



Cowirra Community Wastewater Management Scheme (CWMS)

Discussion Paper

25 January 2019

PROJECT HISTORY

The shack area of Cowirra comprises over 60 allotments all within 200 metres of the main channel of the River Murray and entirely within the 1956 flood level. All of the existing dwellings in Cowirra are serviced by onsite wastewater systems (septic tanks and soakage trenches or septic and holding tanks). In order to achieve better environmental outcomes in the flood plain and facilitate a range of development opportunities for land owners, Council proposes to install a Community Wastewater Management Scheme (CWMS) to manage all wastewater from all existing and future dwellings in Cowirra.

There have been previous proposals by Council to install a CWMS using 100% landowner funding in 2001, 2007 and 2009 and on each occasion, the public vote never received a supporting majority. In 2009, the most recent proposal, 48% of respondents indicated their support for a CWMS so, the CWMS has not progressed.

In 2013, the Mid Murray Council commissioned a report on wastewater disposal pathways at 20 shack sites along the River Murray within the Mid Murray Council area with funding from the Local Government Association of South Australia. This report was undertaken by Rashlee Pty Ltd in October 2013. Following this, in 2015, Council applied to the Local Government Association (LGA) and were successful in obtaining grant funding to the value of approximately \$150,000 to undertake preliminary design and indicative costing works for a CWMS at Cowirra and another shack area. The Council received the formal offer from the LGA on the 27 October 2016 for this funding. On the 8 November 2016, Council accepted the offer from the LGA for this funding. Following a competitive process, Wallbridge Gilbert Aztec Consultants (WGA) were appointed and undertook the Preliminary Design Report. This work has been undertaken and Council now have an understanding of the type of system and likely cost per allotment to install the CWMS. The consultants have examined the various options available, in consultation with Council and LGA CWMS Management Committee representatives and as a result have now submitted a *Cowirra Township CWMS Preliminary Design Report and Design Drawings* for consideration.

Further to the above, Council were also recently successful in obtaining construction subsidy funding from the LGA CWMS Management Committee. The amount received will depend on final construction tender prices, but will guarantee a fixed contribution from Council (presently estimated at about \$255,000). The estimated total project subsidy payment is \$1.45 million.

WASTEWATER TREATMENT AND DISPOSAL OPTIONS

The study brief for the design consultants required that all options for the collection and disposal of wastewater were to be investigated and considered, and included a full sewer scheme or a Septic Tank Effluent Disposal Scheme (STEDS) – both of which are variations of a Community Wastewater Management Scheme (CWMS). The study brief required, as a result of the investigations, the nomination of a preferred option taking into account system impediments and costs.

The design consultants having investigated the various options have recommended that the most economic whole of life cost option for Cowirra is to utilise the existing Community Wastewater Management Scheme (CWMS) at Bolto.

Treatment Options

In the investigation phase, the consultant's brief also required that treatment and disposal **and/or** treatment and reuse of the treated wastewater be considered.

The treatment options ranged from:

- The treatment of full sewerage via the existing, but upgraded Bolto Wastewater Treatment Plant (WWTP) or a new treatment plant, and
- The treatment of effluent only via the existing Bolto WWTP or a new treatment plant.

Disposal Options

Council's desire to maximise reuse/recycling of the treated wastewater from the scheme was an important consideration in the planning process. However, this preference always needs to be assessed against the long term and ongoing cost of the treatment and disposal of the water.

The disposal options ranged from:

- Pumping effluent only to the existing WWTP at Bolto and upgrade capacity of the Bolto plant if required;
- Provide no secondary treatment to effluent, and dispose of untreated effluent in new soakage trench/bed systems; and
- Construct a new WWTP or wastewater stabilisation pond to treat effluent.

Constructing a new wastewater treatment plant would be the most expensive option and the construction of a soakage trench/bed system for untreated effluent would require Council to acquire a significant area of land (approximately 3,320m² after the consideration of trench spacing, access paths etc.).

Utilising the existing Bolto WWTP provides the following benefits:

- Increases in maintenance demands are minimised;
- Increases in power consumption and chemical usage demands are minimised;
- Land acquisition is minimised (likely no additional land will need to be acquired);
- Treatment performance of the Bolto WWTP is improved due to increased flows and additional micro-organism populations.

After assessing the options and liaising with the consultants and the Local Government Association of SA, the consultants adopted to pump effluent to the existing Bolto WWTP and upgrade capacity of the Bolto plant if required. This option was considered by the consultants as the most practical and cost-effective.

Associated Documentation

Copies of the Engineers Design Report *Cowirra Township CWMS Preliminary Design Report and Design Drawings* are available for inspection at both the Mannum and Cambrai Offices of the Council, and will be on display at the public meeting (copies will be available).

The report can also be downloaded from the Council website at www.mid-murray.sa.gov.au.

Questions about the project can also be directed to the Council's Director – Development & Environmental Services, Jake McVicar by emailing postbox@mid-murray.sa.gov.au or telephone 8564 6020 during office hours.

FREQUENTLY ASKED QUESTIONS

Frequently asked questions and responses relating to the scheme design and implementation are set out below.

Property Connections

Each property will be provided with a connection point at the boundary. It will be the landowner's responsibility and cost to connect from their septic tank to the connection point. The septic tank will need to be desludged prior to connection to the scheme, this cost is typically met by the scheme.

It is important to note that properties with more than one allotment contained in their assessment will be provided with a connection point per allotment. For example, if two allotments are contained within the one assessment, a connection point for each allotment will be provided.

Wastewater Application

A Wastewater Application must be submitted to Council in all cases. An application fee is required in order for the application to be opened and assessed. Fees will be charged in accordance with a procedure that Council will endorse. The procedure will include incentives for connecting within certain timeframes e.g. fees waived if connected within the first 6 months. The Wastewater Application must include details of the existing and/or proposed wastewater system, a detailed site plan and an underfloor plumbing plan. A licensed plumber must complete all works related to the CWMS connection and no work is to be performed until approval has been granted. The licensed plumber must submit to Council a Certificate of Completion (CoC) within 28 days of completing the work.

Septic Tanks

Your existing septic tank may be in a suitable condition for ongoing use with the new CWMS. If you wish to use your existing septic tank you will need to provide a report from a suitably qualified plumber to allow this to occur. Regardless, it is likely that your tank will be inspected prior to connection to the CWMS to determine its suitability.

The requirements for connection to the scheme is a 3,000 litre minimum capacity septic tank in sound condition with baffle walls in place, inlet and outlet junctions in place and a sound, safe lid with access lids raised to surface level for routine desludging. Please note, the capacity of septic tank required will be subject to the assessment of a Wastewater Application and may be greater than 3,000 litres.

If a new septic tank is required it will be at the landowner's cost. As discussed later, there will be a time period in which to connect and Council has a Hardship Policy for Residential Customers of Minor & Intermediate Water Retailers which will provide landowners with various payment options.

Vacant properties will require a septic tank that meets the above requirements if such property is to be developed. The landowner will be expected to supply a septic tank of suitable capacity at their own cost and as mentioned above it will be the landowner's responsibility and cost to connect from the new septic tank to the connection point.

Septic Tank and Holding Tank Combinations

Owners of residential properties that are serviced by a septic tank and holding tank will need to decommission their existing holding tank at their own cost. In the case a private pump sump is supplied free of charge due to the property being situated within the 1974 flood level, the property owner will be responsible for the connection of the septic tank to the private pump sump.

In the case a residential property is serviced by a septic tank and holding tank but is not subject to being supplied a new pump sump, the existing holding tank will need to be decommissioned at the landowner's expense and the property owner will be responsible for the connection of the existing septic tank to the CWMS boundary connection point.

Please note, decommissioning a septic tank or holding tank involves either removing the existing tank from the site or fully pumping out and disinfecting the existing tank, breaking open the bottom of the tank, placing the lid inside the tank and filling the tank up with sand (please note that this option may produce an odour for an extended period).

Existing Aerobic Systems

If your property is currently being serviced by an aerobic and irrigation system you may be able to utilise this system when connecting up to the CWMS. For more information regarding connecting aerobic systems to the CWMS please contact Council's Director – Development & Environmental Services, Jake McVicar, by emailing postbox@mid-murray.sa.gov.au or telephone 8564 6020 during office hours.

Private Pump Sump for Low Lying Properties

Some properties have the septic tank located in a low-lying position that is within the 1974 flood level. Those properties will be provided with a private pump sump at no cost to them. The sump will be wired into the household power board and will have an audio visual high level alarm to alert the occupant to a high level of wastewater. The pump sump will also be connected to the connection point, provided at the site boundary, as part of the installation, but the owner will be responsible for connecting the septic tank to the pump sump.

Vacant properties with low-lying land will be supplied with a connection point at the boundary, but once the site is to be developed, the owner will be expected to supply a private pump sump and septic tank of suitable capacity at their own cost. The cost of maintaining the pump is at the expense of the landowner.

Routine Desludging of Septic Tanks

Septic tanks accumulate sludge within the chambers over time and to prevent sludge passing through the tank into the collection system and overloading the Bolto WWTP, all septic tanks will be compulsorily desludged every **four** years by a Council contractor. This cost is included in the annual service charge at no additional cost to the landowner (additional charges may be imposed if the septic tank is not easily accessible or contains tree roots that require removal etc.).

Septic tanks that require more regular desludging outside of the standard four year period due to increased activity and loading will be the landowner's responsibility to arrange and will be at the landowner's cost.

Easements through Private Property

Where possible, the design of the collection network makes use of public roads and footpaths for the laying of drains, but in some cases it may be necessary due to the fall of the land or the arrangement of boundaries, that pipes need to be laid on private property or land not owned by the Council.

To protect the Council's asset and to ensure that future landowners know the drains are there, a legal easement over the strip of land where the pipe is laid will be registered on the title of the land. This will be done at no cost to the landowner.

During the construction phase, the contractors will be required to take every care when working within the private property and reinstatement of the site will be closely monitored and enforced by the Project Superintendent. A formal Right of Entry letter will be provided to each landowner, where an easement is planned for them to give permission for contractors to enter their land. No compensation is payable to the landowner for the existence of the easement, however all costs associated with the establishment of the easement and any associated works will be met by the scheme.

ESTIMATED PROJECT COSTS AND CHARGES

The costs provided below are preliminary **ESTIMATED** project costs.

More accurate costs will not be available until tenders for the project are called and assessed. However, once the tendered costs are known, the Council's contribution to the project will be **FIXED**. Any approved contract variations or take up of price contingent (PC) items will be at the cost of the LGA CWMS Subsidy Scheme Fund, unless Council elects to undertake additional works outside of the approved scope.

The Design Engineers, Wallbridge, Gilbert & Aztec, have provided estimates that the capital construction cost of the project (with a 10% contingency) is approximately \$1.7 million.

(Other project costs include final investigation and design costs, project supervision, legal fees, easement registration costs and approval fees from Statutory Authorities).

Project Subsidy (Council's Fixed Contribution)

The principles that apply to the calculation of the eligible subsidy are complex. They are based on the total estimated capital cost of the project, the whole of life estimated operation and maintenance of the project (over 50 years), measured against the current property values and the equivalent cost for provision of an SA Water scheme.

The difference of these costs and SA Water revenue equivalency is the amount of initial subsidy.

Following the calculation of the initial subsidy amount and thereby determination of the Council contribution, the Council's share of the cost is fixed. Any construction cost changes (up or down) are covered by amending the subsidy accordingly.

For the Council to receive the subsidy allocation they are required to agree that the service charge to be levied against the property owners will be recovered at whole of life asset cost recovery principles or **at least** SA water rating equivalency. Therefore, the Council's fixed cost when determined will be in the order of \$255,000 of the estimated \$1.7 million.

Connection Fees and Service Charges

Council has not yet determined the connection fees, and annual service charge to property owners for the operation of the scheme. However, Council is required as part of the subsidy agreement to recover whole of life capital and operating costs for the scheme and/or at least SA water equivalency.

As an indicator only, the **minimum** 2018-19 annual SA Water country charge is \$319.20 per annum. The SA Water annual rate on a property valued at \$300,000 is \$443.40 per annum. In addition, the residents using the Bolto CWMS are charged an annual service fee of \$530.00. Therefore, the annual sewer charge (dependent on the tenders received) would be within this range.

In addition to the above, SA Water charges a \$4,661.00 connection fee up front. Council has yet to determine payment options for the connection fee and/or when a new septic tank is required. Options are likely to include the following:

- One off payment up front;
- Payment over an agreed period of time;
- Payment when the property is sold or changes ownership (this may include an interest component linked to the Local Government Finance Authority rate).

Most Councils do not charge a rate in the dollar, preferring instead to set annual service charges under Section 155 of the Local Government Act 1999 which enables them to set across the board charges to each of the affected properties that only reflect the cost of ownership and operation of the particular scheme.

NEXT STEPS

Written submissions will be received by Council up until close of business on Monday 11 March 2019.

A report on the project background, the public consultation and submissions received will be presented to Council most likely in April/May 2019.

Subject to Council resolving to proceed with the project, a Funding Agreement will be formalised with the LGA CWMS Subsidy Scheme. A Tender Call for the project, possibly in June 2019 could be anticipated.

Beyond that, the timeframes can only be estimated as follows:

- Acceptance of tender and final decision from both Council and the LGA Subsidy scheme to proceed June/July 2019;
- Tender award July/August 2019;
- Works commence August/September 2019;
- Contract Practical Completion in early 2020.

Following scheme testing and commissioning, landowners will then be advised that connection to the scheme can commence.

Subject to ratification by Council, the usual connection arrangements are:

- If you connect within 6 months – Application to connect with administration and inspection fees waived;
- If you connect between 6 to 24 months – Application to connect with administration and inspection fees to apply;
- Over 24 months – Formal direction to connect within 6 months issued. Penalties apply for failing to connect;
- Failure to connect – Council may engage contractors to do the work if Formal Directions are not complied with, with the cost being recovered or becoming a charge against the land as a debt.

Thank you for taking the time to review all of the above information, Council looks forward to working with you to enable the construction of the Cowirra CWMS.

Russell Peate
Chief Executive Officer