

BEFORE THE FAST-TRACK EXPERT PANEL

IN THE MATTER of the Fast-track Approvals Act 2024 (“FTAA”)

AND

IN THE MATTER of Waikanae North (FTAA-2603-1194)

JOINT STATEMENT OF EXPERT WITNESSES:

HYDROLOGY

16 September 2026

INTRODUCTION

1. Expert conferencing on the topic of hydrology took place online via Microsoft Teams from 1pm – 4pm on 15 September 2026.
2. The conference was attended by the following members of the Expert Panel:
 - a. Sue Simons (“SS”) (Chair)
 - b. Nigel Mark-Brown (“NMB”) (Panel Member)
 - c. James Whetu (“JW”) (Panel Member)
 - d. Carolyn Wratt (“CW”) (Panel Member)
3. The conference was attended by the following experts
 - a. Susannah Tait (“ST”) (appointed by the Expert Panel)
 - b. Jon Williamson (“JLW”) (appointed by the Expert Panel)
 - c. Mitch Lewandowski (“ML”) (Applicant)
 - d. Ray O’Callaghan (“RO”) (Applicant)
 - e. Andrew Beatson (“AB”) (Applicant)
 - f. Paul Busing (“PB”) (KCDC)
 - g. Charlotte Lockyer (“CL”) (KCDC)
 - h. Monique Leith (MLe) (KCDC)
 - i. Katherine Greenaway (“KG”) (GWRC)
 - j. Greg Carlyon (“GC”) (Ātiawa ki Whakarongotai Charitable Trust)
 - k. Dr Liam McAuliffe (“LM”) (Ātiawa ki Whakarongotai Charitable Trust)
4. Ashley Jamieson and Alex Mickleson provided meeting support.

CODE OF CONDUCT

5. The experts confirm that they have read the Code of Conduct for Expert Witnesses contained in the Environment Court Practice Note 2023 and referred to in the Fast-track Approvals Act 2024: Panel Conveners’ Practice and Procedure Guidance 25 July 2025, and agree to comply with it. The experts confirm that the issues addressed in this JWS are within their area of expertise, unless stated otherwise.

SCOPE OF JWS

6. In response to Minute 7 issued by the Expert Panel, a number of outstanding points were identified in relation to this topic. Those outstanding issues form the basis for the structure of this JWS. The Expert Panel took the opportunity to ask questions of the experts to clarify matters in relation to the hydrology matters of the project.
7. In this JWS, we report the outcome of our discussions in relation to each item (below), including by reference to points of agreement, disagreement, and unresolved matters or uncertainties. Where we are not agreed in relation to any issue, we have set out the nature and basis of that disagreement.

AGENDA ITEMS

8. SS confirmed that James Blythe (JB) is welcome to provide a written statement but it will have limited weight. KG repeated comments from JB and these have been annotated in the JWS accordingly.

9. KG advised that Plimmerton Farm had 30 years of data and it would be useful if WNDL undertook groundwater monitoring. JB is concerned about breaching groundwater triggers (due probably to climatic events, rather than the development) will be likely due to a lack of data.
 10. RO advised that two winters of data (and possibly two more winters before works start), as well as proposed modelling, will assist in understanding groundwater conditions (including development changes such as realigning Ngarara Stream and removal of peat) and appropriate triggers for monitoring. RO acknowledged that condition 55 should be drafted to acknowledge proposed modeling etc. RO considers that the pre-works monitoring data and the modeling will provide for sufficient information to get the triggers right.
 11. AB suggested that the key was to identify (in the condition) what the outcome is that the trigger is intended to achieve.
 12. JLW agrees with RO that the modeling and monitoring and the implications of the development on the groundwater should be able to be determined. JLW queried what is the key issue that is trying to be managed. RO suggested the following key outcomes:
 - the implications of the GW on the SW systems
 - ecological restoration objectives from changing GW.
 - Water levels in Te Harakeke Swamp
 13. AB noted that the design will be adaptive.
 14. JLW advised that the model will need to be calibrated to the pre-development situation. RO agreed, but noted that the model may need to be recalibrated over the life of the project to reflect what has been done on the site and what is expected to happen to GW. JLW noted that the certification of the GW model will probably only occur once (prior to development) but acknowledges there may be usefulness in recalibrating the model over time, although he is unclear how that can be managed through the consent conditions. RO noted that the intent of the condition could be that if monitoring signals a notably different outcomes, then the model should be revisited. JLW queried whether there were other options (e.g. an independent peer review). RO suggested revisiting in planning conferencing. AB suggested the review condition may assist.
 15. NMB questioned whether the GW model will need to be peer reviewed. JLW suggested that the model parameters be reviewed (as part of certification process). KG advised that GWRC would have a subject matter expert peer review the model.
- ***Separation of the Groundwater Monitoring Report and ERMP***
 16. KG confirmed that GWRC are seeking clarification in the wording of the condition, but may be redundant now if a GW model is being developed. RO confirmed that the GW monitoring report and the ERMP will be separate but will 'speak to each other'/inform each other.
 17. AB also noted that the final earthworks design will also be informed by the ERMP and GWMR.
 - ***Lack of groundwater data***
 18. KG acknowledges that this has been addressed above where the applicant has confirmed that they will undertake the GW modeling.
 19. RO confirmed that the condition should be amended to ensure that the data and modeling is being used to best inform the project.

- ***Certification of the Groundwater Monitoring Report***

20. KG confirmed that there are no current certification requirement for the GWMR, and that these should be included. KG would also like to see a cross-reference to the ERMP.
21. RO confirmed that the intent is for the GWMR is to be certified and the conditions should reflect this. RO considers that Condition 58 can be amended to include reference to the GWMR. KG considers this may address the issue (GWRC is not fussy about where the cross-reference is made, just that there is a cross-reference).

Conditions 56 – 61

- ***Environmental outcomes sought for streams and wetlands***

22. KG confirmed that GWRC would like to see the outcomes more clearly specified in the conditions. JB provided examples of conditions that show this specificity. ML confirmed that this was raised at the ecology conferencing and will be actioned by the applicant.
23. PB noted KCDC's interest in this issue and how it ties to vesting (and the management implications it creates for KCDC). SS noted that the planners conferencing will pick this up. CL raised the issue of what happens if KCDC don't agree to the conditions of consent, therefore don't accept vesting of the assets. AB noted that different assets will be vested for different reasons.
24. RO noted that the eastern wetland area will provide stormwater detention, but it primarily has an ecological function. PB noted that maintenance of these spaces needs to be provided for as they fill with sediment and/or vegetation over time and their SW function (detention) is compromised. RO advised that the Ngarara Stream capacity needs to be maintained to ensure flows through the site. PB confirmed that the physical and legal control of the Ngarara Stream will assist. NMB queried that if the wetlands are being flooded more often then there are more opportunities for sediment to drop into the wetlands. RO advised that the water depth in the wetlands will be raised and the hydrology model allows for 15% loss through the system over time. NMB asked if there was an opportunity to do a spreadsheet with this information. RO confirmed that there is a condition requiring monitoring of sediment load and if there is an issue for hydrology or ecology this will be addressed.
25. PB advised that the conditions need to address both the hydrology and ecology outcomes so that the relevant Management Plans provide for the long-term management of the system.
26. MLe queried whether KCDC will require a separate consent to undertake any works in the eastern wetland (if its classified as a natural inland wetland) or if the management plan will be sufficient to rely on. PB advised that there have been cases in KCD where KCDC has had to bear the costs of managing unforeseen issues with assets.
27. AB advised that the vesting of these assets should provide for the hydrology and ecology of the wetlands so there is a legal basis for any future works.
28. RO considers that the SWMP conditions sufficiently cover KCDC to undertake future works. PB advised that the GWRC certify that plan, not KCDC and that KCDC will be held to account in regards to a plan sided between two other parties. AB advised that the conditions need to be sufficiently clear that the overall system achieves/supports hydrology function, then the SWMP will be able to determine the how. PB advised that if the asset was vested in KCDC it would be solely as a hydrology function, KCDC would mow it inline with how it manages stormwater reserve assets and would not spend ratepayers funds on the ecological functions, but that won't be possible if the hydrology

and ecology outcomes are treated equally in the conditions of consent. ML noted that the GW RLWP permitted activity rule for maintaining channels. PB noted that it is more difficult to undertake maintenance in a wetland and that the permitted activity rule only applies to private landowners and that Councils are required to get consent.

29. ML noted that the area being discussed is currently to stay in private ownership, but future ownership is still being discussed with KCDC. AB noted that once the area is established this discussion might be easier. AB advised that removing sediment shouldn't be an issue. PB confirmed that the sediment is often contaminated and therefore disposal becomes difficult/costly (and sometimes works are held up in the absence of a solution). ML queried if sediment from a stream and sediment from a stormwater device are dealt with the same. PB advised sometimes. RO advised that ideally nothing should need to be removed from the wetland areas.

Certification of ERMP

30. KG advised that there is no requirement for the ERMP to be certified prior to works commencing on the site. ML advised that this can be easily solved in the conditions.
31. ML, AB and RO confirmed that the management plans across stages need to work 'together' and the conditions should ensure this.

Conditions 121 and 122

Condition the Ngarara Stream Monitoring Report

32. KG queried whether the NSMR should be incorporated into the GWMR. RO confirmed that the Ngarara Stream monitoring is part of the GW monitoring works.

Incorporating hydrology monitoring into the ERMP

33. RO confirmed that this will also be captured in the GWMR.
34. ML queried that turbidity monitoring is required in Ngarara Stream and should this also be included in the GW monitoring. RO advised yes and suggested capturing all water monitoring in a Hydrological Monitoring Report (rather than a GWMR).
35. KG queried the wording of Condition 121 and noted that the hydrological monitoring should be incorporated into the ERMP.

Condition 123

Sediment management in Ngarara Stream

36. KG advised that there are no trigger levels for sediment management and JB suggested using the NESF sediment limits. RO queried whether JB's review was focused on ecological outcomes. KG confirmed that JB would have raised it from a hydrological perspective. RO doesn't have a view on the appropriate trigger levels and noted that there is an adaptive management approach embedded in the management plan. RO queried whether there was a similar issue raised for Plimmerton Farm. KG to check. AB confirms that this highlights that KCDC also have an interest in the trigger levels and this should be worked through with the applicant, KCDC and GWRC.

Monitoring required until vesting

37. KG requested that monitoring be required until stormwater assets are vested. RO queried whether this was adequate given assets vest at 224 stage and Ngarara Stream will be realigned early in the project. RO has experience with the developer providing ongoing

monitoring before vesting for a period to enable vegetation to become established etc. AB it will be important to separate out the stormwater and ecological functions.

38. ML confirmed that there is a 10-year monitoring requirement for sedimentation in Ngarara Stream. RO confirmed that this is the life of the project. KG will clarify with JB the extent of monitoring (in addition to 10 years proffered).
39. AB and RO consider that the monitoring should continue until the stream is vested and the stream shouldn't be vested until the works are complete and everything is established/working the way it should.

SIGNATURES OF EXPERTS



Jon Williamson



Mitch Lewandowski



Andrew Beatson



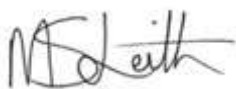
Ray O'Callaghan



Paul Busing



Charlotte Lockyer



Monique Leith



Katherine Greenaway



Liam McAuliffe



Greg Carlyon