

Kingston CWMS Extension

Rosetown, Wyomi & Pinks Beach

Community Forum
Monday 30 June 2025



Project Overview

- Proposed CWMS Extension to the areas of Rosetown, Wyomi and Pinks Beach
- 651 new connections
- Proposed concept design to provide future long-term solution to wastewater management
- Development of concept design funded by the Local Government Association's (LGA) CWMS Program
- Role of Council – operate CWMS current and new, manage project, collect contributions



Wyomi/ Pinks Beach



Rosetown



Hutchings Court



Boundary	No.
Rosetown	
Residential-Occupied	56
Residential-Vacant	96
Non-Rateable*	2
Hutchings Court	
Residential-Occupied	6
Residential-Vacant	2
Non-Rateable*	0
Wyomi - Pinks Beach	
Residential-Occupied	369
Residential-Vacant	116
Public Toilet**	2
Industrial***	1
Non-Rateable*	1
Total	651

Project Funding

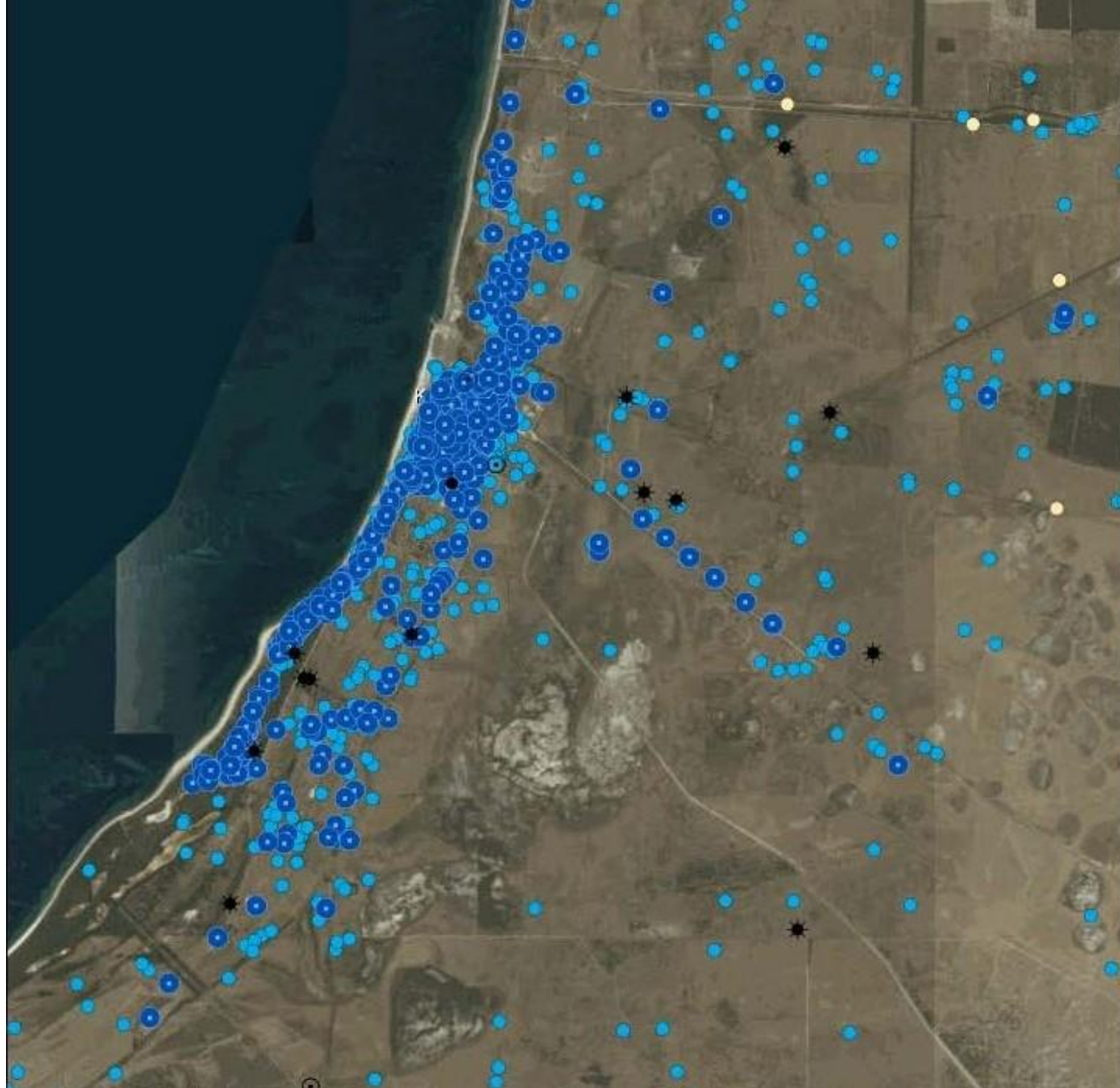
- Funding received from the Local Government Association's CWMS Program
- Kingston has been prioritised over many other SA Councils for funding
- Based on current projections, the subsidy will cover approximately 75% of the total construction cost
- \$18.5m indicative subsidy toward a circa \$25m project



Why is the CWMS Extension needed?

- Many current on-site wastewater systems are at higher risk of failure due to their age and may already be failing
 - 57% were installed prior to 1998 – nearing the end of useful life
- 80-90% of existing allotments fall within 50m of existing bores and wells
- Potential impact to groundwater, environment and human health
- Barrier to development and growth to meet the known and expected demand for new housing





June 17, 25

Drillholes

-  *Water Well*
-  *Domestic Water Well*
-  *Engineering Well*

-  *Mineral Well*
-  *Petroleum Well*
-  *Water point*

Water Connection

- Council has received the following advice from SA Water

“The townships of Rosetown, Wyomi and Pinks Beach are located in areas where the water supply system is constrained. Whilst SA Water does have plans to renew assets at the Kingston Water Treatment plant, there are no plans to augment the water supply system to include these townships in the current or subsequent regulatory business period which ends in 2032.”

- Council will continue to liaise with SA Water on a possible solution for potable water connection into the future



What are the benefits to the property owner?

- To understand the benefits, Council undertook an Economic Impact and Cost Benefit Assessment (CBA) for the project
- The CBA covers various impacts – job creation, economic ripple impacts, stimulus for new housing growth and the expected uplift in property prices
- The benefits outweigh the costs in the medium to long term and provide security and de-risk future expenditure



What work has been completed to date?

- Two studies completed:
 - Tonkins – CWMS Options Assessment
 - WGA – Geotechnical, Survey Specification & Concept Design
- Groundwater levels, drilling, test holes at the Kingston Golf Course for Irrigation
- Concept design for three options:
 - Gravity collection network
 - Pressure collection network
 - Vacuum collection network





WGA

Kingston SE CWMS Extension

Kingston SE CWMS

Proposed Scope

- There are a total of 651 allotments in the Kingston SE township under consideration for the concept design; in Hutchings Ct, Rosetown, Wyomi and Pinks Beach. These connections are currently not serviced by the township's existing Community Wastewater Management System (CWMS) network, and so are considered to be a new scheme.
- The new CWMS is proposed to include:
 - Connection for each property (gravity or low-pressure connections depending on area within township)
 - Collection network to deliver wastewater to the Wastewater Treatment Plant (WWTP) (vacuum or pressure pump station options currently proposed)
 - A new WWTP – facultative lagoon type plant, similar to the existing treatment system
 - A new recycled water reuse pipeline and irrigation area – Golf Course

Proposed Design Flows

- Design Average Daily Flow:
 - Stage 1, Pinks Beach and Wyomi: 190 kL/day (489 residential connections)
 - Ultimate Flow, Pinks, Beach, Wyomi, Rosetown, Hutchings Ct: 254 kL/day (651 connections)
- Ultimate Flows - Around 90ML/annum available for reuse/irrigation (lagoon type WWTP with 38ML storage lagoon)



Site Constraints

Geotechnical and Groundwater Conditions

- Groundwater levels in Pinks Beach and Rosetown were found to be <1.5 m below ground level on average. This will require dewatering provisions to be made during construction for deeper installations, and during any future scheme repairs/maintenance. Where possible, depths of pipes should be minimized to reduce dewatering needs.
- Groundwater testing in Rosetown indicates high salinity and corrosive components – pipes and pump stations will be designed with appropriate concrete mixes and specialized epoxy coatings
- Geotechnical information indicates that excavation is typically possible using conventional earthmoving machinery up to a depth of 4 m, where limestone/calcarenite becomes more prevalent throughout the area.

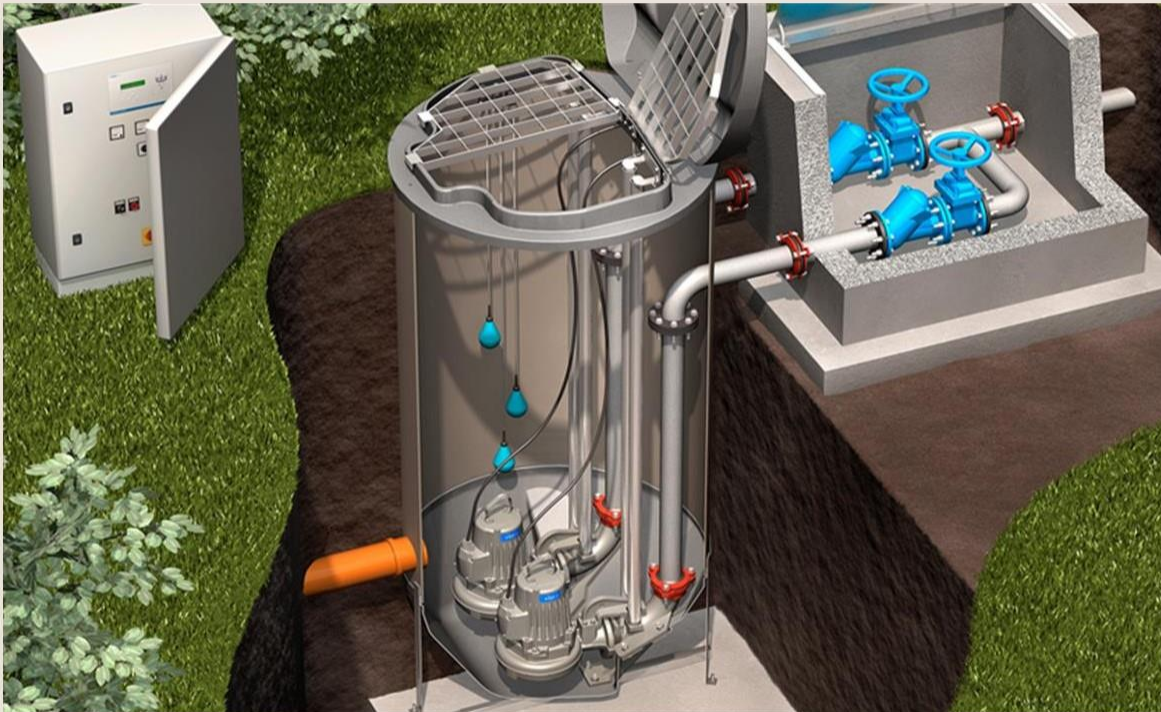
Wastewater Collection System Options

Advantages and Disadvantages

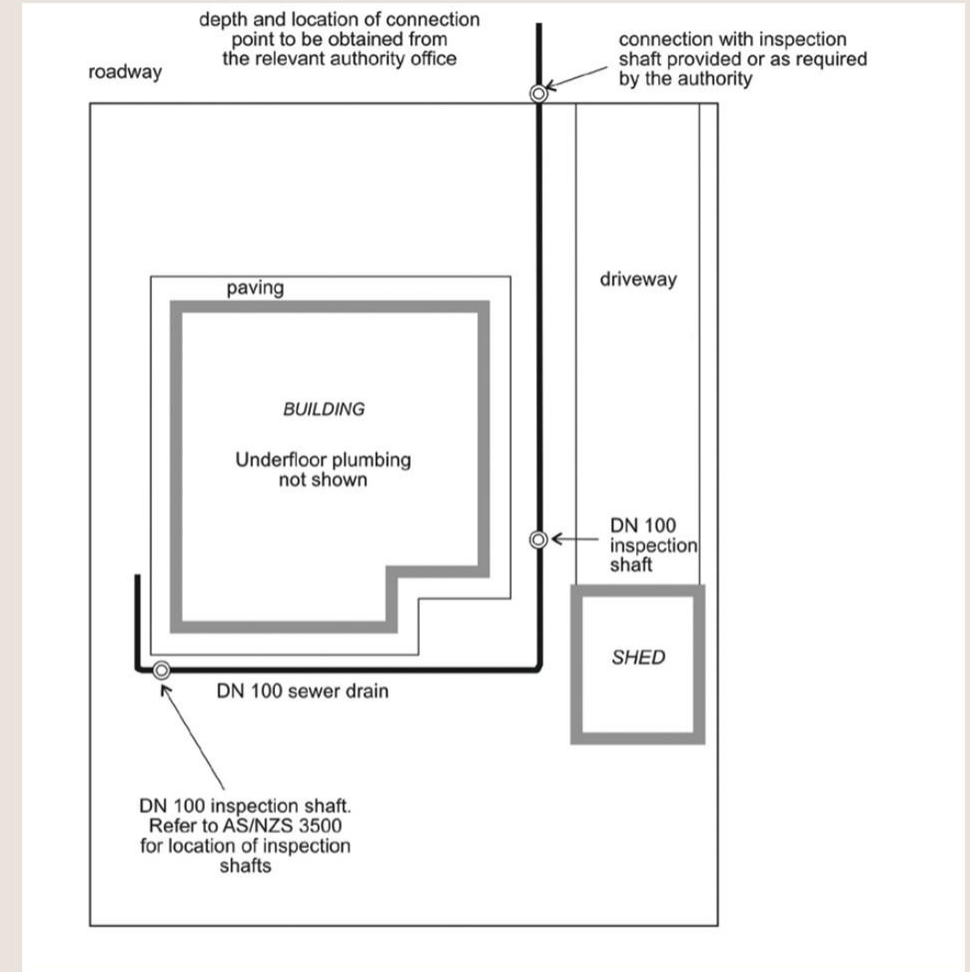
System	Advantages	Disadvantages
Gravity System with Transfer Pump Station	• Low maintenance for gravity connections. • Minimal infrastructure required on each property.	• Layout of the township requires that either additional transfer pump stations be included, or deep construction of mains. • Presence of groundwater is an issue for areas around Kingston, increasing construction costs and potential maintenance issues • Transfer pump stations will be required, which are costly, require space and can cause both odour and amenity issues.
Low Pressure System	• Shallow installation for pipelines / reduced interaction with groundwater • Fast construction timeframe, Horizontal Directional Drill is possible • Minimise disruption and reinstatement due to narrower trench and smaller pipe size	• Pumps typically have a design life of 10-15 years and will require replacement. • Power outage and mechanical failure risks. • Gas entrapment could prevent the network from efficient operation. • Some sections of network could require frequent flushing to remove solids.
Vacuum System	• Shallow installation for pipelines / reduced interaction with groundwater • Minimise disruption and reinstatement due to narrower trench and smaller pipe size	• Main pump station for each area of the township will be large and deep, requiring specialised coatings • 1 vacuum pit for 4-6 connections, valves will require regular maintenance/replacement

Wastewater Collection System

Gravity Sewer, Transfer Pump Station



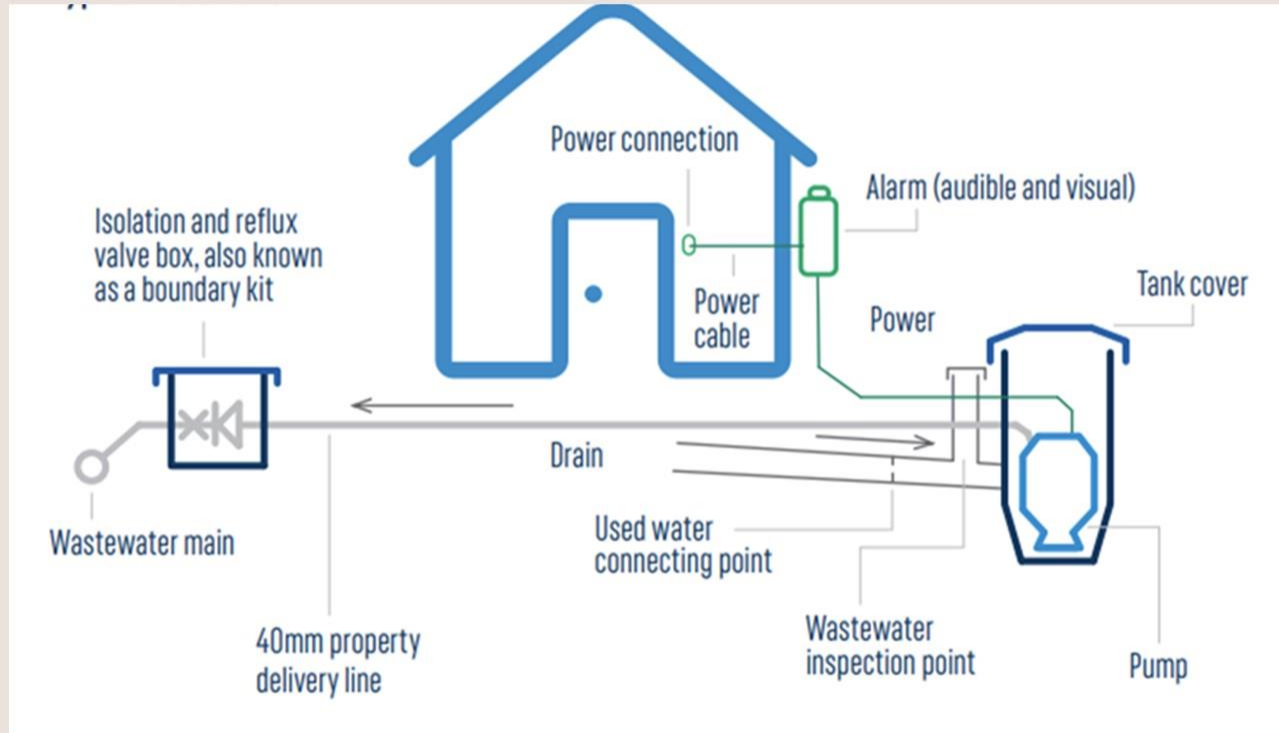
Transfer Pump Station



Typical Gravity Sewer Connection

Wastewater Collection System

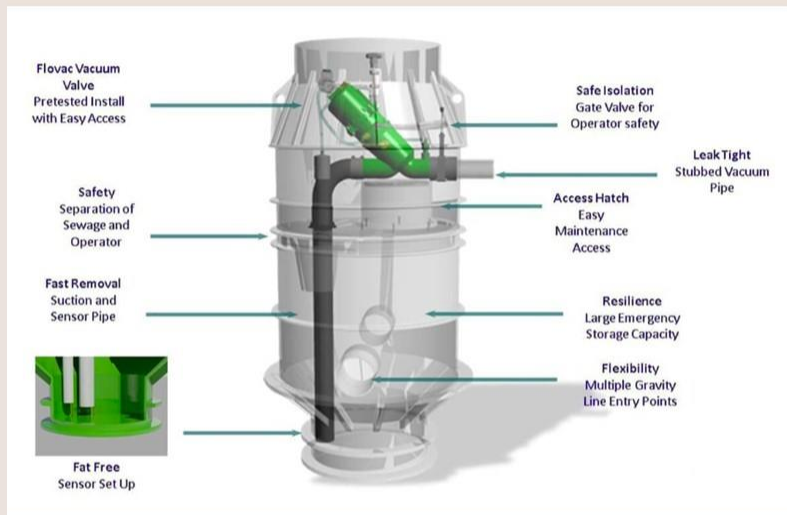
Low-pressure Sewer



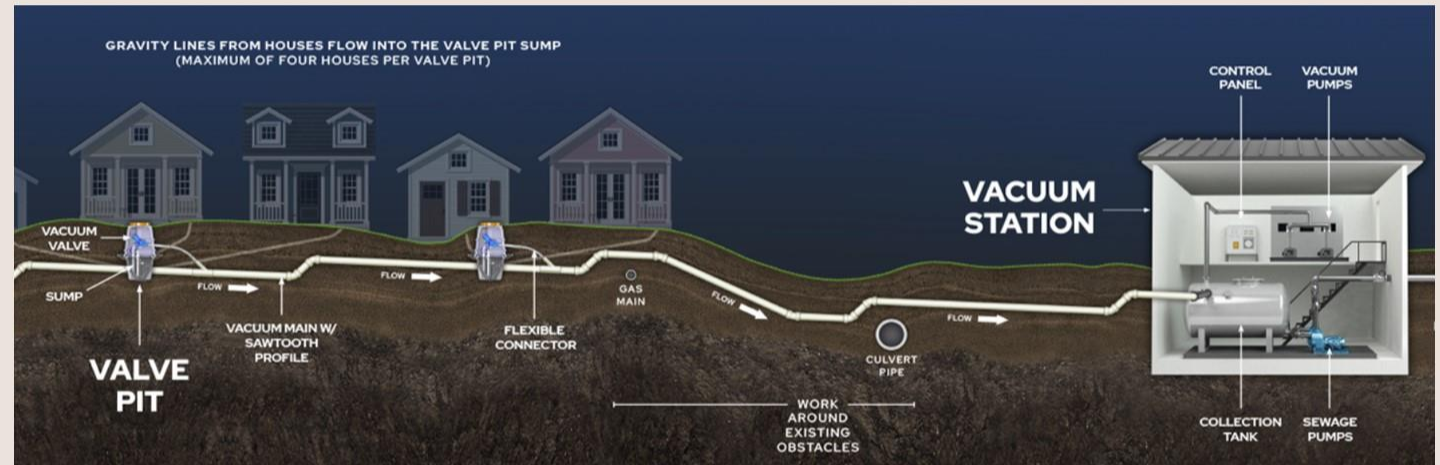
Typical Low-Pressure Sewer Connection

Wastewater Collection System

Vacuum Sewer

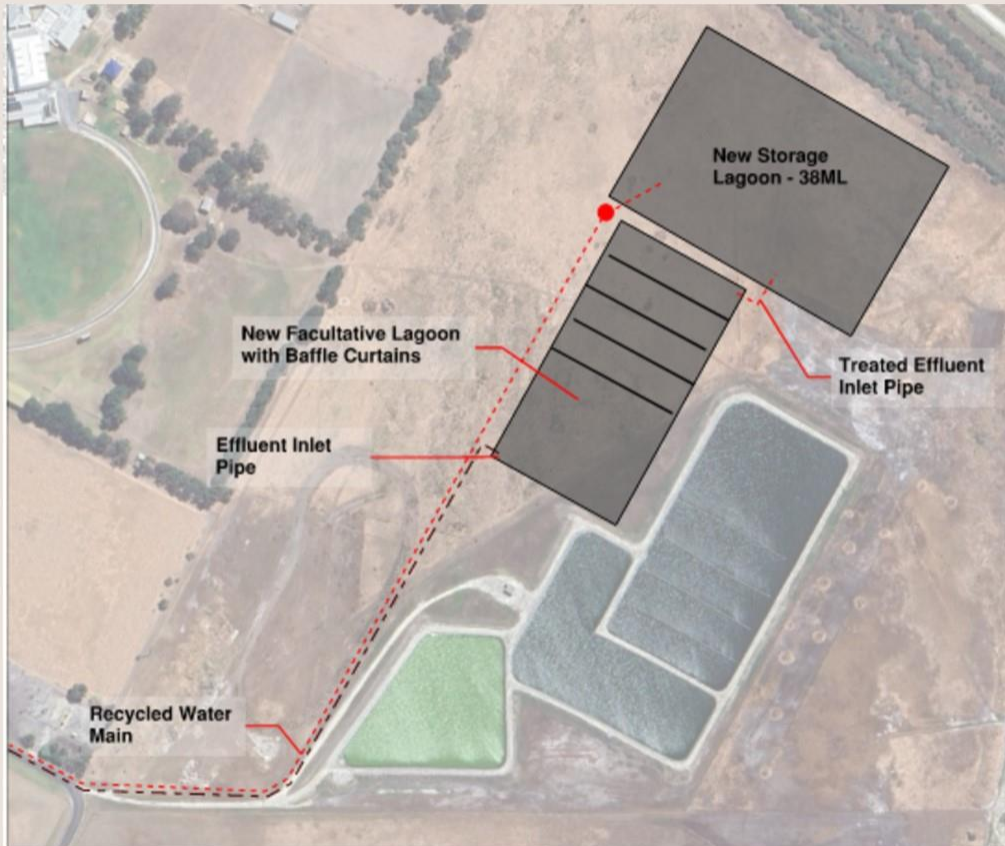


Vacuum Collection Pit
(1 per 4-6 houses)



Vacuum Pipeline to Vacuum
Pump Station

Wastewater Treatment – Lagoon Type WWTP



Advantages

- Easy to operate
- Low energy demand
- Small operation and maintenance needs
- Treatment is not sensitive to power failure
- Whole-of-life cost is usually less than mechanical plant

Disadvantages

- Large footprint
- Larger buffer zone – 350 m (>1000 Equivalent Persons)
- Require cut and fill to build earthen water storages.
- Poor soil conditions (rocks) and high ground water could significantly increase construction costs
- Greater risk of groundwater contamination
- Cannot be located within:
 - 100m of a bank of major watercourse
 - 200m of a busy public roads
 - 50m of other public roads
 - Within a floodplain

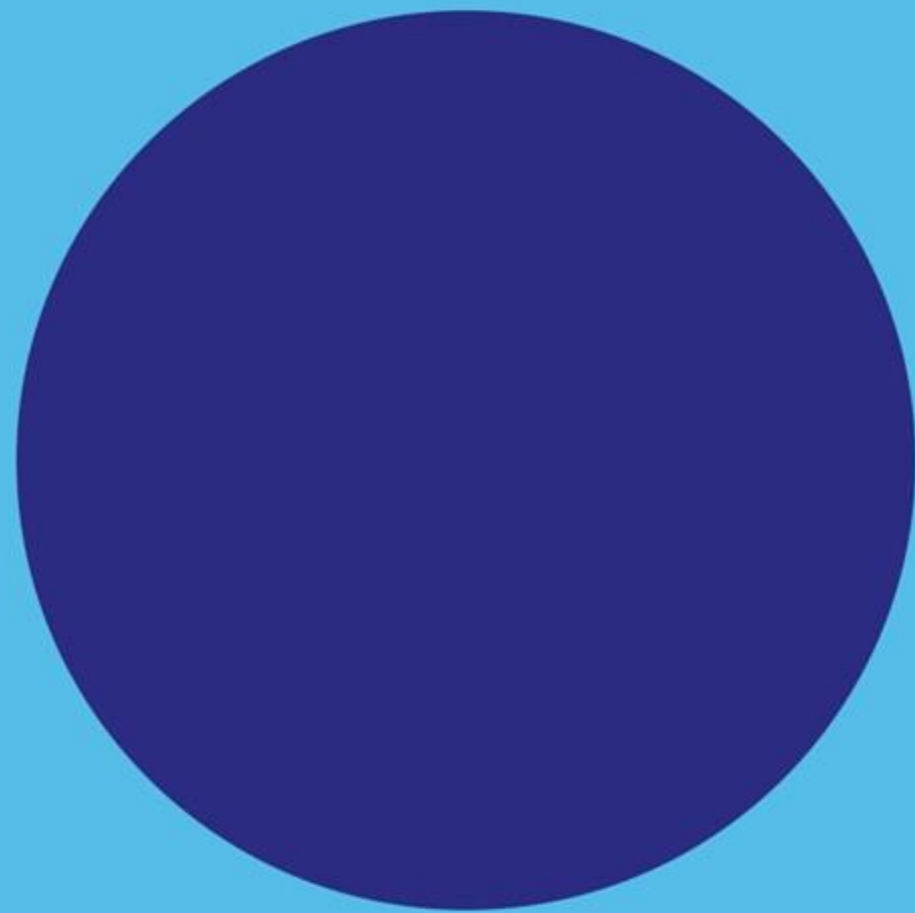


Recycled Wastewater Reuse System

- **Reuse Option – Golf Club (22 ha)**
 - Irrigation of golf course – Demand estimated to be 170 ML/annum
 - Located 1km from WWTP, along planned collection rising main route.



LGA CWMS Program



About us

LGA South Australia is here to help local government build stronger communities.

Our members and community are at the heart of everything we do. Because we know if our local governments are thriving, then our communities are, too.

Learn more about LGA South Australia: lga.sa.gov.au

LGA CWMS Program

- The LGA CWMS Program provides subsidies to enable new CWMS infrastructure to be constructed where SA Water does not provide services and enable equity to SA Water pricing for regional wastewater schemes.
- Currently in the 8th year of a 10 year Program, which expires on 30 June 2027.
- Funding of ~ \$5M per annum.

LGA CWMS Program

- Funding is distributed aligned to Public Health and Environmental risks.
- Assessments to inform the project priority list is undertaken by SA Health and The Environment Protection Authority.
- There is a priority list reviewed annually and currently has 36 potential new CWMS projects across the state seeking funding.

How is the Funding Calculated

- Equity between SA Water customers and Council customers.
- Subsidy is calculated so that contributions from rate payers are no higher than if they were connected to SA Water.
- Subsidy calculations take into account:
 - Revenue generated assuming SA Water charges and connection costs were applied
 - Connection fee (currently \$7405 for 2024/25 financial year, per new connection)
 - Annual service charge (based on property capital value)
 - Difference between SA Water revenue and Council operating costs
- Subsidy = Whole Of Life* cost minus SA Water equivalent revenue (over a 50 year period)
- *capital, maintenance and operational costs (via NPV Calculation)

How is the Funding Calculated

- The SA Water Connection fee used for Grant Funding:

Year	Connection Fee	Increase from Previous year	Increase since 20/21
2020/21	\$ 4,987.00	-	-
2021/22	\$ 5,082.00	2%	2%
2022/23	\$ 5,245.00	3%	5%
2023/24	\$ 6,906.00	32%	38%
2024/25	\$ 7,405.00	7%	48%

- The SA Water Connection fee has risen on an annual basis
- 48% increase in 5 years

NEW KINGSTON CWMS – LGA GRANT

- The Project encompassing 651 new connections has an estimated up front Capital Cost \$24.98M.
- An estimated 50 year whole of life operating cost of \$28.59M – includes Capital / Asset renewal and operating costs**
- ** in 2025 costs using a 4% NPV Calculation over 50 years
- LGA – TOTAL GRANT TO COUNCIL ~ \$18.55M
- **This equates to a \$28,500 Subsidy per connection.**

Cost, timing and support options

The dollars....



Three payment streams

Property Owners will be required to contribute to both the construction and ongoing operation of the CWMS. This is collected through payment of:

1. Capital recovery charge / Connection charge
 2. Individual costs to connect dwelling to connection point (plumbing)
 3. Ongoing annual service charge (vacant/occupied)
- 

1. Upfront Capital Charge & Payment Options

- Properties on the new CWMS network will be asked to pay a connection fee
- Fee to be based on SA Water equivalent connection charge
- Finance options to be provided by Council

Payment Options

- 1. 10 Year Payment Plan – Recover upfront charge through quarterly payment instalments over a ten-year period (including interest and administration)**
 - Estimated at approximately \$240* per quarter, based on current SA Water Connection Charges
- 2. Upfront payment, no interest or administration charges**
 - Currently \$7,405 for current financial year, per new connection (subject to change on 1 July)
- 3. Other options that may be considered by Council following consultation**

All of the above is subject to detailed designs, the outcomes of this consultation process, approval of the State Government funding and approval by Council.



2. Onsite costs to connect property to CWMS network

- Costs for licensed plumber to connect your property to CWMS network
- **Costs vary depending on what is required on individual property**
 - **Cost estimates range from \$1,000 to \$5,000 per connection**
- Council may consider agreements with landowners and licensed plumbers to support you with these costs, which could include potential payment arrangements



3. Annual Service Charge

- Wastewater is an essential service, regulated by ESCOSA and the requirements of the Local Government Act
- Council is required to set service charges to achieve full cost recovery (no more and no less)
- The CWMS Subsidy seeks to ensure that Council can provide ongoing operations of the new CWMS for a cost equivalent to SA Water Service Charges
- Current CWMS Service Charge (Financial year 2025/26)
 - \$624 Occupied
 - \$253 Vacant
- Separate vs Uniform Future Service Charge – To be confirmed
- Council estimates show current annual service charges (on an inflation adjusted basis) should be maintained under the new combined network



Payment Support

- State Government Concessions – ‘Cost of Living Concession’ for sewerage and water services;
- Postponement of rates for State Senior Card holders – apply to Council;
- Payment Plan – as envisaged, payment options will be made available to new connections;
- Council’s Financial Hardship Policy – to assist people experiencing financial hardship to manage their bills



Timeframes for connections

- Connections must be completed by licensed plumber in accordance with the legislation*

**South Australian Public Health (Wastewater) Regulations 2013*

Subject to Council Decision:

- Grace period to connect?
- Time to pay connection fee?
- Application fees reduced or waived?

This is your opportunity to have your say





We want to hear from you

Representatives from the following organisations:

Kington District Council & Environmental Health Officer
Local Government Association of SA
BRM Advisory

We want to hear from you

Online Feedback Form



Community engagement closes at 5pm, Wednesday 9 July 2025.

