

**Fast-track Approvals Act 2024 – Delmore Substantive Application**  
**Technical Addendum**  
FTAA-2502-1015 / BUN60444768

**1.0 Technical Specialist – Delmore (88 Upper Orewa Road) Fast Track Application – Wastewater Discharge**

From: Dylan Walton – Senior Wastewater Engineer, GWE Consulting

Date: 18 June 2025

**2.0 Executive Summary / Principal Issues**

This assessment addresses the wastewater treatment and discharge proposal for the Delmore development at 88 Upper Orewa Road, as presented in the Fast Track application and subsequent submissions.

The original proposal was reviewed alongside a series of supplementary documents, including technical notes, updated design information, and memoranda responding to issues previously raised. The applicant proposes a high-standard wastewater treatment system incorporating reverse osmosis (RO), supported by additional infrastructure. I provided an initial assessment on 19 June 2025, in which the issue of the fate of RO reject water was raised. Other key technical issues identified were addressed to a satisfactory level. These include clarification of effluent quality, microbial and chemical risks, potential impacts on the receiving environment, and proposed monitoring and consent conditions. In most areas, the proposed discharge is considered technically sound and consistent with best-practice treatment approaches.

Following receipt of a number of additional documents since my original assessment, a critical outstanding issue remains: the ultimate fate of the treated wastewater, RO reject water, and intermittently, raw wastewater. The applicant proposes tankering these waste streams off-site to several possible Watercare-operated treatment facilities and possibly to Wainui Golf Course. Watercare, however, has stated it does not support this and has not granted consent for such discharges to its network. No evidence has been provided confirming Wainui Golf Course is prepared to accept any waste streams. Without firm agreements or approvals for these disposal pathways, the proposal lacks the certainty required for technical endorsement.

Accordingly, it is not possible at this stage to recommend conditions of consent for the wastewater discharge. Certainty regarding the final disposal of all wastewater and waste by-products is necessary to confirm the viability and environmental acceptability of the proposed treatment strategy.

### 3.0 Specialist Assessment – Previous Memo / Comments Overview

#### Previous memorandum

My previous memorandum was dated 19 June 2025 and titled “Technical Memorandum – Final. Delmore (88 Upper Orewa Road) Fast Track Application BUN60446761. The main technical issues reviewed were:

1. **RO Reject Water Stream** - Uncertainty about disposal of approximately 40m<sup>3</sup>/day of reverse osmosis reject water. The applicant promised a future memo to address this critical issue.
2. **Pathogenic Impacts** - The extremely high treatment quality from reverse osmosis makes a Microbial Health Risk Assessment unnecessary.
3. **Ammonia Effects** – were addressed satisfactorily. While discharge may occasionally push the stream to State B for ammonia, given the current ecological state, changes are unlikely to be "meaningful." Regular monitoring was recommended.
4. **Estuary Impact Assessment** - The discharge will contribute approximately 1% nitrogen and 5% phosphorus to the southern stem of Orewa River, considered acceptable as a "minor, localised nutrient source."
5. **Emerging Organic Contaminants & Metals** - Satisfactorily addressed. RO treatment is very effective at removing these contaminants.
6. **Soil Assessment** - Adequately addressed with conservative design assumptions. Recommends bore holes at disposal site to confirm soil conditions.
7. **Irrigation Field Design** - Requires better site plans showing separation distances, but sufficient information provided for consent conditions.
8. **Consent Conditions** - Multiple revisions recommended including fortnightly sampling, specific loading rates, and maintenance requirements.

I generally accepted the proposal will have no more than minor impact on the stream, given the extremely high treatment standard and likely short-term nature of the discharge. However, final consent conditions could not be recommended until the promised memo on RO reject water disposal was received and reviewed.

### 4.0 Specialist Assessment – Material Reviewed

#### Review of 07/07 Updates

Since issue of my memo of 19 June 2025. I have received and reviewed the following information relating to wastewater treatment and disposal:

- Technical Note TN.02, revision 5, subject “Technical Note – Truck Movements and Volumes”, dated 02 July 2025 and prepared by Apex Water
- Technical Note from Williamson Water & Land Advisory to Andrew Allsopp-Smith, subject “Delmore subdivision: tinkering of untreated wastewater from the wastewater treatment plant”, dated 07 July 2025
- Memorandum, authored by Viridis, to Andrew Allsopp-Smith, Andrew Fawcett Vineway Limited, document number 10122-009-1, dated 01 July 2025
- Letter from Watercare to Carly Hinde, dated 13 June 2025, subject “BUN60444768 – Delmore Fast Track Application 88 Upper Orewa Road, Upper Orewa 0992”
- “Memorandum of Counsel for the Applicant with Response to Comments”, dated 5 July 2025. Madeleine C Wright, Counsel for Vineway.
- Memorandum from B&A Urban & Environmental to James Kitchen (McKenzie & Co), re: “Delmore – Water and Wastewater Capacity”, dated 02 July 2025
- Memorandum by McKenzie & Co., title “Delmore – Transmission Water & Wastewater Supply Capacity Assessment”, dated 02/07/2025
- Updated “Delmore Proposed Conditions” – received with other documents on 07/07/2025.
- Technical Memorandum by SLR to Andrew Allsopp-Smith, subject “RE: Delmore Wastewater Treatment Strategy – Updated Operational Noise Assessment”, dated 03 July 2025.
- “Delmore Fast Track Approval Application Assessment of Environmental Effects and Statutory Analysis” by B&A Urban & Environment

The latest response from Apex (TN.02, rev 5) proposes some departures from the original design. The key changes are:

1. Provision of a 1,000 m<sup>3</sup> raw wastewater tank to balance flows, but also to act as a contingency in case of plant failure
2. Provision of 1,000 m<sup>3</sup> treated wastewater tank, for holding treated wastewater to irrigate later, or for tankering off site.
3. 60 m<sup>3</sup> total reverse osmosis (RO) storage tanks
4. Thickening of waste sludge on site.
5. Tankering away of 80% of treated wastewater during summer months (condition 241 in the updated conditions), as well as provision for tankering away raw wastewater.

One of the outstanding issues arising from my earlier assessment was uncertainty around the fate of RO reject water. There is still no certainty provided around this and, given that it is now proposed to tanker away 80% of the wastewater during December to February, the total volume to be removed from site will be significantly more. Furthermore, on page 6 of Watercare’s letter of 13 June, it is stated that “Watercare does not support any tankering of wastewater, whether treated or untreated, that would discharge to its public network and there is no general right of entry of wastewater tankers onto Watercare sites for disposal”, noting that consent is required from Watercare for this to take place. The Apex technical note TN.02 (rev 5) lists several treatment plants operated by Watercare where the discharge could be taken (as well as Wainui golf course for treated wastewater or reject RO water). However, Watercare’s letter opposes this and provides no certainty that discharge can take place to their wastewater treatment plants.

At the time of writing, Watercare's position is incompatible with the Applicant's proposal, and the full fate of any RO reject water, treated wastewater, and untreated wastewater remains unresolved. Until certainty is provided on this matter, I cannot therefore recommend that consent be granted.

## **5.0 Specialist Assessment – Addendum – Outstanding Issues / Information Gaps**

At the time of writing this Memo, and having reviewed the 7 July updates from the Applicant the fate of treated wastewater, RO wastewater, and raw wastewater (on occasions) remains unresolved. A full description is provided in Section 4.0 above. In short, the Applicant proposes to tanker away some treated wastewater (and raw wastewater on occasion), along with RO reject water and lists several treatment plants that it could be tankered to. However, Watercare does not support this. An alternative suggested location for the RO water and treated wastewater (on occasion) is Wainui golf club. However, no detail or approvals for this were provided. In the absence of certainty around this issue, I consider that material adverse effects concerning wastewater discharge may arise.

## **6.0 Proposed Conditions**

As per above, given the new information received, I cannot recommend conditions of consent until certainty of the fate of the waste streams is provided.

## **7.0 Recommendation**

The latest information received from the Applicant indicates that 80% of treated wastewater will now be taken off site and delivered to either a Watercare treatment plant, or to Wainui Golf Course (for RO reject water and treated wastewater only). The Applicant also proposes providing for tankering of raw wastewater off site, when needed. These are significant changes from the original application documents. However, Watercare does not support this, and no documents have been provided stating that Wainui Golf Course is prepared to receive the waste streams. The Applicant has therefore not provided certainty on the fate of the treated wastewater, RO reject water, a raw wastewater (on occasion). I therefore cannot recommend grant of consent without this certainty.