

IN THE MATTER of the Resource Management Act 1991

AND

IN THE MATTER of a hearing for Proposed Variation 3 – Enabling
Housing Supply to the Proposed Waikato District Plan

STATEMENT OF EVIDENCE OF KATRINA ROSE ANDREWS

For the Waikato Regional Council

PLANNING

DATED 4 JULY 2023

INTRODUCTION

1. My name is Katrina Rose Andrews. I am a Policy Advisor in the Strategic and Spatial Planning Team at the Waikato Regional Council (WRC). I have been in this role since August 2022.
2. I hold a Bachelor of Environmental Planning from the University of Waikato and am an Intermediate Member of the New Zealand Planning Institute. I have over 4.5 years' experience in resource management planning within the Waikato region.
3. As a member of the Strategic and Spatial Planning Team for WRC I am involved in implementing the Waikato Regional Policy Statement (WRPS) and working with the territorial authorities of the Waikato region and with neighbouring regional councils to assist in the development of consistent integrated regional policy. This includes preparing submissions and planning evidence in relation to district plan changes.
4. I am also part of the project team for Proposed Waikato Regional Policy Statement Change 1 – National Policy Statement on Urban Development 2020 and Future Proof Strategy Update (Proposed WRPS Change 1), which updates the WRPS to give effect to the National Policy Statement on Urban Development 2020 (NPS-UD).
5. Previous to my role at WRC, I was a resource consents planner at the Waikato District Council (WDC). This role involved processing a range of applications for land use and subdivision consent under the Resource Management Act 1991 (RMA) and providing planning guidance on development proposals.
6. I confirm that I am familiar with the Code of Conduct for Expert Witnesses as set out in the Environment Court Practice Note 2023. I have read and agree to comply with the Code. Except where I state that I am relying upon the specified evidence or advice of another person, my statement is within my area of expertise. I have not omitted to consider material facts known to me that might alter or detract from the opinions expressed.

SCOPE OF EVIDENCE

7. My statement of evidence is given on behalf of WRC. WRC made a submission and a further submission to each of the three Intensification Planning Instruments (IPIs) of WDC, Waipā District Council and Hamilton City Council (HCC).
8. I provided evidence on behalf of WRC at the Joint Opening Hearing for the IPIs in February 2023. My statement of evidence¹ provided an overview of WRC's key areas of interest in relation to the IPIs, including the relationship to regional policy direction, and addressed relevant topics within the Themes and Issues report for the Joint Opening Hearing prepared by the three territorial authorities.

¹ Statement of Evidence of Katrina Andrews for the Waikato Regional Council, 31 January 2023, [statement-of-evidence-of-katrina-andrews---waikato-ipis-joint-opening-hearing.pdf \(waikatodistrict.govt.nz\)](https://www.waikatodistrict.govt.nz/~/media/2023/01/31-statement-of-evidence-of-katrina-andrews---waikato-ipis-joint-opening-hearing.pdf)

9. Following the Joint Opening Hearing, my colleague, Hannah Craven, provided evidence on behalf of WRC at the substantive hearing for Plan Change 26 to the Waipā District Plan in April 2023.
10. This statement of evidence reinforces the WRC submission (Submission #42) and further submission (FS205) to Variation 3 to the Proposed Waikato District Plan ('Variation 3') and reflects my professional opinions as a resource management policy advisor.
11. The WRC submission addressed alignment of Variation 3 with the policy direction within the WRPS, with a focus on the relationships between urban intensification, transport and infrastructure planning, climate change and stormwater management.
12. I recognise the mandate placed on WDC by central government to undertake Variation 3 to apply the Medium Density Residential Standards (MDRS) and give effect to Policy 3(d) of the NPS-UD and appreciate that the urban environments within the Waikato district are of a different scale and have different characteristics to other urban areas to which the MDRS typically apply. I also acknowledge that Variation 3 is being considered concurrently with the ongoing process of resolving appeals to the Proposed Waikato District Plan Decisions Version (PDP).
13. My evidence focuses on the following matters:
 - The responses to WRC's submission points by the section 42A report authors.
 - The approach to transport and climate change in Variation 3.
 - Matters to give effect to Te Ture Whaimana and provisions relating to stormwater management and flood hazards within Variation 3.
14. My assessment is primarily based on the provisions and information supplied in the plan change documentation and the direction set out in higher-order policy documents, including relevant national policy statements, the WRPS and Proposed WRPS Change 1.

SUMMARY OF EVIDENCE

15. WRC's primary interest in Variation 3 is in relation to the WRPS. Districts plans are required to 'give effect to' the WRPS under section 75(3)(c) of the RMA.
16. WRC has also recently prepared a change to the WRPS (Proposed WRPS Change 1) to give effect to the NPS-UD and reflect the updated Future Proof Strategy, which provides direction for growth across the sub-region of Hamilton city and Waikato and Waipā districts.
17. I am generally supportive of Variation 3 and the recommendations of the section 42A report authors. Many of the provisions within the variation align with the direction in the WRPS relating to integrated and coordinated planning.

18. I recommend additional provisions to recognise the relationship between urban intensification, transport, and climate change within Variation 3 and to better give effect to national and regional policy direction on these matters.
19. I acknowledge the additional work undertaken by WDC in relation to Te Ture Whaimana o Te Awa o Waikato – the Vision and Strategy for the Waikato River (TTW), infrastructure capacity and stormwater management following the decision not to include the ‘urban fringe’ as a qualifying matter in Variation 3.
20. I support the general approach recommended in the section 42A report to respond to the new stormwater quantity and flood hazard information as far as possible within the scope of Variation 3. I recommend additional amendments to provisions relating to stormwater management and flooding to ensure they are clear and achieve their intended purpose.
21. I also strongly recommend that WDC undertake further work to respond in an integrated and comprehensive manner to the new rapid flood hazard modelling and full suite of recommendations made by Te Miro Water and Mr Andrew Boldero, through a future variation or plan change.
22. I will be attending the expert conferencing on stormwater matters scheduled for 11 July 2023 and will provide any updates to my recommendations as a result of conferencing either in rebuttal evidence or at the hearing for Variation 3.

WAIKATO REGIONAL POLICY STATEMENT AND PROPOSED WRPS CHANGE 1

23. I do not intend to cover the policy direction of the WRPS in detail within my evidence. I will refer to specific sections of the WRPS where I consider it relevant.
24. District plans are required to give effect to the WRPS under section 75(3)(c) of the RMA. The WRPS sets out a largely regulatory approach to planning for urban growth, by directing district plans to manage development in accordance with WRPS policies and methods.
25. I also note that section 74(2)(a) of the RMA requires that when changing a district plan, a territorial authority shall have regard to any proposed regional policy statement. Therefore, the provisions of Proposed WRPS Change 1 are relevant for the Panel to consider when making decisions on Variation 3.
26. Proposed WRPS Change 1 was notified after Variation 3, on 18 October 2022. The purpose of the change is to amend the WRPS to give effect to the NPS-UD, as well as reflect the updated Future Proof Strategy,² within the scope of the WRPS as defined under the RMA. The hearing for Proposed WRPS Change 1 was held on 8th and 9th May 2023 and the decision of the Hearing Panel is currently pending.

² The Future Proof Strategy has been updated in two phases since the WRPS became operative in 2016; the most recent was completed and adopted by the Future Proof local authorities in July 2022.

27. I note that WDC made a submission to Proposed WRPS Change 1.³ This supported WRPS Change 1 and sought that it be approved, subject to amendments required to give effect to the National Policy Statement for Highly Productive Land 2022 and other minor amendments. WDC also lodged a separate officer-level submission to Proposed WRPS Change 1,⁴ which supported the change and sought one specific amendment to Policy UFD-P12 – Density targets for Future Proof area.
28. My statement of evidence for the Joint Opening Hearing provided more background for the Panel on the Urban Form and Development (UFD) chapter of the WRPS, the Future Proof Strategy and its recent update, and Proposed WRPS Change 1.

SECTION 42A RECOMMENDED RESPONSE TO WRC SUBMISSION AND FURTHER SUBMISSION

29. I **support** all recommendations of the section 42A authors which accept WRC's submission points and align with the relief sought through the WRC further submission. I generally do not address these points further in this evidence.
30. I address the submission points which were either rejected or not fully accepted by the section 42A authors in the sections of my statement below.

INTENSIFICATION, TRANSPORT AND CLIMATE CHANGE

Background

31. The WRPS promotes that development, including transport and other infrastructure, and associated land use, occurs in a planned and coordinated manner. The objectives, policies, and implementation methods within the UFD chapter set out how this issue should be managed throughout the region. A general development principle within the WRPS is to promote compact urban form, design, and location to support climate change and transport outcomes.
32. I note that while the Panel must not 'have regard to' the Emissions Reduction Plan (ERP) or National Adaptation Plan (NAP) when making decisions on Variation 3,⁵ the intention to have regard to the ERP was signalled in the 2020 amendment to the RMA and the ERP itself was published in May 2022 (prior to notification of Variation 3). Further, there are other parts of the existing legislative and policy framework that warrant consideration of climate change, including the RMA, NPS-UD, and WRPS.

³ WDC submission on Proposed WRPS Change 1, 16 December 2022, [External Sharing - 14. WRPS Change 1 submission - Waikato District Council - COMBINED.pdf - All Documents \(sharepoint.com\)](#)

⁴ WDC officer-level submission on Proposed WRPS Change 1, 16 December 2022, [External Sharing - 15. WRPS Change 1 submission - Waikato District Council officers.pdf - All Documents \(sharepoint.com\)](#)

⁵ RMA Schedule 12, clause 26.

33. To briefly reiterate my evidence from the Joint Opening Hearing, I consider there is strong support within higher-order planning documents for the inclusion of provisions to give effect to national and regional climate change priorities within Variation 3, including:
- Section 7(i) of the RMA requires that, in achieving the purpose of the Act all persons exercising functions and powers under it, in relation to managing the use, development, and protection of natural and physical resources, shall have particular regard to the effects of climate change.
 - Supporting reductions in greenhouse gas emissions and resilience to the likely current and future effects of climate change are essential aspects of well-functioning urban environments as defined in the NPS-UD (Policy 1).
 - When making planning decisions that affect urban environments, decision-makers should have particular regard to the likely current and future effects of climate change (NPS-UD Policy 6).
 - Regional direction in the WRPS makes clear links between urban planning, transport and climate change.⁶
34. The Future Proof Strategy also contains directives to ensure that neighbourhoods are planned and designed to make public transport use, walking, and cycling easy and attractive. The Strategy states that it is expected that a focus on alternative transport modes will reduce the reliance on private vehicles and thereby reduce greenhouse gas emissions.⁷
35. As demonstrated in national and regional policy, there is a clear relationship between urban intensification, transport, and climate change. Intensification is likely to have an impact on the transport networks of the urban environments subject to the MDRS, and the design of urban environments in turn impacts upon travel behaviour, as well as the operation of public transport. Ultimately, urban form, growth, and travel behaviour all influence transport's contribution to climate change.
36. The WRC submission sought various amendments to better integrate the intensification provisions with positive transport and climate change outcomes, such as to:
- Encourage walking, cycling, micromobility and public transport use and support multi-modal transport connections as urban areas intensify.
 - Integrate land use and transport planning to reduce reliance on private motor vehicles for most daily needs, and therefore contribute to transport emissions reduction.
 - Promote safety outcomes and reduce conflicts between transport modes.
 - Prioritise climate change adaptation and reduction of greenhouse gas emissions.
37. As I discussed in the Joint Opening Hearing, I consider WRC's submission points relating to transport and climate change are within the scope of Variation 3. The submission points did not seek to limit the application of the MDRS, and therefore did not seek for climate change to be included as a qualifying matter in Variation 3. Rather, I consider provisions reflecting the

⁶ A more comprehensive list of specific policies and provisions from national and regional policy documents relating to urban development, transport and climate change is set out in Appendix A to this statement.

⁷ Future Proof Strategy 2022, [External Sharing - FPS-full-document.pdf - All Documents \(sharepoint.com\)](#)

relationship between intensification, transport and climate change can be included as related provisions under section 80E of the RMA.

38. The section 42A author recommends rejecting the WRC submission points which relate to transport and climate change but states that certain recommendations will be reconsidered after seeing evidence from WRC.

Recommended Amendments

39. I understand that provisions relating to transport are generally contained in the Infrastructure (AINF) chapter of the PDP, which does not form part of Variation 3. As the scope of Variation 3 is limited to applying the MDRS, I only recommend changes to the Medium Density Residential Zone 2 (MRZ2) chapter.
40. Wording for these amendments could be influenced by the notified provisions of HCC's Proposed Plan Change 12 or the section 42A recommended provisions for Waipā District Council's Proposed Plan Change 26. Both plan changes include provisions for transport and climate change, recognising that increased residential density will have impacts on transport. I consider these provisions provide good examples of how transport and climate change can be integrated into objectives and policies for a residential zone and based on these, recommend below a series of additions to the MRZ2 chapter in Variation 3.

Insert new objectives:

MRZ2 – Oxx Neighbourhood amenity and safety

Recognise amenity values and enhance safety in the Medium Density Residential Zone 2, including:

- (a) On site for residents;*
- (b) On adjoining sites, and*
- (c) For the transport corridor and public open spaces.*

MRZ2 – Oxx Comprehensive design and development

Encourage developments that are comprehensively designed, co-ordinated with infrastructure provision and integrated with the transportation network, including multi-modal transport options.

MRZ2- Oxx Climate change

Residential development incorporates sustainable features, technologies and methods to minimise the effects of climate change and reduce greenhouse gas emissions.

Insert new policies:

MRZ2 – Pxx Vehicle crossings

- (1) Limit the number of vehicle crossings to prioritise pedestrian and cyclist safety and amenity on public roads or publicly accessible spaces used to give access to development.*

- (2) *Ensure vehicle crossings are minimised on road frontages where narrow dwellings are proposed and where shared paths and separated cycle ways are located.*

MRZ2 – Pxx Tree canopy

Promote the establishment and maintenance of a continuous tree canopy along transport corridors to improve amenity for corridor users and adjoining land use, minimise the urban heat island effects of urban intensification, enhance biodiversity and ecological function, provide summer shade to make the corridors more comfortable for walking, cycling, and micro-mobility during hotter weather, and store carbon.

MRZ2 – Pxx Comprehensive design and development

Ensure that housing developments of four or more residential units are comprehensively designed, including:

- (a) Being appropriately serviced and co-ordinated with infrastructure provision and integrated with the transport network;*
- (b) Where appropriate providing for multi-modal transport options and providing for links with existing road, pedestrian and cycleways; and*
- (c) Retaining existing trees and landscaping within the development where this is practical.*

MRZ2 – Pxx Climate change

(1) *Ensure development implements methods and technologies to minimise the effects on climate change, including:*

- (a) Locating land uses and densities in such a way as to support walking, cycling, micromobility and public transport*
- (b) Providing for electric mobility and its associated charging infrastructure.*

(2) *Reduce embodied greenhouse gas emissions and operational greenhouse gas emissions.*

41. I **recommend** the above objectives and policies be inserted into the MRZ2 chapter and apply within the Medium Density Residential Zone 2. These would achieve the relief sought by WRC to incorporate climate change and emissions reduction goals into Variation 3.

TE TURE WHAIMANA, STORMWATER MANAGEMENT AND FLOOD HAZARDS

Background

42. TTW is the primary direction-setting document for the Waikato River and its catchment. Ngāruawāhia, Huntly, Pōkeno and Tuakau are all located within the Waikato River catchment. TTW has a unique legislative position in that it is deemed in its entirety to be part of any WRPS.⁸ Furthermore, the government has directed that TTW prevails over any inconsistent RMA planning instrument, including any national policy statement.

43. TTW is embedded within Section 1.9 of the WRPS. This is supported by other objectives, policies, and methods throughout the WRPS which seek to manage effects of activities on freshwater bodies. Policy LF-P5 recognises TTW as the primary direction-setting document for

⁸ Waikato Raupatu Claims (Waikato River) Settlement Act 2010, section 11.

the Waikato River and its catchment, and the need to develop an integrated, holistic, and coordinated approach to implementation.

44. Method LF-M26 relates to implementation of TTW within regional and districts plans, and directs that these documents shall:

1. *recognise the Vision and Strategy for the Waikato River as the primary direction-setting document for the Waikato River and its catchment; and*
2. *ensure activities within the Waikato River catchment (refer to Map 23) are controlled with respect to any adverse effects on the health and wellbeing of the Waikato River, including activities which:*
 - a. *result in the destabilisation of the beds and banks of waterbodies;*
 - b. *result in discharges of contaminants to water bodies;*
 - c. *result in adverse effects on significant sites, fisheries, flora and fauna;*
 - d. *result in a loss of public access; and*
 - e. *adversely affect the cultural association of Waikato-Tainui, Ngāti Tūwharetoa, Te Arawa River Iwi, Maniapoto and Raukawa with the Waikato River.*

45. Method LF-M20 directs that territorial authorities should manage the effects of subdivision, use and development on freshwater bodies, including through district plans. This includes considering:

1. *the availability of water, including by encouraging water conservation measures;*
- ...
3. *development and design that minimises the potential for contaminants to enter fresh water bodies and coastal water;*
4. *managing flows into stormwater networks including through the adoption of low impact design;*
5. *providing for the creation and protection of esplanade reserves and/or strips and riparian habitat, including appropriately vegetated riparian margins where this will have a positive effect on a fresh water body and on its ecological, amenity and recreational values;*
6. *the promotion of best practice stormwater management for urban areas, including the need for stormwater catchment plans for greenfield urban development;*
7. *managing contaminant loadings (including sediment) entering stormwater networks;*
8. *minimising stormwater entering wastewater networks; and*
- ...

46. Proposed WRPS Change 1 includes an amendment to Section 1.9.4 of the WRPS to recognise that giving effect to TTW is a qualifying matter in relation to applying the MDRS and Policy 3 of the NPS-UD. This means that plan provisions can be less enabling of urban development than required under the RMA or the NPS-UD where necessary to accommodate a matter required to give effect to TTW.

47. I also note WRC's role as a consenting authority in relation to three waters infrastructure in the Waikato district. In addition to giving effect to TTW, other national direction on freshwater

and the WRPS, it is important that territorial authorities plan for growth in a way that achieves compliance with regional resource consents for water takes and discharges.

48. The WRC submission to Variation 3 queried whether additional provisions to restore and protect the health and wellbeing of the Waikato River are needed given the additional intensification enabled by the variation and sought that objectives, policies and rules be amended to better give effect to TTW, if required.
49. The removal of the 'urban fringe' as a qualifying matter within Variation 3 will significantly increase the potential for intensification across the four towns. In my opinion, this makes it even more important that consideration is given to what further provisions or amendments are required to ensure that Variation 3 gives effect to national and regional direction on freshwater, including the National Policy Statement for Freshwater Management 2020 (NPS-FM), TTW and the WRPS.

Wastewater and Water Supply

50. I acknowledge the issues identified by the experts for WDC that, with the removal of the 'urban fringe', WDC will not be able to predict where within the four towns medium density development will take place, which may lead to capacity problems in local networks if this occurs in an ad hoc manner or concentrates in certain areas.⁹
51. I support WDC investigating and implementing measures to mitigate potential effects of urban intensification on water supply and wastewater infrastructure capacity. Infrastructure capacity issues have potential to create problems for compliance with regional consents and lead to adverse effects on the health and wellbeing of the Waikato River and its catchment, such as through discharge of contaminants from wastewater overflows.
52. I note that WDC's preferred approach is for wastewater and water supply capacity to be managed by revising internal processes for approving network connections, particularly at the building consent stage, without requiring changes to rules within the PDP.¹⁰ I **support** WDC implementing these changes. I **recommend** that the updated processes are monitored to ensure that any issues, such as increasing non-compliance, can be identified and addressed in a timely manner, to protect waterways from adverse effects.

Stormwater Management and Flood Hazards

53. I am not an expert in stormwater or flood hazards and rely on the experts for WDC in relation to the technical aspects of these topics. This section of my evidence will discuss stormwater

⁹ Section 32AA Report, 20 June 2023, section 1.2, waikatodistrict.govt.nz/docs/default-source/your-council/plans-policies-and-bylaws/plans/district-plan-review/variations/variation-3-enabling-housing-supply/expert-evidence/final-statement-of-evidence---katja-huls.pdf?sfvrsn=3cf569c8_2 and Statement of Evidence of Keith Martin, 21 June 2023, paragraph 10, [final-statement-of-evidence---keith-martin.pdf \(waikatodistrict.govt.nz\)](https://waikatodistrict.govt.nz/docs/default-source/your-council/plans-policies-and-bylaws/plans/district-plan-review/variations/variation-3-enabling-housing-supply/expert-evidence/final-statement-of-evidence---keith-martin.pdf)

¹⁰ Statement of Evidence of Katja Huls, 20 June 2023, paragraph 20 and Section 32AA Report, section 11.1.1.

management and flooding from a planning perspective, with reference to relevant higher-order policy documents.

54. I understand that with the removal of the 'urban fringe' qualifying matter from Variation 3, WDC engaged Te Miro Water to investigate the potential effects of the variation in relation to stormwater management. The Te Miro Water report¹¹ reviews existing and proposed rules relevant to stormwater management and provides the results of new rapid flood hazard modelling undertaken for the four towns subject to Variation 3.

Stormwater Management and Te Ture Whaimana

55. The section 42A report recommends accepting WRC's submission points relating to:

- Retaining the impervious surface standard in MRZ2-S10.
- Adding a new matter of discretion to MRZ2-S10 relating to effects on waterways and/or the use of low-impact design technologies.
- Amending the building setback from the Waikato and Waipā Rivers under MRZ2-S13.
- Adding a new matter of discretion to subdivision rule SUB-R153 relating to stormwater management.

56. I **support** these recommendations. I also **support** the other matters of discretion recommended to be added to MRZ2-S10 and SUB-R153 by the section 42A author. I agree that these are useful matters of discretion for decision-makers and will assist with managing adverse stormwater effects in line with TTW, particularly given the additional intensification enabled by the removal of the 'urban fringe' qualifying matter.

57. I acknowledge that, at this stage of the Variation 3 process, there is limited scope to change the notified provisions. The Te Miro Water report and evidence of Mr Andrew Boldero make a number of recommendations in relation to stormwater quality and quantity that are outside the scope of Variation 3, including recommendations to better give effect to the NPS-FM and align with stormwater discharge consent conditions.¹²

58. Mr Boldero also recommends that district-wide stormwater rule WWS-R1 is problematic as a Permitted Activity standard and should be amended.¹³ I understand there is an appeal on the PDP related to this rule and there may be some potential for change through that process.

59. I am concerned that the Te Miro Water report concludes that the PDP and Variation 3 provisions do not prioritise freshwater over urban development in line with the NPS-FM

¹¹ Waikato District Council Variation 3 Technical Review: Stormwater, prepared by Te Miro Water, May 2023, waikatodistrict.govt.nz/docs/default-source/your-council/plans-policies-and-bylaws/plans/district-plan-review/variations/variation-3-enabling-housing-supply/stormwater/appendix-1-te-miro-technical-stormwater-review-andrew-boldero---rev-1-2-07-06-23.pdf?sfvrsn=7d2566c8_1

¹² Waikato District Council Variation 3 Technical Review: Stormwater, section 11 and Statement of Evidence of Andrew Boldero, 20 June 2023, paragraphs 15-17 and 60, [final-statement-of-evidence---andrew-boldero.pdf \(waikatodistrict.govt.nz\)](https://waikatodistrict.govt.nz/docs/default-source/your-council/plans-policies-and-bylaws/plans/district-plan-review/variations/variation-3-enabling-housing-supply/stormwater/appendix-1-te-miro-technical-stormwater-review-andrew-boldero---rev-1-2-07-06-23.pdf?sfvrsn=7d2566c8_1)

¹³ Statement of Evidence of Andrew Boldero, paragraph 26.

guiding concept of Te Mana o te Wai.¹⁴ I understand that the NPS-FM was not available at the time of drafting the PDP provisions and that WDC is limited in what changes can be made to PDP provisions through Variation 3. In addition to specific amendments for Variation 3 discussed in this statement, I would **support** WDC undertaking further work outside of Variation 3 to identify additional changes needed to ensure the PDP gives effect to the NPS-FM and Te Mana o te Wai and aligns with stormwater discharge consents.

Stormwater Quantity and Flood Hazards

60. In addition to provisions relating to TTW and freshwater management as discussed above, objectives, policies and methods within the Hazards and Risks (HAZ) chapter of the WRPS are also relevant to the topic of stormwater quantity and flooding. The Discussion Document: Stormwater prepared by Ms Huls for WDC provides a list of these provisions.¹⁵ I agree that the provisions identified in this document are the key objectives, policies, and methods of the HAZ chapter relevant to Variation 3.
61. The rules relating to natural hazards in the Natural Hazards and Climate Change (NH) chapter of the PDP only apply to the flood hazard areas mapped within the PDP. These maps were developed from modelling by WRC of riverine flooding. I understand the rapid flood hazard modelling undertaken by Te Miro Water for Variation 3 identifies areas higher in the catchments of the Waikato and Waipā Rivers which are not covered by the existing maps.
62. WRC has an appeal against the PDP which seeks to ensure that activities in all areas at potential high risk from hazards are able to be adequately assessed, not just activities in those areas that are currently identified and mapped. The appeal process is ongoing concurrently with Variation 3.
63. While the rapid flood hazard modelling undertaken by Te Miro Water relates to the entire urban areas of the four towns, I understand that, at this stage of the process, there is only scope to add new flood hazard maps for the former 'urban fringe' area as part of Variation 3.
64. I understand the approach recommended by the section 42A authors and experts for WDC is to apply a new Stormwater Constraints Overlay with an associated rule framework for intensification within the overlay. The proposed amendments have been limited to the former 'urban fringe' area where the notified version of Variation 3 did not enable development rights above General Residential Zone (GRZ) standards.
65. I **support** the general approach recommended in the section 42A report to respond to the new information and modelling as far as possible within the scope of Variation 3. I do not comment on the technical aspects of the flood hazard modelling and rely on the experts for WDC and the peer review process to ensure this is accurate.

¹⁴ Waikato District Council Variation 3 Technical Review: Stormwater, section 3.1.

¹⁵ WDC Discussion Document: Stormwater, The Management of Significant Risks from Natural Hazards and Te Ture Whaimana – Additional Qualifying Matters for Variation 3 to the Proposed District Plan, June 2023, section 4.3, [variation-3-pdp-flooding-rules-kh-v7-070623-\(1\)---copy-signed.pdf \(waikatodistrict.govt.nz\)](https://www.waikatodistrict.govt.nz/variation-3-pdp-flooding-rules-kh-v7-070623-(1)---copy-signed.pdf)

66. The limited scope for change at this stage of the process means that the preference expressed by Mr Boldero for Variation 3 to avoid all development within modelled high risk areas, and for consent to be required for development or subdivision in all other areas within the flood plain or overland flow paths,¹⁶ cannot be implemented within Variation 3.
67. The inability to respond to the new modelling within the town centres and their walkable catchments and to avoid development within high risk areas (due to the inability to disenable development rights in the PDP), does not align with the below WRPS methods, particularly the priorities for high risk flood zones.

HAZ-M6 – Control of subdivision within areas of intolerable risk

District plans shall control subdivision to avoid creating demand for new structures within identified high risk flood zones and identified primary hazard zones, and areas at high risk of coastal hazard.

HAZ-M7 – Identification of areas of coastal hazard risk and high risk flood zones

District plans shall identify the location of areas:

- 1. potentially affected by coastal hazards, prioritising the identification of those areas at high risk; and*
- 2. affected by high risk flood hazard.*

HAZ-M10 – Control of use and development (high risk flood zones and areas of high coastal hazard risk)

Regional and district plans shall ensure that use and development within high risk flood zones and areas of high coastal hazard risk is appropriate, including by avoiding the placement of structures or development where these would be vulnerable to a natural hazard event or would place a community at intolerable risk. These include:

- 1. habitable structures;*
- 2. significant community infrastructure such as hospitals and emergency services; and*
- 3. lifeline utilities.*

HAZ-M11 – Control of development within a floodplain or coastal hazard area

Regional and district plans shall ensure that

- 1. Subdivision, use and development can only occur in a floodplain with an annual exceedance probability of 1% (where the floodplain does not match the definition of being a High Risk Flood Zone) or in an identified potential coastal hazard area (not being a High Risk Coastal Hazard area) where:*
 - a. appropriate assessment of the risks has been undertaken and these risks will not exceed acceptable levels;*
 - b. appropriate assessment of the likely effects has been undertaken, including the effects of any new structure or fill on the diversion of overland flows or any consequential increased runoff volumes;*

¹⁶ Statement of Evidence of Andrew Boldero, paragraph 17.

- c. *the creation of a new, or exacerbation of an existing hazard, including those off site, and any adverse effects are avoided, remedied or mitigated;*
 - d. *any adverse effects of a 1% annual exceedance probability flood event on habitable buildings are avoided or mitigated;*
 - e. *has been designed and located to minimise the level of coastal hazard risk over its intended lifetime; and*
 - f. *any hazardous substance stored as part of the development, or during the construction, or found on or near to the site, will not create a hazard; or*
2. *it is essential infrastructure, and:*
- a. *it cannot be located elsewhere; or*
 - b. *it will not increase the risk of or from natural hazard.*

68. I therefore **strongly recommend** that WDC undertake further work to comprehensively respond to the new modelling and the full suite of recommendations made within the Te Miro Water report and Mr Boldero's evidence, through a future variation or plan change.

69. This process should include consideration of whether amendments are required to provisions within the NH chapter. For example, I understand from Mr Boldero's evidence that infilling within the flood plain and overland flow paths is one of the main factors that contribute to adverse stormwater and flooding effects of urban intensification,¹⁷ however the PDP rule which controls filling within the flood plain (NH-R8) only applies to the Flood plain management area and Flood ponding area, and therefore does not include the new areas modelled as part of Variation 3.

Section 42A Recommendations

70. I **support** the recommendations within the section 42A report in relation to stormwater quantity and flooding, subject to the points discussed below. Given the limited scope for amendments to wider PDP provisions as part of Variation 3, I consider the recommended changes will go some way to helping WDC manage adverse stormwater and flooding effects.

Stormwater Constraints/Flood Hazard Overlay

71. I agree with the section 42A recommendations that the proposed new rules within the MR22 chapter apply to existing PDP mapped flood hazard areas (within the former 'urban fringe') as well as the new modelled areas. It is important that any new overlay aligning with the extent of existing mapped areas is separate from the existing overlays within the PDP, to avoid altering the requirement to comply with the rules of the NH chapter in relation to existing mapped areas.

72. I note that from the recommended rules in Appendix 2 to the section 42A report, it is not clear whether one or two new overlays are proposed to be introduced to manage effects relating to stormwater constraints and flood hazards. For example, MR22-S1(1)(a) uses the

¹⁷ Statement of Evidence of Andrew Boldero, paragraphs 30 and 31.

terminology “*outside the Stormwater Constraints and Flood Hazard Overlay*”, while MRZ2-S5(1)(c) uses the words “*the Stormwater Constraints Overlay or the Flood Hazards Overlay*”.

73. To ensure the provisions achieve their intended purpose, and to provide clarity for plan users, it is important that the terminology used throughout the rules is consistent and matches the naming of the overlay/s on the planning maps. I therefore **recommend** that the references to the proposed new overlay/s be aligned throughout the MRZ2 chapter to achieve this.

Rule MRZ2-S1

74. Rule MRZ2-S1(1)(b) in Appendix 2 to the section 42A report refers to sites “*within the Stormwater Constraints Overlay – Medium Risk*”. I note that the proposed maps attached to Ms Huls’ evidence do not include an area labelled “Medium Risk”. I understand these maps are still to be updated as refinements are completed to the flood modelling, including the identification of high risk areas, however I **recommend** that the terms used within MRZ2-S1 should match those used on the planning maps, and ensure this rule applies to all of the mapped areas, except the high risk areas (to which rule MRZ2-S1a will apply).
75. I note that the matters of discretion for this rule will be particularly important for managing stormwater and flooding effects of urban intensification, as proposed rule SUB-R154 provides for subdivision around existing units as a Controlled Activity. Therefore, the effects of additional residential development on stormwater management and flooding will need to be thoroughly considered at land use consent stage.

Rule MRZ2-S1a

76. The section 42A report and the evidence of Ms Huls recommend that within the high risk flood area, two or more residential units should be a Non-Complying Activity.¹⁸ I **support** this recommendation, based on the understanding that it is not possible to impose a more restrictive activity status on one residential unit per site through the Variation 3 process.
77. However, MRZ2-S1a(1) as currently proposed in Appendix 2 to the section 42A report would only make more than two residential units per site a Non-Complying Activity. I consider this **should be amended** to “*two or more residential units*” to implement the section 42A recommendation.

Rules SUB-R153 and SUB-R154

78. Mr Boldero’s evidence outlines a number of concerns with the absence of a minimum lot size requirement in the MDRS.¹⁹ In reliance on Mr Boldero’s evidence, I **support** the changes to SUB-R153 recommended in the section 42A report, including the retention of the 450m²

¹⁸ Section 42A Report, paragraph 509 and Statement of Evidence of Katja Huls, paragraph 43.

¹⁹ Statement of Evidence of Andrew Boldero, paragraph 37.

minimum lot size for sites within the Stormwater Constraints/Flood Hazard Overlay and the additional matters of discretion.

79. SUB-R153 does not, however, apply to proposals where SUB-R154 applies. SUB-R154 provides for subdivision around existing (constructed or approved) residential units as a Controlled Activity. With the removal of the 'urban fringe' qualifying matter and therefore the potential for cumulative adverse stormwater effects across the four towns, and in light of the new information identified in the Te Miro Water report, I **recommend** that additional matters of control be added to SUB-R154 relating to flooding effects and stormwater management, to align with those recommended for SUB-R153.
80. I acknowledge that subdivision consent applications are subject to RMA section 106 relating to natural hazard risk, but I consider that additional matters of control for flooding effects and stormwater management are important for managing any additional stormwater or flooding effects of subdivision proposals, particularly given that this rule will apply across the MRZ2, including the new modelled flood hazard areas.

Minimum Floor Level

81. I note that Mr Boldero and Ms Huls' evidence mentions maintaining the requirements for residential units within the Stormwater Constraints Overlay to comply with the minimum floor level of at least 0.5m above the 1% Annual Exceedance Probability (AEP).²⁰ However, there is no rule proposed within the section 42A or 32AA report to require this. The existing minimum floor level rule (NH-R1) is contained within the NH chapter and relates to the Flood plain management area and Flood ponding area in the PDP; this does not cover the new areas modelled as part of Variation 3.
82. To address this, I **recommend** that Variation 3 includes a new rule within the MRZ2 chapter to apply the minimum floor level requirement of at least 0.5m above the 1% AEP to residential units within the new Stormwater Constraints Overlay.

CONCLUSION

83. The WRC submission was supportive of Variation 3 and recognised that the change is directed by central government requirements. Many of the provisions within Variation 3 align with direction in the WRPS relating to integrated and coordinated planning.
84. I **support** all recommendations of the section 42A authors which accept WRC's submission points and align with the relief sought through the WRC further submission.
85. I **recommend** additional provisions to recognise the relationship between urban intensification, transport, and climate change within Variation 3.

²⁰ Statement of Evidence of Andrew Boldero, paragraph 53(b), Statement of Evidence of Katja Huls, paragraph 43(c).

86. I acknowledge the additional work WDC has undertaken in relation to infrastructure capacity and stormwater management following the decision not to include the 'urban fringe' qualifying matter in Variation 3.
87. I **support** the general approach recommended in the section 42A report to respond to the new stormwater and flooding information as far as possible within the scope of Variation 3. I **recommend** additional amendments to the provisions to ensure they are clear and achieve their intended purpose.
88. I **strongly recommend** that WDC undertake further work to comprehensively respond to the new rapid flood hazard modelling and the full suite of recommendations made within the Te Miro Water report and Mr Boldero's evidence, through a future variation or plan change.
89. A summary of the amendments to Variation 3 provisions recommended throughout my evidence is provided in Appendix B to this statement.



Katrina Rose Andrews
Policy Advisor
Strategic and Spatial Planning
Waikato Regional Council

4 July 2023

Appendix A – National and regional direction on urban development, transport, and climate change

RMA

Section 7 Other matters

In achieving the purpose of this Act, all persons exercising functions and powers under it, in relation to managing the use, development, and protection of natural and physical resources, shall have particular regard to—

...

- (i) the effects of climate change

NPS-UD

Objective 1: New Zealand has well-functioning urban environments that enable all people and communities to provide for their social, economic, and cultural wellbeing, and for their health and safety, now and into the future.

Objective 6: Local authority decisions on urban development that affect urban environments are:

- (a) integrated with infrastructure planning and funding decisions; ...

Objective 8: New Zealand’s urban environments:

- (a) support reductions in greenhouse gas emissions; and
- (b) are resilient to the current and future effects of climate change.

Policy 1: Planning decisions contribute to well-functioning urban environments, which are urban environments that, as a minimum:

...

- (e) support reductions in greenhouse gas emissions; and
- (f) are resilient to the likely current and future effects of climate change.

Policy 6: When making planning decisions that affect urban environments, decision-makers have particular regard to the following matters:

...

- (e) the likely current and future effects of climate change.

WRPS

IM-O5 – Adapting to climate change

Land use is managed to avoid the potential adverse effects of climate change induced weather variability and sea level rise on:

1. amenity;
2. the built environment, including infrastructure;
- ...
5. public health and safety...

UFD-O1 – Built environment

Development of the built environment (including transport and other infrastructure) and associated land use occurs in an integrated, sustainable and planned manner which enables positive environmental, social, cultural and economic outcomes, including by:

...

3. integrating land use and infrastructure planning, including by ensuring that development of the built environment does not compromise the safe, efficient and effective operation of infrastructure corridors

...

UFD-P1 – Planned and co-ordinated subdivision, use and development

Subdivision, use and development of the built environment, including transport, occurs in a planned and co-ordinated manner which:

1. has regard to the principles in APP11;
2. recognises and addresses potential cumulative effects of subdivision, use and development;

UFD-AER2 - There is greater use of walking, cycling and public transport in urban areas.

UFD-AER11 - New urban developments are more compact

APP11 – General development principles

- i. Promote compact urban form, design and location to:
 - i. minimise energy and carbon use;
 - ii. minimise the need for private motor vehicle use;
 - iii. maximise opportunities to support and take advantage of public transport in particular by encouraging employment activities in locations that are or can in the future be served efficiently by public transport;
 - iv. encourage walking, cycling and multi-modal transport connections; and
 - v. maximise opportunities for people to live, work and play within their local area.

Proposed WRPS Change 1

SRMR-I2 – Effects of climate change

The effects of climate change (including climate variability) may impact our ability to provide for our wellbeing, including health and safety.

While addressing this issue generally, specific focus should be directed to the following matters:

...

3. ability for urban environments to support a reduction in greenhouse gas emissions and to be resilient to the current and future effects of climate change.

IM-O5 – Climate change

Land use is managed to:

...

2. support reductions in greenhouse gas emissions within urban environments and ensure urban environments are resilient to the current and future effects of climate change.

UFD-O1 – Built environment

Development of the built environment (including transport and other infrastructure) and associated land use occurs in an integrated, sustainable and planned manner which enables positive environmental, social, cultural and economic outcomes, including by:

...

12) strategically planning for growth and development to create responsive and well-functioning urban environments, that:

a. support reductions in greenhouse gas emissions and are resilient to the current and future effects of climate change;

...

e. improves connectivity within urban areas, particularly by active transport and public transport;

UFD-P12 – Density targets for Future Proof area

Future Proof territorial authorities shall seek to achieve compact urban environments that:

...

2. support multi-modal transport options, including active transport and rapid and frequent public transport;

3. allow people to live, work and play within their local area;

4. support the delivery of a range of housing options;

5. enable building heights and density of urban form to realise as much development capacity as possible to maximise benefits of intensification within city centre zones unless modified to accommodate a qualifying matter;

...

UFD-PR12 – Density targets for Future Proof area

UFD-P12 seeks to ensure that over time, urban development will become more compact through the promotion of development density targets. This is to improve housing choice and affordability, walking and cycling, and the viability of public transport, including rapid and frequent public transport, thereby reducing energy demand and reducing the need for future transport infrastructure development. Other benefits of this approach include reducing transport impacts on air quality, reducing greenhouse gas emissions, improving efficient use of water infrastructure, ... The methods are to ensure this policy is implemented through provisions in district plans and through advocacy with respect to development proposals...

UFD-AER23 - Reduced greenhouse gas emissions in tier 1 and 3 urban environments.

APP11 – General development principles

p) be appropriate with respect to current and projected future effects of climate change and be designed to allow adaptation to these changes and to support reductions in greenhouse gas emissions within urban environments;

Appendix B – Recommended amendments to Variation 3 provisions

Urban intensification, transport, and climate change

Insert new objectives into the MRZ2 chapter:

MRZ2 – Oxx Neighbourhood amenity and safety

Recognise amenity values and enhance safety in the Medium Density Residential Zone 2, including:

- (a) On site for residents;*
- (b) On adjoining sites, and*
- (c) For the transport corridor and public open spaces.*

MRZ2 – Oxx Comprehensive design and development

Encourage developments that are comprehensively designed, co-ordinated with infrastructure provision and integrated with the transportation network, including multi-modal transport options.

MRZ2- Oxx Climate change

Residential development incorporates sustainable features, technologies and methods to minimise the effects of climate change and reduce greenhouse gas emissions.

Insert new policies into the MRZ2 chapter:

MRZ2 – Pxx Vehicle crossings

- (1) Limit the number of vehicle crossings to prioritise pedestrian and cyclist safety and amenity on public roads or publicly accessible spaces used to give access to development.*
- (2) Ensure vehicle crossings are minimised on road frontages where narrow dwellings are proposed and where shared paths and separated cycle ways are located.*

MRZ2 – Pxx Tree canopy

Promote the establishment and maintenance of a continuous tree canopy along transport corridors to improve amenity for corridor users and adjoining land use, minimise the urban heat island effects of urban intensification, enhance biodiversity and ecological function, provide summer shade to make the corridors more comfortable for walking, cycling, and micro-mobility during hotter weather, and store carbon.

MRZ2 – Pxx Comprehensive design and development

Ensure that housing developments of four or more residential units are comprehensively designed, including:

- (a) Being appropriately serviced and co-ordinated with infrastructure provision and integrated with the transport network;*
- (b) Where appropriate providing for multi-modal transport options and providing for links with existing road, pedestrian and cycleways; and*
- (c) Retaining existing trees and landscaping within the development where this is practical.*

MRZ2 – Pxx Climate change

(1) *Ensure development implements methods and technologies to minimise the effects on climate change, including:*

- (a) *Locating land uses and densities in such a way as to support walking, cycling, micromobility and public transport*
- (b) *Providing for electric mobility and its associated charging infrastructure.*

(2) *Reduce embodied greenhouse gas emissions and operational greenhouse gas emissions.*

Stormwater management and flood hazards

It is important that any new overlay aligning with the extent of existing mapped areas is separate from the existing flood hazard overlays within the PDP, to avoid altering the requirement to comply with the rules of the NH chapter in relation to existing mapped areas.

I recommend that the references to the proposed new Stormwater Constraints and/or Flood Hazard Overlay/s are consistent and aligned throughout the MRZ2 chapter and match the naming of the overlay/s on the planning maps.

I recommend that the terms used within MRZ2-S1 should match those used on the planning maps, and ensure this rule applies to all of the mapped areas, except the high risk areas (to which rule MRZ2-S1a will apply).

Amend MRZ2-S1a(1)(b) to “There are two or more residential units per site”.

Add new matters of control to SUB-R154:

(g) Flooding effects including safe access and egress; and

(h) Stormwater Management and the use of Low Impact Design methods.

Add a new rule within the MRZ2 chapter to apply the minimum floor level requirement of at least 0.5m above the 1% AEP to residential units within the new Stormwater Constraints Overlay.