BEFORE THE WAIPĀ DISTRICT COUNCIL

IN THE MATTER	of the Resource Management Act 1991
AND	
IN THE MATTER	of Proposed Plan Change 20 – Airport Northern Precinct Extension to the Operative Waipā District Plan

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STATEMENT OF EVIDENCE OF BEN MAXWELL INGER

PLANNING (ECOLOGY TOPIC)

28 FEBRUARY 2023

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Environment Law and Strategy

INTRODUCTION

Qualifications and experience

1. My name is Ben Maxwell Inger.

2. I am a Senior Planner and Director at Monocle, in Hamilton. I hold the qualifications of Bachelor of Planning (Honours) from the University of Auckland. I am a Full Member of the New Zealand Planning Institute.

3. I have 16 years' planning experience. Over this time, I have been employed in private consultancies working for both private and public sector clients, including developers and local authorities in the Waikato region. In my previous role at Harrison Grierson, which I held until November 2020, I was responsible for managing the company's operations in the Waikato region.

4. My experience includes preparation of plan changes and submissions and planning evidence related to proposed district plans, as well as preparation and processing of resource consent applications for residential, commercial and infrastructure projects. I am a current member of Hamilton City Council's Urban Design Panel.

5. My recent experience relevant to the proposed plan change and consideration of ecology and biodiversity values includes:

   (a) Co-author of the Assessment of Environmental Effects for the Amberfield subdivision in Peacocke, preparation of planning evidence and involvement in expert conferencing and mediation for Weston Lea Limited (2017-2021). The subdivision relates to a 105-hectare site adjacent to the Waikato River in southern Hamilton;

   (b) Author of the Assessment of Environmental Effects for changes to the conditions of the Amberfield subdivision in Peacocke for Weston Lea Limited (2022); and

   (c) Close liaison with Hamilton City Council (**"HCC"**) on behalf of The Adare Company Limited as a contributor to draft provisions for Plan Change 5 – Peacocke (**"PC5"**) to the Hamilton City District Plan, as well as preparation of submissions and further submissions and involvement in expert conferencing (2021-2022). Peacocke is located in southern Hamilton, approximately 3km north of the Hamilton Airport.

6. I am familiar with the application site and the surrounding locality. I have read the relevant parts of: the application; submissions; further submissions and the Section 42A Report.

I have visited the Site and the locality on multiple occasions since 2019. I also recently visited the proposed compensation site on Raynes Road with Ms Cummings.

Involvement in Proposed Plan Change 20

7. I have been engaged by Titanium Park Limited (**"TPL"**) and Rukuhia Properties Limited (**"RPL"**) to prepare planning evidence for Proposed Plan Change 20 (**"PC20"**). I was not the author of the Plan Change request but I have assisted with planning inputs into the master planning for the Northern Precinct since 2019 and I have led most of the consultation associated with TPL/RPL's request.

8. I attended expert conferencing on the Ecology and Bat Habitat topic on 8 February 2023 and signed the joint witness statement (**"JWS"**) that was produced at the conferencing session.

Code of Conduct

9. I confirm that I have read the Code of Conduct for Expert Witnesses contained in the Environment Court Practice Note (2023) and I agree to comply with it. In that regard, I confirm that this evidence is written within my expertise, except where I state that I am relying on the evidence of another person. I have not omitted to consider material facts known to me that might alter or detract from the opinions expressed.

SCOPE OF EVIDENCE

10. In my evidence, I:

    (a) provide an executive summary of my key conclusions;

    (b) summarise the existing ecological values of the PC20 site;

    (c) set out the relevant statutory context and policy provisions;

    (d) summarise the relevant aspects of PC20 with respect to planning matters relating to ecology, including proposed amendments to the notified PC20 ecology provisions;

    (e) address relevant submissions; and

    (f) respond to the Section 42A Report.

11. In relation to the evidence of other witnesses, I make specific reference to the evidence of Mr Grala and to the evidence of Ms Cummings, Mr Markham, Mr McKensey and Mr King. I agree with and adopt Mr Grala's descriptions of the overall site, the background

to PC20 and the wider statutory context and relevant policy provisions. My evidence does not purport to repeat the same statutory planning analysis as that prepared by Mr Grala and instead is focussed on the planning aspects associated with ecology, including the long-tailed bat.

EXECUTIVE SUMMARY

12. The ecological assessments which have been undertaken for the Plan Change request conclude that the PC20 site has low ecological values for vegetation, native lizards, avifauna and freshwater. The PC20 site contains habitat for the Threatened – Nationally Critical long-tailed bat which has been assessed as being of low to moderate value and there are some high value habitats for long-tailed bats in the area around the PC20 site. Management of effects on long-tailed bat habitat values is therefore an important consideration for PC20.

13. Changes are proposed to the notified PC20 provisions to significantly tighten the requirements for the management of effects on the habitat of long-tailed bats, including the identification of Bat Habitat Areas (**"BHAs"**) on the Airport Business Zone Structure Plan and other changes to Sections 10, 15 and 21 and Appendix S10 of the WDP.

14. The amended provisions go significantly further than the existing provisions that apply to the 41ha of land that is zoned Airport Business Zone (**"ABZ"**) within the Northern Precinct, which do not require or enable consideration of ecological effects at all. The amended provisions also impose a much higher threshold for management of ecological effects than any other provisions applying to urban development under the WDP.

15. The potential ecological effects arising from PC20 can be managed through the application of the amended provisions in the Waipa District Plan (**"WDP"**). PC20 will give effect to relevant National Policy Statements and the Operative Waikato Regional Policy Statement (**"WRPS"**) and will be consistent with the Vision and Strategy for the Waikato River.

EXISTING ECOLOGICAL VALUES

16. The existing ecological values of the PC20 site and surrounding area are described in the evidence of Ms Cummings and Mr Markham. I understand the ecological values to be:

(a) Ecological values within the PC20 site for vegetation, native lizards, avifauna and freshwater are low; and

(b) Long-tailed bat habitat within the PC20 site is of low to moderate value. Some high value areas of bat habitat exist in the area surrounding the PC20 site, including three kahikatea remnants, the 'Meridian Oaks' roost site, the 'Narrows Park' camping area and the Waikato River.[1] The long-tailed bat is classified as Threatened – Nationally Critical.

STATUTORY CONTEXT AND RELEVANT POLICY PROVISIONS

Operative Waipa District Plan

Existing Zoning

17. The PC20 site consists of approximately 130ha of land located to the west of the Hamilton Airport. Approximately 41ha of the PC20 site is currently zoned ABZ under the Operative Waipa District Plan (**"WDP"**) and the remaining approximately 89ha is zoned Rural. The existing ABZ within the PC20 site is shown on **Figure 1** below.

18. The ABZ also extends over land which is largely developed for industrial activities around the southern and eastern parts of Hamilton Airport, as well as the airport terminal and car park. The industrial land within the ABZ is commonly known as Titanium Park. The entire ABZ is subject to the Airport Business Zone Structure Plan (**"Structure Plan"**).

19. There are no overlays, controls or other limitations identified within the PC20 site on either the Structure Plan or planning maps related to ecological matters.

20. The Southern Links roading designation surrounds the PC20 site to the north and west.

21. The land which is located on Raynes Road between the PC20 site and the Southern Links designation is zoned Industrial. That land includes existing industrial activities as well as other land that has recently been earthworked in readiness for development. The land beyond the Industrial Zone on the northern side of the Southern Links designation is zoned Rural and is within the Narrows Concept Plan area. That land includes the Clearways accommodation facility and the Narrows Landing event facility as well as other land that has recently been earthworked in readiness for development.

[1] Cummings EIC, Annexure A – Context Map.

22. Much of the land surrounding the airport, including the Northern Precinct site, the Industrial zoned land, the Southern Links designation and the Narrows Concept Plan area, is affected by overlays and designations which relate to height (including buildings, trees and other objects), noise and other limitations associated with the operation of Hamilton Airport.

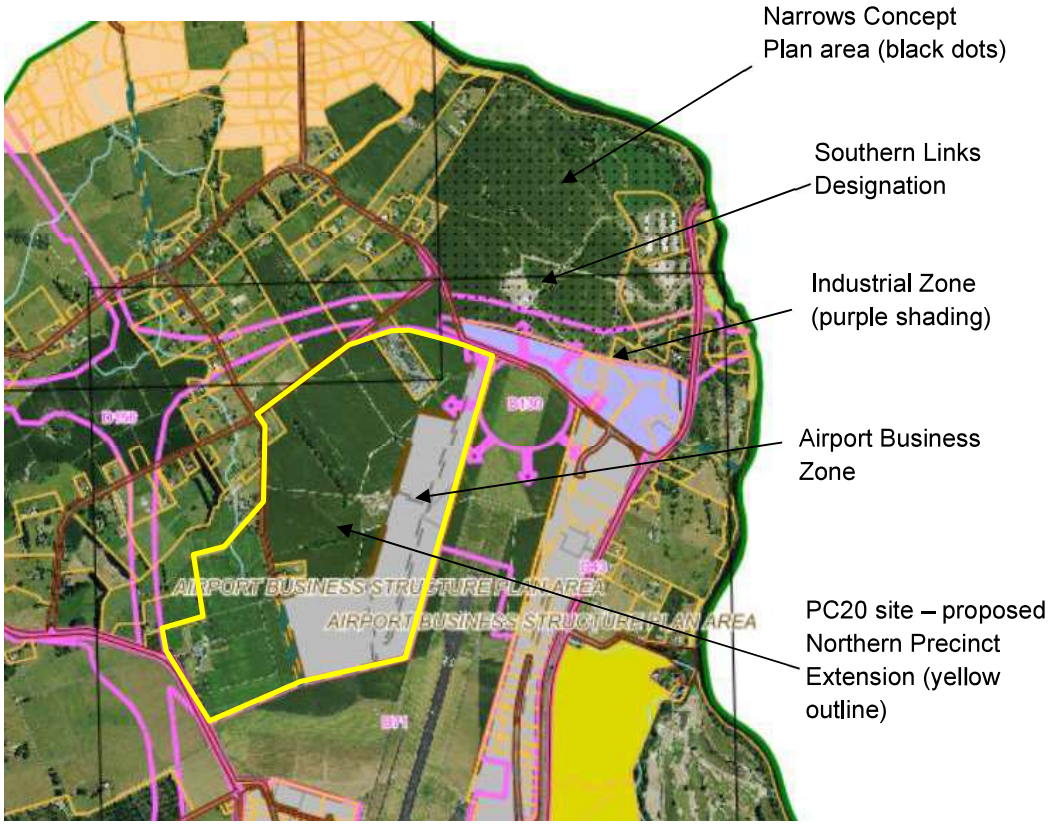

Figure 1: PC20 Site and Existing Zones. Source: Waipa District Council GIS Maps

23. The area between the Hamilton Airport and the existing Hamilton urban area includes land which is zoned for future urban growth and land which is being considered for future urban growth. The land which is zoned for urban growth comprises the Peacocke Structure Plan area within Hamilton City. The land which is being considered for future urban growth includes the SL1 and SL2 areas which are shown on the Future Growth Areas map attached to HCC's submission on PC20, as well as the land between Hamilton Airport and the Southern Links designation which is shown as a 'Possible Future Growth Area' and 'Future Extension Direction' on the Hamilton Airport Growth Map in Appendix S1 of the WDP (**Figure 2**). SL1, SL2 and the land between the airport and the Southern Links designation are all within Waipa District.

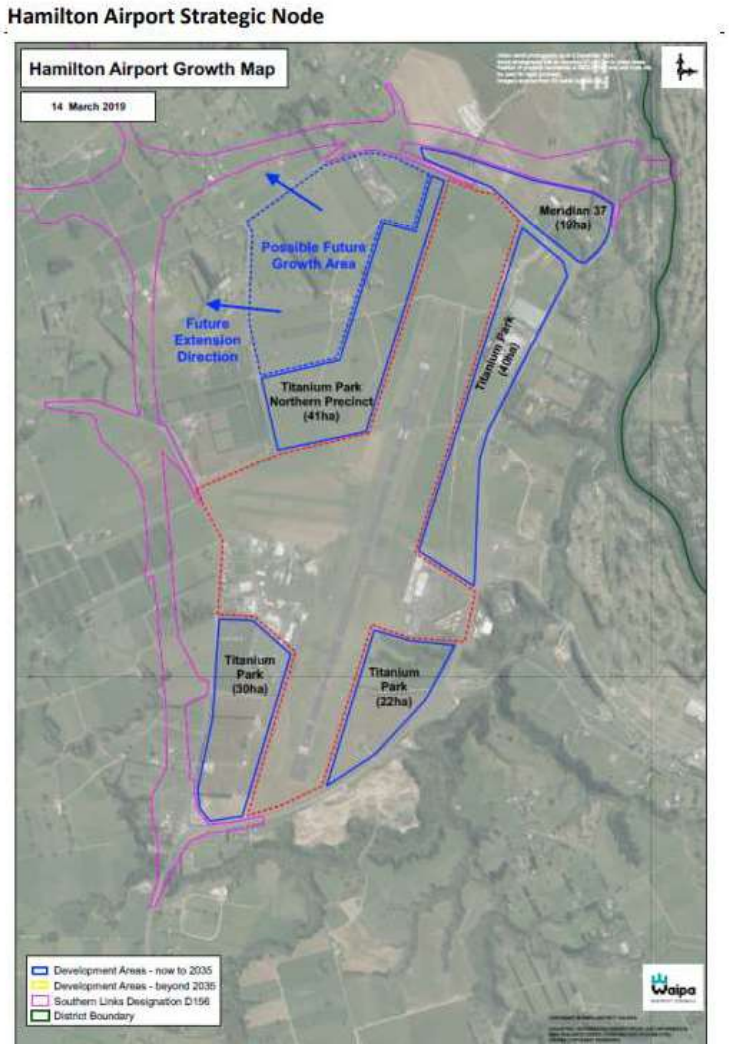

Figure 2: Hamilton Airport Growth Map, WDP Appendix S1

24. The WDP describes the land in the airport area as a scarce and valuable resource which needs to be efficiently and effectively used.[2]

25. The proposal under PC20 is to retain the ABZ over the 41ha area of the site and to extend the Northern Precinct by rezoning the additional 89ha of the site from Rural Zone to ABZ. The provisions in the WDP which currently apply to development of the existing ABZ extent of the Northern Precinct are also proposed to be amended. My evidence explains the proposed changes which introduce new ecological related provisions into the WDP for the Northern Precinct, including amendments to the Structure Plan, a new resource management issue, new policy and new rules and assessment criteria.[3]

[2] WDP, Section 10.1.3.
[3] Inger EIC, paras. [75] to [119].

Airport Business Zone Provisions

26. The existing provisions in the WDP enable development of the 41ha ABZ area of the Northern Precinct for industrial activities and limited commercial activities subject to approval of a Comprehensive Development Plan (**"CDP"**) as a Restricted Discretionary Activity[4]. The purpose of CDPs is to provide *"… an integrated and co-ordinated approach to development and infrastructure"*[5]. Assessment of a resource consent application for a CDP is restricted to traffic effects, water supply, wastewater treatment and disposal and stormwater management, landscaping and visual treatment and consistency with District Plan provisions relating to the operation of Hamilton Airport.[6]

27. Development and subdivision which is in accordance with an approved CDP is a Controlled Activity and the only matter that control is reserved over is compliance with the approved CDP.[7]

28. While the CDP provisions for the Northern Precinct are proposed to be deleted through PC20, it is relevant that there are currently no resource consent assessment matters for development of the Northern Precinct which require or enable consideration of ecological effects.

Indigenous Biodiversity Provisions

29. Section 24 of the WDP relates to Indigenous Biodiversity. It describes a three-tiered approach with the most restrictive provisions applying to significant natural areas (**"SNAs"**) and bush stands shown on the planning maps, slightly less restrictive provisions applying to biodiversity corridors which are shown on the planning maps and the least restrictive standards applying to indigenous vegetation and wetlands in the remainder of the district[8]. There are no SNAs, bush stands or biodiversity corridors identified on the PC20 site under the WDP. However, there is a 750m wide biodiversity corridor nearby which encompasses the Waikato River and adjacent land (see **Figure 3**.

[4] WDP Rule 15.4.1.1(x) and as also explained in Grala EIC, paras. [20] and [21].
[5] WDP Section 15.1.5.
[6] WDP Rule 15.4.1.1(x).
[7] WDP Rule 15.4.1.1(y).
[8] WDP Section 24.1.2.

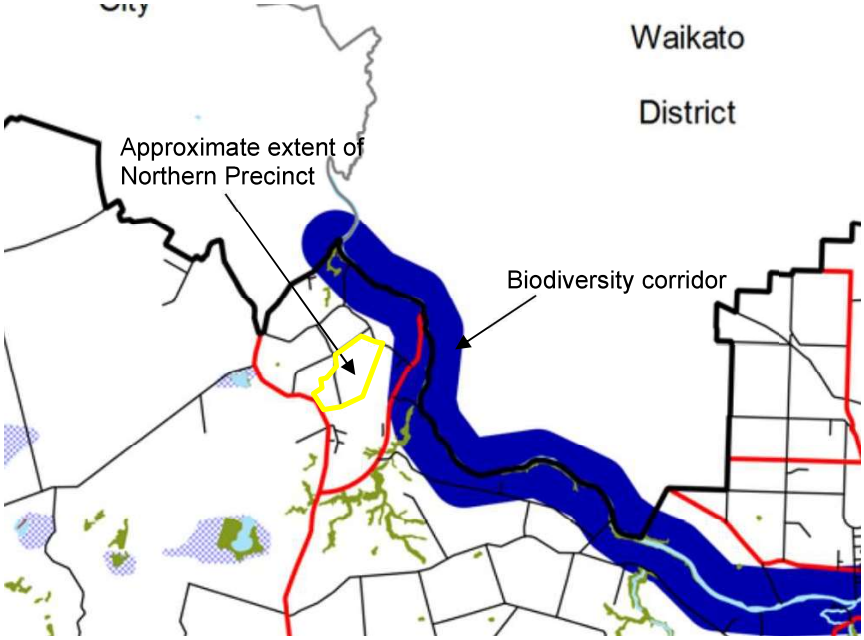

Figure 3: Annotated extract from WDP Planning Map 49 (Biodiversity)

30. There is one district-wide objective in Section 24 which is *"To maintain and enhance the existing level of biodiversity within the district"* (Objective 24.3.1). The policies associated with Objective 24.3.1 are predominantly focused on managing removal of indigenous vegetation and disturbance of wetlands. The rules for indigenous biodiversity in Section 24.4 are focused on restricting indigenous vegetation removal within the SNAs, bush stands and biodiversity corridors.

31. There are also specific objectives and policies which relate to activities within the mapped biodiversity corridors, SNAs and bush stands. For biodiversity corridors (such as the one shown in **Figure 3**) the relevant objective is Objective 24.3.2 which is *"To maintain and enhance indigenous biodiversity, ecological processes and connectivity within the biodiversity corridors as identified on Planning Map 49"*. Policies associated with Objective 24.3.2 discourage removal of indigenous vegetation and habitat of indigenous fauna and disturbance of wetlands within the biodiversity corridors, recognise and promote maintenance and enhancement of connectivity along biodiversity corridors and maintenance and enhancement of indigenous vegetation and habitat of indigenous fauna within the corridors, and encourage incentives to achieve permanent protection of features within the corridors.

32. There are no rules in Section 24 that restrict removal of indigenous vegetation within the district outside of the mapped biodiversity corridors, SNAs and bush stands. There are also no rules in Section 24 which restrict the removal of non-indigenous vegetation within

the district, either within the mapped areas or elsewhere. The only exception to this is for individually scheduled protected trees.

33. As such, removal of indigenous and non-indigenous vegetation within the PC20 site is currently a Permitted Activity under the WDP.

Relevant Higher Order Policy Provisions

34. Although my evidence addresses the statutory context and policy provisions related to ecological matters, I recognise that there are a wider suite of policy provisions that relate to PC20 and that it is important for these matters to be considered holistically. In that regard, I consider Mr Grala's evidence as a companion piece to my own and I agree with the conclusions he reaches.

35. I consider the following higher order policies to be particularly relevant to ecological matters for PC20:

(a) Vision and Strategy for the Waikato River (Te Ture Whaimana o Te Awa o Waikato);

(b) National Policy Statement on Freshwater Management; and

(c) Waikato Regional Policy Statement.

<u>Vision and Strategy for the Waikato River (Te Ture Whaimana o Te Awa o Waikato)</u>

36. The Vision and Strategy for the Waikato River is included in schedule 2 of the Waikato-Tainui Raupatu Claims (Waikato River) Settlement Act 2010 (**"Settlement Act"**).

37. The Settlement Act states at s5 that *"The vision and strategy is intended by Parliament to be the primary direction-setting document for the Waikato River and activities within its catchment affecting the Waikato River"*. Other sections within the Settlement Act confirm and clarify the primacy of the vision and strategy over other RMA documents.[9]

38. The vision in schedule 2(1)(2) of the Settlement Act *"is for a future where a healthy Waikato River sustains abundant life and prosperous communities who, in turn, are all responsible for restoring and protecting the health and wellbeing of the Waikato River, and all it embraces, for generations to come"*.

[9] s12 Waikato-Tainui Raupatu Claims (Waikato River) Settlement Act 2010.

39. Schedule 2(1)(3) of the Settlement Act lists numerous objectives and schedule 2(2) lists numerous strategies for achieving the vision. The objectives include *"(a) the restoration and protection of the health and wellbeing of the Waikato River"* and *"(i) the protection and enhancement of significant sites, fisheries, flora and fauna"*. The strategies include *"(a) ensure that the highest level of recognition is given to the restoration and protection of the Waikato River"*.

40. The definition for the Waikato River in s6 of the Settlement Act includes the Waikato River and its catchment, as well as tributaries, streams and watercourses flowing into the river.

41. Although the PC20 site does not directly adjoin the Waikato River or contain any natural waterbodies, the site is within the Waikato River catchment. The site includes artificially constructed channels which drain to the Waikato River via the Nukuhau Stream and other tributaries that are located beyond the site's boundaries. Therefore, activities within the PC20 site have the potential to affect water quality within the Waikato River if discharges are not appropriately managed.

National Policy Statement on Freshwater Management 2020

42. PC20 is required to "give effect" to the National Policy Statement for Freshwater Management 2020 (**"NPS-FM"**) (s75(3)(a) RMA).

43. The objective of the NPS-FM (Section 2.1) refers to ensuring that natural and physical resources are managed in a way that firstly prioritises the health and wellbeing of water bodies and freshwater ecosystems, secondly the health needs of people and thirdly the ability of people and communities to provide for their social, economic and cultural wellbeing, now and into the future.

44. Of relevance to PC20 are policies in the NPS-FM (Section 2.2) that require freshwater to be managed in a way that gives effect to Te Mana o Te Wai (Policy 1), that tangata whenua are actively involved in freshwater management (Policy 2), that freshwater is managed to ensure that the health and well-being of degraded water bodies and freshwater ecosystems is improved (Policy 5) and that habitats of indigenous freshwater species are protected (Policy 6).

45. As I have previously explained, there are no natural waterbodies (including wetlands) within the PC20 site. Potential freshwater issues associated with PC20 relate to direct effects on artificial drains and stormwater runoff into downstream waterbodies (including the Waikato River) from the developed site.

Waikato Regional Policy Statement

46. PC20 is required to "give effect" to the WRPS (s75(3)(c) RMA).

47. The WRPS includes the Vision and Strategy for the Waikato River[10] which is referred to in my evidence above. The integrated management overview, land and freshwater domain, ecosystems and indigenous biodiversity topic and urban form and development topic in the WRPS also contain provisions which are relevant to the ecological effects of PC20. I have included the key WRPS provisions in **Annexure 1** of my evidence and I summarise them below.

48. The red text in **Annexure 1** represents changes which are proposed through Change 1 to the WRPS (**"WRPS Change 1"**). WRPS Change 1 is an update to give effect to the National Policy Statement on Urban Development 2020 (**"NPS-UD"**) and to incorporate the outcomes of Future Proof 2022. It was notified on 18 October 2022 and a hearing is expected to be held in mid-2023. Territorial authorities must have regard to (rather than "give effect to") a proposed regional policy statement when preparing or changing a district plan (s74(2)(a) RMA). There are relatively few changes proposed through WRPS Change 1 to the provisions which I have cited in **Annexure 1**.

49. The objective for the ecosystems and indigenous biodiversity topic in the WRPS is ECO-O1 (Ecological integrity and indigenous biodiversity):[11]

"The full range of ecosystem types, their extent and the indigenous biodiversity that those ecosystems can support exist in a healthy and functional state".

50. There are three policies and 17 methods which relate to the objective.

51. Policy ECO-P1 (Maintain or enhance indigenous biodiversity) is relevant to all indigenous biodiversity, including significant and non-significant habitat. It seeks to *"Promote positive biodiversity outcomes and maintain or enhance their spatial extent as necessary to achieve health ecological functioning of ecosystems…"*. The policy goes on to identify 10 matters which are of particular focus. All the matters are relevant to PC20, but they notably include working towards no net loss of indigenous biodiversity at a regional scale, the continued functioning of ecological processes, the re-creation and restoration of habitats and connectivity between habitats, supporting (buffering and/or linking)

[10] WRPS, Part 1.9.5 Vision and Strategy for Waikato River.
[11] The WRPS has been converted into National Planning Standards format in the period since preparation and lodgement of the PC20 plan change request. My evidence refers to the updated provision references (i.e. ECO-O1 was previously Objective 3.19).

ecosystems, habitats and areas identified as significant habitats of indigenous fauna and the consideration and application of biodiversity offsets.

52. Policy ECO-P2 (Protect significant indigenous vegetation and significant habitats of indigenous fauna) applies to areas which are 'significant'. It requires significant habitats of indigenous fauna to be protected by ensuring the characteristics that contribute to its significance are not adversely affected to the extent that the significance of the habitat is reduced. It is important to be clear that this policy (and many other provisions in the WRPS) refers to protection of significant habitats of indigenous fauna[12] (my emphasis) rather than protection of significant indigenous fauna.

53. Policy ECO-P3 (Collaborative management) makes it clear that an integrated, efficient and collaborative approach involving landowners, resource managers, tangata whenua and other stakeholders is important for maintaining and enhancing indigenous biodiversity.

54. Method ECO-M1 (Maintain or enhance indigenous biodiversity) requires district plans to maintain or enhance indigenous biodiversity. This includes providing for positive indigenous biodiversity outcomes when managing activities including subdivision and land use change and creating buffers, linkages and corridors to protect and support indigenous biodiversity values.

55. Method ECO-M2 (Adverse effects on indigenous biodiversity) recognises that adverse effects on indigenous biodiversity are cumulative and lists the types of potential effects that may occur.

56. Method ECO-M3 (Avoidance, remediation, mitigation and offsetting (for indigenous biodiversity that is not significant)) is relevant for habitats of indigenous fauna which are 'non-significant'. It sets out that district plans shall require that where loss or degradation of indigenous biodiversity is authorised, adverse effects must be avoided, remedied or mitigated (whether by on-site or off-site methods). It also sets out that district plans should promote biodiversity offsets as a means to achieve no net loss of biodiversity where significant residual adverse effects are unable to be avoided, remedied or mitigated.

57. Method ECO-M13 (Protect areas of significant indigenous vegetation and significant habitats of indigenous fauna) is relevant for habitats of indigenous fauna which are 'significant'. It sets out that district plans shall protect areas of significant habitats of

[12] This is the same terminology used in s6(c) RMA.

indigenous fauna and require that activities avoid the loss or degradation of areas of significant habitats of indigenous fauna in preference to remediation or mitigation. Where adverse effects on significant habitats of indigenous fauna are unavoidable they must be remedied or mitigated and where effects are unable to be avoided, remedied or mitigated, any residual adverse effects which are more than minor must be offset to achieve no net loss. The method also requires recognition that remediation, mitigation and offsetting may not be appropriate in the case of significant habitats where indigenous biodiversity is rare, at risk, threatened or irreplaceable.

58. 'No net loss' is defined in the WRPS to mean *"no reasonably measurable overall reduction in the type, extent, long-term viability and functioning of indigenous biodiversity. When the term is applied in a policy context it has regard to the overall contribution of regulatory and non-regulatory methods as contained in local indigenous biodiversity strategies. It does not create a no adverse effects regime"*.

59. Principal reason ECO-PR1 (Maintain or enhance indigenous biodiversity) assists in explaining the different approaches to 'significant' and 'non-significant' areas in Methods ECO-M3 and ECO-M13. It includes the following explanation:

"No net loss of indigenous biodiversity is to be achieved at a regional scale and does not create a no adverse effects regime. Some activities may result in a loss of indigenous biodiversity; however this will be countered by other regulatory and non-regulatory methods that result in positive indigenous biodiversity outcomes. For non-significant indigenous biodiversity ECO-M3 seeks that district and regional plans avoid, remedy or mitigate adverse effects first, before promoting offsetting. ECO-M3 provides a more flexible approach to offsetting and no net loss than ECO-M13 which applies to areas of significant indigenous biodiversity".

60. It is therefore clear that application of the WRPS policy framework is reliant on identification of any parts of the PC20 site that are 'significant' as well as areas of the site that have indigenous biodiversity values which are 'non-significant'. The criteria for determining significance of indigenous biodiversity are contained in APP5 of the WRPS. The criteria are referred to in the assessments contained in Ms Cummings' and Mr Markham's evidence where they conclude that there are no 'significant' habitats within the PC20 site[13]. Ms Cummings does conclude, however, that there are low and moderate value (non-significant) habitats for long-tailed bats within the site and that there are some significant habitats for long-tailed bats in the surrounding area.

[13] Cummings EIC, paras. [60] to [68] and Markham EIC, para. [33].

61. Responsibilities of the regional council, local authorities and the Department of Conservation (**"DOC"**) in relation to indigenous biodiversity are addressed in the suite of Methods ECO-M5 to ECO-M12 and ECO-M15 to ECO-M17. They include information gathering (including monitoring), consideration of incentives and use of financial contributions or other economic instruments, having regard to indigenous biodiversity values through the Regional Pest Management Strategy, and funding and assistance for the protection and enhancement of indigenous biodiversity. ECO-M11 requires local indigenous biodiversity strategies to be developed by local authorities. The WDP contains a section on indigenous biodiversity but my understanding is that there is currently no local indigenous biodiversity strategy for the Waipa District.

62. Objective LF-O1 in the land and freshwater domain of the WRPS seeks to maintain or enhance the mauri and values of freshwater bodies, including by maintaining or enhancing the overall quality of freshwater within the region, by safeguarding ecosystem processes and indigenous species habitats, by enabling people to provide for their social, economic and cultural wellbeing and for their health and safety and by recognising the interrelationship between land use, water quality and water quantity.

63. Policy LP-3 addresses the way in which the effects of activities are to be managed to maintain or enhance the values of freshwater bodies. Although there are no freshwater bodies within the PC20 site, the policy includes some matters which are relevant to managing effects on artificial drains and downstream water bodies, such as reducing sediment and contaminants.

64. Method LF-M20 lists the matters which should be considered in managing the effects of subdivision, use and development, including through district plans and structure plans. The matters include encouraging water conservation measures, minimising potential for contaminants to enter freshwater bodies, managing flows into stormwater networks through low impact design, promotion of best practice stormwater management for urban areas, managing sediment entering stormwater networks and addressing adverse effects on the migration of indigenous species.

65. Objective UFD-O1 in the urban form and development topic of the WRPS relates to the built environment. It seeks to ensure that development of the built environment occurs in an integrated, sustainable and planned manner which enables positive environmental, social, cultural and economic outcomes. The objective lists a broad range of eleven matters which are required to be achieved, one of which is promoting positive indigenous

biodiversity outcomes. Another matter is providing for a range of commercial development to support the social and economic wellbeing of the region.

66. Policy UFD-P1 requires that subdivision, use and development of the built environment occurs in a planned and co-ordinated manner and must have regard to the development principles in APP11 of the WRPS. The development principles which are most relevant to the ecological effects of PC20 are:

"k. promote positive indigenous biodiversity outcomes and protect significant indigenous vegetation and significant habitats of indigenous fauna. Development which can enhance ecological integrity, such as by improving the maintenance, enhancement or development of ecological corridors, should be encouraged;

m. avoid as far as practicable adverse effects on natural hydrological characteristics and processes (including aquifer recharge and flooding patterns), soil stability, water quality and aquatic ecosystems including through methods such as low impact urban design and development (LIUDD);

r. support the Vision and Strategy for the Waikato River in the Waikato River catchment;

t. recognise and maintain or enhance ecosystem services."

67. Policy UFD-P11 relates to adopting the Future Proof land use pattern. It requires that new industrial development should predominantly be located in the Strategic Industrial Nodes in Table 35 (APP12) and in accordance with the indicative timings in that table. While a more detailed analysis of this matter is provided in Mr Grala's evidence, I agree with his opinion that the PC20 site forms part of the Hamilton Airport (WRPS) and Hamilton Airport/Southern Links (WRPS Change 1) Strategic Industrial Nodes where industrial growth is planned to occur.[14]

68. Policy IM-P1 in the integrated management overview of the WRPS requires an integrated approach to resource management to be adopted. I consider this policy to be important in the context of PC20 given the identification of the airport area as a Strategic Industrial Node in the WRPS and WRPS Change 1 and the presence of long-tailed bats within and around the PC20 site (who's home range includes areas within Waipa District, Hamilton City and Waikato District). Of particular relevance are clauses 1 and 5 of policy IM-P1

[14] Section 3.1.1 of the JWS in relation to Ecology and Bat Habitat also records agreement amongst all of the planners that Hamilton Airport/Southern Links is a Strategic Industrial Node.

which refer to the benefits of aligning decisions across boundaries[15] and to maximising opportunities to achieve multiple objectives.

69. Method IM-M9, which is associated with policy IM-P1, relates to off-site mitigation of adverse effects. It lists priorities for restoration or enhancement as possible alternatives to on-site mitigation in situations where it is not appropriate or practical to mitigate the adverse effects of an activity on-site. The priorities include public access to inland water bodies, the health and wellbeing of the Waikato River and its catchment, functioning and stability of natural physical resources (including enhancement of riparian areas), indigenous biodiversity (including creation, restoration and enhancement of wetlands and corridors) and natural character of rivers and their margins.

Part 2 RMA

70. The relevance of Part 2 RMA to an assessment of the Plan Change request is subject to the findings of the Supreme Court's decision in *Environmental Defence Society Inc v The New Zealand King Salmon Co Ltd* [2014] NZSC 38. That decision confirmed that there is no need for recourse up the hierarchy of provisions to Part 2 except where higher order planning documents are invalid, have incomplete coverage or have uncertain meaning.

71. Although the Plan Change request for PC20 includes an assessment of the proposal in terms of Part 2, in my opinion it is unnecessary for recourse to be had to Part 2 because the higher order planning documents are not invalid, incomplete or uncertain in their meaning. The higher order documents have been prepared in accordance with Part 2, including (but not limited to) the requirement to recognise and provide for the protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna as a matter of national importance (s6(c)).

72. I note that Mr Grala reaches the same conclusion as me regarding the relevance of Part 2. He also refers to the assessment of Part 2 in the Plan Change request in the event that the Commissioners were to find that recourse to Part 2 is required.[16]

[15] The extent to which a district plan needs to be consistent with the plans or proposed plans of adjacent territorial authorities is also a matter that regard must be had to under s74(2)(c) RMA when changing a district plan.
[16] Grala EIC, paras. [101] and [102].

PC20 APPROACH TO ECOLOGICAL MATTERS

Introduction

73. This section of my evidence describes the proposed changes to the WDP, including further changes which have been proposed following notification of PC20 which I refer to as the "amended provisions" (see Annexure 2 of Mr Grala's evidence). The amended provisions respond to submissions on ecology matters and are intended to strengthen the provisions for ecological effects management through the introduction of avoidance mechanisms and through more prescriptive requirements for matters such as habitat enhancement, building setbacks, lighting, vegetation removal and ecological management plans. I have contributed to the further evaluation of the amended provisions under s32AA RMA which is contained in Annexure 3 of Mr Grala's evidence.

74. The JWS Ecology and Bat Habitat records that *"All of the planning and bat ecology experts consider that the amended version of PPC20 (dated 2nd February 2023) is a significant improvement in relation to providing for bats compared to the notified version"*[17]. The JWS also records agreement by the planners to many of the changes in the amended provisions.[18] Where the JWS records agreement by all the planners to further changes recorded in Section 3.3.1 of the JWS, those changes have been incorporated into the amended provisions which are included in Annexure 2 of Mr Grala's evidence. No other changes have been made, except that the amended provisions now also include non-ecology changes (transportation for example) which are separately annotated in green text and separately described by Mr Grala.

Resource Management Issues

75. Although no changes were proposed to the Resource Management Issues under the notified provisions, the amended provisions include a new Section 10.2.3A which refers to the potential for development within the Northern Precinct to adversely affect habitat of the long-tailed bat. The issue also refers to the need to recognise and provide for the protection of identified areas of bat habitat.

76. This amendment was agreed to by all planners in the JWS Ecology and Bat Habitat.

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[17] Section 3.1.1, JWS Ecology and Bat Habitat.

[18] The agreed provisions are listed in Section 3.1.1 of the JWS Ecology and Bat Habitat as Issue Statement 10.2.3A, Policy 10.3.2.2A (except as recorded in the JWS), Activity Status Table 10.4.1, Performance Standard 10.4.2.3A, Performance Standard 10.4.2.14A (except as recorded in the JWS), Performance Standard 10.4.2.14B (except as recorded in the JWS) and Performance Standard 10.4.2.14C (except as recorded in the JWS). Some of the other amended provisions were not specifically discussed due to time constraints, including the structure plan and assessment criteria.

Objectives and Policies

77. The notified PC20 provisions introduced a new Policy 10.3.2.2A in Section 10 – Airport Business Zone to implement Objective 24.3.1 within the Northern Precinct. The amended wording for the policy reflects the proposal to introduce BHAs within the Northern Precinct through the amended Structure Plan. The policy is now proposed to read as follows:

> *"10.3.2.2A To maintain or enhance significant long-tailed bat habitat values by:*
>
> *(a) providing Bat Habitat Areas for long-tailed bats within the Northern Precinct;*
>
> *(b) controlling the location of buildings adjacent to Bat Habitat Areas;*
>
> *(c) minimising light spill into Bat Habitat Areas;*
>
> *(d) requiring the preparation and implementation of an Ecological Management Plan as part of development to:*
>
> *i. avoid more than minor adverse effects on long-tailed bat habitat values within Bat Habitat Areas;*
>
> *ii. avoid or mitigate more than minor adverse effects on long-tailed bat habitat values outside of Bat Habitat Areas; and*
>
> *iii. where any adverse effects on long-tailed bat habitat values are unable to be avoided or mitigated, ensure that any more than minor residual effects are offset or compensated to achieve no net loss."*

78. The amended policy addresses a key ecological issue for the Northern Precinct by requiring that significant long-tailed bat habitat values must be maintained or enhanced.

79. Clause (a) relates to the protection of the BHAs which are shown on the amended Structure Plan by requiring them to be provided at the time the site is developed. The BHAs will not be able to be developed for industrial uses but they may still have multi-functional use for stormwater and public amenity.

80. Clauses (b) and (c) reflect the importance of managing the interface between urban development and BHAs with respect to buildings and lighting respectively. The purpose of this is to avoid and minimise anthropogenic disturbance of bats within these areas. Lighting will be managed through a combination of buffer planting within the BHAs to protect core internal areas of habitat and lighting controls on adjoining sites.

81. Clause (d) reflects that the preparation and implementation of an Ecological Management Plan (**"EMP"**) is an important method for achieving the policy outcome. Sub-clauses (i) to (iii) establish the hierarchy of responses required, including avoiding more than minor effects on the protected habitat within BHAs. More than minor effects on bat habitat values outside the BHAs must be avoided or mitigated, except that where that is unable to happen then any more than minor residual effects associated with development of the Northern Precinct must be offset or compensated to achieve no net loss.

82. In anticipation that there will be residual adverse effects requiring offsetting or compensation because of development in areas outside the BHAs, TPL has recently entered into a conditional agreement to purchase an 11ha property (**"the proposed compensation site"**) which is located approximately 500m north-west of the PC20 site between the Waikato River and Raynes Road (**Figure 4**). Most of the proposed compensation site is located within the biodiversity corridor along the Waikato River which is mapped in the WDP. The habitat enhancement and protection opportunities and benefits of the proposed compensation site for long-tailed bats are explained in Ms Cummings' evidence.[19] I comment on the proposed compensation approach from a policy point of view later in my evidence.[20]

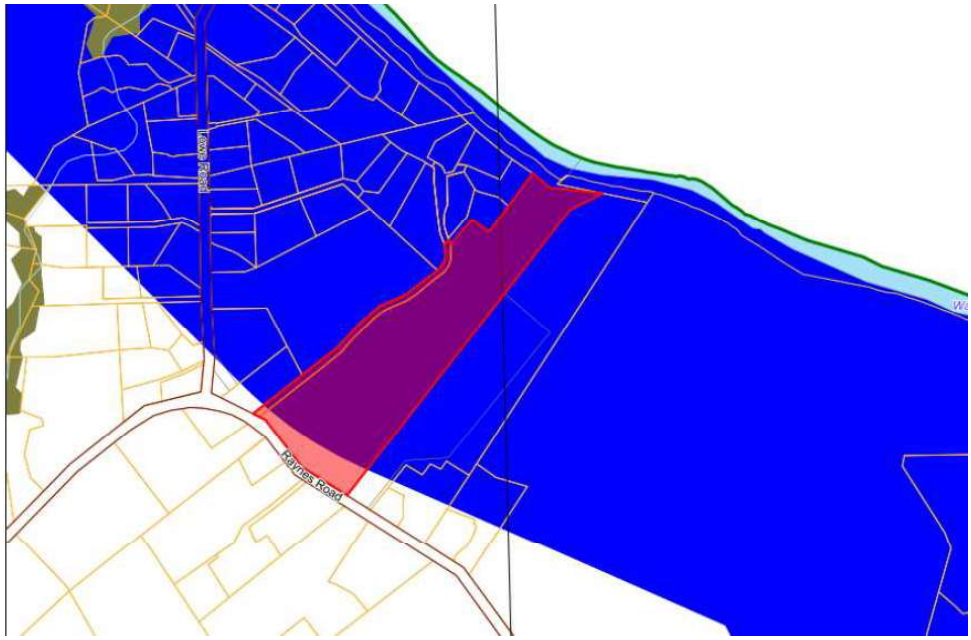

Figure 4: Biodiversity Corridor (blue) and Proposed Compensation Site (Red). Source: Waipa District Council GIS Maps

[19] Cummings EIC, paras. [106] to [110], para. [114], paras. [126] to [129] and para. [144].
[20] Inger EIC, para. [121].

83. The amendments to Policy 10.3.2.2A were agreed to by all planners and bat ecologists in the JWS Ecology and Bat Habitat, except for one discrete change which was supported by the planning and bat ecology experts for DOC (Jesse Gooding and Tertia Thurley) and by Gerry Kessels, as follows (underlined):

"To maintain or enhance significant long-tailed bat habitat values by:

(a) providing <u>functional</u> Bat Habitat Areas for long-tailed bats within the Northern Precinct;"

84. I disagree with this change for two reasons. Firstly, I consider that it is unclear what "functional" means. Secondly, the Structure Plan provisions establish where the BHAs are required to be located and how they are required to be enhanced. The 50m width of the proposed BHA corridor and the 20m buffer around the vegetation within the 'Hub' is consistent with the approach taken by HCC in PC5 and is supported by Ms Cummings. However, 'functionality' (assuming that means frequency of use by long-tailed bats) may be influenced by factors other than PC20 given there will likely be other development and activities occurring in the home range of the long-tailed bat (such as Southern Links and urbanisation in Peacocke) while the development of the PC20 site is occurring. I therefore consider the policy to be more appropriate without reference to "functional".

Structure Plan Framework

85. The amended Structure Plan in **Annexure 2**[21] identifies BHAs that have been identified by Ms Cummings' as the areas of the PC20 site that are amongst the highest value habitats for long-tailed bats and provide the best opportunities for protection and enhancement.[22] The BHAs include a grouping of trees within the 'Hub' and a tree row extending west towards Middle Road. The BHAs are connected to one another and to a kahikatea remnant which is a known key habitat area west of the PC20 site.

86. The BHA around the 'Hub' is 2.72ha in area and is based on the location of the existing grouping of trees with a 20m buffer applied around the outer edge of the trees. The BHA extending to Middle Road is 2.23ha in area and consists of a 50m wide corridor centred on the existing tree row.

87. The proposed Structure Plan amendments include the introduction of landscape cross-sections for the 50m wide BHA corridor which will be planted to enhance its function as long-tailed bat habitat. The cross-sections are based on a corridor design which has

[21] The amended Structure Plan is also contained in Appendix 10 of the amended provisions.
[22] Cummings EIC, para. [92].

previously been adopted under the Amberfield resource consent and by HCC in PC5. Enhancement planting will also occur within the BHA within the 'Hub' resulting in a total of approximately 4.95ha of habitat enhancement within the PC20 site.

88. The primary purpose of the BHAs will be to enable movement, foraging and potentially roosting for long-tailed bats. However, the BHAs are proposed to be multi-functional in that they may also accommodate stormwater infrastructure (such as swales and dry ponds) in suitable places and they may be used for public amenity. For example, the BHA area within the 'Hub' is likely to provide for daytime amenity as part of an important area of publicly accessible open space. Multi-functional use is important for efficiency and to minimise non-developable areas given the large area of land that is within the BHAs.

89. It is likely that the BHAs will be vested in Waipa District Council (**"WDC"**) as public reserves. However, it is possible that the BHA within the 'Hub' might have some alternative form of legal protection which also enables suitable public access. This could be a protective covenant in accordance with s108(2)(d) RMA or a consent notice in accordance with s221 RMA. The amended EMP rule includes a requirement that the Bat Management Plan (**"BMP"**) that must be prepared for the Northern Precinct as an important component of the overarching EMP must confirm the legal mechanisms proposed for protection of the BHAs.

90. The protection and enhancement of the BHAs is an important method for protecting long-tailed bat habitat within the Northern Precinct site, although other provisions are also necessary to protect the use of habitat by bats within the BHAs. These other provisions are commented on below.

91. The amended Structure Plan is attached to the JWS Ecology and Bat Habitat, however, no agreement was reached between the experts for the Applicant and Submitters on the location of the BHAs.

Vegetation Trimming, Pruning and Removal Rules

92. The amended provisions include changes to Section 10 – Airport Business Zone to introduce new rules for trimming, pruning and removal of trees and other vegetation within the Northern Precinct. The notified provisions for PC20 did not include any rules to restrict vegetation trimming, pruning or removal.

93. The most restrictive standards are proposed to apply to trimming, pruning or removal of vegetation inside a BHA. Under Rule 10.4.1(zc) trimming, pruning or removal of

vegetation inside a BHA will only be a Permitted Activity where the standards in Rule 10.4.2.14D are met. The standards are that the vegetation must have a diameter less than 150mm measured at a height of 1.4m or that the removal is authorised by an existing subdivision or land use consent. The rule will allow trimming, pruning or removal of smaller stature vegetation within the BHAs, while ensuring that larger vegetation which may have bat habitat values cannot be removed unless the removal is authorised by way of a resource consent. It is proposed that resource consent will be required for trimming, pruning or removal of vegetation inside a BHA as a Discretionary Activity where compliance with the Permitted Activity standards is not achieved.

94. Rule 10.4.2.14C applies to removal of vegetation outside of BHAs which is only proposed to be a Permitted Activity where the standards in Rule 10.4.2.14C are met. The standards are the same as the standards in Rule 10.4.2.14D except that there is an additional standard which permits removal of vegetation with a diameter larger than 150mm measured at a height of 1.4m if a report is prepared by a suitably experienced bat ecologist demonstrating that the vegetation is not a confirmed or potential bat roost tree. The report must be provided to WDC at least 5 working days prior to the removal of the tree. It is proposed that resource consent will be required for removal of vegetation outside a BHA as a Restricted Discretionary Activity where compliance with the Permitted Activity standards is not achieved.

95. Trimming and pruning of vegetation outside of BHAs is proposed to be a Permitted Activity under Rule 10.4.1(za). This reflects the lower likelihood of adverse effects where works are limited to trimming and pruning and are in areas outside the BHAs.

96. The changes to the activity status table and to the performance standards in Rule 10.4.2.14C were agreed by the planners in the JWS Ecology and Bat Habitat. The only change which was not recorded as agreed is to Rule 10.4.2.14D, although no alternative position is recorded in the JWS.

Building Setback Rule

97. The amended provisions include a new Rule 10.4.2.3A which requires a minimum building setback of 5m from the boundary of a BHA. The proposed 5m setback is consistent with the setbacks to identified bat habitat areas for buildings (both residential and non-residential) in the Medium Density Residential Zone, Local Centre Zone and Neighbourhood Centre Zone in Peacocke which are proposed by HCC in PC5.

98. This amendment was agreed to by all planners in the JWS Ecology and Bat Habitat.

Lighting Rule

99. The amended provisions include a new Rule 10.4.2.14A which relates to fixed artificial lighting in the Northern Precinct. The rule requires that added illuminance from fixed artificial lighting (both indoor and outdoor) must not exceed 0.3 lux when measured at the boundary of a BHA. It also sets specific limitations on the design of fixed artificial outdoor lighting where it is located within 100m of a BHA and requires that there must be no fixed artificial outdoor lighting within a BHA except where it is for emergency works associated with infrastructure.

100. The rule states that the standards do not apply to vehicle headlights or to lighting associated with aviation requirements for Hamilton Airport.

101. The exclusion for vehicle headlights is because lighting associated with vehicles cannot practicably be managed or measured by way of a standard limiting lux levels at a boundary (the reasons for this are explained in Mr McKensey's evidence[23]). This matter is instead proposed to be addressed under the proposed amended EMP provisions and through assessment criteria which require assessment of the extent to which transport corridors are located and designed to avoid or minimise effects of roadside lights and vehicle headlights on nearby BHAs and the bat population within these areas.

102. The exclusion for aviation requirements for Hamilton Airport is to maintain public safety and to ensure the operational requirements for the airport can continue to be met. Notwithstanding this, there are currently no aviation lights within the Northern Precinct or within 100m of the proposed BHAs. I understand that the likelihood of aviation lights needing to be located within, or even near, a BHA in the future is low.

103. Rule 10.4.2.14A was agreed to by the lighting expert (Mr McKensey), all planners and all bat ecologists in the JWS Ecology and Bat Habitat, except for two discrete changes to clause (b) which were supported by the bat ecologist for DOC (Tertia Thurley), as follows (underlined and strikethrough):

> *"(b) Where it is within 100m of a Bat Habitat Area, fixed artificial outdoor lighting must:*
>
> *i. Emit zero direct upward light.*
>
> *ii. Be installed with the light emitting surface facing directly down and be mounted as low as practical.*
>
> *iii. Be white LED with a maximum colour temperature of 2700K <u>and as little blue light as possible</u>.*

[23] McKensey EIC, para. [1.30].

iv. *In the case of exterior security lighting, be controlled by a motion sensor with a short duration timer (~~5 minutes~~ 1 minute).”*

104. The changes relate to technical lighting issues which are addressed in Mr McKensey's evidence. However, I consider it is also important to comment on the amendments that are proposed to clause (b)(iii) by Ms Thurley from a planning point of view. The proposed changes to (b)(iii) are imprecise in a Permitted Activity rule which would cause significant difficulty for determining whether the standard has been met. I note that the standards in clause (b) apply 'over and above' the requirement to achieve 0.3 lux maximum at the external boundary of the BHA which Mr McKensey considers is the key control.[24]

Ecological Management Plan Rule

105. Although the notified PC20 provisions included a requirement for an EMP to accompany resource consent applications for development of the Northern Precinct, substantial changes are proposed to Rule 10.4.2.14B in the amended provisions to make the requirements for the EMP clearer and more comprehensive.

106. The timing for the EMP to be prepared remains unchanged with the trigger being the earlier of the first land use consent application or the first subdivision consent application (excluding boundary adjustments) for the Northern Precinct. This covers any range of activities; the first consent application could be for a substantial development proposal or it could be for a much smaller scale activity such as the removal of a tree. Regardless, the EMP will need to be a comprehensive overarching management plan for the entire PC20 site.

107. Also unchanged is that all subsequent land use and subdivision consents must be consistent with the EMP that was approved through the first consent, or any variation thereof approved by way of a subsequent resource consent. I expect that the resource consent requiring the EMP will include conditions requiring reviews and updates to the management plan through a certification process. Rule 10.4.2.14B would require consistency with the latest version of the EMP that has been approved under a prior resource consent unless a new EMP is submitted as part of a subsequent resource consent application.

108. Most of the amendments which are proposed to the EMP provisions in Rule 10.4.2.14B involve the BMP, which is a sub-plan within the overarching EMP. The proposed amendments to the BMP requirements are summarised as follows:

[24] McKensey EIC, para. [1.27].

(a) The rule now explicitly states that the BMP must be prepared by a suitably experienced bat ecologist;

(b) A specific requirement has been added that the BMP must include planting specifications, drawings and an implementation programme. It requires that the planting of the bat corridor must be in general accordance with the BHA cross-sections (which are proposed to be included as part of the Structure Plan) and the implementation programme must ensure that habitat enhancement planting occurs as early as practicable;

(c) The BMP must detail how planting and light spill will be managed where transport corridors are proposed to cross BHAs;

(d) An assessment is required as part of the BMP of whether retention of any tree or trees which are confirmed or potential roost trees is practicable and appropriate. The criteria include (amongst other things) the proximity of the tree to a BHA;

(e) Specific reference has been added to DOC's tree removal protocols;

(f) The BMP now refers to more than minor residual effects on long-tailed bat habitat values being offset or compensated and that where off-site measures are proposed they should preferentially be within the known home range of the local long-tailed bat population. Mr Markham's evidence explains that residual effects are likely to be compensated rather than offset because it is not possible to classify and quantify residual effects on long-tailed bats.[25] Reference has been added to the need for consideration to be given to connectivity with features in the wider landscape and potential opportunities for co-ordination with other habitat enhancement initiatives. An example of this is the habitat enhancement which is proposed to be carried out by HCC for urbanisation of Peacocke under PC5;

(g) As referred to previously, the legal protection mechanisms for BHAs must be confirmed in the BMP;

(h) The amended provisions require pre- and post-construction monitoring to be detailed in the BMP. Specific regard is required to be given to how the pre- and post-construction monitoring could be co-ordinated with other monitoring, which may include monitoring that is required to be undertaken by Waka Kotahi and/or HCC for Southern Links and by HCC for urban development in Peacocke; and

[25] Markham EIC, para. [56].

(i) Procedures for reviewing and amending the BMP (if necessary) are required to be addressed in the management plan.

109. Rule 10.4.2.14B is also proposed to be amended so that the EMP must specifically address measures to avoid, remedy, mitigate, offset or compensate for any adverse effect which is more than minor on habitats of indigenous fauna, including birds and lizards. Mr Markham's evidence identifies that effects on vegetation, native birds, native lizards and freshwater fauna will be low, very low or negligible[26] and that compensation measures for long-tailed bats will have positive trickle-down effects for species other than bats[27]. Nevertheless, the amendments will ensure that further regard will be given to this at the time that the EMP is prepared.

110. Finally, the notified EMP provisions included a requirement for a Lighting Management Plan (**"LMP"**) to be prepared as part of the EMP. It was proposed that the LMP would apply to the 'Hub' and to the landscape buffer proposed around the site for the purposes of establishing a dark zone within those areas for use by long-tailed bats. The requirement for a LMP is deleted in the amended provisions. The alternative approach that is proposed involves identifying and mapping BHAs around habitat that will be retained and protected and ensuring the BHAs will remain dark spaces for use by long-tailed bats through prescriptive lighting standards which are proposed to be embedded in the WDP (Rule 10.4.2.14A). A key benefit of the alternative approach is that it achieves better certainty as to the lighting standards that must be met and the lighting standards will be in the WDP rather than contained in a management plan. It also ensures the standards will be targeted to the areas of the site where the creation of dark zones is most important for protecting long-tailed bat habitat values.

111. Rule 10.4.2.14B was agreed to by all planners and all bat ecologists in the JWS Ecology and Bat Habitat, except for one discrete change which was supported by the planner for DOC (Jesse Gooding). The JWS records that Mr Gooding seeks an amendment to include a specified outcome for the EMP within Rule 10.4.2.14B that implements his proposed revised wording for Policy 10.3.2.2A (i.e. the added reference to "functional").

112. I disagree with Mr Gooding that a specified outcome needs to be included in Rule 10.4.2.14B. The outcomes that will need to be achieved for long-tailed bats are clearly articulated in the extensive suite of proposed provisions, including Objective 24.3.1, Policy 10.3.2.2A (particularly clause (d)), Appendix S10 and the detailed list of matters

[26] Markham EIC, para. [48].
[27] Markham EIC, para. [70].

that the EMP must address in Rule 10.4.2.14B. Repeating those outcomes in Rule 10.4.2.14B would be inefficient and would result in the rule being unduly wordy.

Assessment Criteria

113. The amended provisions include new ecological assessment criteria specific to the Northern Precinct which are contained in Section 21.1.10.18A and Section 21.1.10.21.

114. The ecological assessment criteria in Section 21.1.10.18A relate to "Ecology – Northern Precinct" and are referred to as matters of discretion in numerous proposed rules for activities requiring resource consent as a Restricted Discretionary Activity.[28] The assessment criteria would also be able to guide consideration of any Discretionary Activity applications, although Council's discretion would not be restricted only to those matters.

115. Clause (a) is a broad criterion which relates to the extent to which proposals avoid, remedy or mitigate the effects of development on BHAs and other habitat values within the Northern Precinct.

116. Clause (b) relates to the specific matter of the location and design of transport corridors through BHAs and associated effects of roadside lights and vehicle headlights. I consider that a specific criterion is required to address this matter as it is not practical or efficient for light spill from vehicle headlights to be controlled via a lighting standard limiting permitted light spill.

117. Clause (c) requires consideration of offset or compensation measures off-site if there are any more than minor residual adverse effects on long-tailed bat habitat values.

118. The ecological assessment criteria in Section 21.1.10.21 relate to trimming, pruning or removal of trees or vegetation inside BHAs. Clauses (a) to (e) relate to the necessity for removal, alternatives to removal, the tree's ecological values and associated effects, whether the works will be undertaken in accordance with best practice and the suitability of any proposed replacement planting.

119. The JWS Ecology and Bat Habitat records that there was no specific discussion of the amended assessment criteria.

[28] Rule 10.4.2.3A (Rule – Minimum building setback from Bat Habitat Area), Rule 10.4.2.14A (Rules – Lighting) and Rules 10.4.2.14B and 10.4.2.14C (Rules – Ecology).

Assessment of PC20 Approach

120. The changes that I have described represent a significant tightening of the notified PC20 provisions for the management of effects on the habitat of long-tailed bats. The amended provisions go significantly further than the existing provisions that apply to the 41ha of land that is zoned ABZ within the Northern Precinct, which do not require or enable consideration of ecological effects at all. The amended provisions also impose a much higher threshold for management of ecological effects than any other provisions applying to development under the WDP.

121. I consider that the amended provisions give effect to the ecosystems and biodiversity and built environment topics in the WRPS, including objective ECO-O1, policies ECO-P1, ECO-P2 and ECO-P3, methods ECO-M3 and ECO-M13, objective UFD-O1, policy UFD-P1 and policy UFD-P11, and to the integrated management overview policy IM-P1 and method IM-M9. That is because:

(a) There will be low or very low levels of ecological effects associated with PC20 except for effects on long-tailed bats;

(b) There are no significant habitats of indigenous fauna, for long-tailed bats or any other species, within the PC20 site;

(c) Some of the non-significant habitat of indigenous fauna (long-tailed bats) within the PC20 site will be retained and enhanced. The proposed provisions protect existing and future bat habitat within the BHAs by requiring vegetation to be retained, light spill into the BHAs to be minimised and BHAs to be enhanced through planting which will encourage foraging, commuting and potentially roosting;

(d) There will be some loss of non-significant habitat outside the proposed BHAs (vegetation and pasture/maize) which is unable to be avoided without compromising the plan change outcomes (i.e. industrial development). The proposed provisions require the effects associated with loss of this non-significant habitat to be avoided or mitigated through implementation of tree removal protocols and through enhancement planting in BHAs to create new habitat. If any more than minor residual effects remain, the proposed provisions require that those effects must be offset or compensated to achieve no net loss;

(e) The protection of significant habitats of indigenous fauna (for long-tailed bats) outside of the PC20 site will be achieved by providing appropriate habitat

connectivity through the identification and protection of BHAs within the PC20 site and through the intended enhancement of the proposed compensation site;

(f) The enhancement planting within the BHAs and within the proposed compensation site will have benefits for bats and will significantly increase the spatial extent of planted bat habitat. The proposed compensation site is within a mapped biodiversity corridor area adjacent to the Waikato River which is a location where the WDP seeks to maintain and enhance connectivity and habitat of indigenous fauna and incentivise permanent protection;

(g) The approach summarised in (b) to (f) above will achieve objective ECO-O1, policy ECO-P1 and policy ECO-P2 as the extent and indigenous biodiversity values of ecosystems within the PC20 site will continue to exist in a healthy and functional state and significant habitats of indigenous fauna (for long-tailed bats) beyond the PC20 site will be protected. The approach is consistent with the preference for avoidance of adverse effects on significant habitats of indigenous fauna in method ECO-M13. It is also consistent with the more flexible approach provided for non-significant habitats of indigenous fauna in method ECO-M3;

(h) Achieving the healthy and functional ecosystem outcomes described in (g) is, however, subject to implementation of the proposed provisions for managing activities within the Northern Precinct and retention of key habitat in the surrounding area beyond the site. Policy ECO-P3 recognises that maintaining and enhancing indigenous biodiversity requires collaborative effort by landowners, resource managers (such as councils and DOC), tangata whenua and other stakeholders. This is particularly relevant given the site is surrounded by existing industrial development, Industrial zoned land (some of which is in the process of being developed for industrial activities) and Waka Kotahi's Southern Links roading designation. The site is also near the Peacocke growth area within Hamilton City and near other land between Peacocke and Hamilton Airport which is being considered for urban growth. A collaborative effort is therefore warranted but this largely falls outside of the PC20 process;

(i) Habitat enhancement and protection within the proposed compensation site will promote positive indigenous biodiversity outcomes for long-tailed bats and for other fauna and flora, which is consistent with the built environment objective UFD-O1, policy UFD-P1 and development principle k in APP11;

(j) Enhancement of the proposed compensation site will be consistent with policy IM-P1 because it will allow objectives related to development of the land surrounding the airport as a Strategic Industrial Node and maintenance and enhancement of indigenous biodiversity to both be achieved. The proposed approach is also consistent with method IM-M9 because it is not appropriate or practical for all adverse effects to be mitigated within the PC20 site and the priorities for restoration and enhancement which are listed in the method can be achieved at the proposed compensation site, including the health and wellbeing of the Waikato River and the creation and enhancement of biodiversity corridors. The details for the enhancement will be addressed in the EMP which is required to be submitted with resource consent applications for development and subdivision in the Northern Precinct; and

(k) PC20 is also a suitable response to recognition of the benefits of aligning decisions across boundaries in policy IM-P1. The amended provisions are generally consistent with HCC's proposed provisions in PC5.

122. I also consider that PC20 is consistent with the Vision and Strategy for the Waikato River and gives effect to the NPS-FM and the freshwater topic provisions in the WRPS. That is because:

(a) Consultation with tangata whenua/mana whenua has provided the opportunity for direct involvement in consideration of management of the freshwater values of the site;

(b) Mr Markham's evidence identifies that the artificial channels within the site have low ecological value for freshwater species and that there will be a very low level of effects on freshwater fauna from the development that will be enabled by PC20[29]; and

(c) Mr King's evidence explains that the proposed at-source soakage and pre-treatment of stormwater runoff will provide an overall improvement to the quality of stormwater discharged from the site relative to rural use[30]. PC20 will therefore contribute to the restoration and protection of the health and wellbeing of the Waikato River.

[29] Markham EIC, para. [48].
[30] King EIC, para. [46].

RESPONSE TO SUBMISSIONS RAISED

123. In this section of my evidence, I respond to the main points raised in submissions relating to ecological effects associated with PC20. A summary of matters raised in submissions which I respond to follows:

(a) Some submitters[31] consider that the notified PC20 provisions, including Policy 10.3.2.2A and Rule 10.4.2.14A, do not prioritise avoidance of bat habitat and is unduly focussed on potential roost trees as opposed the full spectrum of habitats used by long-tailed bats;

(b) DOC's submission seeks for significant bat habitat to be shown on the planning maps as SNA, as well as the application of the rules for indigenous biodiversity in Rule 24.4.1 to activities in SNAs;

(c) Some submitters[32] consider that cumulative impacts at a landscape scale have not been addressed with respect to maintaining connectivity through the PC20 area between key bat habitats in the surrounding landscape;

(d) Some submitters[33] have identified that a suitably qualified bat ecologist should be involved in the preparation of management plans relating to bat protection and that the EMP should be peer reviewed by ecologists from DOC and the Waikato Regional Council;

(e) Some submitters[34] have sought more detailed and robust lighting specifications to avoid effects on long-tailed bats;

(f) Some submitters[35] have sought plan provisions requiring monitoring of long-tailed bats, with triggers if effects are detected;

(g) Some submitters[36] have sought plan provisions which reference appropriate criteria for biodiversity offsetting and compensation, such as the principles in

[31] Including Submitter 7 – Royal Forest and Bird Protection Society of New Zealand, Submitter 11 – Waikato Regional Council and Submission 20 – Department of Conservation.
[32] Including Submitter 7 – Royal Forest and Bird Protection Society of New Zealand, Submitter 19 – Katherine Hay, Submitter 20 – Department of Conservation and Submitter 25 – Gerry Kessels.
[33] Including Submitter 7 – Royal Forest and Bird Protection Society of New Zealand, Submitter 11 – Waikato Regional Council and Submitter 20 – Department of Conservation.
[34] Including Submitter 7 – Royal Forest and Bird Protection Society of New Zealand, Submtter 20 – Department of Conservation, Submitter 22 – Christopher Hickey and Submitter 23 – Hamilton City Council.
[35] Including Submitter 20 – Department of Conservation.
[36] Including Submitter 20 – Department of Conservation.

Appendices 3 and 4 of the Exposure Draft of the National Policy Statement on Indigenous Biodiversity (**"Exposure Draft NPS-IB"**);

(h) HCC's submission seeks that long-tailed bat avoidance and mitigation measures should align with those proposed in the Peacocke Structure Plan area within Hamilton City;

(i) Some submitters[37] have referred to the Waikato Regional Bat Strategy; and

(j) A further submission by Waikato Regional Airport Ltd (**"WRAL"**) seeks to ensure that the PC20 provisions relate to the Northern Precinct only (rather than other areas within the ABZ) and is also concerned to ensure that protection and/or creation of bat corridors does not have unintended consequences for its aeronautical operations.

124. Many of these matters have been addressed in the amended provisions which I have explained earlier in my evidence. My additional comments below do not seek to repeat those explanations.

Prioritising avoidance of bat habitat

125. The extent to which bat habitat is required to be avoided under the PC20 provisions remains a concern for some submitters following ecological conferencing, including DOC whose bat ecologist (Tertia Thurley) considers there has not been enough consideration of on-site avoidance and minimisation.[38] By contrast, Ms Cumming's considers that the BHAs cover areas of the PC20 site that are amongst the highest value habitats for long-tailed bats and provide the best opportunities for protection and enhancement.[39] Her opinion is that enhancement of habitat within the BHAs and at the proposed compensation site will provide a superior outcome compared to further minimisation of habitat fragmentation on-site in this instance.[40]

126. I have explained how the amended provisions focus on avoidance of effects on the BHAs which are identified on the amended Structure Plan by requiring those areas to be provided and protected (vested or some other means) at the time of development. Anthropogenic effects on the BHAs will also be avoided and mitigated through planting, lighting standards, building setbacks and vegetation removal rules. The JWS Ecology

[37] Including Submitter 11 – Waikato Regional Council and Submitter 20 – Department of Conservation.
[38] JWS Ecology and Bat Habitat, Section 3.1.2.
[39] Cummings EIC, para. [92].
[40] Cummings EIC, para. [126].

and Bat Habitat records that the lighting and vegetation removal rules are largely agreed (except as I have identified earlier in my evidence) and that the building setback rule is agreed.

127. It remains unclear from submissions and the JWS Ecology and Bat Habitat what additional areas of the PC20 site that DOC (and other submitters) consider should be prioritised for avoidance.

Mapping of Significant Natural Areas

128. I consider that the proposed mapping of the BHAs within the Northern Precinct and the associated provisions will appropriately protect and enhance bat habitat within the PC20 site such that mapping SNAs and applying the SNA provisions is not necessary or warranted. That is because:

(a) Ms Cummings' and Mr Markham's evidence concludes that there are no 'significant' habitats within the PC20 site;[41]

(b) The BHAs include habitat which is non-significant. Even if those areas were determined to be 'significant', mapping significant habitat as a smaller component of the BHAs would be unnecessary and inefficient;

(c) Policy 10.3.2.2A requires BHAs to be provided (the legal mechanism for their protection must be confirmed through the BMP) and that more than minor adverse effects on long-tailed bat habitat values within BHAs must be avoided;

(d) The tree removal rules that apply within SNAs under the WDP do not restrict removal of non-indigenous vegetation, nor do they restrict trimming and pruning. The proposed rules for BHAs are more onerous because resource consent would be required for trimming, pruning or removal of all vegetation (indigenous and non-indigenous) in BHAs unless it has a diameter less than 150mm measured at 1.4m in height above ground; and

(e) The WDP includes maps and a schedule of all SNAs (Appendix N5) and bush stands (Appendix N8). Some of the areas around the PC20 site which Ms Cummings has identified as key or high value habitat for long-tailed bats[42] are not mapped or scheduled in the WDP, despite her assessment of them as higher value habitats than the PC20 site. It would be more appropriate for any additional SNAs

[41] Cummings EIC, paras. [60] to [68] and Markham EIC, para. [33].
[42] Cummings EIC, paras. [34] and [65].

(or bush stands) to be incorporated into the WDP through a wider landscape review and Council-initiated plan change.

Landscape scale impacts and maintaining habitat connectivity for bats

129. The amended provisions reflect consideration of the context of the PC20 site within the wider landscape. Ms Cummings' evidence[43] identifies how connectivity will be provided for bats through the protection and enhancement of BHAs within the site and through the enhancement of the proposed compensation site which will provide a vegetated corridor between the Waikato River and a stand of kahikatea trees which is located north-west of the PC20 site (and which is largely on Crown owned land). She identifies that the river and the kahikatea stand are both key habitat for bats.

Involvement of a bat ecologist in the preparation of management plans and reviews by DOC and WRC

130. Rule 10.4.2.14B in the amended provisions now requires that the BMP must be prepared by a suitably experienced bat ecologist. Ms Cummings has advised me that there is no bat-specific qualification in New Zealand (aside from a bat competency framework)[44] so it would not be appropriate for the rule to refer to a suitably qualified bat ecologist as was sought in some submissions. Agreement to the reference to suitably experienced bat ecologist in Rule 10.4.2.14B (and in Rule 10.4.2.14C) is recorded in the JWS Ecology and Bat Habitat.

131. In terms of the peer review of the EMP which was suggested by some submitters, Rule 10.4.2.14B in the amended provisions refers to co-ordination in terms of offsetting and compensation and monitoring so I expect that some liaison will be required with other stakeholders during the preparation of the EMP (including the BMP). It is possible that WDC may seek the input of others, such as DOC and WRC, as part of their review of the EMP and they would be entitled to do so. I do not consider this to be necessary detail to include in the rule, nor do I consider it appropriate for a rule to require a third party such as DOC or WRC to undertake a peer review role. Such matters are more appropriately dealt with in consent conditions.

132. Reference to a peer review by DOC and WRC is not included in the amended rule which the JWS Ecology and Bat Habitat records agreement to by the planners for WRC and by

[43] Cummings EIC, paras. [122] to [125].
[44] Cummings EIC, para. [131].

the planner for DOC (with one unrelated exception in the case of Mr Gooding relating to his proposed amendment so that the rule includes a specified outcome for the EMP).

Lighting specifications

133. Rule 10.4.2.14A in the amended provisions includes detailed lighting standards for the Northern Precinct.

Monitoring of long-tailed bats

134. DOC's submission suggests amendments to the EMP requirements (Rule 10.4.2.14B) to set on-going monitoring obligations and triggers for a halt to development if it is determined non-trivial effects on threatened species are occurring. The amended provisions include a new clause (a)(viii) in Rule 10.4.2.14B which requires details of pre- and post-development monitoring for long-tailed bats to be provided as part of the BMP (which forms part of the overarching EMP). The amendments also require the BMP to identify procedures for reviewing and amending (if necessary) the BMP.

135. The JWS Ecology and Bat Habitat records agreement by the planner for DOC to the amendments to Rule 10.4.2.14B with one exception which is unrelated to monitoring.

Criteria for off-setting or compensation for residual effects on long-tailed bats

136. I do not agree with the suggestion by some submitters to include biodiversity offsetting and compensation guidance from the Exposure Draft NPS-IB in the WDP. The Exposure Draft NPS-IB has not been gazetted and it may change. Including provisions from the Exposure Draft NPS-IB in the WDP would be premature and risks the district plan being inconsistent with the final NPS-IB.

137. I also consider including this information verbatim in the WDP to be unnecessary when the NPS-IB will apply anyway once it is gazetted in future. Assuming offsetting and compensation guidance is retained in the final NPS-IB then the guidance could be found there and it would be unnecessary for the WDP to repeat it, or worse include provisions in a district plan that may change. I do not consider this to be good resource management practice particularly as a national policy statement is a matter that regard must be had to anyway when considering a resource consent application (s104(1)(b)(iii) RMA).

Consistency with Peacocke Structure Plan

138. HCC's submission seeks for bat mitigation measures to be aligned to the provisions in PC5, including identification of key bat habitats, provisions for vegetation removal,

creation of bat buffer zones, 5m building setbacks to areas of bat habitat, and performance standards relating to lighting and enhancement vegetation. The amended provisions address these matters.

139. Although PC5 relates to a different site and different activities and a decision on the plan change hasn't been issued yet, the amended provisions are nevertheless generally consistent with HCC's proposed provisions in PC5.

References to the Waikato Regional Bat Strategy

140. I understand that the references to the Waikato Regional Bat Strategy in the submissions by WRC and DOC relate to the report which is titled 'Framing a Bat Strategy for the Waikato Region, Themes, Outcomes and Engaging Stakeholders, A Discussion Document for the Waikato Bat Alliance' dated 4 November 2021 (**"the Strategy"**). I understand that the Strategy was prepared by a consultant (Alternative Endings) on behalf of the Waikato Bat Alliance which is a group consisting of representatives from WRC, DOC, HCC, WDC, Waikato District Council and mana whenua.

141. The Strategy relates to an approximately 5,900km^2 area that comprises the Waikato and Waipa Districts and Hamilton City.[45] Waipa District Council's Strategic Planning and Policy Committee endorsed the Strategy in November 2021.[46] I was unable to find a copy of the Strategy online but Ms Cummings has been provided a copy of it by WRC.

142. The Strategy provides an overview of long-tailed bats and the challenges and potential opportunities for collaborating on bat habitat protection and restoration measures in the Waikato region. Its stated purpose includes to resolve dilemmas and conflict outside legal and planning challenges. The Strategy emphasises the need for a collaborative approach and a willingness to think about landscape scale connectivity.

143. The identification of BHAs within the Northern Precinct and the conditional purchase of the proposed compensation site by TPL reflects a significant commitment on behalf of the Applicant to landscape scale connectivity.

144. In addition, Rule 10.4.2.14B in the amended provisions for PC20 requires that offsetting or compensation under the BMP must consider connectivity with features in the wider landscape and potential opportunities for co-ordination with other habitat enhancement initiatives. The rule also requires consideration of how monitoring for long-tailed bats

[45] Page 4, 'Framing a Bat Strategy for the Waikato Region, Themes, Outcomes and Engaging Stakeholders, A Discussion Document for the Waikato Bat Alliance' (4 November 2021).
[46] https://www.waipadc.govt.nz/our-council/news?item=id:2g8zmgje617q9sv4jttl

could be co-ordinated with other monitoring occurring within the known home range of the local long-tailed bat population.

145. In terms of the RMA, the Strategy is not a policy document that regard must be had to or that decisions must give effect to. For example, it is not a strategy prepared under another Act of the kind referenced in s74(2)(b)(1). While little weight can be placed on the Strategy, I consider it encouraging that the local authorities and DOC have agreed that a collaborative approach is required given the range of stakeholders with interests and responsibilities for protection and restoration of habitat for long-tailed bats but I do not support its reference in a district plan.

PC20 provisions to apply to the Northern Precinct only and avoid impacts on aeronautical operations

146. I agree that the PC20 provisions must be limited to the Northern Precinct only and confirm that the amended provisions have been drafted accordingly.

147. I also agree that it is imperative that the BHAs (and other PC20 provisions) must ensure that adverse effects on aeronautical operations at Hamilton Airport are avoided to maintain the safety and ongoing viability of the airport as a key regional transport hub. This is consistent with the following provisions in the WRPS and WDP:

(a) Hamilton Airport is identified as regionally significant infrastructure in the WRPS. Policy EIT-P1 of the WRPS requires that management of the built environment must have particular regard to protecting the effectiveness and efficiency of regionally significant infrastructure. Method EIT-M5 requires that local authorities should ensure that appropriate measures are implemented to avoid adverse effects of development of the built environment on the safe, efficient and effective operation of regionally significant infrastructure; and

(b) Hamilton Airport is described in Sections 1.2.6, 1.10.1 and 10.2.1 of the WDP as a facility of regional significance and social and economic importance. Policy 1.3.1.4 of the WDP relates to the Hamilton Airport Strategic Node and seeks to ensure that the mixed use, industrial and business area supports the airport's role as a transport hub. Objective 10.3.1 and Policy 10.3.1.3 require that adverse effects on the airport and its operations from development within the ABZ must be managed.

RESPONSE TO THE SECTION 42A REPORT

148. Section 7.6 of the Section 42A Report addresses the WRPS and cites provisions which the report author considers to be relevant to PC20. I have identified some additional provisions in my evidence which I consider to be relevant. My assessment of those provisions is also contained in my evidence.

149. Table 1 in Section 8.1.1 of the Section 42A Report groups matters raised in submissions into topics and sub-topics which are commented on in Section 9. The sub-topics which are most relevant to my evidence are 2.2 Bat Habitat & Biodiversity, 3.1 Amenity / Landscape Planting and 3.2 Lighting. I comment on these matters and several matters raised in the Landscape Review[47] as follows:

(a) The Section 42A Report recommends acceptance of the amended provisions in full with respect to ecology matters[48]. No further ecology related changes have been recommended in the Section 42A Report;

(b) No additional information is identified as being required in the Section 42A Report with respect to the ecology sub-topics referred to above, except in relation to the Landscape Review recommendations which are addressed below;

(c) The Landscape Review recommends that internal street and tree planting should integrate recommendations in terms of species which will support bat habitat and passage[49]. The planting of BHAs will be focused on creating habitat for bats and the details will be addressed through the EMP requirements (Rule 10.4.2.14B(a)(i)). However, Ms Cummings explains in her evidence that choosing tree species on the basis of providing habitat for bats outside of the BHAs will be of little utility to bats;[50] and

(d) The Landscape Peer Review[51] and Section 9.13.13 of the Section 42A Report recommend stronger protection of any high quality established existing trees on-site which form a crucial part of the character of the area. They suggest this would require further input from a qualified arborist in combination with a bat specialist to identify any high value trees (in terms of habitat and amenity) that require protection and which must be integrated into any further development. Examples

[47] Landscape Review by Angela Brown (Align) dated 21 February 2023 (Section 42A Report, Appendix 4).
[48] The recommended track change amendments in Appendix 1 of the Section 42A Report are the same as the amended provisions which are included in Annexure 2 of Mr Grala's EIC for ecology matters.
[49] Landscape Review, para. [41].
[50] Cummings EIC, para. [149].
[51] Landscape Review, para. [41].

are given in the Landscape Review of the plane trees which extend from Middle Road (photo in Figure 3 of the Landscape Review). Subsequent comments in the Landscape Review[52] recognise that the plane trees and the trees within the 'Hub' are within the proposed BHAs which will be protected and enhanced. It supports this outcome from a landscape perspective and also notes potential positive landscape benefits if habitat enhancement within the proposed compensation site occurs.

(e) Within the BHAs, removal of trees with a diameter greater than 150mm measured at 1.4m in height above ground level would require resource consent as a Discretionary Activity under the amended provisions (Rule 10.4.2.14D). I consider the plane trees and the trees within the 'Hub' will be adequately protected because they are within the BHAs and Rule 10.4.2.14D would prevent the trees being removed unless resource consent is obtained. I consider that further changes are unnecessary and may be contrary to the reference in the WDP to the land surrounding the airport being a scarce and valuable resource which needs to be efficiently and effectively used.

CONCLUSION

150. The potential ecological effects arising from PC20 can be managed through the application of the amended provisions in the WDP which represent a significant tightening of the notified PC20 provisions for the management of effects on the habitat of long-tailed bats.

151. PC20 will give effect to relevant National Policy Statements and the WRPS and will be consistent with the Vision and Strategy for the Waikato River.

152. The Section 42A Report recommends that PC20 be approved and accepts the amended provisions in full with respect to ecology matters.

153. I consider that PC20 appropriately addresses ecological matters and that it is appropriate for the Plan Change request to be approved.

Ben Inger

28 February 2023

[52] Landscape Review, para. [47].

ANNEXURE 1 – WRPS PROVISIONS CITED

Notes:

Red text = notified WRPS Change 1 amendments.

IM – Integrated management

IM-P1 – Integrated approach

An integrated approach to resource management will be adopted that:

1. recognises the inter-connected nature of natural and physical resources (including spatially and temporally) and the benefits of aligning the decisions of relevant management agencies across boundaries;
2. maximises the benefits and efficiencies of working together;
3. recognises the multiple values of natural and physical resources including ecosystem services;
4. responds to the nature and values of the resource and the diversity of effects (including cumulative effects) that can occur;
5. maximises opportunities to achieve multiple objectives;
6. takes a long-term strategic approach which recognises the changing environment and changing resource use pressures and trends;
7. applies consistent and best practice standards and processes to decision making; and
8. establishes, where appropriate, a planning framework which sets clear limits and thresholds for resource use.

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6. takes a long-term strategic approach which recognises the changing environment and changing resource use pressures and trends;
7. applies consistent and best practice standards and processes to decision making; and
8. establishes, where appropriate, a planning framework which sets clear limits and thresholds for resource use.

IM-M9 – Offsite mitigation of adverse effects

Local authorities should consider the following priorities (not listed in order of importance) for restoration or enhancement as possible alternatives to onsite mitigation in situations where it is not appropriate or practical to mitigate the adverse effects of an activity on site:

1. public access to and along the coastal marine area and land adjacent to the coast and inland water bodies;
2. health and wellbeing of the Waikato River and its catchment;
3. functioning and stability of natural physical processes (including by retirement of land along the coastal margin, retirement of steep land from production, and enhancement of riparian areas);
4. indigenous biodiversity (including creation, restoration and enhancement of wetlands and corridors);
5. degraded geothermal features/characteristics; and

6. natural character of the coastal environment, wetlands, and lakes and rivers and their margins.

ECO – Ecosystems and indigenous biodiversity

ECO-O1 – Ecological integrity and indigenous biodiversity

The full range of ecosystem types, their extent and the indigenous biodiversity that those ecosystems can support exist in a healthy and functional state.

ECO-P1 – Maintain or enhance indigenous biodiversity

Promote positive indigenous biodiversity outcomes to maintain the full range of ecosystem types and maintain or enhance their spatial extent as necessary to achieve healthy ecological functioning of ecosystems, with a particular focus on:

1. working towards achieving no net loss of indigenous biodiversity at a regional scale;
2. the continued functioning of ecological processes;
3. the re-creation and restoration of habitats and connectivity between habitats;
4. supporting (buffering and/or linking) ecosystems, habitats and areas identified as significant indigenous vegetation and significant habitats of indigenous fauna;
5. providing ecosystem services;
6. the health and wellbeing of the Waikato River and its catchment;
7. contribution to natural character and amenity values;
8. tangata whenua relationships with indigenous biodiversity including their holistic view of ecosystems and the environment;
9. managing the density, range and viability of indigenous flora and fauna; and
10. the consideration and application of biodiversity offsets.

ECO-P2 – Protect significant indigenous vegetation and significant habitats of indigenous fauna

Significant indigenous vegetation and the significant habitats of indigenous fauna shall be protected by ensuring the characteristics that contribute to its significance are not adversely affected to the extent that the significance of the vegetation or habitat is reduced.

ECO-P3 – Collaborative management

Maintaining and enhancing indigenous biodiversity shall be promoted in an integrated and efficient manner including by working collaboratively with landowners, resource managers, tangata whenua and other stakeholders.

ECO-M1 – Maintain or enhance indigenous biodiversity

Regional and district plans shall maintain or enhance indigenous biodiversity, including by:

1. providing for positive indigenous biodiversity outcomes when managing activities including subdivision and land use change;
2. having regard to any local indigenous biodiversity strategies developed under ECO-M11; and
3. creating buffers, linkages and corridors to protect and support indigenous biodiversity values, including esplanade reserves and esplanade strips to maintain and enhance indigenous biodiversity values.

ECO-M2 – Adverse effects on indigenous biodiversity

Regional and district plans shall recognise that adverse effects on indigenous biodiversity within terrestrial, freshwater and coastal environments are cumulative and may include:

1. fragmentation and isolation of indigenous ecosystems and habitats;
2. reduction in the extent and quality of indigenous ecosystems and habitats;
3. loss of corridors or connections linking indigenous ecosystems and habitat fragments or between ecosystems and habitats;
4. the loss of ecological sequences;
5. loss or disruption to migratory pathways in water, land or air;

6. effects of changes to hydrological flows, water levels, and water quality on ecosystems;
7. loss of buffering of indigenous ecosystems;
8. loss of ecosystem services;
9. loss, damage or disruption to ecological processes, functions and ecological integrity;
10. changes resulting in an increased threat from animal and plant pests;
11. effects which contribute to a cumulative loss or degradation of indigenous habitats and ecosystems;
12. noise, visual and physical disturbance on indigenous species, particularly within the coastal environment; and
13. loss of habitat that supports or provides a key life-cycle function for indigenous species listed as 'Threatened' or 'At Risk' in the New Zealand Threat Classification System lists.

ECO-M3 – Avoidance, remediation, mitigation and offsetting (for indigenous biodiversity that is not significant)

Regional and district plans:

1. for non-significant indigenous vegetation and non-significant habitats of indigenous fauna (excluding activities pursuant to ECO-M4):
    a. shall require that where loss or degradation of indigenous biodiversity is authorised adverse effects are avoided, remedied or mitigated (whether by onsite or offsite methods).
    b. should promote biodiversity offsets as a means to achieve no net loss of indigenous biodiversity where significant residual adverse effects are unable to be avoided, remedied or mitigated.
    c. when considering remediation, mitigation or offsetting, methods may include the following:
        i. replacing the indigenous biodiversity that has been lost or degraded;
        ii. replacing like-for-like habitats or ecosystems (including being of at least equivalent size or ecological value);
        iii. the legal and physical protection of existing habitat;
        iv. the re-creation of habitat; or
        v. replacing habitats or ecosystems with indigenous biodiversity of greater ecological value.
2. for significant indigenous vegetation and significant habitats of indigenous fauna ECO-M13 applies.

ECO-M13 – Protect areas of significant indigenous vegetation and significant habitats of indigenous fauna

Regional and district plans shall (excluding activities pursuant to ECO-M4):

1. protect areas of significant indigenous vegetation and significant habitats of indigenous fauna;
2. require that activities avoid the loss or degradation of areas of significant indigenous vegetation and significant habitats of indigenous fauna in preference to remediation or mitigation;
3. require that any unavoidable adverse effects on areas of significant indigenous vegetation and significant habitats of indigenous fauna are remedied or mitigated;
4. where any adverse effects are unable to be avoided, remedied or mitigated in accordance with (2) and (3), more than minor residual adverse effects shall be offset to achieve no net loss; and
5. ensure that remediation, mitigation or offsetting as a first priority relates to the indigenous biodiversity that has been lost or degraded (whether by on-site or off-site methods). Methods may include the following:
    a. replace like-for-like habitats or ecosystems (including being of at least equivalent size or ecological value);
    b. involve the re-creation of habitat;
    c. develop or enhance areas of alternative habitat supporting similar ecology/significance; or
    d. involve the legal and physical protection of existing habitat;

6. recognise that remediation, mitigation and offsetting may not be appropriate where the indigenous biodiversity is rare, at risk, threatened or irreplaceable; and
7. have regard to the functional necessity of activities being located in or near areas of significant indigenous vegetation and significant habitats of indigenous fauna where no reasonably practicable alternative location exists.

ECO-PR1 – Maintain or enhance indigenous biodiversity

ECO-P1 guides Waikato Regional Council and territorial authorities to maintain indigenous biodiversity wherever it occurs. An important component of the policy direction is to work towards no net loss for all indigenous biodiversity at a regional scale. The policy is also important where ecosystems have been depleted and fragmented, such as coastal and lowland ecosystems, and where maintaining indigenous biodiversity in the long term requires enhancement and restoration. The Policy will be implemented through a combination of both regulatory and non-regulatory mechanisms. This provides the flexibility to manage the varying local contexts and take into account the positive effects that some activities may have on indigenous biodiversity. Examples of this include positive effects from riparian planting.

ECO-M1 recognises that there is a range of mechanisms by which regional and district plans can maintain or enhance indigenous biodiversity when managing the effects of activities. Such mechanisms can provide the flexibility to cope with varying local situations or locally specific types of activities, such as within the cycles of plantation forestry.

ECO-M2 provides guidance on adverse effects to be avoided, remedied, mitigated and offset when managing the effects of activities.

No net loss of indigenous biodiversity is to be achieved at a regional scale and does not create a no adverse effects regime. Some activities may result in a loss of indigenous biodiversity; however this will be countered by other regulatory and non-regulatory methods that result in positive indigenous biodiversity outcomes. For non-significant indigenous biodiversity ECO-M3 seeks that district and regional plans avoid, remedy or mitigate adverse effects first, before promoting offsetting. ECO-M3 provides a more flexible approach to offsetting and no net loss than ECO-M13 which applies to areas of significant indigenous biodiversity.

ECO-M4 provides a list of activities that may be provided for as permitted activities in regional and district plans where their effects are minor.

ECO-M5 to ECO-M11 provide a range of non-regulatory approaches intended to allow councils to work collaboratively and strategically to identify opportunities and priorities for enhancement and restoration activities, and to ensure that they have appropriate funding mechanisms, incentives and information to achieve positive indigenous biodiversity outcomes. ECO-M5 recognises that ecosystem health is an integral component of ecosystem functioning, and that establishing appropriate methodology and baseline data will enable this to be monitored.

ECO-M11 helps determine the most appropriate mix of regulatory and non-regulatory methods to address biodiversity management for each district. This method will help to clarify how a no net loss approach should be applied within the broader strategic picture of district-wide indigenous biodiversity maintenance and enhancement. The Method is also important for determining how each district can contribute to no net loss at a regional scale.

APP5 – Criteria for determining significance of indigenous biodiversity

The following criteria are to be used to identify areas of significant indigenous biodiversity and their characteristics as they exist at the time the criteria are being applied. Criteria may be specific to a habitat type including water, land or airspace or be more inclusive to address connectivity, or movement of species across habitat types.
To be identified as significant an area needs to meet one or more of the criteria identified in the table below.
Areas of significant indigenous biodiversity shall not include areas that have been created and subsequently maintained for or in connection with:

- artificial structures (unless they have been created specifically or primarily for the purpose of protecting or enhancing biodiversity); or
- beach nourishment and coastal planting (unless they have been created specifically or primarily for the purpose of protecting or enhancing biodiversity).

Table 28 – Criteria for determining significance of indigenous biodiversity

Previously assessed site	
1.	It is indigenous vegetation or habitat for indigenous fauna that is currently, or is recommended to be, set aside by statute or covenant or by the Nature Heritage Fund, or Ngā Whenua Rāhui committees, or the Queen Elizabeth the Second National Trust Board of Directors, specifically for the protection of biodiversity, and meets at least one of criteria 3-11.
Ecological values	
2	In the Coastal Marine Area, it is indigenous vegetation or habitat for indigenous fauna that has reduced in extent or degraded due to historic or present anthropogenic activity to a level where the ecological sustainability of the ecosystem is threatened.
3.	It is vegetation or habitat that is currently habitat for indigenous species or associations of indigenous species that are: • classed as threatened or at risk, or • endemic to the Waikato region, or • at the limit of their natural range.
4.	It is indigenous vegetation, habitat or ecosystem type that is under-represented (20% or less of its known or likely original extent remaining) in an Ecological District, or Ecological Region, or nationally.
5.	It is indigenous vegetation or habitat that is, and prior to human settlement was, nationally uncommon such as geothermal, chenier plain, or karst ecosystems, hydrothermal vents or cold seeps.
6.	It is wetland habitat for indigenous plant communities and/or indigenous fauna communities (excluding exotic rush/pasture communities) that has not been created and subsequently maintained for or in connection with: • waste treatment; • wastewater renovation; • hydro electric power lakes (excluding Lake Taupō); • water storage for irrigation; or • water supply storage; unless in those instances they meet the criteria in Whaley et al. (1995).
7.	It is an area of indigenous vegetation or naturally occurring habitat that is large relative to other examples in the Waikato region of similar habitat types, and which contains all or almost all indigenous species typical of that habitat type. Note this criterion is not intended to select the largest example only in the Waikato region of any habitat type.
8.	It is aquatic habitat (excluding artificial water bodies, except for those created for the maintenance and enhancement of biodiversity or as mitigation as part of a consented activity) that is within a stream, river, lake, groundwater system, wetland, intertidal mudflat or estuary, or any other part of the coastal marine area and their margins, that

	is critical to the self sustainability of an indigenous species within a catchment of the Waikato region, or within the coastal marine area. In this context "critical" means essential for a specific component of the life cycle and includes breeding and spawning grounds, juvenile nursery areas, important feeding areas and migratory and dispersal pathways of an indigenous species. This includes areas that maintain connectivity between habitats.
9.	It is an area of indigenous vegetation or habitat that is a healthy and representative example of its type because: • its structure, composition, and ecological processes are largely intact; and • if protected from the adverse effects of plant and animal pests and of adjacent land and water use (e.g. stock, discharges, erosion, sediment disturbance), can maintain its ecological sustainability over time.
10.	It is an area of indigenous vegetation or habitat that forms part of an ecological sequence, that is either not common in the Waikato region or an ecological district, or is an exceptional, representative example of its type.
Role in protecting ecologically significant area	
11.	It is an area of indigenous vegetation or habitat for indigenous species (which habitat is either naturally occurring or has been established as a mitigation measure) that forms, either on its own or in combination with other similar areas, an ecological buffer, linkage or corridor and which is necessary to protect any site identified as significant under criteria 1-10 from external adverse effects.

EIT – Energy, infrastructure and transport

EIT-P1 – Significant infrastructure and energy resources

Management of the built environment ensures particular regard is given to:

1. that the effectiveness and efficiency of existing and planned regionally significant infrastructure is protected;
2. the benefits that can be gained from the development and use of regionally significant infrastructure and energy resources, recognising and providing for the particular benefits of renewable electricity generation, electricity transmission, and municipal water supply; and
3. the locational and technical practicalities associated with renewable electricity generation and the technical and operational requirements of the electricity transmission network.

EIT-M5 – Measures to avoid adverse effects

Local authorities should ensure that appropriate measures are implemented to avoid adverse effects of development of the built environment on the safe, efficient and effective operation of regionally significant infrastructure. With respect to electricity transmission corridors, development of the built environment should also take into account National Policy Statements, National Environmental Standards and Transmission Corridor Guidelines as relevant to the circumstances.

LF – Land and freshwater

LF-O1 – Mauri and values of fresh water bodies

Maintain or enhance the mauri and identified values of fresh water bodies including by:

1. maintaining or enhancing the overall quality of freshwater within the region;
2. safeguarding ecosystem processes and indigenous species habitats;
3. safeguarding the outstanding values of identified outstanding freshwater bodies and the significant values of wetlands;

4. safeguarding and improving the life supporting capacity of freshwater bodies where they have been degraded as a result of human activities, with demonstrable progress made by 2030;
5. establishing objectives, limits and targets, for freshwater bodies that will determine how they will be managed;
6. enabling people to provide for their social, economic and cultural wellbeing and for their health and safety;
7. recognising that there will be variable management responses required for different catchments of the region; and
8. recognising the interrelationship between land use, water quality and water quantity.

LF-P3 – All fresh water bodies

Manage the effects of activities to maintain or enhance the identified values of fresh water bodies and coastal water including by:

1. reducing:
    a. sediment in fresh water bodies and coastal water (including bank instability) that is derived from human based activities;
    b. accelerated sedimentation of estuaries;
    c. microbial and nutrient contamination;
    d. other identified contaminants; and
2. Where appropriate, protection and enhancement of:
    a. riparian and wetland habitat;
    b. instream habitat diversity;
    c. indigenous biodiversity; and
3. providing for migratory patterns of indigenous freshwater species up and down rivers and streams and to the coastal marine area where practicable; and
4. avoiding:
    a. physical modification of fresh water bodies where practicable; and
    b. inappropriate development in flood plains; and
5. managing:
    a. groundwater and surface water flow/level regimes, including flow regime variability;
    b. linkages between groundwater and surface water; and
    c. pest and weed species where they contribute to fresh water body and coastal water degradation.

LF-M20 – Effects of subdivision, use and development

Territorial authorities should, in accordance with their statutory responsibilities, manage the effects of subdivision, use and development either by statutory or non-statutory means, including through district plans, development and subdivision guidelines and structure plan by considering the following:

1. the availability of water, including by encouraging water conservation measures;
2. avoid, remedy or mitigate the adverse effects of the sealing of known aquifer recharge areas;
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
9. addressing adverse effects on the migration of indigenous species.

UFD – Urban form and development

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:

1. promoting positive indigenous biodiversity outcomes;
2. preserving and protecting natural character, and protecting outstanding natural features and landscapes from inappropriate subdivision, use, and development;
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;
4. integrating land use and water planning, including to ensure that sufficient water is available to support future planned growth;
5. recognising and protecting the value and long-term benefits of regionally significant infrastructure;
6. protecting access to identified significant mineral resources;
7. minimising land use conflicts, including minimising potential for reverse sensitivity;
8. anticipating and responding to changing land use pressures outside the Waikato region which may impact on the built environment within the region;
9. providing for the development, operation, maintenance and upgrading of new and existing electricity transmission and renewable electricity generation activities including small and community scale generation;
10. promoting a viable and vibrant central business district in Hamilton city, with a supporting network of sub-regional and town centres; ~~and~~
11. providing for a range of commercial development to support the social and economic wellbeing of the region~~.~~; and
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;
    b. improve housing choice, quality, and affordability;
    c. enable a variety of homes that enable Māori to express their cultural traditions and norms;
    d. ensure sufficient development capacity, supported by integrated infrastructure provision, for identified housing and business needs in the short, medium and long term;
    e. improves connectivity within urban areas, particularly by active transport and public transport;
    f. take into account the values and aspirations of hapū and iwi for urban development.

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;
3. is based on sufficient information to allow assessment of the potential long-term effects of subdivision, use and development; and
4. has regard to the existing built environment.

APP11 – Development principles

General development principles

~~New development should:~~The general development principles for new development are:

a. support existing urban areas in preference to creating new ones;
b. occur in a manner that provides clear delineation between urban areas and rural areas;
c. make use of opportunities for urban intensification and redevelopment to minimise the need for urban development in greenfield areas;
d. not compromise the safe, efficient and effective operation and use of existing and planned infrastructure, including transport infrastructure, and should allow for

future infrastructure needs, including maintenance and upgrading, where these can be anticipated;

e. connect well with existing and planned development and infrastructure;
f. identify water requirements necessary to support development and ensure the availability of the volumes required;
g. be planned and designed to achieve the efficient use of water;
h. be directed away from identified significant mineral resources and their access routes, natural hazard areas, energy and transmission corridors, locations identified as likely renewable energy generation sites and their associated energy resources, regionally significant industry, high class soils, and primary production activities on those high class soils;
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;
j. maintain or enhance landscape values and provide for the protection of historic and cultural heritage;
k. promote positive indigenous biodiversity outcomes and protect significant indigenous vegetation and significant habitats of indigenous fauna. Development which can enhance ecological integrity, such as by improving the maintenance, enhancement or development of ecological corridors, should be encouraged;
l. maintain and enhance public access to and along the coastal marine area, lakes, and rivers;
m. avoid as far as practicable adverse effects on natural hydrological characteristics and processes (including aquifer recharge and flooding patterns), soil stability, water quality and aquatic ecosystems including through methods such as low impact urban design and development (LIUDD);
n. adopt sustainable design technologies, such as the incorporation of energy-efficient (including passive solar) design, low-energy street lighting, rain gardens, renewable energy technologies, rainwater harvesting and grey water recycling techniques where appropriate;
o. not result in incompatible adjacent land uses (including those that may result in reverse sensitivity effects), such as industry, rural activities and existing or planned infrastructure;
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;
q. consider effects on the unique tangata whenua relationships, values, aspirations, roles and responsibilities with respect to an area. Where appropriate, opportunities to visually recognise tangata whenua connections within an area should be considered;
r. support the Vision and Strategy for the Waikato River in the Waikato River catchment;
s. encourage waste minimisation and efficient use of resources (such as through resource-efficient design and construction methods); and
t. recognise and maintain or enhance ecosystem services.

ANNEXURE 2 – AMENDED AIRPORT BUSINESS ZONE STRUCTURE PLAN

Legend

- Road/Access Stopped
- Access Point/Gateway
- Landscaping
- Building Setback
- Cycleway/Walkway Connection
- Indicative Road
- Airport Business Zone
- Central Precinct
- Southern Precinct
- Stage 1 Development
- Special Amenity Area
- Stormwater Disposal
- Landscape Open Space
- Retail Area
- Bat Habitat Area
- Indicative Primary Road
- Indicative Secondary Road
- Potential Future Connection Road
- Northern Precinct Hub
- Southern Links - Designation Extent
- Airport Business Zone - Northern Precinct Extent
- Rural Landscaping
- Vehicle Access Restriction

Airport Business Zone Structure Plan

Appendix S10

Waipa DISTRICT COUNCIL

REVISION 20

REFERENCE

Scale @ A3 1:10,000

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