

February 2024 update

Project status

Where is the project up to?

Kempsey Shire Council is continuing with planning work for the construction of a sewerage scheme for Stuarts Point, Fishermans Reach and Grassy Head. The project will involve:

- The construction of a pressure sewer system to initially service approximately 600 properties, with capacity to increase to 1600 properties.
- A wastewater treatment plant (WWTP) to treat the sewage.
- A dunal discharge for the release of treated wastewater.

Planning and construction of the Stuarts Point Sewerage Scheme is complex and requires NSW Government environmental and planning consent for a State Significant Development (SSD). This involves the preparation and public exhibition of an Environmental Impact Statement (EIS).

The tender for the EIS was awarded to Ramboll. Field work for the various studies are underway and due for completion June 2024. You may see staff in Stuarts Point and surrounds completing field work including site surveys and observations.

The EIS should be ready to submit to the NSW Government by mid-2024, with a determination expected by January 2025. Construction work cannot start until the determination is made and approval granted.

While the EIS is happening the project team will continue with:

- Hydraulic and detailed design of the of the network, the WWTP and dunal discharge.
- Auditing all properties to determine sewer infrastructure needs.
- Designing agreed solutions for all properties.

Why has this kind of sewer scheme been chosen?

Investigations into a sewerage scheme for the area date back to 1983, with various options considered over that time.

In 2016, Council delivered a Sewerage Strategy for Stuarts Point, Grassy Head and Fishermans Reach. This identified the option of a pressure sewer collection system and transfer of sewage to South West Rocks Wastewater Treatment Plant, which would require a complex and difficult directional bore pipeline under the Macleay River.

This option was later abandoned due to the environmental and First Nations heritage impacts on the Stuarts Point-Clybucca Midden, one of the largest known estuarine midden complexes in Australia.

A further options report identified an alternative scheme, which included a wastewater treatment plant at Stuarts Point.

As such Council opted for the option to construct a wastewater treatment plant near Stuarts Point, with dunal discharge of treated effluent.

Key Council Resolutions

December 2018 Council resolution

1. *Progress with design and investigation work for the proposed alternative option for the Stuarts Point Sewerage Scheme of a Sewage Treatment Plant (STP) near Stuarts Point, with dunal discharge of treated effluent, in parallel with pursuing the grant funding Deed.*

April 2020 Council resolution

1. *Notes the Environment Protection Authority has agreed that treated effluent from the proposed sewage treatment works be discharged to the dunes located between the Macleay River Arm and the Pacific Ocean, to the north east of the Stuarts Point township.*
2. *Continues with negotiations to secure the suitable site for the Stuarts Point Sewage Treatment Plant to the south of Stuarts Point.*
3. *Note the revised service area has removed properties from the scheme that are:*
 - a. *Greater than two and a half (2.5) acres or not used for residential purposes;*
 - b. *Not likely to have an impact on sensitive environmental areas or neighbouring residential properties; and*
 - c. *Not zoned as residential or identified for future higher density land use in growth area planning.*
4. *Continue to progress with design work reflective of the updated service areas for the Stuarts Point Sewerage Scheme.*
5. *Informs all affected landowners that will now be excluded from the service area of this decision, with any contributions made toward the scheme from these landowners via a sewer charge refunded.*

Why has Council decided to proceed with the scheme now?

The progress of the project is in line with Council resolutions from 2018 and 2020 outlined above. The key driver for the Stuarts Point Sewerage Scheme is addressing the issues with existing on-site sewage management systems.

Typically homes within the scheme area are 40 years old, or older, and their sewage systems do not comply with modern standards for treatment and disposal. These systems risk groundwater contamination and associated public health impacts via overflow events and ineffective treatment.

All the properties in Stuarts Point, Grassy Head and Fishermans Reach presently rely on onsite sewage management systems to treat and dispose of effluent. Many residences are served by septic tanks equipped with absorption trenches or pump-out systems.

Council is focused on providing the most sustainable sewerage service to benefit and meet the needs of the community.

The proposed modern centralised sewerage scheme will have numerous benefits for the entire area, including a positive environmental impact by reducing onsite system leakage and eliminating odour and water quality issues.

The scheme will avoid future significant costs to residents, that would otherwise be incurred to make individual systems compliant.

The scheme will also support future growth, with land surrounding Stuarts Point zoned for future residential and industrial development.

The sewerage scheme will help the area cater for visitor populations in caravan parks.

The scheme is likely to improve property values in the area, based on increased land value, development potential and improved social benefits.

The scheme is also anticipated to improve estuary health for oyster growers in the area.

What is the new project timeframe?

Council is working towards completing planning, approvals, construction, and property connections, with the scheme fully commissioned and operational in 2026, subject to relevant approvals being granted and favourable conditions during construction.

Will the sewerage scheme cater for growth in the area and additional people during peak holiday season?

Yes, the WWTP is being designed to cater for growth and holiday season loading.

Where can I find out more information?

The project team will regularly attend community meetings and as the project progresses, there will be a project office on site where you can visit and ask questions. You can also:

- Visit Council's website ksc.pub/stuarts-point.
- Call (02) 6566 3200.
- Email ksc@kempsey.nsw.gov.au.

Sewerage scheme details

How does a pressure sewer system work?

The pressure sewer system consists of an underground tank and pump at each property, which collects sewage and discharges it through a network of pressure pipes to the treatment facility. Once installed, the only parts of the system that will be visible on the property will be a boundary kit, tank lid, and pump control panel. More information on pressure sewer systems is available on Council's website.

Where will the network pipes be located?

Generally, pressure sewer mains are located within road reserves.

Where will the new wastewater treatment plant be located?

Council has acquired a site near Stuarts Point, south of the village and north of the existing waste transfer station on the Fishermans Reach Road, as the site for the proposed new wastewater treatment plant.

[View map of proposed wastewater treatment plant location](#)

How will the potential odour from the proposed treatment plant be managed by Council?

Air pollution in NSW is regulated in accordance with the Protection of the Environment Operations Act (POEO Act) 1997. The design of the treatment facility and its location will be subject to this regulation with setbacks from nearby residences included in the design.

Where will the treated wastewater be discharged?

Council has worked closely with the NSW Environmental Protection Authority (EPA) and the Water Team within the NSW Department of Planning and Environment (DPE), to determine the best solution. The treated wastewater will be discharged to the dunal discharge area between the Macleay Arm and the ocean, north of the Stuarts Point village. This is similar to the existing South West Rocks dunal discharge.

The concept design of the scheme and construction phases will manage impacts on the surrounding environment and will be reviewed by the relevant government agencies as part of the approval process.

[View a map of the proposed discharge location.](#)

Property connections

Will my property be connected to the sewerage system?

If you are within the sewer service catchment for all three villages, your property will be connected to sewer and will be liable for annual Council sewer service charges.

What is the expected cost to property owners for the installation of the onsite sewer system?

Council will cover the costs associated with the pressure sewer system installation and each property will require an audit to assess the extent of works required. Each property within the scheme will have a pressure sewer unit installed and work will include connection of all property drains to the pressure sewer unit.

Works will be conducted to comply with AS 3000 Electrical Wiring Rules and AS 3500 Australian Plumbing and Drainage Standard.

Once connected, the existing septic tank/onsite treatment system will be decommissioned by Council including site restoration.

Where is power for the pressure units supplied from?

Power will be supplied from the electrical switchboard of the property. Connection will be completed as part of the pressure sewer installation by Council.

Where will the pressure sewer unit be located on my property?

This depends on the layout of your property. The tank will be installed in a suitable location where it can be accessed easily for maintenance and provides the best outcome for the property. The pressure sewer unit is usually installed near the existing septic tank.

Property owners will be consulted during site audits to assess individual circumstances to be considered for each property design.

How will construction impact the community?

Council will endeavor to minimise the impact of construction on the community wherever possible.

As with any major construction project there may be disruption at times. This could include increased noise, vibration, dust and traffic movement.

Construction activities will be planned to minimise impacts on businesses and residents, with the pressure sewer pipework likely to be installed using horizontal boring techniques that have minimal local impact.

How do you manage Aboriginal cultural heritage items on residential properties?

This will be outlined in the Environmental Impact Statement (EIS) for the project.

Operating the system

Who will maintain the pressure sewer system?

Council will maintain the pressure sewer system.

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

The annual septic charge listed in Council's [Schedule of Fees and Charges](#) will be applied during construction of the scheme, with the sewer service and availability charge to apply once the scheme is completed.

Council's Fees and Charges are reviewed annually with information available on [Council's website](#).

How much is the sewer service charge?

Based on Council's [Schedule of Fees and Charges](#), the sewer service charge for 2023/2024 for the average household is \$1359 per annum. All properties in Kempsey Shire pay the sewer service charge.

How is the sewer service charge calculated?

Council works with three separate funds in both budget planning and service provision. These funds must be kept separate by law.

Those funds are:

- the general fund
- the water fund, and
- the sewer fund.

Council rates go to the general fund. The water levy covers the cost of delivering clean water to a property. The sewer levy covers the cost of disposing of wastewater.

The sewer levy is calculated each year and is based on the essential sewer capital program planned for the next 10 years.

How do I pay the sewer service charge?

The sewer service charge will appear on your rates notice.

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 discharges approximately 400 litres of waste per day to the sewer. Typically, the 0.75kw pump will operate between 10 to 20 minutes per day and, for an average property, this equates to electricity consumption of around 70 kilowatts per annum (or \$35.00 per annum if the unit cost of general power is \$0.50 per kilowatt hour).

How noisy is the pressure sewer pump?

The pump is located at the bottom of the collection tank which is below ground, at a depth of two metres. The grinder pump emits a low pitch humming noise that is audible when standing at the tank but barely noticeable at a distance of five metres or more.

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

The pressure sewer unit provides emergency storage for approximately 24 hours. If the power goes out and is restored, or the pump fails, the pump control panel alarm warning light will activate and an audible buzzer will sound. The buzzer can be muted manually or will turn off after 10 minutes with the light remaining active until the alarm condition is cleared. If an outage lasts longer than an hour, and the alarm is still active, you will need to contact Council and report the fault. This information is in the homeowner's manual that will be provided to each resident at the time of commissioning.

The homeowner's manual is also available on the Kempsey Shire Council website.

[View a copy of the homeowner's manual.](#)

General questions

What about the stormwater drainage?

Council is also working on a separate project to improve stormwater drainage in Stuarts Point and the local area.

The project will deliver groundwater study & stormwater study and develop designs which will enable Council to seek grant funding for construction.

Works completed to date include consultation, options assessment, draft groundwater studies (ongoing), draft stormwater study and conceptual stormwater design.

If the drainage is fixed, can we keep the septic tanks?

The scheme will provide a new, modern and reliable sewer service to the Stuarts Point, Grassy Head and Fishermans Reach communities. The existing private systems are overloaded, with many failing and at the end of their serviceable life resulting in significant negative environmental and social impacts.

The existing on-site sewer management systems do not meet current on-site treatment standards and if retained, would require significant capital investment by the landowner to upgrade and provide for ongoing monitoring.

Completing this project will result in benefits for both Council and the communities of Stuarts Point, Grassy Head and Fishermans Reach including minimisation of adverse impacts on the water aquifer and the environment, public health (especially during floods and water charged events) and regional development by removing planning restraints.

Upgrading the stormwater system does not impact the drivers and benefits of the proposed sewer scheme for the area.

Can the sewer scheme be complemented by on-site greywater recycling for individual properties?

On-site grey water recycling for individual properties is not part of the sewer scheme design. For further information, check out the NSW Health Department Domestic Greywater Treatment Systems Accreditation Guidelines Feb 2005 about greywater recycling for individual properties.

Can the discharge from the treatment plant be reused?

Recycling water from the wastewater treatment plant for non-residential uses is outside the scope of this project. Reuse could be considered in the future as a new project. Recycling water would require additional treatment, infrastructure and would incur additional fees/costs.

Can the discharge from the WWTP be used to create a wetland park as a tourist attraction?

The design of the plant is based on a suite of concentration limits and a disposal methods specified by the EPA and will form the basis of the Environmental Protection Licence issued by

the EPA for the sewerage scheme and prior to commissioning of the WWTP. Due to high water tables and flooding, wetlands are not a reliable discharge option.

The effluent from the plant will be suitable for surface dunal discharge within a restricted access area.

Are red algae blooms related to WWTP discharges?

Algal blooms occur worldwide and can be caused by a range of factors including thermal pollution, low water levels, excessive nutrients and more.

The new centralised collection and treatment system will result in a net reduction in total nutrient discharged to the water aquifer as nutrient concentrations are reduced through the WWTP treatment process and discharged to the dunal area between the Macleay Arm and the ocean, which allows rapid dispersal in an area that minimises local environmental impact.

The Environmental Protection License issued by the EPA includes maximum nutrient level criteria used as key design parameters for the WWTP.