IN THE MATTER **of the Resource Management Act 1991(RMA)**

AND

IN THE MATTER **of Private Plan Change 100 - Riverhead to the Auckland Unitary Plan**

JOINT WITNESS STATEMENT (JWS) IN RELATION TO:

Topic: WATER & WASTEWATER and PLANNING (1)

Date 19 June 2025

Expert Conferencing Held on: 19 June 2025

Venue: Watercare Services Limited offices (73 Remuera Road, New Market) and Online

Independent Facilitator: Marlene Oliver

Admin Support: Kasey Zhai

1 Attendance:

1.1 The list of participants is included in the schedule at the end of this Statement.

1.2 Declarations – the participants expertise and roles are set out in the schedule. This JWS should be read having regard to those relationships.

2 Basis of Attendance and Environment Court Practice Note 2023

2.1 All participants agree to the following:

(a) The Environment Court Practice Note 2023 provides relevant guidance and protocols for the expert conferencing session;
(b) They will comply with the relevant provisions of the Environment Court Practice Note 2023;
(c) They will make themselves available to appear before the Panel;
(d) This statement is to be filed with the Panel and posted on the Council's website.

3 Matters considered at Conferencing – Agenda and Outcomes

3.1 Introductory Discussion – Water & Wastewater

3.1.1.1 **Attachment 1** was the base document for this initial discussion. Where appropriate, notes from the expert conferencing have been included in **Attachment 1**. All experts agree that further expert conferencing sessions will need to be scheduled. This initial expert conference session was in part scheduled to enable Helen Shaw to attend before she goes on leave.

4 PARTICIPANTS TO JOINT WITNESS STATEMENT

4.1 The participants to this Joint Witness Statement, as listed below, confirm that:

(a) They agree that the basis of their participation and the outcome(s) of the expert conferencing are as recorded in this Joint Witness Statement; and
(b) They agree to the introduction of the attached information – Refer to paragraph 3.1.1.1 above; and
(c) They have read the Environment Court's Practice Note 2023 and agree to comply with it; and
(d) The matters addressed in this statement are within their area of expertise; and
(e) As this session was held both in-person and online, in the interests of efficiency, it was agreed that each expert would verbally confirm their position in relation to this para 4.1 to the Independent Facilitator and the other experts and this is recorded in the schedule below.

Confirmed: 19 June 2025

EXPERT'S NAME & EXPERTISE	PARTY / ROLE	EXPERT'S CONFIRMATION REFER PARA 4.1
Karl Cook, Planning	RLG (Applicant) Consultant	Yes
Robert White, Engineer – Water and Wastewater	RLG (Applicant) Consultant	Yes
Evan Peters, Civil Engineer	RLG (Applicant) Consultant	Online Yes
Kelsey Bergin, Planning	Fletcher Residential Limited (with the applicant) Employee – Development Manager	Yes
Anthony Smith, Surveying	Fletcher Residential Limited (with the applicant)	Yes

EXPERT'S NAME & EXPERTISE	PARTY / ROLE	EXPERT'S CONFIRMATION REFER PARA 4.1
	Employee – Head of Development	
David Wren, Planning	Auckland Council (s42A team) Consultant	Online Yes
Louise Allwood, Planning	Watercare Services Limited Consultant	Online Yes
Tim Scheirlinck, Engineer – Water Supply	Watercare Services Limited Employee – Head of Water Planning	Yes
Andrew Deutschle, Engineer – Wastewater	Watercare Services Limited Employee – Head of Wastewater Planning	Yes
Helen Shaw, Engineer – Water and Wastewater	Watercare Services Limited Employee – Head of Strategy and Consenting	Yes
Ryan Pitkethley, Engineer – Water and Wastewater	Good Planet Landholder Submitter Group Consultant	Yes

Attachment 1

Wastewater servicing options prepared for the purposes of Expert Conferencing:

Item	Capacity	RLG position	References and supporting documentation	Watercare position PC100 (as stated in evidence and hearing)	References and supporting documentation
1) Existing Riverhead Pump Station	500 DUE*	There is currently sufficient capacity in the existing Riverhead Pump Station with no requirement for additional operation storage required.	Referenced in the notified plan change documentation and the evidence in chief and rebuttal evidence of Mr Robert White.	There is currently sufficient capacity in the existing Riverhead Pump Station with no requirement for additional operation storage required. However, this is not for the Plan Change area but for the entire Kumeu-Huapai and Riverhead Wastewater catchment.	Paragraphs 6.2 and 6.4 of the Statement of Evidence of Andrew Deutschle on behalf of Watercare and confirmed during the hearing.
2)Whenuapai Package 1 and 2	500 DUE*	When the Whenuapai Package 1 and 2 are completed (which has been funded and anticipated to be completed by 2029), additional capacity will be available at the Riverhead Pump Station. No additional operation storage will be required.	Referenced in the notified plan change documentation and the evidence in chief and rebuttal evidence of Mr Robert White.	When the Whenuapai Package 1 and 2 are completed (which has been funded and anticipated to be completed by 2029), additional capacity will be available at the Riverhead Pump Station. No additional operation storage will be required. However, this is not for the Plan Change area but for the entire Kumeu-Huapai and Riverhead Wastewater catchment.	Paragraphs 6.3 and 6.4 of the Statement of Evidence of Andrew Deutschle on behalf of Watercare and confirmed during the hearing.
* - Based on modelling undertaken in 2021/22. Existing development modelled to reflect recorded average of 150 L/person/day for existing development and 180 L/person/day for future development. Additional development included 1,400 additional DUE across the catchment and 1,000 DUE within Plan Change area.					
Expert conferencing 19 June: <u>Items 1 and 2</u> a) Robert White, Anthony Smith, Andrew Deutschle agree 1,000 DUE for bulk wastewater (following the planned abandonment of the Whenuapai village pump station) is the current available capacity.					
3) Smart Pressure Sewer System	450 houses	A Smart Pressure System is an appropriate solution for a retirement village as it can be managed privately to discharge wastewater during off peak periods. The key here is a single discharge (of ~500 DUE) into the Watercare Network.	Referenced in the notified plan change documentation and the evidence in chief and rebuttal evidence of Mr Robert White. In addition, the Botanic Fast Track application (which was approved initially) proposed this solution, which was confirmed as acceptable by Watercare in Joint Expert Statement dated 15 November 2022.	Watercare does not consider that this is an appropriate solution due to: • Lack of oversight and alignment • Limited accountability • Health and Safety Risk Accepted it is technically feasible and acknowledges that there is a benefit from a private system. However, has not seen sufficient evidence from Mr White on how the discharge can be withheld during overflow events. However, Watercare have previously stated that this is an acceptable design solution.	Paragraph 7.12 of the Statement of Evidence of Andrew Deutschle on behalf of Watercare. Andrew's presentation at the hearing Joint Expert Statement dated 15 November 2022 for The Botanic Fast Track.
Expert conferencing 19 June: <u>Item 3</u> a) Evan Peters notes Solution 3) was agreed to as an acceptable solution for the Botanic Fast-Track consent.					

Item	Capacity	RLG position	References and supporting documentation	Watercare position PC100 (as stated in evidence and hearing)	References and supporting documentation
b) No formal assessments have been made for a smart pressure sewer system. Andrew Deutschle and Tim Scheirlinck have reservations about using these site specific servicing solutions and the management of them over time.					
4) New Huapai Terminal Wastewater Pump Station	300 houses	This was always intended by Watercare as part of the urbanisation of land in the Northwest. A Terminal WWPS is required as part of the Riverhead Sewer Separation Project. This is a better technical option, than current scenario. This saves 200m^3/day of potable water (freeing up water and wastewater capacity for growth). It also reduces the flow into WWPS68 by 200m^3/day Including operational storage (future emergency storage) here reduces need for operational storage at Riverhead.	Refer Watercare /GHD diagram (WaterNZ Paper: McCann/Salmon)& Watercare evidence – 3 December 2015 (M Bourne)	Watercare does not support this as it only creates additional capacity at the Riverhead WWPS for up to 400 DUEs beyond the initial 1,000 DUEs and not the whole plan change area. Accepted that this was 'technically feasible' ("as are all the options")	Paragraph 7.15 of the Statement of Evidence of Andrew Deutschle on behalf of Watercare. Andrew's presentation at the hearing
Expert conferencing 19 June: <u>Item 4</u> a) Andrew Deutschle considers Solution 4) is feasible and is part of Watercare's long term planning, however it does not resolve all the capacity constraints that Watercare have.					
5) Upgrade of Riverhead Pump Station	Operational storage can be sized to meet a specified number of houses. Depends on land availability. If insufficient land, see 6) below	The modelling identified that 2,500 DUE within the plan change area, in addition to a further 1,400 DUE within the wider catchment, (further to the abandonment of the Tamiro / Whenuapai WWPS) could be serviced by installing larger pumps, increasing the pump duty point to 75 L/s at 69m	Paragraph 6.18 of the statement of evidence of Robert White. The easement over the land explicitly provides for "repair and maintenance of the underground pumping station and for any other purposes deemed necessary by the Grantor and the Grantee's right to park and right of	This option would present several challenges including: - Land availability (would require agreements with the adjacent land owner and possible land acquisition) - Flow management complexities - Health and safety considerations The golf club has an easement over the site and it would be "significantly disruptive to them"	Andrew's presentation at the hearing Andrew's presentation at the hearing

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		pump head, and providing 150m^3 of operational storage. To meet Code of Practice, emergency storage ` 800m^3 would be required on the site. Upgrading existing pump stations is a common occurrence. Watercare have agreed to an operational storage approach – as a short term solution – for the Kohe development in Pukekohe (PC76). In addition, additional storage has been added to Hingaia (for wet weather storage).	way may be disrupted. The Grantee acknowledges that any disruption or interferences caused by the Grantor will be permitted and will not constitute a breach of this easement instrument. For the avoidance of doubt, the Grantor will not be obliged to provide an alternative car parking or right of way area or compensate the grantee in any manner for any interference it might cause"	Hydrogen sulphide issue at this pump station which poses "significantly higher risks" Any upgrades would be needed to be completed by Watercare and this would put pressure on their contractors to do work elsewhere on the network.	Andrew's presentation at the hearing
Expert conferencing 19 June: <u>Item 5</u> a) Andrew Deutschle considers Solution 5) is feasible, however notes significant concern around hydrogen sulphide and health and safety risks.					
6) New Riverhead Pump Station (on RLG owned land)	Sized to service existing pump station catchment and PC100.	The existing Riverhead WWPS can be decommissioned and a replacement Pump Station constructed on land owned by the RLG. An extension of the rising main from the proposed WWPS site to the existing WWPS site would be required (~700m). There are many examples of where existing WWPS are to	This concept has been recently approved in principle as part of the decision of PC93 (Warkworth South)	Duplicating the existing Riverhead WWPS and rising main would become redundant once the Riverhead Wastewater Separation Project is implemented. As a result, this option is not considered optimal as it is not efficient to enable something that is already planned. No comments made at the hearing.	Paragraph 7.17 of the Statement of Evidence of Andrew Deutschle on behalf of Watercare.

Item	Capacity	RLG position	References and supporting documentation	Watercare position PC100 (as stated in evidence and hearing)	References and supporting documentation
		be replaced but interim upgrades or alternatives are provided: • Bremner Road (interim WWPS) • Slaughterhouse WWPS (to be replaced with Brigham Creek WPS) • Redhills (Interim WWPS)			
Expert conferencing 19 June: <u>Item 6</u> a) Clarification from Anthony Smith that Solution 6) would make the existing pump station redundant and replace it. b) Anthony Smith advised that a number of other solutions would not be required if Solution 6) was implemented. c) Andrew Deutschle agrees that Solution 6) is a feasible solution that has merit. d) Andrew Deutschle and Anthony Smith agree that matters to be resolved following plan change stage would include funding, construction, and sizing to meet capacity demands of the existing pump station catchment and the PC100 area. e) Andrew Deutschle considers mitigation of H2S is necessary. f) Andrew Deutschle considers Solution 6) would not resolve or overcome the overall capacity constraint.					
7) WWPS 68		Diversion of Massey North WWPS and Whenuapai Village WWPS releases significant capacity from WWPS68. Flows will further reduce 2050+ with Riverhead Sewer Separation Project. Significant capacity for growth between today and 2050+ (will full buildout of the “Whenuapai East” catchment occur before 2050+)		Agrees that the Massey North diversion will release capacity.	Andrew’s presentation at the hearing
Expert conferencing 19 June:					

Item	Capacity	RLG position	References and supporting documentation	Watercare position PC100 (as stated in evidence and hearing)	References and supporting documentation
8) New onsite Private MBR Treatment Plant.	Within RLG Land holding to service Plan Change area.	This was introduced at the hearing by the expert evidence of Ryan Pitkethley and is solution that has been approved in other situations	Has been approved in principle under PC93 (Warkworth South).	No comment provided to date.	
Expert conferencing 19 June: <u>Item 8</u> a) Anthony Smith and Ryan Pitkethley noted that there are wastewater servicing options available that do not involve Watercare. b) Helen Shaw noted that other non-Watercare solutions would require necessary resource consents, including discharge.					

Water supply options prepared for the purposes of Expert Conferencing:

Item	Capacity	RLG position	References and supporting documentation	Watercare position PC100	References and supporting documentation
1) Riverhead Reservoir	2,945 houses / DUEs	Based on the requirements of Watercare's Standards (DP-07), the capacity of the reservoir is 4,370m^3 Average Day Demand (ADD) identified by Watercare includes 200m^3 for sewer flushing and demand from tanker filling facility. We have not received any data from Watercare on how the useful capacity or the operational storage has been calculated.	<table><tr><td></td><td colspan="2">Code of Practice</td></tr><tr><td>Reservoir</td><td>4600</td><td>4600</td></tr><tr><td>Utilisation</td><td>95%</td><td>95%</td></tr><tr><td>Reservoir Capacity</td><td>4370</td><td>4370</td></tr><tr><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td></tr><tr><td>Current ADD</td><td>2,426</td><td>2,426</td></tr><tr><td>Flush Water</td><td></td><td>- 200</td></tr><tr><td></td><td></td><td></td></tr><tr><td>Available Capacity (m^3)</td><td>1,944</td><td>2,144</td></tr><tr><td></td><td></td><td></td></tr><tr><td>m^3/DUE/Day</td><td>0.66</td><td>0.66</td></tr><tr><td>Capacity (DUE)</td><td>2,945</td><td>3,248</td></tr><tr><td></td><td></td><td></td></tr><tr><td>Plan Change</td><td>1,861</td><td>1,861</td></tr><tr><td></td><td></td><td></td></tr><tr><td>Available for Growth</td><td>1,084</td><td>1,387</td></tr><tr><td></td><td></td><td></td></tr></table>	The existing capacity for the reservoir is 1,550 DUE (remaining). Available capacity is to be used by other zoned land in the wider area. Actual 'useful' available capacity of the reservoir is only 75% - 5% is considered dead storage and 20% is operational volume (not storage) *The existing bulk water supply network has good capacity in both trunk and storage to service an additional 4,500 DUEs across the entire Riverhead and Kumeu / Huapai water supply areas. Development in excess of this (either from development enabled in the Plan Change 100 area or via infill or future plan changes in Kumeu or Huapai) will trigger the requirement for an additional bulk reservoir.* *Agreed that the consent holder will install a duplicate water pipe from the reservoir that will be sized to cater for the entire Future Urban zone development at Riverhead Agreed that this is an acceptable solution and that the design details will be addressed*	In the evidence of Tim Scheirlinck and reconfirmed at the hearing. Tim's comments at the hearing. Paragraph 2.39 of Watercare's submission on PC100 Areas of Agreement, Joint Expert Statement dated 15 November 2022 for The Botanic Fast Track.

Item	Capacity	RLG position	References and supporting documentation	Watercare position PC100	References and supporting documentation
				through the Engineering Plan Approval stage subsequent to consent being granted.	
Expert conferencing 19 June:					
1a) New Huapai WWPS	3,248 houses / DUEs	In addition, additional capacity (approximately 200m^3) would be gained following the construction of the Huapai Terminal WWPS - and ceasing using 200m^3 of potable water for flushing sewer rising main daily.			
Expert conferencing 19 June:					
2) Existing reservoir also serviced by NH2	3,248 houses / DUEs	No information has been provided by Watercare to allow limitation ahead of NH2 to be evaluated. Implication / capacity of Waitakere 2 pipeline has not been explained. NH2 expected to be completed in Tranches, with servicing for Riverhead likely to occur ahead of final completion of the upgrade. The timing of delivery for NH2 is referenced in different documents and hearing evidence for different dates. This is a matter for which clarification is sought. With the additional capacity provided by NH2, the operational storage (which is 20% according to Watercare) would be reduced. This is a matter for which clarification is sought.		NH2 has been identified by Watercare as an infrastructure prerequisite to support the North-West future urban areas. Delivery of NH2 is forecast for completion in 2034 but there are risks and this could extend beyond 2034. NH2 will be completed by 2035	Paragraph 5.7 of the Statement of Evidence of Tim Scheirlinck Tim's comments at the hearing
Expert conferencing 19 June:					
3) NH2 with a new reservoir	Full development of the Kumeu, Huapai and	This would provide full capacity for the Plan Change area as well as future growth in the Northwest.		New reservoir is not anticipated until at least 2050 and there is currently no funding allocated. Watercare cannot support	Paragraphs 5.9 and 5.11 of the Statement of Evidence of Tim Scheirlinck

Item	Capacity	RLG position	References and supporting documentation	Watercare position PC100	References and supporting documentation
	Riverhead Future Urban Areas.			any connections from the Plan Change Area to the water supply network until completion of both the NH2 and the future Riverhead Reservoir.	
Expert conferencing 19 June: <u>Item 3</u> a) Andrew Deutschle and Tim Scheirlinck note Watercare would not support a third party constructing a new transmission reservoir.					
4) Private water take (from groundwater) and water treatment plant	Full development of the Riverhead Plan Change area	This has the potential to provide full capacity for the plan change area and would be at developer cost and risk.	Has been approved in principle under PC93 (Warkworth South). Karaka North Village Beachlands South	No comment provided.	
Expert conferencing 19 June:					