

21 August 2026



ATTN: Jennifer Caldwell
Associate Panel Convenor
Environmental Protection Authority

Cc: Emma Fahey, Fast Track Application Team

Tenā koe Jennifer,

FTAA-2605-1227 – Wairakei South Fast Track Application

Bay of Plenty Regional Council (BOPRC) Response to Panel Convenor Minute 3

Thank you for the Panel Convenor Minute 3 (the Minute), dated 5 August 2026, relating to the post-conference summary and directions.

This memorandum is provided by BOPRC in direct response to paragraph 39 of the Convenor's Minute 3 (dated 5 August 2026). Despite our best efforts including the facilitation of expert caucusing between the experts engaged by Bell Road Limited Partnership (BRLP, or the 'Applicant') and BOPRC, we have been unable to fully agree a joint response to the Minute. Therefore, this letter outlines BORPC's response to the Panel Convenors Minute 3, in addition to the Joint Response.

For the avoidance of doubt, BOPRC has not reached any final conclusions regarding the adequacy of the Applicant's flood, stormwater, groundwater, or asset management assessments pending resolution of the matters identified in its technical review.

The purpose of this memorandum is to:

1. Confirm (in BOPRC's opinion) the current status of technical review of the Applicant's model and the issues and information gaps identified in that review that remain unresolved, including inconsistencies between the Applicant and Regional Council models (refer 39(a));
2. Outline the steps BOPRC consider are required to resolve the issues identified in the technical review and the likely timeframe required to do so (refer 39(b));
3. Outline further time BOPRC considers is required to run the models for additional scenarios not modelled to date but jointly agreed to be desirable or necessary (refer 39(c)); and
4. Outline (in BOPRC's opinion) the extent to which further technical review and effects assessments (by Regional Council experts) are dependent on the resolution of modelling issues and verification of modelling outputs, and the time that will be required to finalise those assessments once modelling outputs are confirmed. This includes assessments of stormwater and flooding effects as well as ecological and water quality assessments (refer 39(d)).

Following the receipt of the Panel Convenor's Minute 3, the following has occurred:

- **11 August 2026:** BRLP and BOPRC stormwater technical experts (Mr Stoffel Bakkes and Mr Bill Noell) met to work discuss the questions provided by Maven (on 11/08/2026) (attached

as Appendix A), and the Panel Convener's Minute 3, paragraph 39. It is noted that these questions were provided by Maven ahead of the meeting without consultation with BOPRC. BOPRC considers that these questions are limited in scope and do not address the full scope of issues, questions and gaps identified within the technical review undertaken by Mr Noell.

- **18 August 2026:** BRLP and BOPRC technical experts met to confirm their agreed way forward and document this. Mr Bakkes and Mr Noell have recorded (in brief) their discussion and areas of agreement, as 'Joint Technical Note No 1', which is attached to this memorandum as Appendix B. As this memo was produced as part of agreed expert conferencing, BOPRC consider that the memo provides helpful expert advice to the Panel Convenor regarding areas of agreement between the experts, their proposed pathway forward and timeframes. It is acknowledged that further work is needed to develop and refine the scope of the suggested workstreams.
- **21 August 2026:** BRLP and BOPRC representatives met to discuss and agree on a Joint Response to paragraph 39 of the Panel Convenor's Minute 3.

1. Status of technical review of the Applicant's model and the issues and information gaps identified in that review that remain unresolved, including inconsistencies between the Applicant and Regional Council models

a. Status of the technical review of the Applicant's model

No further work has been undertaken to review the Applicant's model. It is noted that the technical review of the Applicant's model has previously been undertaken by Awa Environmental (Awa) (as jointly agreed by both parties). Any further review of the Applicant's model will be undertaken following the work required to update and quality assure their model.

b. Issues and information gaps, including inconsistencies that remain unresolved

Model Review

As previously advised the Applicant's model (The Maven Model) has been through a peer review process (by Awa) prior to the substantive application being lodged. The parties do not agree on the outcome of the peer review process. A summary of BOPRC's perspective on the status of the peer review is provided below. In addition, Appendix C outlines the status of all model scenario runs by each party.

With reference to the Awa 2026 model peer review memorandum (Part 2 of Appendix H to the Application, attached as Appendix D to this memo) , it is important to note that:

"The report includes a section on future work and outlines additional work to be completed through detailed design, development of consent conditions and engagement with authorities."

The Awa Memo also notes that *"Awa considers the modelling suitable to support the applicant's current substantive fast-track application based on the assumption that the 100-year climate change event is the key event to evaluate if flood volumes and levels can be managed. This is subject to the qualifications in this memo and comments in the attached Comment Register"* [emphasis added].

And

“This memo and the supporting services completed by Awa is a review limited to the scope of services set out in the contract between BRLP and Awa.”

It is understood that the peer review of the Maven Model by AWA did not fully address the review scope agreed to between BOPRC and BRLP. BRLP maintained throughout the peer review process (and continues to maintain) that a large proportion of these requirements were not relevant to the application and could be deferred to be addressed through and as conditions of consent. Therefore, due to the way the peer review reporting was undertaken BOPRC does not have a fulsome understanding as to why the 1% scenario is the only scenario to be verified via the peer review process.

BOPRC was not privy to the final contract, nor discussions between BRLP and AWA which may have limited the scope beyond that of which BOPRC outlined at the start of the process. Additionally, the BOPRC have not seen the full review comments of Awa relating to all scenarios, given many review items were deferred (see table attached to Awa Review) and not reported on.

It was BOPRC's expectation when agreeing the scope with BRLP that an independent review of whether the development modelling was fit for purpose across the range of consent-relevant flood scenarios would be undertaken. In reality, AWA largely reviewed whether Maven's HEC-RAS model was suitable for concept-level assessment of the 100-year climate change event and floodplain filling effects and therefore BOPRC has not been able to gain sufficient confidence in the Applicant's model is suitable for assessing the full range of flood and stormwater effects relevant to this application.

This limitation highlights the need to assess a wider range of flood events, particularly given the importance of understanding potential effects on the drainage scheme's level of service. The scheme is intended to support the management of a 20% AEP event and facilitate the removal of floodwater from productive farmland within 72 hours. Assessment of additional events is therefore necessary to provide confidence that the proposed development will not adversely affect drainage performance or result in increased flood risk, prolonged inundation, or adverse effects on properties, infrastructure, roads, productive land, and other assets served by the scheme.

The lack of resolution provided by the peer review process remains the key issue needing resolution.

Further comment on this and the modelling scenarios is provided below.

Model Quality Assurance

When the various scenarios are run in both models, there are differences in the outputs; some of which are considered as significant by the technical experts.

Given this, the model quality assurance (QA) process is key. To date limited QA has been undertaken on the Maven model, as such BOPRC do not have confidence in the inputs and outputs of the maven Model. Typically, the QA process stormwater models go through is; Calibration, Validation and Verification (usually in that order).

Calibration: where the model input parameters are adjusted so the modelled simulation accurately reflects measured storm events.

Validation: Testing the calibrated model against various storm events to confirm if the model accurately predicts real-world conditions / measured storm data.

Verification: independent peer review process of the model which may include a comparison against another verified model.

The BOPRC model has been calibrated, validated (against three large storm events) and verified. The Maven model has not been through a calibration or validation process. BOPRC considers that there has been a partial verification, being that the 1% storm event modelled in the Maven Model has been verified by Awa peer review and comparison to the BOPRC model. The peer review (verification) process found that the 1% AEP flood is comparable with the peak water levels modelled by BOPRC, in limited locations.

Further, the Awa peer review process outlined the use of the model as being appropriate for the macro-scale assessment of floodplain filling effects associated with the proposed development for the 1% AEP (100-year ARI) event. However, it was also outlined that the use of the model is limited to evaluating flood risks associated with the development-related filling of the floodplain and how those effects may be avoided, remedied, or mitigated effectively at a concept level only. It is only through detailed design that it can be understood whether the modelled development can be built and perform as modelled.

While the Applicant has agreed to a verification process, that encompasses Calibration, Validation and Verification (referred to as Verification in the Joint Memo), this is yet to be agreed upon by both parties. The Applicant has provided an initial scope for this, however, following an initial review there is significant work required to the scope to ensure it is adequate.

BOPRC notes that model verification or calibration alone does not demonstrate fitness for purpose. A robust assessment should consider software suitability, model extent, data quality, resolution, hydrologic and hydraulic inputs, parameter selection, assumptions, calibration and validation performance, uncertainty, and the model's ability to represent the processes relevant to the assessment. Agreement with observed water levels alone is insufficient to demonstrate suitability, as acceptable results may be achieved through compensating errors or unrealistic parameter values. As noted in previous comments provided by BOPRC (and Tauranga City Council) there are concerns with the model, model extent and other matters which also need to be resolved.

BOPRC recommends that BRLP give due consideration to the Model Guidelines in addition to the proposed QA process to ensure the process delivers a model that is ultimately fit for purpose.

Stopbank Breach Modelling

BOPRC technical reviewer Mr Bill Noell has advised that the breach modelling is a crucial component of the technical review given the potential significant effects resulting from a breach of the stopbank. It is acknowledged that BOPRC agreed to undertake to model the pre-

development breach scenario for the applicant as this workstream was an already scheduled BOPRC workstream. It was brought forward to assist the applicant in understanding these effects. It is also acknowledged that this workstream has taken longer than originally anticipated.

The pre-development breach model results were provided to BRLP on 24/06/2026. A summary comparison table for the post-development scenario was provided to BRLP on 22 July 2026, with the findings further elaborated in BOPRC's technical review document provided to the applicant on 7 August 2026. It is noted that the post development workstream was never a scheduled workstream that the BORPC sought to undertake but has undertaken this work to assist the process. The assessment of post-development effects is appropriately the responsibility of the Applicant. BOPRC's post-development breach modelling was not a scheduled workstream and was undertaken only because BOPRC was unable to gain sufficient confidence in BRLP's modelling outputs to reliably assess the effects of the proposed development. BOPRC therefore carried out this additional analysis to support its review and better understand the potential consequences of the post-development scenario.

BOPRC has outlined to the BRLP team that the initial results of the breach modelling were showing significant effects, and these results would be reported to the Fast Track Panel when BOPRC was asked for comment. Due to the delays experienced and potential significant effects, BOPRC advised BRLP several times that they may wish to commence breach modelling themselves. While frustrated with the process, BRLP advised that their preference was for the breach modelling work by BOPRC to be completed before they would seek to undertake further work on this aspect. BOPRC are currently working on sharing the breach model with BRLP.

2. Outline areas of agreement reached on the steps required to resolve the issues identified in the technical review and the likely timeframe required to do

Areas of agreement between the experts are outlined in the Joint Technical Note No 1 (refer Appendix B). The parties have also agreed on workstreams which are outline in the Joint Memo.

The BOPRC considers further work on the model is also required such as aspects of the model build to ensure it is fit for purpose.

3. Outline further time required to run the models for additional scenarios not modelled to date but jointly agreed to be desirable or necessary

The technical caucusing minute between Mr Noell and Mr Bakkes (refer Appendix B) outlines that the actions that were agreed upon by these experts. They have noted that typically the QA process would take 3-5months, however Mr Bakkes has noted that Maven seek to achieve this in 5 weeks. Given the likely differences in opinion on scope of the QA process, BOPRC considers that the 3-5 month timeframe is more realistic.

4. Extent to which technical review and effects assessments are dependent on the resolution of modelling issues and verification of modelling output and the associated timeframes

Resolution of the Stormwater Technical Review issues, other than those relating to water quality, are dependent on the required updates and QA process for the Maven model. As the model QA Process is yet to be undertaken, and BRLP have not provided any updated information to the BOPRC for consideration relating to the water quality issues raised, no issues raised in the BOPRC Stormwater Technical Review have been resolved.

While it is acknowledged that the QA process and provision of the CAPEX, OPEX and lifecycle costing matters may assist BOPRC's assessment of stormwater and flooding effects. It is not yet known whether further modelling, information requests, effects assessment updates or technical review will be required until the outcomes of the calibration, validation and verification process have been completed and reviewed.

BORPC note that BRLP's assessment of effects will likely need to be updated following the verification of the model. The technical caucusing memo advises that the calibration and validation process would be completed within 3-5 months. Subsequent information provided outlines that BRLP propose to provide extra resources to enable this process to be completed within 4 weeks. BOPRC are concerned that such a quick process may not be achievable and may not provide for a fulsome QA process of the Maven model to be undertaken.

It is not clear how much time would be required to provide a subsequent update of the effects assessment following the QA process of the Maven model. Following such updates, a further technical review of the assessment of effects will be required by Mr Noell. Mr Noell advises this review could be completed within 2-3 weeks of receiving all information including that previously requested (refer Appendix E). This timeframe is likely to be extended, should information not be provided in full or be provided in a staggered manner.

5. Further Points

It should be noted that this memorandum should not be interpreted as indicating that BOPRC has agreed to accept ownership, operation, maintenance, renewal, funding responsibility, vesting or transfer of any proposed infrastructure. Any future ownership, governance, funding or asset transfer arrangements would be subject to separate Council consideration, statutory processes and formal approval.

BOPRC would like to note that it has been difficult facilitating technical causing between BORPC and BRLP in the timeframe provided. We request that subsequent technical caucusing is directed by the Panel Convenor or Fast Track Panel with independent facilitators/mediators to ensure technical matters are addressed, resolved and accurately reported on.

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Appendix A: Maven Agenda Items for Discussion

Appendix B: Joint Technical Note No. 1

Appendix C: Status of Model Scenario Runs

Appendix D: AWA Peer review

Appendix E: Stormwater and Flood Hazard Assessment