

Beachlands South and Wastewater Treatment Plant – Technical Workshop Summary and Minutes

Date: 4 February 2026

Time: :11:00am-1:00pm

Attendees:

Watercare - Anna Jennings Clemence Carlinet, Haydee Allan, Helen Shaw, Shabneez Hussain, Tanvir Bhamji, Glen Hughes (RCP), Catalina de Mendoza (Martin Jenkins).

Russell Group- Brett Russell, Graeme Harvey, Khai Azizi, Rob Bassett.

Apologies : Andrew Deutschle, Martin Ball

Purpose of the Workshop

To confirm and agree on a technically sound, compliant, and deliverable approach for treating wastewater flows generated by the Beachlands South Development during the interim period ahead of the permanent Beachlands WWTP upgrade.

1. Existing Wastewater Treatment Plant Capacity and Constraints

- The existing plant is currently designed for 10,000 PE and is hydraulically at capacity.
- Doubling of capacity cannot be accommodated within the current configuration.
- While there is land available on site, expansion would require significant earthworks.
- Geotechnical conditions are poor, with hilly terrain presenting physical and financial challenges.
- The SEA designation limits expansion options, resulting in restricted upgrade potential.
- Greenfield expansion is constrained, although land availability exists, cost escalation is likely due to geotechnical risks.
- Construction over the existing plant is possible but would be complex and require careful sequencing of works and would be very costly.
- Upgrading within the existing footprint, expanding to a degree is preferred where possible. This will take us up to 18,000 PE that can connect to the WWTP.

2. Upgrade Pathways and Staging

- Current footprint allows limited expansion.
- Proposed capacity staging discussed: Existing:
 - 10,000 PE
 - Interim Upgrade Capacity: 18,000 PE
 - Ultimate Upgrade Capacity: 30,000 PE
- Interim upgrade option identified to increase capacity to 18,000 PE, subject to approvals.

3. Beachlands WWTP Condition and Operational Issues

- The plant is experiencing seawater ingress, resulting in significant corrosion issues.
- Renewal works undertaken in Beachlands resulted in the relining of approximately 6.2 km of wastewater pipes, the upgrade of 85 manholes, and improvements to 198 household connections. These works will help reduce groundwater and seawater infiltration into the wastewater network, improving network performance and resilience.
- New discharge standards are being considered, including discharge to land or to stream. Assessment is ongoing, with a report awaited from PDP.
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4. Interim Upgrade Solution

- Interim solution proposed as a like-for-like expansion, adding additional treatment units.
- Interim upgrade would be hydraulic in nature and would not involve MBR.
- Existing tertiary filtration is in place and removes solids effectively close to MBR standards; therefore, only minor polishing would be required to get close to the MBR standards.
- The interim solution is expected to take approximately 3 years.
- To achieve 18,000 PE, the following would be required:
 - Additional treatment units
 - Additional aerators
 - Additional hydraulic components

- Interim upgrade would be subject to discharge consent approval by Auckland Council.
- Discharge quality under the interim upgrade would be similar or very close to the full upgrade outcome.
- Potential dilution opportunities were discussed.
- Further assessment is required to confirm whether dilution would meaningfully improve discharge quality outcomes.
- Discharge consent approach proposed to be flow-based rather than PE-based.
- Technical upgrade required, with iwi consultation forming part of the process.
Indicative budget, ballpark capital cost estimated at \$25–30 million, excluding further polishing requirements and solids dewatering.
- Ongoing maintenance works also required on the existing plant.

5. Stakeholder Engagement

- Further discussions are required with iwi.
- WSL to re-engage with iwi to:
 - Better understand iwi values
 - Identify discharge quality drivers that align with those values

6. Beachlands South – Growth and Programme Update

- Beachlands South growth assumptions discussed: Population growth from the live-zoned area is expected to result in approximately 2,000–2,500 DUEs over the next 10-year plan period.
- The school is anticipated to be operational by 2030, alongside approximately 500 new dwellings. Security of wastewater servicing will be required to support this growth.
- Fast-track consenting anticipated to commence in May.
- An interim solution would be beneficial; however, Russell Group is also considering the possibility of working within their existing discharge consent.
- Confidence expressed by Russell Group that a WWTP solution can be delivered well within the indicated budget.
- They are exploring various options with a current strategy proposed that involves installing a site wide gravity network, with flows conveyed to pump stations constructed to Watercare standards, including 24 hour emergency storage. Wastewater from these

pump stations would be transferred via rising mains to an on-site wastewater treatment plant.

- The proposed treatment solution is a combined works wastewater treatment plant incorporating staged, modular expansion, allowing capacity to be increased in line with development staging. This approach provides flexibility and ensures infrastructure provision aligns with growth.
- Following treatment, discharge options will be assessed, with various potential discharge methods to be considered as part of the consenting process.
- From a governance and operational perspective, the following options are under consideration:
 - Beachlands South retaining ownership and management of the wastewater utility in its entirety; or
 - Vesting the full wastewater system with Watercare for ongoing ownership and operation; or
 - A hybrid approach, involving a combination of private and Watercare ownership and management responsibilities.
- Connection to Watercare WWTP option:
 - Whether the rising main is pumped directly to existing Watercare WWTP, where treatment and discharge would be undertaken by Watercare.
 - On-site treatment discharge option: Alternatively, whether discharge would be pumped from the on-site wastewater treatment plant, following treatment, to Watercare WWTP with discharge managed by Watercare.
- Combined Works and Treatment Technology: Combined works option discussed using a compact bio-aeration system.
- System characteristics:
 - Compact footprint
 - No chemicals added
 - Modular “build-as-you-expand” approach
 - Already approved under four consents in Auckland
 - Raath and Associates Limited is the supplier
- Technology is widely used in Europe and meets high discharge quality standards.
- Further work required to understand alignment with Watercare discharge quality standards

- Concerns were raised that Watercare's peak wastewater flow assumptions under the relevant standards are relatively conservative. Where a new, fully watertight wastewater system is constructed in accordance with these standards, this may result in significant over-provision of capacity, leading to unused capacity within the system, particularly during the early stages of development.
- A deviation from Watercare standards would be a big risk but this would be a matter of further discussion with the Networks team.
- Russell group is considering various discharge locations, across the golf course, but also in their EPA areas and in ecological areas,
- They are also looking at where current discharge goes, which is down into a stream, and talking to Iwi on that as well.
- Indicative timeframe for delivery of the Base Scheme package plant and network is 2–3 years.

7. Key Considerations and Matters for Further Resolution

- Public wastewater discharge standards would apply and may provide an advantage if the plant is owned and operated by Watercare. In this case, the discharge would be treated as a public discharge, potentially enabling a 35-year non-notified consent.
- Beachlands South may fall within the relevant entity defined under the wastewater discharge standards, which could influence how those standards are applied.
- Asset ownership, operation, and vesting arrangements require further clarification. Watercare to consider whether it is willing to take on distributed wastewater solutions of this nature.
- If the Fast-track application proceeds with interim private wastewater servicing, Watercare would generally not be involved in commenting, as assessment would occur through the Council regulatory process.

8. Key Next Steps

- Watercare to await the PDP assessment report on the new discharge standards.
- Watercare to continue engagement with iwi to inform discharge quality expectations.
- Watercare to gain a clearer understanding of the proposed treatment technology, awaiting T&T report being prepared for Beachlands South.

- Watercare to confirm feasibility, approvals, and timing for the interim 18,000 PE upgrade subject to approval of discharge consent.
- Further evaluate discharge options (land vs stream), considering regulatory and cultural requirements.
- Both parties to continue assessing options and progressing discussions.
- NIF meeting scheduled for 5 February.
- Next catch-up meeting to be scheduled for mid-March, following receipt of the T+T report for the Package Plant Scheme.