

**BEFORE A HEARING PANEL
OF HAMILTON CITY COUNCIL**

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

AND

IN THE MATTER of Proposed Plan Change 5 to the Operative Hamilton City District Plan

**LEGAL SUBMISSIONS ON BEHALF OF THE DIRECTOR-GENERAL OF
CONSERVATION**

Dated 27 September 2022

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INTRODUCTION

1. These legal submissions are presented on behalf of the Director-General of Conservation (**Director-General**), in support of her submission and further submission on Plan Change 5 (**PC5**).
2. These legal submissions address:
 - a) Preliminary issues arising out of questions from the Hearing Panel;
 - b) The Director-General's position on PC5;
 - c) The background to PC5;
 - d) Legal framework;
 - e) Key issues; and
 - f) Evidence.

PRELIMINARY ISSUES

Independence of the Director-General's Expert Witnesses

3. The Code of Conduct for expert witnesses is set out in the Environment Court Practice Note. Clause 7.2 of the Code states:
 - 7.2 Duty to the Court**
 - (a) *An expert witness has an overriding duty to impartially assist the Court on matters within the expert's area of expertise.*
 - (b) *An expert witness is not, and must not behave as, an advocate for the party who engages the witness. Expert witnesses must declare any relationship with the parties calling them or any interest they may have in the outcome of the proceeding.*
 - (c) *Every expert witness is expected to treat the evidence of experts called by other parties with the respect due to the opinions of a professional colleague, even if there is fundamental disagreement between the views each expresses. Any criticism should be moderate in tone and directed to the evidence, and not to the person.*
4. The Director-General's witnesses have all had training on the Code of Conduct. They are familiar with, and understand, their duty to impartially assist the Hearing Panel.
5. The term "expert" is defined in section 4 of the Evidence Act 2006 to mean "a person who has specialised knowledge or skill based on training, study, or experience". The term "expert evidence" is defined to mean "the evidence of an expert based on the specialised knowledge or skill of that expert and includes evidence given in the form of an opinion".¹

¹ Section 4 of the Evidence Act 2006.

6. The general rule in section 23 of the Evidence Act 2006 is that a statement of opinion is not admissible in a proceeding, except as provided by section 24 (general admissibility of opinions) or section 25 (admissibility of expert opinion evidence). Section 25(1) of the Evidence Act 2006 prescribes the “substantial helpfulness test”. This test requires the fact-finder to be satisfied that the fact-finder will receive substantial help from the expert opinion evidence in understanding other evidence in the proceeding or in ascertaining any fact that is of consequence to the determination of the proceeding.

7. On the topic of the independence of experts, the High Court has said:

No-one should be surprised when a party selects as his or her witness the particular expert whose views happen to broadly coincide with that party's case. But the theory is that the expert would have held those views anyway. The view is supposed to be driven by professional skill and experience, not a perceived need to support a pre-conceived outcome. Experts do not enter the witness box in order to present a case. There is already a lawyer there to do that job. Experts are there to draw upon their skill and experience with professional objectivity, oblivious to the litigation consequences. Their integrity is usually obvious within a few minutes of entering the witness box.²

8. The Director-General's experts all have specialised skill and experience that will assist the Hearing Panel and they have been instructed to impartially assist the Hearing Panel.

9. The Director-General submits that the question as to whether the expert witnesses are employed or contracted is irrelevant. All experts get paid.

Definition of bat habitat

10. The term “Bat habitat” has been defined at page 3 of the Waikato Bat Alliance high level strategy document as being a:³

“collection of locations that provide the resources and conditions needed for bats to be present, and will include, but may not be limited to, areas that provide for breeding, roosting, foraging, and commuting.”

² Fisher J in *Wrightson v Fletcher Challenge Nominees Ltd* (High Court, Auckland, CP 129/96, 21 August 1998)

³ EIC of Dr Kerry Maree Borkin dated 16 September 2022 at paragraph 10.1 Appendix A to EIC and Alternative Endings, 2021: *Framing a Bat Strategy for the Waikato Region: Themes, outcomes and engaging stakeholders – A discussion document for the Waikato Bat Alliance*, 4 November 2021.

THE DIRECTOR-GENERAL'S POSITION ON PC5

11. The Peacocke Structure Plan Area (**PSPA**) is the single largest area of land within Hamilton City that is yet to be fully urbanised. The PSPA has a unique ecological and environmental context.⁴ This is due to the presence of a local population of New Zealand long-tailed bats (pekapeka).⁵ The New Zealand long-tailed bat is an endemic bat. This means that it is only found in New Zealand.⁶ The long-tailed bat is vulnerable to extinction as it is ranked as "Threatened-Nationally Critical" which is the highest threat ranking in the Department of Conservation's (**DOC's**) threat classification system.⁷ It is difficult to bring biodiversity back to an area once it has been lost. And it is impossible to bring back a species once it has become extinct. Hamilton City is one of the last cities where long-tailed bats persist⁸ and there is an opportunity for Hamilton City Council (**Council**) to get it right with PC5.
12. To be clear, the Director-General recognises the need for housing in Hamilton City and does not oppose the urbanisation of the PSPA. The Director-General simply seeks that the PC5 provisions provide for the protection of the significant habitat of the Threatened-Nationally Critical long-tailed bat as required by the higher order policy directives.
13. The practical issue at the heart of the Director-General's submission is: how should the provisions that will be introduced for the protection of the habitat of the Threatened-Nationally Critical long-tailed bat by PC5 be worded to ensure that they:
 - a) Give effect to the higher order planning documents as required by section 75(3) of the Resource Management Act 1991 (**RMA** or the **Act**)⁹; and
 - b) Are efficient and effective in achieving the objective in Chapter 20 of the Operative Hamilton City District Plan (**District Plan**) as contemplated by section 32 of the Act; and

⁴ Section 32 Report, Plan Change 5 – Peacocke Structure Plan at paragraph 4.2.2.

⁵ EIC of Dr Borkin at [5.2]; EIC of Ms Pryde. EIC Mr Kessels. EIC of Dr Parsons at [17].

⁶ EIC of Dr Borkin at [6.1].

⁷ EIC of Dr Borkin at [6.1].

⁸ EIC of Ms Pryde at [5.4].

⁹ See section 75 of the RMA which should be read in light of the purpose of a district plan as set out in section 72.

- c) Assist Council to carry out its mandated statutory functions under section 31 of the Act in order to achieve the purpose of the Act¹⁰.
14. The relevant objective is set out in Chapter 20 of the District Plan. This objective is that “*Significant Natural Areas are protected, maintained, restored and enhanced*”.¹¹
15. PC5 proposes to protect ‘high value’ long-tailed bat habitat from development using Significant Natural Area and Significant Bat Habitat Area overlays which will be included within the Natural Open Space Zone.
16. The Director-General’s evidence is that all types of habitat provide a function for connectivity and foraging and “*if only high value habitats are considered as what is required for bats, then the results will be an unconnected, non-functioning habitat.*”¹²
17. The Director-General submits that the areas within the PSPA that are to be protected from development will need to provide functional and connected habitat in order to achieve the objective in Chapter 20.
18. The ‘low’ and ‘moderate’ value habitat areas will be outside of these overlays and will be zoned within the zones where urbanisation will occur. The core response mechanism to resource consent applications within the ‘low’ and ‘moderate’ value habitat areas where urbanisation will occur will be requirements around ecological evaluation prior to any removal of vegetation and compensation approaches to restore / enhance habitat elsewhere (either within the site or off-site).¹³
19. The Director-General’s evidence is that good effects management practice is needed to protect biodiversity from the impacts of development.¹⁴ Mr Gooding, the Director-General’s expert planner, is of the view that the matters of discretion miss their mark on several points, including that *they allow recourse directly to the compensation stage without demonstrating sequentially whether mitigation, and remediation of effects can occur, or whether offsetting of residual effects is appropriate.*¹⁵

¹⁰ See section 72 of the RMA.

¹¹ Objective 20.2.1, Chapter 20: Natural Environments, Hamilton City Operative District Plan.

¹² EIC of Ms Pryde at [7.12].

¹³ Section 42A Report.

¹⁴ EIC Dr Corkery at [5.1].

¹⁵ EIC Mr Gooding at [8.5].

20. The Director-General submits that the approach taken in PC5 to the effects management hierarchy is not appropriate and does not follow good effects management practice.
21. A recently developed Biodiversity Compensation Model (BCM) has also been proposed for calculating the biodiversity offsetting and compensation. Dr Corkery, the Director-General's offsetting expert, is of the view that the BCM is a poorly designed biodiversity model that will likely facilitate the loss of biodiversity in the PSPA.
22. The Director-General submits that the Hearing Panel should base its decision on the opinions of the experts rather than on the BCM. The BCM cannot predict with an adequate level of confidence that the compensation proposed in PC5 will protect the long-tailed bats and their habitat and it is not the Hearing Panel's role to arbitrate on how the model should be designed.
23. To achieve the objective in Chapter 20, it will be necessary for the PC5 provisions to achieve the following outcomes:
 - a) The areas within the PSPA that are to be protected from development will need to provide functional and connected habitat; and
 - b) The response mechanism to resource consent applications in the areas where urbanisation will occur will need to require:
 - (i) As much to be done at the site as possible to avoid, remedy, and mitigate adverse effects on the habitat of the long-tailed bats;
 - (ii) Offsetting and/or compensation for residual adverse effects to increase the number of suitable roosts within functional connected habitat that is within the home range of the local population of long-tailed bats that are present in the PSPA together with pest control; and
 - (iii) Recourse to the city / region wide compensation stage to be limited to the circumstances in which it is appropriate to allow the activity to proceed and where the earlier steps in the effects management hierarchy have been sequentially exhausted. These limits are needed because city or regional wide

compensation may not actually help the local population of long-tailed bats that are present in the PSPA and will be losing habitat.

24. As well as removal of foraging, roosting and commuting habitat, potential effects include mortality/ injury through the felling of occupied bat roosts, increased predation from the elevated levels of rats and cats which may result from development and the effects of lighting and noise.
25. On the topic of cats, the Director-General's evidence is that the introduction of cats to the PSPA will limit the types of predator control tools that may be used and that will result in reduced effectiveness of the pest control operations that are to be provided as part of any offsetting / compensation.
26. The Director-General's expert planning witness, Mr Gooding, will provide the Hearing Panel with a collated document setting out his recommendations for the wording of the PC5 provisions.¹⁶

BACKGROUND TO PC5

27. PC5 proposes to address a failing in the District Plan. The background to this is that section 6(c) of the RMA requires Council to "*recognise and provide for*" ... "*the protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna*".
28. This is a matter of national importance and the policy directive in section 6(c) is reflected in the Waikato Regional Policy Statement (**RPS**). The RPS establishes a policy framework for the Waikato Region and the RPS contains a list of criteria based on ecological values for the assessment and identification of significant natural areas.
29. Chapter 20 of the District Plan contains an objective that "*Significant Natural Areas are protected, maintained, restored and enhanced*".¹⁷ However, the original study that was procured by Council to identify significant natural areas omitted to assess sites against the criteria in the RPS relating to significant habitats of indigenous fauna.¹⁸ As a result, there is currently no habitat of the Threatened-Nationally Critical long-tailed bat identified in

¹⁶ See paragraph 3.9 of Mr Gooding's EIC.

¹⁷ Objective 20.2.1, Chapter 20: Natural Environments, Hamilton City Operative District Plan.

¹⁸ Assessment of Environmental Effects, Plan Change 5 – Peacocke Structure Plan, page 16 at [1.5.4].

Schedule 9C of the District Plan as required by the higher order policy directives.

30. Council's experts took the view that the protection in Chapter 20 of the District Plan only applied to the areas that have been mapped and are listed as significant natural areas in Schedule 9C. When this issue came to the attention of the Environment Court in 2020¹⁹, the Court held that it was appropriate to take steps based on section 6(c) of the RMA and relevant plans to give the protection that is required by the higher order policy directives to the bat priority areas that are located at the site for the Amberfield development. As the Hearing Panel has already heard, the Amberfield development is a large subdivision that has been consented and is located within the PSPA.
31. In the interim decision for the Amberfield development, the Environment Court said that it "*comes as a surprise to the Court, in light of the warranted concern held for the future of the Long tailed Bat, that no commonly identified and generally agreed Bat Protection Area is currently contained in Schedule 9C*" and the Court noted that "[t]his was an unfortunate oversight ... requiring urgent redress".²⁰

LEGAL FRAMEWORK

The role of the Director-General and DOC

32. The Director-General is the administrative head of DOC. DOC's functions are set out in section 6 of the Conservation Act 1987, and relevantly include:²¹

The functions of the Department are to administer this Act and the enactments specified in Schedule 1, and, subject to this Act and those enactments and to the directions (if any) of the Minister,—

(a) *to manage for conservation purposes, all land, and all other natural and historic resources, for the time being held under this Act, and all other land and natural and historic resources whose owner agrees with the Minister that they should be managed by the Department.*

...

(b) *To advocate the conservation of natural and historic resources generally:*

¹⁹ This appeal related to the consent conditions for the large 834 lot subdivision located in the Peacocke Structure Plan Area known as the Amberfield development. See *Weston Lea Ltd & Director-General of Conservation v Hamilton City Council* [2020] NZEnvC 189 (interim decision); [2021] NZEnvC 111 (decision); and [2021] NZEnvC 149 (final decision with conditions attached).

²⁰ *Weston Lea Ltd & Director-General of Conservation v Hamilton City Council* [2020] NZEnvC 189 (interim decision) at [40 – 42].

²¹ "Conservation" is defined in s2 of the Conservation Act as: "*The preservation and protection of natural and historic resources for the purpose of maintaining the intrinsic values, providing for their appreciation and recreational enjoyment by the public, and safeguarding the options of future generations.*"

33. DOC also administers the Wildlife Act 1953.

RMA

34. The RMA establishes a hierarchy, both within the RMA and in the subordinate planning documents which are created under it. The hierarchy guides resource management decision making. The scheme of the Act moves from the general to the specific.²²

35. Part 2 of the RMA is at the top of the hierarchy. It contains the Act's purpose and principles. Section 5(1) of the Act states: "*The purpose of this Act is to promote the sustainable management of natural and physical resources.*" This is the guiding principle that is intended to be applied by those performing functions under the RMA.²³

36. Sustainable management is defined in section 5(2) as follows:

*"In this Act, **sustainable management** means managing the use, development, and protection of natural and physical resources in a way, or at a rate, which enables people and communities to provide for their social, economic, and cultural well-being and for their health and safety while –*

- (a) sustaining the potential of natural and physical resources (excluding minerals) to the meet the reasonably foreseeable needs of future generations; and*
- (b) safeguarding the life-supporting capacity of air, water, soil, and ecosystems; and*
- (c) avoiding, remedying, or mitigating²⁴ any adverse effects of activities on the environment." (emphasis added)*

37. The Supreme Court has considered the effect of the word "while" in the definition of "sustainable management" and the Supreme Court has held that the definition should be read as an integrated whole and that the word "while" means "at the same time as".²⁵

38. Therefore, in the context of the PSPA, the guiding principle in section 5 of the RMA requires resource management decision makers to manage development and protection in the PSPA in a way that enables people and communities to provide for their social, economic, and cultural well-being and for their health and safety while ("at the same time as") satisfying the

²² *Environmental Defence Society Inc v New Zealand King Salmon Company Ltd* [2014] NZSC 38 at [14].

²³ *Environmental Defence Society Inc v New Zealand King Salmon Company Ltd* [2014] NZSC 38 at [24(a)].

²⁴ "Avoiding" has its ordinary meaning of "not allowing" or "preventing the occurrence of". The words "remedying" and "mitigating" indicate that the framers contemplated that developments might have adverse effects on particular sites, which could be permitted if they were mitigated and/or remedied. See *Environmental Defence Society Inc v New Zealand King Salmon Company Ltd* [2014] NZSC 38 at paragraph 24(b).

²⁵ *Environmental Defence Society Inc v New Zealand King Salmon Company Ltd* [2014] NZSC 38 at [24(c)].

intergenerational environmental interests as set out in subsections 5(2)(a) to (c) of the RMA.

39. The Director-General is not proposing that Council put bat safety ahead of human well-being and safety. The Director-General is simply asking Council as the proponent of PC5 and as the territorial authority for the PSPA to take a balanced approach to the management of both the “the developmental interests” and “the intergenerational and environmental interests” as set out in section 5 from the outset of the urbanisation process for the PSPA.
40. You will see from the evidence that, Ms Mander, the Director-General’s lighting expert has provided evidence on lighting for human safety.²⁶ The Director-General also seeks a responsible approach to any co-location of recreational uses to avoid situations in which high quality bat roosts are removed for human safety when that outcome could have easily been avoided with a more responsible approach to the location and design of the recreational infrastructure.
41. Council’s functions are set out in section 31 of the RMA. Here, subsections 31(1)(a) and (b)(iii) are particularly relevant:

31 Functions of territorial authorities under this Act

(1) *Every territorial authority shall have the following functions for the purpose of giving effect to this Act in its district:*

(a) *the establishment, implementation, and review of objectives, policies, and methods to achieve integrated management of the effects of the use, development, or protection of land and associated natural and physical resources of the district:*

(aa) *the establishment, implementation, and review of objectives, policies, and methods to ensure that there is sufficient development capacity in respect of housing and business land to meet the expected demands of the district:*

(b) *the control of any actual or potential effects of the use, development, or protection of land, including for the purpose of—*

...

(iii) *the maintenance of indigenous biological diversity:*

...

42. The principles of the RMA are set out in sections 6 to 8. These sections are:
- a) Section 6 - matters of national importance which must be “recognised and provided for” (this includes: section 6(c) “*protection of significant indigenous vegetation and significant habitat of indigenous fauna*”);

²⁶ EIC Ms Mander [11].

- b) Section 7 - other matters which must be given “particular regard to” (this includes section 7(d) “*intrinsic values of ecosystems*”); and
- c) Section 8 - the Treaty of Waitangi clause.

43. Here, section 6(c) of the RMA is particularly relevant. In carrying out its functions in its district, Council is required by section 6(c) to recognise and provide for significant indigenous vegetation and significant habitats of indigenous fauna.

44. In *Weston Lea Limited & The Director-General of Conservation v Hamilton City Council*, the Environment Court held that there is a need to avoid adverse effects on “*significant habitats of indigenous fauna*” whether we take an approach to protection “*under s 6(c), under the Regional Policy Statements and Plans or under Chapter 20 of the District Plan*”.²⁷

Subordinate planning documents

45. The hierarchy of subordinate planning documents has three tiers: National Policy Statements²⁸, Regional Policy Statements²⁹; and Regional and District Plans³⁰. Each tier must “give effect to” the planning documents sitting in the tiers above.

Tier 1 – National Policy Statements

46. As noted by Mr Gooding, national policy statements provide national policy guidance on specific resource management issues.

47. Here, Policy 4 of the National Policy Statement for Urban Development 2020 (**NPS-UD**) is particularly relevant. This enables Council to modify the relevant building height or density requirements under Policy 3 of the NPS-UD to the extent necessary to accommodate a qualifying matter in the PSPA. The qualifying matters include “*a matter of national importance that decision makers are required to recognise and provide for under section 6*”.³¹

²⁷ *Weston Lea Limited & The Director-General of Conservation v Hamilton City Council* [2020] NZEnvC 189 at [22].

²⁸ Sections 45 to 55 of the RMA.

²⁹ Sections 59 to 62 of the RMA.

³⁰ Sections 63 to 71 and sections 72 to 77 of the RMA.

³¹ Subpart 6 of the NPS-UD and section 771 of the Resource Management (Enabling Housing Supply and Other Matters) Amendment Act 2021 (HSAA). Note that Policy 3 is now implemented under the HSAA..

48. Mr Gooding has identified that the National Policy Statement for Freshwater Management (**NPS-FM**) provides helpful guidance on the effects management hierarchy.³² In opening legal submission, Mr Muldowney has contended that Mr Gooding has erroneously elevated the NPS-FM effects management hierarchy to a code against which the plan provisions must be elevated.³³ This is not accepted. Mr Gooding has simply applied the definitions in the NPS-FM to add clarity and to help fill the gaps where the RPS is silent. These gaps are no definition of biodiversity offsetting and no definition of biodiversity compensation. This approach also provides consistency with the National-Policy Statement for Indigenous Biodiversity (**NPS-IB**) which is imminent and likely to be gazetted before PC5 is operative.
49. Council has recently notified Plan Change 9 and this plan change involves a review of the Significant Natural Areas provisions in the District Plan on a citywide basis. The Section 32 Report for Plan Change 9 considers the NPS-IB and concludes that the NPS-IB:

is highly relevant to the review of SNAs and associated provisions in the district plan and is expected to come into effect in late 2022 during the PC9 submission and hearing process. Therefore, it is considered efficient and effective to align the review of the SNA provisions with the policy direction and requirements anticipated under the proposed NPSIB.³⁴

50. The approach to residual effects management that has been proposed in legal submissions by Mr Muldowney gives more flexibility to go directly to the compensation stage. This goes against the intent of the higher order policy directives, and it will lock in poor outcomes for biodiversity. That approach will also be inefficient and ineffective at achieving the Chapter 20 Objective which is that “*Significant Natural Areas are protected, maintained, restored and enhanced.*” The Director-General submits that it is useful to look to the definitions in the NPS-FM for guidance on how the effects management hierarchy should be applied. The Director-General further submits that it would be efficient and effective to align the interpretation of the effects management hierarchy with the definitions in the NPS-IB (which are structured in a similar way to the definitions in the NPS-FM).

³² EIC Mr Gooding at [5.30 to 5.36].

³³ Opening Legal Submissions on behalf of Hamilton City Council at [116].

³⁴ Plan Change 9 – s 32 Report at [4.1.3] National Policy Statements, Proposed National Policy Statement for Indigenous Biodiversity.

Tier 2 – Regional Policy Statement

51. The RPS directs a strong preference for avoidance of adverse effects on threatened species.³⁵

52. Policy 11A of the RPS specifies that to be identified as significant an area needs to meet one or more of the criteria in Table 11.1. Criteria 3 in Table 11-1 includes:

“... vegetation or habitat that is currently habitat for indigenous species or associations of indigenous species that are:

- *classed as threatened or at risk, or*
- *...”*

53. Criteria 3 in Table 11-3 of the RPS simply refers to “habitat”. The RPS does not limit the significance criteria to a certain type of habitat.

54. The bat ecology experts agree that bats are present in the PSPA.³⁶ Bat “habitat” has been defined in the Waikato Bat Alliance high level strategy document as a:³⁷

“collection of locations that provide the resources and conditions needed for bats to be present, and will include, but may not be limited to, areas that provide for breeding, roosting, foraging, and commuting.”

55. Dr Borkin has said that “[a]ll habitat types located within the PSPA are used by bats.”³⁸

56. The Director-General agrees that it would be possible to prioritise certain habitat areas within the PSPA. However, the Director-General says that this needs to be done strictly on the basis that the protected areas provide functional and connected habitat.

Tier 3 – Regional and District Plans

57. The District Plan is in the third tier of the hierarchy of subordinate planning documents.

³⁵ EIC of Mr Gooding at [4.2].

³⁶ EIC of Dr Borkin at [5.2]; EIC of Ms Pryde. EIC of Mr Kessels. EIC of Dr Parsons at [17].

³⁷ EIC of Dr Kerry Maree Borkin dated 16 September 2022 at paragraph 10.1 Appendix A to EIC and Alternative Endings, 2021: *Framing a Bat Strategy for the Waikato Region: Themes, outcomes and engaging stakeholders – A discussion document for the Waikato Bat Alliance, 4 November 2021.*

³⁸ EIC of Dr Borkin at [5.2, 6.3].

58. The purpose of a district plan is to assist Councils to carry out their functions in order to achieve the purpose of the RMA.³⁹ Section 75(3) of the RMA states that a district plan must “give effect to”:
- a) any national policy statement; and
 - b) any New Zealand coastal policy statement; and
 - c) a national planning standard; and
 - d) any regional policy statement.

KEY ISSUES

Retaining functional connected habitat in the PSPA

59. Council’s proposed approach for the protection of bat habitat within the PSPA involves the creation of highly protected areas where activity will be restricted. The areas identified as “high value” habitat have been mapped as Significant Bat Habitat Areas (SBHA) in addition to Significant Natural Areas (SNA), which will sit within the Natural Open Space Zone.
60. Ms Pryde is a bat ecologist for the Director-General and she has said that:

The habitat use map (Figure 4) provided by 4Sight Ecology compares areas in terms of high to low “value”. The term, “value” can be misleading as if an area is not used that often it can still be important to the functionality of a species. The “value” of pasture although not the preferred habitat provides a function for connectivity and can provide a foraging area for insects. If only the high value habitats are considered as what is required for bats, then the results will be an unconnected, non-functioning habitat.⁴⁰

61. Dr Borkin who is also a bat ecologist for the Director-General and she has said that for “bat habitat to be functional, it needs to contain sufficient areas for breeding, roosting, foraging, and commuting to occur, as well as functional links between these areas.”⁴¹
62. Ms Pryde also says that “[r]emoving one type of bat habitat such as pasture may influence how the bats can forage” and “If we think of this in human terms – if people have only bedrooms and the hallway to live in then they may survive for a while but not having access to the living room, the kitchen

³⁹ Section 72 of the RMA.

⁴⁰ EIC of Ms Pryde at [7.12].

⁴¹ EIC of Dr Borkin at [10.2].

or visits to the supermarket and socialising with friends – the quality of life will be impacted, and they will fail to thrive. The long-tailed bat has shown resilience in being able to survive in Hamilton but there will be a limit to this resilience if key habitat is lost.”

63. The Director-General submits that it will be necessary for the areas within the PSPA that are to be protected from development to provide functional and connected habitat in order for these provisions to achieve the objective in Chapter 20.
64. There is uncertainty as to whether the habitat will remain functional and connected as the PSPA is developed. PC5 is the last remaining opportunity for Council to get it right. Some of the land in the PSPA is already subject to resource consents and designations which will, once implemented, have an impact on the functionality and connectivity of the protected areas of bat habitat. The ecological concerns regarding the need to retain roosts in functional connected habitat and within the home range of this local population of threatened nationally critical long-tailed bats are set out in the evidence of Ms Pryde and Dr Borkin.

Provisions for the areas in the PSPA where urbanisation will occur

65. The remaining areas in the PSPA which have been identified as “moderate value”⁴² and “low value”⁴³ will be zoned to enable urbanisation to occur subject a range of plan provisions to address ecological effects. Loss of habitat in these areas will be unavoidable and it is proposed that residual ecological effects will be addressed through habitat restoration and enhancement, with a focus on native revegetation and control of introduced predators. Having a ban on the introduction of cats to the PSPA is crucial to the implementation of the predator control measures. Dr Kerry Borkin has provided evidence confirming that cats kill long-tailed bats and she has noted in her evidence that “[h]aving pet cats present in the PSPA will limit the types of predator control tools that may be used and that ... [t]his will result in reduced effectiveness of predator control operations”.⁴⁴

⁴² “Moderate value” habitats included areas containing: vegetation; edge pasture habitat near high value habitat which may be utilised by bats as commuting corridors; foraging habitats; or potential bat roost trees. Appendix L Peacocke Structure Plan Area: Ecological Significance Assessment July 2021 at paragraph 4.5.5.

⁴³ “Low value” habitats included areas of open pasture and scattered trees which may provide occasional foraging or commuting habitat for bats. Appendix L Peacocke Structure Plan Area: Ecological Significance Assessment July 2021 at paragraph 4.5.5.

⁴⁴ EIC Dr Borkin at [17.10].

Effects Management Hierarchy

Avoidance, Minimise, Remedy

66. Under PC5 the management of residual effects that cannot be avoided or minimised falls to offsetting (where feasible) or compensation if offsets cannot demonstrably be achieved.⁴⁵
67. The High Court in *Royal Forest and Bird Protection Society of New Zealand Inc v Buller District Council*⁴⁶ makes it clear that mitigation does not include habitat enhancement outside the area where the habitat is being removed. The High Court held that:
- “The usual meaning of “mitigate” is to alleviate, or to abate, or to moderate the severity of something. Offsets do not do that. Rather, they offer a positive new effect, one which did not exist before”.*⁴⁷
68. The Director-General’s evidence is that good effects management practice is needed to protect biodiversity from the impacts of development and requires a robust and transparent process that results in no or very little adverse effects from activities including development projects.⁴⁸
69. The effects management hierarchy to avoid, then minimise, then remedy, followed by ‘offset’ and then compensation requires each step to be completed as far as feasible before the next stage is attempted.⁴⁹ In other words, each stage in the hierarchy must be fully exhausted before moving to the next stage.
70. Avoidance is the first and most important step to prevent harm to biodiversity of greatest concern.⁵⁰ The Director-General considers that, in respect to PC5, the Long-tailed bats and bat habitat are of greatest biodiversity concern. According to Dr Corkery, the Director-General’s expert on biodiversity offsetting, the methods to achieve avoidance include avoiding the habitat site entirely or engineering solutions at the site to, for example, avoid areas of high value biodiversity.⁵¹

⁴⁵ Section 42A Hearing Report (2 September 2022) section 4.2 page 28

⁴⁶ [2013] NZRMA 293

⁴⁷ *Ibid* at [72]

⁴⁸ EIC Dr Corkery at [5.1]

⁴⁹ *ibid* at [4.1]

⁵⁰ *ibid* at [6.1]

⁵¹ *Ibid*

71. The Director-General submits that just because no alternative site is available or avoiding bat habitat is not an option available, it does not mean that avoidance cannot be achieved. Dr Corkery states that avoidance should be considered at a range of spatial scales through careful project design once biodiversity values at the site are identified and adequately understood. This is relevant when project sites contain habitat of critically threatened species, such as the long-tailed bat, and where adverse effects can be many and varied across multiple scales, as at roost site, across foraging habitats and transport route.⁵²
72. The adverse effects on bats that need careful application of the effects management hierarchy is the loss and modification of bat habitat.⁵³ Dr Corkery states that:
- “The impacts of loss and modification of habitat needs to be clearly identified and understood. Effects to avoid minimise and remedy the adverse impacts of loss and modification of habitat at site should be demonstrated to be sequentially exhausted before offsetting of compensation is considered”⁵⁴*
73. Mr Gooding, the Director-General’s expert planner, view is that the effects management hierarchy proposed in PC5 provides no discretion for Council to assess whether a genuine attempt to avoid the loss of significant habitat has been exhausted, which is the strong preference of the higher order planning framework. Mr Gooding’s evidence is that the proposed effects management hierarchy does not require a project to demonstrate sequentially whether offsetting of residual effects is appropriate. Instead, the proposed hierarchy makes it easier for a subdivision applicant, for example, to offer up compensation to address adverse effects rather than demonstrating that each stage of the hierarchy had been sequentially exhausted before arriving at compensation.⁵⁵
74. The Director-General submits the approach taken in PC5 effects management hierarchy is not appropriate and does not follow good effects management practice. Each stage of the hierarchy should be exhausted before moving to the next stage. There should be discretion for Council to assess whether the efforts employed to avoid, remedy, and/or minimise adverse effects have been exhausted before moving on to offsetting and compensation.

⁵² EIC Dr Corkery at [6.2]

⁵³ *Ibid* at [6.3]

⁵⁴ *Ibid*

⁵⁵ EIC Mr Gooding at [8.5].

Biodiversity Offsetting

75. A biodiversity offset applies to residual adverse effects and must achieve a measurable net gain in type, amount, and condition (structure and quality) of indigenous biodiversity compared to that lost. An offset should only be contemplated after steps to avoid, minimise, and remedy adverse effects are demonstrated to have been sequentially exhausted”.⁵⁶
76. Biodiversity offsetting works by managing residual biodiversity losses caused from development. Offsetting is different from other conservation tools because biodiversity gains are quantified in relation to residual losses.⁵⁷
77. The framework of principles for the use of biodiversity offsets are set out in Dr Corkery’s evidence⁵⁸, derive directly from the NPSIB exposure draft and are consistent with the Business and Biodiversity Offsets Programme (**BBOP**).
78. Dr Corkery evidence is that there are limits to offsetting including where residual impacts cannot be fully addressed by a biodiversity offset because of the irreplaceability or vulnerability of the biodiversity affected, and where there is inadequate data to design an offset with an adequate degree of confidence that similar gains can be created to balance out known losses. Dr Corkery states that, without a data informed design process, it is not possible to demonstrate with a reasonable level of confidence that no net loss or a net gain can be achieved.⁵⁹
79. The Section 42A Hearing Report concludes that the proposed residual effects measures are forms of compensation and do not meet the definition of biodiversity as set out in the NPSIB exposure draft (and in Dr Corkery’s evidence). The Hearing Report states that:

*“... with very few exceptions, all habitat restoration and enhancement activities will default to compensation (rather than offsetting) ...because quantification of losses, and in particular quantification of predicted gains, cannot be determined with sufficient certainty to meet this ‘bright line’ test or yardstick to support offsetting”.*⁶⁰

⁵⁶ NPSIB draft exposure at page 6 to 7

⁵⁷ EIC Dr Corkery at [7.1] to 7.2]

⁵⁸ *Ibid* at [7.3]

⁵⁹ *Ibid* at [8.2]

⁶⁰ Hearing Report at section 4.2.2 page 29-30

80. The Hearing Report notes there are fundamental challenges in collecting and interpreting data. The nature of effects on key ecological values including bats are difficult to identify due to confounding impacts from surrounding land use activities.⁶¹
81. The Hearing Report concludes that the current offsetting definitions in the NPSIB draft exposure, which Dr Corkery and Mr Gooding recommend should be included in PC5, cannot be used to verify that net gain outcomes are likely to be achieved.
82. An offset proposal can be complex, requiring considered and detailed design. Poor design will not improve biodiversity. A high level of knowledge and information is required.⁶² Adopting the NPSIB exposure draft biodiversity offsetting principles framework and definitions into PC5 will provide a better chance of achieving biodiversity net gain and no net loss.

Biodiversity Compensation

83. Where biodiversity offsetting is not possible, compensation is used as the last step in the effects management hierarchy. Biodiversity compensation is designed to compensate for losses, but it is not held to the same definition or principles as biodiversity offsetting, specifically the requirement to fully account for and balance losses and gains.
84. The framework of principles for the use of biodiversity compensation are set out in Dr Corkery's evidence⁶³. Compensation are actions intended to compensate for any more than minor residual effects on biodiversity after avoidance, minimisation, remediation, and biodiversity offsetting measures have been sequentially applied.⁶⁴
85. According to Dr Corkery, compensation attempts that fail or fall short will contribute to the entrenching poor outcomes for biodiversity as losses that have already occurred, remain unaddressed.⁶⁵
86. A defined quantum of habitat restoration and pest control is proposed in the Council's Technical Ecology Report as sufficient for managing the residual

⁶¹ *Ibid*

⁶² EIC Dr Corkery at [10.1]

⁶³ *Ibid* at [9.3]

⁶⁴ NPSIB exposure draft at page 6

⁶⁵ EIC Dr Corkery at [9.2]

effects from development in the PSPA. Dr Corkery states there has not been sufficient explanation of or justification for this proposal. Restoration or creation of new habitat is not always effective and pest control can only partially make up for any loss of habitat.⁶⁶

87. There is no detail in the proposal on whether the compensation would be sufficient to protect bats. Ms Pryde, one of the Director-General's bat experts, opinion is that bats are sensitive to rat levels and require large areas (3350 ha) of predator control to be effective.⁶⁷

88. The compensation proposal offers 700 ha of predator control out of the PSPA but provides no detail on the site or the level of predator control. It is not clear whether the predator control will cover roosting areas for bats in the PSPA. Ms Pryde states that:

*"For Predator Control to be effective at protecting bats, it needs to entirely cover the roosting areas and would need to be connected with other predator control areas"*⁶⁸

89. The alternative compensation proposal is for 190ha of restoration to be offered outside of the PSPA. Ms Pryde opinion on this alternative is:

*"There would have to be careful consideration of where this should happen to benefit bats and a coordinated assessment of the habitat beyond the PSPA and potential of corridors to enable bats to move through the landscape"*⁶⁹

Achieving a Net Gain

90. The term 'net-gain' can only be applied to offsets as a like-for-like quantitative loss/gain calculation must be demonstrated to use this term. Dr Corkery's evidence is that a high level of knowledge and information is required for decision-makers to be confident a net-gain outcome can be achieved. This includes state and trend data for species and ecosystems, species and ecosystems responses to management interventions, and a clear understanding of targets to ensure the persistence and viability of species and ecosystems at a landscape scale.⁷⁰

91. Dr Corkery notes that improving the likelihood of net gain outcomes is particularly important for species that exhibit high levels of site fidelity like the

⁶⁶ *Ibid* at [10.4]

⁶⁷ EIC Ms Pryde at [9.2]

⁶⁸ *Ibid* at [9.4]

⁶⁹ *Ibid* at [9.5]

⁷⁰ EIC Ms Pryde at [10.2] to [10.3]

long tailed bats.⁷¹ This can be achieved by a high offset ratio, where more habitat is created than is lost; proximity, creating new habitat as close to the impacted site as possible to maintain original habitat composition, increase probability of colonisation and to incorporate localised ecological processes; and delay development to allow succession of habitat to avoid losses.⁷²

92. Consistent with Dr Corkery's evidence, the Director-General submits habitat restoration or pest control aimed at detecting and achieving net gain can only be successful where the offset ratio is large, monitoring is long term, robust and precise and funding⁷³ and access to the required land is available to substantially increase the amount of habitat managed if monitoring indicates this is necessary.⁷⁴ Critically or most importantly management targets need to be linked to long-tailed bat population outcomes.

Biodiversity Loss-Gain Models

93. Determining the type and quantum of offset or compensation is required to appropriately address effects of development. Irrespective of the method or tool used, metrics are required to establish the type and quantity of biodiversity to be offset.⁷⁵
94. The Biodiversity Offset Accounting Model (**BOAM**) is designed to improve estimation of ecological equivalency and transparency in communicating loss-gain calculations.⁷⁶
95. A recently developed Biodiversity Compensation Model (BCM) is proposed for use in the PSPA. This model relies on qualitative rather than quantitative data to predict the biodiversity outcomes of a project. The BCM uses more descriptive than numerical data as estimates for habitat quality.⁷⁷ The intent of the BCM is to improve and or generate robustness around compensation proposals but in Dr Corkery's opinion the BCM does not achieve this. Dr Corkery states that the BCM is neither structurally realistic nor are the value estimates sufficiently stringent or transparently logical.

⁷¹ *ibid*

⁷² EIC Dr Corkery at [10.8]

⁷³ Refer [11] of EIC Dr Corkery which sets out her views on financial contributions.

⁷⁴ EIC Dr Corkery at [10.11]

⁷⁵ *ibid* at [12.1]

⁷⁶ *ibid* at [12.2]

⁷⁷ EIC Dr Corkery at [12.4]

96. The BCM seems to be based on mathematics set out in the BOAM, an accepted model, to bolster the credibility of its framework. The application of the BCM in PC5 has several issues which are identified in Dr Corkery's evidence, including with the model structure and with erroneous model inputs, lack of transparency and the absence of the model itself and any detailed analysis. Such issues are likely to lead to flawed ecological accounting that cannot be relied on to predict the direction of outcomes.⁷⁸
97. Dr Corkery's opinion of the BCM is that it is a poorly designed biodiversity model that will likely facilitate the loss of biodiversity in the PSPA.
98. The Director-General submits that the BCM should not be used as a tool in PC5 to determine type and quantum of offset or compensation.
99. In his rebuttal evidence Dr Baber⁷⁹, the Council's offsetting expert, refers to the Environment Court decision in *Waka Kotahi NZ Transport Agency v Manawatu-Whanganui Regional Council*.⁸⁰ This decision considered the BCM and noted there was no compulsion to use any particular or for the model to do more than assist the Court in making a decision as to whether reasonable mitigation is being applied.⁸¹
100. It's worth noting that this decision also mentioned at [162] and [163] in direct relation to the BCM that:

"We draw attention to an issue we have identified about the 'transparency' of the modelling results in terms of the link between the results of the model calculations contained in Mr Markham's tables and the hectares required to achieve the offsets. While the calculations have been summarised in the tables, the steps between "impact to the compensated (ha)" and "required compensation (ha)" are not evident from the tables nor are they explained in the text.

For transparency the link between the detailed offsets and compensation modelling tables (which contain the detail about each biodiversity component) and the overall result (the proposed hectares of revegetation, retirement, pest control) should be clear in the accompanying text otherwise the final figures reached cannot be verified through the documentation provided".

101. Dr Baber also refers to the Te Kuha Mine appeal currently before the Environment Court.⁸² A decision on this appeal has not been released yet with the hearing having only concluded in early August 2022. The Court

⁷⁸ *Ibid* at [12.7]

⁷⁹ Dr Baber Rebuttal at [14e]

⁸⁰ [2020] NZEnvC 192

⁸¹ *Ibid* at [173]

⁸² *Royal Forest & Bird Protection Society of NZ v West Coast Regional Council* ENV-2017-CHC-090

considered the BCM in this appeal and made the following determination as recorded in the Court transcript⁸³:

"It's not our role to arbitrate on how the model should be constructed, whether it should be statistically-based or values-driven, what the input should be, what level of confidence should be incorporated into it and all those kinds of adjustments, it's not our field. We're going to be basing our decision on the opinions of the experts, so just bear that in mind because I just don't want to end up having a large part of the hearing traversing those issues that we're effectively going to ignore."

"it's not our area of expertise to decide whether it should be statistically built, you know, the mathematical and scientific construction of the model, it's just we can't arbitrate on that"

102. Conversely, Dr Baber rebuttal evidence at [14a] seems to criticise the approach of relying solely on professional opinion claiming the BCM is considerably more transparent and robust.

103. The Director-General agrees with the Court's views on the BCM and submits that the BCM in its current form should not be used for calculating biodiversity offsetting or compensation in the PSPA. The BCM cannot predict with an adequate level of confidence that the compensation proposed in PC5 will protect bats and bat habitat. An offset is not possible, and compensation is not held to the same 'net gain' standard as offsetting making it difficult to identify whether the compensation proposed will sufficiently address the loss of biodiversity in the PSPA

EVIDENCE

104. The following witnesses are being called for the Director-General:
 - a) Ms Moira Anne Pryde (bat ecology);
 - b) Dr Kerry Maree Borkin (bat ecology);
 - c) Dr Ilse Corkery (Biodiversity offsetting);
 - d) Ms Susan Maree Mander (lighting); and
 - e) Mr Jesse Quentin Gooding (planning).



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⁸³ *Ibid* Notes of Evidence 1 August 2022 at page 276