

PLANNING FOR THE FUTURE




South
Gippsland Water

Price Submission 2020–2023



CONTENTS

1	EXECUTIVE SUMMARY	1
2	2018 PERFORMANCE AND 2020 POSITION	3
2.1	2018 Position and Performance	3
2.2	2020 Position	4
3	PREMO - ENGAGEMENT	5
3.1	Diving Deeper	8
3.2	Building Learning into our Plan	9
3.3	Testing the Plan	11
4	PREMO - OUTCOMES	12
5	GUARANTEED SERVICE LEVELS	17
6	PREMO - MANAGEMENT	19
6.1	Demand	19
6.2	Operational Expenditure	25
6.3	Capital Expenditure	33
7	PRICE AND TARIFF	46
7.1	Price Control	46
7.2	Tariff Structure	47
7.3	New Customer Contributions	50
8	REVENUE REQUIREMENT	52
8.1	Revenue Requirement	52
8.2	Forecast regulatory asset base	53
8.3	Tax	53
9	FINANCIAL POSITION	54
9.1	Sustainable Strategic Direction Review	54
10	PREMO - RISK	56
10.1	Risk Management Process	56
10.2	Inflow Risk	57
10.3	Demand and Growth Forecasts	59
10.4	Operational Risks	60
10.5	Capital Expenditure	60
10.6	Tariff Structures and Price as a Control Mechanism	60
10.7	Efficiency and Productivity	60
10.8	Guaranteed Service Levels	61
10.9	Regulatory and Policy Risk	61
11	PREMO RATING	62
12	APPENDICES	65
12.1	Appendix A: Supporting documentation	65
12.2	Appendix B: Proposed tariffs 2020/21 to 2022/23	66



ATTESTATION

As at 7 November 2019, 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 2020 Price Review:

- information and documentation provided in the Price Submission and relied upon to support South Gippsland Water's Price Submission is reasonably based, complete and accurate in all material respects;
- financial and demand forecasts are South Gippsland Water's best estimates, and supporting information is available to justify the assumptions and methodologies used; and
- the price submission satisfies the requirements of the 2020 Price Review Guidance paper issued by the Essential Services Commission in all material respects.



1 Executive summary

This Price Submission aims to build on the outcomes from the 2018 Price Determination. A customer engagement program was designed and delivered with a view to validating Customer Outcomes developed in 2018 and to inform the key imperatives to be delivered for the period 2020/21 – 2023/24 (PS2020).

PS2020 provides a solution that is consistent with customer and shareholder expectations for South Gippsland Water. Strong customer desire to maintain service levels has remained consistent during the process. As such, the proposed capital program and operating costs, have not varied significantly from 2018.

South Gippsland Water is proposing to adopt an annual increase and price path of 5%, 2% and 2% consistent with meeting Customer Outcomes and in line with customer preference for price escalation. Increased baseline expenditure has resulted in the requirement for this moderate price increase during the Price Submission period.

During 2018, the customer engagement process identified that maintaining service levels is important to customers and that they supported an increased investment in renewing aging infrastructure. South Gippsland Water has progressed programs to ensure water security within the region and infrastructure renewal over the past two years. These new services funded by customers (including new sewer schemes) and water security for the region have increased the operating costs of the business.

In consultation with the shareholder and in the interests of ensuring customer affordability, price increases were not passed onto customers in 2018/19 and 2019/20 while projects have been funded by increased debt to the business. Over the two-year period, the Corporation has completed a range of activities to further understand the expectations of our stakeholders, to confirm future investment needs and to validate the financial health of the business.

South Gippsland Water has sought to mitigate price increases to customers throughout this submission. Allocation of risk has been assigned to the Corporation wherever possible and demonstrated through the 'just in time' rationale for the Capital Program made possible by our increased understanding of asset conditions. Further risk mitigation is evident through demand forecasting and operating expenditure efficiency and cost absorption.

Existing Customer Outcomes, Measures and Targets have been reviewed in consultation with customers and have largely been confirmed as being appropriate for PS2020.

The process has resulted in five key Customer Outcomes being:

- *Reliability*
- *Safe, clean drinking water*
- *Wastewater services that contribute to liveability*
- *Environmental sustainability*
- *Treating customers with integrity*

A sound demand for the Corporation's services has been assumed. Customer growth estimates were increased to align with government forecasts and to reflect medium and long term trends as appropriate. With respect to major customers, the Corporation has taken on demand risk in terms of future estimates of increased consumption.

The proposed capital program of \$41.0M for the three years is \$2.4M below the indicative forecasts from the 2018 Price Review. Reductions in the capital program have been identified by taking a risk based approach to project prioritisation with a number of projects now deferred. Asset condition assessment works completed during 2019 have enabled a higher degree of confidence regarding future asset renewals. This has been balanced with performance indicator trends, ensuring that an appropriate level of risk is borne by the business.

An increase in operating expenditure in the base year has been driven by programs implemented over the past two years in order to achieve water security for some 60% of customers, and workplace health and safety initiatives.

The baseline operating expenditure closely aligns with PS2018 approved expenditure and will result in a declining operating cost per connection over the regulatory period, with a number of cost pressures to be absorbed by the business.

South Gippsland Water has sought to understand and identify further efficiencies in operating expenditure by conducting a process of industry analysis and benchmarking against peer organisations. The Corporations' cost distribution is broadly similar to the industry. Detailed results found overall efficiency, and differences generally symptomatic of a diverse and disparate service area, comprising many small, localised water and wastewater systems. An annual operating expenditure efficiency rate of 1% has been proposed for PS2020.

The Corporation proposes maintaining the existing individual price caps form of price control, and the existing structure of water and wastewater (including trade waste) tariffs. This is largely in response to the need to manage price impacts over various customer demographics.

South Gippsland Water is working with the Department, Environment, Land Water and Planning and water corporations within the wider Gippsland Region to identify collaborative operating models that would assist in delivering affordable, high quality services to customers and position the business for the medium/long term future.

This Price Submission has been developed to satisfy a Standard PREMO rating and strives to achieve a balance between price, service and being sustainable into the future, as defined by our customers. The capital and operating requirements to deliver customer expectations for long-term reliable and secure services is detailed in the submission. The balance has been tested with customers who have been consistent in confirming a preference for a submission with investment in infrastructure in order to maintain levels of service and to ensure a sound financial position for the corporation.

2 2018 Performance and 2020 Position

2.1 2018 Position and Performance

In developing South Gippsland Water's 2018 Price Determination, a comprehensive engagement process was completed with the aim of understanding what our customer's value most. South Gippsland Water spoke to customers in depth about the balance between price and services. Key customer principles were established and reflected in the 2018 Price Determination and included the following:

- *Planning for the future is key and planning for a medium level of climate change is considered prudent*
- *South Gippsland Water should go 'above and beyond' to avoid leaks and interruptions*
- *It is expected South Gippsland Water will maintain service standards; customers support increased investment into ageing infrastructure to ensure this*
- *There is support for delivering to social equity and contributing to social hardship programs*
- *Customers believe a higher volumetric component of their bill could provide greater control and support such a change, while recognising the need to balance the impact it will have on vulnerable customer groups*
- *Customers value protecting the environment and support the proposed investment in this area*

With customers and community at the forefront of our 2018 Price Determination, a program was developed that reflected their support for a capital and operational plan which delivered on addressing ageing infrastructure, and investment in order to maintain levels of service while balancing the financial sustainability of the Corporation.

In their 2018 Price Determination¹, the Essential Services Commission articulated price support for the majority of the initiatives and provided for a two year regulatory period to allow the Corporation the opportunity to develop further understanding of the Corporation's position and requirements when responding to customer needs.

As a result of shareholder concerns with respect to affordability, South Gippsland Water did not take up an approximate 9% real price increase.

1 2018 - 2023 South Gippsland Water Price Determination

Over the past two years the Corporation has been delivering on the agreed projects and programs to meet these Customer Outcomes, but funded by debt, and with no tariff increase above CPI. South Gippsland Water’s performance against Customer Outcomes are underpinned by a number of quantitative measures and targets. Performance for 2018/19² is listed in the scorecard below.



Figure 1: South Gippsland Water 2018/19 Customer Scorecard

2.2 2020 Position

South Gippsland Water's Price Submission for the years 2019/20 – 2022/23 is effectively an extension of the 2018 Submission. In developing PS2020 the Corporation has:

- Tested what we heard in 2018 to further understand what customers and communities value
- Completed a robust analysis of the operating and capital expenditure and resources required to meet customer needs
- Developed a Submission that provides a balance between price, service and being sustainable in to the future

3 PREMO - Engagement

AT A GLANCE

- Customer engagement completed for PS2020 was built on the learnings of the 2018 engagement process
- Focus areas included the customer perspective of the balance between price, service and being sustainable into the future
- A dedicated program to engage with vulnerable customers was completed
- Key findings from the engagement process are consistent with what we heard in 2018
- Customers support increased investment in order to maintain services
- PS2020 has been tested with customers, and reflects what our customers have said they value and expect

Engagement Process and Reach

South Gippsland Water conducts a range of ongoing programs in order to understand its customers and their communities.

Building on the 2018 Price Submission engagement process and what we learned, South Gippsland Water's PS2020 engagement process was designed to further understand and test customer and community views and preferences.

Based on a key problem statement, South Gippsland Water engaged with customers to assist in "finding the balance between delivering on customer expectations, the prices we charge and being sustainable into the future".

To ensure an independent voice was present in the conversations and to maximise opportunity for participation, independent research companies assisted in the development and delivery of engagement programs.

The engagement program sought to provide further insight on what customer's value about South Gippsland Water and whether the proposed capital and operational programs would deliver on customer expectations. Key principles for engagement were developed with Executive and Board involvement in order to guide the process. The PS2020 engagement process introduced consideration of the Corporation's current environment with respect to pricing, service and business sustainability and was delivered in three stages:

- Testing what we heard in 2018
- Further analysis including direct conversations with representative customer groups and stakeholders to ensure their voices and values were reflected
- Testing of the findings to ensure key themes identified have been understood and included in the submission

The program was developed utilising IAP2 principles topics and programs as detailed in the table below.

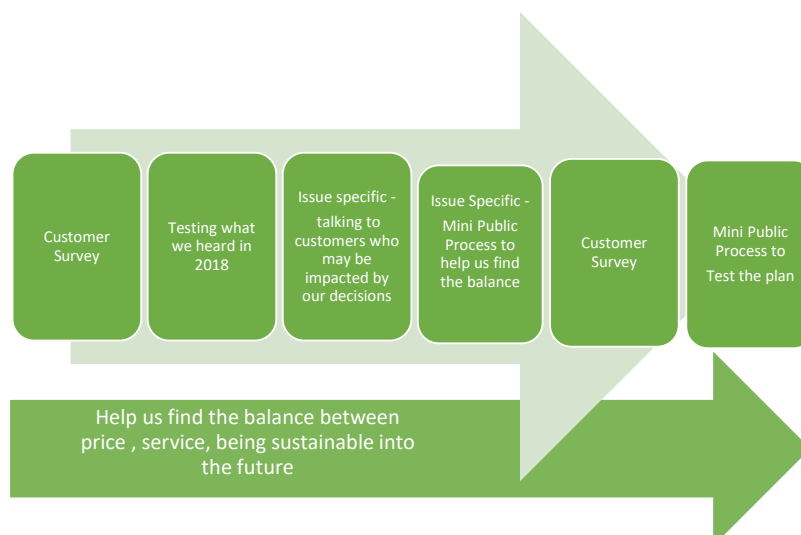


Figure 2: PS2020 Key engagement activities

Table 1: PS2020 Engagement Stages and Program

Stage	Program	Focus	Promotion
General Information	Ongoing	Awareness of Price Submission process and content	Customer Newsletter Print and electronic media Community Sessions
Testing areas that may alter within the Price Submission	Telephone Survey Print and electronic media	Investment to maintain Services Standards Environmental programs Customer Outcomes	General media distribution Online access and opportunity to comment
Diving Deeper	Qualitative Study of SGW's Vulnerable and Disadvantaged customers	Analysis and understanding of demographic cohort Needs and values analysis Bill impact and service needs Support assistance and areas for improvement	Opportunity to participate promoted widely Online access and opportunity to comment
	Mini Public Deliberative Process	Customer Outcomes Price V's service and infrastructure investment preferences Guaranteed Service Levels Communication Pricing structures and price paths	Opportunity to participate promoted widely Online access and opportunity to comment Print and electronic media
Testing	Mini Public Telephone Survey	Reporting back to participants of the Mini Public on key preferences and inclusion in PS2020 Investment to maintain Services Standards including price impact	Opportunity to participate extended to participants of the Deliberative process and interested persons

Engagement reach for the program included:

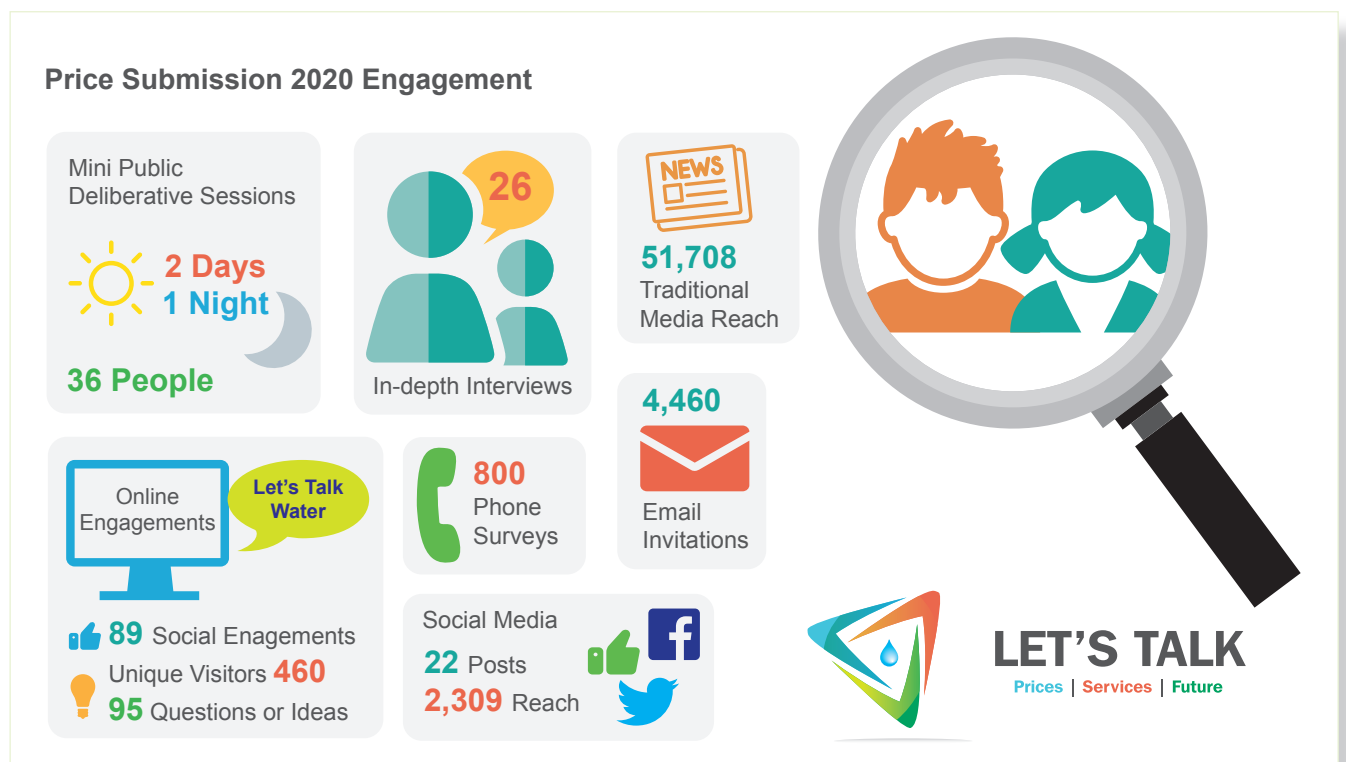


Figure 3: PS2020 Engagement

Testing what we heard in 2018

South Gippsland Water sought to test and further understand the key learnings from the 2018 Price Submission process. The program has focused on two areas that may have the ability to impact customers or result in a key change.

In developing PS2020 customers were asked³ for their views on increased investment in aging infrastructure and the environment. 85% of customers supported increased investment. The majority (62%) supported low increased investment.

Customers continued to demonstrate a clear preference for investment in protecting the environment with 84% supporting investment in these initiatives.

Maintaining service standards and investment into ageing infrastructure

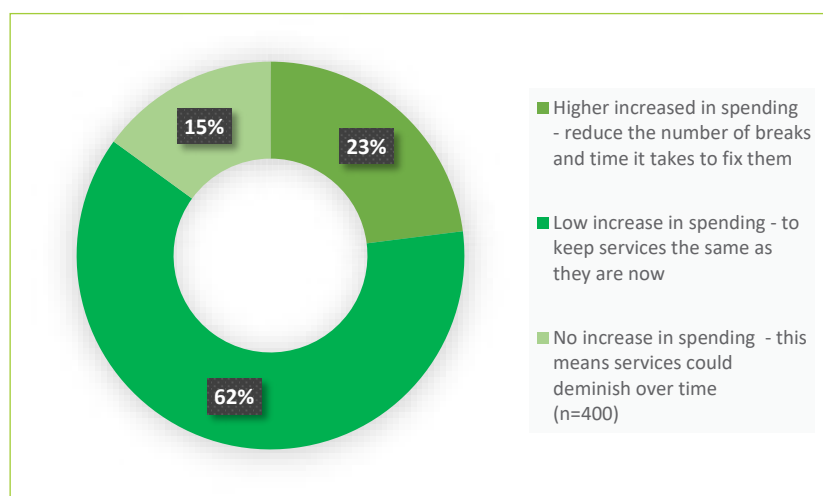


Figure 4: Telephone Survey Results, Service Standards and Cost - February 2019

Investment to protect the environment

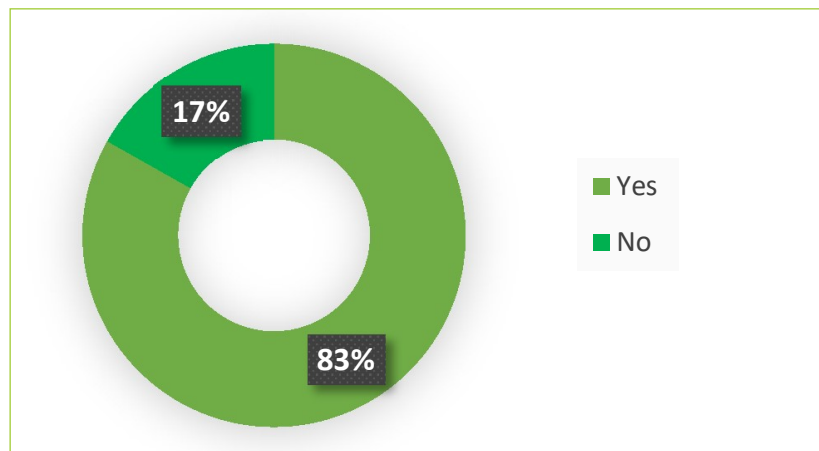


Figure 5: Telephone Survey Results, Investment to Protect the Environment

3.1 Diving Deeper

3.1.1 Mini Public Deliberate Process

Building on the 2018 engagement, South Gippsland Water asked customers to help find the balance between price, service and being sustainable into the future via a Mini Public deliberative process.

A representative sample of the South Gippsland community, attended over a two day period, and were asked to further explore key areas of the submission, test the Customer Outcomes and help us find the balance between price/ service/ being sustainable into the future. Focus areas included:

- *Investment in infrastructure and prioritising expenditure with respect to the renewals program, our facilities and long term water security*
- *Guaranteed Service Levels*
- *Communication with customers and how should we communicate in the future*
- *Testing pricing and price paths*

Over the two days we asked; From the customer perspective, what is the right balance to strike for pricing considering expectation of services and long-term sustainability⁴? The question was asked on both days with consistent results that supported investment to maintain water security and service standards.

Help us find the Balance

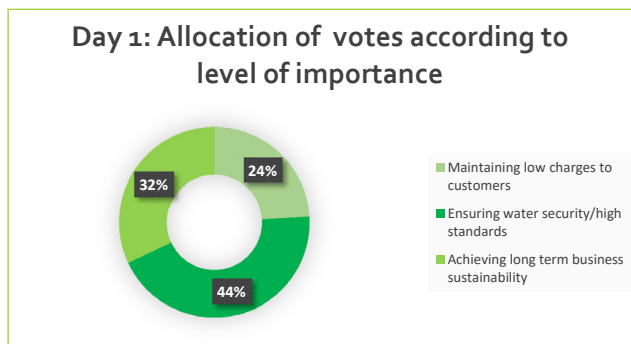


Figure 6: Deliberative Process: Help us find the Balance day one

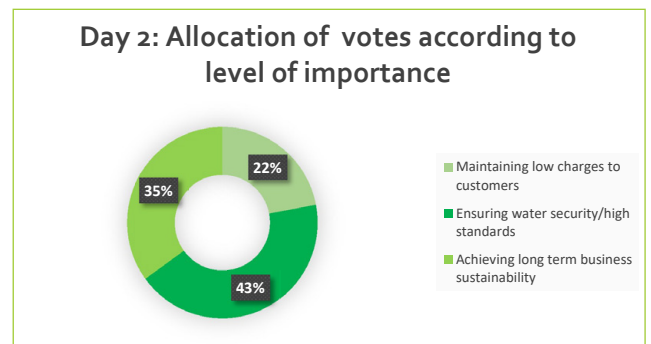


Figure 7: Deliberative Process: Help us find the Balance day two

3.1.2 Vulnerable and disadvantaged customers

Listening to customers who may be impacted by our decisions

South Gippsland Water conducted a program to identify and further understand the needs of customers who are most challenged in our communities, and gain understanding from their support groups⁵. Using a qualitative study, customers and support groups indicated they valued South Gippsland Water services noting that:

- *South Gippsland Water are generally meeting the expectations of customers at risk of, or experiencing hardship and that a customer's vulnerabilities may be a mix of short and long term needs*
- *There is general satisfaction with services provided with no expectation of improved services*

The report identified that any price increase will impact customers identified at risk. Customers have told us they anticipate their bills will increase in the future but their expectation is that South Gippsland Water will be prudent and efficient in managing the business.

The process has resulted in strengthened support programs, further opportunity to support regional services and personalised methods of communication.

⁴ South Gippsland Water Mini Public Report July 2019

⁵ Needs and Expectations of Vulnerable and Disadvantaged Customers August 2019

3.2 Building Learning into our Plan

The engagement process has confirmed and enhanced key learnings gained in 2018. South Gippsland Water's PS2020 has been developed to reflect the expectations and values of our customers and communities:

- *The customer engagement process has identified that maintaining service levels is important. Renewal programs and treatment plant upgrades proposed in PS2020 have been included in order to continue to meet these expectations.*
- *South Gippsland Water customers support investment in the environment and the Corporation is continuing to work towards its pledge to reduce CO₂ emissions by 15% in 2025 and for zero emissions by 2050.*
- *Safe drinking water is paramount to South Gippsland Water customers. The proposed program to renew ageing liners and covers for six of the Corporation's clear water storages is a significant commitment to deliver quality drinking water across the region.*
- *A preferred price path was tested and the Corporation have adopted customer preference for an increase of 5%, 2% and 2% over the three years of PS2020.*

A wide range of customer expectations were raised as a result of the customer engagement process. The process for PS2020 has sought to build on the learnings of 2018. A number of customer expectations have not been included in this Price Submission. These will be subject to further engagement and/or investigation.

For example, South Gippsland Water are not proposing amendment to tariff structures and as such this area was not investigated in the engagement process. However, a reoccurring customer theme of desire to move to a relative higher volumetric charge was highlighted during the Mini Public process.

"Customers believe a higher volumetric component of their bill could provide greater control and support change, while recognising the need to balance the impact it will have to vulnerable customer groups⁶".

South Gippsland Water will continue to further explore the impact of the desired tariff amendment, and keep customers informed of the outcomes.

Programs to support customer expectations are further explored in the table below.

Table 2: Program to deliver customer expectations

Customer Expectation	Outcome	Program
Customers have expressed they wish to maintain existing Service Standards	Reliability	Continued investment in renewals and asset replacement programs being \$4.8M over the PS2020 period
PS2018 identified strong support for social equity. South Gippsland Water continuing to maintain a focus on assisting vulnerable customers	Customer Integrity	Implementation of the SGW Hardship Policy reflecting the key findings of the vulnerable customer engagement process. Operating costs will be absorbed through existing baseline expenditure
Customers support investment in protecting the environment	Environment	Benefits from implementing SGW's Carbon Emissions program, \$2.5M investment over the current regulatory period and continuation of the behind-the-meter renewable energy programs
Safe drinking water is of key importance to South Gippsland Water customers	Water	Major program to renew six aging clear water storage liners and covers over the next five years. \$3.4M during PS2020 with additional expenditure in regulatory period 5. On-going programs for minor upgrade of water treatment plants and networks (\$0.5M) An on-going program for renewal of Water Treatment Plant assets (\$1.7M)
Customers wish South Gippsland Water to plan for future water security	Water	Planning for the future through development of the Urban Water Strategy. Connection to the Melbourne Supply System, resulting in a secure water supply for 60% of customers. \$1.5M operating expenditure
Customers wish South Gippsland Water to provide safe wastewater services that contribute to the liveability of townships across the region	Wastewater	Growth driven projects to upgrade sewerage networks in Wonthaggi and Inverloch. \$4.5M and \$3.5M, respectively A growth driven project to upgrade the Wonthaggi Wastewater Treatment Plant (\$3.4M) Ongoing renewal programs consisting of \$2.4M for sewer replacement/rehabilitation and \$1.1M sewer pump stations

3.3 Testing the Plan

PS2020 proposed content, including appetite for a moderate price increase has been tested with customers via two forums.

Customer Survey

South Gippsland Water sought to further test the proposed price increase included in PS2020 and customers were asked for their views on what level of tariff increase would they be prepared to accept over three years. The Majority (71% of respondents elected a moderate increase in spending and tariffs as demonstrated below.

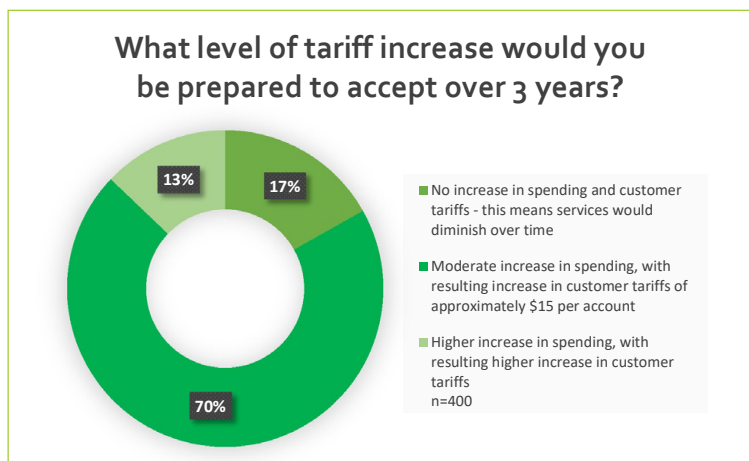


Figure 8: 2019 Customer Survey results

Mini Public Deliberative Process- closing the loop

During October 2019 customers involved with the Mini Public process were invited to explore and test the content of PS2020 from a customer perspective. The process asked if customer views gained from the July 2019 sessions have been included in the three year plan. Elements of PS2020 were tested during a two-hour session with approximately 50% of the original group. The results⁷ identified the Mini Public group sentiment had been included and were satisfied they had been listened to (94% satisfied or very satisfied).

“Definitely. We feel valued and our opinions taken on board and we can see this in the submission. All ideas discussed”.

The process tested PS2020 representation of the balance between price, service and being sustainable into the future and proposed price path. When asked about the overall balance, 89% responded they were either satisfied (33%) or very satisfied (56%) with the content of PS2020.

With respect to price path 84% of respondents were satisfied (42%) or very satisfied (42%) with the proposed price path.

The group were asked if the Draft Price submission achieved a balance between price, service and being sustainable into the future for South Gippsland Water?

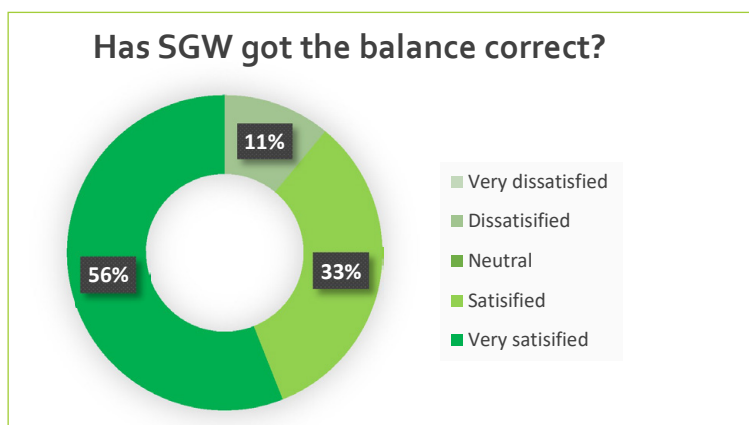


Figure 9: 2019 Mini Public results

7 Mini Public PS2020 Testing Report (October 2019)

4 PREMO - Outcomes

AT A GLANCE

- South Gippsland Water has reviewed its current Customer Outcomes, Measures and Targets in consultation with customers
- Customers confirmed that the majority of these reflect their values and expectations and that the use of Plain English is important in describing them
- The proposed Customer Outcomes, Measures and Targets have been enhanced:
 - Incorporating planning into reliability
 - Expressed in Plain English
 - Refined Measures and Targets

The engagement process for PS2020 included testing the six Customer Outcomes developed in 2018 to reflect customer's value and expectations.

The Corporation used the existing Customer Outcomes⁸ as the basis for a conversation with customers in order to raise awareness of and review the Outcomes, Measures and Targets. The process sought to further understand what is important to customers, identify any perceived gaps and suggest amendments. The groups confirmed the relevance of the majority of measures, and the importance of the use of 'Plain English'⁹ in describing them.

Customers confirmed that the hierarchy of Outcomes, Measures and Targets in place remain relevant with one exception, Planning. The deliberative process identified that successful outcomes are a result of good planning.

“The Planning outcome could be deleted or modified to be incorporated into the others”.

Consistent with this customer feedback South Gippsland Water is proposing the following amendments.

Table 3: Customer Outcome Comparison, 2018 to 2020


2018 Price Determination Outcomes	2020 Price Submission Outcomes
Planning: We will partner with community, local government and business to plan for future years	Deleted and incorporated into reliability
Reliability: We will be reliable, minimise unplanned interruptions to services and commit to communicating well with our customers	We will plan for the future, be reliable and minimise unplanned interruptions to services
Water: Provide safe, clean drinking water for the benefit of our customers and communities	Provide safe, clean drinking water
Wastewater: Provide a safe wastewater service that contributes to the health and liveability of our communities and environment	Provide a safe wastewater service that contributes to the liveability of our communities
Environment: Be environmentally responsible, sustainable and adapt to a future impacted by climate variability	Be environmentally sustainable and adapt to a future impacted by climate variability
Customer Integrity: Treat all customers/ community with honesty, respect and strive to balance affordability, value for money and fairness	We will act with honesty, respect and strive to balance affordability, value for money and fairness


⁸ 2019 ESC Customer Outcome 2018-2020


⁹ South Gippsland Water Mini Public Report July 2019


Continuing the key focuses developed in 2018, South Gippsland Water is proposing only minor amendments to operational activities and capital work connected to Customer Outcomes. Outcome based customer measures and targets to achieve the performance targets that will continue to hold the organisation to account have been identified as follows:


Table 4: PS2020 Customer Outcomes in detail

Outcome 1	 Reliability We will plan for the future, be reliable and minimise unplanned interruptions to services	2020/21	2021/22	2022/23
Primary measures of success	<ul style="list-style-type: none"> Water security outlooks for the Corporation's water supply systems are developed and published in November each year 	Met/ Not met	Met/ Not met	Met/ Not met
	<ul style="list-style-type: none"> Average response time to sewer spills and blockages 	≤ 30 minutes	≤ 30 minutes	≤ 30 minutes
	<ul style="list-style-type: none"> Average response time to water bursts and leaks (Priority 1) 	≤ 30 minutes	≤ 30 minutes	≤ 30 minutes
	<ul style="list-style-type: none"> Average duration of unplanned water supply interruptions 	≤ 110 minutes	≤ 110 minutes	≤ 110 minutes
We will manage and monitor these measures to ensure the delivery of the overall customer outcome	To manage the risks associated with reliable services we will: <ul style="list-style-type: none"> Renew high risk pump stations, wastewater and water pipes Ensure timely communication of planned and unplanned interruptions Optimise preventative maintenance via proactive sewer cleaning and inspections to manage 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 			
We will undertake these programs	<ul style="list-style-type: none"> Continue to undertake a renewal program of sewer reticulation (\$2.4M) and water reticulation (\$2.4M) pipes across the region 			
Comparison to PS2018:	Reliability Measures have been simplified to place a focus on breaks and leak response times and interruption durations for water and wastewater services. Water security planning is an area of importance for customers and have been included in these measures			

Outcome 2	 Water Provide safe, clean drinking water	2020/21	2021/22	2022/23
Primary measure of success	<ul style="list-style-type: none"> Number of Safe Drinking Water Regulations non-compliance incidents Customers who prefer to drink our tap water, including filtered (identified via the Customer Satisfaction Survey) 	0 ≥ 88%	0 ≥ 88%	0 ≥ 88%
We will manage and monitor these measures to ensure the delivery of the overall customer outcome	<ul style="list-style-type: none"> Improve treatment processes at Water Treatment Plants during algae outbreaks and for disinfection Invest to renew aging water treatment plants and treated water storages Continue scheduled maintenance programs to prevent discoloured water 			
We will undertake these actions, activities and programs to deliver the customer outcome	<ul style="list-style-type: none"> Replace liners and covers for six treated water storages (\$3.3M) Ongoing programs for minor upgrade of water treatment plant and networks (\$0.5M) and Water Treatment Plant assets (\$1.7M) 			
Comparison to PS2018	Safe Drinking Water measures are consistent with PS2018			

Outcome 3	 Wastewater Provide a safe wastewater service that contributes to the liveability of our communities	2020/21	2021/22	2022/23
Primary measure of success is	<ul style="list-style-type: none"> No EPA infringement notices per year 	0	0	0
We will manage and monitor this measure to ensure the delivery of the overall customer outcome	<ul style="list-style-type: none"> Invest in sewer system upgrades and expansion to ensure compliance and cater for growth areas Undertake preventative maintenance programs to reduce sewer blockages and spills Upgrade wastewater treatment assets 			
We will undertake these actions, activities and programs to deliver the customer outcome	<ul style="list-style-type: none"> Upgrade sewerage networks in Wonthaggi (\$4.5M) and Inverloch (\$3.5M) Upgrade the Wonthaggi Waste Water Treatment Plant (\$3.3M) Ongoing renewal programs consisting of sewer replacement/rehabilitation (\$2.4M) and sewer pump stations (\$1.1M) Continue to address Bio-solids stockpile (\$0.2) 			
Comparison to PS2018	The Wastewater measure is consistent with PS2018			

Outcome 4	 Environment Be environmentally sustainable and adapt to a future impacted by climate variability	2020/21	2021/22	2022/23
Primary measure of success	<ul style="list-style-type: none"> Reduction of CO2e resulting from energy renewable projects (cumulative) Average household consumption of less than 125kL of water each year 	750 Tonnes/year	1,500 Tonnes/year	2,200 Tonnes/year
We will manage and monitor these measures to ensure the delivery of the overall customer outcome	<ul style="list-style-type: none"> Continuation of the SGW emissions reduction program across the South Gippsland region Promotion of water efficiency across the region and actively participate in water reuse programs Active participation in catchment management programs 			
We will undertake this program to assist in delivering the customer outcome	Invest in renewable energy at South Gippsland Water sites across the region <ul style="list-style-type: none"> Lance Creek Water Treatment Plant Leongatha Wastewater Treatment Plant Korumburra Wastewater Treatment Plant Inverloch Wastewater Treatment Plant 			
Comparison to PS2018	The Environment measure is consistent with PS2018. Targets have been adjusted to reflect completion of proposed behind-the-meter solar projects			

Outcome 5	 Customer Integrity We will act with honesty, respect and strive to balance affordability, value for money and fairness	2020/21	2021/22	2022/23
Primary measure of success	<ul style="list-style-type: none"> Customer satisfaction will be maintained Customers will rate our services as 'value for money' 	≥80%	≥80%	≥80%
We will manage and monitor these measures to ensure the delivery of the overall customer outcome	<ul style="list-style-type: none"> Provide a range of programs to strengthen our support for customers by implementation of our Hardship Policy Provide open and honest communications as identified in our vulnerability study 			
We will undertake these actions, activities and programs to deliver the customer outcome	<ul style="list-style-type: none"> Customer satisfaction rating of 'satisfied' or 'very satisfied' (via the Customer Satisfaction Survey) Customers rating SGW's services as 'value for money' (via the Customer Satisfaction Survey) 			
Comparison to PS2018	Customer Integrity measures are consistent with PS2018			

South Gippsland Water services (water and wastewater) are monitored and measured via a number of mechanisms including the Essential Service Commission Customer Service Code for Urban Water Businesses.

The engagement process completed in 2018 identified key areas of service delivery that are important to customers. These are represented as Customer Outcomes and reflect customer's value and expectations. South Gippsland Water's service standards relating to reliability and attending faults are listed in the table below and will be embedded into South Gippsland Water's Charter, monitored and reported to customers.

Table 5: South Gippsland Water Service Standards

Water	Measure	Units	Target
1	Unplanned water interruptions per 100 km mains per year	Number	25
2	Average minutes to respond to bursts and leaks (Priority 1)	Minutes	30
3	Average minutes to respond to bursts and leaks (Priority 2)	Minutes	35
4	Average minutes to respond to bursts and leaks (Priority 3)	Minutes	500
5	Unplanned water interruptions restored within 5 hours	Percent	95%
6	Planned water interruptions restored within 5 hours	Percent	95%
7	Average unplanned customer minutes off water supply per year	Minutes	25
8	Average planned customer minutes off water supply per year	Minutes	100
9	Average frequency of unplanned water interruptions	Ratio	0.3
10	Average frequency of planned water interruptions	Ratio	0.4
11	Average duration of unplanned water interruptions	Minutes	110
12	Average duration of planned water interruptions	Minutes	240
13	Unaccounted for water	Percentage	15.0
Sewer	Measure	Units	Target
14	Sewer blockages per 100 km mains per year	Number	25
15	Average time responding to sewer spills blockages	Minutes	30
16	Average time to rectify sewer spills blockages	Minutes	120
17	Sewer spills contained within 5 hours	Percent	95%
18	Customers receiving >3 sewer blockages in the year	Number	0

5 Guaranteed Service Levels

AT A GLANCE

- *South Gippsland Water has reviewed its current Guaranteed Service Level (GSL) scheme, including payment amounts in consultation with customers*
- *South Gippsland Water is proposing to remove one GSL based on customer feedback*
- *The proposed GSL's are objective, easily understood by customers and able to be reported upon*
- *SGW propose to absorb GSL payments within its existing baseline expenditure*

Guaranteed Service Level Review

South Gippsland Water reviewed its current Guaranteed Service Level (GSL) scheme with customers during the Mini Public deliberative process¹⁰, including how they are determined and payments amounts.

The group noted that accountability of the organisation is vitally important with respect to service standards and performance. Through further discussion of GSL's the group identified that, "they are nice to have, however, not expected".

The deliberative process further explored the GSL related to, "Unplanned water interruptions not restored in five hours". South Gippsland Water queried customers re the "Unplanned water interruptions not restored in five hours" GSL. The rationale for the discussion with customers was that South Gippsland Water had recently identified an inaccuracy with respect to the way the Service Standard was being calculated by us. That is, the exclusion of flushing time in the interruption duration.

Due to the nature of some of the Corporation's infrastructure configuration, guaranteeing a five hour restoration of supply, including flushing times, is not cost-efficient. Under this scenario, the Corporation would be required to either;

- *Realign the existing reticulation system in a number of townships in order to isolate reticulation areas and reduce the amount of flushing time, and/or*
- *Increase the regular air scouring maintenance program*

To complete either of these activities would incur significant cost to the organisation for the purpose of guaranteeing the unplanned water interruption GSL.

Should South Gippsland Water 'do nothing', the payment of a GSL for exceeding a five hour interruption limit would be inevitable in a number of circumstances. The Mini Public considered the issue, including options to exclude flushing times for GSL purposes. The majority of the participants indicated that the GSL has little value to customers and they would rather SGW spend money on reducing breaks and improve the notification process when breaks occur. Therefore, they recommended that South Gippsland Water maintain the service standard of five hours, but, remove the GSL payment.

South Gippsland Water proposes to adopt the recommendation and to remove the GSL for unplanned water interruption not restored within five hours. Three GSL's, already in place, are proposed for the 2020 – 2023 regulatory period below:

Table 6: Proposed Guaranteed Service Levels

Service level obligation	Details	Level of service	Rebate/payment for breach per customer (\$)
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
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

The Corporation has made no allowance for GSL payments in its operating expenditure and will therefore carry the risk of any GSL payments.

6 PREMO - Management

6.1 Demand

AT A GLANCE

- South Gippsland Water is proposing residential property connection growth of 1.80% per annum for both water and wastewater customers
- The 1.80% growth forecast represents an increase of 0.17% compared to PS2018, recognising predicted residential land development activity. The increase provides alignment with Victoria in Future Small Areas (VIFSA) forecasts
- Non-residential property connection growth is proposed at 0.75% per annum, consistent with PS2018
- The 10-year average residential water consumption of 121 kL per annum remains unchanged from PS2018
- Non-residential and Major Customer water consumption has been forecast based on recent trends and direct customer forecasts.

6.1.1 Background

South Gippsland Water has calculated demand forecasts¹¹ across all areas of water and wastewater services. Demand in conjunction with growth assumptions are a key factor in determining customer prices.

6.1.2 Method

The method for forecasting demand for the 2020 to 2023 regulatory period involves reviewing and applying appropriate growth rates across the region for both residential and non-residential customers. Residential and non-residential water and wastewater usage, trends and forecasts were also analysed for the purpose of assessing demand and future planning.

A range of sources have been used to forecast customer growth rates including:

- Victoria in Future Small Areas (VIFSA) 2019 statistical information
- Forecast land development data
- South Gippsland Water's historical growth.

Data from the Corporation's billing system is used to track movements in the number of water and wastewater property connections and water consumption for various customer categories, including residential, non-residential, major customers and miscellaneous others. The data is subject to audit and reported to the Essential Services Commission.

6.1.3 Growth

PS2018 considered ten years of water and wastewater property connections to underpin its growth assumptions. The commissioning of a number of new wastewater schemes in the past 10 years caused an anomaly in the growth rates for wastewater connections. Therefore, water property connection data was ultimately relied upon for both water and wastewater growth forecasts. Data from the VIFSA was also considered alongside forecasts of development activity.

The PS2018 approved annual growth rates for water and wastewater property connections currently are:

- Residential (excludes vacant land) - 1.63%
- Non-residential (excludes major customers) - 0.75%

¹¹ South Gippsland Water Analysis Report Demand Forecasting August 2019

The following table provides an overview of the actual growth rates achieved in 2018/19 for residential and non-residential customers, excluding major customers and vacant land.

Table 7: 2018/19 Actual and Approved Growth Rates

	2018/19 Actual	Approved
Residential water (excluding vacant land)	1.84%	1.63%
Residential wastewater (excluding vacant land)	1.78%	1.63%
Non- residential water and wastewater	0.25%	0.75%

Water and wastewater property connections – residential

The VIFSA growth rate forecast as at 30 June 2021 provides for a weighted average 1.80% annual increase in households. The VIFSA provides an indication of future growth in households and does not distinguish between vacant land and occupied properties. South Gippsland Water’s residential growth rate for water connections has been increasing over recent years, however, the ten-year average rate is significantly lower at 1.45% per annum including vacant land (1.68% excluding vacant land). The difference in the growth rate for vacant land compared to occupied properties is not considered significant and we have therefore assumed the same growth rate as for occupied properties.

Further to the VIFSA forecast, South Gippsland Water has analysed recent and predicted growth across the region (internal development applications and Shire planning estimates). These estimates predict that growth will continue to increase and therefore the Corporation proposes to use the VIFSA rate for residential water and wastewater connection growth. Refer to the graph below for a comparison of actual and forecast growth for residential households.

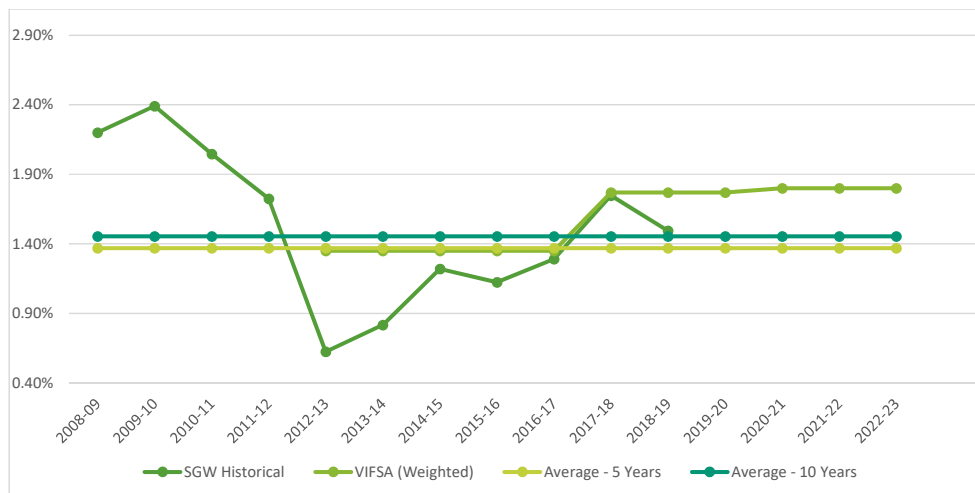


Figure 10: Residential Growth (including vacant land) Trend Graph

Water and wastewater property connections – non-residential

Non-residential water property connections have increased over recent years, although at a consistently lower rate than for residential growth, the ten-year average is 0.51% per annum. Consistent with the above, the Corporation proposes to use the non-residential water property connection growth rate as a proxy for wastewater connection growth. Although the ten-year average is lower, South Gippsland Water proposes that the growth forecast remain at 0.75% per annum as approved by the Essential Services Commission for PS2018.

6.1.4 Water Consumption (residential and non-residential)

Residential

The average residential water consumption per household proposed is 121 kL for 2020/21 to 2022/23, based on the ten-year average. This consumption is applied to the forecast residential water connections above. South Gippsland Water, like the wider Victorian water industry, undertook measures to reduce per capita demand. This included targeting all major aspects of water use with an emphasis on education and behaviour change.

As a result, average water consumption patterns steadily declined approximately 15 years ago. The residential average consumption patterns of the past 10 years have been steady and are forecast to continue unchanged during the regulatory period. South Gippsland Water used this approach in previous regulatory periods. The approach takes into account variances such as weather conditions, and there has been little change from this average over the ten-year analysis period. The following graph provides an illustration of this trend.

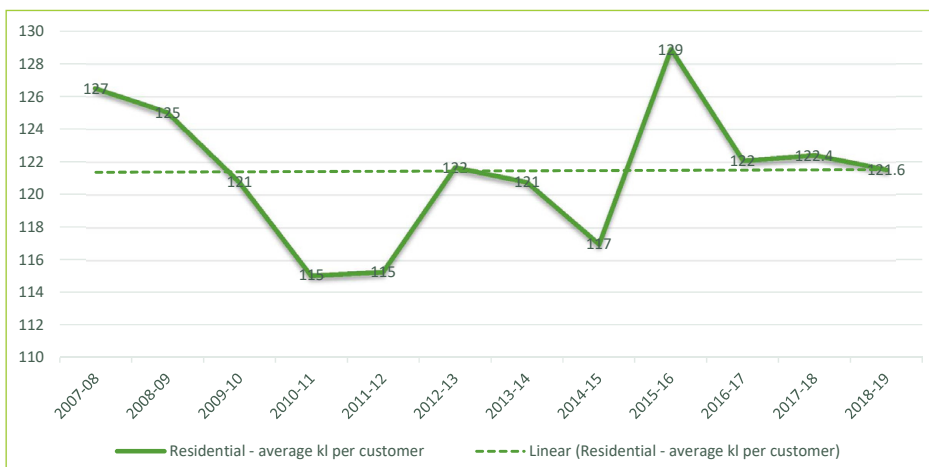


Figure 11: Water consumption trend for residential customers 2008 - 2018

Non-Residential

Non-residential customers comprise not-for-profit businesses, “water by agreement” customers that have a varied service level (e.g. farmers with access to raw water) and other businesses. There has been a declining consumption trend over the past decade. This is particularly notable in the farming cohort (water by agreement customers) and the Corporation is expecting this trend to continue. As such South Gippsland Water proposes to utilise the five year average for each cohort of non-residential customers.



Figure 12: Water consumption for non-residential customers 2008 - 2018

6.1.5 Water consumption (Major Customers)

Non-residential water usage, including six Major Customers, equates to approximately 30% of South Gippsland Water consumption.

The Corporation's two largest Major Customers, Burra Foods and Saputo alone provide approximately 25% of the demand. The demand forecasts for PS2020 have been developed using recent historical trends and forecast predictions by customers.

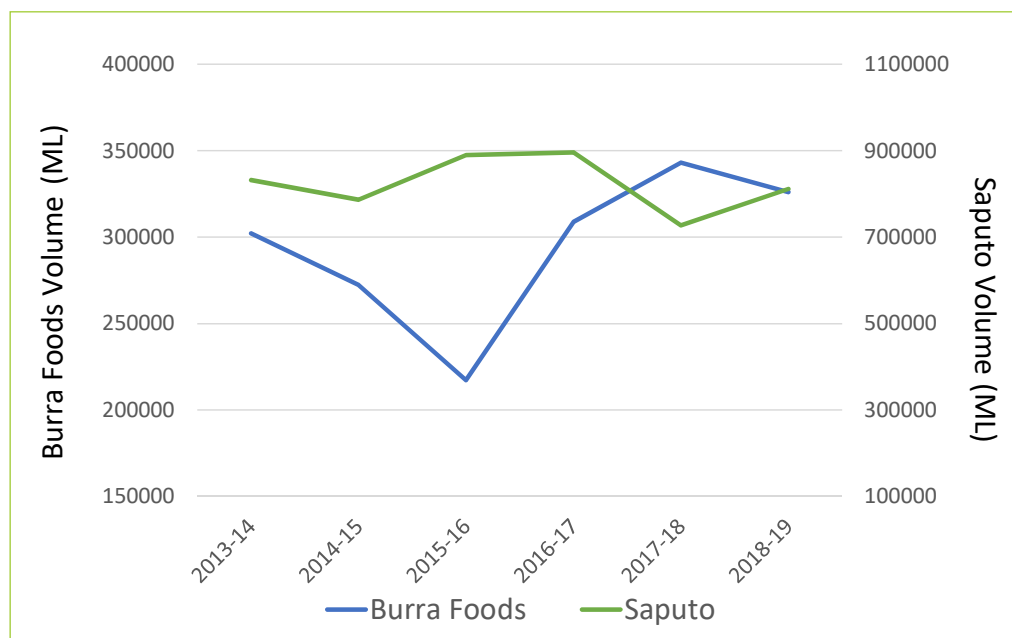


Figure 13: Major Customer volume trend - Burra Foods and Saputo

Long-term industrial growth is hard to predict due to short planning horizons and the impact of global commodity prices. The recent volatile nature of the Corporation's two major customers has added considerable risk to demand forecasting and recovery of past capital investment. The loss of a dairy producer in Poowong and an abattoir in Wonthaggi has been reflected in the volume forecast for Major Customers.

Saputo (located in Leongatha) demand has fluctuated over the last five years. Demand has been as high as 896 ML in 2016/17, however reached a low point of 727 ML in 2017/18 (a reduction of 19%). Saputo's business has been impacted by the economic environment influencing milk prices and they have lost significant farm supply. Advice from Saputo is that this supply is expected to grow. This is evident in the first 2019/20 quarter results, and a forecast 1,000 ML has been applied to annual demand estimates for Saputo.

Burra Foods, located in Korumburra, are however, predicting a growth phase, forecasting an increase of 55 ML over the next three years. Burra Foods demand over the last five years has been as high as 343 ML and as low as 217 ML. Demand estimates assume consumption trends consistent with the past two years at 335 ML, as opposed to the 5-year average of 290 ML. An increase of 25 ML and 30 ML has been applied to 2020/21 and 2021/22 respectively, in line with Burra Foods production forecasts.

Significant fluctuation in demand, is evidenced by other Major Customers, notably the abattoirs in Poowong (GBP) and Wonthaggi (Tabro). Tabro has recently ceased business operations, consumption is assumed to be zero. This decline is demonstrated in the graph below. MG Co-op has also shown a steady decline, a two year average has been assumed.

A total of 161 ML per year has been assumed for other Major Customers comprising:

Table 8: Other Major Customer Consumption

Other Major Customers	Usage
MG Co-op	80 ML (2 year average)
GBP	60 ML (5 year average)
Esso	21 ML (5 year average)
Tabro	0 ML (cessation of business)
Total	161 ML

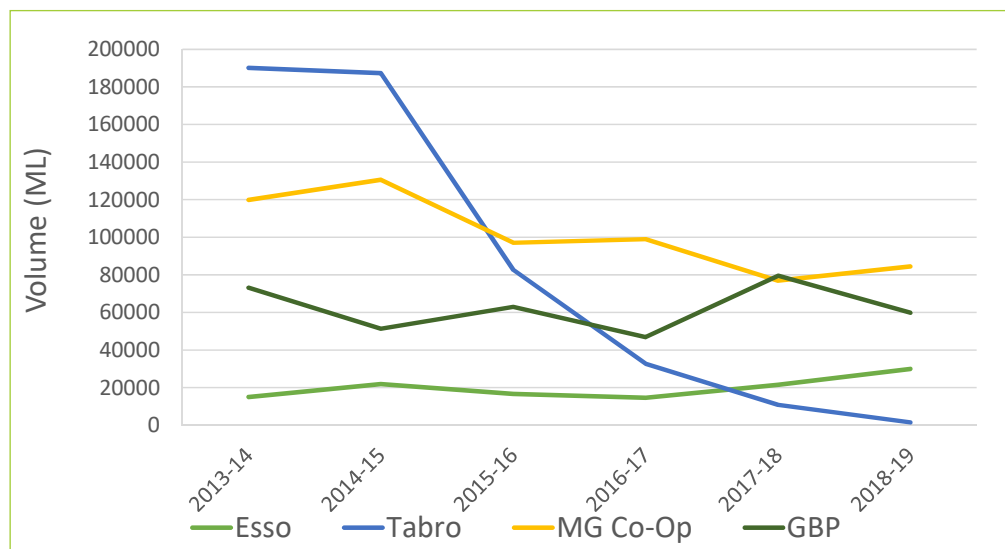


Figure 14: Other Major Customer volume and trends

6.1.6 Water consumption overview

The following table provides an overview of the historic and forecast consumption trends.

Table 9: Overview of water consumption historic trends and forecasts (2019/20 \$)

Water Volume Consumption (Megalitre)	Actual					Estimate	Forecasts		
	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23
Residential	1,911	2,124	2,034	2,067	2,090	2,111	2,152	2,193	2,237
Non-Residential	589	556	588	576	611	587	592	596	600
Agreement	404	445	340	354	347	380	383	386	389
Concessional	215	246	236	238	240	235	237	239	241
Standpipe	17	33	17	35	40	28	28	28	28
Subtotal	3,135	3,404	3,215	3,271	3,329	3,342	3,392	3,442	3,495
Other Major Customers	391	259	193	189	176	161	161	161	161
Burra Foods	272	217	309	343	326	335	360	390	390
Saputo	786	890	896	727	811	1,000	1,000	1,000	1,000
Subtotal	1,450	1,367	1,398	1,259	1,313	1,496	1,521	1,551	1,551
Total	4,585	4,771	4,613	4,530	4,642	4,838	4,913	4,993	5,046

6.1.7 Wastewater

Cistern and Minor Trade Waste including Wastewater Volumes

Wastewater volume charges apply to non-residential cistern and minor trade waste customers. These wastewater volumes vary directly with their water consumption.

Cistern and Minor Trade Waste fees represent 4% of total revenue. Growth of cistern customers has remained relatively consistent therefore the ten year average non-residential growth rate has been used. Minor Trade Waste customer growth has varied due to an active program driving improvements in trade waste quality. An assumption of 3% growth per annum has been applied, reflecting the most recent years trends.

Major Trade Waste

South Gippsland Water has three major Trade Waste Agreements with customers whose discharges have the potential to create a significant impact on wastewater collection, treatment and disposal. The forecast for these customers is to remain constant for the Price Submission period, consistent with current agreements that are primarily based on fixed charges.

Miscellaneous income

Miscellaneous income is approximately 1.7% of total income, mainly from standpipe water sales, inspection fees, information certificates and water tapping fees. Individually, all are less than 0.5% of total income. In line with historical trends, they have not been significantly volatile and are therefore forecast to remain stable for the regulatory period.

6.1.8 Allocation of Risk

Variances in customer growth rates and demands, and climatic conditions across the region impact water demand and therefore customer tariffs. In setting demand forecasts, South Gippsland Water has aimed to allocate risk in an efficient and appropriate manner;

- *Customer growth rates are based on VIFSA forecasts and have been cross referenced with Land Development Data and South Gippsland Water's historical growth rate. The Corporation has proposed an increased average growth rate and considers this a balanced risk approach*
- *Residential water consumption is based on a ten-year average. Risk is apportioned in a balanced way between the Corporation and customers given there has been little variation over the past decade*
- *Given volatility in year to year demand, Major Customer and non-residential consumption projections are based on shorter-term trend analysis and customer growth forecasts. This places more risk with South Gippsland Water, especially given forecasts for Burra Foods and Saputo include assumed growth yet to be realised.*

6.2 Operational Expenditure

AT A GLANCE

- Operating expenditure proposed closely aligns with PS2018 approved expenditure for 2018/19
- Base year (2018/19) expenditure has varied by \$0.3M
- Operating expenditure is considered prudent and efficient as confirmed by industry benchmarking and external review:
 - The Australia-wide operating cost benchmark review administered by Water Services Association of Australia (WSAA) for the 2017/18 period
 - Sustainable Strategic Direction Review partnership with DELWP and conducted by KPMG has helped inform the process
- The Operating expenditure efficiency rate proposed is 1% per annum
- The Corporation propose to minimise variations to baseline expenditure, and will absorb significant additional expenditure during the regulatory period

6.2.1 Introduction

In developing the 2020 Price Submission (PS2020), the Corporation has placed an emphasis on maintaining service standards in line with agreed Customer Outcomes. The process of formulating the submission has incorporated an assessment of operating costs in order to ensure services are delivered whilst maintaining prudent and efficient expenditure.

6.2.2 Baseline controllable and non-controllable expenditure

Baseline expenditure has been informed by an assessment of recent trends and a detailed review of the base year (2018/19).

Current period performance

South Gippsland Water has delivered relatively stable operating cost performance over the current regulatory period. Figure 15 below compares the performance for controllable and non-controllable operational expenditure with the approved expenditure from the 2018 Price Determination. The 2018/19 financial year experienced a one-off accounting provision (\$3.0M) for the future decommissioning of assets associated with the completion of a water security pipeline from Lance Creek to Korumburra and Poowong. This expenditure has been removed from the graphs displayed for the purpose of comparison.

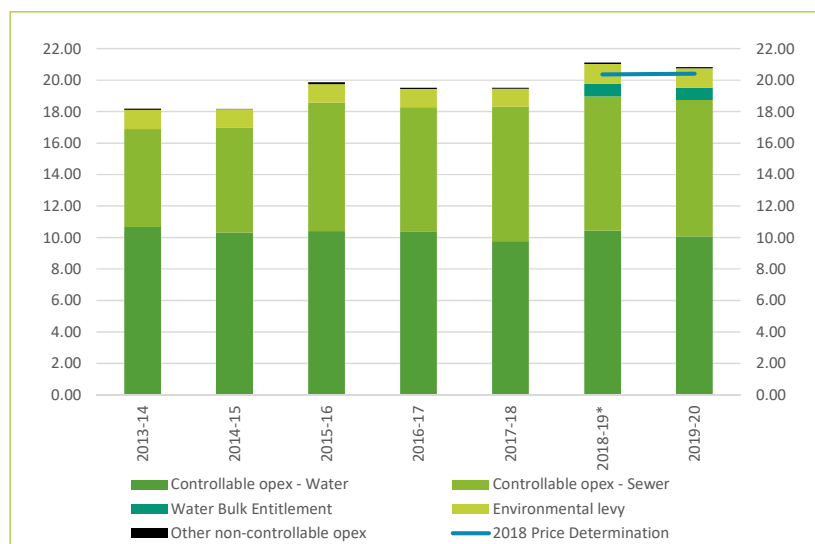


Figure 15: Controllable and non-controllable operating expenditure - current period performance

* 2018/19 cost excludes \$3.0M provision for future decommissioning expenditure.

Operating expenditure increased during 2018/19 by \$1.6M compared to 2017/18. A significant driver was an increase in non-controllable costs (\$0.9M). These costs have increased as a result of the completion of the Lance Creek Water Connection and the environmental levy. In 2018/19 South Gippsland Water commissioned the pipeline that supplies water from the Lance Creek supply system to Korumburra and Poowong, securing approximately 60% of South Gippsland Water's customer base. The Lance Creek system is connected to the Melbourne Supply System, utilising a Bulk Entitlement to access up to 1 GL of water, at a fixed fee of \$0.6M and current usage charges of \$0.2M, per annum.

Controllable operating cost increases are largely driven by higher operating expenditure associated with the cost of pumping water from Lance Creek to Korumburra and Poowong and higher electricity rates. The new system has displaced two existing water treatment plants and incurred a net increase in operating costs, however, has delivered a high level of water supply resilience and potential for economic growth to approximately 60% of South Gippsland Water's customer base. Further analysis of the base year operating costs is provided below.

Base year operating expenditure

South Gippsland Water's controllable operating costs for 2018/19 were relatively consistent with approved expenditure levels. Actual base year operating expenditure incurred was \$21.95M, noting that \$3.38M related to items which do not have a pricing impact for South Gippsland Water customers. These items include a provision for decommissioning redundant assets, DELWP funded expenditure for asset condition assessments and an accounting movement in the long service leave provision. These items are described further in Table 9 and have been removed from the base year.

Table 10: Operating expenditure items for adjustment, Base Year 2018/19

Item	Description	'\$M 2019/20 \$
Decommissioning provision	Provision for future costs (likely to occur in RP5) associated with decommissioning assets that are no longer required due to the completion of the Lance Creek Water Connection	2.99
DELWP funded initiatives	Expenditure associated with asset management initiatives. Funded by DELWP in 2017/18 and expended in 2018/19	0.14
Long Service Leave provision movement - discount rate	Movements in the discount rate and wage index have increased the future provision for Long Service Leave. These costs have been removed from the base year given that these are not cash movements and may reverse in future periods	0.25
Total adjustment		3.38

Excluding these items, base year operating expenditure for 2018/19 was \$18.6M, a \$0.1M variation from the 2018 Price Determination expenditure level of \$18.5M. A detailed assessment of the base year's costs was undertaken to identify any adjustments required for PS2020.

Biosolids expenditure, a cost anticipated to increase in 2018/19 and approved in PS2018, did not occur as planned due to constraints with the existing disposal facility. An increase is required to meet EPA disposal requirements associated with the stockpiling of biosolids. Disposal of biosolids via Gippsland Water's Soil and Organic Recycling Facility (SORF) was limited due to capacity issues. This expenditure has been delayed to 2019/20 and added to the base year expenditure.

Total base year costs are proposed at \$18.7M, an increase of \$0.3M or 2% over the PS2018 approved amount.

Table 11: Base Year Operating Costs

	'\$M 2019/20 \$
Controllable operating costs – reportable	21.95
Remove from base year (no pricing impact to customers)	(3.38)
New expenditure to add to base year	0.16
Proposed base year operating costs	18.73

Future operating costs

Controllable operating expenditure can be directly or indirectly influenced by South Gippsland Water's operating decisions. The Corporation is committed to improving operating cost efficiency whilst continuing to provide valued services.

Prudent and Efficient Expenditure

South Gippsland Water's review of controllable operating costs also considered operating costs relative to peers (benchmarking). The Corporation participated in an independent benchmarking review conducted by the Water Services Association of Australia (WSAA)¹². 25 utilities across Australia (including nine in Victoria), segmented their 2017/18 operating costs across the industry value chain. The Corporation's cost distribution was broadly similar to the industry.

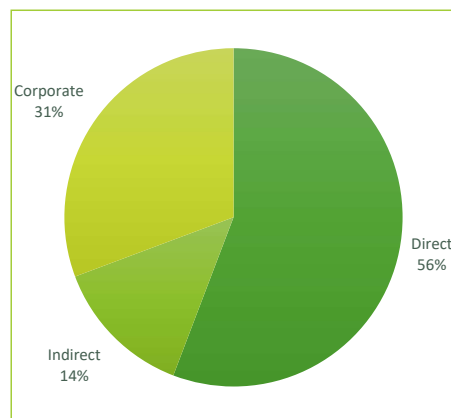


Figure 16: South Gippsland Water % of Opex

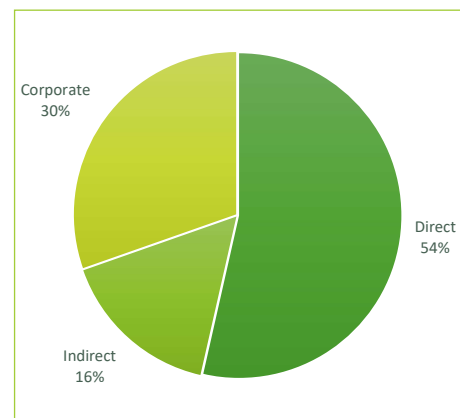


Figure 17: Industry % of Opex

Benchmarking result variations were found to be affected by the service area¹³, comprising many small, localised water and wastewater systems and characterised by a high level of agricultural land use. Water supply systems are largely efficient due to the use of gravity systems, offsetting low raw water quality resulting from open catchments subject to farming. With the exception of the two mechanical wastewater treatment plants, all lagoon systems are characterised by low operating costs with discharge to the ocean.

South Gippsland Water benchmarks compare favourably with similar-sized water business as evidenced by assessment of the top ten expenditure categories (representing approximately 60% of controllable operating costs), refer to the table below. When analysed by category, some areas of expenditure appear relatively high (third or fourth quartile). This is often a result of high indirect or overhead costs and relatively low demand (low economies of scale). Where the normaliser "No. of connections" is used, South Gippsland Water provides 30% of its total water demand to just six connections (Major Customers). The skews benchmarking results.

¹² WSAA operating cost benchmarking utility report.

¹³ Benchmark review (2019)

Table 12: Top 10 controllable operating cost categories - benchmarking results

Category	Normaliser	Quartile
Water treatment costs*	ML treated	4th
Wastewater network costs	Length of mains	2nd
Water network costs	Length of mains	1st
Wastewater treatment costs	ML treated	2nd
Retail	No. of connections	3rd
Information Technology	FTE	1st
Strategy and regulation	No. of connections	3rd
Asset management	No. of connections	3rd
Human resources including OH&S	FTE	2nd
Corporate governance	FTE	3rd

* Most plants are close to the trend for small systems. Lance Creek is an outlier with relatively high chemical costs due to poor quality raw water received via an open catchment.

Further to the WSAA benchmarking, South Gippsland Water recently participated in a Sustainable Strategic Direction Review in partnership with DELWP, which includes an independent review of operating costs. The review by KPMG, has focussed on high expenditure categories (water and wastewater treatment, network maintenance and information technology costs). The review confirmed, that any cost efficiencies identified will require capital investment in either further networking of water and wastewater systems, water treatment plant modernisation or automation.

“Where organisational efficiencies are identified, significant expenditure is required to implement the program.”

“Limited IT system functionality is impacting on operational efficiency and business risk”.

Proposed operating expenditure by major cost category: cost assumptions

Labour

Labour costs comprise 52% of total controllable expenditure. In order for South Gippsland Water to manage price impacts to customers, it is proposed to maintain the existing labour base, with any new initiatives or business requirements during the next regulatory period to be funded by reallocating existing resources.

South Gippsland Water’s Enterprise Bargaining Agreement (EBA) has provided a 3% annual wage increment to staff over the last four years. In 2018/19, CPI applied to tariffs equalled 1.9%. Consequently, the Corporation has absorbed a shortfall in the EBA increment, less CPI, i.e. equivalent to a 0.5% efficiency, approximately \$0.1M.

With the EBA expiring at the end of 2020, South Gippsland Water expects to adopt the State Government Wage Policy which mandates no increase in excess of 2% per annum. As a result, no cost increases in real terms have been assumed for wages during the next regulatory period.

Table 13: Labour costs and Full Time Equivalent Staff

‘\$M (2019/20 \$)	2018-19	2019-20	2020-21	2021-22	2022-23
Labour costs	10.07	9.82	9.82	9.82	9.82
Full time equivalents	94.4	94.4	94.4	94.4	94.4

Energy

4% of total controllable expenditure is consumed by the demand for energy from water and wastewater pumping and treatment operations, as well as a small component associated with office facilities. In developing the energy forecast for the next regulatory period, unit rates consistent with the current agreement which expires on 30 June 2021, have been applied. A unit-rate reduction, based on the projected rates from (ASX energy index) has been assumed for future periods.

Consistent with government policy and customer expectations, South Gippsland Water has pledged to reduce carbon emissions by 15% by 2025. In order to achieve this objective, the Corporation is investing in four behind-the-meter solar initiatives in 2019/20. This initiative has the benefit of reducing energy consumption and the associated annual cost, with pay-back periods of between six and 13 years, dependent on the site. The following table provides a summary of forecast electricity costs applied to existing volumes and reductions expected from the installation of behind-the-meter solar initiatives.

Table 14: Forecast electricity 2018/19 to 2022/23

'\$M (2019/20 \$)	2018/19	2019/20	2020/21	2021/22	2022/23
Electricity costs (without contract rate reduction)	1.10	1.10	1.10	1.10	1.10
Less (contract rate reduction)	-	(0.02)	(0.09)	(0.14)	(0.14)
Subtotal	1.10	1.08	1.01	0.97	0.96
Less offsets	-	-	(0.20)	(0.18)	(0.18)
Proposed forecasted electricity costs	1.10	1.08	0.81	0.79	0.78

It is recognised that these behind-the-meter installations alone will not meet the 2025 emission reduction target. The Corporation is also participating in the water industry's large-scale renewable project, Zero Emissions Water (ZEW), which provides the opportunity for members to collaboratively purchase power and Large-Scale Generation Certificates in order to meet the pledge. In October 2018, ZEW entered into an 11-year Power Purchasing Agreement (PPA) with a solar farm energy generator. This initiative is assumed to have a neutral financial impact with income derived from the sale of electricity and the generation of Large-Scale Generation Certificates (LGCs), being offset by contracted costs of the PPA. The LGCs will be held for surrender in order to meet the 2025 emission reduction target.

Further monitoring of emission trends will continue through to 2023, when the Corporation will revisit the potential for a larger installation of solar or wind as part of a mid-term carbon emissions reduction strategy. This approach balances the business benefit of behind-the-meter generation avoiding risks created by a range of uncertainties in relation to future carbon emissions.

Chemicals

5% of controllable expenditure is spent on chemical use for the purpose of water and wastewater treatment. Chemicals are a significant driver of high water treatment costs for the Corporation. Recent blending of water from the Melbourne Supply System with the Lance Creek water source, replacing the supply for Korumburra and Poowong townships, resulted in a favourable chemical cost variance for 2018/19. This reduction in chemical use is anticipated to continue and has been passed on to customers for the forecast regulatory period.

Chemicals are competitively procured in conjunction with many water corporations. The Corporation has assumed chemical unit costs will remain at current rates. Relatively poor raw water quality sourced from open catchments and small reservoirs, provide minimal opportunity to reduce these costs further without major infrastructure expenditure, i.e. plant process modification or catchment purchases.

The following table provides a summary of forecast chemical costs.

Table 15: Forecast chemical costs 2018/19 to 2022/23

'\$M (2019/20 \$)	2018-19	2019-20	2020-21	2021-22	2022-23
Total chemical cost	0.86	0.86	0.86	0.86	0.86

Information Technology

11% of controllable operating expenditure is spent on information technology (IT) costs, including plant and pump telemetry costs. IT enables the delivery of all services across the South Gippsland region. The associated costs have increased over regulatory periods 3 and 4 as the Corporation upgrades core business systems, increases the rate of upgrades for plant telemetry systems and aims to meet customer reliability expectations and government compliance obligations with respect to data security and improved Customer Outcomes.

The recent Sustainable Strategic Direction Review has confirmed that there are several constraints within the current operating environment that limit the opportunity to reduce costs in the short term. These limitations include a complex IT landscape with multiple software applications, including some major Tier 1 applications that are at end of life and require replacement, with limited reporting and business intelligence capability.

Despite recent increases in IT, industry benchmarking revealed this category to be low cost as a proportion of operating expenditure and on a per user basis. This reflects the relative immaturity of South Gippsland Water's digital strategy. Further observations made include relatively high data and telecommunication costs. These are driven by multiple sites and networks, with many small pump stations consuming data, (a product of small, dispersed water and wastewater systems).

Further investment would be required to lift organisational IT and data management capability and realise potential cost optimisation. South Gippsland Water, in partnership with DELWP via the Sustainable Strategic Direction Review, is investigating potential opportunities for collaboration with other Gippsland region water businesses in the interest of meeting customer affordability outcomes. IT costs are proposed to remain stable for the regulatory period until such opportunities are identified. The proposed expenditure allows for limited continuous improvement in the short term which will support the delivery of reliable services.

The following table provides a summary of forecast IT costs.

Table 16: Forecast Information and Technology Costs 2018/19 to 2022/23

'\$M (2019/20 \$)	2018-19	2019-20	2020-21	2021-22	2022-23
Total information technology costs	2.04	2.04	2.04	2.04	2.04

Forecast variations or "step changes" in operating expenditure

In assessing the need for future changes from base year expenditure, consideration of customer outcomes was undertaken with attention given to proposed capital investment. The following areas have been identified, with operating cost increases either proposed or absorbed as described.

Water and sewer main renewals and associated maintenance costs:

South Gippsland Water, has undertaken significant assessment of water and wastewater main asset condition for the purpose of predicting future main replacements. This work supports an increase in renewal rates for both asset classes. However, it is proposed to seek only a modest increase in renewals, over the regulatory period in line with customer feedback. This is proposed in order to balance expenditure, customer price and service standards in accordance with customer expectations.

Reactive and preventative maintenance costs have been forecast to remain constant, increasing only to meet the needs of future growth. Due to the modest increase in renewals, the Corporation bears the risk of increased reactive maintenance if there is an increase in water and wastewater main failures.

Urban Water Strategy 2022:

This is being developed in order to support government and customer outcomes with respect to planning for secure water supplies. South Gippsland Water will require external assistance in the development of the Urban Water Strategy, due for completion in 2022. The 2017 Urban Water Strategy was prepared by external consultants with input from subject matter experts in the organisation. The scope and associated cost of the 2017 review has been used to estimate future costs. These costs are illustrated in the table below and represent a step change from base year costs.

Table 17: Urban Water Strategy 2022

'\$M (2019/20 \$)	2018-19	2019-20	2020-21	2021-22	2022-23
Development of the Urban Water Strategy	-	-	-	0.23	-

Non-controllable cost forecasts

The following section describes the assumptions made with regard to forecasting non-controllable costs for the Corporation.

Melbourne Water Bulk Entitlement

Bulk charges are paid to Melbourne Water for a one GL bulk entitlement. For PS2020, the Corporation has assumed that these charges will remain in line with the current prices approved in Melbourne Water's 2016 Price Determination. A higher charge has occurred in 2018/19 to 2020/21 in order to align recovery of the one GL entitlement with the regulatory period. A reduction to the fixed fee is forecast to occur from 2021/22.

Water security – purchase of a further bulk entitlement from the Melbourne Supply System

South Gippsland Water has the opportunity to purchase an additional four GL bulk entitlement (BE) from the Melbourne supply system before July 2024, in addition to the one GL BE purchased in 2016/17.

The current water security outlooks suggest that by 2023/24 the Corporation will need to supplement current yield. A significant number of variables may alter this requirement including demand from major industrial customers, growth, and short to medium term climate impacts. Customers, as tested during the Mini Public engagement process, were of the view that the purchase of two of the available four GL mitigates supply security future risks and provides an affordable and sustainable solution in meeting this outcome.

South Gippsland Water proposes to purchase a two GL BE in 2023/24 at a capital cost of \$0.8 M. Additional annual fixed non-controllable operating costs will occur, equal to \$0.7M per annum. In addition to this, the business will pay additional variable costs for water supplied by Melbourne Water. The following table provides a summary of non-controllable operating costs noting that they will occur in regulatory period 5.

Table 18: Melbourne Supply System Bulk Entitlement Purchase

'\$M (2019/20 \$)	2023-24	2024-25	2025-26	2027-28	2028-29
Purchase of 2 GL Bulk Entitlement (capital expenditure)	0.76	-	-	-	-
Non-controllable (fixed cost – Melbourne Water 3 GL)	1.07	1.07	1.07	1.07	1.07
Non-controllable (variable water consumption – Melbourne Water)	0.27	0.27	0.27	0.27	0.27

Environmental contribution

South Gippsland Water currently makes an annual contribution to DELWP for initiatives that promote the sustainable management of water. The contribution increased from \$1.01M to \$1.23M in 2018/19 and will be subject to review from 1 July 2020. Historically, the Environmental Contributions has been applied based on 5% of the Corporation's core water and wastewater annual revenue. It has been assumed to remain at 2018/19 levels and it is proposed that any variations be treated as a "pass through" as required.

Licence fees

Licence fees consist of regulatory charges incurred from the Essential Services Commission, Department of Health, and Environmental Protection Authority, Victoria. These regulatory fees are assumed to remain constant, in real terms.

Growth and efficiency

Growth projections used to forecast controllable operating expenditure are consistent with projections used for demand forecasts. The weighted average demand increase across all customer categories is 1.6% per annum. The impact of customer growth is to allow a commensurate increase in operating and maintenance expenditure, which will provide \$1.9M in additional expenditure over the regulatory period.

In the interests of customer affordability, consideration of scope for operating cost efficiencies has been assessed. The proposed efficiency rate is 1% per annum, representing \$1.2M of savings across the regulatory period. Cost efficiencies will be achieved by ongoing workplace review processes, embedding LEAN process improvement and initiatives.

A net increase of \$0.7M (\$1.9M growth less \$1.2M efficiency) for operating expenditure is therefore proposed to support controllable operating costs over the period.

Forecast operating costs

The approach adopted for PS2020 has resulted in a high degree of confidence that opportunities have been identified and improvements adopted to ensure actual costs are consistent with efficient practices. Over the course of 2018/19 to 2022/23 (and onwards) controllable operating costs per connection are forecast to decline from \$916 to \$851 (7%).

A total operating expenditure of \$62.0M is forecast for the period 2020/21 to 2022/23. This includes \$5.7M of non-controllable expenditure. The following table provides a breakdown of total controllable operating expenditure, including the impact of any step changes.

Table 19: Forecast controllable operating expenditure - incorporating step changes

'\$M (2019/20 \$)	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28
Controllable operating expenditure (baseline)	18.87	18.99	19.11	19.24	19.36	19.48	19.61	19.73
Less electricity contract rate reduction	(0.09)	(0.14)	(0.14)	(0.14)	(0.14)	(0.14)	(0.14)	(0.14)
Electricity offset (behind the meter solar projects)	(0.20)	(0.18)	(0.18)	(0.18)	(0.18)	(0.18)	(0.18)	(0.18)
Urban water strategy consultancy	-	0.23	-	-	-	-	0.23	-
Total controllable operating expenditure	18.58	18.90	18.79	18.91	19.03	19.16	19.51	19.41

Allocation of Risk

The Price Submission process has been developed with a key focus on understanding and allocation of risk.

Operating expenditure for the years 2020/21 to 2022/23 has been allocated with the Corporation managing key risk areas in order to deliver on customer expectations with respect to water security and service reliability while maintaining affordable prices.

Reliable benchmarking has proven the organisation to be relatively prudent and efficient in its diverse operations. The 2018/19 baseline is a result of recent increased expenditure in an environment of stable prices where South Gippsland Water has delivered on programs to achieve the desired customer outcomes. The Corporation proposes to minimise further variations to baseline expenditure, and will absorb additional expenditure during the regulatory period.

6.3 Capital Expenditure

AT A GLANCE

- *South Gippsland Water proposes \$41.0M of Capital Expenditure over the regulatory period*
- *This is \$2.4M less than the indicative forecasts from the 2018 Price Review*
- *Approximately \$1.2M per year less than long term average capital expenditure*
- *Capital projects have been prioritised in order to deliver on Customer Outcomes*
- *Key project drivers are Renewal, Growth and Compliance*

6.3.1 Background

In 2018 South Gippsland Water submitted a capital program to deliver on six key Customer Outcomes and with a key focus to maintain the reliability of customer services for the long term. The PS2020 submission is largely an extension of those projects identified in 2018.

South Gippsland Water has completed a process of testing and confirming key outcomes and drivers with our customers to inform the capital program. A thorough infrastructure analysis has also been completed over the past two years which has provided further confidence in the methodology to inform the development process. Additional asset condition and risk assessments have been used to underpin a prudent and efficient capital expenditure program.¹⁴

6.3.2 Method of developing the capital expenditure program

The Corporation's capital expenditure approach involves a robust process to understand the condition of assets, associated risk, and target expenditure where required to meet customer outcomes or regulatory requirements. All expenditure for the capital program is shown in 2019/20 dollars.

A project risk prioritisation tool¹⁵ has been used, which incorporates consideration of the Corporation's strategic risk framework, customer benefit, together with project cost. The benefits of this assessment process includes the ability to focus and prioritise capital expenditure to support Customer Outcomes and stakeholder interests.

The method for developing the capital expenditure program is overseen by a solid governance framework incorporating Senior Management review, Engagement and Planning (Board) Committee assessment and endorsement, and Board review and approval processes. A staged process is used consisting of:

- *Identification of the requirement via asset planning to deliver customer value*
- *Investigations to determine the best way a requirement can be met*
- *Development of a Preliminary Business Case or Asset Class Plan*
- *Further analysis, investigation, design and scoping to produce Business Cases*
- *Design finalisation and procurement, usually via tender*
- *Tender approval and project delivery*

Options analysis on each project is undertaken to ensure that the capital program is completed in a prudent and efficient manner that aligns with organisational capacity.

¹⁴ Capital Plan 2019

¹⁵ PS2020 Project Prioritisation Tool

6.3.3 Asset Management Improvement Projects

Over the past regulatory period South Gippsland Water has undertaken an improvement program in partnership with the Department of Environment, Land, Water and Planning (DELWP) to assess and further understand its assets. This process has provided confidence in the methodology adopted to plan for the upgrade and replacement of assets.

Robust data analysis has formed the basis of renewal plans to assist in preparing the capital expenditure program and ensures planned works are scheduled to be completed in a “Just in Time” and cost efficient manner. The analysis has provided the Corporation with a greater ability to manage risk as opposed to transferal to the customer.

6.3.4 Risk Based project prioritisation

For PS2020, South Gippsland Water has undertaken additional risk analysis with respect to standards of service, customer benefit and project cost.

The risk prioritisation tool is a systematic approach to capital program development incorporating key customer outcomes and drivers, justification, impact and cost to inform the decision making process as outlined below;

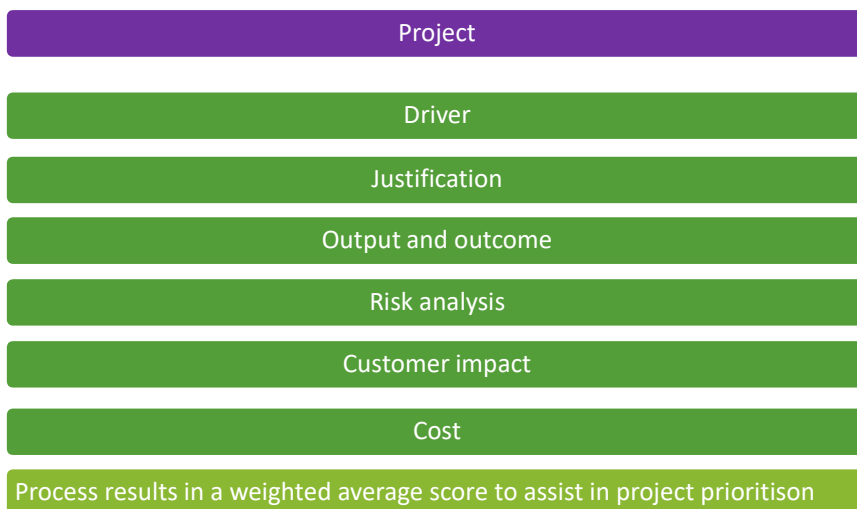


Figure 18: Risk prioritisation process

Capital project delivery processes are designed to deliver customer outcomes efficiently by:

- *Completion of projects just as the assets are needed, with risks created by uncertainty of timing to be carried by South Gippsland Water*
- *Design development by expert third-party service providers as this is efficient for the water sector, particularly for small water businesses*
- *Procurement and contracting strategies designed to manage delivery risks between suppliers, service providers, contractors and South Gippsland Water*
- *Typical water sector and public sector procurement and contracting procedures*

Projects that have been assessed to contain a level of uncertainty, such as the Facilities Strategy, have been deferred from the program with the view of completing further options assessment, feasibility studies, scoping work and cost estimates. Some projects have also been deferred where there was uncertainty around the timing, for example the Leongatha water supply augmentation. South Gippsland Water has not sought to transfer risk associated with project timing to customers and has deferred projects where appropriate. Projects with uncertain scope or timing have been included in future regulatory periods.

Projects that have been deferred due to uncertainty about the scope or timing are summarised in the following table:

Table 20: Capital Program – projects deferred from the PS2020 Capital Program

Project	Deferred from PS2020 (2019/20 \$)	Revised Completion Date
Capital costs for purchase of additional Bulk Entitlement to the Greater Yarra – Thomson Pool (Melbourne surface water system)	\$0.8M	2023/24
Expenditure on works to improve water security for Leongatha	\$21.1M	After 2027/28
Dams repurposing or decommissioning costs	\$3.0M*	After 2023/24
Works to improve water pressure in Poowong	\$0.6M	2024/25
Facilities Strategy	\$7.2M	2024/25
Korumburra sewerage augmentation	\$1.1M	2027/28
Foster sewerage augmentation	\$0.5M	2027/28
Billing system renewal	\$1.6M	After 2022/23

* Note that decommissioning or impairment costs are considered as operating costs for accounting purposes

The development of risk-based renewal plans has allowed South Gippsland Water to better balance the risk allocation between customers (via tariffs) and the business. Renewal allocations for water and wastewater treatment plants have been limited to cover only the highest priority renewals. Similarly, water main renewal forecasts have been set to minimise risk transfer to the customer. Extensive analysis of the business' data on main performance has been completed to forecast future performance and modelling has been completed to estimate the renewal investment required to maintain service standards over the next twenty five years. This work has suggested that larger long term renewal allocations for water reticulation mains and transfer/distribution mains are required. The business has chosen to further assess requirements based on any emerging trends that may start to show service standards declining and/or operating and expenditure increasing, proposing only a modest increase in annual renewal expenditure.

6.3.5 Cost Estimation

Capital Program estimates have been developed using a variety of cost estimation processes. Where possible, forecasts are based on contracted amounts or rates with allowances for provisional items, minor contingency allowances and project management costs. For major discrete projects, estimates are developed by engineering or design consultants.

Probabilistic analysis of these estimates is used to generate the P50 values which are included in the Price Submission expenditure forecast. For renewal allocations, forecast expenditure is based on current contracted rates where possible. Where allocations are based on rates, the rates have been taken from completed South Gippsland Water contracts and escalated, where necessary, using CPI. Rates for water reticulation, transfer and distribution mains were cross-checked using reports produced by engineering consultants and are available upon request.

6.3.6 Historical Capital Expenditure

Since the start of the current regulatory framework, the average annual capital expenditure by South Gippsland Water has been approximately \$15.1M, as shown in the figure below.

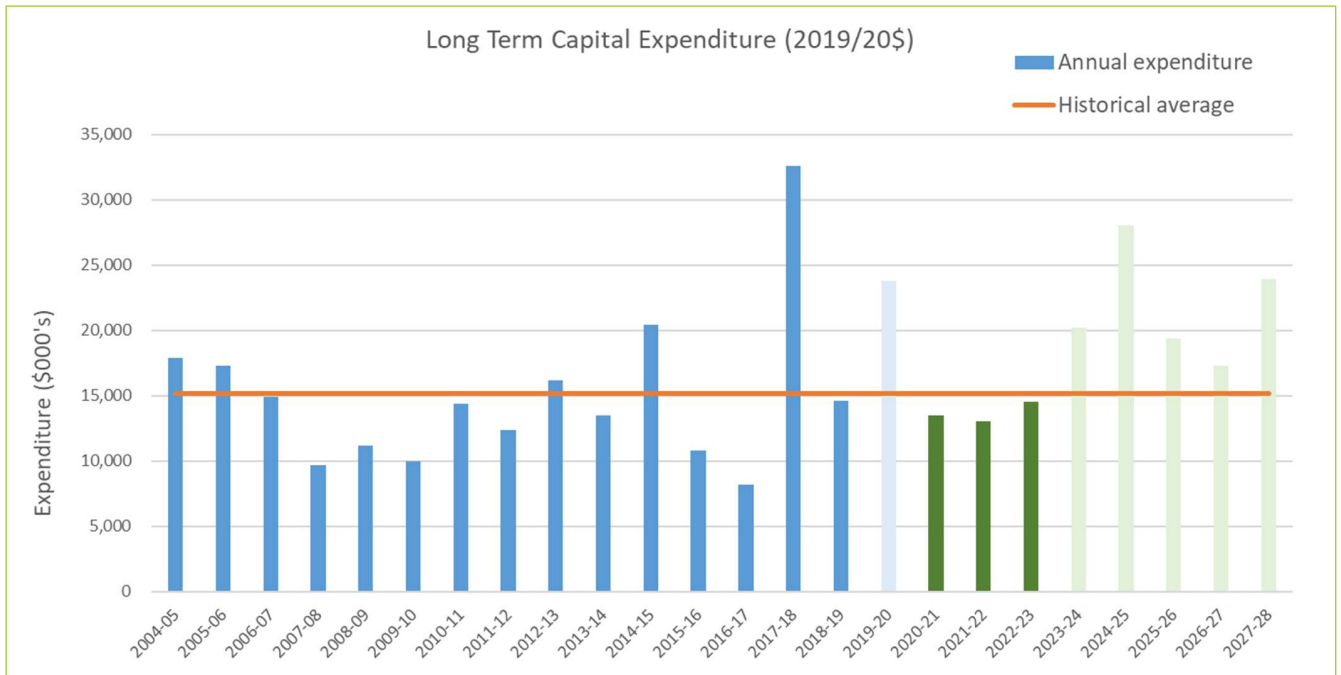


Figure 19: Historical and projected capital expenditure

Expenditure has shown some variation year by year, with major peaks coinciding with significant projects driven largely by growth or compliance.

The 2018 Price Determination included an approved expenditure of \$37.3M over the two years 2018/19 and 2019/20. Expenditure in 2018/19 was \$15.1M and the latest forecasts for 2019/20 was \$23.2M, a total of \$38.3. The \$1M difference between the 2018 Price Determination, expenditure in 2018/19 and forecast 2019/20 was caused by a \$1.6M project to renew assets at a major water pump station in Wonthaggi plus other minor variations. The Project has been brought forward from Regulatory Period 5 based on recent performance, asset condition and risk assessments

The table below shows the top ten major discrete projects included in the 2018 Price Submission with notes on the status of each project.

Table 21: Discrete Project Status - Proposed Top Ten 2018/19 - 2019/20

Project Name	Project Description	Primary Driver	Status
Lance Creek Water Connection Project (LCWC)	Secure water supplies for Korumburra, Poowong, Loch and Nyora	Growth	Completed in 2018/19 minor additional works 2019/20
Sewer System Expansion (Wonthaggi)	Sewer Main augmentation program in the Wonthaggi township	Growth/ Compliance	Works underway, Ongoing program in PS2020
Leongatha Raw Water Transfer Main	Renewal of the Leongatha raw water main to address asset condition and capacity issues	Asset Renewal	Deferred, Preliminary works included in PS2020
Sewer System Expansion (Inverloch) Sewer Pump Station	Capacity upgrade to include emergency storage for wet weather events	Growth	Underway, will be complete in PS2020
Carbon Emission Reduction Upgrades	Carbon Emission Reduction Upgrade including behind-the-meters solar projects	Compliance	Stage One complete, second stage due for completion 2019/20
Wonthaggi WWTP Treated Effluent Rising Main	Wonthaggi rising main upgrade –to 400mm over a length of 1.88km	Growth	Programed to be completed PS2020
Fish Creek Treated Water Distribution Main	Asset Renewal to reduce water loss and assist in securing the Fish Creek water supply	Asset Renewal	Deferred, Preliminary works included in PS2020
WTP Disinfection Upgrade Projects	Project scheduled across the region WTP's to upgrade disinfection systems for Pathogen Risk Reduction	Compliance	Underway and due for completion in 2019/20
Lawler Street SPS renewal Sewer System Major Renewal Item	Sewer System Major Renewal of the Lawler Street Sewer Pump Station	Asset Renewal	Underway and due for completion in 2019/20
Wonthaggi WWTP Inlet Pump Station Renewal	Renewal of pump station and installation of screen	Asset Renewal	Underway and due for completion in 2019/20

Table 22: Renewal Program Status - Top Ten programmed 2018/19 - 2019/20

Project Name	Project Description	Status
Water Reticulation Renewal Allocation	An ongoing renewal program of the Corporation's water assets	Underway. Expenditure will exceed approved allocation due to two high priority projects
Reticulation Sewer Replacement / Rehabilitation Allocation	An ongoing renewal program of sewer assets - primarily consisting of relining programs	Underway. Expenditure in line with approved allocation
Vehicle Renewal	Renewal program for the Corporation's vehicle fleet	Underway. Expenditure below allocation in 2018/19 while efficient contractual arrangements were established
Water Treatment Plant Asset Renewal	Asset renewal allocation for the Corporation's eight Water Treatment Plants	Underway. Expenditure will exceed allocation
SCADA Renewal	An ongoing renewal program for SCADA equipment and programming	Underway and on track
Wastewater Treatment Plant Renewal	Asset renewal allocation for the Corporation's Wastewater Treatment Plants	Underway. Expenditure has exceeded allocation
IT Hardware Renewal	An ongoing renewal program for the Corporation's computer systems	Underway and on track
Hydraulic Modelling and Network Master Planning	Building, update, calibration of all SGW water/sewer hydraulic model & network master planning	Underway and on track
M&E Sewer Pump Stations Renewal	An ongoing renewal program for Sewer Pump Stations mechanical and electrical components	Underway and on track
IT Systems (software) Renewal	An ongoing renewal program for the Corporation's software updates	Underway and on track

Year on year capital expenditure variations are evident from the historical data. Significant variations in the past have been caused by major growth or compliance projects such as the Poowong, Loch and Nyora sewerage scheme (peak expenditure in 2014/15) and the Lance Creek Water Connection Project (peak expenditure in 2017/18). Expenditure in 2019/20 is higher than the historical average to accommodate:

- *Upgrades to disinfection processes at several water treatment plants (\$1.97M)*
- *Renewal of water mains in the Central Business Districts of Wonthaggi and Leongatha (\$1.55M)*
- *A taste and odour removal process upgrade at Lance Creek Water Treatment Plant (\$1.00M)*
- *Expenditure on vehicle renewals deferred from 2018/19 (\$2.59M)*

Expenditure is forecast to peak again in 2023/24 – 2025/26 (Regulatory Period 5) due to planned works such as, renewals of filters at three water treatment plants (Foster, Leongatha and Toora) and construction works on the Corporation's Facilities Strategy.

6.3.7 Summary of Capital Forecast for PS2020

South Gippsland Water has completed a process of gathering customer feedback, analysing risk allocation, meeting regulatory compliance requirements and provision for growth which has resulted in the proposed capital program.

The proposed Capital forecast amount of \$41.0M is approximately \$2.4M below the indicative forecasts from 2018 with the key variances being:

- \$4.00M of project facilities renewals reduced to \$0.80M of high priority interim works and an allocation of \$0.60M for design development of permanent works now scheduled for Regulatory Period 5, deferring \$2.60M
- Reprioritisation of Foster sewer augmentation works, deferring \$1.39M
- Risk based prioritisation of treatment plant renewals, deferring \$0.70M
- Prioritisation and rationalisation of sewer manhole renewals, deferring \$0.85M
- Other minor allocation rationalisation and deferral of projects, \$1.17M

With a focus on reliability and maintaining service levels, three key drivers underpin the Capital Program, renewal, growth and compliance. Capital investment has been tested with customers and the largest investment area remains with renewals, comprising 56% of the total expenditure over the period of PS2020 and 51% of total capital expenditure over regulatory period five.

Table 23: Forecast Capital Expenditure Driver

Driver	Regulatory Period	
	4 2020/21 – 2023/24	5 2023/24 – 2028/29
Asset Renewal	56%	51%
Compliance	6%	20%
Growth	36%	28%
Business Efficiency	2%	1%

The South Gippsland Water Capital Program has been built to deliver on customer outcomes, in particular the customer outcome for reliability. Over the past three regulatory periods, capital investment by South Gippsland Water has focussed on construction of new services, including a new water treatment plant, five new sewerage schemes for small towns, significant upgrades to Leongatha and Korumburra wastewater treatment plants and the recent Lance Creek Water Connection project that supports growth.

For the foreseeable future, capital investment will change focus to asset renewal, as driven by recent data on water supply system performance, recent incidents in both the water and sewer networks and extensive condition and risk assessment of assets undertaken since the 2018 Price Submission. The 2020 Price Submission reflects this change with 44% of expenditure targeting growth and compliance.

6.3.8 PS2020 Discrete Projects

Over the period of PS2020, there are five major discrete projects with forecast expenditure in excess of \$500,000, totalling \$15.4M. This represents 93% of expenditure on discrete projects. The table below provides further detail on the top five discrete projects. Summary information on minor discrete projects has been provided in 6.3.10.

Table 24: Top Five Discrete Project Classification and Driver

Classification	Driver	Project	PS2020 (2019/20 \$)
Sewer	Growth	Sewer System Augmentation -Wonthaggi Mains	\$4.5M
	Growth	Wonthaggi WWTP Augmentation	\$3.4M
	Growth / Compliance	Sewer System Augmentation - Inverloch	\$3.5M
Water	Renewal	Service Basin Cover and Liner Renewals	\$3.3M
Non Direct	Renewal	Facilities Strategy	\$0.6M

6.3.9 Top Five Discrete Project summary

1. Sewer System Augmentation - Wonthaggi Mains

Preliminary Business Case Number 317200¹⁶

Customer Outcomes: The Corporation is committed to providing a safe wastewater service that contributes to the liveability of our communities. Growth forecasts for Wonthaggi have identified a need to upgrade a range of elements within the Wonthaggi Waste Water Treatment plant and reticulation system. This project aligns to the Wastewater, Reliability and Environment Customer Outcomes.

Why: The Wonthaggi sewerage network is experiencing compliance issues with respect to the EPA standards for wet weather flow containment and has no capacity to accommodate growth. Capacity upgrade works are necessary to ensure the system achieves a standard of service which is compliant with regulatory requirements. Upgrade works are also necessary to support substantial growth that is occurring to the north and east of the town. Multiple options have been assessed to develop a preferred solution.

What: A number of proposed pipe capacity upgrades and new pipeline diversions. The works form part of an on-going multi-stage network augmentation that has been underway for a number of years. Works occurred in 2018/19 and are still underway in 2019/20. A complementary project to upgrade sewer pump stations is also underway, with the next stages planned for Regulatory Period 5. Upgrade stages are planned for delivery on a 'just-in-time' basis as new subdivisions are built and development occurs. Works are aligned with planned capacity increases at the Wonthaggi Wastewater Treatment Plant.

When: A number of key sections of sewer are already under-capacity elevating spill risks. Furthermore, development of subdivisions to the north and east of the town over the past two years has escalated the risk of spills. This project is being delivered in stages and various stages are currently in delivery, detailed design and planning.

Cost RP4.2 (2019/20 \$)	2020/21	2021/22	2022/23
Total \$4.5M	\$1.0M	\$1.5M	\$2.0M

Costs forecast for the period 2020/21 to 2022/23 are part of an on-going program of work. Expenditure in 2018/19 and 2019/20 means the total expenditure for Regulatory Period 4 is \$5.7M and further expenditure has been forecast in RP5. The project driver is partly growth (75% of costs) and partly compliance (25% of costs). This split between growth and compliance recognises the fact that the existing system is already under-capacity constraints regardless of growth.

2. Wonthaggi Wastewater Treatment Plant Augmentation

Preliminary Business Case Numbers 447268 & 447269¹⁷

Customer Outcomes: The Corporation is committed to providing a safe wastewater service that contributes to the liveability of our communities. Growth forecasts for Wonthaggi have identified a need to upgrade a range of elements within the Wonthaggi Waste Water Treatment plant and reticulation system. This project aligns to the Wastewater, and Environment Customer Outcomes.

Why: The Wonthaggi Wastewater Treatment Plant (WWTP) has limited capacity to adequately accommodate wastewater flows. Inadequate capacity of the outlet pump station and rising main has, on occasion, overflowed from the treatment plant during wetter winter months. Growth in the town will further increase the potential of treated effluent spills in future. Furthermore, additional flows will overload the treatment plant further and reduce effluent quality.

What: This project includes a staged upgrade of the WWTP starting with the outlet pump station and rising main during PS2020. The work follows a project of renewal and upgrade of the WWTP inlet pump station, which is currently underway and will be followed, in Regulatory Period 5, by upgrades to the treatment capacity. Multiple options to handle treated effluent from the plant were considered before the proposed solution was accepted.

When: The containment standard for the plant is close to the minimum standard required by the regulator and spills have occurred during times of wet weather. Subdivision development and in-fill development is occurring at the moment making this project relatively urgent. The project is currently in the design stage.

Cost (2019/20 \$)	2020/21	2021/22	2022/23
Total \$3.4M	\$0M	\$0.5M	\$2.9M

¹⁶ Sewer System Augmentation - Wonthaggi Mains

¹⁷ Wonthaggi Wastewater Treatment Plant Augmentation

3. Sewerage System Expansion (Inverloch)

Preliminary Business Case number 447232¹⁸

Customer Outcomes: The Corporation is committed to providing a safe wastewater service that contributes to the liveability of our communities. Growth forecasts and potential wet weather events associated with Inverloch have identified a need to upgrade a range of the Inverloch Sewerage System. This project aligns to the Wastewater, Reliability and Environment Customer Outcomes.

Why: The existing Inverloch sewerage network is limited with respect to the EPA minimum standard for wet weather flow containment. Sewage spills have been experienced during wet weather. These works are required to achieve compliance and accommodate for growth in the area. With sub-divisions to the east of the town now developed, properties are currently under construction meaning sewer system works are needed in the near future. Also, system resilience during unplanned outages is very limited during dry weather, particularly during summer holiday season peaks and overflows from the sewerage system pose a risk to high amenity value beaches.

What: This project proposes capacity upgrades to the Veronica Street, Pier Road and Meanderri Drive pump stations with additional emergency storage capacity that can detain flows in wet weather and in holiday peak, dry weather failure scenarios.

When: Augmentation of the Inverloch sewerage system has been progressing in stages for a number of years with works on gravity mains and the pump station. Work is now needed on three other pump stations that are already overloaded during dry weather during the summer holiday peak and don't have operational resilience or the required wet weather containment volume. Further work will be needed in Regulatory Period 5.

Cost RP4.2 (2019/20 \$)	2020/21	2021/22	2022/23
Total \$3.5M	\$2.5M	\$1.0M	\$0M

4. Service Basin Cover and Liner Replacements

Preliminary Business Case Number 447228¹⁹

Customer Outcomes: The Corporation is committed to providing safe drinking water to communities across the region. This project ensures the quality of clear water is not compromised while in storage and aligns to the Water Customer Outcome.

Why: Service Basin liners and covers have a finite life that is limited by UV exposure, exposure to chlorine in the stored water and the cumulative impact of wear caused by water level changes. Cracks or holes in the lining and cover material provide an entry point for groundwater or rainwater carrying pathogens or pollutants, risking customer health or creating taste and odour issues. This program is necessary to upgrade the liners and protect treated water quality.

What: The project involves staged renewal of the water service basin liners and covers of six drinking water service reservoirs and temporary works to allow basins to be taken out of service. Four service basins will be addressed in Regulatory Period 4 and the remaining two in Regulatory Period 5. A range of solutions were investigated during development of this project to identify the preferred solution, including different materials and radically different covers.

When: Condition and risk assessment of the basin liners has been used to develop a program of works that targets the highest risk basins first. Known rips, tears and residual strength suggests this work cannot be delayed any further.

Cost RP4.2 (2019/20 \$)	2020/21	2021/22	2022/23
Total \$3.4M	\$1.2M	\$1.3M	\$0.9M

¹⁸ Sewerage System Expansion (Inverloch)

¹⁹ Service Basin Cover and Liner Replacement

5. Facilities Strategy²⁰

Why: South Gippsland Water staff are dispersed across eight different office buildings across six sites. The buildings and sites were generally inherited from predecessor organisations in 1995. Ad hoc upgrades and basic maintenance have been completed over the last 25 years, but many of the buildings now need significant maintenance or renewal. The scope of renewal works triggered further investigations to confirm the best long-term option for the organisation over the next 50 years.

What: Expenditure in PS2020 has been proposed to complete the design development and tendering process to construct a contemporary, centralised building for the Corporation's stores, corporate services and depots. Upgrade of a number of satellite depots is included in the process. Consolidating to a centralised facility is the lowest whole of life cost solution for the business, reduces safety risks and time lost through travel and has numerous benefits that are not easily monetised.

When: To minimise the risk posed by the existing facilities conditions, this project should be progressed as soon as possible. However, the business Sustainable Strategic Direction Review being conducted jointly with DELWP and South Gippsland Water may have an impact on the optimal location and configuration for the business' facilities and work cannot proceed until the business review is complete, including further investigation of appropriate location. For this reason only design and project development costs have been included in Regulatory Period 4, with the balance of the costs included in Regulatory Period 5.

Cost RP 4.2 (2019/20 \$)	2020/21	2021/22	2022/23
Total \$0.6M	\$0M	\$0M	\$0.6M

Future Regulatory Period expenditure on the Facilities Strategy is estimated to be an additional \$7.2M (P50 estimate).

6.3.10 Discrete Projects – Other

All remaining discrete projects have individual project expenditures below \$0.5M. Summary information on these projects with a value between \$0.15M and \$0.5M is provided below.

Table 25: Additional (non top five) Discrete Projects

Project	What	Why	When	\$M
Leongatha Raw Water Transfer Main	Condition assessment, targeted renewals	Maintain water supply reliability: Reduce leakage and failure risk	2020/21 to 2022/23	\$0.31M
Leongatha WWTP Inlet Works	Renewal of inlet works to reduce maintenance cost and OH&S risks	Compliance driver: Frequency of failures and OH&S risk associated with maintenance	2020/21 to 2021/22	\$0.26M
Port Albert Vacuum Sewer Renewal	Vacuum valve renewal, pit instrumentation	Maintain wastewater service reliability: Reduce frequency of failures and reduce after-hours repair time and OH&S risk	2021/22 to 2022/23	\$0.25M
Wonthaggi Low Level Basin Pump Station Renewal	Pump station and pipework renewal	Maintain water supply reliability: Pumps, switchboard and surge vessel failure risk is unacceptably high	2019/20 to 2020/21	\$0.17M
Leongatha Water Supply Augmentation	Project development costs	Maintain water supply level of service: Leongatha water supply level of service is low	2020/21	\$0.15M

6.3.11 Renewal Programs - Top Ten

South Gippsland Water major renewal programs represent 56% of the proposed total capital program. Over the past two years, South Gippsland Water has undertaken an asset improvement project to assess and further understand its assets and renewal needs. Completion of the asset management improvement project in partnership with DELWP has provided an enhanced understanding of the Corporation's renewal needs for water and wastewater assets. Asset class plans documented in 12-Appendices.

Robust analysis has formed a basis of high-quality risk assessments to assist in preparing the capital program. The aim is to ensure that planned works are scheduled to be completed in a "Just in time" and cost-efficient manner. Risks associated with delivering this program have been largely taken on by the Corporation by proposing a lower rate of renewal than identified by the modelling processes for water and wastewater systems.

South Gippsland Water customers have expressed a desire to maintain current service levels. The knowledge gained through the asset improvement project has enabled the Corporation to further understand the works required to deliver on this customer expectation.

The top 10 renewal programs are listed below:

Table 26: Summary of PS2020 Renewals Programs including movement from PS2018

2019/20 \$	Renewal Project	2020/21	2021/22	2022/23	Movement from PS2018
Sewer	Sewer Reticulation - replacement / rehabilitation				
	Total \$2.40M	\$0.80M	\$0.80M	\$0.80M	Reticulated sewer network, annual renewal allocation. Proposed expenditure is marginally below PS2018 and is being delivered under a multiyear contract.
	Wastewater Treatment Plant				
	Total \$1.60M	\$0.53M	\$0.53M	\$0.53M	Annual renewal program for the Corporation's 11 WWTPs. The proposed expenditure is \$0.25M per year below PS2018. Work is at various stages including delivery, design and procurement.
Sewer Pump Stations					
	Total \$1.05M	\$0.35M	\$0.35M	\$0.35M	Renewal or rehabilitation program for components of the Corporation's larger Sewer Pump Stations. This is a continuation of the ongoing program. Work is at various stages and a multi-site multiyear contract is being tendered in 2019/20. The allocation is consistent with PS2018. The proposal is marginally above actual expenditure from the past two full years (in 2017/18 and 2018/19 expenditure averaged \$0.32M per year)

2019/20 \$	Renewal Project	2020/21	2021/22	2022/23	Movement from PS2018	
Water	Water Reticulation - Mains					
	Total \$2.40M	\$0.80M	\$0.80M	\$0.80M	Water main network, annual renewal allocation. The proposal is \$0.3M per year above the allocation in PS2018 but is below actual expenditure for the first two years of the current regulatory period. Work is at various stages, with projects in planning, design and delivery.	
	Water Transfer and Distribution Mains					
	Total \$1.08M	\$0.36M	\$0.36M	\$0.36M	Annual allocation for renewal of the transfer (raw water) and distribution (treated water) mains. Work is at various stages including planning, design and delivery. This proposal is consistent with the PS2018.	
	Water Treatment Plant					
	Total \$1.65M	\$0.55M	\$0.55M	\$0.55M	Ongoing maintenance and renewal of the Corporation's eight WTP's. The proposed expenditure is \$0.43M per year below PS2018. Work is at various stages including planning, design and delivery.	
Non Direct	Infrastructure Safety Improvements					
	Total \$0.93M	\$0.61M	\$0.16M	\$0.16M	The proposed expenditure for safety upgrades of the Corporation's treatment plants and pump stations is \$0.1M per year above PS2018. Work is in procurement and delivery stages.	
	SCADA renewals (equipment)					
	Total \$0.87M	\$0.29M	\$0.29M	\$0.29M	There are four allocations for renewal of Information Technology and Control equipment in the top ten South Gippsland Water allocations for Regulatory Period 4. Expenditure proposed remains unchanged from the PS2018. *Minor allocation, included here for completeness	
	SCADA renewals (programming)					
	Total \$0.87M	\$0.29M	\$0.29M	\$0.29M		
	IT Hardware					
Total \$1.08M	\$0.36M	\$0.36M	\$0.36M			
IT System*						
Total \$0.62M	\$0.21M	\$0.21M	\$0.21M			

The 2018 Price Determination allowed for \$0.5M per year for water reticulation main renewals and a further \$0.25M per year for distribution main renewals. Since 2018 the business has completed considerable work to better understand the future investment requirement to maintain water service standards. Assessment of asset performance and criticality have been used to develop a program of work necessary to maintain service standards over the next 25 years. This work has forecast that the annual expenditure requirement for reticulation mains is \$1.34M per year and the investment needed in transfer and distribution mains is a minimum of \$0.5M per year. The business has seen a recent increase in bursts and leaks, particularly in some areas and for cohorts of similar materials. To maintain standards the business has historically invested more than \$0.5M per year. Rather than proposing an immediate increase to \$1.34M the business is proposing to balance risk and price and include an unchanged allocation for transfer and distribution mains but increase the water reticulation renewal allocation to \$0.8M per year. This proposal aligns with testing of customer views during 2019 that support investment to maintain service levels.

6.3.12 Renewal Programs - Other

In addition to the top ten allocations described previously, South Gippsland Water's Capital program includes a range of minor works to deliver on Customer Outcomes as detailed in Table 26 below.

Table 27: Renewal Projects - Other

Minor Program	What	Why	When	\$M
Plant & Equipment renewal	Renewal/repair of trailers, excavators etc.	Maintain service reliability by renewal of service tools	2020/21 to 2022/23	\$0.78M
Network model development	Complete development of water and sewer network models	Plan for network expansion to support regional growth	2020/21 to 2022/23	\$0.73M
Treated water storage renewal allocation	Renewal work on tanks and towers	Maintain service reliability and compliance with drinking water regulations	2020/21 to 2022/23	\$0.64M
Sewer sideline renewal allocation	Reactive renewal of house branch connections	Maintain service reliability	2020/21 to 2022/23	\$0.31M
Vehicle replacement renewal	Ute, trucks and vehicle renewal	Maintain service reliability	2020/21 to 2022/23	\$0.63M
IT systems renewal (software)	Renewal of IT systems software to maintain business systems	Maintain business core functions	2020/21 to 2022/23	\$0.62M
Minor water quality improvement allocation	Program of works to maintain compliance	Safe water supply	2020/21 to 2022/23	\$0.47M
Water pump station renewal allocation	Renewal of raw and treated water pump stations	Maintain service reliability	2020/21 to 2022/23	\$0.26M
Dam safety renewal allocation	Program of compliance driven work to maintain dam safety	Dam safety compliance	2020/21 to 2022/23	\$0.31M
Minor wastewater treatment improvement allocation	Program of works to improve compliance	Maintain service reliability	2020/21 to 2022/23	\$0.39M

7 Price and Tariff

AT A GLANCE

- *South Gippsland Water proposes to continue with the existing 'individual price caps' form of price control*
- *Water and wastewater tariff structures remain unchanged for the regulatory period 2020 to 2023*
- *A preferred price path was tested and the Corporation are proposing to adopt the customer preference for an increase of 5%, 2% and 2% over the three years of PS2020.*

7.1 Price Control

The form of price control reflects the approach that a water business takes to translate their revenue requirement into customer prices. It is an important tool for ensuring a water business achieves sustainable revenue streams over the regulatory period,

Several forms of price control are used in Victoria. South Gippsland Water currently uses the individual price caps form of price control.

In our 2018 Price Submission we proposed the introduction of a hybrid form of price control with a revenue cap for cisterns and minor trade waste (excludes major trade waste customers) and individual price caps for other services. The Corporation is proposing not to continue with the wastewater tariff reforms during PS2020, and will reconsider tariff reform options in regulatory period five.

As such, the Corporation is proposing to continue with the existing price caps form of price control for the regulatory period 2020 – 2023.

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

- *Provides greater price certainty across the period*
- *Allows for a simple messaging to customers by applying the CPI-X formula to each price component*
- *Provides consistency with the approved 2018 Price Determination*

7.1.1 Price Adjustment Mechanism

South Gippsland Water proposes to adopt the price adjustment mechanisms identified in the 2018 price determination for the PS2020 period. These allow for prices to adjust in order to take into account:

- *Uncertain and unforeseen events*
- *Differences between forecast and actual non controllable costs associated with Melbourne Water*
- *A 'pass through' of changes in costs such as taxes of environmental contribution during the regulatory period*
- *Annual changes to the benchmark cost of debt and Consumer Price Index*

7.2 Tariff Structure

7.2.1 Water

The Corporation's water tariff structure comprises of a fixed and a variable component. In response to overwhelming customer feedback, the Corporation, in its 2018 Price Submission, proposed to continue the two part tariff, however, rebalance the components, with an increase in the volumetric per kilolitre rate relative to the fixed access fee. This was in response to customer's wishes to have more control over their bills.

The proposal was not accepted by the Essential Services Commission, mainly due to the impact of price shock for water customers and a further exacerbation impact for tenants. Community desire to rebalance the tariff structure to a more user pays system has again been demonstrated in the Mini Public process. However, given the proposed price increase, it is not deemed appropriate to continue with any fixed/ volumetric rebalancing at this stage. As such, it is proposed that the current water tariff structure remain unchanged for the regulatory period 2020 to 2023.

7.2.2 Wastewater

The 2018 Price Submission proposed to revise the price model for cistern and minor trade waste fees, with a view to aligning them with a more appropriate user pays model during the regulatory period.

In its draft price decision, the ESC invited South Gippsland Water to submit its proposed minor sewerage and trade waste tariff reforms for implementation in 2020-21 as part of its 2020 price submission.

As proposed for the water tariffs, with significant price increases expected, it is not deemed appropriate to seek any reform in this Price Submission. The Corporation will undertake a thorough engagement and analysis program prior to introducing any further change to wastewater charges and as such, all wastewater tariff categories and structures are proposed to remain unchanged.

The range of tariffs and their compositions are detailed in Table 27 below.

Table 28: SGW tariff range and composition

Tariff descriptor	Current composition
Retail water	A two-part tariff comprising a fixed access fee and a variable volumetric per kilolitre rate
Retail wastewater Sewer access fee Cistern fee	Residential and general non-residential customers: a single fixed access fee Business customers: a fixed access fee (sewer or cistern) and a volumetric cistern variable fee per kilolitre rate
Trade waste Trade waste access fee Volumetric load fee	Applies to business customers that generate trade waste only. A two-part tariff comprising a fixed access fee and a variable volumetric per kilolitre rate Penalty fees also apply
Recycled water	A single variable volumetric per kilolitre rate
New customer contributions	New Customer Contributions are under review. Refer item 7.3
Miscellaneous fees and cost recovery services	Fees are charged on fixed, cost recovery basis with the exception of a variable kilolitre rate for standpipe water sales

7.2.3 Price and Tariff Impacts

Customer sentiment has been tested with respect to the balance between price, service and the organisation being sustainable into the future. Customer preference has been demonstrated to align with a moderate price increase that would maintain levels of service and support business activities. Consistent with customer feedback operational and capital programs and resulting expenditure has been developed to meet the objectives in maintaining and replacing current infrastructure and meeting customer outcomes.

The tariffs proposed for 2020 – 2023 are consistent with customer expectations and the 2018 Essential Services Commission indicative forecast and represent a projected increase of 5% in 2020/21, 2% and 2% in 2022/23 (plus CPI).

Customers and Stakeholders at the Mini Public deliberative process discussed a preferred price path, should South Gippsland Water adopt the moderate price increase. Two scenarios were provided, step change in year one and smoothed over a three year period. Attendees developed their own option (significant larger uplift followed by smaller increases). Day two voting resulted in a 46% preference for the developed option increase of 5%, 2% & 2%, South Gippsland Water proposes to adopt a price path of 5%, 2% & 2% consistent with this sentiment.

The Minister's Letter of Expectation provides guidance for South Gippsland Water to operate in an environment of stable or falling prices. South Gippsland Water is currently completing a Sustainable Strategic Direction Review in partnership with the Department of Environment, Land Water and Planning (DELWP). The project encompasses review of alternate service delivery mechanisms that would ensure a sustainable and affordable outcome for customers in future. South Gippsland Water recognises that the recommendations from the Sustainable Strategic Direction Review may impact the future direction of the Corporation.

The Corporation has not sought to lift tariffs to meet the maximum allowable revenue requirement provided for under the pricing model. A gap of \$1.7M over the three year regulatory period remains. The Corporation is confident that the pricing path proposed provides for an affordable outcome to customers and a sustainable financial position for the Corporation in the short term, ie the next three years of the regulatory period.

The following table outlines proposed prices for residential customers for the next regulatory period. The Corporation will maintain annual price adjustments consistent with the 2018 Price Determination. A price increase has been applied equally to all tariffs, excluding miscellaneous fees which are determined by a direct cost recovery method.

South Gippsland Water has sought to balance customer impacts by keeping the current price structures consistent so that high and low consumption users are equally impacted by price changes. The following tables provide an overview of the proposed tariff changes and impacts noting this is not an exhaustive list (refer to Appendix B: Proposed tariffs 2020/21 to 2022/23).

Table 29: Proposed Residential Water and Wastewater Tariffs (2019/20 \$)

Residential tariffs and customer impacts	FY19/20	FY20/21	FY21/22	FY22/23
Water service charge	\$ 305.78	\$ 321.10	\$ 327.50	\$ 334.00
Sewerage service charge (developed)	\$ 474.56	\$ 498.30	\$ 508.30	\$ 518.40
Sewerage service charge (undeveloped)	\$ 268.51	\$ 281.90	\$ 287.60	\$ 293.30
Variable water charge (water - kL)	\$ 1.85	\$ 1.94	\$ 1.98	\$ 2.02
Residential (developed) - average bill (121 kL p.a.)				
Real price	\$1,004	\$1,054	\$1,075	\$1,097
Real price increase per year (\$)		\$50	\$21	\$21
Real price increase per year (%)		5.0%	2.0%	2.0%
Residential - 200 kL p.a.				
Real price	\$1,150	\$1,208	\$1,232	\$1,256
Real price increase per year (\$)		\$58	\$24	\$25
Real price increase per year (%)		5.0%	2.0%	2.0%
Tenants - 200 kL p.a.				
Real price	\$370	\$388	\$396	\$404
Real price increase per year (\$)		\$18	\$8	\$8
Real price increase per year (%)		5.0%	2.0%	2.0%
Vacant land (undeveloped properties)				
Nominal price	\$574	\$603	\$615	\$627
Real price increase per year (\$)		\$29	\$12	\$12
Real price increase per year (%)		5.0%	2.0%	2.0%

Table 30: Proposed Non-residential Water and Wastewater Tariffs (2019/20 \$)

Non-Residential tariffs and customer impacts	FY19/20	FY20/21	FY21/22	FY22/23
Water service charge	\$ 305.78	\$ 321.10	\$ 327.50	\$ 334.00
Water service charge (not for profit)	\$ 245.29	\$ 257.55	\$ 262.70	\$ 268.00
Water service charge (agreement)	\$ 275.23	\$ 289.00	\$ 294.80	\$ 300.70
Sewerage service charge (developed)	\$ 474.56	\$ 498.30	\$ 508.30	\$ 518.40
Sewerage service charge (undeveloped)	\$ 268.51	\$ 281.90	\$ 287.60	\$ 293.30
Variable water charge (water - kL)	\$ 1.85	\$ 1.94	\$ 1.98	\$ 2.02
Non-residential - 250 kL p.a.				
Real price	\$1,242	\$1,305	\$1,331	\$1,357
Real price increase per year (\$)		\$62	\$26	\$26
Real price increase per year (%)		5.0%	2.0%	2.0%
Not for Profit - 150 kL p.a.				
Real price	\$997	\$1,047	\$1,068	\$1,089
Real price increase per year (\$)		\$50	\$21	\$21
Real price increase per year (%)		5.0%	2.0%	2.0%
Water by Agreement - 700 kL p.a.				
Real price	\$2,044	\$2,146	\$2,189	\$2,232
Real price increase per year (\$)		\$102	\$43	\$44
Real price increase per year (%)		5.0%	2.0%	2.0%

7.3 New Customer Contributions

AT A GLANCE

- *South Gippsland Water completed a thorough review process in determining a fair and consistent fee structure for New Customer Contributions*
- *The Corporation proposes to continue with the existing standardised rate for new customers to connect to water and wastewater services.*

7.3.1 Background

New Customer Contributions (NCC's) are the charges applied for new customers to connect to water and wastewater services. The Corporation currently charges standardised rates individually for water and wastewater across the region.

In developing PS2020, the Corporation has reviewed its charges in terms of the ESC principles based framework²¹ The objectives of the NCC review²² were to:

- *Understand whether the current NCC's reflects the costs incurred by the Corporation to make service connections*
- *Determine whether connection costs are consistent over the region*

The review has taken into account pricing principles supporting fairness between new and existing customers, and between geographic locations. It also considered reasonableness, such as the cost South Gippsland Water would incur in servicing new connections.

Key variables which may influence the costs of servicing new connections were taken into consideration including;

- *The level of growth-related capital expenditure to support development*
- *The number of new customers to be connected*
- *Future incremental operating costs*

Various NCC options were identified which distinguished between high and low growth areas, infill from greenfield developments and other unique circumstances within the region.

7.3.2 NCC income analysis

Standardised Scenario

Using the Essential Services Commission NCC Model, analysis of a standardised scenario resulted in a calculated NCC of \$3,137. This represented a \$819 increase to the 2019/20 individual NCC charge for both water and wastewater connections of \$2,318.

Localised Scenario

Analysis of a localised NCC scenario resulted in charges applied to the townships of Poowong, Loch, Nyora (PLN) and Greenfield low growth areas only. Under this scenario an abnormally high charge was projected for connection in the Poowong, Loch and Nyora townships as demonstrated below:

21 *NCC Analysis Report (2019)*

22 *South Gippsland Water NCC Analysis September 2019*

Table 31: Comparison of localised NCC Charge analysis

Development Segment	NCC Charge (2019/20 \$)
Infill	No Charge
Greenfield – Low Growth - Water	\$10,577
Greenfield – Low Growth - Wastewater	\$6,015
Greenfield – High Growth - Water	No Charge
Greenfield – High Growth - Wastewater	No Charge
PLN – Water	\$6,831
PLN - Wastewater	\$20,804

7.3.3 NCC Proposed

For PS2020, the Corporation proposes to continue with the existing standardised NCC rate of \$2,318 across all new connections for water and wastewater.

South Gippsland Water has considered that:

- *Moving to a localised model would create significant price shock for a small number of customers in Poowong, Loch and Nyora*
- *A \$819 increase to the current NCC charge identified in the revised model would materially increase the overall NCC revenue of the organisation. However, would potentially impact new development, and act against growth strategies for the region as a whole.*

Revenue for the period calculated at the proposed standardised contribution of \$2,318 is demonstrated in the table below.

Table 32: PS2020 Proposed NCC contribution (2019/20 \$)

Customers (2019/20 \$)	2021		2022		2023	
	Customers	Revenue	Customers	Revenue	Customers	Revenue
Water	418	\$968,924	419	\$971,242	416	\$964,288
Wastewater	420	\$973,560	422	\$978,196	420	\$973,560
Total		\$1,942,484		\$1,949,438		\$1,937,848

Customers wishing to connect to a pressurised sewerage system will remain responsible for onsite pumps, pipes, telemetry, other materials installation and inspection costs for connecting to pressured sewer systems. These costs are a direct pass through for the organisation with no price impact.

Table 33: Pressure Sewer Contribution (2019/20 \$ 'M)

	2021	2022	2023
Capital Expenditure	0.52	0.77	0.69
Contribution	(0.52)	(0.77)	(0.69)

8 Revenue Requirement

AT A GLANCE

- Opening Regulatory Asset Base (RAB) at 1 July 2020 is expected to be \$172.5M, increasing to \$188.9M at the end of 2022/23
- SGW has prepared this submission with a view to meeting a Standard PREMO rating, resulting in a return on equity of 4.5%
- SGW does not expect to make tax payments
- The Corporation has calculated a revenue requirement of \$97.1M for the period, of which \$1.7M will not be recovered by the tariffs proposed (prescribed revenue)
- The prescribed revenue proposed provides for an affordable outcome to customers, and a sustainable financial position for the Corporation in the short term

8.1 Revenue Requirement

South Gippsland Water's revenue requirement reflects the revenue required to deliver on Customer Outcomes. It is premised on prudent and efficient operating and capital expenditure and includes:

- Return on our assets, which is the forecast value of the regulatory asset base (RAB) for each year of the regulatory period, multiplied by the weighted average cost of capital
- Regulatory depreciation of new and existing assets
- Operating expenditure, including:
 - Controllable operating expenditure
 - Water and sewage bulk charges from Melbourne Water
 - Environmental contribution and other licence fees
 - Non-prescribed services which offset revenue with operating costs already included in the base line expenditure

The revenue requirement for PS2020 is \$97.1M which consists of the following:

Table 34: Total revenue requirement for PS2020 (2019/20 \$ 'M)

Item	\$M (2019/20)
Operating expenditure	61.94
Return on assets	19.94
Regulatory depreciation of assets	15.74
Adjustments from last period	0.00
Non-prescribed revenue offset	-0.52
Tax liability	0.00
Total revenue requirement	97.11

South Gippsland Water's proposed revenue requirement to 2027/28 is increasing as illustrated in the table below. 84% of the increase in revenue requirement is due to growth in the Regulatory Asset Base via the return of and on assets.

*Note: Minor differences to Finance Model due to rounding.

Table 35: Revenue Requirement to 2027/28 (2019/20 \$ 'M)

Revenue component (2019/20 \$)	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28
Operating expenditure	20.65	20.71	20.57	21.46	21.56	21.66	21.99	21.86
Return on assets	6.45	6.65	6.84	7.16	7.70	8.22	8.52	8.89
Regulatory depreciation of assets	4.85	5.22	5.66	6.28	6.83	7.47	8.10	8.59
Non-prescribed revenue offset of revenue requirement	-0.17	-0.17	-0.17	-0.17	-0.17	-0.17	-0.17	-0.17
Total revenue requirement	31.79	32.41	32.91	34.72	35.92	37.17	38.44	39.16

The following sections outline the assumptions used to calculate the revenue requirement for PS2020.

8.2 Forecast regulatory asset base

Opening asset base

The opening Regulatory Asset Base (RAB) for 2020/21 has been calculated by:

- Adding capital expenditure for each year of the current period to the opening RAB in 2018/19
- Subtracting actual customer contributions, any government contributions, asset disposals and regulatory depreciation

Table 36: Regulatory Asset Base, 2018 to 2020 (2019/20 \$ 'M)

	2018/19	2019/20
Opening asset base	159.93	162.16
plus Gross capex	15.12	17.19
less Government contributions	7.19	-
less Customer contributions	1.54	2.06
less Proceeds from disposals	0.01	0.36
less Regulatory depreciation	4.14	4.46
Closing asset base	162.16	172.47

The proposed capital program for PS2020 is forecast to increase the RAB as demonstrated below.

Table 37: Regulatory Asset Base, 2018 to 2028 (2019/20 \$ 'M):

	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28
Opening asset base	172.47	178.28	183.07	188.89	200.15	218.57	228.14	234.98
plus Gross capex	13.46	13.02	14.52	20.18	28.01	19.38	17.28	23.96
less Government contributions	-	-	-	-	-	-	-	-
less Customer contributions	2.46	2.72	2.62	2.31	2.45	2.04	2.03	2.03
less Proceeds from disposals	0.35	0.34	0.34	0.34	0.33	0.32	0.31	0.30
less Regulatory depreciation	4.85	5.22	5.66	6.28	6.83	7.47	8.10	8.59
	178.28	183.01	188.89	200.15	218.57	228.14	234.98	248.02

8.3 Tax

South Gippsland Water tax estimates show that the Corporation will not be required to make tax payments (or payments under the National Tax Equivalents Regime) during the period 2020 – 2023. Therefore, the revenue requirement does not include any component related to tax expense.

9 Financial Position

AT A GLANCE

- The proposed price path provides for a sustainable financial position for the Corporation from 2020/21 to 2022/23 with key financial indicators in keeping with benchmark
- South Gippsland Water has partnered with DELWP in order to carry out a joint review of the financial sustainability of the business. Outcomes of the review process may impact the Corporation's prices in the future
- Further moderate price increases may be required from 2023/24 to 2027/28 as a result of growth in the Regulatory Asset Base and to a lesser extent costs associated with maintaining water security

South Gippsland Water's proposed pricing, prudent and efficient operating and capital expenditure required to deliver on Customer Outcomes results in a sustainable financial position in the short term as demonstrated by the following financial indicators. The following key financial indicators are presented noting that 2023/24 to 2027/28 is premised upon a further moderate price increase, primarily due to the growth in the Regulatory Asset Base.

Table 38: South Gippsland Water Financial Indicators

	Bench- marking Range	2020 -21	2021- 22	2022 -23	2023 -24	2024 -25	2025 -26	2026 -27	2027 -28
FFO interest cover	>1.5 times	3.88	4.17	4.39	3.79	3.36	3.15	3.31	3.40
Net Debt / Regulatory Asset Value (%)	<70%	39%	39%	38%	37%	38%	42%	43%	42%
FFO / Net debt (%)	>10%	14%	15%	16%	15%	14%	12%	13%	14%
Internal financing ratio (%)	>35%	86%	103%	97%	61%	44%	66%	83%	64%

9.1 Sustainable Strategic Direction Review

In planning for PS2020 and long-term financial sustainability, the Corporation has signalled to stakeholders the potential for a moderate price rise. South Gippsland Water has tested with customers the balance between price, service and being sustainable into the future. The results remain consistent with previous customer sentiment as demonstrated earlier.

Shareholder expectation is that Victorian water businesses will operate in an environment of steady or declining prices. In the context of these expectations, South Gippsland Water has partnered with DELWP in order to carry out a joint review of the medium and long term financial sustainability of the business. Phase One of the Sustainable Strategic Direction Review process has been completed*. The process confirmed a number of business challenges facing South Gippsland Water:

- Asset condition exacerbated by limited economies of scale
- Small and dispersed water/wastewater systems
- The need to invest in IT systems and data maturity
- Delayed recovery of the Regulatory Asset Base
- Local economy impacts on growth
- Comparatively high revenue concentration in a small number of non-residential customers

*Phase 1 - Sustainable Strategic Direction (KPMG 2019)

Key outcomes of Phase One were:

- *South Gippsland Water has met the majority of its service KPIs and is a relatively efficient business*
- *Some cost optimisation opportunities have been identified, however, these will require investment to implement which would impact prices in the short term*
- *Opportunities for further efficiencies exists via collaboration with water businesses within the wider Gippsland region*

The review confirmed, that should South Gippsland Water continue to operate with the current business model and no increase in prices, then the revenue deficit will increase significantly in the future.

South Gippsland Water has commenced partnering with DELWP and water businesses in Phase two to explore a number of options with respect to alternate business models.

The results of Phase two of Sustainable Strategic Direction Review are expected during 2020 and will inform South Gippsland Water, DELWP and the Minister on a range of scenarios moving forward with respect to long-term delivery of water and wastewater services across the region.

This Price Submission reflects the moderate price increases required for South Gippsland Water to maintain services in a sustainable manner under its current business model. The Corporation's Price Submission and proposed prices have been communicated to DELWP and the Minister in line with the Statement of Obligations.

South Gippsland Water recognises that recommendations from the Sustainable Strategic Direction Review may impact the future direction of the Corporation. Progress and outcomes of the Sustainable Strategic Direction Review will be communicated to the Essential Services Commission as they come to hand, recognising that they have the potential to impact the Corporation's prices in the future.

10 PREMO - Risk

AT A GLANCE

- *The Price Submission has been developed using a robust Risk Management framework*
- *Consideration has been given to the allocation of risk between the customer and the business throughout the process with risk allocated to the business where possible*
- *The proposed capital program is \$2.4M less than the 2018 Price Determination transferring risk to the business*
- *Proposed Opex variations of \$0.3M are aligned to base-year operational expenditure. South Gippsland Water proposes to minimise operational expenditure for PS2020 with a number of cost pressures being absorbed by the business*
- *The 1.80% growth forecast represents an increase of 0.17% compared to PS2018 recognising predicted residential land development activity*
- *Major Customer demand has been modeled on current trends, incorporating a predicted increase to demand, transferring risk to the business*

10.1 Risk Management Process

Effective risk management plays an integral role in South Gippsland Water's decision-making and strategic planning. It assists in the effective allocation of risk between the customer and the Corporation, helps sustain business performance and underpins achievement of strategic goals.

South Gippsland Water has reviewed and revised its risk management framework to better understand and determine the most appropriate allocation of risk. In developing the Price Submission, the process has paid particular attention to avoiding risk averse assumptions and has sought alignment with the PREMO risk criteria of:

- *Expenditure identified for proposed investments tested against the Corporation's risk framework*
- *Submission of a case for investment including consideration of and review for prudence and efficiency*
- *Analysis of risk responsibility and potential shift between customers, South Gippsland Water and stakeholders. Particular attention has been given to mitigating price impacts on customers*
- *Third-party assistance has been sought to ensure a robust process is developed incorporating better practice rationale and alignment to the risk prioritisation model.*

Key to South Gippsland Water's Price Submission has been mitigating transfer of risk to the customer which may result in an adverse impact to prices or services. Areas where risk analysis has been included in the decision making process and further explored are:

- *Inflow risk and the potential inability to meet customer demand due to climatic conditions*
- *Uncertainty in demand forecasting*
- *Operational risks associated with health, environmental or customer service performance*
- *Capital program risks as a result of varying project costs or project timing*
- *Regulatory risks which may include increased regulatory requirements, costs of meeting compliance obligations and fines resulting from non-compliance*
- *Business and operational risks via changes in technology, or fluctuations in the regional economy.*

Development of PS2020 has included consideration of risk allocation in all areas of the process, including:

- *Recovery of only prudent operating and capital expenditure so that South Gippsland Water can manage risks*
 - *South Gippsland Water will manage the risk of declining customer service standards with respect to aging infrastructure. This risk has been identified and assessed and the proposed management response justified*
 - *The Corporation has sought to minimise variations to baseline expenditure, and will absorb significant additional expenditure during the regulatory period.*
- *Form of price control*
 - *South Gippsland Water is not proposing to change the form of price control used for the period 2020/21 to 2022/23. The Corporation is not proposing to continue with the envisaged wastewater tariff reforms and are proposing to develop a deeper understanding of potential risks of price shock to customers.*
- *Tariff structures*
 - *South Gippsland Water is not proposing to change tariff structures for the period 2020/21 to 2022/23 limiting rebalancing price impacts*
- *Length of regulatory period*
 - *A short regulatory period minimises risks for customers and the business by reducing forecasting uncertainty. The risk of over-charging (a risk for customers) or under-recovery (a risk to the business) is minimised. For this Price Submission, a three year period is desirable to the business because:*
 - *Demand forecasts in the near future are far more robust than the mid to long term*
 - *Forecasts of CPI, construction costs, energy costs are better than mid to long-term and the businesses risk of unexpected movements is limited to funding over a three year period only*
 - *A three-year Price Determination will bring South Gippsland Water back into the same cycle as most other Victorian Water Corporations. This is helpful because changes by government regulators are, generally, aligned with pricing periods.*
- *Pass-through mechanisms*
 - *Will allow savings or costs to be reflected in customer prices, for example unforeseen changes to federal and/or state taxes, levies, etc.*

10.2 Inflow Risk

South Gippsland Water have worked with customers to define an acceptable level of water supply security.

Four of South Gippsland Water systems, supplying seventeen towns, require water supply augmentation projects in the foreseeable future. The risk of water restrictions has been forecast for each system under a variety of scenarios. The Corporation manages the risk using a number of business processes:

- *Continuously tracking inflows, storage volumes and demand. Future restriction forecasts are frequently developed for at risk systems*
- *An Annual Water Security Outlook, based on water resource modelling, is developed each year and shared with state, customers and stakeholders*
- *Projects are planned and developed to augment water supplies when the agreed level of security is not being met*
- *Non-revenue water is assessed annually to ensure that water supply systems are operating efficiently;*
- *Future demand forecasts are regularly reviewed*
- *Continuing water literacy discussions and water saving messaging via a wide variety of communication mediums*

For the 2020 Price Submission the risk and risk allocation differs from system to system and is described in the following table

Table 39: Water Security Risk Analysis

System	Towns served	Risk	Management response	Risk allocation
Lance Creek	<ul style="list-style-type: none"> • Wonthaggi • Inverloch • Cape Paterson • Korumburra • Poowong • Loch • Nyora 	Low Security of Supply 2020 and 2025	Purchase additional Bulk Entitlement (BE) under existing agreement with state government	Risk allocated to business. No price relief sought for additional BE purchase during pricing period. Customers were consulted on the topic of when to purchase additional BE and how much during the 2019 deliberative forum process (Mini Public) Potential to purchase temporary entitlement
Ruby Creek	<ul style="list-style-type: none"> • Leongatha • Koonwara 	Low Security of Supply 2019 - onwards	Options investigated and strategy to augment water supply developed	Risk allocated between business and customers. No price relief sought for supply augmentation. As such the risk of staged water restrictions are allocated to customers and SGW the risk of sourcing supplementary supply and/or lower sales
Battery Creek	<ul style="list-style-type: none"> • Fish Creek 	Low Security of Supply 2019 - onwards	Options under investigation to augment water supply	Risk allocated between business and customers. Pricing relief sought to progress investigation of options to reduce non-revenue water. Risk of restrictions shared by business and customers. Risk sourcing supplementary supply or lower sales allocated to the business
Agnes River	<ul style="list-style-type: none"> • Toora • Welshpool • Port Welshpool • Port Franklin 	Low Security of Supply 2030 - onwards	Options investigated	Risk relevant for future pricing periods

10.3 Demand and Growth Forecasts

Variances in customer demand, climatic conditions and growth rates across the region impact customer's prices. To ensure the recovery of prudent and efficient costs from customers' particular attention has been given to the variances and risks associated in developing demand forecasts. A third-party review has been undertaken to strengthen the analysis which has resulted in:

- *Growth rates consistent with Victoria in Future Small Area 2019*
- *Average residential water consumption based on a 10-year average*
- *Average non-residential consumption based on 5 year average*
- *Engagement with Major Customers to understand their plans and adopted their predicted increases in demand*

Following the 2018 Price Determination South Gippsland Water has refined and updated growth forecasts for all systems in the region.

For this Price Submission, the business has adopted a growth rate of 1.80% for water and wastewater residential customers. This growth rate exceeds the historical average for the region but more closely reflects development forecasts, particularly in the west of the region. This revised estimate reduces the risk that revenue will be underestimated and shifts risk from customers to South Gippsland Water.

The key risk to the Corporation with respect to demand is the uncertainty associated with two major customers as discussed in the Demand section.

Inaccurate demand forecasts pose a number of risks and the table below demonstrates how these have been identified, quantified, managed and allocated. The table below provides a summary of the methods to determine risk with respect to the Corporation's water and wastewater customers.

Table 40: Demand Risk Summary

Demand Item	Method of Determining	Comment
Water and wastewater customer growth		
Residential	Victoria in Future growth rates	Neutral allocation of risk as utilising well founded government information/ forecasts
Non-residential	10 year average data	Risk weighted to South Gippsland Water as actual growth has historically been below VIFSA 2019 rates
Water Usage Projections		
Residential & Non-residential	10 year average consumption	Neutral allocation of risk as long term trend that has exhibited only minor variance from average
Major Customers	5 year trends together with conversations with major customers on growth plans and forecasts	Neutral allocation of risk as utilising 5 year trend supported by major customer forecasts. Some risk to business regarding growth plans
Wastewater Customer Growth		
Residential	10 year average figures has resulted in variances due to the construction of new wastewater treatment schemes. Data from water connections utilised	Neutral allocation of risk as utilising well founded government information/ forecasts to mitigate anomaly in wastewater connection data
Non-residential	Fiver year trend has been utilised	Neutral allocation of risk as utilising well founded government information/ forecasts

10.4 Operational Risks

Operational Risks are assessed via a variety of tools. A multi-barrier, industry best practice approach has been used for drinking water safety risks.

Risks to service standards have been assessed and tested with customers based on historic South Gippsland Water performance trends. The Corporation has retained service standard risks associated with aged infrastructure.

Risks to the environment and compliance with environmental standards from sewerage systems was assessed in the same way. The Corporation has managed these risks to date by absorbing costs resulting from the programs agreed in 2018 and implemented in recent years.

10.5 Capital Expenditure

Capital projects go through planning, design and delivery phases and South Gippsland Water uses a variety of processes at each stage to ensure that expenditure delivers customer outcomes in a prudent and efficient manner that avoids, whenever possible, the transfer of risk to customers via pricing. These processes are further explored in 6.3 Capital Expenditure

Expenditure forecasts for the price period are based on risk adjusted estimates which includes:

- *Estimates for water main renewals are based on a combination of rates developed and reviewed by third-parties and tendered rates. Sewer renewal allocations are based on a combination of tendered rates and estimates provided by third parties.*
- *For discrete projects P50 estimates have been included in the expenditure forecasts rather than more conservative P90 estimates.*
- *A number of projects have been deferred from the proposed Capital Program as demonstrated in Capital Expenditure.*
- *Projects with an uncertain scope or timing have been deferred from the program*
- *Scenario/analysis for major discrete projects are further explored in individual project business cases*
- *The program has sought to transfer risk to the business where possible.*

10.6 Tariff Structures and Price as a Control Mechanism

In 2018 South Gippsland Water proposed to amend volumetric and service tariff charges and to introduce a hybrid form of price control with a revenue cap for cisterns and minor trade waste (excluding major trade waste customers). An individual price cap was to be applied to the remainder of its services. The Corporation is proposing not to continue with amending volumetric and service charges or Wastewater tariff reforms

The existing price cap form of price control will continue for the regulatory period. Adopting an individual price cap ensures prices are not rebalanced within the regulatory period and provides greater price certainty across the period mitigating price shock.

Risks associated with the 2018 approach have been considered from the view that any benefit to customers due to the change will be offset by other customers potentially being worse off. Striving to find the balance between affordability, value for money and fairness is a key customer outcome for South Gippsland Water and the corporation will continue to talk to the customers most impacted by our decisions prior to proposing any further amendments to tariff structures or price control mechanisms.

10.7 Efficiency and Productivity

The 2020 Price Submission is proposing a 1% efficiency factor applied to operating expenditure. A combination of the Corporation's historically low water consumption, uncertainly with respect to Major Customer demand and financial positioning of the organisation results in the business accepting the risk to achieve the proposed efficiency target.

As outlined in the Operating Expenditure section, South Gippsland Water is absorbing a number of other costs including wages increases above inflation.

10.8 Guaranteed Service Levels

South Gippsland Water developed and tested six key Customer Outcomes in 2018.

The GSLs relating to unplanned water interruptions not restored within 5 hours is further explored in Section 5 Guaranteed Service Levels. The recommendation to remove the GSL has allocated service risk to the customer, albeit with the benefit of lower prices as a result of lower operating/ capital expenditure.

The Corporation is proposing that the remaining GSL's and associated rebate amounts are unchanged for the regulatory period. Risks associated with payment of these GSL's are borne by the business, as they do not form part of the operating expenditure budget of the Corporation.

10.9 Regulatory and Policy Risk

The process of developing the Price Submission includes the identification and potential impact of changing regulations and changes to state and federal government policy.

Stakeholder analysis has been completed to identify and allocate risk associated with changing regulations and state and federal government policy as outlined below

Table 41: Stakeholder Risk Analysis

Regulatory Authority	Method of identification	Management response	Allocation
Federal & State Government	Effective working relationships to assist in identification and to respond to changes in government policy	The form of price control provides greater certainty across the period. South Gippsland Water will financially absorb the cost impact of minor changes in government policy	Business
Department of Health and Human Services	Advice received confirming no change to existing guidance for regulatory period 4.2	Existing programs included in capital and operations programs to ensure ongoing compliance	Business and customer
Environment Protection Authority	Advice received confirming no change to existing guidance for regulatory period 4.2	Existing programs included in capital and operations programs to ensure ongoing compliance	Business and customer
Department of Treasury and Finance	Effective process and working relationships to assist in identification and to respond to changes in financial policy	Compliance with the Financial management Framework achieved via robust review and monitoring process	Business

11 PREMO Rating

South Gippsland Water's 2020 Price Submission has been prepared to align with the Essential Services guidance for a Standard Rated Corporation under the PREMO Incentive mechanism. The Corporation was not required to apply a PREMO rating, however is required to satisfy the requirements of the guidance for a Standard rating. South Gippsland Water has applied the PREMO assessment tool in development of this submission. The rationale for each rating and responses to each of the ESC's guiding question is provided in the following section.

Table 42: PREMO Rating Summary

Performance	
Performance refers to the organisation ongoing monitoring during the regulatory period. Reporting on Performance is not a requirement of the 2020 Price Submission. A summary of activity has been included pending further guidance.	South Gippsland Water has demonstrated our Performance 2017/18 – 2018/2019 via submission of the Essential Services Commission Outcomes reporting process. The Corporation's Outcome scorecard has been made available to customers.
Risk	
To what extent has the business demonstrated a robust process for identifying risk, and how it has decided who should bear these risks?	<p>A robust process has been utilised in identifying risk and understanding who should bear the risk when developing the Price Submission.</p> <p>Further to the Corporation's ongoing risk program, individual areas of the Price Submission, (capital and operational programs and expenditure and demand) have been subject to a robust risk assessment process.</p> <p>The Corporation has accepted and managed risk on behalf of customers in order to mitigate price increases. Distribution and management of risk is explored throughout the submission and in a dedicated section.</p>
To what extent does the proposed guaranteed service level (GSL) scheme provide incentives for the business to be accountable for the quality of services delivered, and provide incentives to deliver valued services efficiently?	The proposed GSL scheme provides incentives for SGW to be accountable for the quality of services delivered and price incentives to deliver valued services effectively and to a high level. Amendments to GSL's result from customer recommendations.
Engagement	
To what extent has the business justified how the form of engagement suits the content of consultation, the circumstances facing the water business and its customers?	<p>In developing the engagement program for the PS2020 particular consideration was given to the suitability of content of engagement and the circumstances of customer and business. The engagement program tested our learnings from 2018. The program was completed with a key focus on material issues identified as requiring further understanding or not previously engaged on adequately.</p> <p>Plain English has been used throughout the fit for purpose program with information available on our online portal and via customer correspondence for broad awareness. Programs such as face to face interviews have been used in more complex issues such as understanding vulnerable and disadvantaged customers.</p>
To what extent has the business demonstrated that it provided appropriate instruction and information to customers about the purpose, form and content of the customer engagement?	<p>Throughout the process South Gippsland Water has sought to provide an appropriate level of instruction and information to customers with respect to the purpose, form and content of the engagement.</p> <p>The organisation has sought to ensure customers have an understanding of the business, particularly via the deliberative process. This has included key areas of the Price Submission that may be impacted.</p>

Engagement (continued)	
To what extent has the business demonstrated that the matters it has engaged on are those that have the most influence on the services provided to customers and prices charged?	The engagement program has been underpinned by a problem statement to assist us in finding the balance between price, service and being sustainable into the future. The program has tested our understanding of what customer's value with respect to services including the existing Customer Outcomes.
To what extent has the business explained how it decided when to carry out its engagement?	The timing of the engagement program has been aligned to test learnings gained from 2018 and understand customer expectations. To dive deeper and further understand individual customer sentiment. Finally it has sought to test the proposed content of the submission via a customer survey and a deliberative process with customers.
To what extent has the business demonstrated how its engagement with customers has influenced its submission?	The engagement program was designed to be an extension to the learnings gained in 2018. The program has resulted in a Price Submission that reflects the expectations of customers to maintain services. Adjustment to Customer Outcomes and amendments Guaranteed Service Levels have been included in the submission as a result of the engagement process.
Management	
To what extent has the business demonstrated how its proposed prices reflect only prudent and efficient expenditure?	South Gippsland Water prices reflect prudent and efficient expenditure. This is demonstrated by: <ul style="list-style-type: none"> • Third party analysis and benchmarking of organisational expenditure • Capital programs have been developed with a thorough understanding of our infrastructure and on a 'just in time' basis • Operational expenditure which will strive for a 1% efficiency improvement rate • Considered allocation of risk between the customer and organisation
To what extent has the business justified its commitment to cost efficiency or productivity improvements?	South Gippsland Water has demonstrated that the organisation operates in an efficient and effective manner. The Corporation has committed to 1% efficiency improvement rate in a financially constrained environment.
To what extent has senior management, including the Board, demonstrated ownership and commitment to the proposals in its submission?	Senior Management and the Board have demonstrated ownership and commitment to the proposals by: <ul style="list-style-type: none"> • Oversight of the process • Dedicated workshops to establish guiding principles • Fortnightly Senior Management updates • Monthly Board and Committee updates • Capital and Operating expenditure reviews and governance assurance <p>Additionally, support to this submission has been provided by the provision of resources (internal/external and financial) and by offering guidance and decision making.</p>
To what extent has the business justified or provided assurance about the quality of the submission, including the quality of supporting information on forecast costs or projects?	Assurance with respect to the quality of the submission has been provided via a multi-level approach to development, review and approval of the Submission and supporting documentation. This has been achieved by the use of third-party assistance in key areas of the process such as; <ul style="list-style-type: none"> • Financial analysis & PREMO assurance (Marsden Jacob Associates) • Capital Program review - (Inside Infrastructure) • Engagement – (Bartley Consulting/ Max Hardy Consulting) • Infrastructure Condition Assessment - (PARMS: Weiser Analysis and SEAMS: SEAMS Ltd) • Organizational Efficiency - (KPMG / WSAA Benchmarking study)

Outcomes	
Has the business provided evidence that the outcomes proposed have taken into account the views, concerns and priorities of customers?	Yes, South Gippsland Water tested the Outcomes developed in 2018. The process sought to further understand customer views, concerns and priorities with respect to the six key areas previously identified. The proposed Outcomes reflect the learnings from the engagement process
Has the business provided sufficient explanation of how the outcomes it has proposed align to the forecast expenditure requested?	Yes, Customer Outcomes are a key component in the development and decision-making processes for Capital and Operational expenditure. Alignment of expenditure to Outcomes has been demonstrated throughout the document.
Has the business proposed outputs to support each of its outcomes, which are measurable, robust and deliverable?	Yes, the proposed output and measure for each Outcome has been developed and refined using learnings gained over the past two years. The proposed structure reflects a robust, deliverable program based on customer value for the reporting of organisational performance.
Has the business provided evidence that the outputs it has proposed are reasonable measures of performance against stated outcomes?	Yes, the proposed outputs are a reasonable measure of performance. The Corporation has sought to align the proposed measures with key customer expectations.
Has the business demonstrated a process to measure performance against each outcome and to inform customers?	Yes, South Gippsland Water measures performance quarterly. Results are reported to the Board, the Engagement and Planning Committee and externally via electronic media platforms and the customer newsletter.

12 Appendices

12.1 Appendix A: Supporting documentation

Engagement

- *ESC Report – South Gippsland Water Outcomes 2018 – 2020*
- *Customer Satisfaction Survey (February 2019 Insync)*
- *South Gippsland Water Mini Public Report (July 2019 Max Hardy Consulting)*
- *Needs and Expectations of Vulnerable and Disadvantaged Customers (August 2019 Bartley Consulting)*
- *South Gippsland Water Mini Public Testing Report (October 2019)*
- *Customer Satisfaction Survey (October 2019 Insync)*

Operational

- *Operating Cost Baseline Review (2019)*
- *Demand Analysis Report (2019)*
- *WSAA Operating Cost Benchmarking Utility Report (December 2018)*
- *Benchmarking Review (February 2019)*

Capital

- *Capital Plan 2019*
- *PS2020 Project Prioritisation tool*
- *Preliminary Business Case - Sewer System Augmentation - Wonthaggi Mains*
- *Preliminary Business Case - Wonthaggi WWTP Augmentation*
- *Preliminary Business Case - Sewerage System Augmentation (Inverloch)*
- *Preliminary Business Case - Service Basin Cover and Liner Replacement*
- *Facilities Strategy - July 2019*
- *WTP Asset Class Plan*
- *WWTP Asset Class Plan*
- *Water Transfer and Distribution Main Asset Class Plan*
- *Sewer Mains Asset Class Plan*
- *Sewer Pump Station Asset Class Plan*
- *IT Asset Class Plan/s*
- *SCADA Asset Class Plan*

Other

- *ESC Finance Model*
- *ESC NCC Model*
- *NCC Analysis Report 2019*
- *Phase 1, Sustainable Strategic Direction Report (KPMG 2019)*
- *South Gippsland Water 2018 Price Determination*

Supporting documentation provided upon request.

12.2 Appendix B: Proposed tariffs 2020/21 to 2022/23

Tariffs are expressed in 2019/20 \$	Frequency of charge	Approved	Proposed	Proposed	Proposed
		1 July 2019	1 July 2020	1 July 2021	1 July 2022
1.1 Water access fees (per annum)					
Access fee – Developed	Tri-annual	305.78	321.07	327.49	334.04
Access fee – Undeveloped	Tri-annual	305.78	321.07	327.49	334.04
Access fee – Agreements	Tri-annual	275.23	288.99	294.77	300.67
Access fee – Concessional	Tri-annual	245.29	257.55	262.71	267.96
1.2 Water usage charges (per kL)					
Volumetric fee – Saputo	Monthly	2.24	2.35	2.40	2.45
Volumetric fee – Other Majors	Monthly	1.85	1.94	1.98	2.02
Volumetric fee – All others	Tri-annual	1.85	1.94	1.98	2.02
1.3 Sewerage access fees (per annum)					
Residential and non-residential					
Access fee – Developed	Tri-annual	474.56	498.29	508.25	518.42
Access fee – Undeveloped	Tri-annual	268.51	281.94	287.57	293.33
1.4 Cistern access fees (per annum)					
1-2 Cisterns	Tri-annual	161.59	169.67	173.06	176.52
3-5 Cisterns	Tri-annual	425.07	446.32	455.25	464.35
6-10 Cisterns	Tri-annual	823.12	864.28	881.56	899.19
11-15 Cisterns	Tri-annual	1,317.99	1,383.89	1,411.57	1,439.80
16-20 Cisterns	Tri-annual	2,197.63	2,307.51	2,353.66	2,400.73
21-26 Cisterns	Tri-annual	3,145.40	3,302.67	3,368.72	3,436.10
27-35 Cisterns	Tri-annual	3,855.34	4,048.11	4,129.07	4,211.65
36–Greater Cisterns	Tri-annual	4,405.36	4,625.63	4,718.14	4,812.50
Volume Charge – (per kL)					
Volume Charge	Tri-annual	1.85	1.94	1.98	2.02
1.6 Minor trade waste fees					
Application fees (per application)					
Category 1	Tri-annual	128.65	128.65	128.65	128.65
Category 2	Tri-annual	205.10	205.10	205.10	205.10
Category 3	Tri-annual	375.93	375.93	375.93	375.93
Access fees (per annum)					
Access fee – Category 1	Tri-annual	655.87	688.66	702.44	716.49
Access fee – Category 2	Tri-annual	871.23	914.79	933.09	951.75
Access fee – Category 3	Tri-annual	1,080.79	1,134.83	1,157.53	1,180.68
Volumetric fees (per kL)					
All Categories	Tri-annual	0.883	0.927	0.946	0.965
Quality fees (per kg)					
BOD	Tri-annual	0.713	0.713	0.713	0.713
SS	Tri-annual	0.673	0.673	0.673	0.673
Nitrogen	Tri-annual	3.011	3.011	3.011	3.011
Phosphorus	Tri-annual	17.156	17.156	17.156	17.156

Tariffs are expressed in 2019/20 \$	Frequency of charge	Approved	Proposed	Proposed	Proposed
		1 July 2019	1 July 2020	1 July 2021	1 July 2022
Additional sampling (per sample)					
All Categories	Per occasion	At cost	At cost	At cost	At cost
Exceedence fees (per kg)					
Oil & Grease	Per occasion	0.107	0.107	0.107	0.107
Sodium	Per occasion	0.107	0.107	0.107	0.107
TOS	Per occasion	0.769	0.769	0.769	0.769
Asset protection fee					
<i>Alternate annual fee available to customers that do not elect to install a grease trap (cost prohibitive).</i>	Per annum	1,508.52	1,508.52	1,508.52	1,508.52
Treatment violation fee					
<i>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.)</i>	Per occasion	309.26	309.26	309.26	309.26
1.7 New customer contributions (per lot)					
Water & Sewer (all customers)	Per occasion	2,318.47	2,318.47	2,318.47	2,318.47
1.8 Miscellaneous fees and charges					
Property information statements	Per occasion	57.75	57.75	57.75	57.75
<i>Fee imposed for providing a certificate issued in accordance with Section 158 of the, Water Act 1989.</i>					
Special meter readings	Per occasion	44.39	44.39	44.39	44.39
<i>Fee imposed for providing a certificate which indicates water usage charges up to a specified date. Generally provided, on application, for property sales.</i>					
As constructed charge	Per occasion	72.45	72.45	72.45	72.45
<i>As constructed charge</i>					
20mm Tapping Fee	Per occasion	399.08	399.08	399.08	399.08
<i>Fee imposed for meter and labour associated in providing a tapping to the water main.</i>					
Plumbing Industry Commission (PIC) Fee	Per occasion	224.06	224.06	224.06	224.06
<i>Fee imposed for providing sewer plans and processing applications to connect or modify plumbing.</i>					
Standpipe Water Sales (per kL)					
<i>Fee imposed for the sale of water via a metered standpipe.</i>	Per occasion				
- Registered Users		5.97	6.27	6.39	6.52
- Unregistered Users		7.96	8.36	8.53	8.70
Septic Tank Waste Receptival (per kL)	Per occasion	27.31	27.31	27.31	27.31
<i>Fee imposed on septic tank waste carters, for the disposing of sewage and/ or other acceptable waste.</i>					
Non Core Miscellaneous Services					
<i>Non core miscellaneous services</i>	Per occasion	At cost	At cost	At cost	At cost