge.	The Corporation proposes to implement a revised pricing model for cistern and minor trade waste fees during the fourth regulatory period. An extensive consultation process will be conducted with business customers and is intended to distribute costs according to use.

[4] Abrams, B., Kumaradevan, S., Sarafidis, V. and Spaninks, F. (2011) *The residential price elasticity of demand for water,* Joint Research Study, Sydney, February.

11.5. Tariff Structure and Assessment of Fixed and Variable Costs

The major categories of tariffs that South Gippsland Water will apply over the fourth regulatory period are described in the following table.

Figure 11.4 Tariff categories and changes

Tariff descriptor	Current composition	Proposed change
Retail water	A two-part tariff comprising a fixed access fee and a variable volumetric per kilolitre rate.	Two-part tariff with an increase in the volumetric per kilolitre rate and relative reduction in the access fee.
Retail wastewater Sewer access fee Cistern fee	Residential customers: a single fixed access fee. Business customers: a fixed access fee (sewer or cistern) and a volumetric cistern variable fee.	No change to residential customers. For non-residential customers, fixed access fees will match residential customers. Higher water users (with corresponding high discharge volumes) will pay a variable wastewater volumetric fee.
Trade waste Trade waste access fee Volumetric load fee	Applies to business customers only. A two-part tariff comprising a fixed access fee and a variable volumetric per kilolitre rate. Penalty fees also apply.	Introduce a discounted fixed access fee for deemed trade waste customers. Increase the unit rate to align with the new wastewater volumetric fee such that only one of these fees (the higher of) will apply to the customer. Apply alternate annual bypass and penalty fees to customers that do not abide by trade waste disposal requirements.*
Recycled water	A single variable volumetric per kilolitre rate applies.	No change proposed.
New customer contributions	A fixed contribution applies for both water and sewer connections. The sewer connection fee is higher for all pressure sewer connections.	No change proposed.
Miscellaneous fees and cost recovery services	Fees are charged on fixed, cost recovery basis with the exception of a variable kL rate for Standpipes.	No change proposed.

* Note: Refer section 11.8 Tariff Schedule, 1.6 New Charges Proposed: Asset Protection Fee, Treatment Violation Fee. Discounted tariff rate for 'Deemed' customers.

Tariff structures proposed are a direct result of the engagement process and represent a greater alignment towards the proportion of direct and indirect operating costs for the provision of water and wastewater services. Approximately 38% of operating costs for water and wastewater are direct (and vary with levels of production). The variable component of revenue is currently 33% which will increase to 37% over the fourth regulatory period. This increase is a result of a higher volumetric component of the water tariff and the replacement of what was largely a fixed cistern charge with a variable wastewater fee.

Challenges still remain for the Corporation (and the industry) in aligning direct wastewater costs (marginal costs of production) to variable revenue. The pricing structure for wastewater is therefore largely fixed (with the exception of existing cistern volumetric fees). It is for this reason that a discount to the fixed rate for sewer access for vacant properties has been applied in the past and will remain.

The proposed change to remove cistern fee charges and implement a wastewater volumetric charge will attribute costs to high water users which significantly improves equity to the customer overall. Engagement with respect to key pricing principles has been a result of customer feedback. A further extensive consultation process will be conducted over the next two years to ensure that measures are taken to identify the relationship between water use and wastewater discharge for an individual customer and ensure the principle of 'user pays' is applied equitably.

11.6. Subsidy Free Pricing and Locational Pricing

The proposed tariff structure for South Gippsland Water further standardises the rates across customer groups. Regulatory period three addressed uniform water tariffs across all townships, bringing these into alignment which is consistent with the approach for wastewater tariffs. In addition to the proposed changes in Section 11.4 of the Pricing Submission seeks to:

- Remove the current water access tariff concessions provided to charities and not-for-profits (State Revenue Office discount remains);
- Remove the current water access tariff discount provided to Water by Agreement customers;
- Provide increased support to vulnerable customers by delivering a more comprehensive Customer Assistance Program;
- Align major customer variable water fees with the uniform rate.

The decision to replace concessions and increase funding to a broader based assistance program is designed to ensure that we focus on those customers who genuinely require assistance. Impact to concessional customers is therefore mitigated, as those who continue to require assistance will be able to obtain it through our assistance program.

11.7. Consideration of customer impact

Careful consideration has been given to the impact that will be felt by the various customer groups, with regard to the proposed tariff changes. Price impacts will be managed with additional support provided by way of the customer hardship programs (refer Section 8.1).

The following analysis provides an overview of the impact to customers of proposed changes to water and wastewater tariffs (excluding the proposed cistern and minor trade waste changes). A breakdown is provided, by customer group and is expressed in nominal dollars (including inflation assumed to be 2.3% p.a.) and in real terms. Assumptions have been made with regard to volumes consumed, attempting to represent at least 80% of the customers within the respective group.

In order to illustrate the volume assumptions made, the table below provides an overview of customer groups and the average consumption thresholds. This analysis was undertaken for the calendar year 2016 and excludes major customers.

Figure 11.5 Customer Groups & Consumption

Customer Type / Consumption threshold (kL p.a.)	Under 100 kL	Between 100-200 kL	Between 200-350 kL	Between 350-500 kL	Between 500 - 1,000 kL	Between 1,000 - 5,000 kL	Between 5,000 - 10,000 kL	> 10,000 kL	Total
Residential									
Average annual Water Usage	47	143	251	407	637	1,967			**113**
Number of Customers	10,007	5,398	2,229	350	123	16			**18,123**
Non-Residential									
Average annual Water Usage	35	143	263	414	694	2,002	6,534	11,901	**330**
Number of Customers	908	314	227	109	114	124	6	4	**1,806**
Concessional									
Average annual Water Usage	39	143	267	413	693	2,224	6,326	11,435	**405**
Number of Customers	306	105	53	25	44	42	6	2	**583**
Agreement									
Average annual Water Usage	50	152	264	415	706	2,025	6,313	13,574	**818**
Number of Customers	104	101	95	41	53	81	11	5	**491**
Total Customers									
Average annual Water Usage	45	143	253	409	675	2,042	6,374	12,576	**156**
Number of Customers	11,325	5,918	2,604	525	334	263	23	11	**21,003**

Tariff impact for residential customers

The following table shows the price impact in nominal dollars for residential customers, firstly assuming the average water consumption for South Gippsland Water and secondly, assuming consumption that is more representative of a family, i.e. a 3-4 person household. In summary, by the end of regulatory period four:

- Residential customers will, on average, pay $367 more than they are currently which contains a real price increase of $222 (23%).
- Higher use residential customers, are likely to pay $438 more than they are currently which contains a real price increase of $270 (24%).
- Tenants (a subset of residential customers) will pay $175 more than they are currently which contains a real price increase of $118 (33%).

Note, that the impact to residential customers (or lower water consumers) has been lessened by the increase in the volumetric component overall which has distributed higher cost to higher volume users.

Figure 11.6 Tariff Impact Residential Customers

Customer impact	FY17/18	FY18/19	FY19/20	FY20/21	FY21/22	FY22/23
Residential - average bill (118 kL p.a.)						
Nominal price	$978	$1,073	$1,135	$1,201	$1,271	$1,344
Real price	$978	$1,049	$1,085	$1,122	$1,160	$1,200
Real price increase per year ($)	-	$71	$36	$37	$38	$40
Real price increase per year (%)	-	7.3%	3.4%	3.4%	3.4%	3.4%
Residential - 200 kL p.a.						
Nominal price	$1,124	$1,247	$1,320	$1,396	$1,477	$1,563
Real price	$1,124	$1,219	$1,261	$1,304	$1,349	$1,395
Real price increase per year ($)	-	$95	$42	$43	$45	$46
Real price increase per year (%)	-	8.4%	3.4%	3.4%	3.4%	3.4%
Tenants - 200 kL p.a.						
Nominal price	$358	$425	$450	$476	$504	$533
Real price	$358	$416	$430	$445	$460	$476
Real price increase per year ($)	-	$58	$14	$15	$15	$16
Real price increase per year (%)	-	16.1%	3.4%	3.4%	3.4%	3.4%

Tariff impact for business customers

The following table shows the price impact in nominal dollars for business customers, assuming annual water consumption that is representative of at least 80% of the customer base. Higher (or lower) use customers will be impacted by more (or less) based on the applicable per kL rate for water consumption. In summary, by the end of regulatory period four:

- Non-residential customers will, on average, pay $482 more than they are currently which contains a real price increase of $300 (25%).
- Concessional customers will, on average, pay $454 more than they are currently which contains a real price increase of $300 (31%). Note, that the real price increase is the same as for non-residential customers, despite lower consumption, due to removal of the fixed fee discount.
- Agreement customers will, on average, pay $905 more than they are currently which contains a real price increase of $594 (30%).

Figure 11.7 Tariff Impact Business Customers

Customer impact	FY17/18	FY18/19	FY19/20	FY20/21	FY21/22	FY22/23
Non-residential - 250 kL p.a.						
Nominal price	$1,214	$1,354	$1,432	$1,515	$1,603	$1,696
Real price	$1,214	$1,323	$1,368	$1,415	$1,464	$1,514
Real price increase per year ($)	-	$109	$45	$47	$48	$50
Real price increase per year (%)	-	9.0%	3.4%	3.4%	3.4%	3.4%
Concessional - 150 kL p.a.						
Nominal price	$975	$1,141	$1,207	$1,277	$1,351	$1,430
Real price	$975	$1,115	$1,153	$1,193	$1,234	$1,276
Real price increase per year ($)	-	$140	$38	$39	$41	$42
Real price increase per year (%)	-	14.3%	3.4%	3.4%	3.4%	3.4%
Agreement - 700 kL p.a.						
Nominal price	$1,989	$2,310	$2,444	$2,586	$2,736	$2,895
Real price	$1,989	$2,258	$2,336	$2,415	$2,498	$2,584
Real price increase per year ($)	-	$269	$77	$80	$83	$85
Real price increase per year (%)	-	13.5%	3.4%	3.4%	3.4%	3.4%

Consideration has been given to the impact of price increases to larger business water users (major customers). Major customers will experience a significant increase in water usage fees due to the increase in the unit rate. A decision has been made to standardise the unit rate for all major customers. This approach restricts the impact to major customers to a maximum of $186,000 in real terms over the fourth regulatory period.

Tariff impact for vacant land customers

The following table shows the price impact in nominal dollars for vacant land customers, for which, the basis of charges are fixed fees only.

Vacant land customers will, on average, pay $216 more than they are currently which contains a real price increase of $136 (25%).

Figure 11.8 Tariff Impact Vacant Land Customers

Customer impact	FY17/18	FY18/19	FY19/20	FY20/21	FY21/22	FY22/23
Vacant land (undeveloped properties)						
Nominal price	$534	$599	$634	$670	$709	$750
Real price	$534	$585	$605	$626	$648	$670
Real price increase per year ($)	-	$51	$20	$21	$21	$22
Real price increase per year (%)	-	9.6%	3.4%	3.4%	3.4%	3.4%

11.8. Tariff Schedule

Tariffs are expressed in 2017/18 $	Frequency of charge	Price as at 1 July 2017	*Proposed 1 July 2018*	*Proposed 1 July 2019*	*Proposed 1 July 2020*	*Proposed 1 July 2021*	*Proposed 1 July 2022*
1.1 Water access fees (per annum)							
Access fee – Developed	Tri-annual	300.30	301.56	312.11	323.03	334.34	346.04
Access fee – Undeveloped	Tri-annual	300.30	301.56	312.11	323.03	334.34	346.04
Access fee – Agreements	Tri-annual	270.30	301.56	312.11	323.03	334.34	346.04
Access fee – Concessional	Tri-annual	240.90	301.56	312.11	323.03	334.34	346.04
1.2 Water usage charges (per kL)							
Volumetric fee – Murray Goulburn	Monthly	2.17	2.17	2.17	2.28	2.36	2.44
Volumetric fee – Other Majors	Monthly	1.79	2.13	2.20	2.28	2.36	2.44
Volumetric fee – All others	Tri-annual	1.79	2.13	2.20	2.28	2.36	2.44
1.3 Sewerage access fees (per annum)							
Residential and non-residential							
Access fee – Developed	Tri-annual	466.05	503.33	520.95	539.18	558.06	577.59
Access fee – Undeveloped	Tri-annual	263.70	284.80	294.76	305.08	315.76	326.81
1.4 Cistern access fees (per annum)							
1-2 Cisterns	Tri-annual	158.70	171.40	177.40	-	-	-
3-5 Cisterns	Tri-annual	417.45	450.85	466.63	-	-	-
6-10 Cisterns	Tri-annual	808.35	873.02	903.57	-	-	-
11-15 Cisterns	Tri-annual	1,294.35	1,397.90	1,446.82	-	-	-
16-20 Cisterns	Tri-annual	2,158.20	2,330.86	2,412.44	-	-	-
21-26 Cisterns	Tri-annual	3,088.95	3,336.07	3,452.83	-	-	-
27-35 Cisterns	Tri-annual	3,786.15	4,089.04	4,232.16	-	-	-
36–Greater Cisterns	Tri-annual	4,326.30	4,672.40	4,835.94	-	-	-
Volume Charge – (per kL)							
Volume Charge	Tri-annual	1.7900	1.93	2.00	-	-	-
1.5 Waste Water volumetric							
> 250 kl per annum (per kl fee based on water consumption)	Tri-annual	-	-	-	3.00	3.00	3.00
1.6 Minor trade waste fees							
Application fees (per application)							
Category 1	Tri-annual	124.59	127.24	127.24	127.24	127.24	127.24
Category 2	Tri-annual	198.63	202.86	202.86	202.86	202.86	202.86
Category 3	Tri-annual	364.08	371.82	371.82	371.82	371.82	371.82
Access fees (per annum)							
Access fee – Deemed Customer	Tri-annual	644.10	591.28	611.98	633.40	655.57	678.51
Access fee – Category 1	Tri-annual	644.10	695.63	719.97	745.17	771.26	798.25
Access fee – Category 2	Tri-annual	855.60	924.05	956.39	989.86	1,024.51	1,060.37
Access fee – Category 3	Tri-annual	1,061.40	1,146.31	1,186.43	1,227.96	1,270.94	1,315.42
Volumetric fees (per kL)							
All Categories	Tri-annual	0.8555	0.9239	0.9563	0.9897	1.0244	1.0602
Quality fees (per kg)							
BOD	Tri-annual	0.7148	0.7300	0.7455	0.7613	0.7775	0.7940
SS	Tri-annual	0.6739	0.6882	0.7029	0.7178	0.7331	0.7486
Nitogen	Tri-annual	3.0187	3.0829	3.1484	3.2154	3.2837	3.3535
Phosphorus	Tri-annual	17.1977	17.5632	17.9366	18.3179	18.7072	19.1049
Additional sampling (per sample)							
All Categories	Per occasion	At cost	At cost	At cost	At cost	At cost	At cost
Exceedence fees (per kg)							
Oil & Grease	Per occasion	0.1077	0.1100	0.1123	0.1147	0.1172	0.1197
Sodium	Per occasion	0.1077	0.1100	0.1123	0.1147	0.1172	0.1197
TOS	Per occasion	0.7705	0.7869	0.8036	0.8207	0.8381	0.8559

Tariff Schedule Continued

Tariffs are expressed in 2017/18 $	Frequency of charge	Price as at 1 July 2017	*Proposed 1 July 2018*	*Proposed 1 July 2019*	*Proposed 1 July 2020*	*Proposed 1 July 2021*	*Proposed 1 July 2022*
Asset protection fee *Alternate annual fee available to customers that do not elect to install a grease trap (cost prohibitive).*	Per annum	1,460.96	1,492.02	1,523.73	1,556.12	1,589.20	1,622.98
Treatment violation fee *Fee imposed for customers that do not fill in a trade waste application; or do not maintain their pre-treatment apparatus (e.g. do not pump out their grease trap.)*	Per occasion	299.51	305.88	312.38	319.02	325.80	332.73
1.7 New customer contributions (per lot)							
Water & Sewer (all customers)		2,246.00	2,246.00	2,246.00	2,246.00	2,246.00	2,246.00
Sewer (Poowong Loch & Nyora)		10,212.00	-	-	-	-	-
Sewer (Alberton)							
with dwelling		11,061.00	-	-	-	-	-
vacant lot		5,530.00	-	-	-	-	-
1.8 Miscellaneous fees and charges							
Property information statements *Fee imposed for providing a certificate issued in accordance with Section 158 of the, Water Act 1989.*		50.85	57.00	57.00	57.00	57.00	57.00
Special meter readings *Fee imposed for providing a certificate which indicates water usage charges up to a specified date. Generally provided, on application, for property sales.*		25.95	43.00	43.00	43.00	43.00	43.00
As constructed charge *As constructed charge*		70.21	71.70	73.23	74.78	76.37	78.00
20mm Tapping Fee *Fee imposed for meter and labour associated in providing a tapping to the water main.*		386.50	386.50	386.50	386.50	386.50	386.50
Plumbing Industry Commission (PIC) Fee *Fee imposed for providing sewer plans and processing applications to connect or modify plumbing.*		217.00	217.00	217.00	217.00	217.00	217.00
Standpipe Water Sales (per kL) *Fee imposed for the sale of water via a metered standpipe.*							
- Registered Users		5.79	6.25	6.47	6.70	6.93	7.18
- Unregistered Users		7.72	8.34	8.63	8.93	9.24	9.57
Septic Tank Waste Receival (per kL) *Fee imposed on septic tank waste carters, for the disposing of sewage and/or other acceptable waste.*		26.45	27.01	27.59	28.17	28.77	29.39
Non Core Miscellaneous Services *Non core miscellaneous services*		At cost	At cost	At cost	At cost	At cost	At cost

12. Form of Price Control

Key Points

South Gippsland Water proposes to maintain the individual price caps form of control over the majority of its services.

It is proposed that a revenue cap be applied to the combination of services known as cisterns and minor trade waste (excludes major trade waste customers) due to a mid-period reform of tariffs

12.1. Introduction

The Water Industry Regulatory Order (WIRO) provides the Essential Services Commission (ESC) with the flexibility to approve individual prices or the manner for determining prices. Several forms of price control are used in Victoria, but individual price caps are the most common. South Gippsland Water currently utilises this form of price control.

12.2. WIRO Requirements

South Gippsland Water proposes to employ a hybrid form of price control with a revenue cap for the services known as cisterns and minor trade waste (excludes major trade waste customers) and individual price caps for the remainder of its services.

The revenue cap approach is proposed due to a mid-period review of these tariffs that will result in reduced service charges and a higher volumetric rate. That is more emphasis on user pays. The restructure may result in significant customer behavioral change impacting on the volume of wastewater discharge by these customers, in turn impacting revenue to the Corporation. The use of a revenue cap will allow South Gippsland Water to manage the response to price reform of this group on customers against the need to ensure sustainable revenue flows that reflect the impact on the costs of the Corporation. It will also allow the Corporation to phase in customer price impacts, favourable and unfavourable, over a period of time.

It is believed that the proposed form of price control meets WIRO requirements as it:

- Provides incentives to align price structures with underlying costs;
- The revenue cap approach provides opportunities to manage large price impacts;
- Manages and allocates demand and supply risk efficiently with risks allocated to the party best placed to manage them; and
- Minimises administrative complexity, cost and intrusiveness

12.3. Key Issues Considered

The Corporation's Pricing Submission Advisory Panel was taken through the Building Blocks model as an introduction to the regulatory framework. Discussion ensued regarding a number of matters, including cross subsidies, customer equity, volumetric versus fixed tariff issues, and cistern and trade waste services. The Advisory Panel supported a shift to a higher volumetric emphasis (user pays) and the restructuring of cistern and minor trade waste tariffs.

South Gippsland Water has taken the Advisory Panel's views into account, and in terms cisterns and minor trade waste, has undertaken to test a tariff restructure to the relevant customer demographic for further engagement. It is at this time that the Corporation will test the revenue cap form of price control, among other issues, as proposed.

A summary of salient considerations are detailed below.

Figure 12.1 Risk management and other considerations

Service and Form of Price Control	Risk Management	Other Considerations
Cistern and minor trade waste *(Revenue Cap)*	Incentivises customers to manage wastewater volumes and loadings Potential financial impact to Corporation to be managed by revenue cap form of price control Demand risk allocated to customers due to unknown impacts of higher emphasis on volumetric component No supply risks	Engagement has indicated that customers do not easily understand the rationale for cistern pricing, i.e. high fixed charges based on potential to contribute to wastewater volumes. They have a strong preference for user pays principles including lower fixed charges Detailed customer engagement to be undertaken (2018) on implementation (2020) of a 2 part tariff with emphasis on the volumetric component Implementation of 2 part tariff to replace cistern and minor trade waste services effective 1 July 2020 A 3 year transition plan developed to phase in price impacts (favourable and unfavourable) A revenue cap approach will require annual ESC approval but will relate to only a few services
All other services *(Individual Price Caps)*	Supply and demand risk allocated to the Corporation as has historically been the case Revenue composition between service charges and variable tariffs balances business needs for sustainable revenue and customer needs for control over their tariffs	No change to the form of price control for these services Strong customer understanding of current form of price control and general acceptance of balance between fixed and usage charges Price impacts are not as a result of change of form of price control and therefore no transition plan required Proven administrative simplicity