

Frequently Asked Questions: Stuarts Point Sewerage Scheme

May 2022

1. Where is the project up to?

Council is continuing with planning work to construct a sewerage scheme which will service Stuarts Point, Fishermans Reach and Grassy Head. Once delivered, the scheme will provide significant benefits for the community and resolve issues arising from onsite sewage management systems.

The project is currently in the design and investigation phase. Recently, NSW Crown Lands issued a conditional permit to undertake field studies at the wastewater treatment plant site to the south of Stuarts Point and the dunal treated effluent discharge area on the eastern side of the Macleay Arm.

In conjunction with Council, Pressure System Solutions recently completed a masterplan study of the scheme. This comprised a review of the current villages and identified future development sites to provide a hydraulic network solution that meets existing requirements and allows for future residential and industrial developments in the scheme area.

The masterplan study provides a concept design that is available for the current network and a planning tool for use when assessing the impact of future developments as they evolve. Information derived from the network modelling has formed the basis of the concept design flows and capacities for the wastewater treatment plant.

Council's consultant, GHD, has been working on the concept design, which is 90% complete and awaiting geotechnical information to complete hydraulic profiling for the plant.

2. Where will the sewage treatment plant be located?

Council has identified a vacant site near Stuarts Point, north of the existing waste transfer station on Fishermans Reach Road, as the preferred site for the new sewage treatment plant. Acquisitions are now underway for the site from the Crown, which has included resolving an undetermined Aboriginal land claim.

3. Will the sewerage scheme cater for growth in the area and holiday loadings?

The design of the treatment plant and collection system will serve existing properties and allow for potential development and peak holiday loading from places such as the holiday park and convention centre at Grassy Head.

4. Where will the treated effluent be discharged?

Options for methods of treated effluent discharge have been assessed. Council has worked closely with the NSW Environment Protection Authority and NSW Department of Planning and Environment – Water (DPE – Water) in this regard. Dunal discharge is the endorsed option of treated effluent discharge, like the system in place at South West Rocks.

5. Where to from here?

In the coming months, Council will work closely with consultants and DPIE – Water to complete the treatment facility concept design and a collection system detailed design. This will enable the scheme to be tendered under a design and construct tender process.

6. What is the new project timeframe?

While it is difficult to provide a precise timeframe, Council will endeavour to deliver this project as a priority to comply with the grant conditions.

Based on a current estimate for delivery of the project, the connection of properties to the sewerage scheme is scheduled to begin from early 2024, subject to the successful contractor's design and construction program.

The project is complex in nature and if there are any changes to this timeframe Council will proactively communicate these to the community.

7. Will my property be connected to sewer?

If you are within the sewer service catchment for the three villages then your property will be connected to sewer.

8. What sewer access charges will be applicable over the project delivery timeframe?

Council resolved to waive the proposed sewer charge for the Stuarts Point area for the 2019-20 financial year. Instead, the annual septic charge listed in Council's Schedule of Fees and Charges applies.

Based on progress with the project, charges will be reviewed as required, and property owners will be advised of any changes. Once properties ultimately have a connection to the sewerage scheme available, annual sewer charges will apply.

For current fees and charges, refer to the extract below from Council's Schedule of Fees and Charges. Please visit Council's website for more detail on fees and charges.

9. As a property owner, what would the installation of the sewerage scheme cost me?

At each property, Council will install a pressure sewer unit and will connect the property sewer drain to this unit. Council will also re-route the property drain from the septic tank to the pressure sewer unit. Existing septic tank or onsite treatment systems will be decommissioned by Council, including restoration. Thus, Council will cover the cost associated with the pressure sewer system installation.

10. How does a pressure sewerage scheme work?

A pressure sewerage scheme is made up of a network of fully sealed pipes into which pump units discharge household sewage. The pump unit is located on each connected property. The pump unit grinds up the waste into a liquid and transfers this to the collection main (located in the street) through a small pipeline within the property (house discharge line). Once the collection tank unit has been installed, the only visible parts are the tank lid and the pump control panel.

For more information, please see the Pressure Sewer Homeowners Manual on Council's website at ksc.pub/Stuarts-Point-scheme.

11. Where is power for the pressure units supplied from?

Power will be supplied from the electrical switchboard of the house to the pump control panel. This will be done as part of the pump well and control panel installation by Council contractors.

12. Where will the pressure sewer unit be located in my property?

While this depends on the layout of your property, the collection tank will be installed in a location where it can be accessed easily for maintenance. Generally, the pressure sewer unit will be installed at the front of the property, though property owners will be consulted to assess their individual circumstances before installation.

13. Who will maintain the pressure sewer system?

Council will operate and maintain the pressure sewer system.

14. What will happen to the existing caravan park sewer system?

Once a connection is available, Caravan park sewage will be diverted to the new sewer system and transferred to the new sewage plant for treatment.

15. What will the impacts be during construction?

Council endeavours to minimise the impact of construction on the community. This factor will influence the plant design, construction timing and so on. Construction hours will be planned to minimise any impacts on businesses and residents.

16. What is the average yearly electrical cost to operate a unit servicing the typical single-family home? What is the duration of operation per day?

A typical home uses up to 630 litres of water a day and discharges approximately 450 litres of that to the sewer. Pump operation is typically between 10 and 20 minutes per day. For a single pressure sewer pump, this equates to electricity consumption of up to \$10 per year.

Below is a table that shows run time for different water usage. The average water usage of a Kempsey Shire Council resident is 465 litres per day.

Water use (litres/day)	Sewer discharge litres/day	Typical pump cost/year
465	335	\$8.69
630	454	\$13.47
1000	720	\$20.02

17. How noisy is the pressure sewer pump?

As the outdoor unit is buried in the ground, you will not hear it at all if you're 5 metres away. If you're standing on top of it when it's running, you may hear a sound like a washing machine.

18. What if the power goes out or the pump fails?

The pressure sewer unit provides emergency storage of up to 24 hours. If the power goes out or the pump fails, the pump control panel's alarm light will blink and a buzzer will sound. You will need to contact Council and turn off the alarm and light by pressing a button at the bottom of the control panel. This information will be given to each resident at the time of installation. Each resident will be provided with a copy of the homeowner's manual.

19. Where will the collection pipes and pump station be located?

Generally, mains are set out from power poles, surface structures, assumed property boundaries, or the kerb and edge of bitumen. The installation contractor will be responsible for locating all existing services, confirming the suitability of pipe locations and adjusting the design and construction accordingly.

20. How would potential odour from the proposed treatment work be managed by Council?

Air pollution in New South Wales is regulated in accordance with the *Protection of the Environment Operations Act 1997* (POEO Act). The design of the treatment plant and location will be subject to this legislation.

Minimum buffer setbacks from nearby residents will be maintained from the sewage treatment plant. Odour management will also be a key design factor for the sewer scheme and treatment system to eliminate or mitigate potential odour sources.

21. Where on the dunes would the discharge point be located?

Council has negotiated a site envelope with the Environment Protection Authority to establish the most suitable location for dunal discharge of treated effluent. This is on the east side of the Macleay Arm, north of Stuarts Point. As the treatment facility concept design is developed – involving further investigation of the dune environment, including groundwater modelling and geotechnical investigations – it will manage any impact on the receiving environment.

22. Why a pressure system compared to other types of sewerage systems?

Council's preferred option comprises a pressure sewerage scheme, conveying the sewage to the wastewater treatment plant. Council adopted this as the preferred option based on the capabilities of new technology and considering the studies that have identified constraints and challenges in the area, especially the high water table.

23. What has happened to the fees charged to date for the scheme now that it's been delayed?

The project funding model relies on collection of some sewerage rates in advance of the project, which has occurred as part of 2018-19 rate collection. These monies are held in reserve.

Extract from Council’s Schedule of Fees and Charges

Sewerage Access & Usage Charges

Sewerage Access & Usage Charges – Residential Properties

Refer to Council's Policy in respect of the classification of properties as residential or non-residential.

Sewerage Access Charge – Vacant Properties

Unconnected Properties (Vacant)	per connection	\$782.00	E	N
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Name	Unit	Year 21/22 Fee (incl. GST)	Pricing Policy	GST
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Sewerage Access and Usage Charge – Connected Properties

Residential properties (single dwellings)	per connection	\$1,288.00	E	N
Multi-residential properties – flats and holiday flats (s.501 charge)	per unit per annum	\$1,288.00	E	N

Sewerage Access & Usage Charges – Non Residential Properties

Kilolitres discharged to sewer are calculated as follows: metered water consumption multiplied by the sewerage discharge factor.

Refer to Council's Policy in respect of the classification of properties as residential or non-residential.

Sewerage Access Charges – Non Residential

Unconnected Properties (Vacant)		\$782.00	E	N
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Sewerage Access Charges

Non Residential Properties are charged based on the size of the water meters connected to the property

20mm	per connection size	\$1,189.00	E	N
25mm	per connection size	\$1,870.00	E	N
32mm	per connection size	\$2,743.00	E	N
40mm	per connection size	\$4,241.00	E	N
50mm	per connection size	\$6,707.00	E	N
80mm	per connection size	\$17,202.00	E	N
100mm	per connection size	\$26,836.00	E	N
150mm	per connection size	\$63,905.00	E	N
Fire Services		\$0.00	E	N

Fire Services: Water meters for fire fighting that meet Council Policy C22.14, are not charged a sewer access fee

Sewerage Usage Charges – Non Residential

Non Residential Properties	per kilolitre discharged to sewer	\$3.10	E	N
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