

Major Projects 2018/19 – 2022/23

Expansion and Renewal of Sewer Pump Stations

We'll be investing \$7.2M for expansion and renewal of sewer pump stations and emergency storages in Wonthaggi, Inverloch, Korumburra and Yarram to ensure sufficient capacity for future growth and renewal of aged assets to maintain reliability.

These works help delivery customer expectations for reliability and provision of a safe wastewater service. Upgrade of sewage pump stations to cater for growth and renewal of assets at the end of their service life will maintain the current standards of service with respect to sewer spills.

Upgrading Water Treatment Plant Disinfection Systems

We'll be investing \$2.1M to improve water treatment processes by adding Ultra Violet light (UV) disinfection and making improvements to chlorination and filtration systems. This will ensure drinking water meets quality targets and our customer outcome to provide safe, clean drinking water

Works will include installation of UV disinfection system at Leongatha, improvements in chlorination treatment at Devon North and Leongatha, improvement in UV disinfection system reliability at Toora, filter improvements at Foster, Meeniyah and Dumbalk and installation of UV disinfection for supernatant recycling at Dumbalk and Lance Creek.

Water Treatment Plant Renewals

South Gippsland Water operates 10 water treatments plants to service 21 rural centres. The water treatment process includes either sedimentation, clarification or dissolved air floatation / filtration (DAFF), disinfection and fluoridation. Our plants have a number of components that require replacement due to age.

We're investing \$3M in renewal, replacement and decommissioning of aging components to make sure your water is clean and safe to drink.

Carbon Emission Reduction of 15% by 2025

We're proposing to reduce our carbon emissions by 15% by 2025 and investing \$2.6M over the next five years. To achieve this we'll install five solar systems across the region at Leongatha, Inverloch and Korumburra Wastewater Treatment Plants, the Lohr avenue sewer pump station and Lance Creek Water Treatment Plant, along with purchasing a portion of Green Power. We expect to see a \$0.63M reduction in operating costs over this time. This will help us achieve our customer outcomes in relation to integrity and environment by minimising the price impact of power prices and by reducing emissions.

Sewer Pipeline Relining and Renewal

We currently operate and maintain approximately 480km of sewer mains. Some of the sewer pipes are approaching the end of their designed life, with approximately 30% being 40 years or older.

We are planning to reline or replace 35 km of aging pipes costing \$4.3M. This will work to avoid sewer failures, interruptions, blockage issues, inflow / infiltration and sewer spills and increase sewer network integrity, reliability and availability.

Upgrading Lance Creek Water Treatment Plant – Algae Treatment

The Lance Creek Water Treatment Plant utilises dissolved air floatation / filtration (DAFF) and has been operating since 1998. The Lance Creek Reservoir is susceptible to algal blooms due to the proximity of farming in the catchment zone. The current copper and powdered activated carbon dosing process requires reconfiguration for greater effectiveness and to address health and safety concerns.

We will invest \$0.45M to upgrade the current system to ensure water quality, supply reliability, safety and environmental sustainability.

Sewer Manhole Renewals

Sewer manholes provide access to the sewer from ground level. There are approximately 6,225 sewer manholes in our sewer network and of these, over 3,500 are over 45 years old.

Approximately 550 manholes will be replaced or refurbished across the network costing \$1.3M. This will work to avoid sewer failures, interruptions, blockage issues, inflow / infiltration and sewer spills and increase sewer network integrity, reliability and availability.

Replacement of Flexible Cover and Liner Treated Water Storage Basins

Once water is treated to a standard that is suitable for drinking it is usually stored in large, covered storage basins. These are protected by heavy duty Flexible polypropylene material and to keep the water clean.

Wonthaggi, Toora, Fish Creek and Poowong water basin covers and liners have reached the end of their useful life and will need replacing over the next five years costing \$1.75M, helping to continue provision of safe and clean drinking water



Sewer Sidelines Renewals

A sewer sideline or House Connection Branch is a section of pipe from the sewer network to the customer's house.

This program focuses on replacement or refurbishment of the sewer sidelines in response to blockages or known areas of failure in the sewer network. We propose to invest \$0.7M to replace or refurbish sewer sidelines each year.

Poowong Water Supply Pressure Upgrade

In some areas of Poowong, water pressure is less than the desirable minimum pressure of 200 kPa and it is expected this deficiency will increase over time as new development occurs within the region.

We propose to invest \$0.6M to improve water pressure for Poowong through pipe and network improvements.

Expansion of Sewer Systems

We're proposing to invest \$8.3M over the next five years in Wonthaggi, Korumburra and Foster on sewer system pipe networks to address growth and development, as well as improving the efficiency of the overall sewerage systems. This will also provide capacity for to contain sewerage in storm events.

Renewal of Fish Creek Treated Water Distribution Main

We will invest \$2.2M over the next five years which will secure long term water supply reliability for Fish Creek. The current distribution network has a large proportion of ageing pipes which have a high rate of failure and leakage.

This project will address current supply capacity issues by reducing leakage and water loss and increase network integrity, reliability and availability.

Renewal of the Port Albert Vacuum Sewer System

The Port Albert Vacuum Sewer System and pumping station are approximately 20 years old with some components reaching the end of their useful life. We're investing \$0.9M to renew critical components. This will allow us to maintain the current standard of service with respect to reliability.

IT Hardware / Software Renewal and Upgrade

Supervisory Control and Data Acquisition (SCADA) systems assist in the monitoring and control of water and sewer assets. SCADA is critical resource to ensure planning, maintenance and asset management of treatment plants and pump stations. The current SCADA systems have a range of issues, lack of standardisation, reliability concerns, data quality issues and end of hardware life.

We're proposing to invest \$2.8M for renewal, expansion and upgrading aging SCADA assets to increase operational excellence and business efficiency.

Water Pipe Renewals

There are over 700km of water pipes and mains across the South Gippsland region to supply drinking water. A large proportion of these water pipes are approaching the end of their service life with 30% of pipes being more than 50 years old.

This program focuses on timely replacement, or rehabilitation of the original water pipes and mains. We're proposing \$4.7M for renewal of 52km of reticulation mains and a further \$1.2M for renewal of 27.5km of water distribution pipes over 5 years. This work will result in a reduction in leakage and water loss from aging assets and increase water supply network integrity, reliability and availability.

Upgrading Wonthaggi Waste Water Treatment Plant

To accommodate predicted future population growth in Wonthaggi it is recognised there is a need for the expansion of the Wonthaggi Waste Water Treatment Plant.

We're proposing to invest \$1.7M to replace the Inlet Screen and Pump Station, the existing outlet pump station and approximately 1.8km of pipes will be replaced to address projected increase in sewer inflow as a result of future growth in the township. This will reduce sewer spills, sewer blockages and increases network reliability and efficiency.

Master Planning of Water & Sewer Systems

One of our customer outcomes is planning for future years. We're committed to optimising our water and sewer network capability and planning for future growth in the most effective and cost-efficient manner possible. Water and sewer hydraulic modelling provides a comprehensive tool for master planning of network. We will build, calibrate and update hydraulic models and network master planning for major towns in the next five years costing \$1.7M.

Renewal of Sewer Pump Stations

There are 60 operational Sewer Pump Stations in our network which transport sewage up hill, through a sewer rising main. Mechanical and electrical systems are required to operate and control sewer pump stations.

Over the next five years we're investing \$1.5M for renewals of various Sewer Pump Stations. This project will improve infrastructure integrity, sewer network reliability and environmental compliance.

Renewal of Leongatha Raw Water Transfer Main

The sole source of water supply to Leongatha township and the Murray Goulburn Milk factory is via raw water transfer mains fed from four off-stream reservoirs on Ruby Creek to the Leongatha water treatment plant. Constructed in 1950, this concrete water transfer main has suffered many bursts and leaks in the last fifteen years.

To ensure long term water supply reliability to customers and future population growth, SGW is proposing to invest \$5M over 5 years for renewal and augmentation of this aging pipeline. This work will support our customer outcome on reliability.