

# Wastewater Treatment Projects

## Citizens' Panel Insights

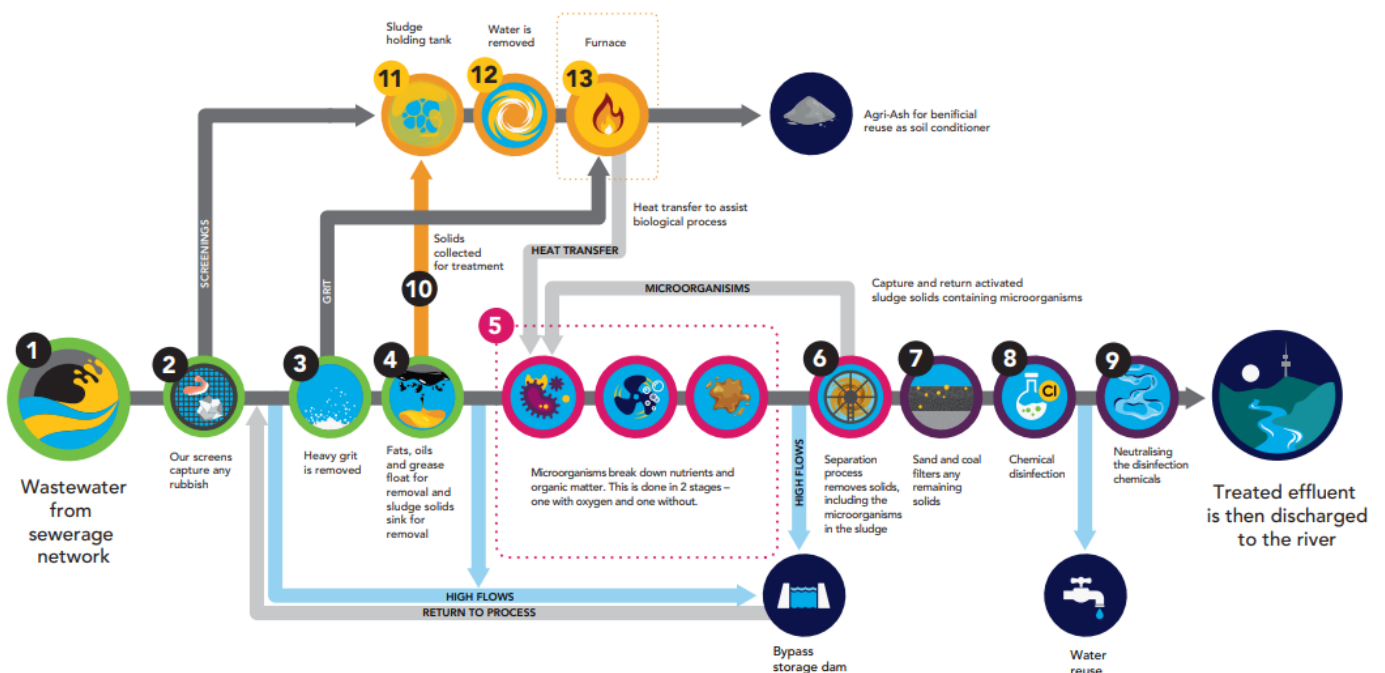
Phase one of our consultation on the **Bioreactors - secondary treatment process upgrade** and **Biosolids management renewal** projects was conducted in July and August 2022.

The purpose of the engagement was to inform further communication and engagement on the projects and to test our thinking and decision-making approach.

**Thank you to those who participated!**

This document provides a summary of what you told us and our response.

### The treatment process:



What you told us	Our reflection on what you told us
<p><b>Cost is important to you.</b></p> <p>You need to understand how investment is planned and will impact your bill. Consequently, you helped us develop this <a href="#">factsheet</a>.</p>	<ul style="list-style-type: none"> <li>▪ These projects are significant and will ensure the long-term servicing of Canberra’s wastewater.</li> <li>▪ The selected options came up best in terms of <b>value for money</b> for our customers when compared to other options.</li> <li>▪ The option selected will be delivered in stages to make sure we are only increasing capacity to what is needed and that the cost is spread across a number of years.</li> </ul>
<p>It is helpful to you and gives you confidence to see where <b>technology is successfully used elsewhere</b>.</p> <p>You felt that we shouldn’t reinvent the wheel when we can learn from others.</p>	<ul style="list-style-type: none"> <li>▪ The technologies we have selected have been <b>tried and tested</b> both in Australia and elsewhere around the world.</li> <li>▪ The technologies selected on each project are used successfully in locations internationally and here in Australia. The option chosen for the bioreactors is in use in Googong, NSW and Cleveland Bay, QLD. The option chosen for biosolids treatment is in use in Loganholme, QLD.</li> <li>▪ We work closely with utilities in the water and wastewater industry to share and learn from the experience of others.</li> </ul>
<p>We are using complex technologies. For you to have <b>meaningful conversations</b> with us, you expressed that the <b>community requires a deeper understanding of the topics</b>.</p> <p>This includes the need for the project, technology options, community, and environmental impacts.</p>	<ul style="list-style-type: none"> <li>▪ We are commencing our second phase of community engagement in the first half of 2023.</li> <li>▪ Phase two will focus on educating the broader community on these two important projects and will be used to inform the planning approvals process.</li> </ul>

When assessing between technical options, it is helpful for us to **demonstrate trade-off comparisons**.

Beyond cost, the two elements you care about most are:

What you told us	Our reflection on what you told us
<p><b>Impacts to the environment.</b></p> <ul style="list-style-type: none"> <li>▪ You support maximisation of resource recovery and circular economy opportunities (Biosolids treatment).</li> <li>▪ Ability to treat microplastics and contaminates of concern.</li> <li>▪ Emissions.</li> <li>▪ Disposal of waste to landfill.</li> </ul>	<ul style="list-style-type: none"> <li>▪ The selected technology will produce the best circular economy outcomes, compared the other options assessed.</li> <li>▪ The biosolids management option chosen can provide treatment of microplastics and contaminants of emerging concern.</li> <li>▪ The option chosen for biosolids management provided the best outcomes for low greenhouse gas emissions.</li> <li>▪ The option chosen will was the best performing for the avoidance of waste to landfill.</li> </ul>
<p><b>Impacts to the community.</b></p> <ul style="list-style-type: none"> <li>▪ Truck movements</li> <li>▪ Odour</li> </ul>	<ul style="list-style-type: none"> <li>▪ The selected technology will result in the least amount of truck movements.</li> <li>▪ Improving the reliability of infrastructure will reduce onsite odour and the biosolids management technology selected is least odorous out of the options considered.</li> </ul>

## Project specific feedback:

### Biosolids treatment

- You are supportive of and very interested in outcomes that deliver circular economy opportunities.
- Following deliberation of impacts, you **preferred 'hot' treatment options** (due to positive environmental outcomes and less negative impact on the community).
- Once you were informed on trade-offs and comparisons between options you **favoured gasification**.

## Bioreactors – secondary treatment process

- You had a greater level of **trust in our decision making** on this project due to it having less community and environmental impacts and being more contained within the treatment process.
- You understood that the process needed to be expanded and updated to ensure that we can continue to service our growing community.
- Once you were informed on trade-offs and comparisons between options you **favoured membrane bioreactors and integrated fixed film activated sludge**.

We have now selected a treatment option for both the Biosolids treatment renewal and Bioreactor – secondary treatment upgrade projects.

To find out more about the selected technology, the options considered and our decision process, see our [project webpage](#).

## Wider infrastructure planning and asset location feedback:

We wanted to gauge your understanding of **what assets we have in your blocks, and in your neighbourhood**.

Further to this we wanted to understand tolerance for where assets could be built in our communities and what combined land uses may be preferred.

- Most of our assets are below the ground... **generally, you only know about the assets you can see** such as water meters and sewer manholes.
- When planning to do renovations or landscaping, most are **not aware how these assets may affect your land or building** or how much clearance is required for safe operation and maintenance.
- You would generally be **concerned if there was a sewer network stack** (or vent) located close to your home. On this basis it is important we understand what your specific concerns would be and address them through education and by alleviating any impacts to amenity.
- With our population growing and densifying, you **support compatible shared land use** of areas around assets (this may be parkland, playgrounds, dog parks or industrial uses).
- You prefer the concept of a centralised (or single) treatment plant, rather than several spread throughout the community.