

CWMS FAQs

1. What is a Community Wastewater Management System (CWMS)?

A CWMS is a community wide system designed to collect, treat, re-use and/or dispose of wastewater by means of a full sewer or from septic tanks (Septic Tank Effluent Disposal Scheme - STEDS) on individual properties.

The collection system is a network of pipes and pumping stations that transport the effluent to the treatment site.

Two examples of a treatment system include:

- Facultative lagoons where effluent is stored and treated by aerobic function and/or mechanical aeration to speed up treatment process; or
- Mechanical treatment plants where aerobic action is undertaken in a series of aerated tanks.

The disposal system may be either:

- Evaporation ponds; or
- Irrigation systems or other re-use opportunities.

2. How many CWMS are there across the state?

There are currently 175 CWMS across 50 council areas in South Australia.

3. What is the Murray Bridge East CWMS Concept?

The proposed concept design project has been fully funded by the LGA.

It is a modern, full sewer system that takes all wastewater (both solids and liquids) without the need for a septic tank.

A full sewer system therefore significantly reduces the risk of environmental and public health risks associated with failing or non-compliant systems.

The design report is a proposal only and does not include detailed information. If this was to proceed, more in-depth plans and engineering would occur.

4. Why has this project been undertaken?

This project has been undertaken following the findings of the Feasibility Study. This study verified that there was a high number of onsite wastewater systems that were either failing or in poor condition, thus causing a potential public health and environmental risk.

Refer to this link: <u>https://www.murraybridge.sa.gov.au/EastSideCWMS</u> for access to the Feasibility Study.



5. How much will the CWMS cost and who will pay?

The final costings have not yet been determined. However, preliminary costings are detailed within the Concept Design report.

The Rural City of Murray Bridge is currently engaging with the LGA CWMS Program to explore further funding opportunities should the project proceed to detailed design and construction. This funding would assist to significantly subsidise the cost to residents and Council.

In addition to the LGA CWMS Program Funding, Council will also explore other funding opportunities to further reduce costs to the affected residents.

6. What is the LGA CWMS Program?

This is a grant program where Local Government organisations can apply for financial support to investigate, design and construct a CWMS. Certain criteria must be met to be eligible for this funding and the aim is to support and assist Councils in developing sustainable and safe wastewater management options.

With the support of the LGA the total costs of the construction of a CWMS can be significantly reduced. The purpose of this funding is to provide equity between SA Water customers and council customers.

LGA SA webpage

7. How does the LGA funding work?

If Council were to proceed to detailed design and construction this would be subject to available of funding.

The subsidy is calculated so that contributions from ratepayers are no higher than if they were to be connected to SA Water. The subsidy amount is equal to the whole of life costs minus the SA Water equivalent revenue (over a 50-year period).

8. What are whole-of-life costs?

This is the expected capital, maintenance and operational costs of a CWMS over its whole life (50 years).

9. How much will it cost me?

If the Council are successful with obtaining funding from the LGA CWMS Program, the capital cost of the construction will be significantly reduced, but not fully covered. The



current residential connection cost estimate with LGA subsidy funding is approximately \$8,000 per connection. However, this is indicative only and may change following further investigations or to be in-line with SA Water prices (i.e. fees to connect into SA Water sewer).

The Council will need to consider several options with respect to cost recovery for the remaining capital costs. Some of the options Council may consider include (but are not limited to) the following:

- Borrowings to fund individual connections amortise with annual charge/levy to service loan;
- Require a connection fee upfront
- Require part-payment upfront and part-payment at later date.

However, this will be a decision for Council at a later date.

If the CWMS is installed, then it is the property owner's responsibility to install and pay for the piping from their dwelling to the connection point. There will also be an ongoing CWMS connection charge that would be similar to that of an SA Water sewer connection charge which must be ratified by Essential Services Commission of SA.

10. What would I be responsible for?

Council would be responsible for the infrastructure from the boundary of a private property. This would include installing the main CWMS lines and individual connection points and then maintaining this infrastructure.

It would be your responsibility to connect into the connection point (i.e. plumbing work from your dwelling to the connection) and maintain any plumbing at your property. Refer to the below image:



11. Do all properties have a CWMS Connection point? The CWMS concept design includes connections to 527 allotments. These properties were selected following the

results of the feasibility study.

Please refer here to the concept design report and plans to see included properties.

12. How do I read to the plans to determine if I have a connection point?

If you have a connection point this will be indicated on the plans as a small blue or green line going to your property. Refer to the below image for how this looks:







If you do not have a line like this going to your property you do not have a connection point.

13. Will I need to connect straight away?

This will be a decision of Council. Grace periods are typically offered to residents, requiring connection within a certain timeframe.

Grace periods offered by councils for similar CWMS projects have provided incentives to residents, such as waived application fees, to encourage timely connection.

Please note Council has not made a decision to progress this project and is seeking your feedback.

14. My property doesn't have a connection – can I connect?

The concept design is a proposal and only includes connections to four key priority areas. If this proceeds to detailed design the final design may vary.

It may be possible in the future to connect if the CWMS system has capacity. This would be a similar process as undertaken by SA Water. Following receipt of an enquiry for a new connection, the Council would undertake a capacity assessment.

15. My property has a connection – do I have to connect?

Yes. If your property has a connection, you would eventually be required to connect.

This is a preliminary design and may change if this proceeds to detailed design.

16. If I have an Aerobic Wastewater Treatment System, will I have to connect?

This will be a policy decision, but requirement to connect to the CWMS will be based on compliance of individual Aerobic Wastewater Treatment Systems with legislative requirements (i.e. servicing, irrigation area, etc.).



17. Which properties benefit from a CWMS?

The installation of the CWMS will eventually benefit all properties involved. Whilst this might not seem apparent immediately for properties with compliant systems, it will:

- Allow people with failing systems or properties with limited space an option to connect to a system off-site.
- Provides a long-term solution for wastewater management. For example, onsite wastewater treatment systems eventually fail and require costly upgrades.

The concept design preliminary drawings have identified properties likely to be serviced by the CWMS.

18. How will connecting to a CWMS benefit me?

- Maintenance of individual septic or aerobic tanks will not be required.
- There is a significant cost saving between installing a new on-site wastewater system vs connecting to the CWMS (approx. \$20,000 difference).
- Possibility to further develop your land as area not required for an onsite wastewater system. For example, property extensions, building sheds or swimming pools (subject to planning regulations).
- Potential increase in property value.
- Reduction in the risk to public health due to failing systems and exposure to effluent. Ability for families (children and animals) to utilise the land without a risk.
- Convenience.

19. How will a CWMS benefit Murray Bridge East?

- Improved public health outcomes.
- Potential increased property value and improvement to the amenity of the area.
- Provides options for growth and development in the area.
- Potential to reuse recycled water for sale or community benefit.

20. Consequences of not constructing a CWMS?

- An appropriate solution will still need to be developed to address the public health and environmental concerns of the failing systems. A CWMS is the most sustainable option.
- There are limited options for system upgrades for several properties that do not have adequate reserve area. This could result in the only options for these sites being more expensive alternative systems or holding tanks that need to be pumped regularly.
- Upgrading systems is a costly undertaking and difficult for many who may be on lower incomes or pensions.
- Possible limitations on future development for individual properties.
- Construction of new systems on individual blocks is only a short-term option given that these systems may fail in time.



• If LGA CWMS Program Funding ceases, any future construction of a CWMS will require a considerably larger financial contribution from Council and therefore an increased to landowners through higher connection fees.

21. What happens if the CWMS does not go ahead and my system is poor or failing?

You will eventually be required to upgrade your system.

Under the Public Health Act and Wastewater Regulations there are certain requirements that must be met. If enforcement was to occur:

• A section 92 Public Health Notice would be issued requiring the onsite wastewater system to be upgraded. This will provide directions that must be completed within a certain timeframe.

22. What are the signs that my system might be failing?

- Wastewater is being disposed of to the surface. There may be a pump sitting on top of the septic or soakage.
- Wastewater is pooling on the surface. This will typically appear as a darker colour and have an odour associated with it.
- You might notice issues with the drainage of your internal fixtures (i.e. flushing of the toilet).

If your system was installed prior to 1988 it is considered non-compliant with the current legislation.

23. Was SA Water considered to provide sewerage services in this project?

Contact was made with SA Water at the start of this project. To date no response has been received by them to confirm if there would be capacity to connect into their current infrastructure. Further follow-up occurred by Council in August 2024, and there is currently a 12-month minimum wait for a response.

Due to the project and funding timeframes, SA Water has not been considered a feasible option at this time.

The LGA CWMS funding is available for proposals that have the lowest 'whole of life' costs. There is no guarantee that connecting to SA Water would be the lowest cost option.



If this project proceeds, any connection costs would be equivalent to SA Water costings.

24. Will this change the neighbourhood (i.e. land divisions)?

In the future there may be ability for further development within the area and people could further develop their land.

Any changes to current zoning would go through an entirely different process, including public consultation. This project is for a CWMS concept design and is not proposing changes to current planning policies.

25. What happens after public consultation?

Following the public consultation, the information would be gathered and reviewed.

This would then go to Council for a decision as to whether to proceed to Detailed Design.

26. Do all residents have to pay?

If this project were to proceed to detailed design and construction, it would be subject to LGA funding. Exact costings would be determined in detailed design and the costs would be covered by the connection fees of properties included within the scheme.

Properties that do not have a connection will not have to pay a fee.

27. Will there be odour problems from the pump station and treatment ponds?

Wastewater due to its nature is odorous. Network pump stations are fitted with odour filters in order to mitigate the risk of odour to surrounding properties. The location of the pump stations will be finalised at the detailed design phase. However, in order to minimise the number of pump stations, these are located at catchment low-points, so are governed largely by topography.

The EPA sets evaluation distances for effective air quality (refer <u>https://www.epa.sa.gov.au/files/15485_eval_distances_2023.pdf</u>) which outlines minimum buffer/separation distances from wastewater treatment plants. For wastewater treatment lagoons, the minimum separation distance is 150 metres for treatment plants servicing less than 1,000 people and 350 metres for plants servicing between 1,000 and 5,000 people. 350 metres has been adopted for the concept design.



There is no recommended evaluation distance for recycled water storage lagoons.

28. Some of the properties are shown with individual property pump stations. What does that mean for me?

The concept design has reviewed available LiDAR (elevation) data to determine those properties that may be at risk of 'not making grade' into a gravity drain. Typically, these properties fall away from the road or have a long length of connection to the main drain, and it is not always feasible to make the whole system deeper to cater for a small number of deep connections.

If the project progresses to detailed design, each property with a connection to the CWMS will require that its existing septic tank is depthed and located. This is to make sure that each property can achieve sufficient grade (minimum 1.65%) to the nominated connection point. This is a costly process as it requires individual site inspections to be undertaken at each property. This process will also allow an engineering decision to be made as to whether a property can be serviced via gravity or whether it will need to pump into the main drain.

Due to the fact that septic tank depthing is an expensive exercise, it is typically not done at the concept-design phase. The number of properties that require a pumped connection will be finalised as part of the detailed design phase. This typically involves a small package pump station with a DN40 pressure main that connects into the main drain in the street.

The power costs associated with the pump station are typically \$30-\$40/year and require annual servicing.