Brooms Head Holiday Park On-Site Sewage Management System

Frequently Asked Questions

Why is the existing system being upgraded?

The current packaged treatment plant and system is at the end of operational life. Due to environmental regulations, the system does not meet current regulatory standards and needs to be upgraded so that the park can continue to operate in the long term.

The Parks current approval also requires a sullage collection system to be installed on short term sites. This would put an additional load on the current treatment system of approximately 30 kL a day. The current system cannot process this additional load. The park needs to upgrade the treatment system followed by the sullage system.

Council needs to upgrade the system in order to maintain operation of the park.

Can the system stay the way that it is?

The current packaged treatment plant is on the frontal dune and the new plant will not fit in this area without removing several prime location sites due to the need to increase the size of the system.

The current land application area is through disposal ponds on another parcel of Crown Land to the south of the Village utilised Council. These use of this land for disposal is not a sustainable long-term solution and, in the future, Council is unlikely to have access to that land. NSW Crown Lands have requested that Council manage wastewater within the whole of the reserve while Council cannot justify the risk of spending a significant amount of money on investing in a land application system with a high risk of losing the asset in the future.

Will any sites be lost? If so, permanent or semi permanent? Have these tenants been accommodated alternatively.

No approved formal sites will be lost. Some transitional (temporary) sites will be removed where the new location of the packaged treatment plant is proposed.

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What is happening with the Redevelopment of the Holiday Park?

Council adopted a Concept Masterplan for the redevelopment of the park following consultation in 2017. The full redevelopment of the park is not in the scope of this project.

This project needs to be completed prior to any further redevelopment work, due to the additional sullage load the redevelopment will put on the system. The detailed design for the full redevelopment of the park is currently on hold.

Why was the frontal dune chosen as the site for the land application area? Was this the only position available?

Council has undertaken a risk management process over the past 4 years and considered a number of sites over that time undertaking many studies. During the process all other options and sites were considered and ruled out due to a range of environmental or tenure issues. These included saturated water tables, environmental protection zones, impact on native vegetation, proximity to waterways and/or the beach as well as land which may not be owned or controlled by the Crown or the Council in the future.

The selected site was found suitable to date due to the following factors:

- It has a suitable depth of water table.
- It meets requirements for distances for beach and other waterways.
- It enables the treated water to be spread the load over a large area.
- If consist of sandy soils which have a high permeability rate acts a natural filter.
- Consideration of flora and fauna impacts (yet to be completed).
- Underground absorption beds which will not affect the current use of the reserve, and
- Underground beds with almost no risk of human contact or surface run off.

Council is currently finalising its assessment of the suitability of this area and design for the land application area in this location

Can the top of the Frontal Dune still be used for recreation use?

Yes

The dune will be returfed, with wastewater applied below ground level to the land application beds that will be at least 800mm deep to ensure there is no human contact.

Will the view of the beach be maintained?

Yes, additional planting is planned for the dune, this will consider the neighbouring properties scenic views.

What are the water quality standards of treatment of the wastewater?

The wastewater will be treated to the Secondary Treatment level, with double disinfection (Chlorine and Ultraviolet Light) then purified further through the natural sand filter of the dune.

This will meet the guidelines and local government regulations that outline that the treatment must not cause environmental harm or risk to public health.

Will the water quality standards be monitored?

Yes, Council has installed monitoring wells on the dune and at the base of the dune and has assessed current water quality data. Future monitoring of treatment system water quality as well as a groundwater monitoring program is proposed for ongoing monitoring of water quality in the location.

This data can be supplied to the Environmental Protection Authority (EPA) as Council's overseeing regulatory authority.

Will there be contaminated water seeping onto the beach and will this have health implications.

Council will implement mitigation measures being put into place to minimise the risk of additional seeps from the water table and to the environment. Wastewater will also be treated to a high level through the system and monitored for compliance. Water within the dunal system would be monitored for any contamination in the groundwater monitoring wells on a regular basis.

The packaged plant will also include a maintenance contract to ensure the system is optimally functioning and regularly maintained.

Where does the treated wastewater go?

Treated wastewater will be to a high standard with dual disinfection (chlorination and ultra-violet) and filtered through the sand that disperses into the dunal system.

Covid 19 (Coronavirus) What happens if it gets into the system

The system is designed to treat virus's and pathogens, including Covid 19 and has multiple barriers to reduce the environmental and public health risk.

Covid 19 What happens if it is found in the Holiday Park

As any business, the Holiday Park has a Covid safe Plan and would be under the guidance of the NSW Department of Health for direction on what to do.

Can the water be piped away to be utilised on farmland?

The distances to nearest farmland make it not viable to pipe the treated wastewater away.

There are also complexities with Council not owning and managing the land. (One concern would be if the land was sold and the new owners did not want to take the water then the system could not operate).

This is not seen as a viable solution for this instance, the risks and costs are considered too high for this approach.

How will Council ensure the stability of the Dune? Will there be a subsidence problem for the hill? Will erosion be a problem?

The dune is currently being structurally assessed prior to any works being undertaken. That assessment will inform the design of the land application system.

Initial discussions with the Structural Geotechnical Engineer and a Geologist have not flagged any significant concerns with the loads on the dune and subsidence however is subject to further investigation. That investigation will confirm the suitability and if appropriate make recommendations of any mitigation measures that will be required to stabilise the dune further.

Part of the land application area design includes increasing the vegetation on the dune to stabilise the dune further and to assist with evapotranspiration.

Will the planting be Native Vegetation?

Yes Council, will look at dune stabilisation by planting predominantly with native vegetation on the dune. All planting will consider maintenance of scenic views across the dune.

The Consultants have suggested a non-native plant to be mixed in with the natives Vetiver grass. Vetiver Grass has been used in wastewater treatment system as it has a long root system, it is a sterile plant and cannot propagate and further removes nutrients and absorbs water.

Has this been done before?

Yes, the wastewater consultants specialise in commercial on site wastewater management system investigation and environmental assessment and consider the sensitivity of the environment.

Can I have access to the Consultants reports?

Council cannot release the reports for the following reasons:

- The reports are commercial in confidence, and some parts of the reports are considered the consultant's intellectual property.
- The reports released could give tenderers an unfair advantage and may compromise the tender process.
- Recommendations of the reports will be included and inform the design.

Can I contact the consultants?

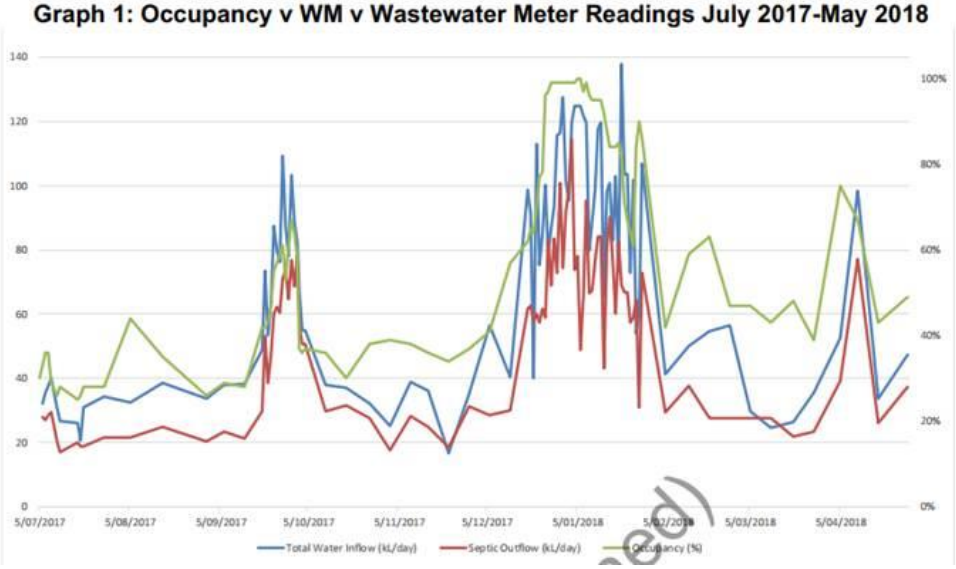
Please direct all questions through to Council's Project Manager Justin Menzies on 6643 0200.

How much water will be pumped into the dune each day?

For the majority of time there will only be between 20kL and 40kL a day rotated across each land application bed. While the dune has been assessed as coping with the full capacity of the system there will be a cap on the system of 80kL a day through the implementation phase and monitor the outcomes.

The balance of the treated wastewater will be disposed of in the current disposal ponds to supplement the load when the load exceeds 80kL. This will allow the system to be assessed and monitored through its implementation. If there are any issues Council has a contingency plan to pump all the treated wastewater to the existing disposal ponds in the short term.

Graph 1: Occupancy v WM v Wastewater Meter Readings July 2017-May 2018



Note: *Red is actual usage, (Measured in Kilolitres kL)*
Blue is forecast usage (i.e in the future when the additional infrastructure is installed) (Measured in kL)
Green is Occupancy (Measured in %).

- Data was collected over period of normal operation time of the park to assess wastewater load. The amount of wastewater produced is variable throughout the year, with peak loads in September, Christmas Holidays and at Easter. For 8 months of the year the amount is around 20kL to 30kl. during peak periods the such as Christmas, September School Holidays and Easter the treated wastewater spikes due to the influx of visitors.

- The monitoring showed a maximum wastewater generation of 113.3kL/day on 3 January 2018. The treatment system needs to allow for future infrastructure of sullage which needs to be installed throughout the park. Hydraulic modelling has estimated that maximum loads of 143.4KL a day (See the Blue line) with the additional infrastructure.

  Note: Pumping to the current disposal area is not a viable long-term solution. Once Council has longer term data and data from the upgrades to the sullage system of the park, other systems will be put in place to dispose of the treated wastewater.

How will the wastewater be applied to the beds?

The beds will be rotated by the treatment system to ensure there is an even load placed across the dune. Beds can be rested (skipped) if there is a need.

What happens if there is an issue with the treatment plant or during maintenance?

The treatment plant will be made of 8 x 20kL pods which will be able to be turned on or off and individual pods can be taken out of service for maintenance whilst the system functions.

The current disposal ponds will also be maintained for a number of years as a contingency for land application areas.

What approvals does the system need to gain and who assesses them.

The system needs to get a Section 68 approval under the Local Government Act through Council's Environment, Development & Strategic Planning Section of Council. The proposal has also already been referred to the EPA for comment.

A Review of Environmental Factors under Part V of the Environmental Planning and Assessment Act is being completed to assess the environmental impact of the proposal and recommended mitigation measures.

How does Council resolve what appears to be a conflict of interest in managing the park and determining the Section 68?

- Council currently manages the whole reserve as the Crown land manager of R65975, the physical management of the reserve is undertaken by Council's Open Spaces and Facilities section.
- The application for s68 is assessed/approved by Council's Environment, Development & Strategic Planning Section.

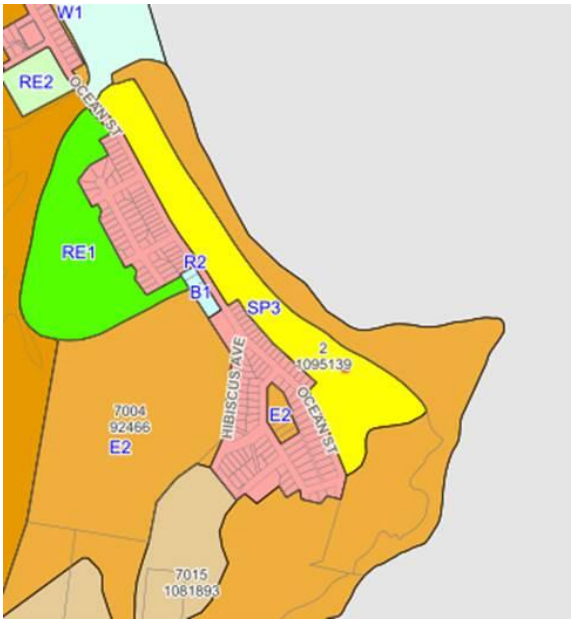
Both sections operate independently of each other. In this case Council's Environment, Development & Strategic Planning Section has requested comment from the NSW Environmental Protection Agency.

Is there a difference between the Holiday Park boundary and the Reserve Boundary?

The Brooms Head Reserve is Reserve 65975 for the public purpose of Public Recreation and Resting Place, notified 15 May 1936. It consists of the following land parcels:

- Lot 7001 DP 92464 - Brooms Head Foreshore Reserve (PN 128472)
- Lot 7004 DP 92466 - Brooms Head Public Reserve (PN 134785)
- Lot 1 DP 1095139 - Brooms Head Reserve Kiosk (PN 128624)
- Lot 2 DP 1095139 - Brooms Head Reserve (incl. Holiday Park) (PN 114797)

From a planning perspective the Holiday Park area is within the area identified as being SP3. The built footprint of the holiday park (cabins, amenities, tourist and holiday park sites) has been adopted within adopted Concept Masterplan for the site by Council, as Crown Land Manager, available on Council's web site at the minutes of the December 2017 Ordinary Council Meeting (Item 15.256/17).



Can we have a copy of the Brooms Head Reserve Plan of Management?

Yes. A copy is available on Council's website:
https://www.clarence.nsw.gov.au/cp_themes/metro/page.asp?p=DOC-TGF-61-54-57

What is the progress in updating the Plans of Management (POM) for Brooms Head reserve and will it go out for community consultation?

Council is waiting for Crown Lands to release a policy direction on whether caravan/tourist parks are to be managed under the *Local Government Act 1993* as community land or not.

The remainder of the Brooms Head Reserve (i.e. the area excluding the holiday park) has been included under the draft *Community Land, Crown Reserves and other Public Places Generic Plan of Management.* This draft plan is currently with the Crown Lands waiting for Ministerial approval for Council to place on public exhibition. Once approval is given this draft plan will be placed on public exhibition for 6 weeks for comment.

What are the next steps?

1. Council is completing the structural geotechnical assessment of the dunal system to accept wastewater from the treatment system.
2. The Draft Review of Environmental Factors (REF) is being updated and following the geotechnical assessment will be completed.
3. Finalisation of the design, which will consider and align to:
    a. Advice and recommendations of the Environment Protection Authority.
    b. Comments from NSW Crown Lands as owner of the property/reserve.
    c. Comments from the Department of Planning, Industry and Environment.
    d. Findings and recommendations of the structural geotechnical assessment of the dunal system.
    e. Findings and recommendations of the completed REF.

4. An approval under s68 of the Local Government Act will be sought to enable the treatment system to proceed.